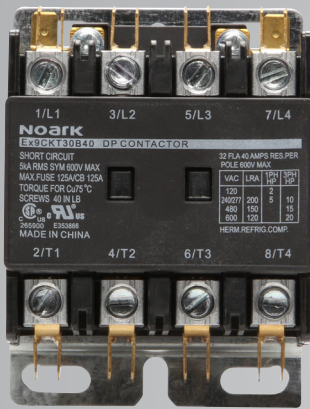


Catalog

Contactors and Relays Manual Motor Starters

Ex9C, Ex9CA, Ex9R, Ex9CD, Ex9RD, Ex9CKT, Ex9S32,
Ex9SN, Ex9RCA and Ex9RE Series

Ex9CKT30B40



Ex9RCA71D



Ex9C38 and Ex9R38A



Ex9RE40A0.5



Ex9S32



NOARK Electric

Electrical Equipment Manufacturer for Distribution and Control



NOARK Electric is a global manufacturer of electrical distribution and control products that address a variety of customer needs, ranging from components to intelligent system solutions. Our global product lines include: circuit breakers, contactors, relays and intelligent control. Based in Shanghai, China, NOARK Electric was established in 2007 and covers the globe with regional headquarters in North America, Latin America, Europe and Middle East/Africa.

Globally, NOARK Electric serves the industrial, commercial, utility and residential markets. In North America, NOARK Electric focuses primarily on industrial OEMs, users and associated channel partners. Our motto is "Excellent Product...Exceptional Value," which NOARK Electric delivers to our customer by maintaining local inventory, providing local sales, customer service and support and manufacturing quality, aggressively priced products backed by a five-year limited warranty.

Quality Product

- Backed by a five-year limited warranty*



Exceptional Value

- Reduce the cost of products
- Improve profitability
- Increase margins

Local Support and Local Inventory

- Superb customer service
- Knowledgeable technical support
- Dedicated sales force
- Well-stocked inventory
- North American headquarters

*Contact NOARK Electric for complete details.

NOARK Electric

International Headquarter Locations



Global reach. Local resources.

The best of both worlds come together when customers count on NOARK as their electrical product manufacturer.

NOARK Electric

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NOARK Electric

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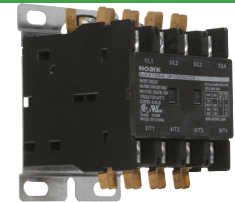
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NOARK Electric

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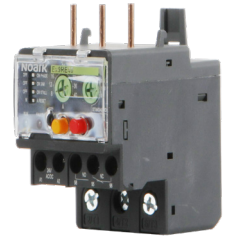
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IEC CONTACTORS



Ex9C

IEC Contactors

Ex9C Product Overview

Features

Ex9C contactors are intended for various applications including heavy industrial loads. Nine frame sizes allows optimization of electrical parameters and mechanical dimensions. A range of overload relays are available in a variety of frame sizes to fit respective contactors of given rated current.

- Nine frame sizes with rated current up to 1000 A at 690 V AC-3
- Coil control voltage available in AC and DC with ranges from 24-600V
- Wide range electronic coil available for 09~500 A contactors features built-in surge suppression
- DIN rail 35 mm and panel mountable

Certifications

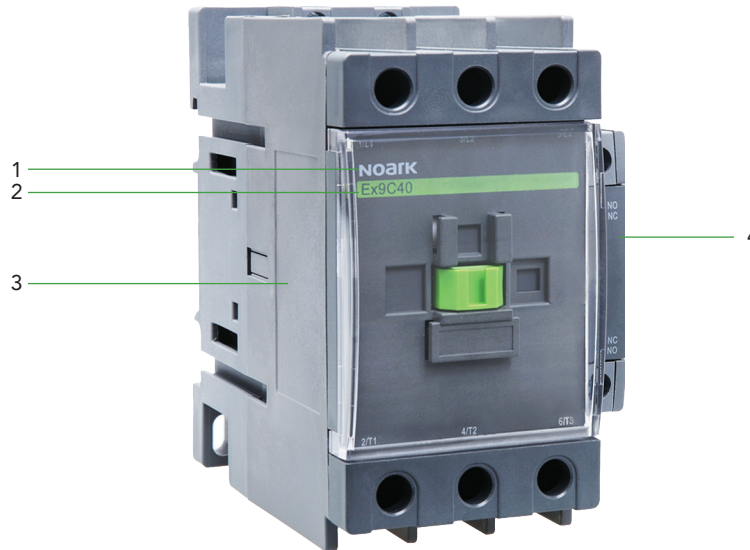
- UL 508 Listed, File Number E353866, UL 60947-1 and 60947-4-1
- Certified for Canada CSA standards 22.2 No. 14 under cUL testing
- IEC/EN 60947-4-1
- CE Approved
- CCC Certified



IEC Contactors

Ex9C Product Selection Guide

Label



1. Brand
2. Product Selection
3. Label with UL logo, CE logo and data
4. Built-In Auxiliary Contact

Product Selection Guide

Ex9C	S	R	09	D	10	A	7	B	G
NOARK Ex9C Series	Contactors Type	Function	Rated Current (AC-3)	Coil Type	Auxiliary Contacts	Control Voltage	Frequency	Main Power Contacts	Application
	Blank: Ex9C Standard (9~1000 A) S: Ex9C Miniature (6~12 A)	Blank: Full Voltage Non-Reversing (FVNR) R: Full Voltage Reversing (FVR)	06: 6 A 09: 9 A 12: 12 A 18: 18 A 25: 25 A 32: 32 A 38: 38 A 40: 40 A 50: 50 A 65: 65 A 80: 80 A 100: 100 A 115: 115 A 150: 150 A 185: 185 A 225: 225 A 265: 265 A 300: 300 A 400: 400 A 500: 500 A 630: 630 A 800: 800 A 1000: 1000 A	Blank: AC D: DC* *:available on Miniature Contactor only E: Vac/dc (115~1000A) F: Wide Range Electronic Coil	10: 1NO (9CS Only) 01: 1NC (9CS Only) 11: 1NO+1NC (9~100A Only) 22: 2NO+2NC (09~38/115~1000A) Blank: no Aux (9CS only)	A: 12V B: 24V* C: 36V D: 42V E: 48V F: 110V G: 120V X: 208V M: 220V P: 230V U: 240V V: 250V N: 277V Q: 380V V: 400V Z: 415V R: 440V T: 480V S: 500V Y: 600V J: 24-60Vac/dc H: 48-130Vac/dc K: 100-250Vac/dc L: 250-500Vac/dc	7: 50/60 Hz	Blank: 3NO B: 2NO+2NC (9CS Only) C: 4NO (9CS Only)	G: No top mounting accessories for special industry (115-1000A)

* Note: 24Vac is not available at 400A and 1000A
**630-1000A:48-415 Vac/dc available only

IEC Contactors

Ex9CS 6 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Non-Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



Coil Voltage	6 A • 3 Poles				6 A • 4 Poles				
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		2NO+2NC		
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9CS0610B7	1320001	Ex9CS0601B7	1320055	Ex9CS06B7C	1320109	Ex9CS06B7B	1320415
	36	Ex9CS0610C7	1320002	Ex9CS0601C7	1320056	Ex9CS06C7C	1320110	Ex9CS06C7B	1320416
	42	Ex9CS0610D7	1320003	Ex9CS0601D7	1320057	Ex9CS06D7C	1320111	Ex9CS06D7B	1320417
	48	Ex9CS0610E7	1320004	Ex9CS0601E7	1320058	Ex9CS06E7C	1320112	Ex9CS06E7B	1320418
	110	Ex9CS0610F7	1320005	Ex9CS0601F7	1320059	Ex9CS06F7C	1320113	Ex9CS06F7B	1320419
	120	Ex9CS0610G7	1320006	Ex9CS0601G7	1320060	Ex9CS06G7C	1320114	Ex9CS06G7B	1320420
	208	Ex9CS0610X7	1320018	Ex9CS0601X7	1320072	Ex9CS06X7C	1320126	Ex9CS06X7B	1320432
	220	Ex9CS0610M7	1320007	Ex9CS0601M7	1320061	Ex9CS06M7C	1320115	Ex9CS06M7B	1320421
	230	Ex9CS0610P7	1320008	Ex9CS0601P7	1320062	Ex9CS06P7C	1320116	Ex9CS06P7B	1320422
	240	Ex9CS0610U7	1320010	Ex9CS0601U7	1320064	Ex9CS06U7C	1320118	Ex9CS06U7B	1320424
	277	Ex9CS0610N7	1320009	Ex9CS0601N7	1320063	Ex9CS06N7C	1320117	Ex9CS06N7B	1320423
	380	Ex9CS0610Q7	1320011	Ex9CS0601Q7	1320065	Ex9CS06Q7C	1320119	Ex9CS06Q7B	1320425
	400	Ex9CS0610V7	1320012	Ex9CS0601V7	1320066	Ex9CS06V7C	1320120	Ex9CS06V7B	1320426
	415	Ex9CS0610Z7	1320013	Ex9CS0601Z7	1320067	Ex9CS06Z7C	1320121	Ex9CS06Z7B	1320427
440	Ex9CS0610R7	1320014	Ex9CS0601R7	1320068	Ex9CS06R7C	1320122	Ex9CS06R7B	1320428	
480	Ex9CS0610T7	1320015	Ex9CS0601T7	1320069	Ex9CS06T7C	1320123	Ex9CS06T7B	1320429	
500	Ex9CS0610S7	1320016	Ex9CS0601S7	1320070	Ex9CS06S7C	1320124	Ex9CS06S7B	1320430	
Vdc	12	Ex9CS06D10A	1320325	Ex9CS06D01A	1320340	Ex9CS06DAC	1320355	Ex9CS06DAB	1320523
	24	Ex9CS06D10B	1320326	Ex9CS06D01B	1320341	Ex9CS06DBC	1320356	Ex9CS06DBB	1320524
	48	Ex9CS06D10E	1320327	Ex9CS06D01E	1320342	Ex9CS06DEC	1320357	Ex9CS06DEB	1320525
	110	Ex9CS06D10F	1320328	Ex9CS06D01F	1320343	Ex9CS06DFC	1320358	Ex9CS06DFB	1320526
	220	Ex9CS06D10M	1320329	Ex9CS06D01M	1320344	Ex9CS06DMC	1320359	Ex9CS06DMB	1320527
	250	Ex9CS06D10W	1320553	Ex9CS06D01W	1320556	Ex9CS06DWC	1320559	Ex9CS06DWB	1320571

IEC Contactors

Ex9CS 9 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Non-Reversing



Certifications
 IEC/EN 60947-1, 60947-4-1
 UL 60947-1, 60947-4-1

CE **UL** **LISTED**

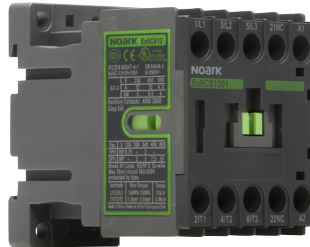
A

Coil Voltage	9 A • 3 Poles				9 A • 4 Poles				
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		2NO+2NC		
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9CS0910B7	1320019	Ex9CS0901B7	1320073	Ex9CS09B7C	1320127	Ex9CS09B7B	1320433
	36	Ex9CS0910C7	1320020	Ex9CS0901C7	1320074	Ex9CS09C7C	1320128	Ex9CS09C7B	1320434
	42	Ex9CS0910D7	1320021	Ex9CS0901D7	1320075	Ex9CS09D7C	1320129	Ex9CS09D7B	1320435
	48	Ex9CS0910E7	1320022	Ex9CS0901E7	1320076	Ex9CS09E7C	1320130	Ex9CS09E7B	1320436
	110	Ex9CS0910F7	1320023	Ex9CS0901F7	1320077	Ex9CS09F7C	1320131	Ex9CS09F7B	1320437
	120	Ex9CS0910G7	1320024	Ex9CS0901G7	1320078	Ex9CS09G7C	1320132	Ex9CS09G7B	1320438
	208	Ex9CS0910X7	1320036	Ex9CS0901X7	1320090	Ex9CS09X7C	1320144	Ex9CS09X7B	1320450
	220	Ex9CS0910M7	1320025	Ex9CS0901M7	1320079	Ex9CS09M7C	1320133	Ex9CS09M7B	1320439
	230	Ex9CS0910P7	1320026	Ex9CS0901P7	1320080	Ex9CS09P7C	1320134	Ex9CS09P7B	1320440
	240	Ex9CS0910U7	1320028	Ex9CS0901U7	1320082	Ex9CS09U7C	1320136	Ex9CS09U7B	1320442
	277	Ex9CS0910N7	1320027	Ex9CS0901N7	1320081	Ex9CS09N7C	1320135	Ex9CS09N7B	1320441
	380	Ex9CS0910Q7	1320029	Ex9CS0901Q7	1320083	Ex9CS09Q7C	1320137	Ex9CS09Q7B	1320443
	400	Ex9CS0910V7	1320030	Ex9CS0901V7	1320084	Ex9CS09V7C	1320138	Ex9CS09V7B	1320444
	415	Ex9CS0910Z7	1320031	Ex9CS0901Z7	1320085	Ex9CS09Z7C	1320139	Ex9CS09Z7B	1320445
	440	Ex9CS0910R7	1320032	Ex9CS0901R7	1320086	Ex9CS09R7C	1320140	Ex9CS09R7B	1320446
480	Ex9CS0910T7	1320033	Ex9CS0901T7	1320087	Ex9CS09T7C	1320141	Ex9CS09T7B	1320447	
500	Ex9CS0910S7	1320034	Ex9CS0901S7	1320088	Ex9CS09S7C	1320142	Ex9CS09S7B	1320448	
Vdc	12	Ex9CS09D10A	1320330	Ex9CS09D01A	1320345	Ex9CS09DAC	1320360	Ex9CS09DAB	1320528
	24	Ex9CS09D10B	1320331	Ex9CS09D01B	1320346	Ex9CS09DBC	1320361	Ex9CS09DBB	1320529
	48	Ex9CS09D10E	1320332	Ex9CS09D01E	1320347	Ex9CS09DEC	1320362	Ex9CS09DEB	1320530
	110	Ex9CS09D10F	1320333	Ex9CS09D01F	1320348	Ex9CS09DFC	1320363	Ex9CS09DFB	1320531
	220	Ex9CS09D10M	1320334	Ex9CS09D01M	1320349	Ex9CS09DMC	1320364	Ex9CS09DMB	1320532
	250	Ex9CS09D10W	1320554	Ex9CS09D01W	1320557	Ex9CS09DWC	1320560	Ex9CS09DWB	1320572

IEC Contactors

Ex9CS 12 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Non-Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



Coil Voltage	12 A • 3 Poles				12 A • 4 Poles				
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		2NO+2NC		
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9CS1210B7	1320037	Ex9CS1201B7	1320091	Ex9CS12B7C	1320145	Ex9CS12B7B	1320451
	36	Ex9CS1210C7	1320038	Ex9CS1201C7	1320092	Ex9CS12C7C	1320146	Ex9CS12C7B	1320452
	42	Ex9CS1210D7	1320039	Ex9CS1201D7	1320093	Ex9CS12D7C	1320147	Ex9CS12D7B	1320453
	48	Ex9CS1210E7	1320040	Ex9CS1201E7	1320094	Ex9CS12E7C	1320148	Ex9CS12E7B	1320454
	110	Ex9CS1210F7	1320041	Ex9CS1201F7	1320095	Ex9CS12F7C	1320149	Ex9CS12F7B	1320455
	120	Ex9CS1210G7	1320042	Ex9CS1201G7	1320096	Ex9CS12G7C	1320150	Ex9CS12G7B	1320456
	208	Ex9CS1210X7	1320054	Ex9CS1201X7	1320108	Ex9CS12X7C	1320162	Ex9CS12X7B	1320468
	220	Ex9CS1210M7	1320043	Ex9CS1201M7	1320097	Ex9CS12M7C	1320151	Ex9CS12M7B	1320457
	230	Ex9CS1210P7	1320044	Ex9CS1201P7	1320098	Ex9CS12P7C	1320152	Ex9CS12P7B	1320458
	240	Ex9CS1210U7	1320046	Ex9CS1201U7	1320100	Ex9CS12U7C	1320154	Ex9CS12U7B	1320460
	277	Ex9CS1210N7	1320045	Ex9CS1201N7	1320099	Ex9CS12N7C	1320153	Ex9CS12N7B	1320459
	380	Ex9CS1210Q7	1320047	Ex9CS1201Q7	1320101	Ex9CS12Q7C	1320155	Ex9CS12Q7B	1320461
	400	Ex9CS1210V7	1320048	Ex9CS1201V7	1320102	Ex9CS12V7C	1320156	Ex9CS12V7B	1320462
	415	Ex9CS1210Z7	1320049	Ex9CS1201Z7	1320103	Ex9CS12Z7C	1320157	Ex9CS12Z7B	1320463
	440	Ex9CS1210R7	1320050	Ex9CS1201R7	1320104	Ex9CS12R7C	1320158	Ex9CS12R7B	1320464
480	Ex9CS1210T7	1320051	Ex9CS1201T7	1320105	Ex9CS12T7C	1320159	Ex9CS12T7B	1320465	
500	Ex9CS1210S7	1320052	Ex9CS1201S7	1320106	Ex9CS12S7C	1320160	Ex9CS12S7B	1320466	
Vdc	12	Ex9CS12D10A	1320335	Ex9CS12D01A	1320350	Ex9CS12DAC	1320365	Ex9CS12DAB	1320533
	24	Ex9CS12D10B	1320336	Ex9CS12D01B	1320351	Ex9CS12DBC	1320366	Ex9CS12DBB	1320534
	48	Ex9CS12D10E	1320337	Ex9CS12D01E	1320352	Ex9CS12DEC	1320367	Ex9CS12DEB	1320535
	110	Ex9CS12D10F	1320338	Ex9CS12D01F	1320353	Ex9CS12DFC	1320368	Ex9CS12DFB	1320536
	220	Ex9CS12D10M	1320339	Ex9CS12D01M	1320354	Ex9CS12DMC	1320369	Ex9CS12DMB	1320537
	250	Ex9CS12D10W	1320555	Ex9CS12D01W	1320558	Ex9CS12DWC	1320561	Ex9CS12DWB	1320573

IEC Contactors

Ex9C 9~12 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



A

Coil Voltage	9 A • 3 Poles				12 A • 3 Poles				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9C0911B7	1320576	Ex9C0922B7	1320774	Ex9C1211B7	1320594	Ex9C1222B7	1320792
	36	Ex9C0911C7	1320577	Ex9C0922C7	1320775	Ex9C1211C7	1320595	Ex9C1222C7	1320793
	42	Ex9C0911D7	1320578	Ex9C0922D7	1320776	Ex9C1211D7	1320596	Ex9C1222D7	1320794
	48	Ex9C0911E7	1320579	Ex9C0922E7	1320777	Ex9C1211E7	1320597	Ex9C1222E7	1320795
	110	Ex9C0911F7	1320580	Ex9C0922F7	1320778	Ex9C1211F7	1320598	Ex9C1222F7	1320796
	120	Ex9C0911G7	1320581	Ex9C0922G7	1320779	Ex9C1211G7	1320599	Ex9C1222G7	1320797
	208	Ex9C0911X7	1320593	Ex9C0922X7	1320791	Ex9C1211X7	1320611	Ex9C1222X7	1320809
	220	Ex9C0911M7	1320582	Ex9C0922M7	1320780	Ex9C1211M7	1320600	Ex9C1222M7	1320798
	230	Ex9C0911P7	1320583	Ex9C0922P7	1320781	Ex9C1211P7	1320601	Ex9C1222P7	1320799
	240	Ex9C0911U7	1320585	Ex9C0922U7	1320783	Ex9C1211U7	1320603	Ex9C1222U7	1320801
	277	Ex9C0911N7	1320584	Ex9C0922N7	1320782	Ex9C1211N7	1320602	Ex9C1222N7	1320800
	380	Ex9C0911Q7	1320586	Ex9C0922Q7	1320784	Ex9C1211Q7	1320604	Ex9C1222Q7	1320802
	400	Ex9C0911V7	1320587	Ex9C0922V7	1320785	Ex9C1211V7	1320605	Ex9C1222V7	1320803
	415	Ex9C0911Z7	1320588	Ex9C0922Z7	1320786	Ex9C1211Z7	1320606	Ex9C1222Z7	1320804
	440	Ex9C0911R7	1320589	Ex9C0922R7	1320787	Ex9C1211R7	1320607	Ex9C1222R7	1320805
	480	Ex9C0911T7	1320590	Ex9C0922T7	1320788	Ex9C1211T7	1320608	Ex9C1222T7	1320806
500	Ex9C0911S7	1320591	Ex9C0922S7	1320789	Ex9C1211S7	1320609	Ex9C1222S7	1320807	
600	Ex9C0911Y7	1320592	Ex9C0922Y7	1320790	Ex9C1211Y7	1320610	Ex9C1222Y7	1320808	
Wide Range Electronic Coil Vac/dc	24~60	Ex9C09F11J	1321846	Ex9C09F22J	1321864	Ex9C12F11J	1321847	Ex9C12F22J	1321865
	48~130	Ex9C09F11H	1321852	Ex9C09F22H	1321870	Ex9C12F11H	1321853	Ex9C12F22H	1321871
	100~250	Ex9C09F11K	1321858	Ex9C09F22K	1321876	Ex9C12F11K	1321859	Ex9C12F22K	1321877

IEC Contactors

Ex9C 18~25 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



Certifications
 IEC/EN 60947-1, 60947-4-1
 UL 60947-1, 60947-4-1

CE **UL** **LISTED**

Coil Voltage	18 A • 3 Poles				25 A • 3 Poles				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9C1811B7	1320612	Ex9C1822B7	1320810	Ex9C2511B7	1320630	Ex9C2522B7	1320828
	36	Ex9C1811C7	1320613	Ex9C1822C7	1320811	Ex9C2511C7	1320631	Ex9C2522C7	1320829
	42	Ex9C1811D7	1320614	Ex9C1822D7	1320812	Ex9C2511D7	1320632	Ex9C2522D7	1320830
	48	Ex9C1811E7	1320615	Ex9C1822E7	1320813	Ex9C2511E7	1320633	Ex9C2522E7	1320831
	110	Ex9C1811F7	1320616	Ex9C1822F7	1320814	Ex9C2511F7	1320634	Ex9C2522F7	1320832
	120	Ex9C1811G7	1320617	Ex9C1822G7	1320815	Ex9C2511G7	1320635	Ex9C2522G7	1320833
	208	Ex9C1811X7	1320629	Ex9C1822X7	1320827	Ex9C2511X7	1320647	Ex9C2522X7	1320845
	220	Ex9C1811M7	1320618	Ex9C1822M7	1320816	Ex9C2511M7	1320636	Ex9C2522M7	1320834
	230	Ex9C1811P7	1320619	Ex9C1822P7	1320817	Ex9C2511P7	1320637	Ex9C2522P7	1320835
	240	Ex9C1811U7	1320621	Ex9C1822U7	1320819	Ex9C2511U7	1320639	Ex9C2522U7	1320837
	277	Ex9C1811N7	1320620	Ex9C1822N7	1320818	Ex9C2511N7	1320638	Ex9C2522N7	1320836
	380	Ex9C1811Q7	1320622	Ex9C1822Q7	1320820	Ex9C2511Q7	1320640	Ex9C2522Q7	1320838
	400	Ex9C1811V7	1320623	Ex9C1822V7	1320821	Ex9C2511V7	1320641	Ex9C2522V7	1320839
	415	Ex9C1811Z7	1320624	Ex9C1822Z7	1320822	Ex9C2511Z7	1320642	Ex9C2522Z7	1320840
	440	Ex9C1811R7	1320625	Ex9C1822R7	1320823	Ex9C2511R7	1320643	Ex9C2522R7	1320841
	480	Ex9C1811T7	1320626	Ex9C1822T7	1320824	Ex9C2511T7	1320644	Ex9C2522T7	1320842
500	Ex9C1811S7	1320627	Ex9C1822S7	1320825	Ex9C2511S7	1320645	Ex9C2522S7	1320843	
600	Ex9C1811Y7	1320628	Ex9C1822Y7	1320826	Ex9C2511Y7	1320646	Ex9C2522Y7	1320844	
Wide Range Electronic Coil Vac/dc	24~60	Ex9C18F11J	1321848	Ex9C18F22J	1321866	Ex9C25F11J	1321849	Ex9C25F22J	1321867
	48~130	Ex9C18F11H	1321854	Ex9C18F22H	1321872	Ex9C25F11H	1321855	Ex9C25F22H	1321873
	100~250	Ex9C18F11K	1321860	Ex9C18F22K	1321878	Ex9C25F11K	1321861	Ex9C25F22K	1321879

IEC Contactors

Ex9C 32~38 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



A

Coil Voltage	32 A • 3 Poles				38 A • 3 Poles				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9C3211B7	1320648	Ex9C3222B7	1320846	Ex9C3811B7	1320666	Ex9C3822B7	1320864
	36	Ex9C3211C7	1320649	Ex9C3222C7	1320847	Ex9C3811C7	1320667	Ex9C3822C7	1320865
	42	Ex9C3211D7	1320650	Ex9C3222D7	1320848	Ex9C3811D7	1320668	Ex9C3822D7	1320866
	48	Ex9C3211E7	1320651	Ex9C3222E7	1320849	Ex9C3811E7	1320669	Ex9C3822E7	1320867
	110	Ex9C3211F7	1320652	Ex9C3222F7	1320850	Ex9C3811F7	1320670	Ex9C3822F7	1320868
	120	Ex9C3211G7	1320653	Ex9C3222G7	1320851	Ex9C3811G7	1320671	Ex9C3822G7	1320869
	208	Ex9C3211X7	1320665	Ex9C3222X7	1320863	Ex9C3811X7	1320683	Ex9C3822X7	1320881
	220	Ex9C3211M7	1320654	Ex9C3222M7	1320852	Ex9C3811M7	1320672	Ex9C3822M7	1320870
	230	Ex9C3211P7	1320655	Ex9C3222P7	1320853	Ex9C3811P7	1320673	Ex9C3822P7	1320871
	240	Ex9C3211U7	1320657	Ex9C3222U7	1320855	Ex9C3811U7	1320675	Ex9C3822U7	1320873
	277	Ex9C3211N7	1320656	Ex9C3222N7	1320854	Ex9C3811N7	1320674	Ex9C3822N7	1320872
	380	Ex9C3211Q7	1320658	Ex9C3222Q7	1320856	Ex9C3811Q7	1320676	Ex9C3822Q7	1320874
	400	Ex9C3211V7	1320659	Ex9C3222V7	1320857	Ex9C3811V7	1320677	Ex9C3822V7	1320875
	415	Ex9C3211Z7	1320660	Ex9C3222Z7	1320858	Ex9C3811Z7	1320678	Ex9C3822Z7	1320876
	440	Ex9C3211R7	1320661	Ex9C3222R7	1320859	Ex9C3811R7	1320679	Ex9C3822R7	1320877
	480	Ex9C3211T7	1320662	Ex9C3222T7	1320860	Ex9C3811T7	1320680	Ex9C3822T7	1320878
500	Ex9C3211S7	1320663	Ex9C3222S7	1320861	Ex9C3811S7	1320681	Ex9C3822S7	1320879	
600	Ex9C3211Y7	1320664	Ex9C3222Y7	1320862	Ex9C3811Y7	1320682	Ex9C3822Y7	1320880	
Wide Range Electronic Coil Vac/dc	24~60	Ex9C32F11J	1321850	Ex9C32F22J	1321868	Ex9C38F11J	1321851	Ex9C38F22J	1321869
	48~130	Ex9C32F11H	1321856	Ex9C32F22H	1321874	Ex9C38F11H	1321857	Ex9C38F22H	1321875
	100~250	Ex9C32F11K	1321862	Ex9C32F22K	1321880	Ex9C38F11K	1321863	Ex9C38F22K	1321881

IEC Contactors

Ex9C 40~100 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

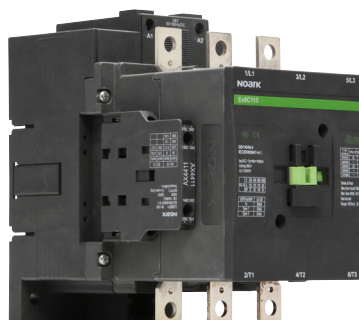


Coil Voltage	40 A • 3 Poles		50 A • 3 Poles		65 A • 3 Poles		80 A • 3 Poles		100 A • 3 Poles		
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9C4011B7 1320684	Ex9C5011B7 1320702	Ex9C6511B7 1320720	Ex9C8011B7 1320738	Ex9C10011B7 1320756	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	36	Ex9C4011C7 1320685	Ex9C5011C7 1320703	Ex9C6511C7 1320721	Ex9C8011C7 1320739	Ex9C10011C7 1320757	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	42	Ex9C4011D7 1320686	Ex9C5011D7 1320704	Ex9C6511D7 1320722	Ex9C8011D7 1320740	Ex9C10011D7 1320758	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	48	Ex9C4011E7 1320687	Ex9C5011E7 1320705	Ex9C6511E7 1320723	Ex9C8011E7 1320741	Ex9C10011E7 1320759	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	110	Ex9C4011F7 1320688	Ex9C5011F7 1320706	Ex9C6511F7 1320724	Ex9C8011F7 1320742	Ex9C10011F7 1320760	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	120	Ex9C4011G7 1320689	Ex9C5011G7 1320707	Ex9C6511G7 1320725	Ex9C8011G7 1320743	Ex9C10011G7 1320761	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	208	Ex9C4011X7 1320701	Ex9C5011X7 1320719	Ex9C6511X7 1320737	Ex9C8011X7 1320755	Ex9C10011X7 1320773	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	220	Ex9C4011M7 1320690	Ex9C5011M7 1320708	Ex9C6511M7 1320726	Ex9C8011M7 1320744	Ex9C10011M7 1320762	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	230	Ex9C4011P7 1320691	Ex9C5011P7 1320709	Ex9C6511P7 1320727	Ex9C8011P7 1320745	Ex9C10011P7 1320763	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	240	Ex9C4011U7 1320693	Ex9C5011U7 1320711	Ex9C6511U7 1320729	Ex9C8011U7 1320747	Ex9C10011U7 1320765	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	277	Ex9C4011N7 1320692	Ex9C5011N7 1320710	Ex9C6511N7 1320728	Ex9C8011N7 1320746	Ex9C10011N7 1320764	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	380	Ex9C4011Q7 1320694	Ex9C5011Q7 1320712	Ex9C6511Q7 1320730	Ex9C8011Q7 1320748	Ex9C10011Q7 1320766	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	400	Ex9C4011V7 1320695	Ex9C5011V7 1320713	Ex9C6511V7 1320731	Ex9C8011V7 1320749	Ex9C10011V7 1320767	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	415	Ex9C4011Z7 1320696	Ex9C5011Z7 1320714	Ex9C6511Z7 1320732	Ex9C8011Z7 1320750	Ex9C10011Z7 1320768	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	440	Ex9C4011R7 1320697	Ex9C5011R7 1320715	Ex9C6511R7 1320733	Ex9C8011R7 1320751	Ex9C10011R7 1320769	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	480	Ex9C4011T7 1320698	Ex9C5011T7 1320716	Ex9C6511T7 1320734	Ex9C8011T7 1320752	Ex9C10011T7 1320770	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
500	Ex9C4011S7 1320699	Ex9C5011S7 1320717	Ex9C6511S7 1320735	Ex9C8011S7 1320753	Ex9C10011S7 1320771	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	
600	Ex9C4011Y7 1320700	Ex9C5011Y7 1320718	Ex9C6511Y7 1320736	Ex9C8011Y7 1320754	Ex9C10011Y7 1320772	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	
Wide Range Electronic Coil Vac/dc	24~60	Ex9C40F11J 1321936	Ex9C50F11J 1321939	Ex9C65F11J 1321942	Ex9C80F11J 1321945	Ex9C100F11J 1321948	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	48~130	Ex9C40F11H 1321937	Ex9C50F11H 1321940	Ex9C65F11H 1321943	Ex9C80F11H 1321946	Ex9C100F11H 1321949	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact
	100~250	Ex9C40F11K 1321938	Ex9C50F11K 1321941	Ex9C65F11K 1321944	Ex9C80F11K 1321947	Ex9C100F11K 1321950	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact	3NO • 1NO+1NC Auxiliary Contact

IEC Contactors

Ex9C 115~225 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



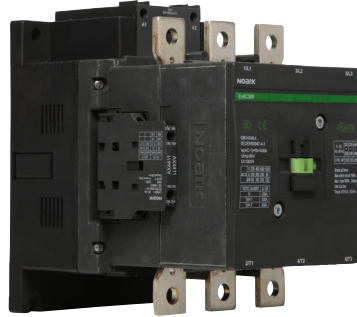
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Coil Voltage	115 A • 3 Poles				150 A • 3 Poles				185 A • 3 Poles				225 A • 3 Poles					
	3NO • 2NO+2NC Auxiliary Contact				3NO • 2NO+2NC Auxiliary Contact				3NO • 2NO+2NC Auxiliary Contact				3NO • 2NO+2NC Auxiliary Contact					
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number				
Vac/dc	24	Ex9C115E22B	1321316	Ex9C150E22B	1321331	Ex9C185E22B	1321346	Ex9C225E22B	1321361	Ex9C115E22C	1321317	Ex9C150E22C	1321332	Ex9C185E22C	1321347	Ex9C225E22C	1321362	
	42	Ex9C115E22D	1321318	Ex9C150E22D	1321333	Ex9C185E22D	1321348	Ex9C225E22D	1321363	Ex9C115E22E	1321319	Ex9C150E22E	1321334	Ex9C185E22E	1321349	Ex9C225E22E	1321364	
	48	Ex9C115E22F	1321320	Ex9C150E22F	1321335	Ex9C185E22F	1321350	Ex9C225E22F	1321365	Ex9C115E22G	1321321	Ex9C150E22G	1321336	Ex9C185E22G	1321351	Ex9C225E22G	1321366	
	110	Ex9C115E22X	1321324	Ex9C150E22X	1321339	Ex9C185E22X	1321354	Ex9C225E22X	1321369	Ex9C115E22M	1321322	Ex9C150E22M	1321337	Ex9C185E22M	1321352	Ex9C225E22M	1321367	
	120	Ex9C115E22P	1321323	Ex9C150E22P	1321338	Ex9C185E22P	1321353	Ex9C225E22P	1321368	Ex9C115E22U	1321325	Ex9C150E22U	1321340	Ex9C185E22U	1321355	Ex9C225E22U	1321370	
	208	Ex9C115E22N	1321328	Ex9C150E22N	1321643	Ex9C185E22N	1321358	Ex9C225E22N	1321644	Ex9C115E22Q	1321326	Ex9C150E22Q	1321341	Ex9C185E22Q	1321356	Ex9C225E22Q	1321371	
	220	Ex9C115E22V	1321327	Ex9C150E22V	1321342	Ex9C185E22V	1321357	Ex9C225E22V	1321372	Ex9C115E22Z	1321651	Ex9C150E22Z	1321343	Ex9C185E22Z	1321653	Ex9C225E22Z	1321373	
	230	Ex9C115E22T	1321329	Ex9C150E22T	1321344	Ex9C185E22T	1321359	Ex9C225E22T	1321374	Ex9C115E22Y	1321330	Ex9C150E22Y	1321345	Ex9C185E22Y	1321360	Ex9C225E22Y	1321375	
	240	Ex9C115F22H	1321434	Ex9C150F22H	1321437	Ex9C185F22H	1321440	Ex9C225F22H	1321443	Ex9C115F22K	1321435	Ex9C150F22K	1321438	Ex9C185F22K	1321441	Ex9C225F22K	1321444	
	277	Ex9C115F22L	1321436	Ex9C150F22L	1321439	Ex9C185F22L	1321442	Ex9C225F22L	1321445									
	380																	
	400																	
	415																	
	480																	
600																		
Wide Range Electronic Coil Vac/dc	48~130	Ex9C115F22H	1321434	Ex9C150F22H	1321437	Ex9C185F22H	1321440	Ex9C225F22H	1321443									
	100~250	Ex9C115F22K	1321435	Ex9C150F22K	1321438	Ex9C185F22K	1321441	Ex9C225F22K	1321444									
	250~500	Ex9C115F22L	1321436	Ex9C150F22L	1321439	Ex9C185F22L	1321442	Ex9C225F22L	1321445									

IEC Contactors

Ex9C 265~500 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



Certifications
 IEC/EN 60947-1, 60947-4-1
 UL 60947-1, 60947-4-1

CE cUL US LISTED

Coil Voltage	265 A • 3 Poles			300 A • 3 Poles			400 A • 3 Poles			500 A • 3 Poles		
	3NO • 2NO+2NC Auxiliary Contact			3NO • 2NO+2NC Auxiliary Contact			3NO • 2NO+2NC Auxiliary Contact			3NO • 2NO+2NC Auxiliary Contact		
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number		
Vac/dc	24	Ex9C265E22B	1321376	Ex9C300E22B	1321391	-	-	-	-	-		
	36	Ex9C265E22C	1321377	Ex9C300E22C	1321392	Ex9C400E22C	1321406	Ex9C500E22C	1321420			
	42	Ex9C265E22D	1321378	Ex9C300E22D	1321393	Ex9C400E22D	1321407	Ex9C500E22D	1321421			
	48	Ex9C265E22E	1321379	Ex9C300E22E	1321394	Ex9C400E22E	1321408	Ex9C500E22E	1321422			
	110	Ex9C265E22F	1321380	Ex9C300E22F	1321395	Ex9C400E22F	1321409	Ex9C500E22F	1321423			
	120	Ex9C265E22G	1321381	Ex9C300E22G	1321396	Ex9C400E22G	1321410	Ex9C500E22G	1321424			
	208	Ex9C265E22X	1321384	Ex9C300E22X	1321399	Ex9C400E22X	1321413	Ex9C500E22X	1321427			
	220	Ex9C265E22M	1321382	Ex9C300E22M	1321397	Ex9C400E22M	1321411	Ex9C500E22M	1321425			
	230	Ex9C265E22P	1321383	Ex9C300E22P	1321398	Ex9C400E22P	1321412	Ex9C500E22P	1321426			
	240	Ex9C265E22U	1321385	Ex9C300E22U	1321400	Ex9C400E22U	1321414	Ex9C500E22U	1321428			
	277	Ex9C265E22N	1321388	Ex9C300E22N	1321645	Ex9C400E22N	1321417	Ex9C500E22N	1321646			
	380	Ex9C265E22Q	1321386	Ex9C300E22Q	1321401	Ex9C400E22Q	1321415	Ex9C500E22Q	1321429			
	400	Ex9C265E22V	1321387	Ex9C300E22V	1321402	Ex9C400E22V	1321416	Ex9C500E22V	1321430			
	415	Ex9C265E22Z	1321654	Ex9C300E22Z	1321403	Ex9C400E22Z	1321655	Ex9C500E22Z	1321431			
	480	Ex9C265E22T	1321389	Ex9C300E22T	1321404	Ex9C400E22T	1321418	Ex9C500E22T	1321432			
600	Ex9C265E22Y	1321390	Ex9C300E22Y	1321405	Ex9C400E22Y	1321419	Ex9C500E22Y	1321433				
Wide Range Electronic Coil Vac/dc	48~130	Ex9C265F22H	1321446	Ex9C300F22H	1321449	Ex9C400F22H	1321452	Ex9C500F22H	1321455			
	100~250	Ex9C265F22K	1321447	Ex9C300F22K	1321450	Ex9C400F22K	1321453	Ex9C500F22K	1321456			
	250~500	Ex9C265F22L	1321448	Ex9C300F22L	1321451	Ex9C400F22L	1321454	Ex9C500F22L	1321457			

IEC Contactors

Ex9C 630~1,000 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



A

Coil Voltage	630 A • 3 Poles			800 A • 3 Poles			1,000 A • 3 Poles		
	3NO • 2NO+2NC Auxiliary Contact			3NO • 2NO+2NC Auxiliary Contact			3NO • 2NO+2NC Auxiliary Contact		
	Product	Part Number		Product	Part Number		Product	Part Number	
Vac/dc	48	Ex9C630E22EG	1321807	Ex9C800E22EG	1321819		Ex9C1000E22EG	1321831	
	110	Ex9C630E22FG	1321808	Ex9C800E22FG	1321820		Ex9C1000E22FG	1321832	
	120	Ex9C630E22GG	1321809	Ex9C800E22GG	1321821		Ex9C1000E22GG	1321833	
	220	Ex9C630E22MG	1321811	Ex9C800E22MG	1321823		Ex9C1000E22MG	1321835	
	230	Ex9C630E22PG	1321812	Ex9C800E22PG	1321824		Ex9C1000E22PG	1321836	
	240	Ex9C630E22UG	1321813	Ex9C800E22UG	1321825		Ex9C1000E22UG	1321837	
	277	Ex9C630E22NG	1321815	Ex9C800E22NG	1321827		Ex9C1000E22NG	1321839	
	380	Ex9C630E22QG	1321816	Ex9C800E22QG	1321828		Ex9C1000E22QG	1321840	
	400	Ex9C630E22VG	1321817	Ex9C800E22VG	1321829		Ex9C1000E22VG	1321841	
	415	Ex9C630E22ZG	1321818	Ex9C800E22ZG	1321830		Ex9C1000E22ZG	1321842	
480	EX9C630E22TG	1321843	EX9C800E22TG	1321844		EX9C1000E22TG	1321845		
Wide Range Electronic Coil Vac/dc	100~250	EX9C630F22K	1321229	EX9C800F22K	1321232		EX9C1000F22K	1321235	
	250~500	EX9C630F22L	1321230	EX9C800F22L	1321233		EX9C1000F22L	1321236	

IEC Contactors

Ex9CSR 6 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	6 A • 3 Poles				6 A • 4 Poles		
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		
	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9CSR0610B7	1320163	Ex9CSR0601B7	1320217	Ex9CSR06B7C	1320271
	36	Ex9CSR0610C7	1320164	Ex9CSR0601C7	1320218	Ex9CSR06C7C	1320272
	42	Ex9CSR0610D7	1320165	Ex9CSR0601D7	1320219	Ex9CSR06D7C	1320273
	48	Ex9CSR0610E7	1320166	Ex9CSR0601E7	1320220	Ex9CSR06E7C	1320274
	110	Ex9CSR0610F7	1320167	Ex9CSR0601F7	1320221	Ex9CSR06F7C	1320275
	120	Ex9CSR0610G7	1320168	Ex9CSR0601G7	1320222	Ex9CSR06G7C	1320276
	208	Ex9CSR0610X7	1320180	Ex9CSR0601X7	1320234	Ex9CSR06X7C	1320288
	220	Ex9CSR0610M7	1320169	Ex9CSR0601M7	1320223	Ex9CSR06M7C	1320277
	230	Ex9CSR0610P7	1320170	Ex9CSR0601P7	1320224	Ex9CSR06P7C	1320278
	240	Ex9CSR0610U7	1320172	Ex9CSR0601U7	1320226	Ex9CSR06U7C	1320280
	277	Ex9CSR0610N7	1320171	Ex9CSR0601N7	1320225	Ex9CSR06N7C	1320279
	380	Ex9CSR0610Q7	1320173	Ex9CSR0601Q7	1320227	Ex9CSR06Q7C	1320281
	400	Ex9CSR0610V7	1320174	Ex9CSR0601V7	1320228	Ex9CSR06V7C	1320282
	415	Ex9CSR0610Z7	1320175	Ex9CSR0601Z7	1320229	Ex9CSR06Z7C	1320283
440	Ex9CSR0610R7	1320176	Ex9CSR0601R7	1320230	Ex9CSR06R7C	1320284	
480	Ex9CSR0610T7	1320177	Ex9CSR0601T7	1320231	Ex9CSR06T7C	1320285	
500	Ex9CSR0610S7	1320178	Ex9CSR0601S7	1320232	Ex9CSR06S7C	1320286	
Vdc	12	Ex9CSR06D10A	1320370	Ex9CSR06D01A	1320385	Ex9CSR06DAC	1320400
	24	Ex9CSR06D10B	1320371	Ex9CSR06D01B	1320386	Ex9CSR06DBC	1320401
	48	Ex9CSR06D10E	1320372	Ex9CSR06D01E	1320387	Ex9CSR06DEC	1320402
	110	Ex9CSR06D10F	1320373	Ex9CSR06D01F	1320388	Ex9CSR06DFC	1320403
	220	Ex9CSR06D10M	1320374	Ex9CSR06D01M	1320389	Ex9CSR06DMC	1320404
	250	Ex9CSR06D10W	1320562	Ex9CSR06D01W	1320565	Ex9CSR06DWC	1320568

IEC Contactors

Ex9CSR 9 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



A

Coil Voltage	9 A • 3 Poles				9 A • 4 Poles		
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		
	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9CSR0910B7	1320181	Ex9CSR0901B7	1320235	Ex9CSR09B7C	1320289
	36	Ex9CSR0910C7	1320182	Ex9CSR0901C7	1320236	Ex9CSR09C7C	1320290
	42	Ex9CSR0910D7	1320183	Ex9CSR0901D7	1320237	Ex9CSR09D7C	1320291
	48	Ex9CSR0910E7	1320184	Ex9CSR0901E7	1320238	Ex9CSR09E7C	1320292
	110	Ex9CSR0910F7	1320185	Ex9CSR0901F7	1320239	Ex9CSR09F7C	1320293
	120	Ex9CSR0910G7	1320186	Ex9CSR0901G7	1320240	Ex9CSR09G7C	1320294
	208	Ex9CSR0910X7	1320198	Ex9CSR0901X7	1320252	Ex9CSR09X7C	1320306
	220	Ex9CSR0910M7	1320187	Ex9CSR0901M7	1320241	Ex9CSR09M7C	1320295
	230	Ex9CSR0910P7	1320188	Ex9CSR0901P7	1320242	Ex9CSR09P7C	1320296
	240	Ex9CSR0910U7	1320190	Ex9CSR0901U7	1320244	Ex9CSR09U7C	1320298
	277	Ex9CSR0910N7	1320189	Ex9CSR0901N7	1320243	Ex9CSR09N7C	1320297
	380	Ex9CSR0910Q7	1320191	Ex9CSR0901Q7	1320245	Ex9CSR09Q7C	1320299
	400	Ex9CSR0910V7	1320192	Ex9CSR0901V7	1320246	Ex9CSR09V7C	1320300
	415	Ex9CSR0910Z7	1320193	Ex9CSR0901Z7	1320247	Ex9CSR09Z7C	1320301
	440	Ex9CSR0910R7	1320194	Ex9CSR0901R7	1320248	Ex9CSR09R7C	1320302
480	Ex9CSR0910T7	1320195	Ex9CSR0901T7	1320249	Ex9CSR09T7C	1320303	
500	Ex9CSR0910S7	1320196	Ex9CSR0901S7	1320250	Ex9CSR09S7C	1320304	
Vdc	12	Ex9CSR09D10A	1320375	Ex9CSR09D01A	1320390	Ex9CSR09DAC	1320405
	24	Ex9CSR09D10B	1320376	Ex9CSR09D01B	1320391	Ex9CSR09DBC	1320406
	48	Ex9CSR09D10E	1320377	Ex9CSR09D01E	1320392	Ex9CSR09DEC	1320407
	110	Ex9CSR09D10F	1320378	Ex9CSR09D01F	1320393	Ex9CSR09DFC	1320408
	220	Ex9CSR09D10M	1320379	Ex9CSR09D01M	1320394	Ex9CSR09DMC	1320409
	250	Ex9CSR09D10W	1320563	Ex9CSR09D01W	1320566	Ex9CSR09DWC	1320569

IEC Contactors

Ex9CSR 12 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



Coil Voltage	12 A • 3 Poles				12 A • 4 Poles		
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		
	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9CSR1210B7	1320199	Ex9CSR1201B7	1320253	Ex9CSR12B7C	1320307
	36	Ex9CSR1210C7	1320200	Ex9CSR1201C7	1320254	Ex9CSR12C7C	1320308
	42	Ex9CSR1210D7	1320201	Ex9CSR1201D7	1320255	Ex9CSR12D7C	1320309
	48	Ex9CSR1210E7	1320202	Ex9CSR1201E7	1320256	Ex9CSR12E7C	1320310
	110	Ex9CSR1210F7	1320203	Ex9CSR1201F7	1320257	Ex9CSR12F7C	1320311
	120	Ex9CSR1210G7	1320204	Ex9CSR1201G7	1320258	Ex9CSR12G7C	1320312
	208	Ex9CSR1210X7	1320216	Ex9CSR1201X7	1320270	Ex9CSR12X7C	1320324
	220	Ex9CSR1210M7	1320205	Ex9CSR1201M7	1320259	Ex9CSR12M7C	1320313
	230	Ex9CSR1210P7	1320206	Ex9CSR1201P7	1320260	Ex9CSR12P7C	1320314
	240	Ex9CSR1210U7	1320208	Ex9CSR1201U7	1320262	Ex9CSR12U7C	1320316
	277	Ex9CSR1210N7	1320207	Ex9CSR1201N7	1320261	Ex9CSR12N7C	1320315
	380	Ex9CSR1210Q7	1320209	Ex9CSR1201Q7	1320263	Ex9CSR12Q7C	1320317
	400	Ex9CSR1210V7	1320210	Ex9CSR1201V7	1320264	Ex9CSR12V7C	1320318
	415	Ex9CSR1210Z7	1320211	Ex9CSR1201Z7	1320265	Ex9CSR12Z7C	1320319
440	Ex9CSR1210R7	1320212	Ex9CSR1201R7	1320266	Ex9CSR12R7C	1320320	
480	Ex9CSR1210T7	1320213	Ex9CSR1201T7	1320267	Ex9CSR12T7C	1320321	
500	Ex9CSR1210S7	1320214	Ex9CSR1201S7	1320268	Ex9CSR12S7C	1320322	
Vdc	12	Ex9CSR12D10A	1320380	Ex9CSR12D01A	1320395	Ex9CSR12DAC	1320410
	24	Ex9CSR12D10B	1320381	Ex9CSR12D01B	1320396	Ex9CSR12DBC	1320411
	48	Ex9CSR12D10E	1320382	Ex9CSR12D01E	1320397	Ex9CSR12DEC	1320412
	110	Ex9CSR12D10F	1320383	Ex9CSR12D01F	1320398	Ex9CSR12DFC	1320413
	220	Ex9CSR12D10M	1320384	Ex9CSR12D01M	1320399	Ex9CSR12DMC	1320414
	250	Ex9CSR12D10W	1320564	Ex9CSR12D01W	1320567	Ex9CSR12DWC	1320570

IEC Contactors

Ex9CR 9~12 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



A

Coil Voltage	9 A • 3 Poles				12 A • 3 Poles				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9CR0911B7	1320882	Ex9CR0922B7	1321062	Ex9CR1211B7	1320900	Ex9CR1222B7	1321080
	36	Ex9CR0911C7	1320883	Ex9CR0922C7	1321063	Ex9CR1211C7	1320901	Ex9CR1222C7	1321081
	42	Ex9CR0911D7	1320884	Ex9CR0922D7	1321064	Ex9CR1211D7	1320902	Ex9CR1222D7	1321082
	48	Ex9CR0911E7	1320885	Ex9CR0922E7	1321065	Ex9CR1211E7	1320903	Ex9CR1222E7	1321083
	110	Ex9CR0911F7	1320886	Ex9CR0922F7	1321066	Ex9CR1211F7	1320904	Ex9CR1222F7	1321084
	120	Ex9CR0911G7	1320887	Ex9CR0922G7	1321067	Ex9CR1211G7	1320905	Ex9CR1222G7	1321085
	208	Ex9CR0911X7	1320899	Ex9CR0922X7	1321079	Ex9CR1211X7	1320917	Ex9CR1222X7	1321097
	220	Ex9CR0911M7	1320888	Ex9CR0922M7	1321068	Ex9CR1211M7	1320906	Ex9CR1222M7	1321086
	230	Ex9CR0911P7	1320889	Ex9CR0922P7	1321069	Ex9CR1211P7	1320907	Ex9CR1222P7	1321087
	240	Ex9CR0911U7	1320891	Ex9CR0922U7	1321071	Ex9CR1211U7	1320909	Ex9CR1222U7	1321089
	277	Ex9CR0911N7	1320890	Ex9CR0922N7	1321070	Ex9CR1211N7	1320908	Ex9CR1222N7	1321088
	380	Ex9CR0911Q7	1320892	Ex9CR0922Q7	1321072	Ex9CR1211Q7	1320910	Ex9CR1222Q7	1321090
	400	Ex9CR0911V7	1320893	Ex9CR0922V7	1321073	Ex9CR1211V7	1320911	Ex9CR1222V7	1321091
	415	Ex9CR0911Z7	1320894	Ex9CR0922Z7	1321074	Ex9CR1211Z7	1320912	Ex9CR1222Z7	1321092
	440	Ex9CR0911R7	1320895	Ex9CR0922R7	1321075	Ex9CR1211R7	1320913	Ex9CR1222R7	1321093
	480	Ex9CR0911T7	1320896	Ex9CR0922T7	1321076	Ex9CR1211T7	1320914	Ex9CR1222T7	1321094
500	Ex9CR0911S7	1320897	Ex9CR0922S7	1321077	Ex9CR1211S7	1320915	Ex9CR1222S7	1321095	
600	Ex9CR0911Y7	1320898	Ex9CR0922Y7	1321078	Ex9CR1211Y7	1320916	Ex9CR1222Y7	1321096	

IEC Contactors

Ex9CR 18~25 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing



Certifications
 IEC/EN 60947-1, 60947-4-1
 UL 60947-1, 60947-4-1

CE **cULUS LISTED**

Coil Voltage	18 A • 3 Poles				25 A • 3 Poles				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9CR1811B7	1321607	Ex9CR1822B7	1321625	Ex9CR2511B7	1320918	Ex9CR2522B7	1321098
	36	Ex9CR1811C7	1321608	Ex9CR1822C7	1321626	Ex9CR2511C7	1320919	Ex9CR2522C7	1321099
	42	Ex9CR1811D7	1321609	Ex9CR1822D7	1321627	Ex9CR2511D7	1320920	Ex9CR2522D7	1321100
	48	Ex9CR1811E7	1321610	Ex9CR1822E7	1321628	Ex9CR2511E7	1320921	Ex9CR2522E7	1321101
	110	Ex9CR1811F7	1321611	Ex9CR1822F7	1321629	Ex9CR2511F7	1320922	Ex9CR2522F7	1321102
	120	Ex9CR1811G7	1321612	Ex9CR1822G7	1321630	Ex9CR2511G7	1320923	Ex9CR2522G7	1321103
	208	Ex9CR1811X7	1321624	Ex9CR1822X7	1321642	Ex9CR2511X7	1320935	Ex9CR2522X7	1321115
	220	Ex9CR1811M7	1321613	Ex9CR1822M7	1321631	Ex9CR2511M7	1320924	Ex9CR2522M7	1321104
	230	Ex9CR1811P7	1321614	Ex9CR1822P7	1321632	Ex9CR2511P7	1320925	Ex9CR2522P7	1321105
	240	Ex9CR1811U7	1321616	Ex9CR1822U7	1321634	Ex9CR2511U7	1320927	Ex9CR2522U7	1321107
	277	Ex9CR1811N7	1321615	Ex9CR1822N7	1321633	Ex9CR2511N7	1320926	Ex9CR2522N7	1321106
	380	Ex9CR1811Q7	1321617	Ex9CR1822Q7	1321635	Ex9CR2511Q7	1320928	Ex9CR2522Q7	1321108
	400	Ex9CR1811V7	1321618	Ex9CR1822V7	1321636	Ex9CR2511V7	1320929	Ex9CR2522V7	1321109
	415	Ex9CR1811Z7	1321619	Ex9CR1822Z7	1321637	Ex9CR2511Z7	1320930	Ex9CR2522Z7	1321110
	440	Ex9CR1811R7	1321620	Ex9CR1822R7	1321638	Ex9CR2511R7	1320931	Ex9CR2522R7	1321111
	480	Ex9CR1811T7	1321621	Ex9CR1822T7	1321639	Ex9CR2511T7	1320932	Ex9CR2522T7	1321112
500	Ex9CR1811S7	1321622	Ex9CR1822S7	1321640	Ex9CR2511S7	1320933	Ex9CR2522S7	1321113	
600	Ex9CR1811Y7	1321623	Ex9CR1822Y7	1321641	Ex9CR2511Y7	1320934	Ex9CR2522Y7	1321114	

IEC Contactors

Ex9CR 32~38 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



A

Coil Voltage	32 A • 3 Poles				38 A • 3 Poles				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9CR3211B7	1320936	Ex9CR3222B7	1321116	Ex9CR3811B7	1320954	Ex9CR3822B7	1321134
	36	Ex9CR3211C7	1320937	Ex9CR3222C7	1321117	Ex9CR3811C7	1320955	Ex9CR3822C7	1321135
	42	Ex9CR3211D7	1320938	Ex9CR3222D7	1321118	Ex9CR3811D7	1320956	Ex9CR3822D7	1321136
	48	Ex9CR3211E7	1320939	Ex9CR3222E7	1321119	Ex9CR3811E7	1320957	Ex9CR3822E7	1321137
	110	Ex9CR3211F7	1320940	Ex9CR3222F7	1321120	Ex9CR3811F7	1320958	Ex9CR3822F7	1321138
	120	Ex9CR3211G7	1320941	Ex9CR3222G7	1321121	Ex9CR3811G7	1320959	Ex9CR3822G7	1321139
	208	Ex9CR3211X7	1320953	Ex9CR3222X7	1321133	Ex9CR3811X7	1320971	Ex9CR3822X7	1321151
	220	Ex9CR3211M7	1320942	Ex9CR3222M7	1321122	Ex9CR3811M7	1320960	Ex9CR3822M7	1321140
	230	Ex9CR3211P7	1320943	Ex9CR3222P7	1321123	Ex9CR3811P7	1320961	Ex9CR3822P7	1321141
	240	Ex9CR3211U7	1320945	Ex9CR3222U7	1321125	Ex9CR3811U7	1320963	Ex9CR3822U7	1321143
	277	Ex9CR3211N7	1320944	Ex9CR3222N7	1321124	Ex9CR3811N7	1320962	Ex9CR3822N7	1321142
	380	Ex9CR3211Q7	1320946	Ex9CR3222Q7	1321126	Ex9CR3811Q7	1320964	Ex9CR3822Q7	1321144
	400	Ex9CR3211V7	1320947	Ex9CR3222V7	1321127	Ex9CR3811V7	1320965	Ex9CR3822V7	1321145
	415	Ex9CR3211Z7	1320948	Ex9CR3222Z7	1321128	Ex9CR3811Z7	1320966	Ex9CR3822Z7	1321146
	440	Ex9CR3211R7	1320949	Ex9CR3222R7	1321129	Ex9CR3811R7	1320967	Ex9CR3822R7	1321147
	480	Ex9CR3211T7	1320950	Ex9CR3222T7	1321130	Ex9CR3811T7	1320968	Ex9CR3822T7	1321148
500	Ex9CR3211S7	1320951	Ex9CR3222S7	1321131	Ex9CR3811S7	1320969	Ex9CR3822S7	1321149	
600	Ex9CR3211Y7	1320952	Ex9CR3222Y7	1321132	Ex9CR3811Y7	1320970	Ex9CR3822Y7	1321150	

IEC Contactors

Ex9CR 40~100 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



Coil Voltage	40 A • 3 Poles		50 A • 3 Poles		65 A • 3 Poles		80 A • 3 Poles		100 A • 3 Poles	
	3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9CR4011B7 1320972	Ex9CR5011B7 1320990	Ex9CR6511B7 1321008	Ex9CR8011B7 1321026	Ex9CR10011B7 1321044				
	36	Ex9CR4011C7 1320973	Ex9CR5011C7 1320991	Ex9CR6511C7 1321009	Ex9CR8011C7 1321027	Ex9CR10011C7 1321045				
	42	Ex9CR4011D7 1320974	Ex9CR5011D7 1320992	Ex9CR6511D7 1321010	Ex9CR8011D7 1321028	Ex9CR10011D7 1321046				
	48	Ex9CR4011E7 1320975	Ex9CR5011E7 1320993	Ex9CR6511E7 1321011	Ex9CR8011E7 1321029	Ex9CR10011E7 1321047				
	110	Ex9CR4011F7 1320976	Ex9CR5011F7 1320994	Ex9CR6511F7 1321012	Ex9CR8011F7 1321030	Ex9CR10011F7 1321048				
	120	Ex9CR4011G7 1320977	Ex9CR5011G7 1320995	Ex9CR6511G7 1321013	Ex9CR8011G7 1321031	Ex9CR10011G7 1321049				
	208	Ex9CR4011X7 1320989	Ex9CR5011X7 1321007	Ex9CR6511X7 1321025	Ex9CR8011X7 1321043	Ex9CR10011X7 1321061				
	220	Ex9CR4011M7 1320978	Ex9CR5011M7 1320996	Ex9CR6511M7 1321014	Ex9CR8011M7 1321032	Ex9CR10011M7 1321050				
	230	Ex9CR4011P7 1320979	Ex9CR5011P7 1320997	Ex9CR6511P7 1321015	Ex9CR8011P7 1321033	Ex9CR10011P7 1321051				
	240	Ex9CR4011U7 1320981	Ex9CR5011U7 1320999	Ex9CR6511U7 1321017	Ex9CR8011U7 1321035	Ex9CR10011U7 1321053				
	277	Ex9CR4011N7 1320980	Ex9CR5011N7 1320998	Ex9CR6511N7 1321016	Ex9CR8011N7 1321034	Ex9CR10011N7 1321052				
	380	Ex9CR4011Q7 1320982	Ex9CR5011Q7 1321000	Ex9CR6511Q7 1321018	Ex9CR8011Q7 1321036	Ex9CR10011Q7 1321054				
	400	Ex9CR4011V7 1320983	Ex9CR5011V7 1321001	Ex9CR6511V7 1321019	Ex9CR8011V7 1321037	Ex9CR10011V7 1321055				
	415	Ex9CR4011Z7 1320984	Ex9CR5011Z7 1321002	Ex9CR6511Z7 1321020	Ex9CR8011Z7 1321038	Ex9CR10011Z7 1321056				
	440	Ex9CR4011R7 1320985	Ex9CR5011R7 1321003	Ex9CR6511R7 1321021	Ex9CR8011R7 1321039	Ex9CR10011R7 1321057				
480	Ex9CR4011T7 1320986	Ex9CR5011T7 1321004	Ex9CR6511T7 1321022	Ex9CR8011T7 1321040	Ex9CR10011T7 1321058					
500	Ex9CR4011S7 1320987	Ex9CR5011S7 1321005	Ex9CR6511S7 1321023	Ex9CR8011S7 1321041	Ex9CR10011S7 1321059					
600	Ex9CR4011Y7 1320988	Ex9CR5011Y7 1321006	Ex9CR6511Y7 1321024	Ex9CR8011Y7 1321042	Ex9CR10011Y7 1321060					

IEC Contactors

Ex9CR 115~225 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



A

Coil Voltage	115 A • 3 Poles			150 A • 3 Poles			185 A • 3 Poles			225 A • 3 Poles		
	3NO • 2NO+2NC Auxiliary Contact			3NO • 2NO+2NC Auxiliary Contact			3NO • 2NO+2NC Auxiliary Contact			3NO • 2NO+2NC Auxiliary Contact		
	Product	Part Number		Product	Part Number		Product	Part Number		Product	Part Number	
Vac/dc	24	Ex9CR115E22B	1321458	Ex9CR150E22B	1321473		Ex9CR185E22B	1321488		Ex9CR225E22B	1321503	
	36	Ex9CR115E22C	1321459	Ex9CR150E22C	1321474		Ex9CR185E22C	1321489		Ex9CR225E22C	1321504	
	42	Ex9CR115E22D	1321460	Ex9CR150E22D	1321475		Ex9CR185E22D	1321490		Ex9CR225E22D	1321505	
	48	Ex9CR115E22E	1321461	Ex9CR150E22E	1321476		Ex9CR185E22E	1321491		Ex9CR225E22E	1321506	
	110	Ex9CR115E22F	1321462	Ex9CR150E22F	1321477		Ex9CR185E22F	1321492		Ex9CR225E22F	1321507	
	120	Ex9CR115E22G	1321463	Ex9CR150E22G	1321478		Ex9CR185E22G	1321493		Ex9CR225E22G	1321508	
	208	Ex9CR115E22X	1321466	Ex9CR150E22X	1321481		Ex9CR185E22X	1321496		Ex9CR225E22X	1321511	
	220	Ex9CR115E22M	1321464	Ex9CR150E22M	1321479		Ex9CR185E22M	1321494		Ex9CR225E22M	1321509	
	230	Ex9CR115E22P	1321465	Ex9CR150E22P	1321480		Ex9CR185E22P	1321495		Ex9CR225E22P	1321510	
	240	Ex9CR115E22U	1321467	Ex9CR150E22U	1321482		Ex9CR185E22U	1321497		Ex9CR225E22U	1321512	
	277	Ex9CR115E22N	1321470	Ex9CR150E22N	1321647		Ex9CR185E22N	1321500		Ex9CR225E22N	1321648	
	380	Ex9CR115E22Q	1321468	Ex9CR150E22Q	1321483		Ex9CR185E22Q	1321498		Ex9CR225E22Q	1321513	
	400	Ex9CR115E22V	1321469	Ex9CR150E22V	1321484		Ex9CR185E22V	1321499		Ex9CR225E22V	1321514	
	415	Ex9CR115E22Z	1321652	Ex9CR150E22Z	1321485		Ex9CR185E22Z	1321656		Ex9CR225E22Z	1321515	
480	Ex9CR115E22T	1321471	Ex9CR150E22T	1321486		Ex9CR185E22T	1321501		Ex9CR225E22T	1321516		
600	Ex9CR115E22Y	1321472	Ex9CR150E22Y	1321487		Ex9CR185E22Y	1321502		Ex9CR225E22Y	1321517		
Wide Range Electronic Coil Vac/dc	48~130	Ex9CR115F22H	1321576	Ex9CR150F22H	1321579		Ex9CR185F22H	1321582		Ex9CR225F22H	1321585	
	100~250	Ex9CR115F22K	1321577	Ex9CR150F22K	1321580		Ex9CR185F22K	1321583		Ex9CR225F22K	1321586	
	250~500	Ex9CR115F22L	1321578	Ex9CR150F22L	1321581		Ex9CR185F22L	1321584		Ex9CR225F22L	1321587	

IEC Contactors

Ex9CR 265~500 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing



Certifications
 IEC/EN 60947-1, 60947-4-1
 UL 60947-1, 60947-4-1

CE **UL US LISTED**

Coil Voltage	265 A • 3 Poles				300 A • 3 Poles		400 A • 3 Poles		500 A • 3 Poles	
	3NO • 2NO+2NC Auxiliary Contact				3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number		
Vac/dc	24	Ex9CR265E22B	1321518	Ex9CR300E22B	1321533	-	-	-	-	
	36	Ex9CR265E22C	1321519	Ex9CR300E22C	1321534	Ex9CR400E22C	1321548	Ex9CR500E22C	1321562	
	42	Ex9CR265E22D	1321520	Ex9CR300E22D	1321535	Ex9CR400E22D	1321549	Ex9CR500E22D	1321563	
	48	Ex9CR265E22E	1321521	Ex9CR300E22E	1321536	Ex9CR400E22E	1321550	Ex9CR500E22E	1321564	
	110	Ex9CR265E22F	1321522	Ex9CR300E22F	1321537	Ex9CR400E22F	1321551	Ex9CR500E22F	1321565	
	120	Ex9CR265E22G	1321523	Ex9CR300E22G	1321538	Ex9CR400E22G	1321552	Ex9CR500E22G	1321566	
	208	Ex9CR265E22X	1321526	Ex9CR300E22X	1321541	Ex9CR400E22X	1321555	Ex9CR500E22X	1321569	
	220	Ex9CR265E22M	1321524	Ex9CR300E22M	1321539	Ex9CR400E22M	1321553	Ex9CR500E22M	1321567	
	230	Ex9CR265E22P	1321525	Ex9CR300E22P	1321540	Ex9CR400E22P	1321554	Ex9CR500E22P	1321568	
	240	Ex9CR265E22U	1321527	Ex9CR300E22U	1321542	Ex9CR400E22U	1321556	Ex9CR500E22U	1321570	
	277	Ex9CR265E22N	1321530	Ex9CR300E22N	1321649	Ex9CR400E22N	1321559	Ex9CR500E22N	1321650	
	380	Ex9CR265E22Q	1321528	Ex9CR300E22Q	1321543	Ex9CR400E22Q	1321557	Ex9CR500E22Q	1321571	
	400	Ex9CR265E22V	1321529	Ex9CR300E22V	1321544	Ex9CR400E22V	1321558	Ex9CR500E22V	1321572	
	415	Ex9CR265E22Z	1321657	Ex9CR300E22Z	1321545	Ex9CR400E22Z	1321658	Ex9CR500E22Z	1321573	
	480	Ex9CR265E22T	1321531	Ex9CR300E22T	1321546	Ex9CR400E22T	1321560	Ex9CR500E22T	1321574	
600	Ex9CR265E22Y	1321532	Ex9CR300E22Y	1321547	Ex9CR400E22Y	1321561	Ex9CR500E22Y	1321575		
Wide Range Electronic Coil Vac/dc	48~130	Ex9CR265F22H	1321588	Ex9CR300F22H	1321591	Ex9CR400F22H	1321594	Ex9CR500F22H	1321597	
	100~250	Ex9CR265F22K	1321589	Ex9CR300F22K	1321592	Ex9CR400F22K	1321595	Ex9CR500F22K	1321598	
	250~500	Ex9CR265F22L	1321590	Ex9CR300F22L	1321593	Ex9CR400F22L	1321596	Ex9CR500F22L	1321599	

IEC Contactors

Ex9CS/C Specifications

	Ex9CS/CSR			Ex9C/CR																
	6	9	12	9	12	18	25	32	38	40	50									
General Information																				
Pole	3, 4			3																
Production Standard	IEC 60947-1, IEC 60947-4-1, UL 60947-1, UL 60947-4-1																			
Environmental Testing According to	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-11, IEC 60068-2-30																			
Rated Frequency (Hz)	50/60																			
Conventional Free Air Thermal Current Ith (A)	$\theta \leq 104^\circ\text{F}$ ($\theta \leq 40^\circ\text{C}$)			20		25		32		40		50		60		80				
	$\theta \leq 140^\circ\text{F}$ ($\theta \leq 60^\circ\text{C}$)			16		19		24		30		38		45		60				
	$\theta \leq 158^\circ\text{F}$ ($\theta \leq 70^\circ\text{C}$)			16		19		24		30		38		45		60				
Rated Insulating Voltage Ui (V)	690											1,000								
Rated Impulse Withstand Voltage Uimp (kV)	6											8								
Electrical Life (x10 ⁴ cycles)	AC-3		120																	
	AC-4		380/400 V																	
Mechanical Life (x10 ⁴ cycles)	6											5	4	6	5	4	5	4	3.5	3
Operating Cycles Per Hour (cycles/h)	AC-3			1,200				1,000												
	AC-4			300				150				120								
Environmental Temperature	Transportation or Storage											-76°F to 176°F (-60°C to +80°C)								
	Working At											-4°F to 140°F (-20°C to +60°C)								
	Maximum											-40°F to 158°F (-40°C to +70°C)								
Altitude ft (m)	6,562 (2,000)																			
Pollution Degree	Class III																			
Rated Operational Current Ie (A)																				
At -82 to 131 °F (-25 to 40 °C)	AC-1		690 V			20		25		32		40		50		60		80		
	AC-3		380/400 V			6	9	12	9	12	18	25	32	38	40	50				
	AC-3		660/690 V			3.8	4.9		6.7	9	10.6	17.3	21.9		34	39				
	AC-4		380/400 V			6	9	12	9	12	18	25	32		40	50				
	AC-4		660/690 V			3.8	4.9		6.7	9	10.6	14	17.3		34	39				
Rated Power of 3-Phase Motor																				
For IEC (kW)	AC-3		230 Vac			1.5	2.2	3	2.2	3	4	5.5	7.5	9	11	15				
	AC-4		230 Vac			1.5	2.2	3	2.2	3	4	5.5	7.5	9	11	15				
	AC-3		380/400 Vac			2.2	4	5.5	4	5.5	7.5	11	15	18.5		22				
	AC-4		380/400 Vac			2.2	4	5.5	4	5.5	7.5	11	15	18.5		22				
	AC-3		660/690 Vac			3	4		5.5	7.5	10	15	18.5		30	33				
	AC-4		660/690 Vac			3	4		5.5	7.5	10	15	18.5		30	33				
	AC-3		1,000 Vac			-														
AC-4		1,000 Vac			-															
UL Rating																				
Single-Phase (HP)	110-120 Vac		0.5		0.75		0.5	1	1.5	2		3			5					
	220-240 Vac		1	1.5	2	1.5	2	3		5			7.5	10						
Three-Phase (HP)	200-208 Vac		1.5	3		3		5	7.5	10		10			15	20				
	220-240 Vac		2	3		3		5	7.5	10		10			15	20				
	440-480 Vac		3	5	7.5	5	7.5	10	15	20		30			40					
	550-600 Vac		5	7.5	10	7.5	10	15	20	25		30			40					
Coil Voltage (V)	24~500Vac, 12~250Vdc						24~600Vac, 24~250Vac/dc													

A

IEC Contactors Ex9C Specifications

		Ex9C/CR										
		65	80	100	115	150	185	225	265	300	400	500
General Information												
Pole		3										
Production Standard		IEC 60947-1, IEC 60947-4-1, UL 60947-1, UL 60947-4-1										
Environmental Testing According to		IEC 60068-2-1, IEC 600682-2, IEC 60068-2-11, IEC 60068-2-30										
Rated Frequency (Hz)		50/60										
Conventional Free Air Thermal Current I _{th} (A)	θ≤104 °F (θ≤40 °C)	80	125	160	185	215	275	330	400	500	610	
	θ≤140 °F (θ≤60 °C)				170	200	260	300	360	430	550	
	θ≤158 °F (θ≤70 °C)	60	94	140	160	180	206	260	300	400	418	
Rated Insulating Voltage U _i (V)		1,000										
Rated Impulse Withstand Voltage U _{imp} (kV)		8										
Electrical Life (x10 ⁴ cycles)	AC-3 380/400 V	120			100							
	AC-4	3	2.5	20								
Mechanical Life (x10 ⁴ cycles)		1,000			800						500	
Operating Cycles Per Hour (cycles/h)	AC-3	1,000	900		750			500			420	
	AC-4	120			130							
Environmental Temperature	Transportation or Storage	-76°F to 176°F (-60°C to +80 °C)										
	Working At	-4°F to 140°F (-20°C to +60 °C)										
	Maximum	-40°F to 158°F (-40°C to +70 °C)										
Altitude ft (m)		6,562 (2,000)										
Pollution Degree		Class III										
Rated Operational Current I_e (A)												
At -82 to 131 °F (-25 to 40 °C)	AC-1 690 V	80	125	160	185	215	275	330	400	500	610	
	AC-3 380/400 V	65	80	100	115	150	185	225	265	300	400	500
	AC-3 660/690 V	42	49				170			280		450
	AC-4 380/400 V	65	80	100			185			300		500
	AC-4 660/690 V	42	49				170			280		450
Rated Power of 3-Phase Motor												
For IEC (kW)	AC-3 230 Vac	18.5	22	25	37	45	55	75	90	132	160	
	AC-4											
	AC-3 380/400 Vac	30	37	45	55	75	90	110	132	160	220	250
	AC-4											
	AC-3 660/690 Vac	37	45		110	132	160	200	250	355	400	
	AC-4											
	AC-3 1,000 Vac	-			75	90	90	132	250	315		
AC-4												
UL Rating												
I _{th} (A)		80	125	160	185	215	275	330	400	500	610	
Single-Phase (HP)	110-120 Vac	5	7.5	10	15	-						
	220-240 Vac	15	20		25	30	40	-				
Three-Phase (HP)	200-208 Vac	20	30	30	40	50	60	75	100	125	150	
	220-240 Vac	25		40	50	60	75	100	125	150	200	
	440-480 Vac	50	60		100	125	150	200	250	300	400	
	550-600 Vac				125	150	200	250	300	400	500	
Coil Voltage (V)		24~600 Vac			24~600 Vac/dc						36~600 Vac/dc	

IEC Contactors



Ex9C Specifications

A

		Ex9C			
		630	800	1000	
General Information					
Pole		3			
Production Standard		IEC 60947-1, IEC 60947-4-1, UL 60947-1, UL 60947-4-1			
Environmental Testing According to		IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-11, IEC 60068-2-30			
Rated Frequency (Hz)		50/60			
Conventional Free Air Thermal Current Ith (A)	$\theta \leq 104^\circ\text{F}$ ($\theta \leq 40^\circ\text{C}$)	800	1000	1000	
	$\theta \leq 140^\circ\text{F}$ ($\theta \leq 60^\circ\text{C}$)	720	850	850	
	$\theta \leq 158^\circ\text{F}$ ($\theta \leq 70^\circ\text{C}$)	630	750	750	
Rated Insulating Voltage Ui (V)		1,000			
Rated Impulse Withstand Voltage Uimp (kV)		8			
Electrical Life (x10 ⁴ cycles)	AC-3	80	50		
	AC-4	20			
Mechanical Life (x10 ⁴ cycles)		300			
Operating Cycles Per Hour (cycles/h)	AC-3	300		120	
	AC-4	100			
Environmental Temperature	Transportation or Storage	-76°F to 176°F (-60°C to +80°C)			
	Working At	-4°F to 140°F (-20°C to +60°C)			
	Maximum	-40°F to 158°F (-40°C to +70°C)			
Altitude ft (m)		6,562 (2,000)			
Pollution Degree		Class III			
Rated Operational Current Ie (A)					
At -82 to 131 °F (-25 to 40 °C)	AC-1	690 V	800	1000	1000
	AC-3	380/400 V	630	800	1000
	AC-3	660/690 V	560	650	800
	AC-4	380/400 V	225	242	260
	AC-4	660/690 V	200	215	230
Rated Power of 3-Phase Motor					
For IEC (kW)	AC-3	230 Vac	200	250	315
			75		80
	AC-3	380/400 Vac	335	450	560
			110	132	150
	AC-3	660/690 Vac	560	630	800
			185	200	220
	AC-3	1,000 Vac	400	450	500
			150	200	
UL Rating					
Ith (A)		800	1000	1000	
Single-Phase (HP)	110-120 Vac	-			
	220-240 Vac				
Three-Phase (HP)	200-208 Vac	-	-	-	
	220-240 Vac	250	300	350	
	440-480 Vac	500	600	750	
	550-600 Vac	600	700	800	
Coil Voltage (V)		48 - 480 Vac/dc			



IEC Contactors

Ex9CS/C Specifications

			Ex9CS/CSR			Ex9C/CR							
			6	9	12	9	12	18	25	32	38	40	50
Coil Electrical Parameters													
Tolerance of Control Voltage 50/60 Hz	Operation (Uc)	Standard	0.85~1.10										
	Drop-Off (Uc)		0.20~0.75(AC) ; 0.10~0.75(DC)										
	Operation (Uc)	F-Type	-			0.85Ucmin~1.10Ucmax							
	Drop-Off (Uc)		0.20Ucmax~0.75Ucmin (AC), 0.10Ucmax~0.75Ucmin (DC)										
Coil Power Consumption													
In Rush (VA)	AC		40			80				85			300
	F-Type		-			60				60			100
Power Factor										-			
Sealed (VA)	AC		9			9.5				11.4			34.2
	F-Type		-							5.1			15
Power Factor										-			
Pick-Up (W)	DC		4						7				17
	F-Type		-						35				100
Hold (W)	DC		4						7				17
	F-Type		-						2.5				8
Operating Time (ms)	Operation	Standard	15-40			14-30			18-32			20-30	
		F-Type	-			30-90			-			50~100	
	Drop-Off	Standard	8-15			6-20			7-22			8-20	
		F-Type	-			20~110			20~110			20~120	
IEC AC Contactor Working at DC Power Data													
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)										
Working Type: DC-1, Resistive Load	24	1											
		2											
		3											
Time Data: L/R≤1ms	48/75	1	15			25		32		40		50	
		2											
		3											
Environmental Temperature: ≤140 °F (≤60 °C)	125	1	4			10		15		20		25	
		2	15			20		25		32		40	
		3											
	225	1				1						1.5	
		2	4						7			60	
		3	15			20		25		32		40	
IEC AC Contactor Working at DC Power Data													
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)										
Working Type: DC-2 to DC-5, Inductive Load	24	1											
		2	15			20		25					
		3											
Time Data: L/R≤15ms	48/75	1	5						32		40		50
		2											
		3	15			20		25					
Environmental Temperature: ≤140 °F (≤60 °C)	125	1	1.5			2			3			4	
		2	11			20		25		32		40	
		3	15										
	225	1	0.5						1			1.5	
		2	1.5			2			3		4		
		3	5			8			32		40		50

IEC Contactors

Ex9C Specifications

			Ex9C/CR										Ex9C			
			65	80	100	115	150	185	225	265	300	400	500	630	800	1000
Coil Electrical Parameters																
Tolerance of Control Voltage 50/60 Hz	Operation (Uc)	Standard	0.85~1.10													
	Drop-Off (Uc)		0.20~0.75(AC); 0.10~0.75(DC)													
	Operation (Uc)	F-Type	0.20~0.70					0.85Ucmin~1.10Ucmax								
	Drop-Off (Uc)		0.20Ucmax~0.75Ucmin(AC) ; 0.10Ucmax~0.75Ucmin(DC)													
Coil Power Consumption																
In Rush (VA)	AC		300	330		400		590		600		850				
	F-Type		100								1000					
Power Factor			0.90-0.95													
Sealed (VA)	AC		34.2	36.6		10		10		10		10				
	F-Type		15			18		18		18		18				
Power Factor			0.90-0.95													
Pick-Up (W)	DC		17			400		590		600		850				
	F-Type		100								1000					
Hold (W)	Standard		17					10				10				
	F-Type		8					5.0				5.0				
Operating Time (ms)	Operation	Standard	20-30	20-35		30-65		45-80		70-90		80~120				
		F-Type	50~100			75-120		90-120		110-120		100-150				
	Drop-Off	Standard	8-20	6-20		45-65		50-70		60-80		85~160				
		F-Type	20~120			45-70		60-80		50-100		85-120				
IEC AC Contactor Working at DC Power Data																
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)													
Working Type: DC-1, Resistive Load	24	1	70	100	160	200	275	330	400	430	500					
		2														
		3														
	48/75	1														
		2														
		3														
Environmental Temperature: ≤140 °F (≤60 °C)	125	1	65	80	100	115	150	200	300	400						
		2	70	100	160	200	275	330	400	430	500					
		3														
	225	1	1.5		3.4			3.8								
		2	70	80	160	200	300	400								
		3		100												
IEC AC Contactor Working at DC Power Data																
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)													
Working Type: DC-2 to DC-5, Inductive Load	24	1	65	100	160	200	300	400								
		2														
		3														
	48/75	1							7.5		11					
		2							160	200	300	400				
		3														
Environmental Temperature: ≤140 °F (≤60 °C)	125	1	4	5	2.5		3									
		2	65	80	160	200	300	400								
		3		100												
	225	1	1.5	2	2											
		2	4	5	7.5			11								
		3	65	100	160	200	300	400								

A

IEC Contactors

Ex9CS/C Specifications

		Ex9CS/CSR			Ex9C/CR								
		6	9	12	9	12	18	25	32	38	40	50	
Built-In Auxiliary Contacts													
Auxiliary Contacts		1NO/1NC (3P), None (4P)			1NO+1NC, 2NO+2NC						1NO+1NC		
Rated Operation Voltage U _e (V)		690											
Rated Insulating Voltage U _i (V)		690											
Rated Impulse Withstand Voltage U _{imp} (kV)		6											
Rated Frequency (Hz)		50/60											
Conventional Free Air Thermal Current I _{th} (A)		10											
Rated Operational Current I_e (A)													
AC-15	24 V	-											
	120 V	6											
	230 V	-											
	240 V	3											
	380 V	1.9											
	400 V	-											
	600 V	1.2											
DC-13	125 V	1.1			0.55								
	220 V	-			0.31								
	250 V	0.55			0.27								
Mounting	Screw (mm)	ø4									ø5		
	N rail (mm)	35/7.5									35/7.5 or 75/7.5		
Dimension LxWxH in (mm)	AC	2.28x1.77x2.28 (58x45x58)			3.58x1.77x3.70 (91x45x94)			3.94x1.77x4.25 (100x45x108)			4.80x2.99x4.84 (122x76x123)		
	DC	2.28x1.77x2.68 (58x45x68)											
Weight lb (kg)	AC	0.40 (0.18)			0.77 (0.35)			0.88 (0.40)			2.71 (1.23)		
	DC	0.57 (0.26)											
Degree of Protection		IP 20 (front side)											
Main Power Terminal Connection													
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable												
	Dual Cable	18-12* (1-2.5) [†]			18-10* (1.5-6) [†]			14-8* (1.5-10) [†]			14-4* (2.5-25) [†]		
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable												
	Dual Cable												
Screw Size ø (mm)		M3			M3.5			M4			M8		
Torque of Terminals in-lb (N.m)		7 (0.80)			15 (1.70)			22 (2.50)			53 (6)		
Bus Bar Terminal Connection													
Bus Bar Size													
Screw Size ø (mm)													
Torque of Terminals in-lb (N.m)													
Auxiliary Contact Terminal Connection													
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable												
	Dual Cable												
Stiff Cable With Cold-Press Terminal AWG (mm ²)	Single Cable	18-12* (1-2.5) [†]											
	Dual Cable												
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable												
	Dual Cable												
Screw Size ø (mm)		M3			M3.5								
Torque of Terminals in-lb (N.m)		7 (0.80)			15 (1.70)								

* American Wire Gauge

[†] IEC Wire Gauge

IEC Contactors

Ex9C Specifications

		Ex9C/CR											
		65	80	100	115	150	185	225	265	300	400	500	
Built-In Auxiliary Contacts													
Auxiliary Contacts		1NO+1NC					2NO+2NC						
Rated Operation Voltage Ue (V)		690											
Rated Insulating Voltage Ui (V)		6											
Rated Impulse Withstand Voltage Uimp (kV)		50/60											
Rated Frequency (Hz)		10											
Conventional Free Air Thermal Current Ith (A)													
Rated Operational Current Ie (A)													
AC-15	24 V	-					6						
	120 V	6					-						
	230 V	-					3.13						
	240 V						3						
	380 V	1.9					-						
	400 V	-					1.8						
	600 V	1.2					-						
DC-13	690 V	-					1.04						
	125 V						0.55						
	220 V						0.31						
Mounting	250 V						0.27						
	Screw (mm)	ø5			ø8			ø9					
	DIN rail (mm)	35/7.5 or 75/7.5											
Dimension LxWxH in (mm)		4.80x2.99 x4.84 (122x76x123)	5.12x3.43x5.12 (130x87x130)			6.81x4.72x6.85 (173x120x174)			8.35x5.71x8.19 (212x145x208)			8.58x6.30x9.06 (218x160x230)	
Weight lb (kg)		2.71 (1.23)		3.31 (1.50)		6.61 (3)		13.23 (6)		20.94 (9.5)			
Degree of Protection		IP 20				IP 20 (Control Circuit Terminal) ; IP 00(Main Circuit Terminal)							
Main Power Terminal Connection													
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable			12-1/0 (2.5-50)					(1x) 1/0 - (2x) 500 MCM (218x160x230)				
	Dual Cable	14-4*		12-1 (2.5-42.5)		(1x) 4 - (2x) 250 MCM ((1x) 25 - (2x) 120)			(1x) 50 - (2x) 240				
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable	(2.5-25)†		12-1/0 (2.5-50)									
	Dual Cable			12-1 (2.5-42.5)									
Screw Size ø (mm)		M8											
Torque of Terminals in-lb (N.m)		53 (6)		79 (9)		159 (18)		310 (35)					
Bus Bar Terminal Connection													
Bus Bar Size						2x0.75x0.25 (2x20x5)		2x1x0.25 (2x30x5)		2x1.25x0.25 (2x40x5)			
Screw Size ø (mm)						M8		M10					
Torque of Terminals in-lb (N.m)						159 (18)		310 (35)					
Auxiliary Contact Terminal Connection													
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable												
	Dual Cable												
Stiff Cable With Cold-Press Terminal AWG (mm ²)	Single Cable	18-12*											
	Dual Cable	(1-2.5)†											
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable												
	Dual Cable												
Screw Size ø (mm)		M3.5											
Torque of Terminals in-lb (N.m)		15 (1.70)											

A

* American Wire Gauge

† IEC Wire Gauge

IEC Contactors

Ex9C Specifications

		Ex9C		
		630	800	1000
Built-In Auxiliary Contacts				
Auxiliary Contacts		2NO+2NC		
Rated Operation Voltage U _e (V)		690		
Rated Insulating Voltage U _i (V)		690		
Rated Impulse Withstand Voltage U _{imp} (kV)		6		
Rated Frequency (Hz)		50/60		
Conventional Free Air Thermal Current I _{th} (A)		10		
Rated Operational Current I_e (A)				
AC-15	24 V	6		
	120 V	-		
	230 V	3.13		
	240 V	3		
	380 V	-		
	400 V	1.8		
	600 V	-		
DC-13	690 V	1.04		
	125 V	0.55		
	220 V	0.31		
Mounting	250 V	0.27		
	Screw (mm)	11.5		
	DIN rail (mm)	-		
Dimension LxWxH in (mm)		11.73x9.06x10.47 (298x230x262)	12.68x9.06x10.47 (322x230x262)	
Weight lb (kg)		44.53(20.2)	48.5(22)	49.16(22.3)
Degree of Protection		IP 20 (Control Circuit Terminal) IP 00 Main Circuit Terminal		
Main Power Terminal Connection				
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable	LTC25NB 250~600 LTC25NC 4/0~500	LTC26NC 3/0~750 LTC26ND 3/0~500	
	Dual Cable			
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable			
	Dual Cable			
Screw Size ø (mm)		M12	4*M10	
Torque of Terminals in-lb (N.m)		310(45)	310(35)	
Auxiliary Contact Terminal Connection				
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable	18-12* (1-2.5) †		
	Dual Cable			
Stiff Cable With Cold-Press Terminal AWG (mm ²)	Single Cable			
	Dual Cable			
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable			
	Dual Cable			
Screw Size ø (mm)		M3.5		
Torque of Terminals in-lb (N.m)		15 (1.70)		

* American Wire Gauge

† IEC Wire Gauge

IEC Contactors

Ex9C Specifications

Type C

			Voltage / V							
			200		240		480		600	
MC*	CB	OLR**	HP	Sccr(kA)	HP	Sccr(kA)	HP	Sccr(kA)	HP	Sccr(kA)
Ex9C09...	M1N15T3L	Ex9R38B.../Ex9RE40...	3	65	3	65	5	65	7.5	20
	M1H15T3L	Ex9R38B.../Ex9RE40...	3	100	3	100	5	100	7.5	25
Ex9C12...	M1N15T3L	Ex9R38B.../Ex9RE40...	3	65	3	65	7.5	65	10	20
	M1H15T3L	Ex9R38B.../Ex9RE40...	3	100	3	100	7.5	100	10	25
Ex9C18...	M1N30T3L	Ex9R38B.../Ex9RE40...	5	65	5	65	10	65	15	20
	M1H30T3L	Ex9R38B.../Ex9RE40...	5	100	5	100	10	100	15	25
Ex9C25...	M1N30T3L	Ex9R38B.../Ex9RE40...	-	-	7.5	65	15	65	20	20
	M1H30T3L	Ex9R38B.../Ex9RE40...	-	-	7.5	100	15	100	20	25
	M1N50T3L	Ex9R38B.../Ex9RE40...	7.5	65	-	-	-	-	-	-
	M1H50T3L	Ex9R38B.../Ex9RE40...	7.5	100	-	-	-	-	-	-
Ex9C32...	M1N50T3L	Ex9R38B.../Ex9RE40...	10	65	10	65	20	65	25	20
	M1H50T3L	Ex9R38B.../Ex9RE40...	10	100	10	100	20	100	25	25
Ex9C38...	M1N50T3L	Ex9R38B.../Ex9RE40...	10	65	10	65	20	65	25	20
	M1H50T3L	Ex9R38B.../Ex9RE40...	10	100	10	100	20	100	25	25
Ex9C40...	M1N70T3L	Ex9R100B...	10	65	15	65	30	65	30	20
	M1H70T3L	Ex9R100B...	10	100	15	100	30	100	30	25
Ex9C50...	M1N70T3L	Ex9R100B...	15	65	20	65	40	65	40	20
	M1H70T3L	Ex9R100B...	15	100	20	100	40	100	40	25
Ex9C65...	M1N70T3L	Ex9R100B...	-	-	-	-	-	-	50	20
	M1H70T3L	Ex9R100B...	-	-	-	-	-	-	50	25
	M1N100T3L	Ex9R100B...	20	65	25	65	50	65	-	-
	M1H100T3L	Ex9R100B...	20	100	25	100	50	100	-	-
Ex9C80...	M1N100T3L	Ex9R100B...	-	-	30	65	60	65	60	20
	M1H100T3L	Ex9R100B...	-	-	30	100	60	100	60	25
	M1N150T3L	Ex9R100B...	30	65	-	-	-	-	-	-
	M1H150T3L	Ex9R100B...	30	100	-	-	-	-	-	-
Ex9C100...	M1N100T3L	Ex9R100B...	-	-	-	-	60	65	60	20
	M1H100T3L	Ex9R100B...	-	-	-	-	60	100	60	25
	M1N150T3L	Ex9R100B...	30	100	40	65	-	-	-	-
	M1H150T3L	Ex9R100B...	-	-	40	100	-	-	-	-

A

* More information about MC (Motor Contactor), Please refer to Product Selection Guide in Chapter A (Ex9C series).

**More information about OLR (Overload Relay), Please refer to Product Selection Guide in Chapter B (Ex9R series).

IEC Contactors Ex9C Specifications

Type C

			Voltage / V							
			200		240		480		600	
MC*	CB	OLR**	HP	Sccr(kA)	HP	Sccr(kA)	HP	Sccr(kA)	HP	Sccr(kA)
Ex9C115...	M2N200T3L	Ex9R185B...	40	65	50	65	100	65	125	20
	M2H200T3L	Ex9R185B...	40	100	50	100	100	100	125	25
Ex9C150...	M2N200T3L	Ex9R185B...	50	65	60	65	125	65	150	20
	M2H200T3L	Ex9R185B...	50	100	60	100	125	100	150	25
Ex9C185...	M2N250T3L	Ex9R185B...	60	65	75	65	150	65	200	20
	M2H250T3L	Ex9R185B...	60	100	75	100	150	100	200	25
Ex9C225...	M2N250T3L	Ex9R500B...	60	65	75	65	150	65	200	20
	M2H250T3L	Ex9R500B...	60	100	75	100	150	100	200	25
Ex9C265...	M3N400T3L	Ex9R500B...	75	65	100	65	200	65	250	25
	M3H400T3L	Ex9R500B...	75	100	100	100	200	100	250	30
Ex9C300...	M3N400T3L	Ex9R500B...	100	65	125	65	250	65	300	25
	M3H400T3L	Ex9R500B...	100	100	125	100	250	100	300	30
Ex9C400...	M4N500T3L	Ex9R500B...	125	65	150	65	300	65	400	30
	M4H500T3L	Ex9R500B...	125	100	150	100	300	100	400	50
Ex9C500...	M4N600T3L	Ex9R500B...	150	65	200	65	400	65	500	30
	M4H600T3L	Ex9R500B...	150	100	200	100	400	100	500	50

* More information about MC (Motor Contactor), Please refer to Product Selection Guide in Chapter A (Ex9C series).

**More information about OLR (Overload Relay), Please refer to Product Selection Guide in Chapter B (Ex9R series).

IEC Contactors

Ex9C Specifications

Type D

			Voltage / V								A
			200		240		480		600		
MC*	ICB	OLR**	HP	Sccr(kA)	HP	Sccr(kA)	HP	Sccr(kA)	HP	Sccr(kA)	
Ex9C09...	M1MN3T3L	Ex9R38B.../Ex9RE40...	3	65	3	65	5	65	7.5	20	
	M1MH3T3L	Ex9R38B.../Ex9RE40...	3	100	3	100	5	100	7.5	25	
	M1MN7T3L	Ex9R38B.../Ex9RE40...	3	65	3	65	5	65	7.5	20	
	M1MH7T3L	Ex9R38B.../Ex9RE40...	3	100	3	100	5	100	7.5	25	
	M1MN15T3L	Ex9R38B.../Ex9RE40...	3	65	3	65	5	65	7.5	20	
	M1MH15T3L	Ex9R38B.../Ex9RE40...	3	100	3	100	5	100	7.5	25	
Ex9C12...	M1MN15T3L	Ex9R38B.../Ex9RE40...	3	65	3	65	7.5	65	10	20	
	M1MH15T3L	Ex9R38B.../Ex9RE40...	3	100	3	100	7.5	100	10	25	
Ex9C18...	M1MN30T3L	Ex9R38B.../Ex9RE40...	5	65	5	65	10	65	15	20	
	M1MH30T3L	Ex9R38B.../Ex9RE40...	5	100	5	100	10	100	15	25	
Ex9C25...	M1MN30T3L	Ex9R38B.../Ex9RE40...	-	-	7.5	65	15	65	20	20	
	M1MH30T3L	Ex9R38B.../Ex9RE40...	-	-	7.5	100	15	100	20	25	
	M1MN50T3L	Ex9R38B.../Ex9RE40...	7.5	65	-	-	-	-	-	-	
	M1MH50T3L	Ex9R38B.../Ex9RE40...	7.5	100	-	-	-	-	-	-	
Ex9C32...	M1MN50T3L	Ex9R38B.../Ex9RE40...	10	65	10	65	20	65	25	20	
	M1MH50T3L	Ex9R38B.../Ex9RE40...	10	100	10	100	20	100	25	25	
Ex9C38...	M1MN50T3L	Ex9R38B.../Ex9RE40...	10	65	10	65	20	65	25	20	
	M1MH50T3L	Ex9R38B.../Ex9RE40...	10	100	10	100	20	100	25	25	
Ex9C40...	M1MN70T3L	Ex9R100B...	10	65	15	65	30	65	30	20	
	M1MH70T3L	Ex9R100B...	10	100	15	100	30	100	30	25	
Ex9C50...	M1MN70T3L	Ex9R100B...	15	65	20	65	40	65	40	20	
	M1MH70T3L	Ex9R100B...	15	100	20	100	40	100	40	25	
Ex9C65...	M1MN70T3L	Ex9R100B...	-	-	-	-	-	-	50	20	
	M1MH70T3L	Ex9R100B...	-	-	-	-	-	-	50	25	
	M1MN100T3L	Ex9R100B...	20	65	25	65	50	65	-	-	
	M1MH100T3L	Ex9R100B...	20	100	25	100	50	100	-	-	
Ex9C80...	M1MN100T3L	Ex9R100B...	-	-	30	65	60	65	60	20	
	M1MH100T3L	Ex9R100B...	-	-	30	100	60	100	60	25	
	M1MN150T3L	Ex9R100B...	30	65	-	-	-	-	-	-	
	M1MH150T3L	Ex9R100B...	30	100	-	-	-	-	-	-	
Ex9C100...	M1MN100T3L	Ex9R100B...	-	-	-	-	60	65	60	20	
	M1MH100T3L	Ex9R100B...	-	-	-	-	60	100	60	25	
	M1MN150T3L	Ex9R100B...	30	65	40	65	-	-	-	-	
	M1MH150T3L	Ex9R100B...	30	100	40	100	-	-	-	-	

* More information about MC (Motor Contactor), Please refer to Product Selection Guide in Chapter A (Ex9C series).

**More information about OLR (Overload Relay), Please refer to Product Selection Guide in Chapter B (Ex9R series).

IEC Contactors Ex9C Specifications

Type D

			Voltage / V							
			200		240		480		600	
MC*	ICB	OLR**	HP	Scrr(kA)	HP	Scrr(kA)	HP	Scrr(kA)	HP	Scrr(kA)
Ex9C115...	M2MN250T3L	Ex9R185B...	40	65	50	65	100	65	125	20
	M2MH250T3L	Ex9R185B...	40	100	50	100	100	100	125	25
Ex9C150...	M2MN250T3L	Ex9R185B...	50	65	60	65	125	65	150	20
	M2MH250T3L	Ex9R185B...	50	100	60	100	125	100	150	25
Ex9C185...	M2MN250T3L	Ex9R185B...	60	65	75	65	150	65	200	20
	M2MH250T3L	Ex9R185B...	60	100	75	100	150	100	200	25
Ex9C225...	M2MN250T3L	Ex9R500B...	60	65	75	65	150	65	200	20
	M2MH250T3L	Ex9R500B...	60	100	75	100	150	100	200	25
Ex9C265...	M3MN400T3L	Ex9R500B...	75	65	100	65	200	65	250	25
	M3MH400T3L	Ex9R500B...	75	100	100	100	200	100	250	30
Ex9C300...	M3MN400T3L	Ex9R500B...	100	65	125	65	250	65	300	25
	M3MH400T3L	Ex9R500B...	100	100	125	100	250	100	300	30
Ex9C400...	M4MN600T3L	Ex9R500B...	125	65	150	65	300	65	400	30
	M4MH600T3L	Ex9R500B...	125	100	150	100	300	100	400	50
Ex9C500...	M4MN600T3L	Ex9R500B...	150	65	200	65	400	65	500	30
	M4MH600T3L	Ex9R500B...	150	100	200	100	400	100	500	50

* More information about MC (Motor Contactor), Please refer to Product Selection Guide in Chapter A (Ex9C series).

**More information about OLR (Overload Relay), Please refer to Product Selection Guide in Chapter B (Ex9R series).

SCCR Rating

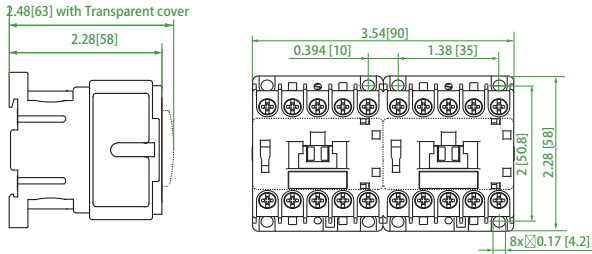
Product	kA (600Vac)	Fuse class	Max. upstream fuse ampere rating
Ex9C115	100	J	400
Ex9C185	100	J	400
Ex9C225	100	J	500

IEC Contactors

Ex9CS/C Dimensions

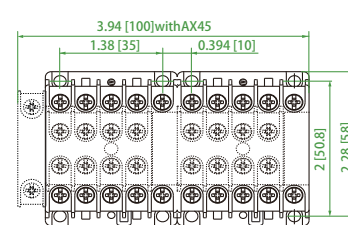
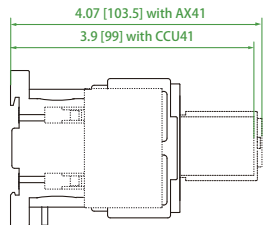
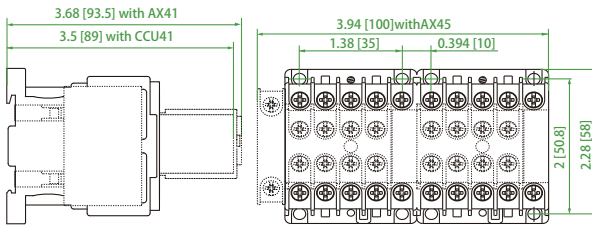
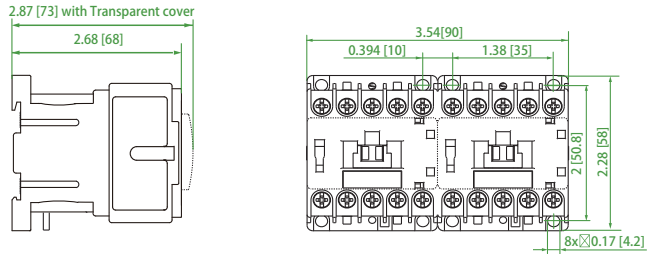
Ex9CSR06~12AC

Unit: in [mm]



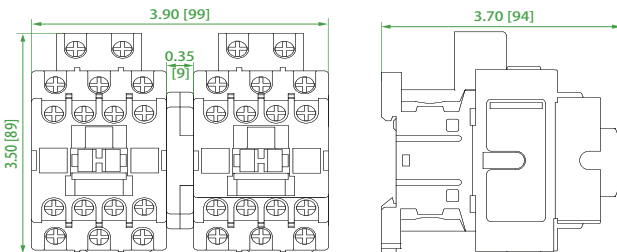
Ex9CSR06~12 DC

Unit: in [mm]



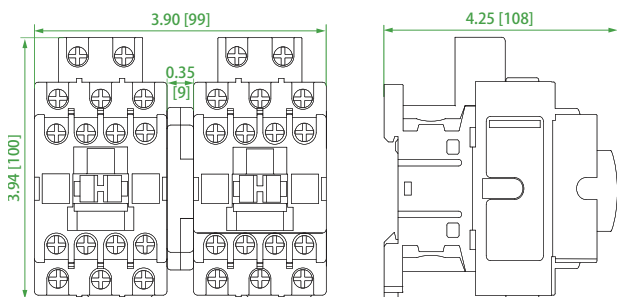
Ex9CR09~18

Unit: in [mm]



Ex9CR25~38

Unit: in [mm]

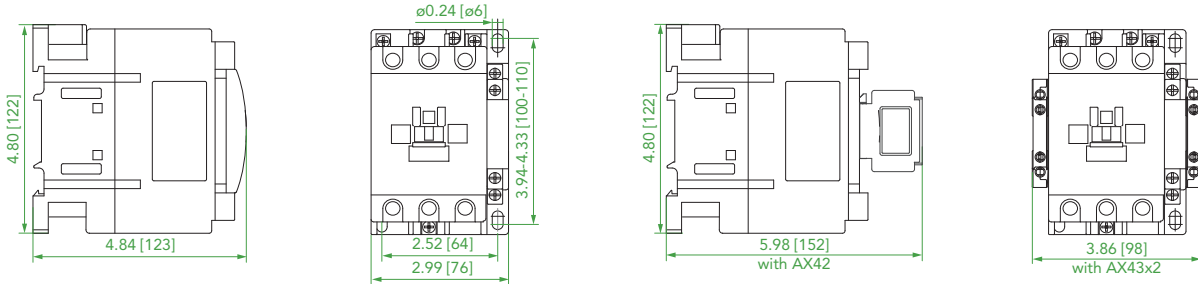


A

IEC Contactors Ex9C Dimensions

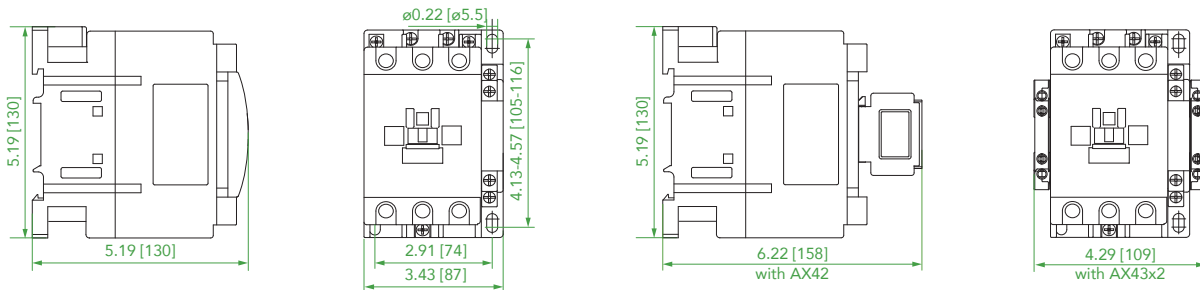
Ex9C40~65

Unit: in [mm]



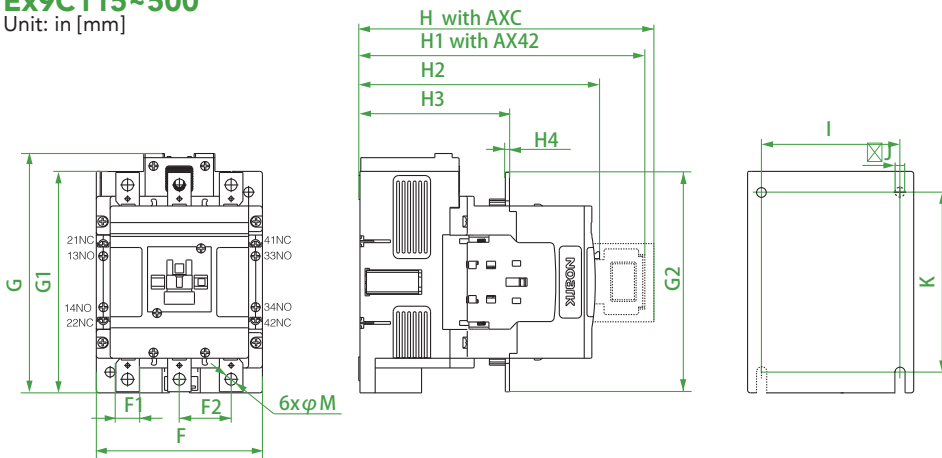
Ex9C80~100

Unit: in [mm]



Ex9C115~500

Unit: in [mm]



Contactor	G	G1	F	F1	F2	M	H	H1	H2	H3	H4	G2	I	J*	K
Ex9C115~185	6.81 [173]	6.30 [160]	4.75 [120]	0.669 [17]	1.47 [37.4]	$\phi 0.335$ [$\phi 8.5$]	9.02 [229]	8.11 [206]	6.85 [174]	4.25 [108]	0.118 [3]	6.26 [159]	3.94 [100]	$\phi 0.28$ [$\phi 7$]	5.12 [130]
Ex9C225~300	8.35 [212]	7.87 [200]	5.71 [145]	0.984 [25]	1.89 [48]	$\phi 0.433$ [$\phi 11$]	10.35 [263]	9.45 [240]	8.19 [208]	5.28 [134]	0.236 [6]	7.60 [193]	4.72 [120]	$\phi 0.35$ [$\phi 9$]	7.09 [180]
Ex9C400~500	8.58 [218]	7.87 [200]	6.30 [160]	0.984 [25]	1.89 [48]	$\phi 0.433$ [$\phi 11$]	11.22 [285]	10.31 [262]	9.06 [230]	5.98 [152]	0.236 [6]	8.41 [213.6]	5.12 [130]	$\phi 0.35$ [$\phi 9$]	7.09 [180]

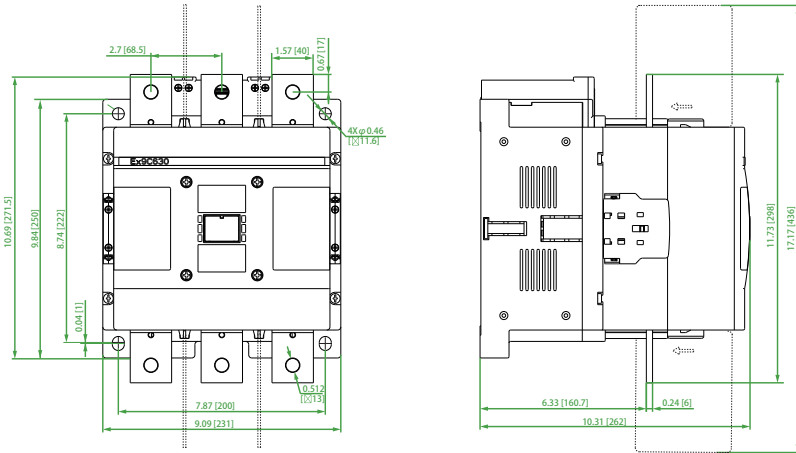
*Note: Ex9C115~185 has only two mounting holes as broken circles and the other types have four mounting holes.

IEC Contactors

Ex9C Dimensions

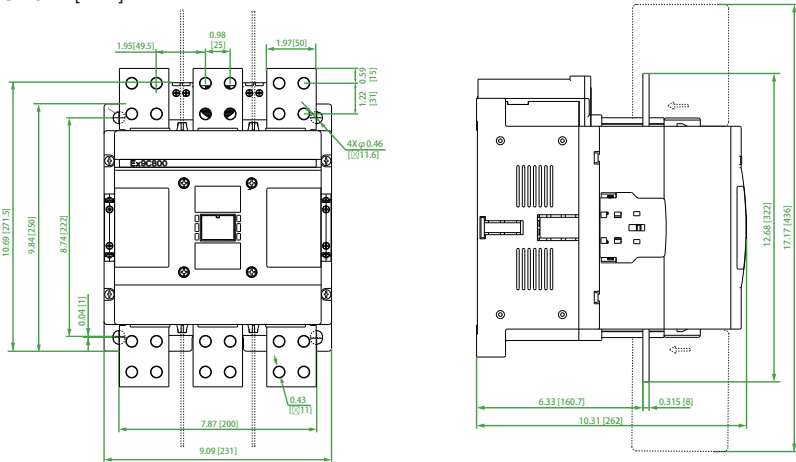
Ex9C630

Unit: in [mm]



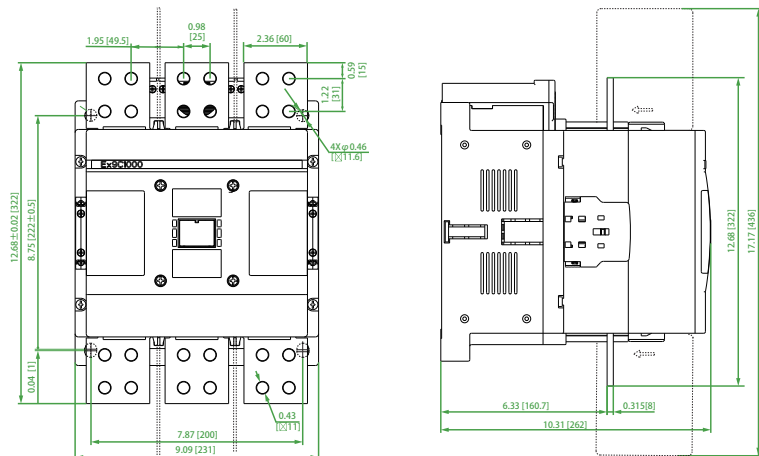
Ex9C800

Unit: in [mm]



Ex9C1000

Unit: in [mm]



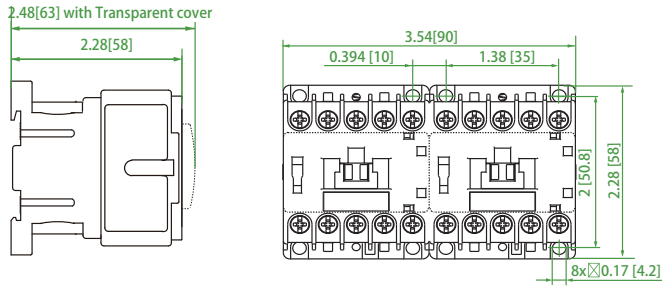
A

IEC Contactors

Ex9CSR/CR Dimensions

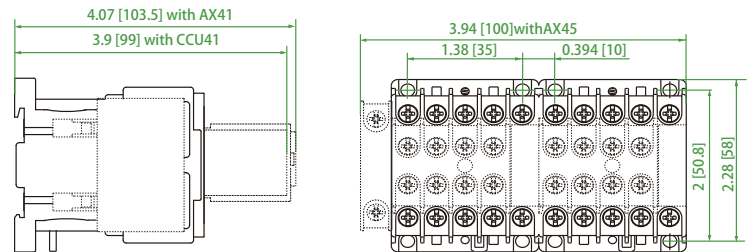
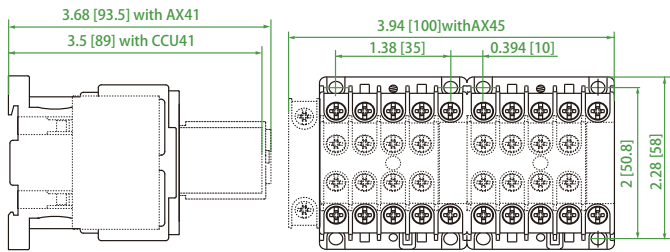
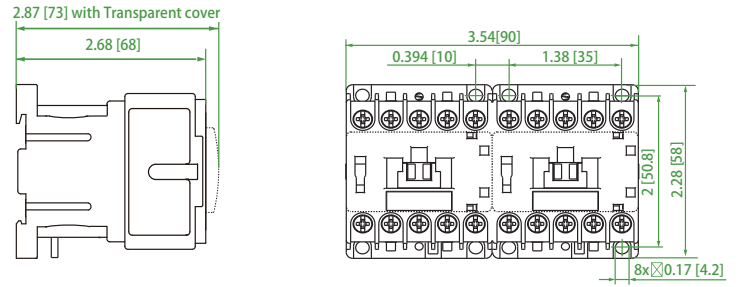
Ex9CSR06~12 AC

Unit: in [mm]



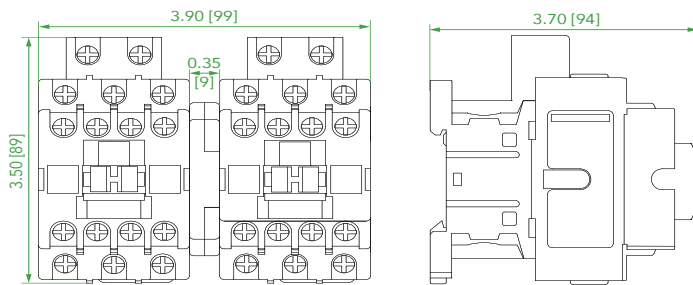
Ex9CSR06~12 DC

Unit: in [mm]



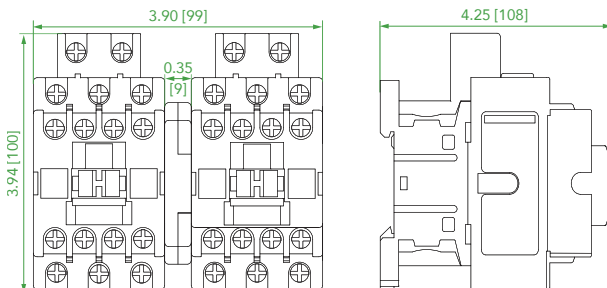
Ex9CR09~18

Unit: in [mm]



Ex9CR25~38

Unit: in [mm]

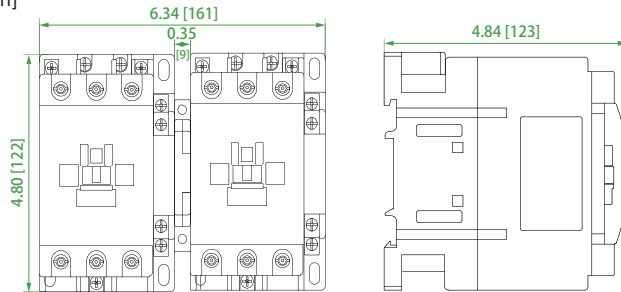


IEC Contactors

Ex9CR Dimensions

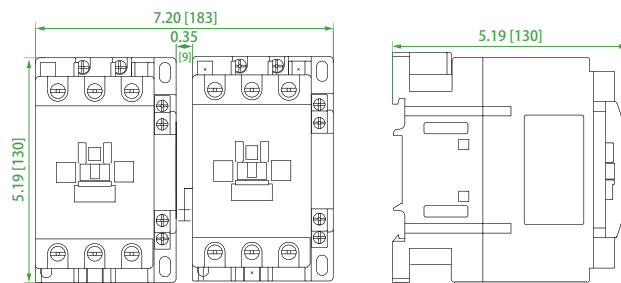
Ex9CR40~65

Unit: in [mm]



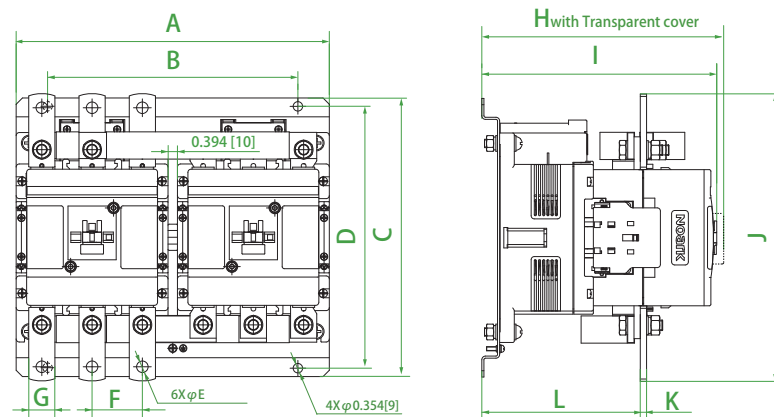
Ex9CR80~100

Unit: in [mm]



Ex9CR115~500

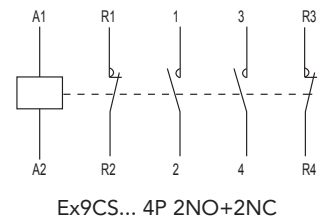
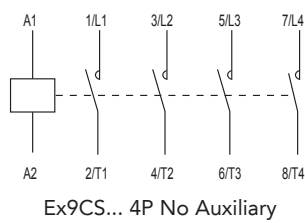
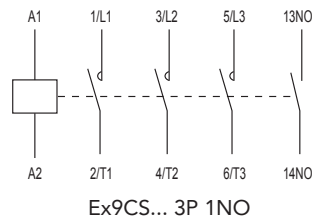
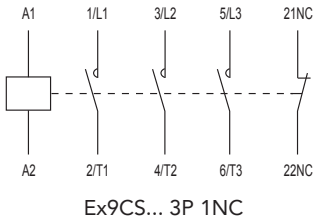
Unit: in [mm]



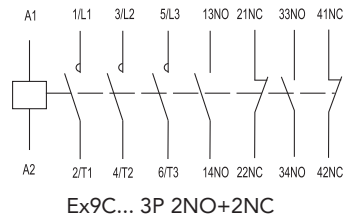
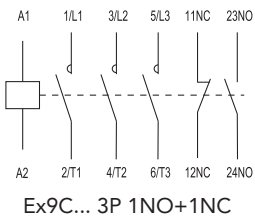
Contactor	A	B	C	D	E	F	G	H	I	J	K	L
Ex9CR115~185	9.80 [249]	7.44 [189]	9.06 [230]	8.43 [214]	0.335 [8.5]	1.47 [37.4]	0.63 [16]	7.72 [196]	7.62 [193.5]	8.76 [222.5]	0.197 [5]	5.05 [128.3]
Ex9CR225~300	11.77 [299]	9.41 [239]	10.47 [266]	9.84 [250]	0.433 [11]	1.89 [48]	0.984 [25]	8.94 [227]	8.84 [224.5]	10.81 [274.5]	0.236 [6]	5.96 [151.3]
Ex9CR400~500	12.95 [329]	10.59 [269]	10.55 [268]	9.96 [253]	0.433 [11]	1.89 [48]	0.984 [25]	9.8 [249]	9.7 [246.5]	11.63 [295.5]	0.236 [6]	6.65 [169]

IEC Contactors Ex9CS/C Wiring Diagrams

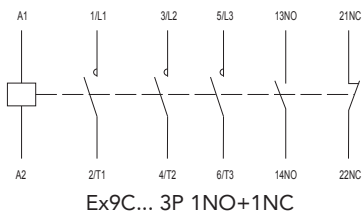
Ex9CS06~12



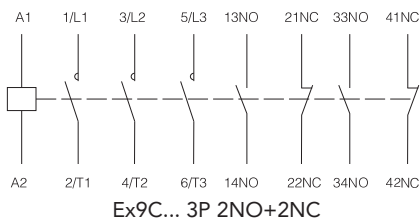
Ex9C09~38



Ex9C40~100



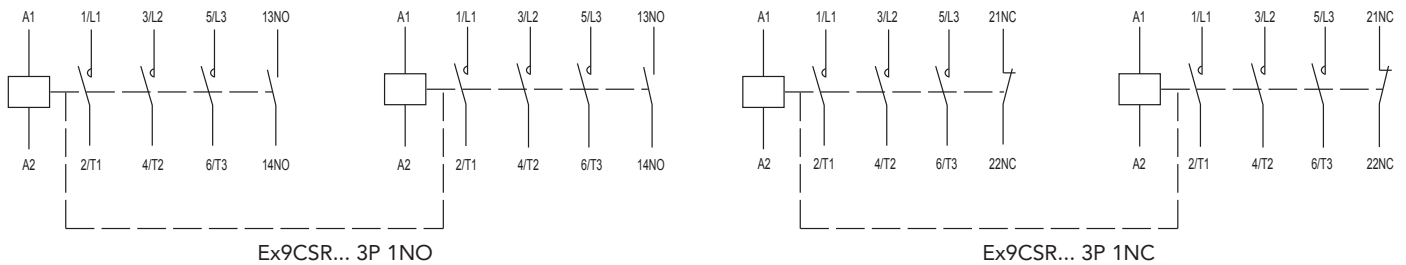
Ex9C115~1000



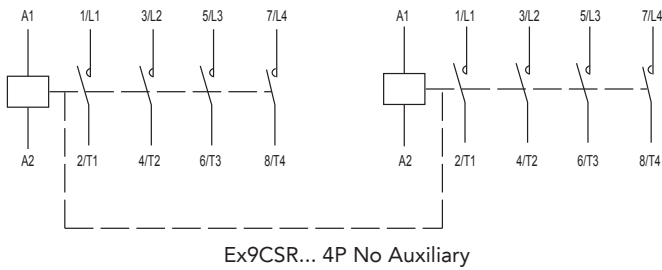
IEC Contactors

Ex9CSR/CR Wiring Diagrams

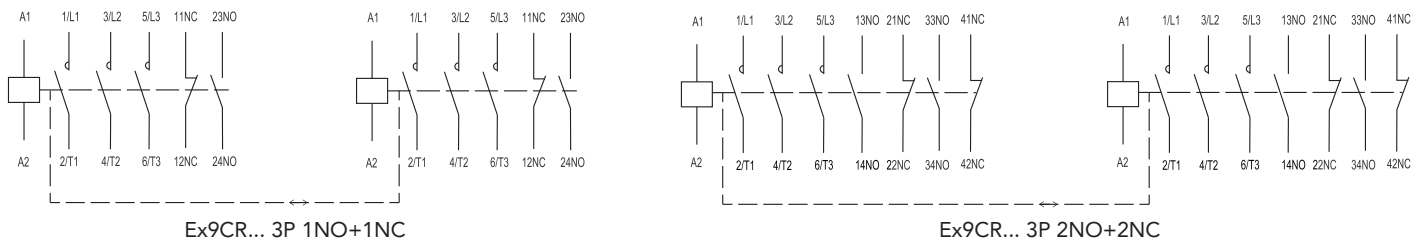
Ex9CSR06~12



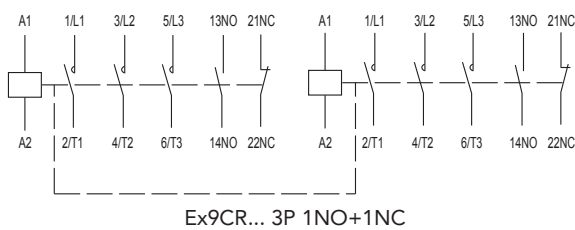
A



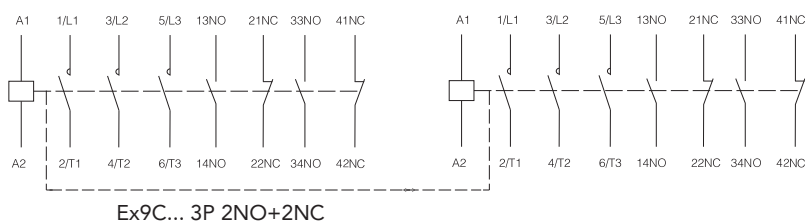
Ex9CR09~38



Ex9CR40~100



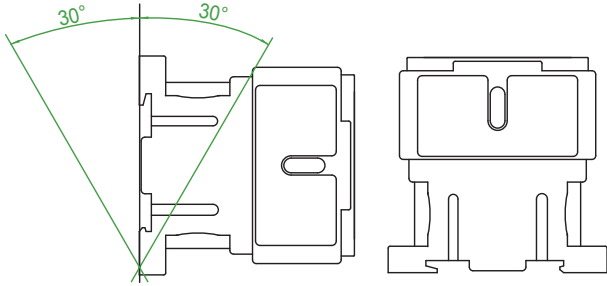
Ex9CR115~500



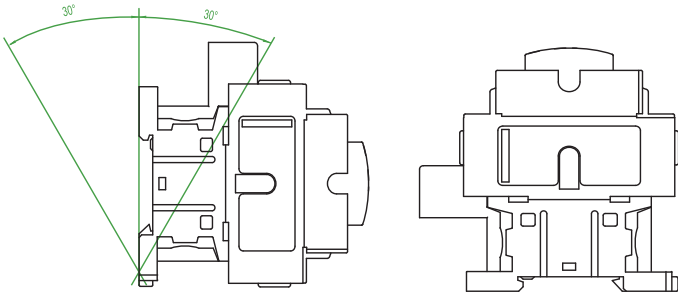
IEC Contactors

Ex9CS/C Mounting Positions

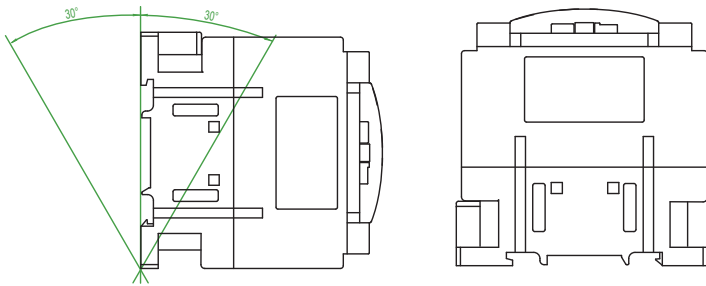
Ex9CS/CSR06~12



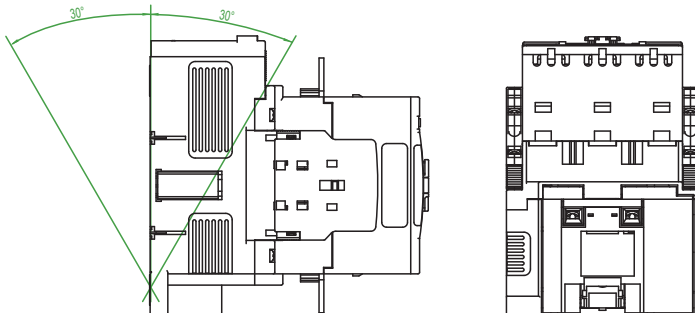
Ex9C/CR09~38



Ex9C/CR40~100



Ex9C/CR115~1000

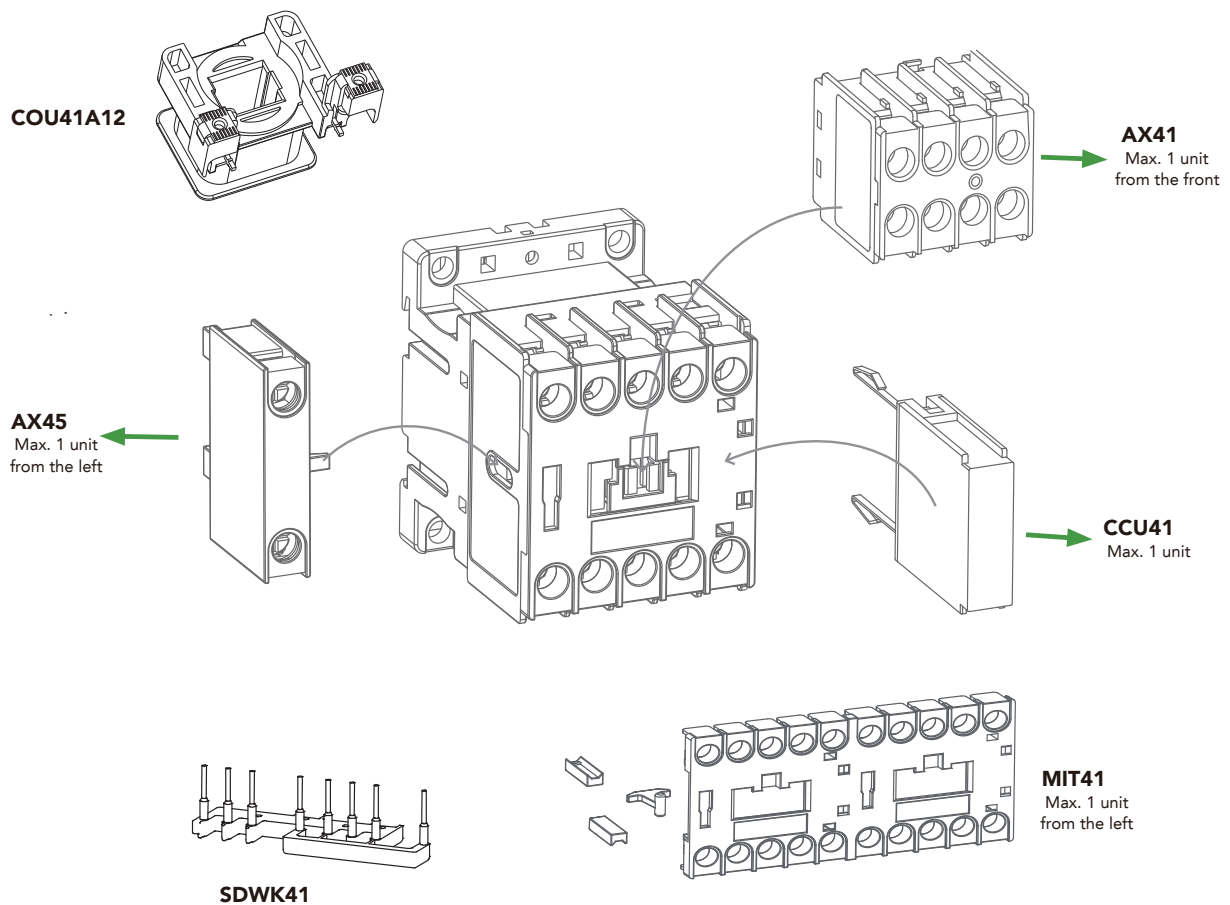


IEC Contactors

Ex9CS Accessories Overview

The Ex9CS line shares accessories and every contactor can be equipped with one front-mounted unit, one left side-mounted contact and surge suppressor block.

A



Front-Mounted Auxiliary Contacts (AX41)

- For subsequent mounting
- One unit used with a contactor

Side-Mounted Auxiliary Contacts (AX45)

- For subsequent mounting
- One unit used with a contactor on the left side

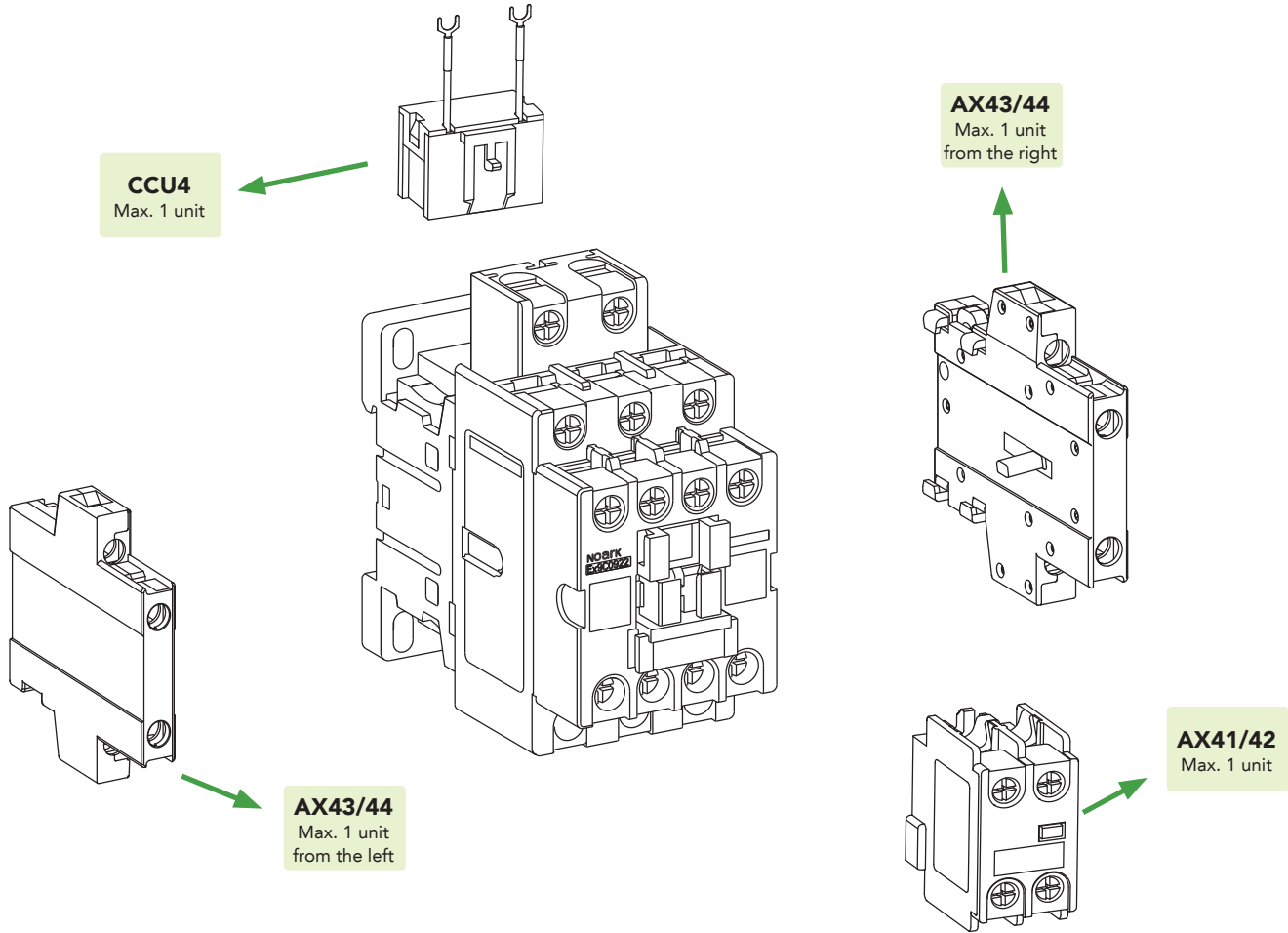
Surge Suppressor Blocks (CCU41)

- Reduces voltage peaks in control circuit
- Versions with varistor technology
- Includes cable lugs for connecting to contactor terminals

IEC Contactors

Ex9C Accessories Overview

The Ex9C line shares accessories and every contactor can be equipped with one front-mounted unit, two units of side-mounted contact (one from the left, the other from the right) and surge suppressor block.



Front-Mounted Auxiliary Contacts (AX41/AX42)

- For subsequent mounting
- One unit used with a contactor

Side-Mounted Auxiliary Contacts (AX43/AX44)

- For subsequent mounting
- One unit used with a contactor on the left side

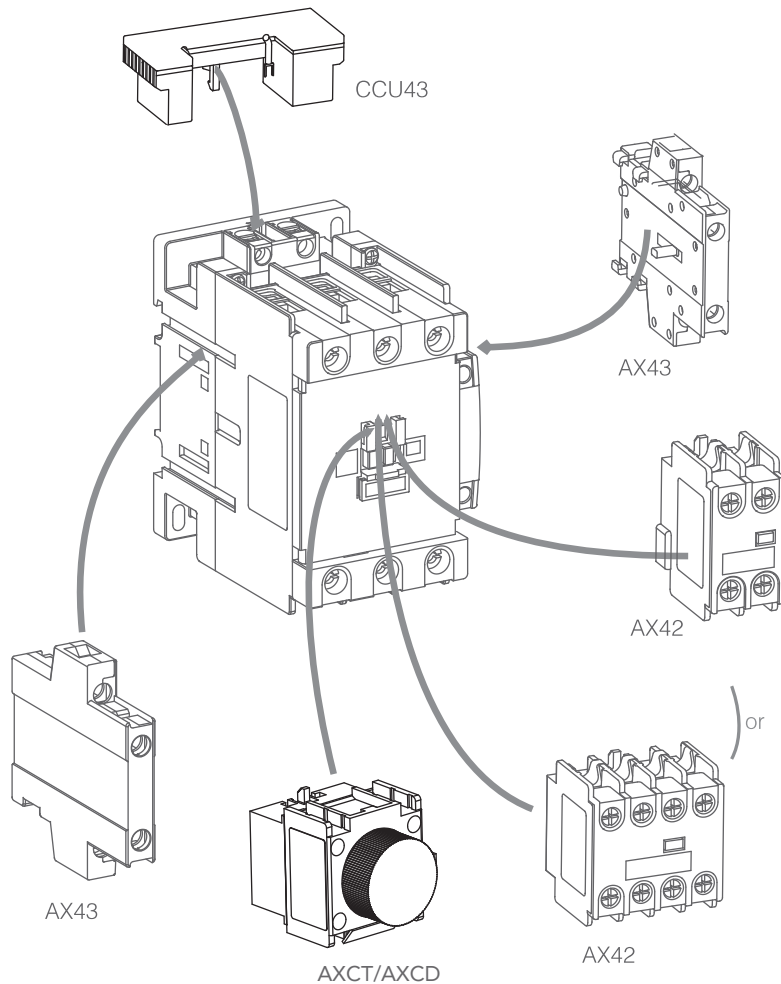
Surge Suppressor Blocks (CCU)

- Reduces voltage peaks in control circuit
- Versions with varistor technology
- Includes cable lugs for connecting to contactor terminals

IEC Contactors

Ex9C Accessories Overview

The Ex9C(40-100A) line shares accessories and every contactor can be equipped with one front-mounted unit, two units of side-mounted contact (one from the left, the other from the right) and surge suppressor block.



Front-Mounted Auxiliary Contacts (AX42)

- For subsequent mounting
- One unit used with a contactor

Side-Mounted Auxiliary Contacts (AX43)

- For subsequent mounting
- One unit used with a contactor on the left side another unit on the right side

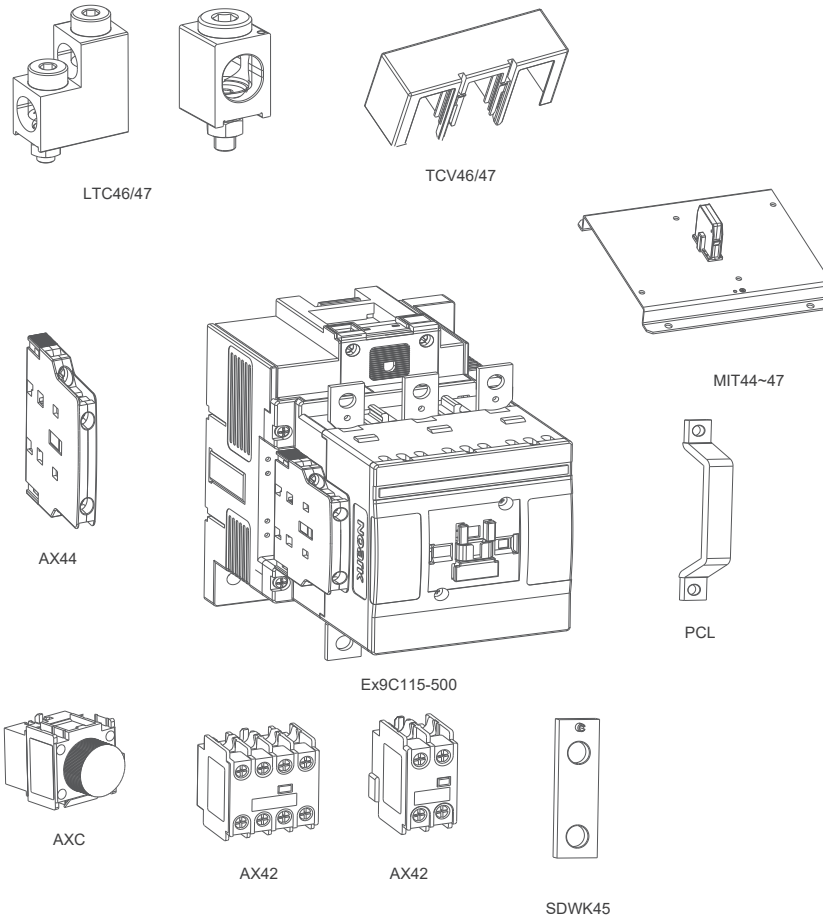
Surge Suppressor Blocks (CCU43)

- Reduces voltage peaks in control circuit
- Versions with varistor technology
- Includes cable lugs for connecting to contactor terminals

IEC Contactors

Ex9C Accessories Overview

The Ex9C (115-500A) line shares accessories and every contactor can be equipped with one front-mounted unit, one left side-mounted



Front-Mounted Auxiliary Contacts (AX42)

- For subsequent mounting
- One unit used with a contactor

Side-Mounted Auxiliary Contacts (AX44)

- For subsequent mounting
- One unit used with a contactor on the left side

Time Delay Relay (AXCD/AXCT)

Mechanical Interlock (MIT44-47)

Surge Suppressor Blocks (CCU41)

- Reduces voltage peaks in control circuit
- Versions with varistor technology
- Includes cable lugs for connecting to contactor terminals

Power (PCL185/PCL300/PCL/500)

- For reversing contactors

Star Delta Wiring Kit (SDWK45)

- Applied in Ex9C115-185 contactor

IEC Contactors

Ex9CS/C Accessories: Auxiliary Contact



Front Mount

- For contactors Ex9CS, Ex9CSR, Ex9C and Ex9CR
- For subsequent mounting
- One unit used with a contactor



Side Mount

- For contactors Ex9CS, Ex9C and Ex9CR
- For subsequent mounting
- One unit used with a contactor on the left and one unit on the right

AX4	1	04	UL
Description	Contactor Type and Rated Current	Auxiliary Contact	Device Category
Auxiliary Contact	1: Ex9CS Mini Front Mount 06~12 A	01: 1NC	UL: UL Listed
	2: Ex9C Standard Front Mount 09~500 A	02: 2NC	
	3: Ex9C Standard Side Mount 09~100 A	04: 4NC	
	4: Ex9C Standard Side Mount 115~500 A	10: 1NO	
	5: Ex9CS Mini Side Mount 06~12 A	11: 1NO+1NC	
		13: 1NO+3NC	
		20: 2NO	
		22: 2NO+2NC	
		31: 3NO+1NC	
		40: 4NO	

	Matched Contactor	Product	Part Number
Front Mount	Ex9CS06~12 Ex9CSR06~12 (Front Mount)	AX4104UL	1330001
		AX4113UL	1330002
		AX4122UL	1330003
		AX4131UL	1330004
		AX4140UL	1330005
	Ex9C09~500 Ex9CR09~500 (Front Mount)	AX4202UL	1330006
		AX4204UL	1330009
		AX4211UL	1330007
		AX4213UL	1330010
		AX4220UL	1330008
		AX4222UL	1330011
		AX4231UL	1330012
		AX4240UL	1330013
Side Mount	Ex9C09~100 Ex9CR09~100 (Side Mount)	AX4311UL	1330014
	Ex9C115~1000 Ex9CR115~500 (Side Mount)	AX4402UL	1330016
		AX4411UL	1330015
			AX4420UL
Ex9CS06~12 (Side Mount)	AX4501UL	1330241	
	AX4510UL	1330242	

A

IEC Contactors

Ex9CS/C Accessories: Coil



- Field interchangeable

COU41	A	12	A	UL
Description	Coil Type	Contactor Type and Rated Current	Control Voltage	Device Category
Coil	A: AC, 50/60 Hz E: AC/DC F: Wide Range Electronic AC/DC	12: Ex9CS Mini 06~12 A 18: Ex9C Standard 09~18 A 38: Ex9C Standard 25~38 A 65: Ex9C Standard 40~65 A 100: Ex9C Standard 80~100 A 185: Ex9C Standard 115~185 A 300: Ex9C Standard 225~300 A 500: Ex9C Standard 400~500 A 1000: Ex9C Standard	B: 24 V U: 240 V C: 36 V W: 250 V D: 42 V L: 250~500 E: 48 V Vac/dc H: 48~130 N: 277 V Vac/dc Q: 380 V K: 100~250 V: 400 V Vac/dc Z: 415 V F: 110 V R: 440 V G: 120 V T: 480 V X: 208 V S: 500 V M: 220 V Y: 600 V P: 230 V	UL: UL Listed

IEC Contactors

Ex9CS/C Accessories: Coil

Accessory Description	Coil Voltage	AC Coil						
		Product Part Number		Product Part Number		Product Part Number		
		06~12 A		25~38 A		80~100 A		
Coil	24	COU41A12BUL	1330036	COU41A38BUL	1330084	COU41A100BUL	1330132	
	36	COU41A12CUL	1330037	COU41A38CUL	1330085	COU41A100CUL	1330133	
	42	COU41A12DUL	1330038	COU41A38DUL	1330086	COU41A100DUL	1330134	
	48	COU41A12EUL	1330039	COU41A38EUL	1330087	COU41A100EUL	1330135	
	110	COU41A12FUL	1330040	COU41A38FUL	1330088	COU41A100FUL	1330136	
	120	COU41A12GUL	1330041	COU41A38GUL	1330089	COU41A100GUL	1330137	
	208	COU41D12XUL	1330053	COU41A38XUL	1330101	COU41A100XUL	1330149	
	220	COU41A12MUL	1330042	COU41A38MUL	1330090	COU41A100MUL	1330138	
	230	COU41A12PUL	1330043	COU41A38PUL	1330091	COU41A100PUL	1330139	
	240	COU41A12UUL	1330045	COU41A38UUL	1330093	COU41A100UUL	1330141	
	277	COU41A12NUL	1330044	COU41A38NUL	1330092	COU41A100NUL	1330140	
	380	COU41A12QUL	1330046	COU41A38QUL	1330094	COU41A100QUL	1330142	
	400	COU41A12VUL	1330047	COU41A38VUL	1330095	COU41A100VUL	1330143	
	415	COU41A12ZUL	1330048	COU41A38ZUL	1330096	COU41A100ZUL	1330144	
	440	COU41A12RUL	1330049	COU41A38RUL	1330097	COU41A100RUL	1330145	
	480	COU41A12TUL	1330050	COU41A38TUL	1330098	COU41A100TUL	1330146	
	500	COU41A12SUL	1330051	COU41A38SUL	1330099	COU41A100SUL	1330147	
	600	COU41A12YUL	1330052	COU41A38YUL	1330100	COU41A100YUL	1330148	
			09~18 A		40~65 A			
		24	COU41A18BUL	1330060	COU41A65BUL	1330108		
	36	COU41A18CUL	1330061	COU41A65CUL	1330109			
	42	COU41A18DUL	1330062	COU41A65DUL	1330110			
	48	COU41A18EUL	1330063	COU41A65EUL	1330111			
	110	COU41A18FUL	1330064	COU41A65FUL	1330112			
	120	COU41A18GUL	1330065	COU41A65GUL	1330113			
	208	COU41A18XUL	1330077	COU41A65XUL	1330125			
	220	COU41A18MUL	1330066	COU41A65MUL	1330114			
	230	COU41A18PUL	1330067	COU41A65PUL	1330115			
	240	COU41A18UUL	1330069	COU41A65UUL	1330117			
	277	COU41A18NUL	1330068	COU41A65NUL	1330116			
	380	COU41A18QUL	1330070	COU41A65QUL	1330118			
	400	COU41A18VUL	1330071	COU41A65VUL	1330119			
	415	COU41A18ZUL	1330072	COU41A65ZUL	1330120			
	440	COU41A18RUL	1330073	COU41A65RUL	1330121			
	480	COU41A18TUL	1330074	COU41A65TUL	1330122			
	500	COU41A18SUL	1330075	COU41A65SUL	1330123			
	600	COU41A18YUL	1330076	COU41A65YUL	1330124			

A

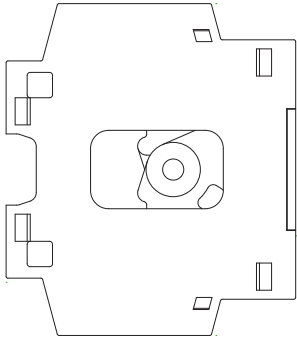
IEC Contactors

Ex9CS/C Accessories: Coil

Accessory Description	Coil Voltage	AC/DC Coil						
		Product Part Number		Product Part Number		Product Part Number		
		115~185 A		225~300 A		400~500 A		
Coil	24	COU41E185BUL	1330155	COU41E300BUL	1330173	-	-	
	36	COU41E185CUL	1330156	COU41E300CUL	1330174	COU41E500CUL	1330192	
	42	COU41E185DUL	1330157	COU41E300DUL	1330175	COU41E500DUL	1330193	
	48	COU41E185EUL	1330158	COU41E300EUL	1330176	COU41E500EUL	1330194	
	110	COU41E185FUL	1330159	COU41E300FUL	1330177	COU41E500FUL	1330195	
	120	COU41E185GUL	1330160	COU41E300GUL	1330178	COU41E500GUL	1330196	
	208	COU41E185XUL	1330163	COU41E300XUL	1330181	COU41E500XUL	1330199	
	220	COU41E185MUL	1330161	COU41E300MUL	1330179	COU41E500MUL	1330197	
	230	COU41E185PUL	1330162	COU41E300PUL	1330180	COU41E500PUL	1330198	
	240	COU41E185UUL	1330164	COU41E300UUL	1330182	COU41E500UUL	1330200	
	277	COU41E185NUL	1330167	COU41E300NUL	1330185	COU41E500NUL	1330203	
	380	COU41E185QUL	1330165	COU41E300QUL	1330183	COU41E500QUL	1330201	
	400	COU41E185VUL	1330166	COU41E300VUL	1330184	COU41E500VUL	1330202	
	480	COU41E185TUL	1330168	COU41E300TUL	1330186	COU41E500TUL	1330204	
	600	COU41E185YUL	1330169	COU41E300YUL	1330187	COU41E500YUL	1330205	
			Wide Range Electronic AC/DC Coil					
			115~185 A		225~300 A		400~500 A	
	48~130	COU41F185HUL	1330170	COU41F300HUL	1330188	COU41F500HUL	1330206	
	100~250	COU41F185KUL	1330171	COU41F300KUL	1330189	COU41F500KUL	1330207	
	250~500	COU41F185LUL	1330172	COU41F300LUL	1330190	COU41F500LUL	1330208	

IEC Contactors

Ex9CS/C Accessories: Mechanical Interlock and Power

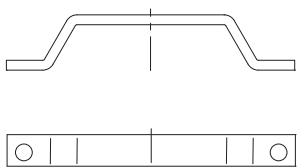


*NOTE: MIT41 cannot be installed by end user.

MIT4	1	UL
Description	Contactor Type and Rated Current	Device Category
Mechanical Interlock	1: Ex9CS Mini 06~12 A* 2: Ex9C Standard 09~38 A 3: Ex9C Standard 40~100 A 4: Ex9C Standard 115~185 A 5: Ex9C Standard 225~300 A 6: Ex9C Standard 400~500 A 8: Ex9C Standard 09~38 A and 40~100 A 9: Ex9C Standard 40~100 A and 115~185 A 10: Ex9C Standard 115~185 A, 225~300A, 400~500A, 630~1000A	UL: UL Listed

A

Accessory Description	Product	Part Number
Mechanical Interlock	MIT41UL	1330026
	MIT42UL	1330027
	MIT43UL	1330028
	MIT44UL	1330029
	MIT45UL	1330030
	MIT46UL	1330031
	MIT48UL	1330232
	MIT49UL	1330233
	MIT410UL	1330234



PCL	185	UL
Description	Contactor Type and Rated Current	Device Category
Power Connection	185: Ex9C Standard 115~185 A 300: Ex9C Standard 225~300 A 500: Ex9C Standard 400~500 A	UL: UL Listed

Accessory Description	Product	Part Number
Power Connection	PCL185UL	1330032
	PCL300UL	1330033
	PCL500UL	1330034

IEC Contactors

Ex9CS/C Accessories: Surge Suppressor Block



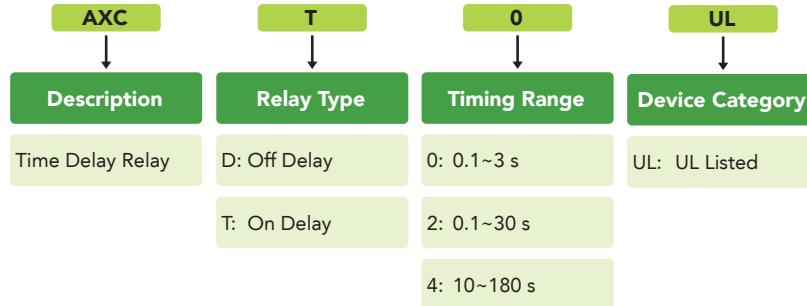
CCU4	1	A	UL
Description	Contactor Type and Rated Current	Voltage Protection Scope	Device Category
Surge Suppressor Block	1: Ex9CS Mini 06~12 A	A: 24~48 Vac	UL: UL Listed
	2: Ex9C Standard 09~38 A	B: 110~240 Vac	
	3: Ex9C Standard 40~100 A	C: 380~415 Vac	

Accessory Description	Matched Contactor	Product	Part Number
Surge Suppressor Block	Ex9CS06~12	CCU41AUL	1330017
		CCU41BUL	1330018
		CCU41CUL	1330019
	Ex9C09~38	CCU42AUL	1330020
		CCU42BUL	1330021
		CCU42CUL	1330022
	Ex9C40~100	CCU43AUL	1330023
		CCU43BUL	1330024
		CCU43CUL	1330025

- Reduces voltage peaks in control circuit
- Versions with varistor (CCU41) and RC circuit technology (CCU42 and CCU43)
- Includes cable lugs for connecting to contactor terminals

IEC Contactors

Ex9CS/C Accessories: Time Delay Relay, Lugs, Wiring Kit



A

Accessory Description	Matched Contactor	Product	Part Number
Time Delay Relay (Pneumatic Timer)	Ex9C09~500	AXCD0UL	1311730
		AXCD2UL	1311729
		AXCD4UL	1311731
		AXCT0UL	1311726
		AXCT2UL	1311727
		AXCT4UL	1311728



Accessory Description	Suitable For	Product Number	Part Number	Comment
Star Delta Wiring Kit (SDWK)	Ex9CS or Ex9CSR	SDWK41	1330216	-
	Ex9C 115-185	SDWK45	1330217	45mm terminal x 6pcs
	Ex9C 115-185	SDWK45-L	1330035	45mm terminal x 4pcs 70mm terminal x 2pcs

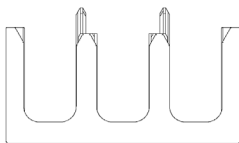
IEC Contactors

Ex9CS/C Accessories: Terminal Lugs, Terminal Cover



LTC	25	N	B	A
Description	Type	Device Category	Number of Holes	Others
Terminal Lugs	25: for Ex9C630 26: for Ex9C800/1000 46: for Ex9C115~185 47: for Ex9C225~500	N: UL Approval	A: 1 Hole * 115-185A B: 2 Holes * 225-630A C: 3 Holes * 630-1000A D: 4 Holes * 800-1000A	

Accessory Description	Type	Number of Holes	Product	Part Number
Terminal Lugs	630A	2 Holes	LTC25NBA	1102622
		3 Holes	LTC25NCA	1102623
	800/1000A	3 Holes	LTC26NCA	1102624
		4 Holes	LTC26NDA	1102625
	115~185A	1 Hole	LTC46NA1	1330218
	225~500A	2 Holes	LTC47NB2	1330221



TCV	46
Description	Type
Terminal Cover	46: for Ex9C115~185 47: for Ex9C225~500

Accessory Description	Type	Product	Part Number
Terminal Cover	115~185A	TCV46	1330222
	225~500A	TCV47	1330223

IEC Contactors

Ex9CS/C Accessory Specifications

	Auxiliary Contact																	A
	CS/CSR Front Mount AX41					C/CR Front Mount AX42								C/CR Side Mount AX43 AX44				
	04	13	22	31	40	02	04	11	13	20	22	31	40	11	02	11	20	
UL Standard File Number	E353866																	
IEC Standard File Number	IEC/EN 60947-5-1																	
Certifications	UL Listed, CSA, CCC, RoHS																	
Electrical Parameters																		
Contacts	4NC	1NO+ 3NC	2NO+ 2NC	3NO+ 1NC	4NO	2NC	4NC	1NO+ 1NC	1NO+ 3NC	2NO	2NO+ 2NC	3NO+ 1NC	4NO	1NO+ 1NC	2NC	1NO+ 1NC	2NO	
Rated Frequency (Hz)	50/60																	
Rated Working Voltage Ue	AC-15 (V)					380/400/415								24/230/400/690				
	DC-13 (V)					220/250								125/250				
Rated Working Current Ie	AC-15 (A)					1.9A								6.00 (24 V) 3.13 (230 V) 1.80 (400 V) 1.04 (690 V)				
	DC-13 (A)					0.31								0.55 (125 V) 0.27 (250 V)				
Rated Capacity	AC-15 (VA)					720												
	DC-13 (W)					69												
Rated Thermal Current Ith (A)	10																	
Rated Impulse Withstand Voltage Uimp (kV)	6 (1.2/50 ms)																	
Rated Insulation Voltage Ui (V)	690																	
Mechanical Parameters																		
Device Width in (mm)	1.46 (37)					1.89 (48)								0.43 (11)	0.39 (10)			
Device Height in (mm)	1.54 (39)					1.46 (37)								2.72 (69)	2.52 (64)			
Device Depth in (mm)	1.30 (33)					1.02 (26)		1.77 (45)						2.76 (70)	2.68 (68)			
Degree of Protection	IP 20																	
Terminals	Lift																	
Terminal Capacity AWG (mm ²)	18-12 (1-2.5)																	
Torque of Terminals in-lb (N.m)	7 (0.80)					15 (1.70)												

IEC Contactors

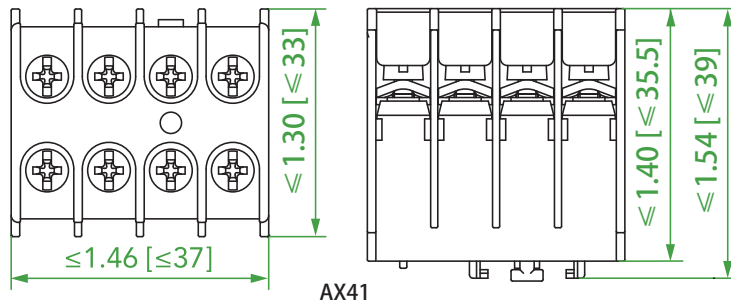
Ex9CS/C Accessory Specifications

	Surge Suppressor Block		
	CCU41	CCU42	CCU43
Electrical Parameters			
Internal Technology	Varistor	Resistance	
Control Coil Voltage Uc (Protection Range)	24~48 Vac/dc 110~240 Vac/dc 380~415 Vac/dc		
Maximum Peak Voltage Up (Uc)	2kV	3kV	
Mechanical Parameters			
Matched Contactor Type	Ex9CS06~12	Ex9C09~38	Ex9C40~100
Mounting	Mounts to Contactor Control Coil Terminals		
Weight lb (kg)	0.04 (0.02)		

IEC Contactors

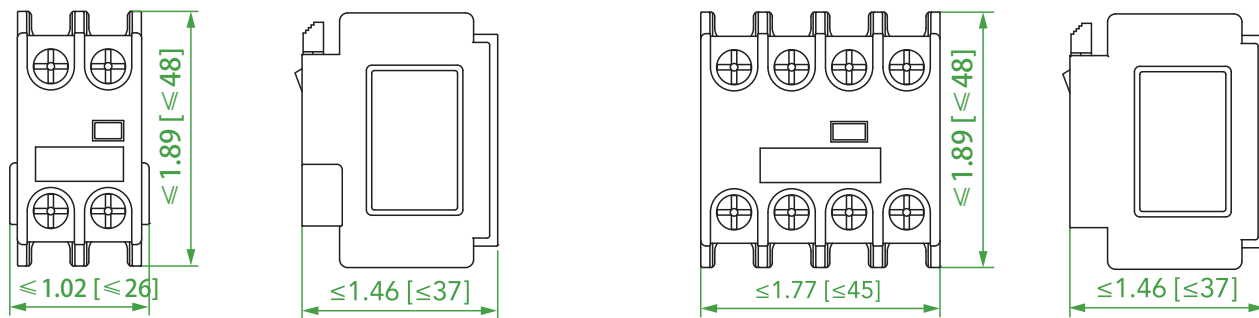
Ex9CS/C Accessory Dimensions

AX41/42
 Front Mount Auxiliary Contact
 Unit: in [mm]



AX41

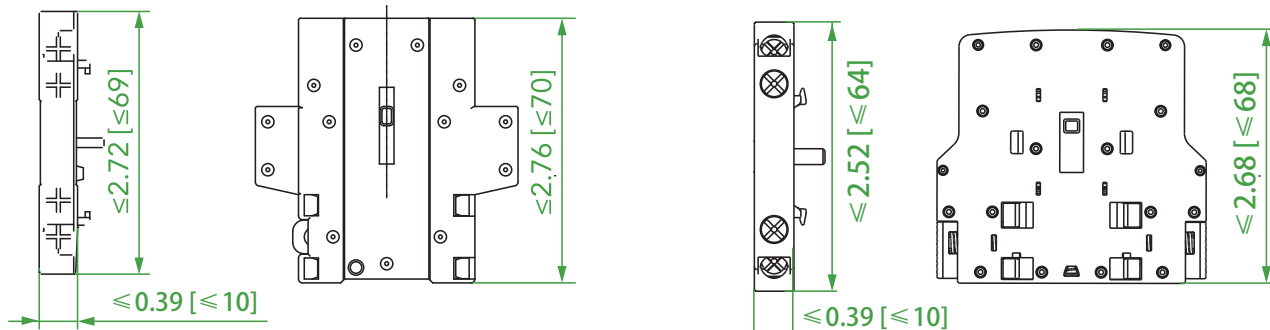
A



AX42 2P

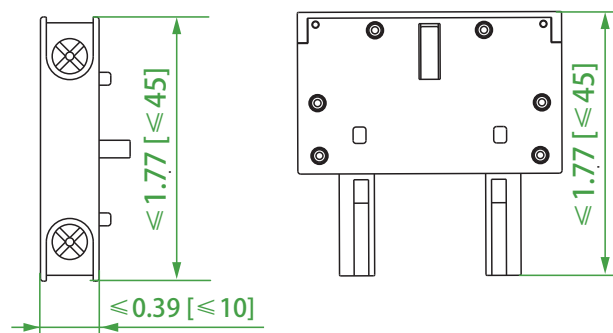
AX42 4P

AX43/44/45
 Side Mount Auxiliary Contact
 Unit: in [mm]



AX43

AX44

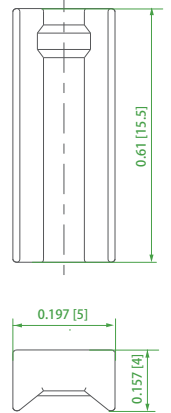
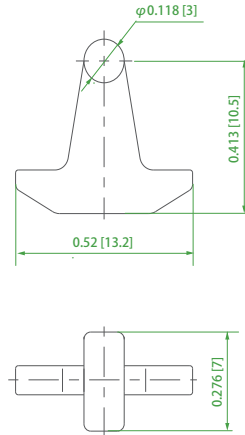
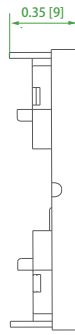
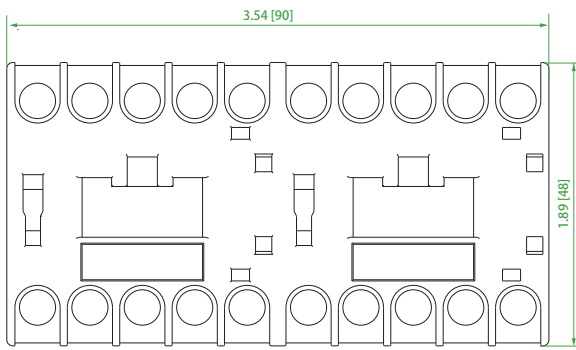


AX45

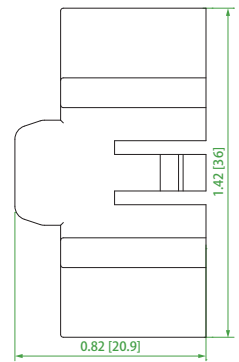
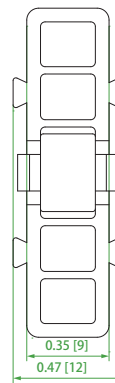
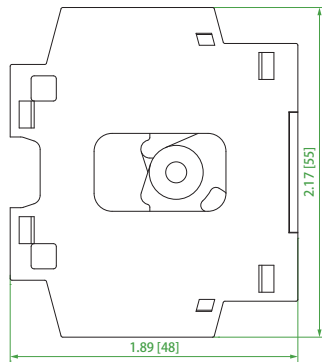
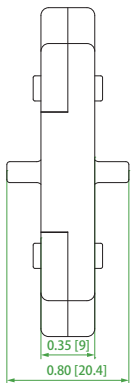
IEC Contactors

Ex9CS/C Accessory Dimensions

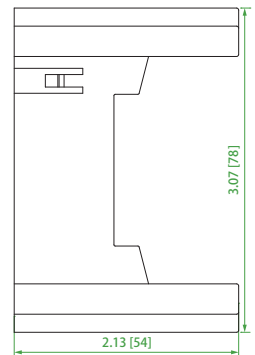
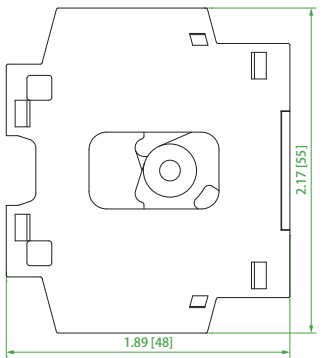
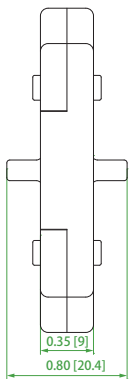
MIT41
Mechanical Interlock Kit
Unit: in [mm]



MIT42
Mechanical Interlock Kit
Unit: in [mm]



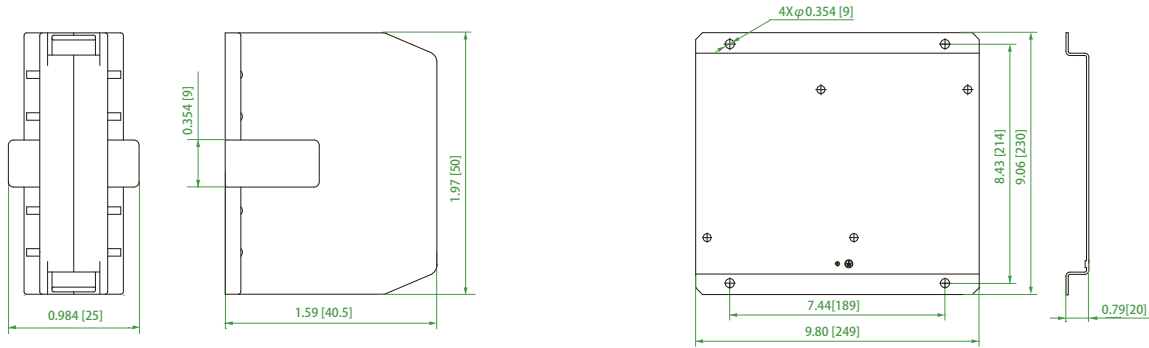
MIT43
Mechanical Interlock Kit
Unit: in [mm]



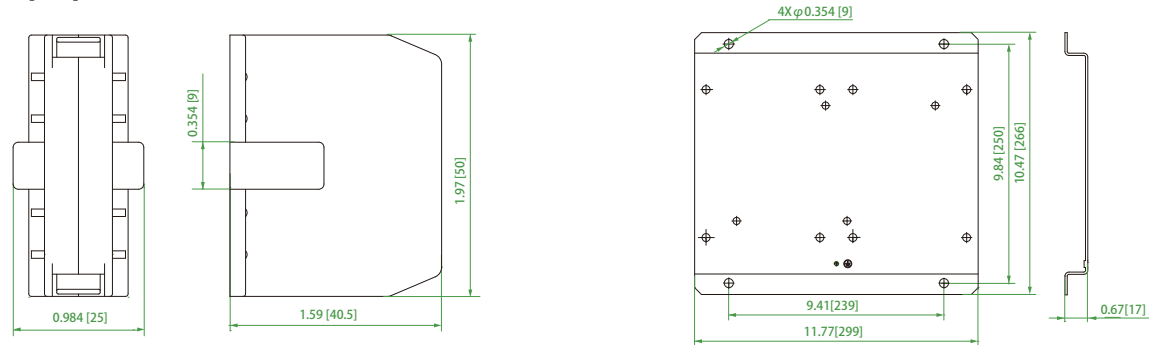
IEC Contactors

Ex9CS/C Accessory Dimensions

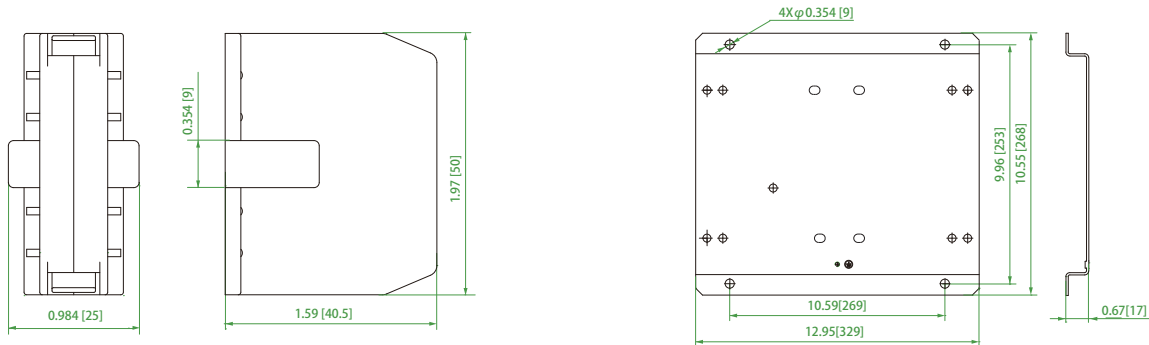
MIT44
Mechanical Interlock Kit
Unit: in [mm]



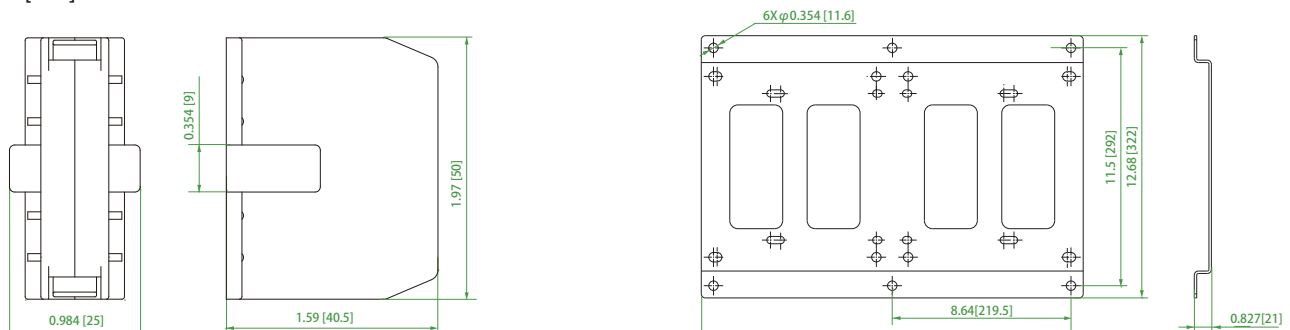
MIT45
Mechanical Interlock Kit
Unit: in [mm]



MIT46
Mechanical Interlock Kit
Unit: in [mm]



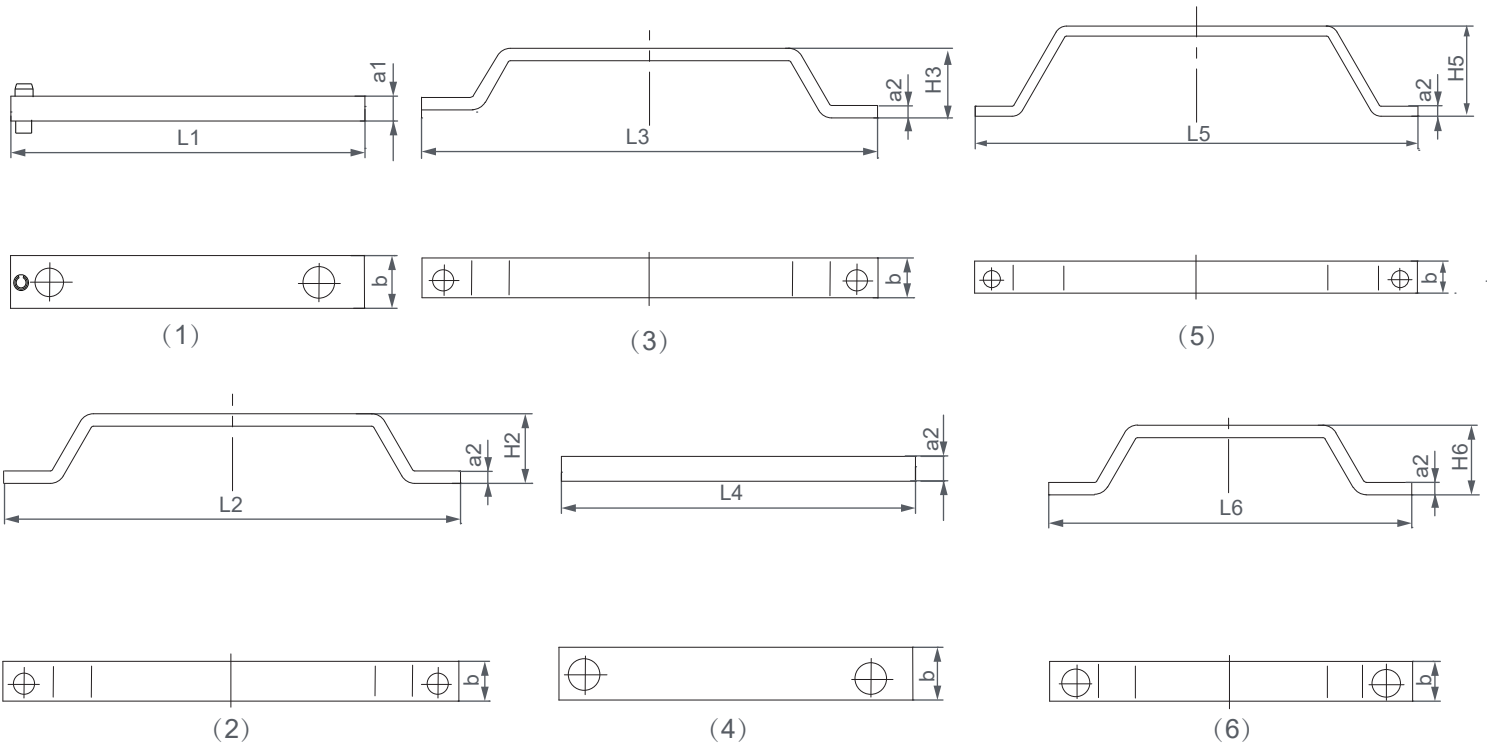
MIT47
Mechanical Interlock Kit
Unit: in [mm]



IEC Contactors

Ex9CS/C Accessory Dimensions

PCL185/300/500
Power Connection Kit
Unit: in [mm]



Code \ TYPE	a1	a2	b	L1	H2	L2	H3	L3	L4	H5	L5	H6	L6
PCL185	0.197 [5]	0.197 [5]	0.63 [16]	2.13 [54]	0.906 [23]	7.22 [183.4]	1.1 [28]	7.22 [183.4]	2.8 [71.2]	1.77 [45]	8.7 [221]	1.1 [28]	5.75 [146]
PCL300	0.236 [6]	0.236 [6]	0.984 [25]	2.83 [72]	1.26 [32]	8.94 [227]	1.65 [42]	8.94 [227]	3.27 [83]	1.97 [50]	10.83 [275]	1.26 [32]	7.05 [179]
PCL500	0.236 [6]	0.315 [8]	0.984 [25]	2.83 [72]	1.34 [34]	9.53 [242]	1.73 [44]	9.53 [242]	3.86 [98]	2.05 [52]	11.42 [290]	1.34 [34]	7.64 [194]

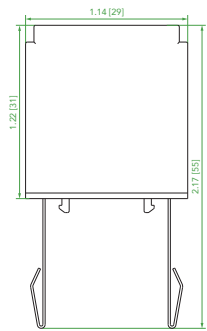
IEC Contactors

Ex9CS/C Accessory Dimensions

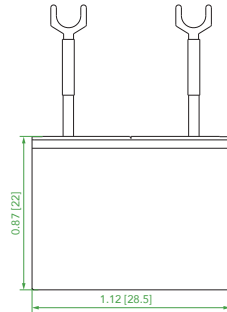
CCU4

Surge Suppressor Block

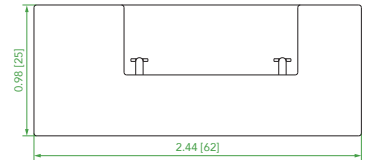
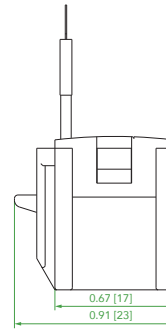
Unit: in [mm]



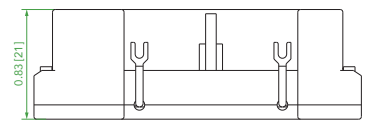
CCU41



CCU42



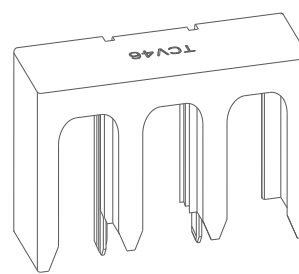
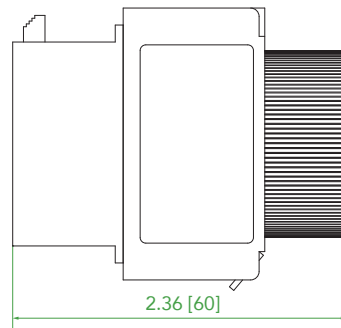
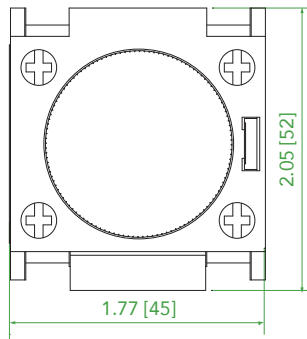
CCU43



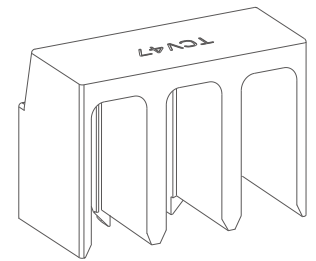
AXC

Time Delay Relay

Unit: in [mm]



TCV46

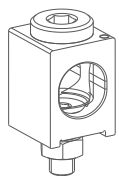


TCV47

LTC

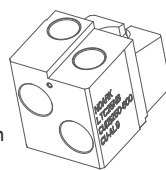
Terminal Lugs

Unit: in [mm]



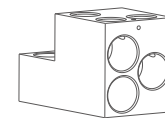
LTC46NA1

1-Hole
75/90°C
Al/Cu Wire Only
3AWG~350kcmil
3AWG~2/0AWG 124lb-in/14N·m
3/0AWG~350kcmil 213lb-in/24N·m



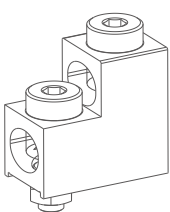
LTC25NB

2-Holes
75/90°C
Al/Cu Wire Only
(2)250kcmil-600kcmil
398 lb-in/pulg/po
(2)120-300mm2
45N·m



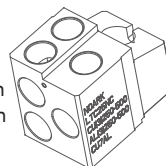
LTC26NC

3-Holes
75°C/90°C
Al/Cu Wire
(3)3/0AWG-750kcmil
310 lb-in/pulg/po
(3)95-300mm2
35N·m



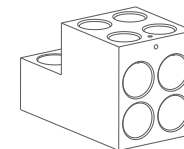
LTC47NB2

2-Holes
75/90°C
Al/Cu Wire Only
2/0AWG~500kcmil
2/0AWG~250kcmil 195lb-in/22N·m
300kcmil~500kcmil 310lb-in/35N·m



LTC25NC

3-Holes
75/90°C
Al/Cu Wire Only
(3)250kcmil-500kcmil
398 lb-in/pulg/po
(3)120-240mm2
45N·m



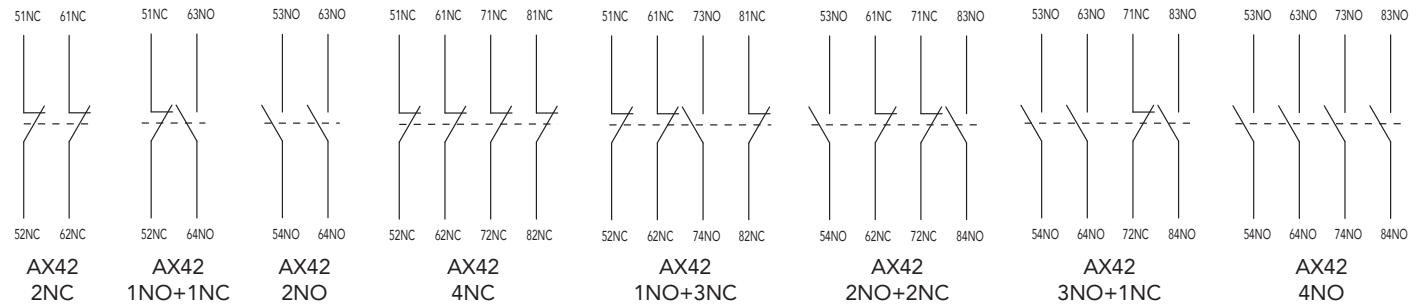
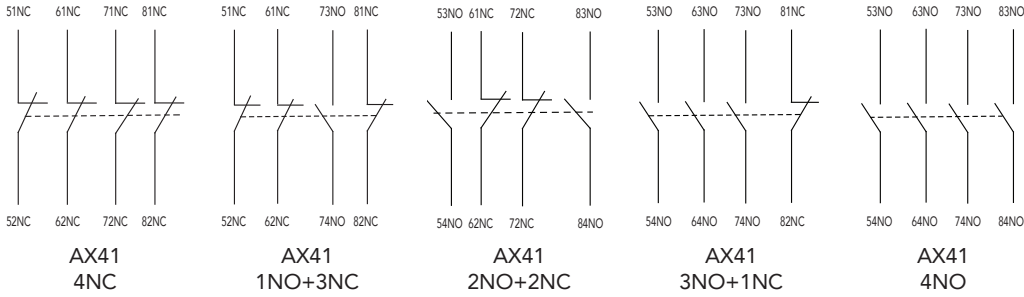
LTC26ND

4-Holes
75°C/90°C
Al/Cu Wire
(4)3/0AWG-500kcmil
310 lb-in/pulg/po
(4)95-240mm2
35N·m

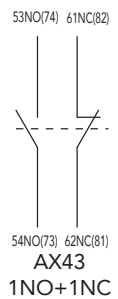
IEC Contactors

Ex9CS/C Accessory Wiring Diagrams

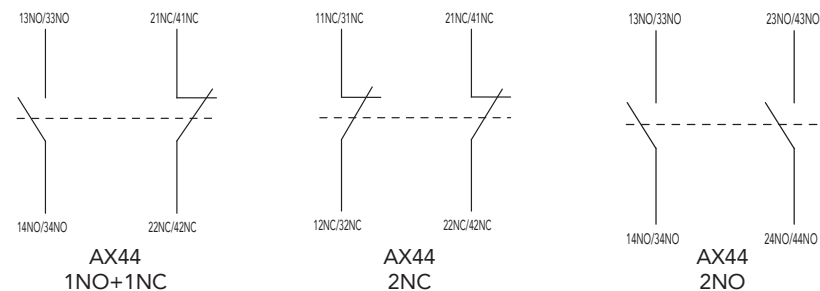
AX41/42 Front Mount Auxiliary Contact



AX43 Side Mount Auxiliary Contact



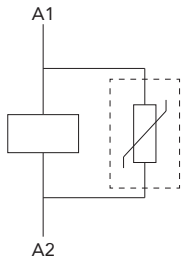
AX44 Side Mount Auxiliary Contact



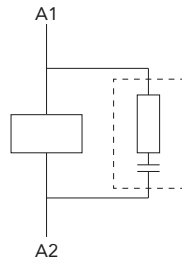
IEC Contactors

Ex9CS/C Accessory Wiring Diagrams

CCU4 Surge Suppressor Block



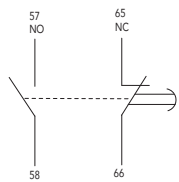
CCU41



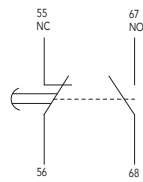
CCU42
CCU43



AXC Time Delay Relay

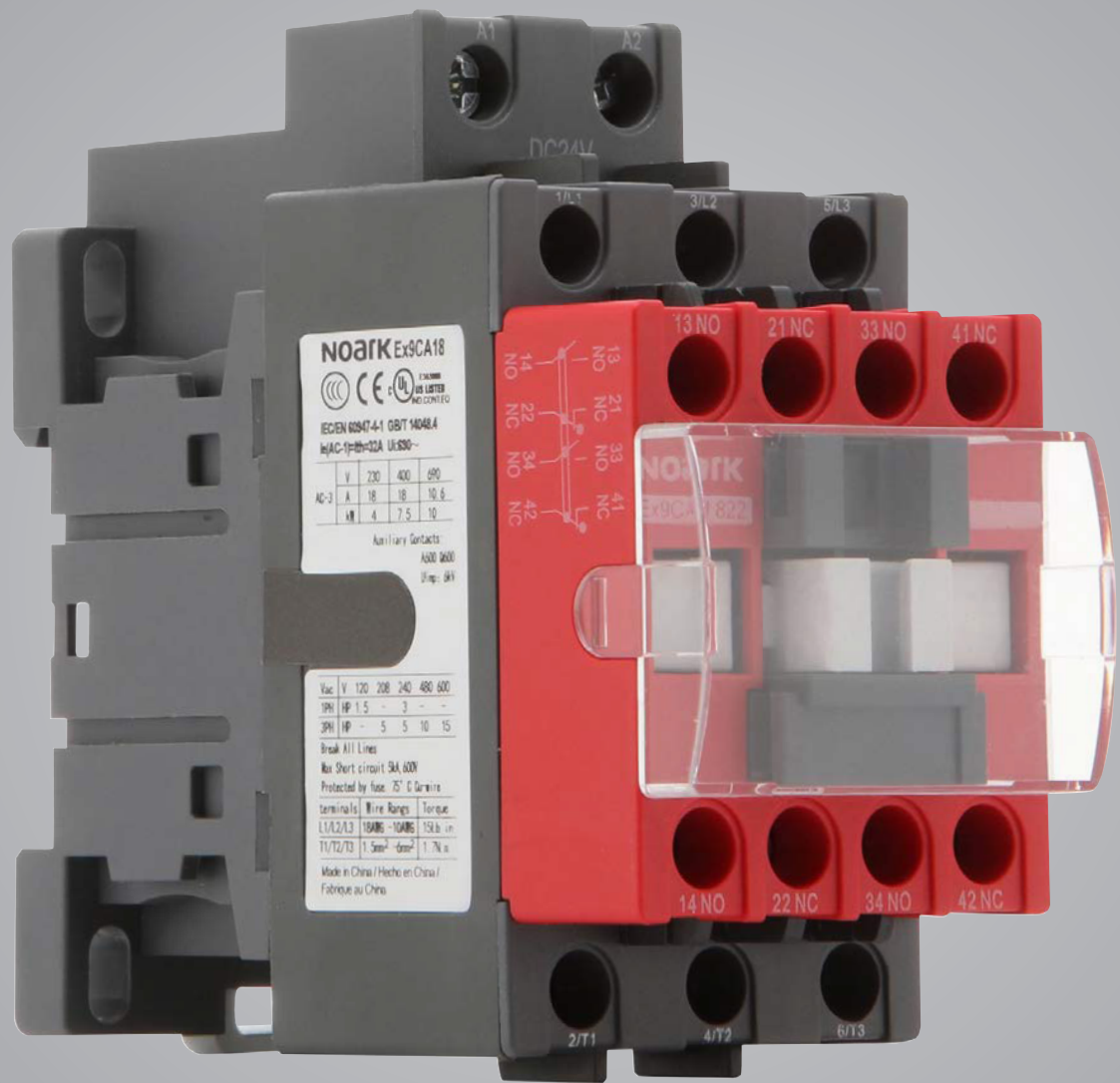


AXCD



AXCT

SAFETY CONTACTORS



Ex9CA

Safety Contactors

Ex9CA Product Overview

Features

The NOARK Ex9CA Safety Contactor is designed for use in safety function applications. It offers special features that allow the design of safe control circuits with current ratings up to 38 Amps. The Normally Closed (NC) Auxiliary contact is a mirror contact to the main contacts and is mechanically linked to the Normally Open (NO) Auxiliary contacts. This allows for optimal design selections in SRP/CS*.

*SRP/CS is the term given by ISO short for safety-related part of a control system, meaning part of a control system that responds to safety-related input signals and generates safety-related output signals

- Positively guided mirror contacts/mechanically linked contacts according to IEC/UL60947-4-1 Annex F, IEC/UL60947-5-1 Annex L
- Mirror contacts/ mechanically linked symbol on the side of Aux block
- Fixed transparent anti-dust cover for easy identification of the device action and prevents the manual operation
- AC or DC operating coils
- Integrated body with built in auxiliary contacts up to 2 NC and 2NO
- Integrated surge suppression on DC coil models
- 5-Year limited warranty

AA

Safety Contactors

Ex9CA National and International Standards

Certifications

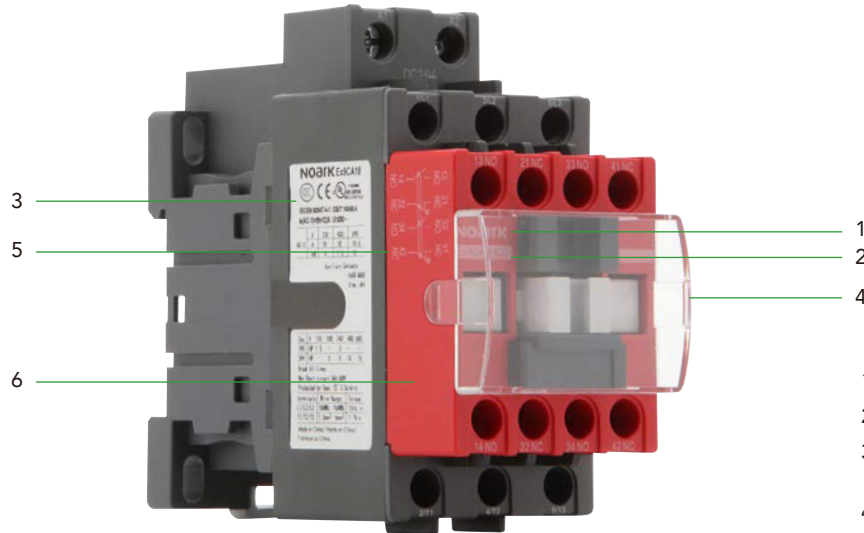
- UL Listed, File Number E353865, UL 60947-1
- Certified for Canada according to CSA standards
- IEC/EN 60947-4-1
- CE Approved
- CCC Certified
- RoHS Compliant



Safety Contactors

Ex9CA Product Selection Guide

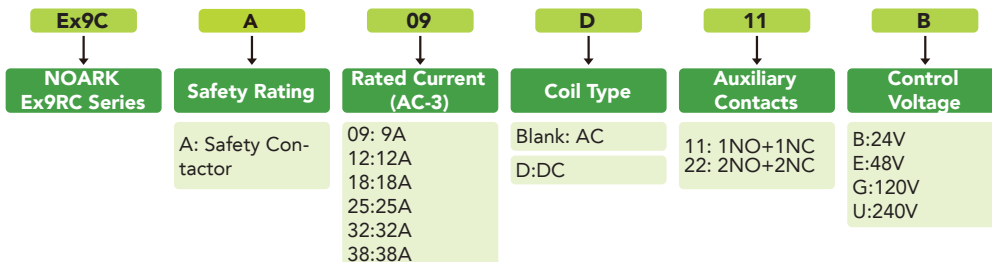
Label



AA

1. Brand
2. Product Selection
3. Label with UL logo, CE logo and data
4. Fixed clear anti-dust front cover
5. Mirror contact / mechanically linked contact symbol
6. Auxilliary contact block

Product Selection Guide



Safety Contactors

Ex9CA 9~18A



Certifications

IEC/EN 60947-1



Coil Voltage	09 A				12 A				
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
	1NO+1NC		2NO, 2NC		1NO+1NC		2NO, 2NC		
AC	24	Ex9CA0911B7	1321951	Ex9CA0922B7	1321975	Ex9CA1211B7	1321955	Ex9CA1222B7	1321979
	48	Ex9CA0911E7	1321952	Ex9CA0922E7	1321976	Ex9CA1211E7	1321956	Ex9CA1222E7	1321980
	120	Ex9CA0911G7	1321953	Ex9CA0922G7	1321977	Ex9CA1211G7	1321957	Ex9CA1222G7	1321981
	240	Ex9CA0911U7	1321954	Ex9CA0922U7	1321978	Ex9CA1211U7	1321958	Ex9CA1222U7	1321982
DC	24	Ex9CA09D11B	1321999	Ex9CA09D22B	1322023	Ex9CA12D11B	1322003	Ex9CA12D22B	1322027
	48	Ex9CA09D11E	1322000	Ex9CA09D22E	1322024	Ex9CA12D11E	1322004	Ex9CA12D22E	1322028
	120	Ex9CA09D11G	1322001	Ex9CA09D22G	1322025	Ex9CA12D11G	1322005	Ex9CA12D22G	1322029
	240	Ex9CA09D11U	1322002	Ex9CA09D22U	1322026	Ex9CA12D11U	1322006	Ex9CA12D22U	1322030

Coil Voltage	18 A				
	Product	Part Number	Product	Part Number	
	1NO+1NC		2NO, 2NC		
AC	24	Ex9CA1811B7	1321959	Ex9CA1822B7	1321983
	48	Ex9CA1811E7	1321960	Ex9CA1822E7	1321984
	120	Ex9CA1811G7	1321961	Ex9CA1822G7	1321985
	240	Ex9CA1811U7	1321962	Ex9CA1822U7	1321986
DC	24	Ex9CA18D11B	1322007	Ex9CA18D22B	1322031
	48	Ex9CA18D11E	1322008	Ex9CA18D22E	1322032
	120	Ex9CA18D11G	1322009	Ex9CA18D22G	1322033
	240	Ex9CA18D11U	1322010	Ex9CA18D22U	1322034

Safety Contactors

Ex9CA 25~38A



Certifications

IEC/EN 60947-1



AA

Coil Voltage	25 A				32 A				
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
	1NO+1NC		2NO, 2NC		1NO+1NC		2NO, 2NC		
AC	24	Ex9CA2511B7	1321963	Ex9CA2522B7	1321987	Ex9CA3211B7	1321967	Ex9CA3222B7	1321991
	48	Ex9CA2511E7	1321964	Ex9CA2522E7	1321988	Ex9CA3211E7	1321968	Ex9CA3222E7	1321992
	120	Ex9CA2511G7	1321965	Ex9CA2522G7	1321989	Ex9CA3211G7	1321969	Ex9CA3222G7	1321993
	240	Ex9CA2511U7	1321966	Ex9CA2522U7	1321990	Ex9CA3211U7	1321970	Ex9CA3222U7	1321994
DC	24	Ex9CA25D11B	1322011	Ex9CA25D22B	1322035	Ex9CA32D11B	1322015	Ex9CA32D22B	1322039
	48	Ex9CA25D11E	1322012	Ex9CA25D22E	1322036	Ex9CA32D11E	1322016	Ex9CA32D22E	1322040
	120	Ex9CA25D11G	1322013	Ex9CA25D22G	1322037	Ex9CA32D11G	1322017	Ex9CA32D22G	1322041
	240	Ex9CA25D11U	1322014	Ex9CA25D22U	1322038	Ex9CA32D11U	1322018	Ex9CA32D22U	1322042

Coil Voltage	38 A				
	Product	Part Number	Product	Part Number	
	1NO+1NC		2NO, 2NC		
AC	24	Ex9CA3811B7	1321971	Ex9CA3822B7	1321995
	48	Ex9CA3811E7	1321972	Ex9CA3822E7	1321996
	120	Ex9CA3811G7	1321973	Ex9CA3822G7	1321997
	240	Ex9CA3811U7	1321974	Ex9CA3822U7	1321998
DC	24	Ex9CA38D11B	1322019	Ex9CA38D22B	1322043
	48	Ex9CA38D11E	1322020	Ex9CA38D22E	1322044
	120	Ex9CA38D11G	1322021	Ex9CA38D22G	1322045
	240	Ex9CA38D11U	1322022	Ex9CA38D22U	1322046

Safety Contactors Specifications

		Ex9CA					
		9	12	18	25	32	38
General Information							
Pole		3					
Production Standard		IEC 60947-1, IEC 60947-4-1, UL 60947-1, UL 60947-4-1, GB/T14048.4					
Environmental Testing According to		IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-11, IEC 60068-2-30					
Rated Frequency (Hz)		50/60					
Conventional Free Air Thermal Current Ith (A)	0≤104 °F (0≤40 °C)	25	32	40	50		
	0≤140 °F (0≤60 °C)						
	0≤158 °F (0≤70 °C)	17	22	28	35		
Rated Insulating Voltage Ui (V)		690					
Rated Impulse Withstand Voltage Uimp (kV)		6					
Electrical Life (x10 ⁴ cycles)	AC-3 380/400 V	120					
	AC-4	5	4	5	4		
Mechanical Life (x10 ⁴ cycles)		1,000					
Operating Cycles Per Hour (cycles/h)	AC-3	1,200			1,000		
	AC-4	300			150		
Environmental Temperature	Transportation or Storage	-76 to 176 °F (-60 to +80 °C)					
	Working At	-4 to 140 °F (-20 to +60 °C)					
	Maximum	-40 to 158 °F (-40 to +70 °C)					
Altitude ft (m)		6,562 (2,000)					
Pollution Degree		Class III					
Rated Operating Voltage (U e)	AC 50/60 HZ						
	DC	24, 48, 120, 240					
Rated Operational Current Ie (A)							
At -82 to 131 °F (-25 to 40 °C)	AC-1 690 V	25	32	40	50		
	AC-3 380/400 V	9	12	18	25	32	38
	AC-3 660/690 V	6.7	9	10.6	17.3	21.9	
	AC-4 380/400 V	9	12	18	25	32	
	AC-4 660/690 V	6.7	8.9	14	17.3		
Rated Power of 3-Phase Motor							
For IEC (kW)	AC-3 230 Vac	-					
	AC-4 230 Vac	-					
	AC-3 380/400 Vac	4	5.5	7.5	11	15	18.5
	AC-4 380/400 Vac						15
	AC-3 660/690 Vac	5.5	7.5	9	15	18.5	
	AC-4 660/690 Vac	5.5	7.5	11	15		
AC-3 1,000 Vac	-						
AC-4 1,000 Vac	-						
UL Rating							
Ith (A)		25	32	40	50		
Single-Phase (HP)	110-120 Vac	0.5	1	1.5	2	3	
	220-240 Vac	1.5	2	3		5	
Three-Phase (HP)	200-208 Vac	3		5	7.5	10	
	220-240 Vac						
	440-480 Vac	5	7.5	10	15	20	
	550-600 Vac	7.5	10	15	20	25	

Safety Contactors

Specifications

		Ex9CA					
		9	12	18	25	32	38
AC-12 Rated Thermal Current I_{th}							
Ambient temperature 40°C	24...240V (A)					10	
	230...500V (A)					10	
	230...690V (A)					10	
Ambient temperature 60°C I _{th}	24...240V (A)					10	
	230...500V (A)					10	
	230...690V (A)					10	
AC-15/A600							
I _e	24V (A)					—	
	48 (A)					—	
	120V (A)					6	
	230V (A)					3	
	240V (A)					3	
	400V (A)					1.9	
	480V (A)					1.5	
	500V (A)					1.4	
	600V (A)					1.2	
690V (A)					—		
DC-13							
I _e	24V(A)					2.8	
	48V(A)					1.2	
	110V(A)					0.55	
	220V(A)					0.27	
	440V(A)					0.15	
Load Carrying Capacity per UL							
Rated voltage AC (V)						Max. 600	
Continuous rating 40 °C (A)						10	
Switching capacity AC (A)						A600	
Rated voltage DC (V)						Max. 600	
Switching capacity DC (A)						Q600	
Tolerance of Control Voltage							
AC control (50/60 Hz)	pick-up (x U _s)					0.85...1.1	
	dropout (x U _s)					0.2...0.75	
DC control	pick-up (x U _s)					0.8...1.1	
	dropout (x U _s)					0.1...0.75	
Coil Power Consumption							
AC control (50/60 Hz)	pick-up (VA)					120VA(9CA09-18)/140VA(9CA25-38)	
	hold-in (VA)					12VA(9CA09-18)/14VA(9CA25-38)	
DC control	pick-up (W)					≤70	
	hold-in (W)					≤3.5	
Operating Time							
AC	closing delay (ms)					15...30	
	opening delay (ms)					15...25	
DC	closing delay (ms)					100...170	
	opening delay (ms)					30-100	
Typical Lifetime							
B _{10D} Value (Electrical)	DC Coil	1.08x10 ⁶			1.13x10 ⁶		
	AC Coil	1.28x10 ⁶			1.25x10 ⁶		

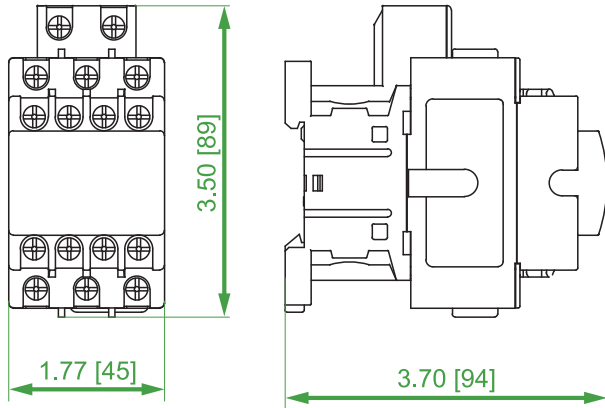
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Safety Contactors

Dimensions

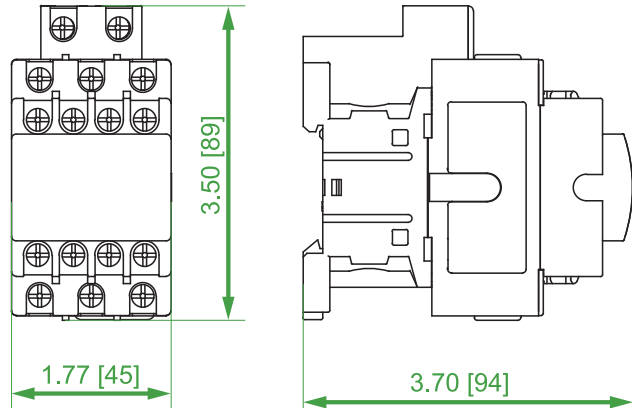
Ex9CA09-18

Unit: in. [mm]



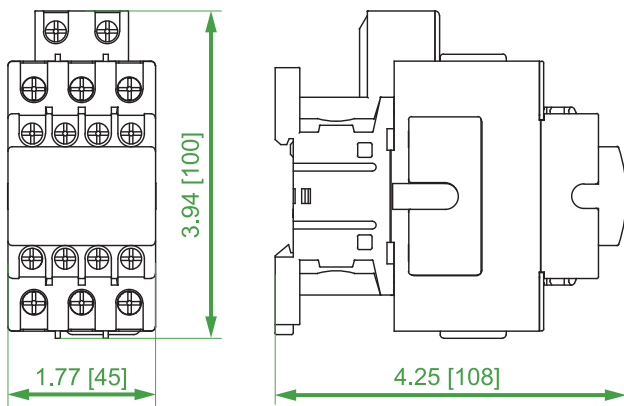
Ex9CA09D-18D

Unit: in. [mm]



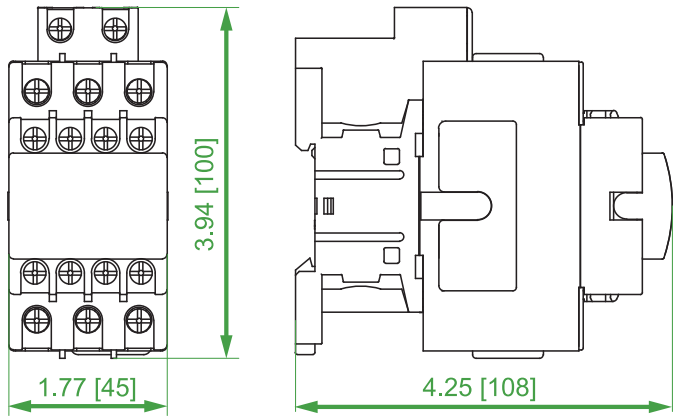
Ex9CA25-38

Unit: in. [mm]



Ex9CA25D-38D

Unit: in. [mm]



Safety Contactors

Contact Configuration

Poles	Configuration	Main Pole	NO Aux	NC Aux	SKU*	Mirror contacts	Mechanically Linked Contacts
3	<p>A1 1/L1 3/L2 5/L3 11/NC 23/NO A2 2/T1 4/T2 6/T3 12/NC 24/NO</p>	3	1	1	Ex9CA*11*	Yes	Yes
3	<p>A1 1/L1 3/L2 5/L3 13/NO 21/NC 33/NO 41/NC A2 2/T1 4/T2 6/T3 14/NO 22/NC 34/NO 42/NC</p>	3	2	2	Ex9CA*22*	Yes	Yes

AA

THERMAL OVERLOAD RELAYS



Ex9R

Thermal Overload Relays

Ex9R Product Overview

Features

- For use with Ex9C and Ex9CR*
- Rated current up to 500 A @ 600 Vac, 50/60 Hz
- Overload protection trip Class 10 and Class 10 A
- Phase loss sensitivity
- Adjustable current setting for overload protection
- Automatic or manual reset selectable
- Status indication
- STOP and TEST function
- Direct mount to contactors or 35 mm DIN rail mounting base option
- 5-year limited warranty



B

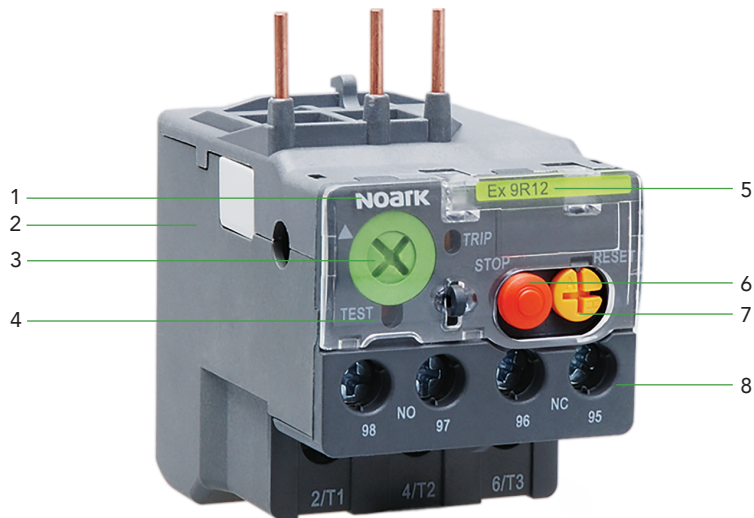
Certifications

- UL Listed, File Number E353865, UL 60947-1 and 60947-4-1
- Certified for Canada CSA standards under cUL testing
- IEC/EN 60947-4-1
- CE Approved
- CCC Certified



Thermal Overload Relays Ex9R Product Selection Guide

Label



1. Brand
2. Label with UL Logo, CE Logo and Data
3. Adjustable Current Range
4. Push to Test
5. Product Series/Frame Amperage
6. Manual Stop
7. Manual/Auto Reset
8. Auxiliary Contacts

Product Selection Guide

Ex9R	12	B	0.16A
NOARK Ex9R Series	Frame Size	Trip Class*	Setting Amperage
	12: 12 A	B: Class 10	0.16A: 0.1~0.16 A
	38: 38 A		0.25A: 0.16~0.25 A
	100: 100 A		0.4A: 0.25~0.4 A
	185: 185 A		0.63A: 0.4~0.63 A
	500: 500 A		1A: 0.63~1 A
			1.6A: 1~1.6 A
			2.5A: 1.6~2.5 A
			4A: 2.5~4 A
			6A: 4~6 A
			8A: 5.5~8 A
			10A: 7~10 A
			12A: 9~12 A
			13A: 9~13 A
			18A: 12~18 A
			24A: 16~24 A
			32A: 23~32 A
			38A: 30~38 A
			40A: 30~40 A
			50A: 37~50 A
			65A: 48~65 A
			70A: 55~70 A
			80A: 63~80 A
			100A: 80~104 A
			115A: 75~115 A
			150A: 110~150 A
			185A: 140~210 A
			225A: 160~225 A
			300A: 210~300 A
			400A: 280~400 A
			500A: 380~500 A

Note: Consult NOARK for information on Tripping Class 10 A.

Thermal Overload Relays

Ex9R 12~100 A

Certifications
IEC/EN 60947-4-1

CE e UL US LISTED



12 A



38 A



100 A

B

Current Range Amp (Min-Max)	Use with Contactors: Ex9CS06~12		Use with Contactors: Ex9C09~38		Use with Contactors: Ex9C40~100	
	Product	Part Number	Product	Part Number	Product	Part Number
0.1~0.16	Ex9R12B0.16A	1420001	-	-	-	-
0.16~0.25	Ex9R12B0.25A	1420002	-	-	-	-
0.25~0.4	Ex9R12B0.4A	1420003	-	-	-	-
0.4~0.63	Ex9R12B0.63A	1420004	-	-	-	-
0.63~1	Ex9R12B1A	1420005	Ex9R38B1A	1420013	-	-
1~1.6	Ex9R12B1.6A	1420006	Ex9R38B1.6A	1420014	-	-
1.6~2.5	Ex9R12B2.5A	1420007	Ex9R38B2.5A	1420015	-	-
2.5~4	Ex9R12B4A	1420008	Ex9R38B4A	1420016	-	-
4~6	Ex9R12B6A	1420009	Ex9R38B6A	1420017	-	-
5.5~8	Ex9R12B8A	1420010	Ex9R38B8A	1420018	-	-
7~10	Ex9R12B10A	1420011	Ex9R38B10A	1420019	-	-
9~12	Ex9R12B12A	1420012	-	-	-	-
9~13	-	-	Ex9R38B13A	1420020	-	-
12~18	-	-	Ex9R38B18A	1420021	-	-
16~24	-	-	Ex9R38B24A	1420022	-	-
23~32	-	-	Ex9R38B32A	1420023	Ex9R100B32A	1420025
30~38	-	-	Ex9R38B38A	1420024	-	-
30~40	-	-	-	-	Ex9R100B40A	1420026
37~50	-	-	-	-	Ex9R100B50A	1420027
48~65	-	-	-	-	Ex9R100B65A	1420028
55~70	-	-	-	-	Ex9R100B70A	1420029
63~80	-	-	-	-	Ex9R100B80A	1420030
80~104	-	-	-	-	Ex9R100B104A	1420046

Thermal Overload Relays

Ex9R 185~500 A

Certifications
IEC/EN 60947-4-1

CE cUL US LISTED



185 A



500 A

Current Range Amp (Min-Max)	Use with Contactors: Ex9C115~185		Use with Contactors: Ex9C225~500	
	Product	Part Number	Product	Part Number
75~115	Ex9R185B115A	1420032	-	-
110~150	Ex9R185B150A	1420033	-	-
140~210	Ex9R185B210A	1420047	-	-
160~225	-	-	Ex9R500B225A	1420035
210~300	-	-	Ex9R500B300A	1420036
280~400	-	-	Ex9R500B400A	1420037
380~500	-	-	Ex9R500B500A	1420038

Thermal Overload Relays

Ex9R Specifications

		Ex9R	
Tripping Class		Class 10/10 A	
Operating Frequency (Hz)		50/60	
Phase Failure Protection Function			
Automatic and Manual Reset			
Temperature Compensation		Yes	
Tripping Indicator			
Test and Stop Pushbutton			
Environmental Conditions	Altitude ft (m)	6,562 (2,000)	
	Pollution Degree	Class III	
Rated Tripping Current (In)		1.2	
Sensitivity to Phase Failure (In)		30%	
Rated Working Voltage (V)		600	
Rated Impulse Withstand Voltage Uimp		6 kV	
Auxiliary Contacts	Number of Contacts	1NO+1NC	
	Rated Operating Voltage Ue (V)	AC-15	220/380
		DC-13	220
	Rated Operating Current Ie (A)	AC-15	1.64 / 0.95
		DC-13	0.13
	Circuit Continuous Current		5 A 600 Vac, 1 A 300 Vdc
	Contact Rating		B600, R300
	Terminal Wire Range AWG (mm ²)		#18-12 (1-2.5)
	Terminal Torque in-lb (N.m)		15 (1.70)
Terminal Wire Strip Length in (mm)		0.43 (11)	

B

Thermal Overload Relays

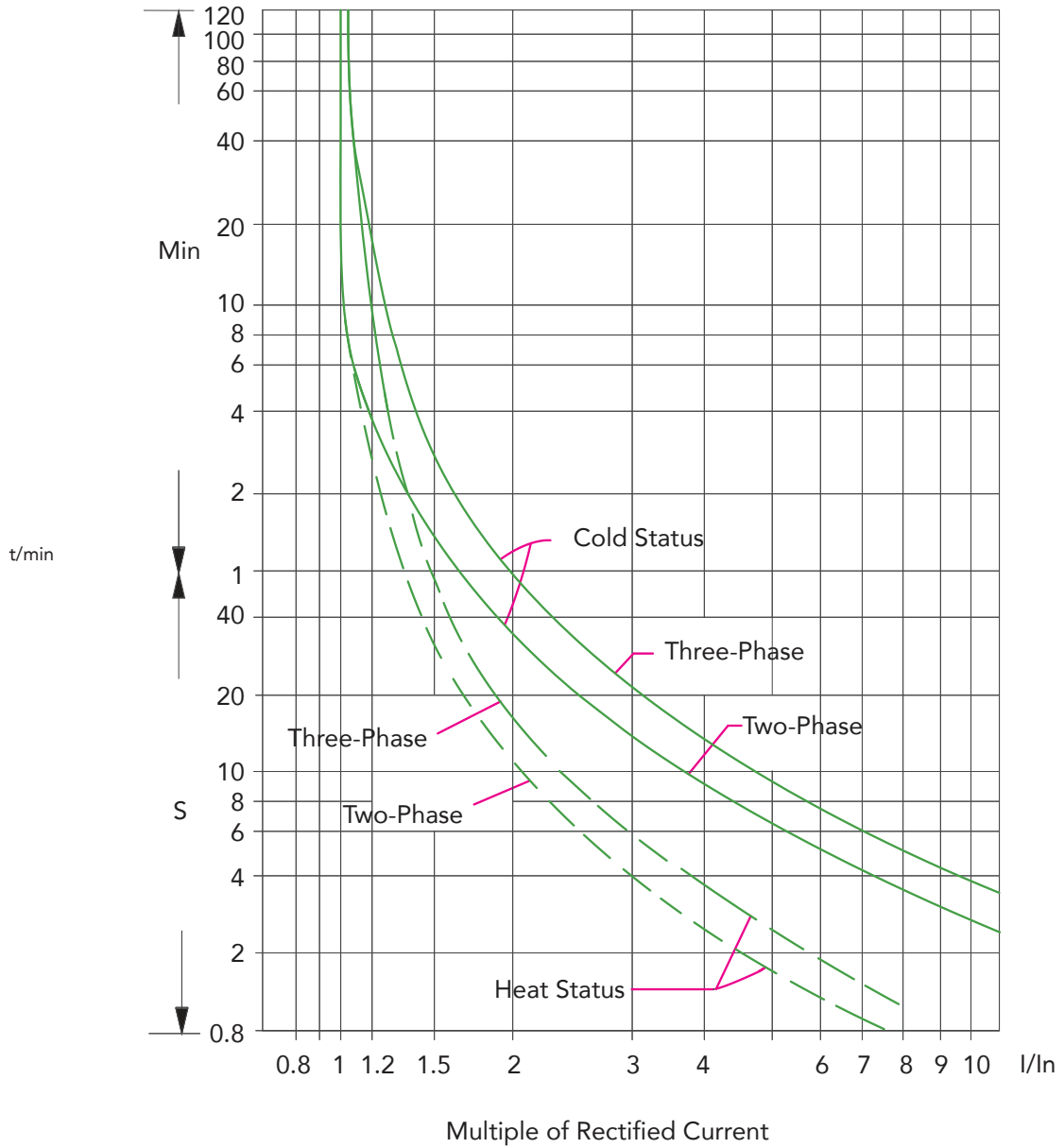
Ex9R Specifications

Ex9R	12 A											
Current Rated (A)	0.16~1.6						2.5~12					
Current Setting Range (A)	0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~12
Short Circuit Rating, 3 Phase at 600 Vac (kA)	1						5					
Power Terminal	#18-12 AWG											
Power Terminal Torque in-lb (N.m)	15 (1.7)											
Power Terminal Wire Strip Length in (mm)	0.43 (11)											
Matched Contactor Type	Ex9CS06~12											
Matched Adapter	AD51											
Ex9R	38 A											
Current Rated (A)	1~1.6			2.5~38								
Current Setting Range (A)	0.63~1	1~1.6	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~13	12~18	16~24	23~32	30~38
Short Circuit Rating, 3 Phase at 600 Vac (kA)	1			5								
Power Terminal	#18-10 AWG / #8 AWG Str											
Power Terminal Torque in-lb (N.m)	22 (2.5)											
Power Terminal Wire Strip Length in (mm)	0.51 (13)											
Matched Contactor Type	Ex9C09~38											
Matched Adapter	AD56											
Ex9R	100 A											
Current Rated (A)	32~50				65~104							
Current Setting Range (A)	23~32	30~40	37~50	48~65	55~70	63~80	80~104					
Short Circuit Rating, 3 Phase at 600 Vac (kA)	5				10							
Power Terminal	#12-10 AWG / #8-1 AWG Str											
Power Terminal Torque in-lb (N.m)	80 (9)											
Power Terminal Wire Strip Length in (mm)	0.71 (18)											
Matched Contactor Type	Ex9C40~100											
Matched Adapter	AD53											
Ex9R	185 A											
Current Rated (A)	115~210											
Current Setting Range (A)	75~115		110~150		140~210							
Short Circuit Rating, 3 Phase at 600 Vac (kA)	10											
Power Terminal	Bus Bar Only											
Power Terminal Torque in-lb (N.m)	159 (18)											
Power Terminal Wire Strip Length in (mm)	-											
Matched Contactor Type	Ex9C115~185											
Matched Adapter	AD54											
Ex9R	500 A											
Current Rated (A)	225~500											
Current Setting Range (A)	160~225	210~300	280~400	380~500								
Short Circuit Rating, 3 Phase at 600 Vac (kA)	30											
Power Terminal	Bus Bar Only											
Power Terminal Torque in-lb (N.m)	310 (35)											
Power Terminal Wire Strip Length in (mm)	-											
Matched Contactor Type	Ex9C225~500											
Matched Adapter	AD55											

Thermal Overload Relays

Ex9R Trip Curves

B

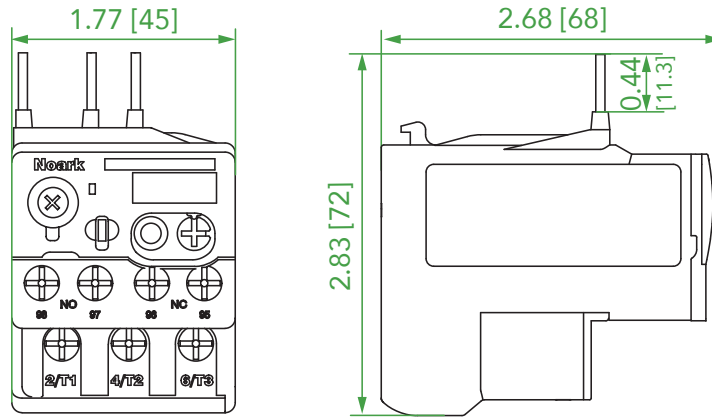


Thermal Overload Relays

Ex9R12 Dimensions

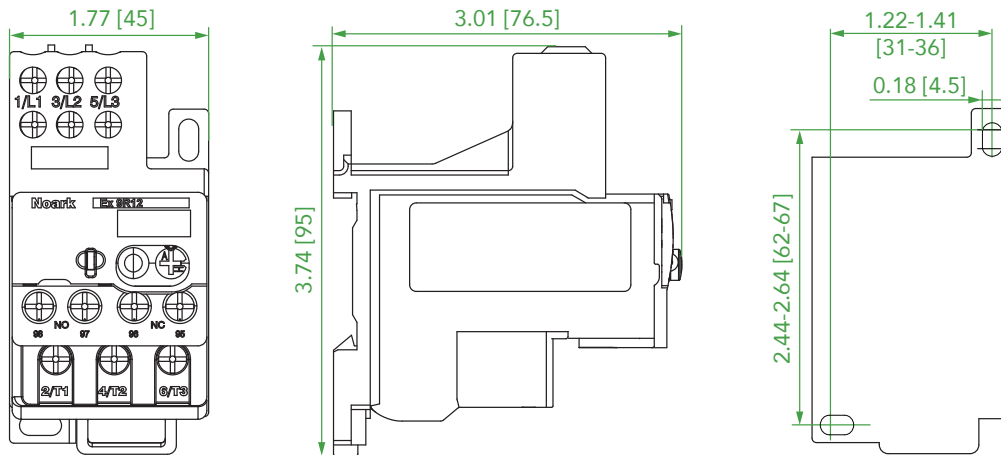
Ex9R12

Unit: in [mm]



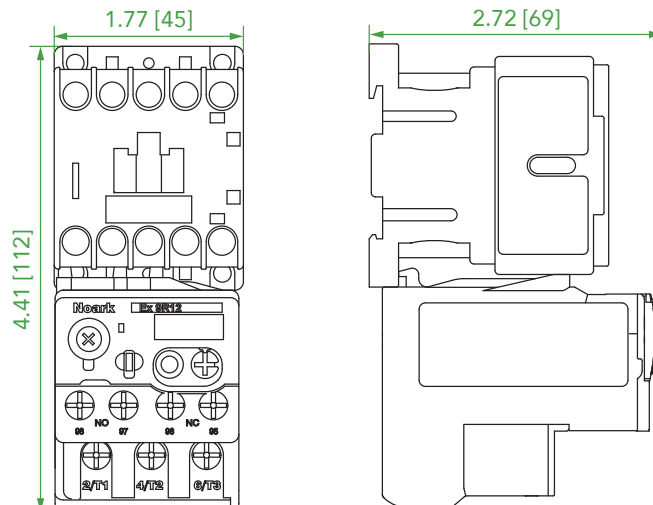
Ex9R12+AD51

Unit: in [mm]



Ex9R12+Ex9CS06~12

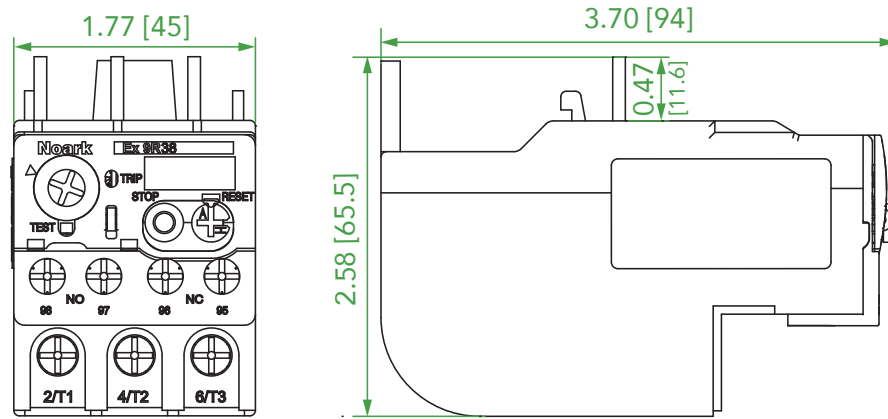
Unit: in [mm]



Thermal Overload Relays

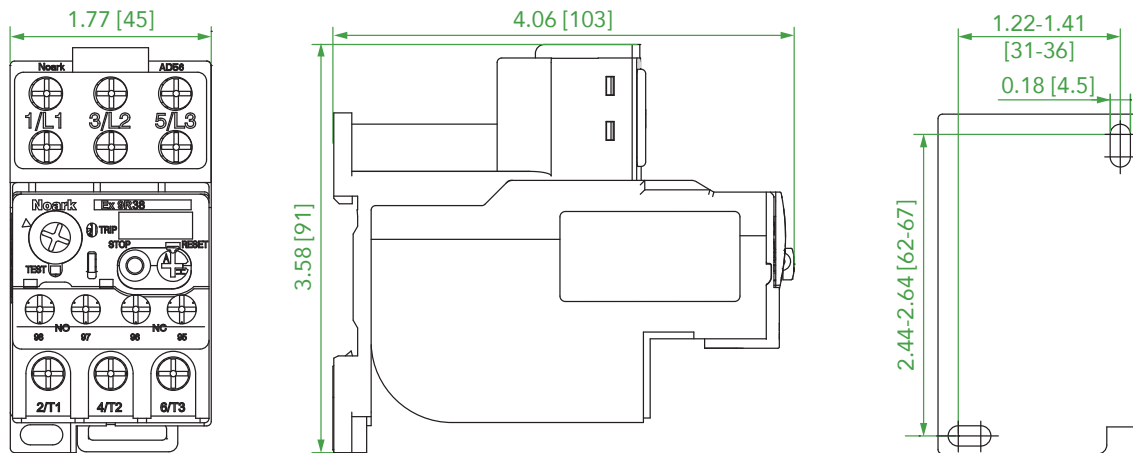
Ex9R38 Dimensions

Ex9R38
Unit: in [mm]

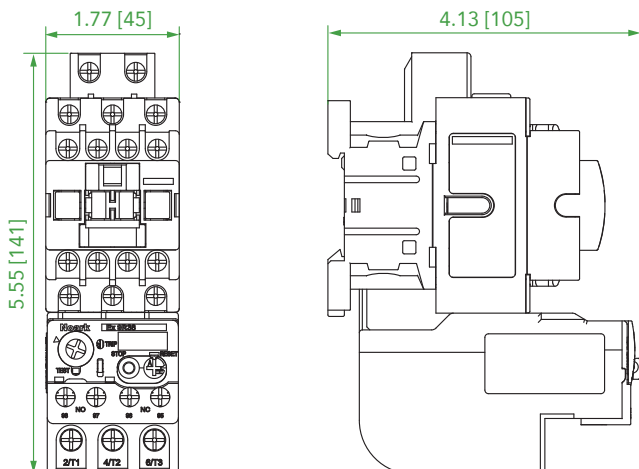


B

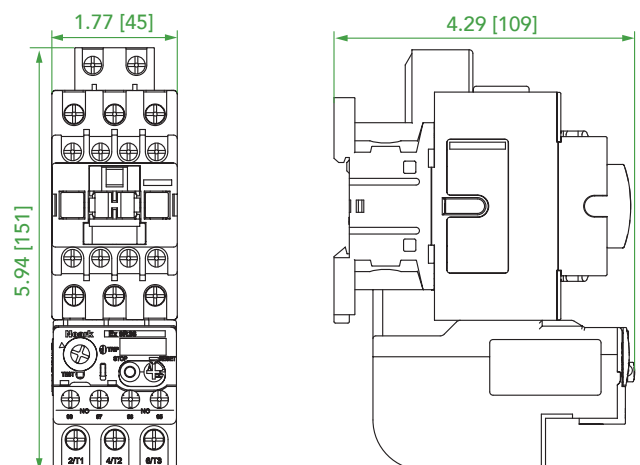
Ex9R38-TAVJ6
Unit: in [mm]



Ex9R38+Ex9C09~18
Unit: in [mm]



Ex9R38+Ex9C25~38
Unit: in [mm]

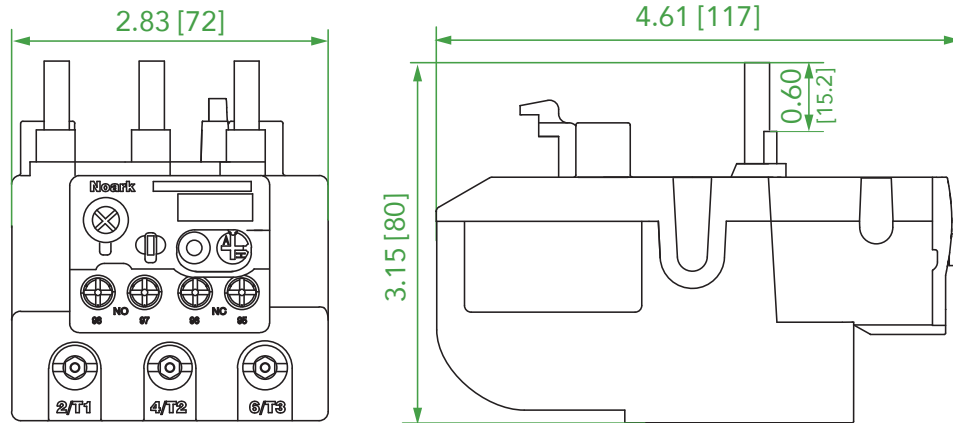


Thermal Overload Relays

Ex9R100 Dimensions

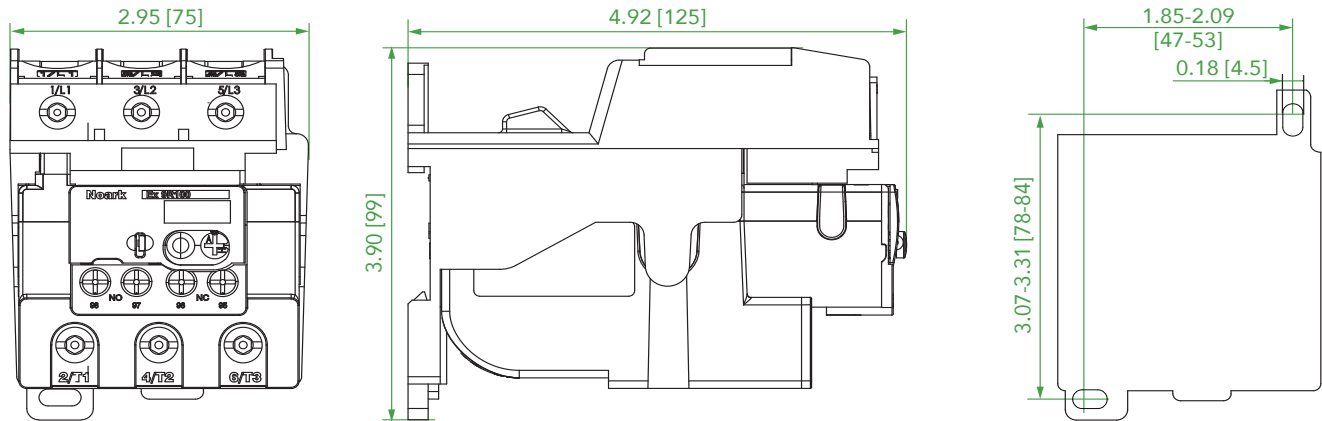
Ex9R100

Unit: in [mm]



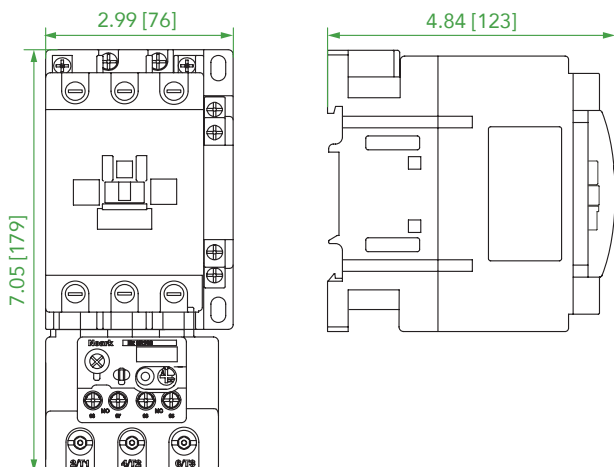
Ex9R100+AD53

Unit: in [mm]



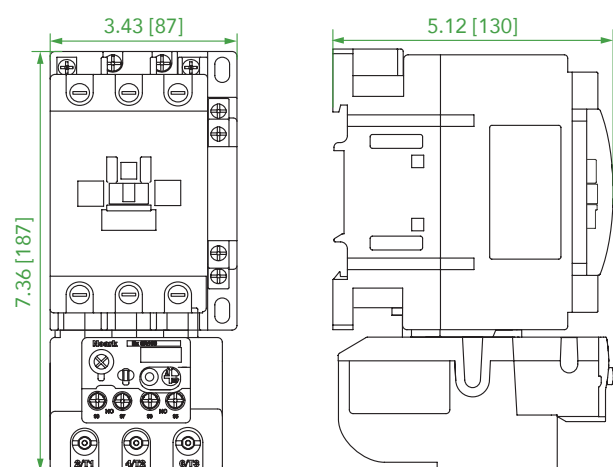
Ex9R100+Ex9C40~65

Unit: in [mm]



Ex9R100+Ex9C80~100

Unit: in [mm]

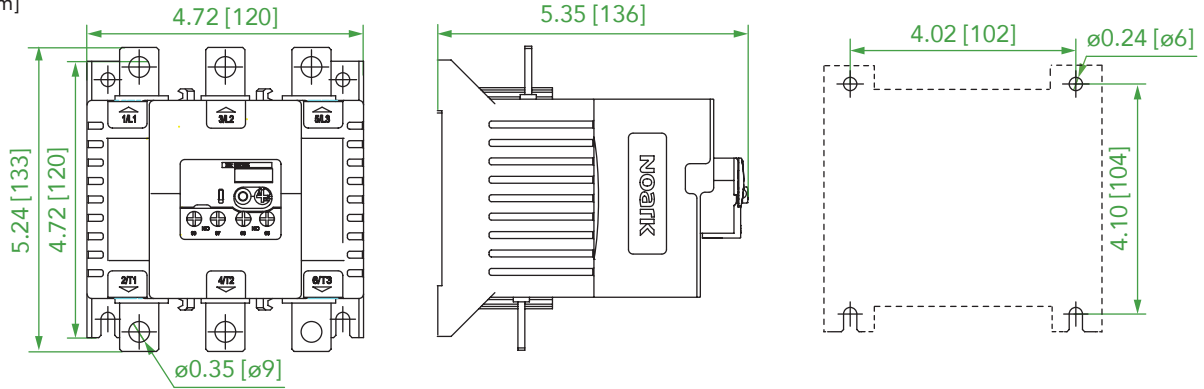


Thermal Overload Relays

Ex9R185 Dimensions

Ex9R185

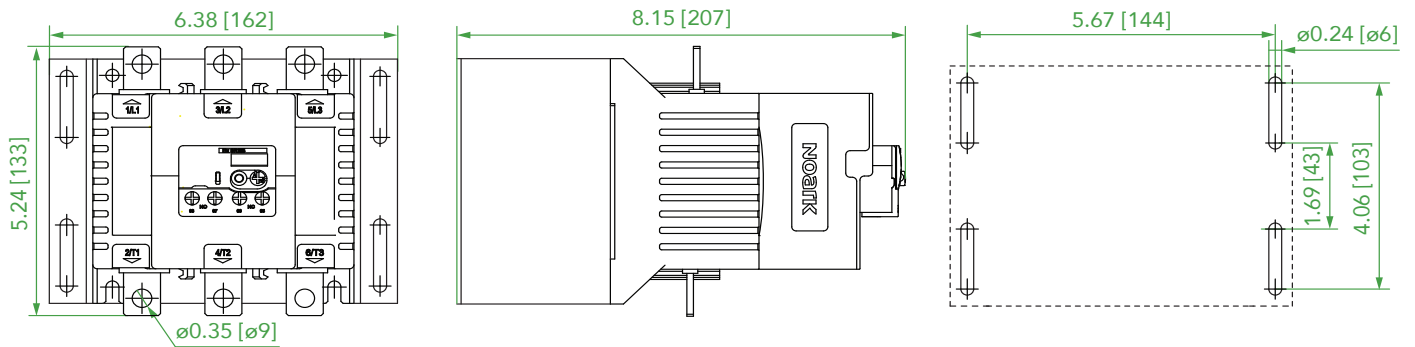
Unit: in [mm]



B

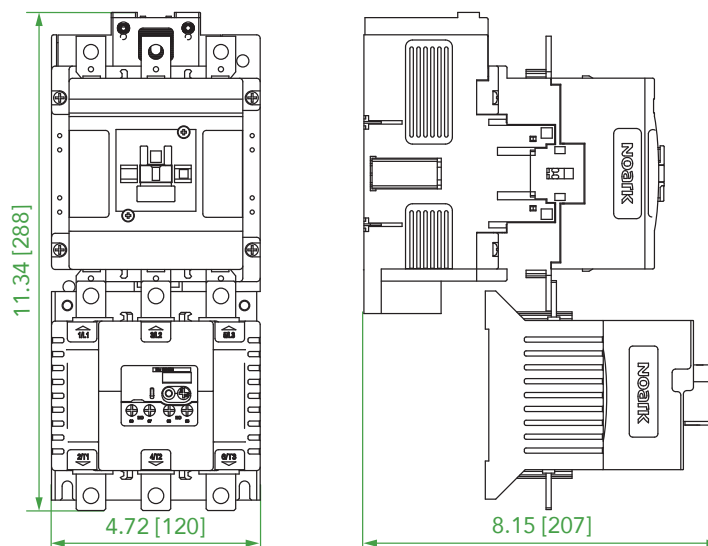
Ex9R185+AD54

Unit: in [mm]



Ex9R185+Ex9C115~185

Unit: in [mm]

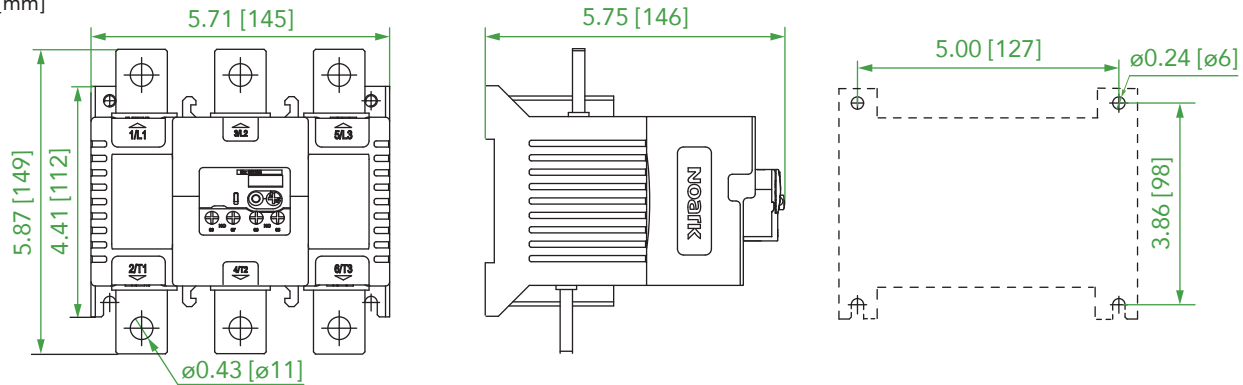


Thermal Overload Relays

Ex9R500 Dimensions

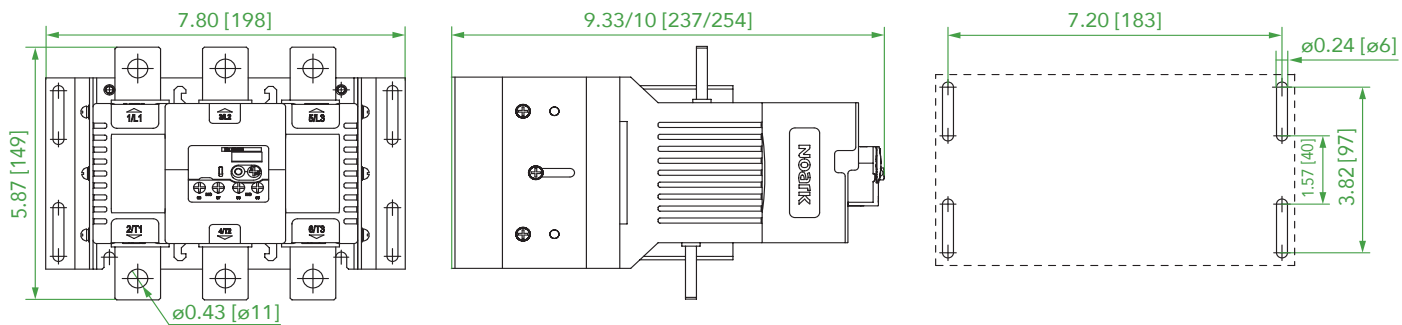
Ex9R500

Unit: in [mm]



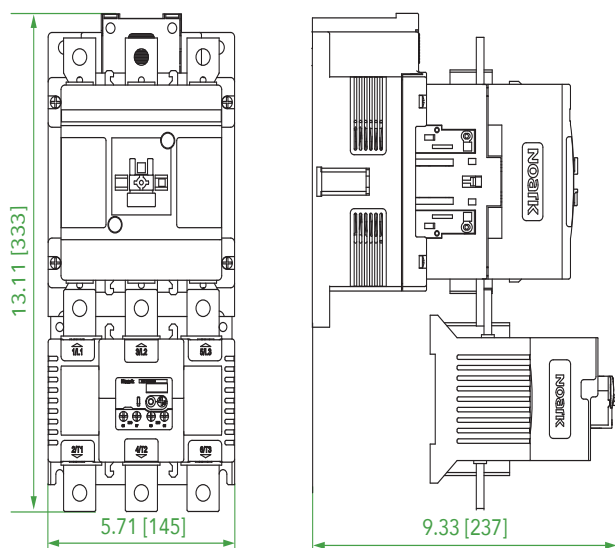
Ex9R500+AD55

Unit: in [mm]



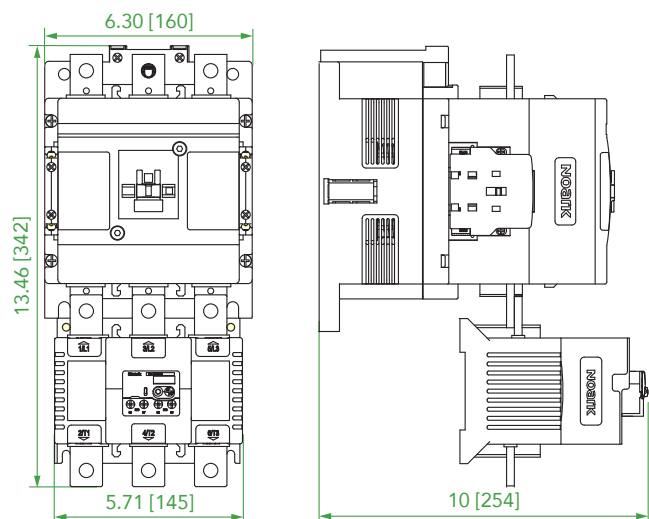
Ex9R500+Ex9C225~300

Unit: in [mm]



Ex9R500+Ex9C400~500

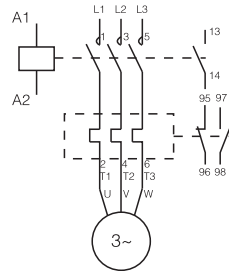
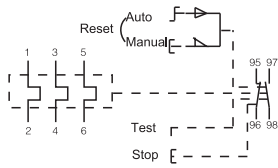
Unit: in [mm]



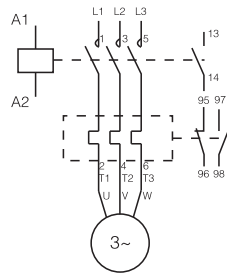
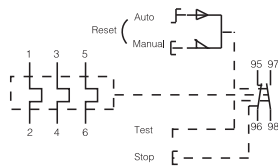
Thermal Overload Relays

Ex9R Wiring Diagrams

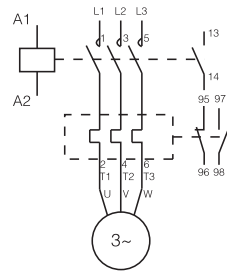
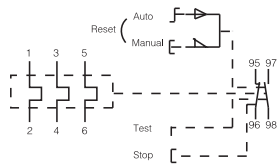
Ex9R12



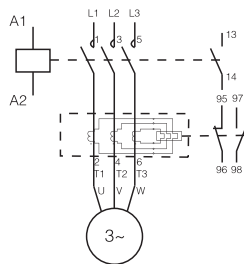
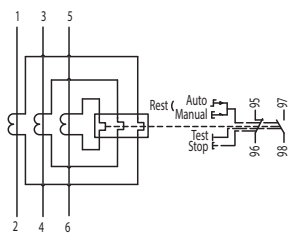
Ex9R38



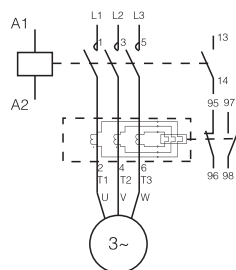
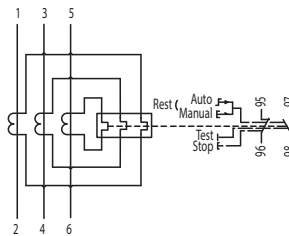
Ex9R100



Ex9R185



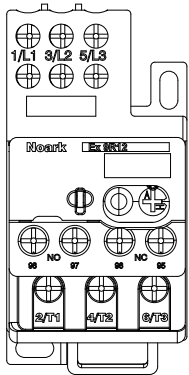
Ex9R500



B

Thermal Overload Relays

Ex9R Accessories: Mounting Base



AD51 shown with Ex9R12 for reference only

AD	51
Description	Relay Type
Mounting Base	51: Ex9R12
	56: Ex9R38
	53: Ex9R100
	54: Ex9R185
	55: Ex9R500

Accessory Description	Product	Part Number
Mounting Base	AD51	1420039
	AD56	1420040
	AD53	1420041
	AD54	1420042
	AD55	1420043

Mounting Base	AD51	AD56	AD53	AD54	AD55
Current Rating (A)	12	38	104	185	500
Voltage (Vac)	600				
Terminal Wire Range	#18-12 AWG	#18-10 AWG / #8 AWG Str	#12-10 AWG / #8-1 AWG, Str		
Terminal Torque in-lb (N.m)	7 (0.80)	22 (2.50)	80 (9)		
Wire Strip Length in (mm)	0.39 (10)	0.51 (13)	0.71 (18)		
Matched Contactor Type	Ex9CS6~12	Ex9C09~38	Ex9C40~100	Ex9C115~185	Ex9C225~500

IEC CONTACTORS



Ex9CD/CM

IEC Contactors

Ex9CD/CM Product Overview

Features

Ex9CDS are general purpose contactors used mainly for controlling 3-phase motors and power circuits up to 600 Vac. This entry level line includes magnetic coils and basic accessories for front and side mounting.

- AC-3 contactor ratings from 630 A and AC-1 contactor ratings to 800 A
- Coil voltages from 24~480 Vac, 50/60 Hz
- Full Voltage Non-Reversing (FVNR) and Full Voltage Reversing (FVR)
- 5 kA @ 600 Vac
- Built-on NO or NC auxiliary contacts on 9-32A frames
- IP 20 finger and back-of hand safe
- 3 and 4 pole versions including 2NO+2NC and 4NO configurations
- 95 A mounts on standard 35mm DIN rail (40~95A can also mount on 75 mm DIN rail)
- Compatible with Ex9RD thermal overload relays
- Plug-on accessories for reduced installation time
- Coil replacement on standard contactor from 9~630 A

Certifications

- UL Listed, File Number E353866
- Certified for Canada CSA standards 22.2 No. 14 under cUL testing
- IEC/EN 60947
- CE Compliant



IEC Contactors

Ex9CD/CM Product Selection Guide

Label



1. CE Mark
2. Brand
3. Product Selection
4. UL Listed Mark
5. Coil Indicator
6. AC Coil Voltage
7. Frequency

Product Selection Guide

Ex9C	D	S	09	A	30	G	7	A
NOARK Ex9C Series	Contactor Type	Function	Rated Current AC-3	Terminal	Pole	Coil Voltage ¹	Frequency	Auxiliary Contacts (Built In)
	D: Ex9CD Standard (9~630 A) M: Ex9CM Miniature (9~12 A)	S: Full Voltage Non-Reversing (FVNR) R: Full Voltage Reversing (FVR)	06: 6 A 09: 9 A 12: 12 A 18: 18 A 25: 25 A 32: 32 A 40: 40 A 50: 50 A 65: 65 A 80: 80 A 95: 95 A 115: 115 A 150: 150 A 185: 185 A 225: 225 A 265: 265 A 330: 330 A 400: 400 A 500: 500 A 630: 630 A	A: Screw Terminals	30: 3NO 40: 4NO 22: 2NO+ 2NC	B: 24 V F: 110 V G: 120 V P: 230 V U: 240 V T: 480 V	7: 50/60 Hz	A: 1NO Mini Type B: 1NC (6~12 A) A: 1NO Standard Type B: 1NC (9~32 A) C: 1NO+ Standard Type 1NC AC Coil: (40~95 A) Blank Standard Type None (115~630 A)

Notes:
1. Consult NOARK for information on 277-440V products

115-265A: 110-480Vac Coil available
330-630A: 110-380Vac Coil available

IEC Contactors

Ex9CMS 6~9 A Miniature

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

6 A

9 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CMS06A30B7A	1311137	Ex9CMS06A30B7B	1311113	Ex9CMS09A30B7A	1311233	Ex9CMS09A30B7B	1311209
48	Ex9CMS06A30E7A	1313334	Ex9CMS06A30E7B	1313310	Ex9CMS09A30E7A	1313430	Ex9CMS09A30E7B	1313406
110	Ex9CMS06A30F7A	1311129	Ex9CMS06A30F7B	1311105	Ex9CMS09A30F7A	1311225	Ex9CMS09A30F7B	1311201
120	Ex9CMS06A30G7A	1311131	Ex9CMS06A30G7B	1311107	Ex9CMS09A30G7A	1311227	Ex9CMS09A30G7B	1311203
220	Ex9CMS06A30M7A	1313328	Ex9CMS06A30M7B	1313304	Ex9CMS09A30M7A	1313424	Ex9CMS09A30M7B	1313400
230	Ex9CMS06A30P7A	1311133	Ex9CMS06A30P7B	1311109	Ex9CMS09A30P7A	1311229	Ex9CMS09A30P7B	1311205
240	Ex9CMS06A30U7A	1311135	Ex9CMS06A30U7B	1311111	Ex9CMS09A30U7A	1311231	Ex9CMS09A30U7B	1311207
277	Ex9CMS06A30N7A	1313336	Ex9CMS06A30N7B	1313312	Ex9CMS09A30N7A	1313432	Ex9CMS09A30N7B	1313408
380	Ex9CMS06A30Q7A	1313330	Ex9CMS06A30Q7B	1313306	Ex9CMS09A30Q7A	1313426	Ex9CMS09A30Q7B	1313402
440	Ex9CMS06A30R7A	1313332	Ex9CMS06A30R7B	1313308	Ex9CMS09A30R7A	1313428	Ex9CMS09A30R7B	1313404
480	Ex9CMS06A30T7A	1311139	Ex9CMS06A30T7B	1311115	Ex9CMS09A30T7A	1311235	Ex9CMS09A30T7B	1311211

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)		4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CMS06A40B7	1311065	Ex9CMS06A22B7	1311089	Ex9CMS09A40B7	1311161	Ex9CMS09A22B7	1311185
48	Ex9CMS06A40E7	1313262	Ex9CMS06A22E7	1313286	Ex9CMS09A40E7	1313358	Ex9CMS09A22E7	1313382
110	Ex9CMS06A40F7	1311057	Ex9CMS06A22F7	1311081	Ex9CMS09A40F7	1311153	Ex9CMS09A22F7	1311177
120	Ex9CMS06A40G7	1311059	Ex9CMS06A22G7	1311083	Ex9CMS09A40G7	1311155	Ex9CMS09A22G7	1311179
220	Ex9CMS06A40M7	1313256	Ex9CMS06A22M7	1313280	Ex9CMS09A40M7	1313352	Ex9CMS09A22M7	1313376
230	Ex9CMS06A40P7	1311061	Ex9CMS06A22P7	1311085	Ex9CMS09A40P7	1311157	Ex9CMS09A22P7	1311181
240	Ex9CMS06A40U7	1311063	Ex9CMS06A22U7	1311087	Ex9CMS09A40U7	1311159	Ex9CMS09A22U7	1311183
277	Ex9CMS06A40N7	1313264	Ex9CMS06A22N7	1313288	Ex9CMS09A40N7	1313360	Ex9CMS09A22N7	1313384
380	Ex9CMS06A40Q7	1313258	Ex9CMS06A22Q7	1313282	Ex9CMS09A40Q7	1313354	Ex9CMS09A22Q7	1313378
440	Ex9CMS06A40R7	1313260	Ex9CMS06A22R7	1313284	Ex9CMS09A40R7	1313356	Ex9CMS09A22R7	1313380
480	Ex9CMS06A40T7	1311067	Ex9CMS06A22T7	1311091	Ex9CMS09A40T7	1311163	Ex9CMS09A22T7	1311187

IEC Contactors

Ex9CMS 12 A Miniature

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

12 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		Ratings		6 A	9 A	12 A	C
	Product	Part Number	Product	Part Number	UL/CSA (A)	General Purpose				
24	Ex9CMS12A30B7A	1311329	Ex9CMS12A30B7B	1311305	Single-Phase (hp)	110/120 V	0.3	0.5	0.75	
48	Ex9CMS12A30E7A	1313526	Ex9CMS12A30E7B	1313502	Three-Phase (hp)	230/240 V	0.75	1.5	2	
110	Ex9CMS12A30F7A	1311321	Ex9CMS12A30F7B	1311297		200/208 V	1.5	3		
120	Ex9CMS12A30G7A	1311323	Ex9CMS12A30G7B	1311299		230/240 V	3	5	7.5	
220	Ex9CMS12A30M7A	1313520	Ex9CMS12A30M7B	1313496		460/480 V			10	
230	Ex9CMS12A30P7A	1311325	Ex9CMS12A30P7B	1311301	IEC (A)	AC-3 le	6	9	12	
240	Ex9CMS12A30U7A	1311327	Ex9CMS12A30U7B	1311303	AC-3 (kw)	AC-1 le	20			
277	Ex9CMS12A30N7A	1313528	Ex9CMS12A30N7B	1313504		220/230/240 V	1.5	2.2	3	
380	Ex9CMS12A30Q7A	1313522	Ex9CMS12A30Q7B	1313498		380/400 V	2.2	4	5.5	
440	Ex9CMS12A30R7A	1313524	Ex9CMS12A30R7B	1313500	415 V	4				
480	Ex9CMS12A30T7A	1311331	Ex9CMS12A30T7B	1311307	660/690 V	3		4		

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CMS12A40B7	1311257	Ex9CMS12A22B7	1311281
48	Ex9CMS12A40E7	1313454	Ex9CMS12A22E7	1313478
110	Ex9CMS12A40F7	1311249	Ex9CMS12A22F7	1311273
120	Ex9CMS12A40G7	1311251	Ex9CMS12A22G7	1311275
220	Ex9CMS12A40M7	1313448	Ex9CMS12A22M7	1313472
230	Ex9CMS12A40P7	1311253	Ex9CMS12A22P7	1311277
240	Ex9CMS12A40U7	1311255	Ex9CMS12A22U7	1311279
277	Ex9CMS12A40N7	1313456	Ex9CMS12A22N7	1313480
380	Ex9CMS12A40Q7	1313450	Ex9CMS12A22Q7	1313474
440	Ex9CMS12A40R7	1313452	Ex9CMS12A22R7	1313476
480	Ex9CMS12A40T7	1311259	Ex9CMS12A22T7	1311283

IEC Contactors

Ex9CDS 9~12 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



9 A

12 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CDS09A30B7A	1310069	Ex9CDS09A30B7B	1310009	Ex9CDS12A30B7A	1310153	Ex9CDS12A30B7B	1310093
48	Ex9CDS09A30E7A	1312266	Ex9CDS09A30E7B	1312206	Ex9CDS12A30E7A	1312350	Ex9CDS12A30E7B	1312290
110	Ex9CDS09A30F7A	1310061	Ex9CDS09A30F7B	1310001	Ex9CDS12A30F7A	1310145	Ex9CDS12A30F7B	1310085
120	Ex9CDS09A30G7A	1310063	Ex9CDS09A30G7B	1310003	Ex9CDS12A30G7A	1310147	Ex9CDS12A30G7B	1310087
220	Ex9CDS09A30M7A	1312260	Ex9CDS09A30M7B	1312200	Ex9CDS12A30M7A	1312344	Ex9CDS12A30M7B	1312284
230	Ex9CDS09A30P7A	1310065	Ex9CDS09A30P7B	1310005	Ex9CDS12A30P7A	1310149	Ex9CDS12A30P7B	1310089
240	Ex9CDS09A30U7A	1310067	Ex9CDS09A30U7B	1310007	Ex9CDS12A30U7A	1310151	Ex9CDS12A30U7B	1310091
277	Ex9CDS09A30N7A	1312268	Ex9CDS09A30N7B	1312208	Ex9CDS12A30N7A	1312352	Ex9CDS12A30N7B	1312292
380	Ex9CDS09A30Q7A	1312262	Ex9CDS09A30Q7B	1312202	Ex9CDS12A30Q7A	1312346	Ex9CDS12A30Q7B	1312286
440	Ex9CDS09A30R7A	1312264	Ex9CDS09A30R7B	1312204	Ex9CDS12A30R7A	1312348	Ex9CDS12A30R7B	1312288
480	Ex9CDS09A30T7A	1310071	Ex9CDS09A30T7B	1310011	Ex9CDS12A30T7A	1310155	Ex9CDS12A30T7B	1310095
Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)		4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CDS09A40B7	1310033	Ex9CDS09A22B7	1310057	Ex9CDS12A40B7	1310117	Ex9CDS12A22B7	1310141
48	Ex9CDS09A40E7	1312230	Ex9CDS09A22E7	1312254	Ex9CDS12A40E7	1312314	Ex9CDS12A22E7	1312338
110	Ex9CDS09A40F7	1310025	Ex9CDS09A22F7	1310049	Ex9CDS12A40F7	1310109	Ex9CDS12A22F7	1310133
120	Ex9CDS09A40G7	1310027	Ex9CDS09A22G7	1310051	Ex9CDS12A40G7	1310111	Ex9CDS12A22G7	1310135
220	Ex9CDS09A40M7	1312224	Ex9CDS09A22M7	1312248	Ex9CDS12A40M7	1312308	Ex9CDS12A22M7	1312332
230	Ex9CDS09A40P7	1310029	Ex9CDS09A22P7	1310053	Ex9CDS12A40P7	1310113	Ex9CDS12A22P7	1310137
240	Ex9CDS09A40U7	1310031	Ex9CDS09A22U7	1310055	Ex9CDS12A40U7	1310115	Ex9CDS12A22U7	1310139
277	Ex9CDS09A40N7	1312232	Ex9CDS09A22N7	1312256	Ex9CDS12A40N7	1312316	Ex9CDS12A22N7	1312340
380	Ex9CDS09A40Q7	1312226	Ex9CDS09A22Q7	1312250	Ex9CDS12A40Q7	1312310	Ex9CDS12A22Q7	1312334
440	Ex9CDS09A40R7	1312228	Ex9CDS09A22R7	1312252	Ex9CDS12A40R7	1312312	Ex9CDS12A22R7	1312336
480	Ex9CDS09A40T7	1310035	Ex9CDS09A22T7	1310059	Ex9CDS12A40T7	1310119	Ex9CDS12A22T7	1310143

IEC Contactors

Ex9CDS 18 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



18 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		Ratings		9 A	12 A	18 A	C
	Product	Part Number	Product	Part Number	UL/CSA (A)	General Purpose				
24	Ex9CDS18A30B7A	1310201	Ex9CDS18A30B7B	1310177	Single-Phase (hp)	120 V	20		32	
48	Ex9CDS18A30E7A	1312398	Ex9CDS18A30E7B	1312374		208 V	0.5	0.75	1	
110	Ex9CDS18A30F7A	1310193	Ex9CDS18A30F7B	1310169		240 V	1	2	3	
120	Ex9CDS18A30G7A	1310195	Ex9CDS18A30G7B	1310171	Three-Phase (hp)	200 V	3	5	7.5	
220	Ex9CDS18A30M7A	1312392	Ex9CDS18A30M7B	1312368		240 V	5	7.5	10	
230	Ex9CDS18A30P7A	1310197	Ex9CDS18A30P7B	1310173		460 V	9	12	18	
240	Ex9CDS18A30U7A	1310199	Ex9CDS18A30U7B	1310175	IEC (A)	600 V	20		32	
277	Ex9CDS18A30N7A	1312400	Ex9CDS18A30N7B	1312376		AC-3 le	2.2	3	4	
380	Ex9CDS18A30Q7A	1312394	Ex9CDS18A30Q7B	1312370	AC-3 (kw)	AC-1 le	20		32	
440	Ex9CDS18A30R7A	1312396	Ex9CDS18A30R7B	1312372		220/230 V	4	5.5	7.5	
480	Ex9CDS18A30T7A	1310203	Ex9CDS18A30T7B	1310179		380/400 V	5.5	7.5	10	
						660/690 V				

IEC Contactors

Ex9CDS 25~32 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

25 A

32 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CDS25A30B7A	1310285	Ex9CDS25A30B7B	1310225	Ex9CDS32A30B7A	1310333	Ex9CDS32A30B7B	1310309
48	Ex9CDS25A30E7A	1312482	Ex9CDS25A30E7B	1312422	Ex9CDS32A30E7A	1312530	Ex9CDS32A30E7B	1312506
110	Ex9CDS25A30F7A	1310277	Ex9CDS25A30F7B	1310217	Ex9CDS32A30F7A	1310325	Ex9CDS32A30F7B	1310301
120	Ex9CDS25A30G7A	1310279	Ex9CDS25A30G7B	1310219	Ex9CDS32A30G7A	1310327	Ex9CDS32A30G7B	1310303
220	Ex9CDS25A30M7A	1312476	Ex9CDS25A30M7B	1312416	Ex9CDS32A30M7A	1312524	Ex9CDS32A30M7B	1312500
230	Ex9CDS25A30P7A	1310281	Ex9CDS25A30P7B	1310221	Ex9CDS32A30P7A	1310329	Ex9CDS32A30P7B	1310305
240	Ex9CDS25A30U7A	1310283	Ex9CDS25A30U7B	1310223	Ex9CDS32A30U7A	1310331	Ex9CDS32A30U7B	1310307
277	Ex9CDS25A30N7A	1312484	Ex9CDS25A30N7B	1312424	Ex9CDS32A30N7A	1312532	Ex9CDS32A30N7B	1312508
380	Ex9CDS25A30Q7A	1312478	Ex9CDS25A30Q7B	1312418	Ex9CDS32A30Q7A	1312526	Ex9CDS32A30Q7B	1312502
440	Ex9CDS25A30R7A	1312480	Ex9CDS25A30R7B	1312420	Ex9CDS32A30R7A	1312528	Ex9CDS32A30R7B	1312504
480	Ex9CDS25A30T7A	1310287	Ex9CDS25A30T7B	1310227	Ex9CDS32A30T7A	1310335	Ex9CDS32A30T7B	1310311

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS25A40B7	1310249	Ex9CDS25A22B7	1310273
48	Ex9CDS25A40E7	1312446	Ex9CDS25A22E7	1312470
110	Ex9CDS25A40F7	1310241	Ex9CDS25A22F7	1310265
120	Ex9CDS25A40G7	1310243	Ex9CDS25A22G7	1310267
220	Ex9CDS25A40M7	1312440	Ex9CDS25A22M7	1312464
230	Ex9CDS25A40P7	1310245	Ex9CDS25A22P7	1310269
240	Ex9CDS25A40U7	1310247	Ex9CDS25A22U7	1310271
277	Ex9CDS25A40N7	1312448	Ex9CDS25A22N7	1312472
380	Ex9CDS25A40Q7	1312442	Ex9CDS25A22Q7	1312466
440	Ex9CDS25A40R7	1312444	Ex9CDS25A22R7	1312468
480	Ex9CDS25A40T7	1310251	Ex9CDS25A22T7	1310275

IEC Contactors

Ex9CDS 40 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

40 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		Ratings		25 A	32 A	40 A	C
	Product	Part Number	UL/CSA (A)	General Purpose				
24	Ex9CDS40A30B7C	1310393	Single-Phase (hp)	120 V	40	50	60	
48	Ex9CDS40A30E7C	1312590		208 V	2	3		
110	Ex9CDS40A30F7C	1310385		240 V	5		7.5	
120	Ex9CDS40A30G7C	1310387	Three-Phase (hp)	200 V	7.5	10	15	
220	Ex9CDS40A30M7C	1312584		240 V	10	15	20	
230	Ex9CDS40A30P7C	1310389		460 V	15	20	25	
240	Ex9CDS40A30U7C	1310391	600 V					
277	Ex9CDS40A30N7C	1312592	IEC (A)	AC-3 le	25	32	40	
380	Ex9CDS40A30Q7C	1312586		AC-1 le	40	50	60	
440	Ex9CDS40A30R7C	1312588	AC-3 (kw)	220/230 V	5.5	7.5	11	
480	Ex9CDS40A30T7C	1310395		380/400 V	11	15	18.5	
				660/690 V	15	18.5	30	

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS40A40B7	1310357	Ex9CDS40A22B7	1310381
48	Ex9CDS40A40E7	1312554	Ex9CDS40A22E7	1312578
110	Ex9CDS40A40F7	1310349	Ex9CDS40A22F7	1310373
120	Ex9CDS40A40G7	1310351	Ex9CDS40A22G7	1310375
220	Ex9CDS40A40M7	1312548	Ex9CDS40A22M7	1312572
230	Ex9CDS40A40P7	1310353	Ex9CDS40A22P7	1310377
240	Ex9CDS40A40U7	1310355	Ex9CDS40A22U7	1310379
277	Ex9CDS40A40N7	1312556	Ex9CDS40A22N7	1312580
380	Ex9CDS40A40Q7	1312550	Ex9CDS40A22Q7	1312574
440	Ex9CDS40A40R7	1312552	Ex9CDS40A22R7	1312576
480	Ex9CDS40A40T7	1310359	Ex9CDS40A22T7	1310383

IEC Contactors

Ex9CDS 50~65 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

50 A

65 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		3 Poles 3NO+1NO/1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDS50A30B7C	1310453	Ex9CDS65A30B7C	1310513
48	Ex9CDS50A30E7C	1312650	Ex9CDS65A30E7C	1312710
110	Ex9CDS50A30F7C	1310445	Ex9CDS65A30F7C	1310505
120	Ex9CDS50A30G7C	1310447	Ex9CDS65A30G7C	1310507
220	Ex9CDS50A30M7C	1312644	Ex9CDS65A30M7C	1312704
230	Ex9CDS50A30P7C	1310449	Ex9CDS65A30P7C	1310509
240	Ex9CDS50A30U7C	1310451	Ex9CDS65A30U7C	1310511
277	Ex9CDS50A30N7C	1312652	Ex9CDS65A30N7C	1312712
380	Ex9CDS50A30Q7C	1312646	Ex9CDS65A30Q7C	1312706
440	Ex9CDS50A30R7C	1312648	Ex9CDS65A30R7C	1312708
480	Ex9CDS50A30T7C	1310455	Ex9CDS65A30T7C	1310515

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)		4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CDS50A40B7	1310417	Ex9CDS50A22B7	1310441	Ex9CDS65A40B7	1310477	Ex9CDS65A22B7	1310501
48	Ex9CDS50A40E7	1312614	Ex9CDS50A22E7	1312638	Ex9CDS65A40E7	1312674	Ex9CDS65A22E7	1312698
110	Ex9CDS50A40F7	1310409	Ex9CDS50A22F7	1310433	Ex9CDS65A40F7	1310469	Ex9CDS65A22F7	1310493
120	Ex9CDS50A40G7	1310411	Ex9CDS50A22G7	1310435	Ex9CDS65A40G7	1310471	Ex9CDS65A22G7	1310495
220	Ex9CDS50A40M7	1312608	Ex9CDS50A22M7	1312632	Ex9CDS65A40M7	1312668	Ex9CDS65A22M7	1312692
230	Ex9CDS50A40P7	1310413	Ex9CDS50A22P7	1310437	Ex9CDS65A40P7	1310473	Ex9CDS65A22P7	1310497
240	Ex9CDS50A40U7	1310415	Ex9CDS50A22U7	1310439	Ex9CDS65A40U7	1310475	Ex9CDS65A22U7	1310499
277	Ex9CDS50A40N7	1312616	Ex9CDS50A22N7	1312640	Ex9CDS65A40N7	1312676	Ex9CDS65A22N7	1312700
380	Ex9CDS50A40Q7	1312610	Ex9CDS50A22Q7	1312634	Ex9CDS65A40Q7	1312670	Ex9CDS65A22Q7	1312694
440	Ex9CDS50A40R7	1312612	Ex9CDS50A22R7	1312636	Ex9CDS65A40R7	1312672	Ex9CDS65A22R7	1312696
480	Ex9CDS50A40T7	1310419	Ex9CDS50A22T7	1310443	Ex9CDS65A40T7	1310479	Ex9CDS65A22T7	1310503

IEC Contactors

Ex9CDS 80 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

80 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		Ratings		50 A	65 A	80 A
	Product	Part Number	UL/CSA (A)	General Purpose			
24	Ex9CDS80A30B7C	1310573	Single-Phase (hp)	120 V	80		95
48	Ex9CDS80A30E7C	1312770		208 V	5		7.5
110	Ex9CDS80A30F7C	1310565		240 V	10		
120	Ex9CDS80A30G7C	1310567	Three-Phase (hp)	200 V	15	20	25
220	Ex9CDS80A30M7C	1312764		240 V	20	25	30
230	Ex9CDS80A30P7C	1310569		460 V	30	40	
240	Ex9CDS80A30U7C	1310571	600 V				
277	Ex9CDS80A30N7C	1312772	IEC (A)	AC-3 le	50	65	80
380	Ex9CDS80A30Q7C	1312766		AC-1 le	80		95
440	Ex9CDS80A30R7C	1312768	AC-3 (kw)	220/230 V	15	18.5	22
480	Ex9CDS80A30T7C	1310575		380/400 V	22	30	37
				660/690 V	37		45

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS80A40B7	1310537	Ex9CDS80A22B7	1310561
48	Ex9CDS80A40E7	1312734	Ex9CDS80A22E7	1312758
110	Ex9CDS80A40F7	1310529	Ex9CDS80A22F7	1310553
120	Ex9CDS80A40G7	1310531	Ex9CDS80A22G7	1310555
220	Ex9CDS80A40M7	1312728	Ex9CDS80A22M7	1312752
230	Ex9CDS80A40P7	1310533	Ex9CDS80A22P7	1310557
240	Ex9CDS80A40U7	1310535	Ex9CDS80A22U7	1310559
277	Ex9CDS80A40N7	1312736	Ex9CDS80A22N7	1312760
380	Ex9CDS80A40Q7	1312730	Ex9CDS80A22Q7	1312754
440	Ex9CDS80A40R7	1312732	Ex9CDS80A22R7	1312756
480	Ex9CDS80A40T7	1310539	Ex9CDS80A22T7	1310563

IEC Contactors

Ex9CDS 95 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1




95 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		Ratings		95 A
	Product	Part Number	UL/CSA (A)	General Purpose	
24	Ex9CDS95A30B7C	1310633	Single-Phase (hp)	120 V	95
48	Ex9CDS95A30E7C	1312830		208 V	7.5
110	Ex9CDS95A30F7C	1310625		240 V	-
120	Ex9CDS95A30G7C	1310627	Three-Phase (hp)	200 V	20
220	Ex9CDS95A30M7C	1312824		240 V	30
230	Ex9CDS95A30P7C	1310629		460 V	50
240	Ex9CDS95A30U7C	1310631	IEC (A)	600 V	95
277	Ex9CDS95A30N7C	1312832		AC-3 Ie	25
380	Ex9CDS95A30Q7C	1312826		AC-1 Ie	45
440	Ex9CDS95A30R7C	1312828	AC-3 (kw)	220/230 V	25
480	Ex9CDS95A30T7C	1310635		380/400 V	45
				660/690 V	

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS95A40B7	1310597	Ex9CDS95A22B7	1310621
48	Ex9CDS95A40E7	1312794	Ex9CDS95A22E7	1312818
110	Ex9CDS95A40F7	1310589	Ex9CDS95A22F7	1310613
120	Ex9CDS95A40G7	1310591	Ex9CDS95A22G7	1310615
220	Ex9CDS95A40M7	1312788	Ex9CDS95A22M7	1312812
230	Ex9CDS95A40P7	1310593	Ex9CDS95A22P7	1310617
240	Ex9CDS95A40U7	1310595	Ex9CDS95A22U7	1310619
277	Ex9CDS95A40N7	1312796	Ex9CDS95A22N7	1312820
380	Ex9CDS95A40Q7	1312790	Ex9CDS95A22Q7	1312814
440	Ex9CDS95A40R7	1312792	Ex9CDS95A22R7	1312816
480	Ex9CDS95A40T7	1310599	Ex9CDS95A22T7	1310623

IEC Contactors

Ex9CDS 115~150 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

115 A			150 A			Ratings		115 A	150 A	C
Coil Voltage (Vac)	3 Poles (3NO)		3 Poles (3NO)		UL/CSA (A)	General Purpose	200			
	Product	Part Number	Product	Part Number		Three-Phase (hp)	240 V	40	50	
110	Ex9CDS115A30F7	1310649	Ex9CDS150A30F7	1310697	415 V		60	75		
120	Ex9CDS115A30G7	1310651	Ex9CDS150A30G7	1310699	480 V		75	100		
220	Ex9CDS115A30M7	1312848	Ex9CDS150A30M7	1312896	600 V					
230	Ex9CDS115A30P7	1310653	Ex9CDS150A30P7	1310701	IEC (A)	AC-3 le	115	150		
240	Ex9CDS115A30U7	1310655	Ex9CDS150A30U7	1310703		AC-1 le	200			
277	Ex9CDS115A30N7	1312856	Ex9CDS150A30N7	1312904	AC-3 (kw)	220/230 V	33	45		
380	Ex9CDS115A30Q7	1312850	Ex9CDS150A30Q7	1312898		380/400 V	55	75		
440	Ex9CDS115A30R7	1312852	Ex9CDS150A30R7	1312900		660/690 V	80	100		
480	Ex9CDS115A30T7	1310659	Ex9CDS150A30T7	1310707						
Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (4NO)							
	Product	Part Number	Product	Part Number						
110	Ex9CDS115A40F7	1310661	Ex9CDS150A40F7	1310709						
120	Ex9CDS115A40G7	1310663	Ex9CDS150A40G7	1310711						
220	Ex9CDS115A40M7	1312860	Ex9CDS150A40M7	1312908						
230	Ex9CDS115A40P7	1310665	Ex9CDS150A40P7	1310713						
240	Ex9CDS115A40U7	1310667	Ex9CDS150A40U7	1310715						
277	Ex9CDS115A40N7	1312868	Ex9CDS150A40N7	1312916						
380	Ex9CDS115A40Q7	1312862	Ex9CDS150A40Q7	1312910						
440	Ex9CDS115A40R7	1312864	Ex9CDS150A40R7	1312912						
480	Ex9CDS115A40T7	1310671	Ex9CDS150A40T7	1310719						

IEC Contactors

Ex9CDS 185~225 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

185 A

225 A

Coil Voltage (Vac)	3 Poles (3NO)		3 Poles (3NO)		Ratings	185 A	225 A	
	Product	Part Number	Product	Part Number				
110	Ex9CDS185A30F7	1310745	Ex9CDS225A30F7	1310793	UL/CSA (A) General Purpose	275		
120	Ex9CDS185A30G7	1310747	Ex9CDS225A30G7	1310795		Three-Phase (hp)	60	75
220	Ex9CDS185A30M7	1312944	Ex9CDS225A30M7	1312992	100		125	
230	Ex9CDS185A30P7	1310749	Ex9CDS225A30P7	1310797				
240	Ex9CDS185A30U7	1310751	Ex9CDS225A30U7	1310799	IEC (A)	185	225	
277	Ex9CDS185A30N7	1312952	Ex9CDS225A30N7	1313000		AC-3 le	275	
380	Ex9CDS185A30Q7	1312946	Ex9CDS225A30Q7	1312994	AC-1 le		275	
440	Ex9CDS185A30R7	1312948	Ex9CDS225A30R7	1312996		AC-3 (kw)	55	63
480	Ex9CDS185A30T7	1310755	Ex9CDS225A30T7	1310803	380/400 V		90	110
					660/690 V		100	129

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (4NO)	
	Product	Part Number	Product	Part Number
110	Ex9CDS185A40F7	1310757	Ex9CDS225A40F7	1310805
120	Ex9CDS185A40G7	1310759	Ex9CDS225A40G7	1310807
220	Ex9CDS185A40M7	1312956	Ex9CDS225A40M7	1313004
230	Ex9CDS185A40P7	1310761	Ex9CDS225A40P7	1310809
240	Ex9CDS185A40U7	1310763	Ex9CDS225A40U7	1310811
277	Ex9CDS185A40N7	1312964	Ex9CDS225A40N7	1313012
380	Ex9CDS185A40Q7	1312958	Ex9CDS225A40Q7	1313006
440	Ex9CDS185A40R7	1312960	Ex9CDS225A40R7	1313008
480	Ex9CDS185A40T7	1310767	Ex9CDS225A40T7	1310815

IEC Contactors

Ex9CDS 265~330 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

UL LISTED CE

265 A

330 A

Coil Voltage (Vac)	3 Poles (3NO)		3 Poles (3NO)		Ratings		265 A	330 A	C
	Product	Part Number	Product	Part Number	UL/CSA (A)	General Purpose	315	380	
110	Ex9CDS265A30F7	1310841	Ex9CDS330A30F7	1310889	Three-Phase (hp)	240 V	100	125	
120	Ex9CDS265A30G7	1310843	Ex9CDS330A30G7	1310891		415 V	150	150	
220	Ex9CDS265A30M7	1313040	Ex9CDS330A30M7	1313088		480 V		200	
230	Ex9CDS265A30P7	1310845	Ex9CDS330A30P7	1310893		600 V			
240	Ex9CDS265A30U7	1310847	Ex9CDS330A30U7	1310895	IEC (A)	AC-3 le	265	330	
277	Ex9CDS265A30N7	1313048	Ex9CDS330A30N7	1313096		AC-1 le	315	380	
380	Ex9CDS265A30Q7	1313042	Ex9CDS330A30Q7	1313090	AC-3 (kw)	220/230 V	80	100	
440	Ex9CDS265A30R7	1313044	-	-		380/400 V	132	160	
480	Ex9CDS265A30T7	1310851	-	-		660/690 V	160	220	
Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (4NO)						
	Product	Part Number	Product	Part Number					
110	Ex9CDS265A40F7	1310853	Ex9CDS330A40F7	1310901					
120	Ex9CDS265A40G7	1310855	Ex9CDS330A40G7	1310903					
220	Ex9CDS265A40M7	1313052	Ex9CDS330A40M7	1313100					
230	Ex9CDS265A40P7	1310857	Ex9CDS330A40P7	1310905					
240	Ex9CDS265A40U7	1310859	Ex9CDS330A40U7	1310907					
277	Ex9CDS265A40N7	1313060	Ex9CDS330A40N7	1313108					
380	Ex9CDS265A40Q7	1313054	Ex9CDS330A40Q7	1313102					
440	Ex9CDS265A40R7	1313056	-	-					
480	Ex9CDS265A40T7	1310863	-	-					

IEC Contactors

Ex9CDS 400~500 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

400 A

500 A

Coil Voltage (Vac)	3 Poles (3NO)		3 Poles (3NO)		Ratings		400 A	500 A
	Product	Part Number	Product	Part Number	UL/CSA (A)	General Purpose		
110	Ex9CDS400A30F7	1310937	Ex9CDS500A30F7	1310985	Three-Phase (hp)	General Purpose	450	630
120	Ex9CDS400A30G7	1310939	Ex9CDS500A30G7	1310987		240 V	150	200
220	Ex9CDS400A30M7	1313136	Ex9CDS500A30M7	1313184		415 V	200	250
230	Ex9CDS400A30P7	1310941	Ex9CDS500A30P7	1310989		480 V	250	350
240	Ex9CDS400A30U7	1310943	Ex9CDS500A30U7	1310991	600 V	300		
277	Ex9CDS400A30N7	1313144	Ex9CDS500A30N7	1313192	IEC (A)	AC-3 le	400	500
380	Ex9CDS400A30Q7	1313138	Ex9CDS500A30Q7	1313186		AC-1 le	450	630
Coil Voltage (Vac)	4 Poles (4NO)				AC-3 (kw)	220/230 V	110	150
	Product	Part Number				380/400 V	200	250
110	Ex9CDS400A40F7	1310949				660/690 V	280	335
120	Ex9CDS400A40G7	1310951						
220	Ex9CDS400A40M7	1313148						
230	Ex9CDS400A40P7	1310953						
240	Ex9CDS400A40U7	1310955						
277	Ex9CDS400A40N7	1313156						
380	Ex9CDS400A40Q7	1313150						

IEC Contactors

Ex9CDS 630 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1




630 A

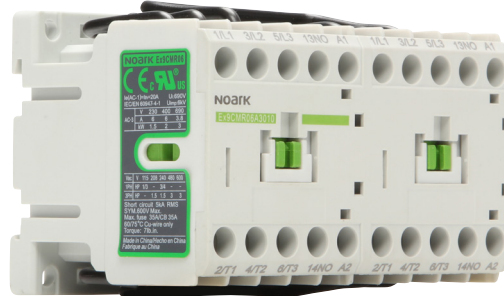
Coil Voltage (Vac)	3 Poles (3NO)		Ratings		630 A	C
	Product	Part Number	UL/CSA (A)	General Purpose		
110	Ex9CDS630A30F7	1311009	Three-Phase (hp)	240 V	800	
120	Ex9CDS630A30G7	1311011		415 V	250	
220	Ex9CDS630A30M7	1313208		480 V	350	
230	Ex9CDS630A30P7	1311013		600 V	400	
240	Ex9CDS630A30U7	1311015		AC-3 le	500	
277	Ex9CDS630A30N7	1313216	IEC (A)	AC-1 le	630	
380	Ex9CDS630A30Q7	1313210		220/230 V	800	
			AC-3 (kw)	380/400 V	200	
				660/690 V	335	
					450	

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
110	Ex9CDS630A40F7	1311021
120	Ex9CDS630A40G7	1311023
220	Ex9CDS630A40M7	1313220
230	Ex9CDS630A40P7	1311025
240	Ex9CDS630A40U7	1311027
277	Ex9CDS630A40N7	1313228
380	Ex9CDS630A40Q7	1313222

IEC Contactors

Ex9CMR 6~9 A Miniature

- Auxiliary contacts are front mounted
- FVR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

6 A

9 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CMR06A30B7A	1311149	Ex9CMR06A30B7B	1311125	Ex9CMR09A30B7A	1311245	Ex9CMR09A30B7B	1311221
48	Ex9CMR06A30E7A	1313346	Ex9CMR06A30E7B	1313322	Ex9CMR09A30E7A	1313442	Ex9CMR09A30E7B	1313418
110	Ex9CMR06A30F7A	1311141	Ex9CMR06A30F7B	1311117	Ex9CMR09A30F7A	1311237	Ex9CMR09A30F7B	1311213
120	Ex9CMR06A30G7A	1311143	Ex9CMR06A30G7B	1311119	Ex9CMR09A30G7A	1311239	Ex9CMR09A30G7B	1311215
220	Ex9CMR06A30M7A	1313340	Ex9CMR06A30M7B	1313316	Ex9CMR09A30M7A	1313436	Ex9CMR09A30M7B	1313412
230	Ex9CMR06A30P7A	1311145	Ex9CMR06A30P7B	1311121	Ex9CMR09A30P7A	1311241	Ex9CMR09A30P7B	1311217
240	Ex9CMR06A30U7A	1311147	Ex9CMR06A30U7B	1311123	Ex9CMR09A30U7A	1311243	Ex9CMR09A30U7B	1311219
277	Ex9CMR06A30N7A	1313348	Ex9CMR06A30N7B	1313324	Ex9CMR09A30N7A	1313444	Ex9CMR09A30N7B	1313420
380	Ex9CMR06A30Q7A	1313342	Ex9CMR06A30Q7B	1313318	Ex9CMR09A30Q7A	1313438	Ex9CMR09A30Q7B	1313414
440	Ex9CMR06A30R7A	1313344	Ex9CMR06A30R7B	1313320	Ex9CMR09A30R7A	1313440	Ex9CMR09A30R7B	1313416
480	Ex9CMR06A30T7A	1311151	Ex9CMR06A30T7B	1311127	Ex9CMR09A30T7A	1311247	Ex9CMR09A30T7B	1311223
600	Ex9CMR06A30Y7A	1313338	Ex9CMR06A30Y7B	1313314	Ex9CMR09A30Y7A	1313434	Ex9CMR09A30Y7B	1313410

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)		4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CMR06A40B7	1311077	Ex9CMR06A22B7	1311101	Ex9CMR09A40B7	1311173	Ex9CMR09A22B7	1311197
48	Ex9CMR06A40E7	1313274	Ex9CMR06A22E7	1313298	Ex9CMR09A40E7	1313370	Ex9CMR09A22E7	1313394
110	Ex9CMR06A40F7	1311069	Ex9CMR06A22F7	1311093	Ex9CMR09A40F7	1311165	Ex9CMR09A22F7	1311189
120	Ex9CMR06A40G7	1311071	Ex9CMR06A22G7	1311095	Ex9CMR09A40G7	1311167	Ex9CMR09A22G7	1311191
220	Ex9CMR06A40M7	1313268	Ex9CMR06A22M7	1313292	Ex9CMR09A40M7	1313364	Ex9CMR09A22M7	1313388
230	Ex9CMR06A40P7	1311073	Ex9CMR06A22P7	1311097	Ex9CMR09A40P7	1311169	Ex9CMR09A22P7	1311193
240	Ex9CMR06A40U7	1311075	Ex9CMR06A22U7	1311099	Ex9CMR09A40U7	1311171	Ex9CMR09A22U7	1311195
277	Ex9CMR06A40N7	1313276	Ex9CMR06A22N7	1313300	Ex9CMR09A40N7	1313372	Ex9CMR09A22N7	1313396
380	Ex9CMR06A40Q7	1313270	Ex9CMR06A22Q7	1313294	Ex9CMR09A40Q7	1313366	Ex9CMR09A22Q7	1313390
440	Ex9CMR06A40R7	1313272	Ex9CMR06A22R7	1313296	Ex9CMR09A40R7	1313368	Ex9CMR09A22R7	1313392
480	Ex9CMR06A40T7	1311079	Ex9CMR06A22T7	1311103	Ex9CMR09A40T7	1311175	Ex9CMR09A22T7	1311199
600	Ex9CMR06A40Y7	1313266	Ex9CMR06A22Y7	1313290	Ex9CMR09A40Y7	1313362	Ex9CMR09A22Y7	1313386

IEC Contactors

Ex9CMR 12 A Miniature

- Auxiliary contacts are front mounted
- FVR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

UL **us** **CE**

12 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		Ratings		6 A	9 A	12 A	C
	Product	Part Number	Product	Part Number	UL/CSA (A)	General Purpose				
24	Ex9CMR12A30B7A	1311341	Ex9CMR12A30B7B	1311317	Single-Phase (hp)	110/120 V	0.3	0.5	0.75	
48	Ex9CMR12A30E7A	1313538	Ex9CMR12A30E7B	1313514		230/240 V	0.75	1.5	2	
110	Ex9CMR12A30F7A	1311333	Ex9CMR12A30F7B	1311309	Three-Phase (hp)	200/208 V	1.5	3		
120	Ex9CMR12A30G7A	1311335	Ex9CMR12A30G7B	1311311		230/240 V				
220	Ex9CMR12A30M7A	1313532	Ex9CMR12A30M7B	1313508		460/480 V	3	5	7.5	
230	Ex9CMR12A30P7A	1311337	Ex9CMR12A30P7B	1311313	IEC (A)	575/600 V	6	9	12	
240	Ex9CMR12A30U7A	1311339	Ex9CMR12A30U7B	1311315		AC-3 le				
277	Ex9CMR12A30N7A	1313540	Ex9CMR12A30N7B	1313516	AC-3 (kw)	AC-1 le	20			
380	Ex9CMR12A30Q7A	1313534	Ex9CMR12A30Q7B	1313510		220/230/240 V	1.5	2.2	3	
440	Ex9CMR12A30R7A	1313536	Ex9CMR12A30R7B	1313512		380/400 V	2.2	4	5.5	
480	Ex9CMR12A30T7A	1311343	Ex9CMR12A30T7B	1311319	415 V					
600	Ex9CMR12A30Y7A	1313530	Ex9CMR12A30Y7B	1313506	660/690 V	3		4		

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CMR12A40B7	1311269	Ex9CMR12A22B7	1311293
48	Ex9CMR12A40E7	1313466	Ex9CMR12A22E7	1313490
110	Ex9CMR12A40F7	1311261	Ex9CMR12A22F7	1311285
120	Ex9CMR12A40G7	1311263	Ex9CMR12A22G7	1311287
220	Ex9CMR12A40M7	1313460	Ex9CMR12A22M7	1313484
230	Ex9CMR12A40P7	1311265	Ex9CMR12A22P7	1311289
240	Ex9CMR12A40U7	1311267	Ex9CMR12A22U7	1311291
277	Ex9CMR12A40N7	1313468	Ex9CMR12A22N7	1313492
380	Ex9CMR12A40Q7	1313462	Ex9CMR12A22Q7	1313486
440	Ex9CMR12A40R7	1313464	Ex9CMR12A22R7	1313488
480	Ex9CMR12A40T7	1311271	Ex9CMR12A22T7	1311295
600	Ex9CMR12A40Y7	1313458	Ex9CMR12A22Y7	1313482

IEC Contactors

Ex9CDR 9~12 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

UL LISTED CE

9 A

12 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CDR09A30B7A	1310081	Ex9CDR09A30B7B	1310021	Ex9CDR12A30B7A	1310165	Ex9CDR12A30B7B	1310105
48	Ex9CDR09A30E7A	1312278	Ex9CDR09A30E7B	1312218	Ex9CDR12A30E7A	1312362	Ex9CDR12A30E7B	1312302
110	Ex9CDR09A30F7A	1310073	Ex9CDR09A30F7B	1310013	Ex9CDR12A30F7A	1310157	Ex9CDR12A30F7B	1310097
120	Ex9CDR09A30G7A	1310075	Ex9CDR09A30G7B	1310015	Ex9CDR12A30G7A	1310159	Ex9CDR12A30G7B	1310099
220	Ex9CDR09A30M7A	1312272	Ex9CDR09A30M7B	1312212	Ex9CDR12A30M7A	1312356	Ex9CDR12A30M7B	1312296
230	Ex9CDR09A30P7A	1310077	Ex9CDR09A30P7B	1310017	Ex9CDR12A30P7A	1310161	Ex9CDR12A30P7B	1310101
240	Ex9CDR09A30U7A	1310079	Ex9CDR09A30U7B	1310019	Ex9CDR12A30U7A	1310163	Ex9CDR12A30U7B	1310103
277	Ex9CDR09A30N7A	1312280	Ex9CDR09A30N7B	1312220	Ex9CDR12A30N7A	1312364	Ex9CDR12A30N7B	1312304
380	Ex9CDR09A30Q7A	1312274	Ex9CDR09A30Q7B	1312214	Ex9CDR12A30Q7A	1312358	Ex9CDR12A30Q7B	1312298
440	Ex9CDR09A30R7A	1312276	Ex9CDR09A30R7B	1312216	Ex9CDR12A30R7A	1312360	Ex9CDR12A30R7B	1312300
480	Ex9CDR09A30T7A	1310083	Ex9CDR09A30T7B	1310023	Ex9CDR12A30T7A	1310167	Ex9CDR12A30T7B	1310107
600	Ex9CDR09A30Y7A	1312270	Ex9CDR09A30Y7B	1312210	Ex9CDR12A30Y7A	1312354	Ex9CDR12A30Y7B	1312294

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (4NO)	
	Product	Part Number	Product	Part Number
24	Ex9CDR09A40B7	1310045	Ex9CDR12A40B7	1310129
48	Ex9CDR09A40E7	1312242	Ex9CDR12A40E7	1312326
110	Ex9CDR09A40F7	1310037	Ex9CDR12A40F7	1310121
120	Ex9CDR09A40G7	1310039	Ex9CDR12A40G7	1310123
220	Ex9CDR09A40M7	1312236	Ex9CDR12A40M7	1312320
230	Ex9CDR09A40P7	1310041	Ex9CDR12A40P7	1310125
240	Ex9CDR09A40U7	1310043	Ex9CDR12A40U7	1310127
277	Ex9CDR09A40N7	1312244	Ex9CDR12A40N7	1312328
380	Ex9CDR09A40Q7	1312238	Ex9CDR12A40Q7	1312322
440	Ex9CDR09A40R7	1312240	Ex9CDR12A40R7	1312324
480	Ex9CDR09A40T7	1310047	Ex9CDR12A40T7	1310131
600	Ex9CDR09A40Y7	1312234	Ex9CDR12A40Y7	1312318

IEC Contactors

Ex9CDR 18 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

18 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		Ratings		9 A	12 A	18 A	C
	Product	Part Number	Product	Part Number	UL/CSA (A)	General Purpose				
24	Ex9CDR18A30B7A	1310213	Ex9CDR18A30B7B	1310189	Single-Phase (hp)	General Purpose	20		32	
48	Ex9CDR18A30E7A	1312410	Ex9CDR18A30E7B	1312386		120 V	0.5	0.75	1	
110	Ex9CDR18A30F7A	1310205	Ex9CDR18A30F7B	1310181		208 V	1	2	3	
120	Ex9CDR18A30G7A	1310207	Ex9CDR18A30G7B	1310183	Three-Phase (hp)	240 V				
220	Ex9CDR18A30M7A	1312404	Ex9CDR18A30M7B	1312380		200 V	3	5	7.5	
230	Ex9CDR18A30P7A	1310209	Ex9CDR18A30P7B	1310185		240 V				
240	Ex9CDR18A30U7A	1310211	Ex9CDR18A30U7B	1310187	IEC (A)	460 V	5	7.5	10	
277	Ex9CDR18A30N7A	1312412	Ex9CDR18A30N7B	1312388		600 V				
380	Ex9CDR18A30Q7A	1312406	Ex9CDR18A30Q7B	1312382		AC-3 le	9	12	18	
440	Ex9CDR18A30R7A	1312408	Ex9CDR18A30R7B	1312384	AC-3 (kw)	AC-1 le	20		32	
480	Ex9CDR18A30T7A	1310215	Ex9CDR18A30T7B	1310191		220/230 V	2.2	3	4	
600	Ex9CDR18A30Y7A	1312402	Ex9CDR18A30Y7B	1312378		380/400 V	4	5.5	7.5	
						660/690 V	5.5	7.5	10	

IEC Contactors

Ex9CDR 25~32 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



25 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDR25A30B7A	1310297	Ex9CDR25A30B7B	1310237
48	Ex9CDR25A30E7A	1312494	Ex9CDR25A30E7B	1312434
110	Ex9CDR25A30F7A	1310289	Ex9CDR25A30F7B	1310229
120	Ex9CDR25A30G7A	1310291	Ex9CDR25A30G7B	1310231
220	Ex9CDR25A30M7A	1312488	Ex9CDR25A30M7B	1312428
230	Ex9CDR25A30P7A	1310293	Ex9CDR25A30P7B	1310233
240	Ex9CDR25A30U7A	1310295	Ex9CDR25A30U7B	1310235
277	Ex9CDR25A30N7A	1312496	Ex9CDR25A30N7B	1312436
380	Ex9CDR25A30Q7A	1312490	Ex9CDR25A30Q7B	1312430
440	Ex9CDR25A30R7A	1312492	Ex9CDR25A30R7B	1312432
480	Ex9CDR25A30T7A	1310299	Ex9CDR25A30T7B	1310239
600	Ex9CDR25A30Y7A	1312486	Ex9CDR25A30Y7B	1312426

32 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDR32A30B7A	1310345	Ex9CDR32A30B7B	1310321
48	Ex9CDR32A30E7A	1312542	Ex9CDR32A30E7B	1312518
110	Ex9CDR32A30F7A	1310337	Ex9CDR32A30F7B	1310313
120	Ex9CDR32A30G7A	1310339	Ex9CDR32A30G7B	1310315
220	Ex9CDR32A30M7A	1312536	Ex9CDR32A30M7B	1312512
230	Ex9CDR32A30P7A	1310341	Ex9CDR32A30P7B	1310317
240	Ex9CDR32A30U7A	1310343	Ex9CDR32A30U7B	1310319
277	Ex9CDR32A30N7A	1312544	Ex9CDR32A30N7B	1312520
380	Ex9CDR32A30Q7A	1312538	Ex9CDR32A30Q7B	1312514
440	Ex9CDR32A30R7A	1312540	Ex9CDR32A30R7B	1312516
480	Ex9CDR32A30T7A	1310347	Ex9CDR32A30T7B	1310323
600	Ex9CDR32A30Y7A	1312534	Ex9CDR32A30Y7B	1312510

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
24	Ex9CDR25A40B7	1310261
48	Ex9CDR25A40E7	1312458
110	Ex9CDR25A40F7	1310253
120	Ex9CDR25A40G7	1310255
220	Ex9CDR25A40M7	1312452
230	Ex9CDR25A40P7	1310257
240	Ex9CDR25A40U7	1310259
277	Ex9CDR25A40N7	1312460
380	Ex9CDR25A40Q7	1312454
440	Ex9CDR25A40R7	1312456
480	Ex9CDR25A40T7	1310263
600	Ex9CDR25A40Y7	1312450

IEC Contactors

Ex9CDR 40 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

40 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		Ratings		25 A	32 A	40 A
	Product	Part Number	UL/CSA (A)	General Purpose	40	50	60
24	Ex9CDR40A30B7C	1310405	Single-Phase (hp)	120 V	2	3	
48	Ex9CDR40A30E7C	1312602		208 V	5		
110	Ex9CDR40A30F7C	1310397		240 V			
120	Ex9CDR40A30G7C	1310399	Three-Phase (hp)	240 V	10	15	20
220	Ex9CDR40A30M7C	1312596		460 V	15	20	25
230	Ex9CDR40A30P7C	1310401		600 V			
240	Ex9CDR40A30U7C	1310403	IEC (A)	AC-3 le	25	32	40
277	Ex9CDR40A30N7C	1312604		AC-1 le	40	50	60
380	Ex9CDR40A30Q7C	1312598	AC-3 (kw)	220/230 V	5.5	7.5	11
440	Ex9CDR40A30R7C	1312600		380/400 V	11	15	18.5
480	Ex9CDR40A30T7C	1310407		660/690 V	15	18.5	30
600	Ex9CDR40A30Y7C	1312594					

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
24	Ex9CDR40A40B7	1310369
48	Ex9CDR40A40E7	1312566
110	Ex9CDR40A40F7	1310361
120	Ex9CDR40A40G7	1310363
220	Ex9CDR40A40M7	1312560
230	Ex9CDR40A40P7	1310365
240	Ex9CDR40A40U7	1310367
277	Ex9CDR40A40N7	1312568
380	Ex9CDR40A40Q7	1312562
440	Ex9CDR40A40R7	1312564
480	Ex9CDR40A40T7	1310371
600	Ex9CDR40A40Y7	1312558

C

Note: 40~95 A are not pre-wired in the factory.

IEC Contactors

Ex9CDR 50~65 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

50 A

65 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		3 Poles 3NO+1NO/1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDR50A30B7C	1310465	Ex9CDR65A30B7C	1310525
48	Ex9CDR50A30E7C	1312662	Ex9CDR65A30E7C	1312722
110	Ex9CDR50A30F7C	1310457	Ex9CDR65A30F7C	1310517
120	Ex9CDR50A30G7C	1310459	Ex9CDR65A30G7C	1310519
220	Ex9CDR50A30M7C	1312656	Ex9CDR65A30M7C	1312716
230	Ex9CDR50A30P7C	1310461	Ex9CDR65A30P7C	1310521
240	Ex9CDR50A30U7C	1310463	Ex9CDR65A30U7C	1310523
277	Ex9CDR50A30N7C	1312664	Ex9CDR65A30N7C	1312724
380	Ex9CDR50A30Q7C	1312658	Ex9CDR65A30Q7C	1312718
440	Ex9CDR50A30R7C	1312660	Ex9CDR65A30R7C	1312720
480	Ex9CDR50A30T7C	1310467	Ex9CDR65A30T7C	1310527
600	Ex9CDR50A30Y7C	1312654	Ex9CDR65A30Y7C	1312714

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (4NO)	
	Product	Part Number	Product	Part Number
24	Ex9CDR50A40B7	1310429	Ex9CDR65A40B7	1310489
48	Ex9CDR50A40E7	1312626	Ex9CDR65A40E7	1312686
110	Ex9CDR50A40F7	1310421	Ex9CDR65A40F7	1310481
120	Ex9CDR50A40G7	1310423	Ex9CDR65A40G7	1310483
220	Ex9CDR50A40M7	1312620	Ex9CDR65A40M7	1312680
230	Ex9CDR50A40P7	1310425	Ex9CDR65A40P7	1310485
240	Ex9CDR50A40U7	1310427	Ex9CDR65A40U7	1310487
277	Ex9CDR50A40N7	1312628	Ex9CDR65A40N7	1312688
380	Ex9CDR50A40Q7	1312622	Ex9CDR65A40Q7	1312682
440	Ex9CDR50A40R7	1312624	Ex9CDR65A40R7	1312684
480	Ex9CDR50A40T7	1310431	Ex9CDR65A40T7	1310491
600	Ex9CDR50A40Y7	1312618	Ex9CDR65A40Y7	1312678

Note: 40~95 A are not pre-wired in the factory.

IEC Contactors

Ex9CDR 80 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

80 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		Ratings		50 A	65 A	80 A
	Product	Part Number	UL/CSA (A)	General Purpose			
24	Ex9CDR80A30B7C	1310585	Single-Phase (hp)	120 V	80		95
48	Ex9CDR80A30E7C	1312782		208 V	5		7.5
110	Ex9CDR80A30F7C	1310577		240 V	10		
120	Ex9CDR80A30G7C	1310579	Three-Phase (hp)	200 V	15	20	25
220	Ex9CDR80A30M7C	1312776		240 V	20	25	30
230	Ex9CDR80A30P7C	1310581		460 V	30	40	
240	Ex9CDR80A30U7C	1310583	600 V				
277	Ex9CDR80A30N7C	1312784	IEC (A)	AC-3 le	50	65	80
380	Ex9CDR80A30Q7C	1312778		AC-1 le	80		95
440	Ex9CDR80A30R7C	1312780	AC-3 (kw)	220/230 V	15	18.5	22
480	Ex9CDR80A30T7C	1310587		380/400 V	22	30	37
600	Ex9CDR80A30Y7C	1312774		660/690 V	37		45

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
24	Ex9CDR80A40B7	1310549
48	Ex9CDR80A40E7	1312746
110	Ex9CDR80A40F7	1310541
120	Ex9CDR80A40G7	1310543
220	Ex9CDR80A40M7	1312740
230	Ex9CDR80A40P7	1310545
240	Ex9CDR80A40U7	1310547
277	Ex9CDR80A40N7	1312748
380	Ex9CDR80A40Q7	1312742
440	Ex9CDR80A40R7	1312744
480	Ex9CDR80A40T7	1310551
600	Ex9CDR80A40Y7	1312738

Note: 40-95 A are not pre-wired in the factory.

IEC Contactors

Ex9CDR 95 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications
IEC/EN 60947-4-1

95 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		Ratings		95 A
	Product	Part Number	UL/CSA (A)	General Purpose	
24	Ex9CDR95A30B7C	1310645	Single-Phase (hp)	120 V	95
48	Ex9CDR95A30E7C	1312842		240 V	7.5
110	Ex9CDR95A30F7C	1310637	Three-Phase (hp)	200 V	20
120	Ex9CDR95A30G7C	1310639		240 V	30
220	Ex9CDR95A30M7C	1312836		460 V	50
230	Ex9CDR95A30P7C	1310641	600 V		
240	Ex9CDR95A30U7C	1310643	IEC (A)	AC-3 le	95
277	Ex9CDR95A30N7C	1312844		AC-1 le	
380	Ex9CDR95A30Q7C	1312838	AC-3 (kw)	220/230 V	25
440	Ex9CDR95A30R7C	1312840		380/400 V	
480	Ex9CDR95A30T7C	1310647		660/690 V	
600	Ex9CDR95A30Y7C	1312834			

Coil Voltage Vac	4 Poles (4NO)	
	Product	Part Number
24	Ex9CDR95A40B7	1310609
48	Ex9CDR95A40E7	1312806
110	Ex9CDR95A40F7	1310601
120	Ex9CDR95A40G7	1310603
220	Ex9CDR95A40M7	1312800
230	Ex9CDR95A40P7	1310605
240	Ex9CDR95A40U7	1310607
277	Ex9CDR95A40N7	1312808
380	Ex9CDR95A40Q7	1312802
440	Ex9CDR95A40R7	1312804
480	Ex9CDR95A40T7	1310611
600	Ex9CDR95A40Y7	1312798

Note: 40~95 A are not pre-wired in the factory.

IEC Contactors

Ex9CMS/CMR Specifications

Ex9CMS/CMR		06	09	12
Operating Frequency (415 V)	AC-3		1,200 operations/h	
	AC-4		300 operations/h	
Electrical Life (x10 ³ Operations)	AC-3		1,000	
	AC-4		200	
Ambient Temperature		23 to 104°F (-5 to 40°C)		
Mechanical Life (x10 ⁶ Operations)		10		
Matched Overload Relay Type		Ex9RD11.5		
Terminal Connection				
Flexible Cable (with Cold-Press Terminal) AWG (mm ²)	Single Cable	16~14 (1~2.50)		
	Dual Cable	16 (1~1.50)		
Stiff Cable AWG (mm ²)	Single Cable	16~14 (1~2.50)		
	Dual Cable			
Screw Size		M3		
Tightening Torque in-lb (N.m)		7 (0.80)		



IEC Contactors

Ex9CDS/CDR Specifications

Ex9CDS/CDR		09	12	18	25	32	40	50	65	80	95		
Frame		Frame 1			Frame 2		Frame 3			Frame 4			
Poles		3 & 4		3	3 & 4		3	3 & 4					
Rated Insulation Voltage (Vac)		690											
Operating Frequency (Operations/h)	Electrical	AC-3					1,200					600	
		AC-4					300						
	Mechanical	3,600											
Electrical Life (x10 ³ Operations)	AC-3	1,000			800		600						
	AC-4	200					150			100			
Ambient Temperature		23 to 104°F (-5 to 40°C)											
Mechanical Life (x10 ⁶ Operations)		10				8				6			
Matched Overload Relay Type		Ex9RD25				Ex9RD36		Ex9RD93					
Rated Conventional Heating Current (A) AC-1		20		32	40	50	60	80		95			
AC-3	I _e (A)	220/230 V	9	12	18	25	32	40	50	65	80	95	
		380/400 V											
		660/690 V	6.6	8.9	12	18	21	34	39	42	49		
	P _e (kW)	220/230 V	2.2	3	4	5.5	7.5	11	15	18.5	22	25	
		380/400 V	4	5.5	7.5	11	15	18.5	22	30	37	45	
		660/690 V	5.5	7.5	10	15	18.5	30	37		45		
Power of Controlled Three-Phase Cage Motor AC-3 (hp)	200 V				7.5	10	15		20	25	30		
	240 V	3	5	7.5	10	15	20		25	30			
	460 V												
	600 V	5	7.5	10	15	20	25	30	40		50		
Terminal Connection		Number of Pieces											
Flexible Cable with Cold-Pressed Socket AWG (mm ²)	1	16~14 (1~2.5)			16~12 (1.5~4)		14~10 (2.5~6)	10~4 (6~25)			8~2 (10~35)		
	2							12~8 (4~10)			10~6 (6~16)		
Flexible Cable without Cold-Pressed Socket AWG (mm ²)	1	16~12 (1~4)			16~10 (1.5~6)	1.5~10 (16~8)	14~8 (2.5~10)	10~4 (6~25)			8~2 (10~35)		
	2	1~2.5 (16~14)			16~12 (1.5~4)	1.5~6 (16~10)	14~10 (2.5~6)	4~10 (12~8)			10~6 (6~16)		
Inflexible Cable AWG (mm ²)	1	16~12 (1~4)			16~10 (1.5~6)		14~8 (2.5~10)	6~25 (10~4)			8~2 (10~35)		
	2							12~8 (4~10)			10~6 (6~16)		
Screw Size		M3.5			M4		M8			M10			
Tightening Torque in-lb (N.m)		7 (0.80)			10 (1.20)		45 (3.50)			89 (10)			

IEC Contactors

Ex9CDS/CDR Specifications

Ex9CDS/CDR			115	150	185	225	265	330	400	500	630	
Frame			Frame 5		Frame 6		Frame 7	Frame 8	Frame 9	Frame 10	Frame 11	
Poles			3 & 4						3	3 & 4		
Rated Insulation Voltage (Vac)			1,000									
Operating Frequency (Operations/h)	Electrical	AC-3	1,200			600						
		AC-4	300									
	Mechanical	1,200										
Electrical Life (x10 ³ Operations)		AC-3	1,200		1,000		800					
Ambient Temperature			23 to 104°F (-5 to 40°C)									
Mechanical Life (x10 ⁶ Operations)			10			6						
Matched Overload Relay Type			Ex9RD200				EX9RD630					
Rated Conventional Heating Current (A) AC-1			200		275		315	380	450	630	800	
AC-3	I _e (A)	220/230 V	115	150	185	225	265	330	400	500	630	
		380/400 V										
		660/690 V	86	108	118	137	170	235	303	353	462	
	P _e (kW)	220/230 V	33	45	55	63	80	100	110	150	200	
		380/400 V	55	75	90	110	132	160	200	250	335	
		660/690 V	80	100	110	129	160	220	280	335	450	
Power of Controlled Three-Phase Cage Motor AC-3 (hp)	240 V	40	50	60	75	100	125	150	200	250		
	415 V	60	75	100	125	150	150	200	250	350		
	480 V	75	100				200	250	350	400		
	600 V			300	500							
Terminal Connection			Number of Pieces									
Cable Cross Section AWG (mm ²)	1	00~000 (70~95)	0000~300 MCM (95~150)		250~350 MCM (120~185)	350~500 MCM (185~240)	-					
	1 (2)	-						500 MCM [300 MCM] (240 [150])	-			
	2	-						300~350 MCM (150~185)		350~500 MCM (185~240)		
Cu Bus Bar Cross Section in (mm ²)	1 (2)	-						1x0.25 (30x5)	-			
	2	-						1.25x0.25 (40x5)		1.5x0.25 (50x5)		
Screw Size			M6	M8		M10				M12		
Tightening Torque in-lb (N.m)			27 (3)		54 (6)		89 (10)				124 (14)	

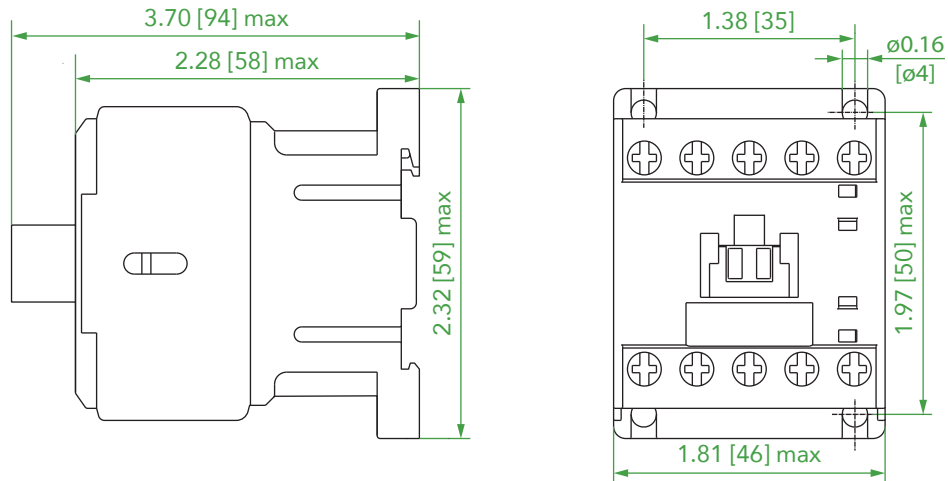
C

IEC Contactors

Ex9CMS/CMR Dimensions

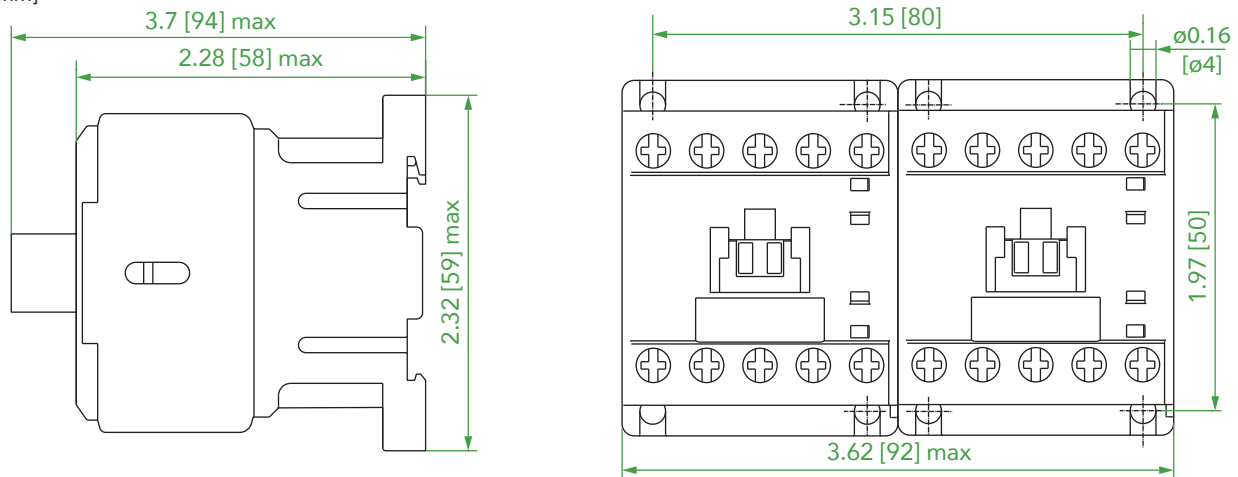
Ex9CMS06~12

Unit: in [mm]



Ex9CMR06~12

Unit: in [mm]

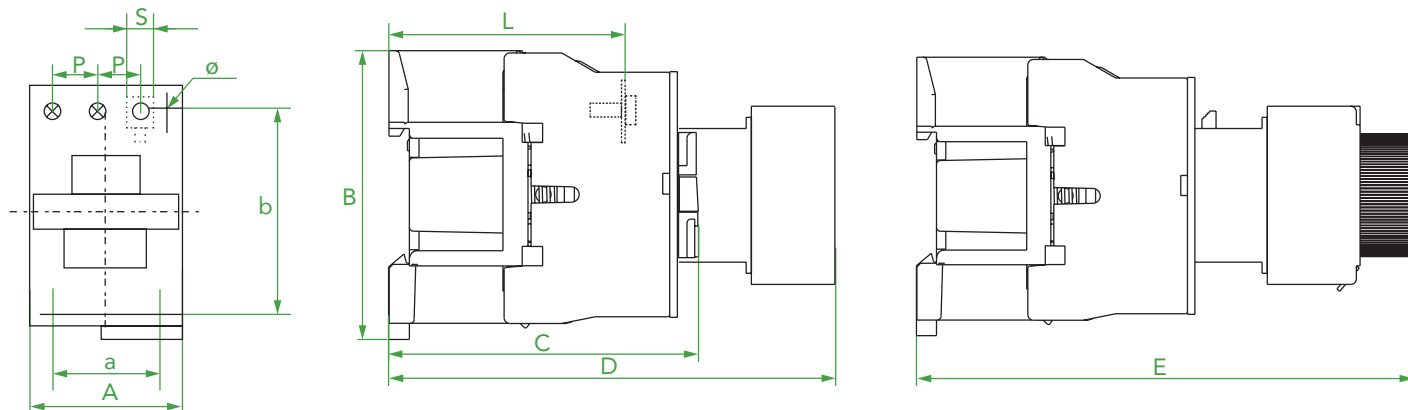


IEC Contactors

Ex9CDS Dimensions

Ex9CDS09~32

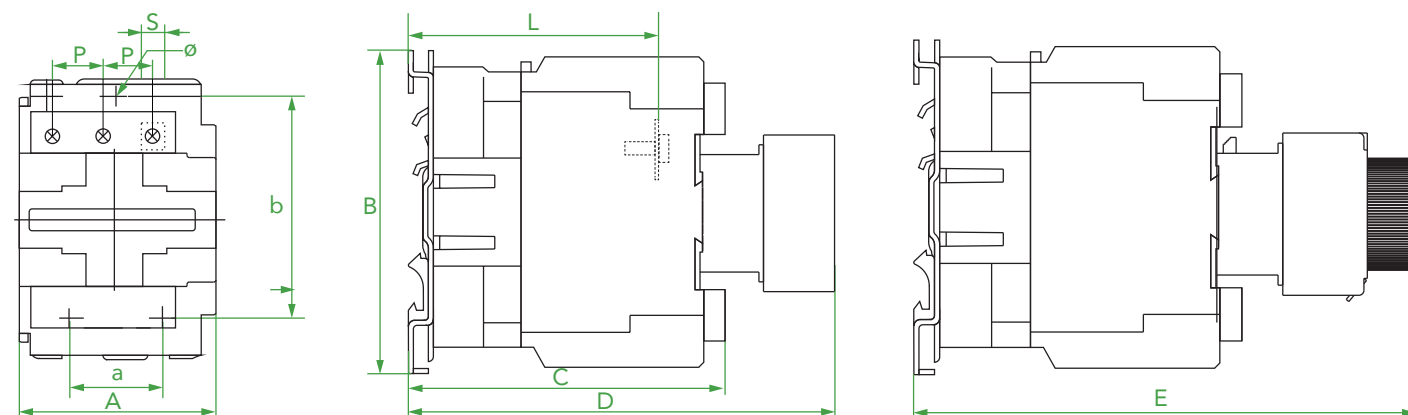
Unit: in [mm]



C

Ex9CDS40~95

Unit: in [mm]



Ex9CDS	A max	B max	C max	D max	E max	a	b	ø	L	P	S
09											0.34 [8.6]
12	1.85 [47]	2.99 [76]	3.38 [86]	4.74 [120.5]	5.53 [140.5]	1.34/1.38 [34/35]	1.97/2.36 [50/60]	0.18 [4.5]	2.36 [60]	0.41 [10.5]	0.41 [10.4]
18									2.40 [61]	0.44 [11.3]	
25	2.25 [57]	3.38 [86]	3.74 [95]	5.25 [133.5]	6.04 [153.5]	1.57 [40]	1.89 [48]		2.76 [70]	0.52 [13.2]	0.46 [11.7]
32			3.94 [100]	5.45 [138.5]	6.24 [158.5]			2.82 [71.6]	0.57 [14.5]	0.51 [13]	
40~65 11	3.03 [77]	5.08 [129]	4.56 [116]	6.08 [154.5]	6.87 [174.5]	1.57 [40]	4.13 [105]	0.26 [6.5]	3.07 [78]	0.79 [20]	0.34 [8.6]
40~65 40	3.30 [84]		5.00 [128]	6.51 [165.5]	7.3 [185.5]				3.27 [83]	0.93 [23.5]	0.47 [12]
40~65 22			4.80 [122]	6.31 [160.5]	7.10 [180.5]						
80~95 11	3.42 [87]		5.31 [135]								
80~95 40	3.78 [96]										
80~95 22											

- Note:
- 1) L is the distance between terminals and plate in main circuit.
 - 2) P is the distance between two phase in main circuit.
 - 3) S is the width of contacting plate: in main circuit.
 - 4) Ex9CDS40~95: 11 = 3NO+1NO & 1NC, 40 = 4NO, 22 = 2NO & 2NC

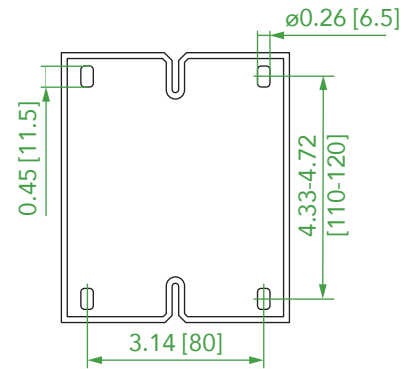
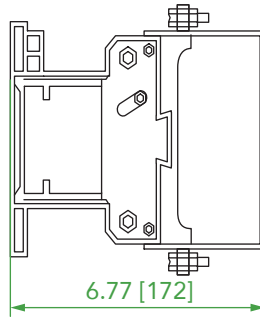
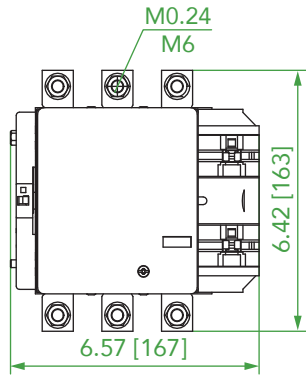
IEC Contactors

Ex9CDS Dimensions

Ex9CDS115

3 Poles

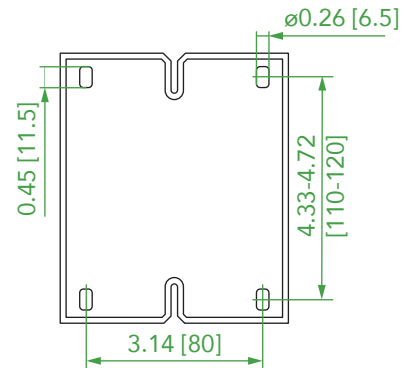
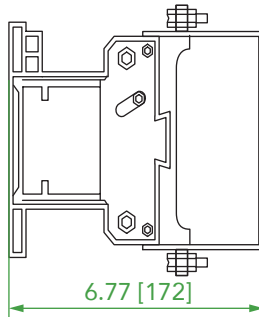
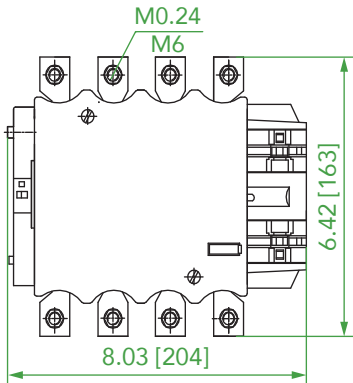
Unit: in [mm]



Ex9CDS115

4 Poles

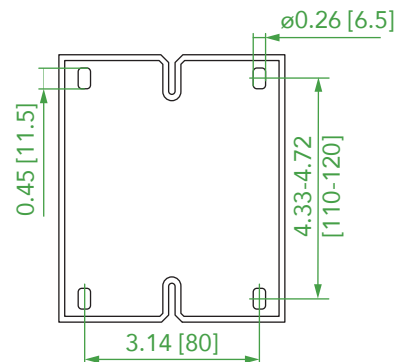
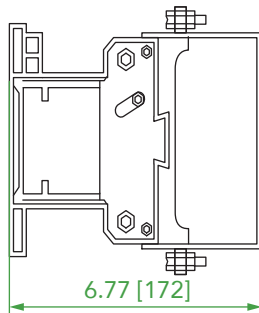
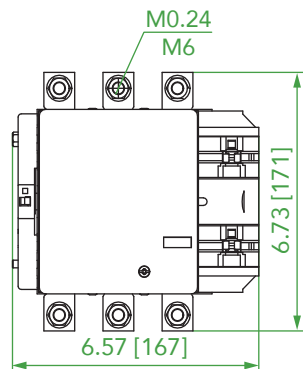
Unit: in [mm]



Ex9CDS150

3 Poles

Unit: in [mm]



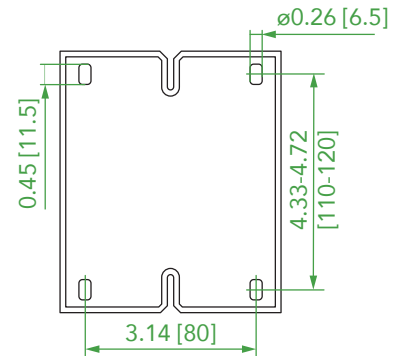
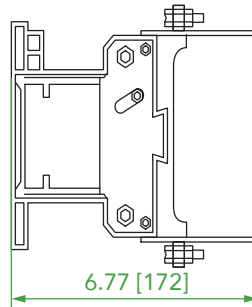
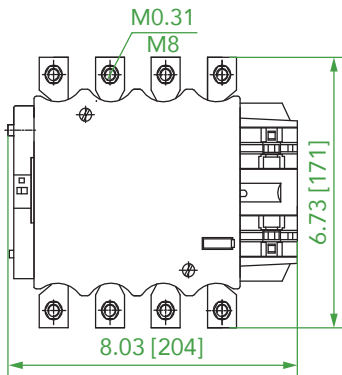
IEC Contactors

Ex9CDS Dimensions

Ex9CDS150

4 Poles

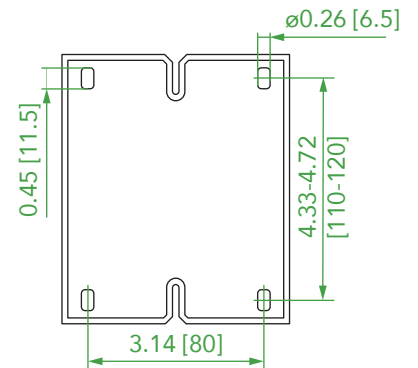
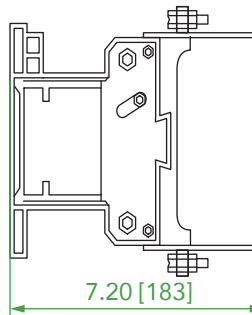
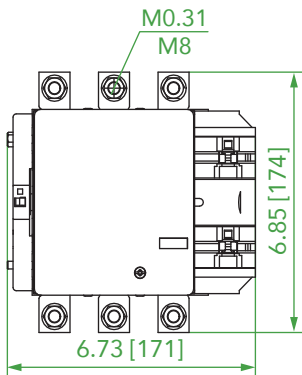
Unit: in [mm]



Ex9CDS185

3 Poles

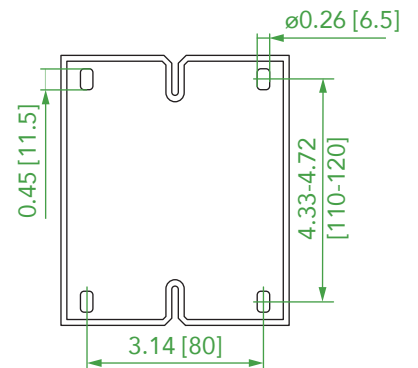
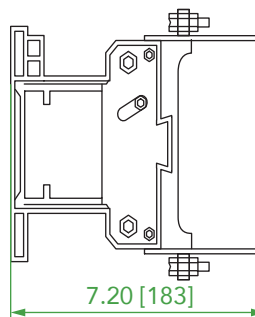
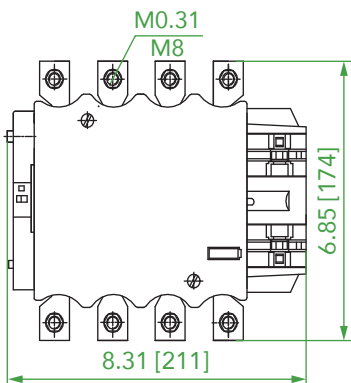
Unit: in [mm]



Ex9CDS185

4 Poles

Unit: in [mm]



C

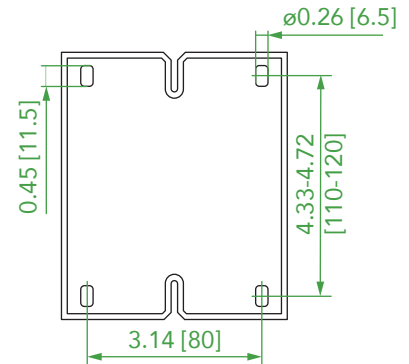
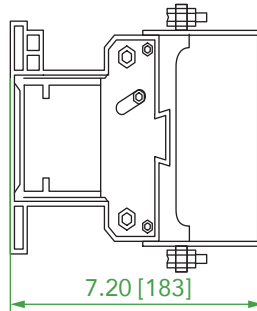
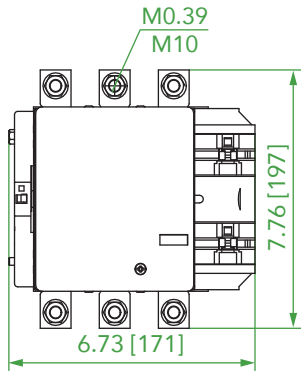
IEC Contactors

Ex9CDS Dimensions

Ex9CDS225

3 Poles

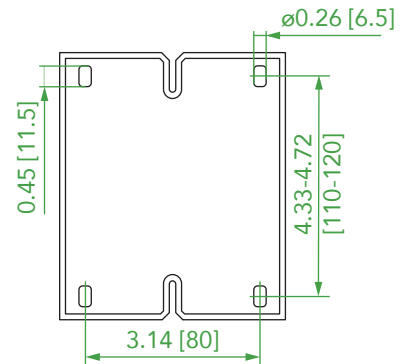
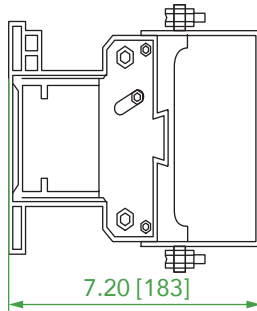
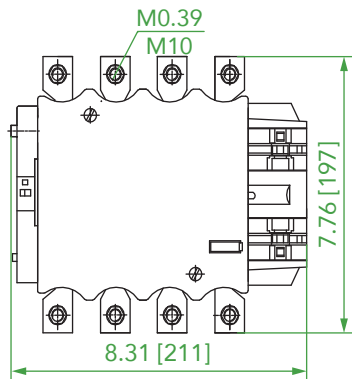
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Ex9CDS225

4 Poles

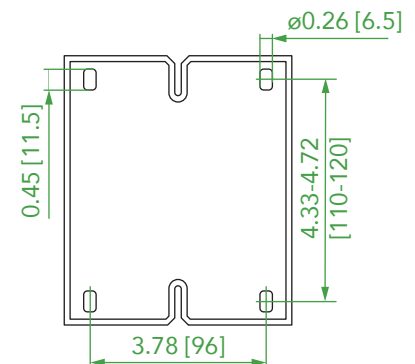
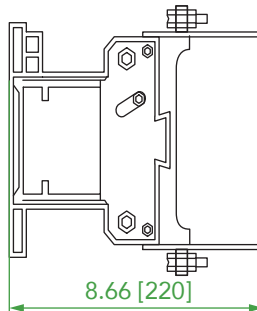
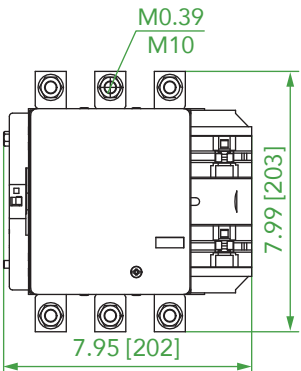
Unit: in [mm]



Ex9CDS265

3 Poles

Unit: in [mm]

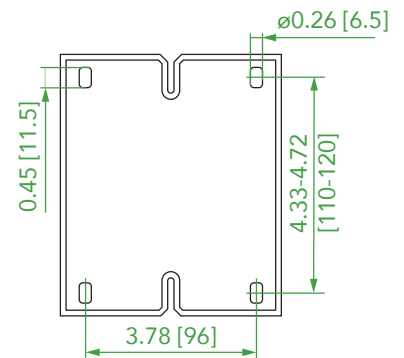
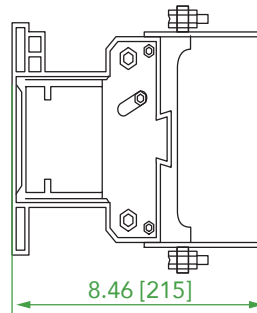
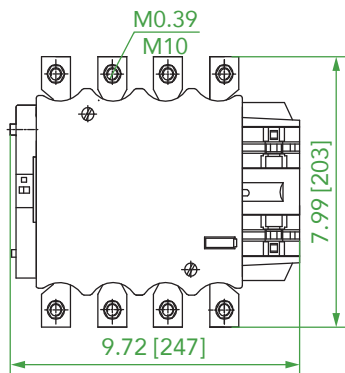


IEC Contactors

Ex9CDS Dimensions

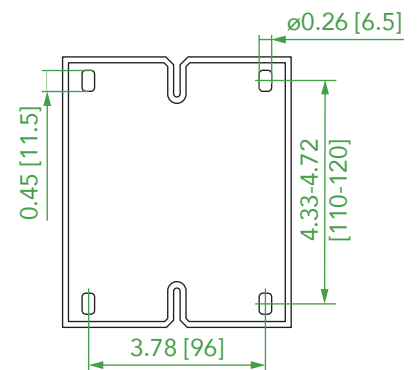
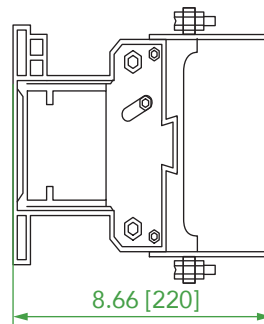
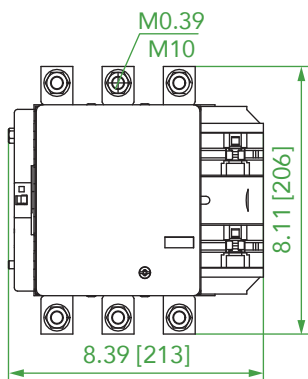
Ex9CDS265

4 Poles
Unit: in [mm]



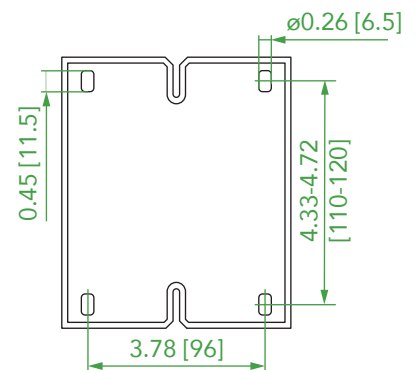
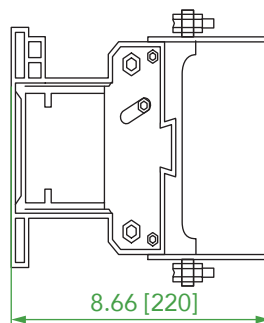
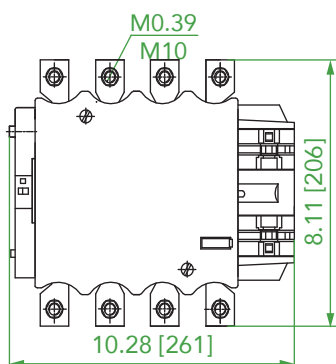
Ex9CDS330

3 Poles
Unit: in [mm]



Ex9CDS330

4 Poles
Unit: in [mm]



C

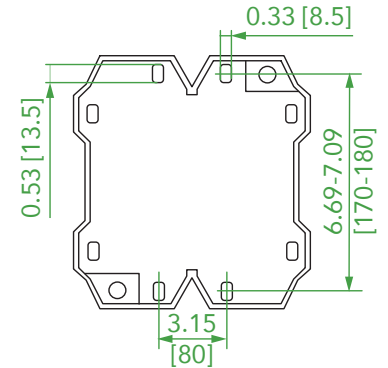
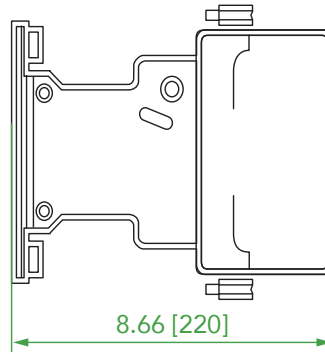
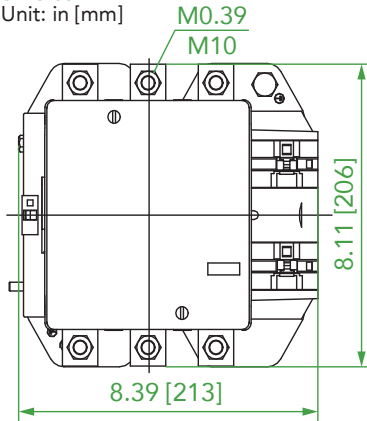
IEC Contactors

Ex9CDS Dimensions

Ex9CDS400

3 Poles

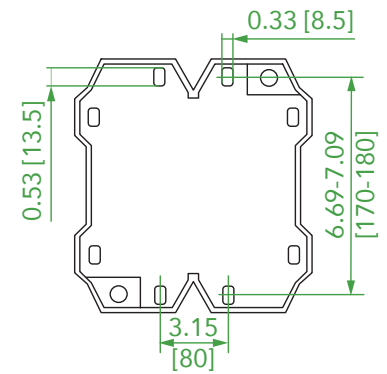
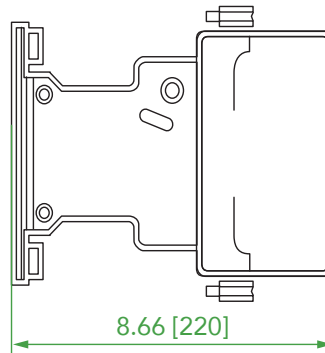
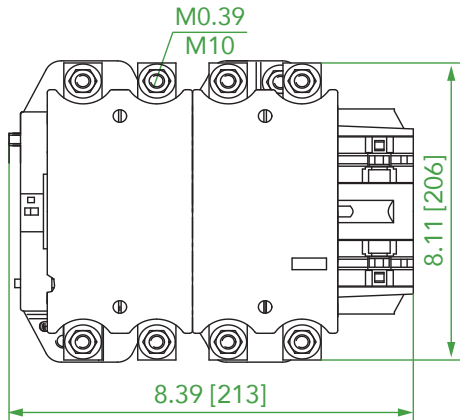
Unit: in [mm]



Ex9CDS400

4 Poles

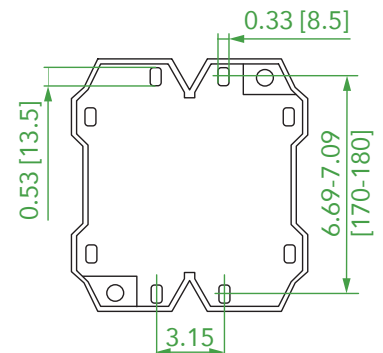
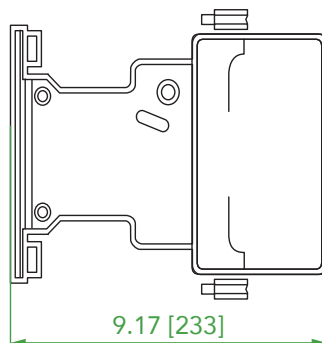
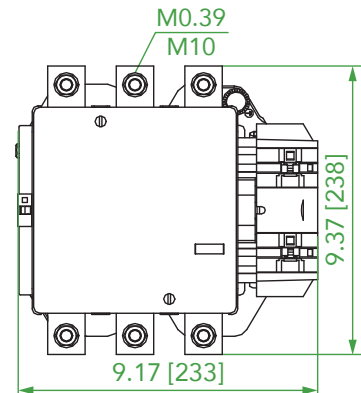
Unit: in [mm]



Ex9CDS500

3 Poles

Unit: in [mm]

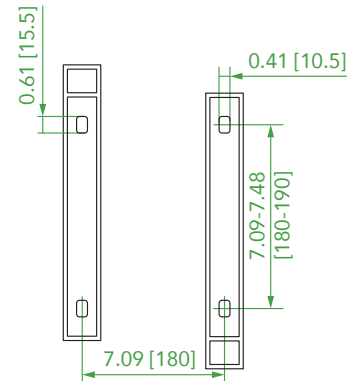
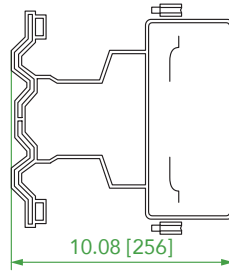
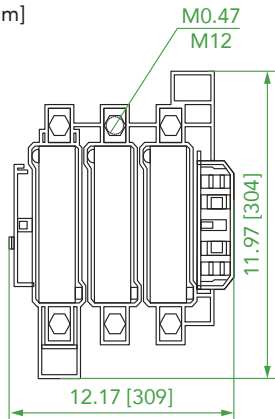


IEC Contactors

Ex9CDS Dimensions

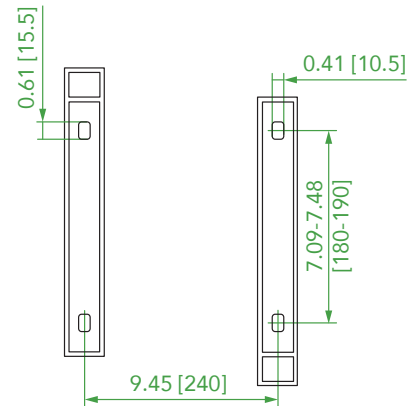
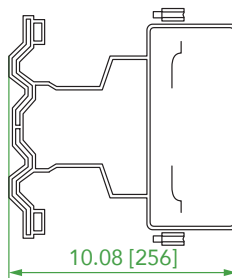
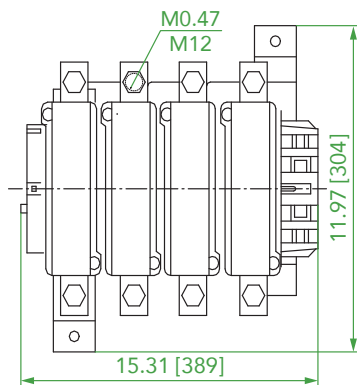
Ex9CDS630

3 Poles
Unit: in [mm]



Ex9CDS630

4 Poles
Unit: in [mm]



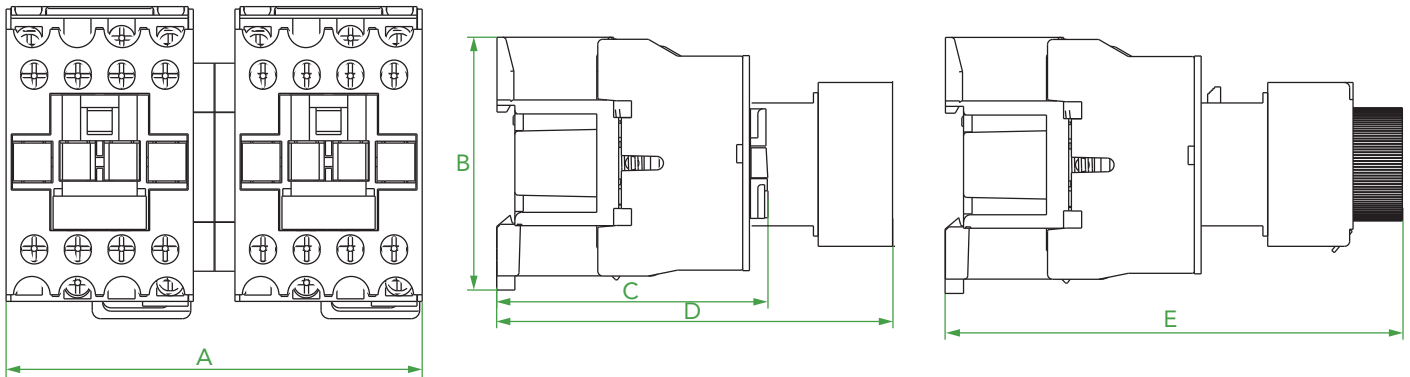
C

IEC Contactors

Ex9CDR Dimensions

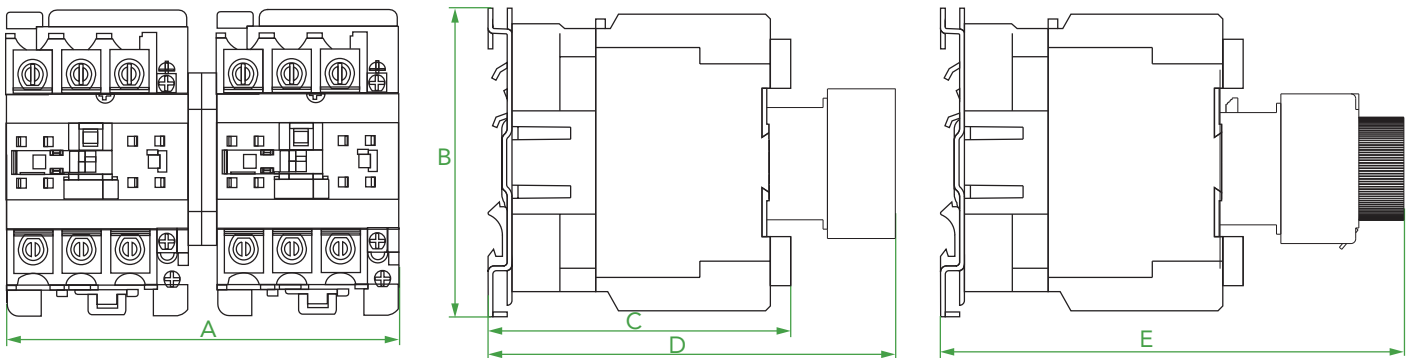
Ex9CDR09~32

Unit: in [mm]



Ex9CDR40~95

Unit: in [mm]



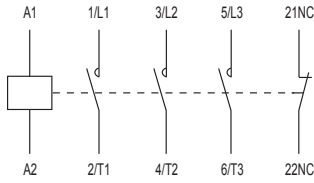
Ex9CDR	A	B	C	D	E
09					
12	4.13 [105]	3.07 [78]	3.23 [82]	4.74 [120.5]	5.53 [140.5]
18					
25	4.92 [125]	3.54 [90]	3.74 [95]	5.25 [133.5]	6.04 [153.5]
32			3.93 [100]	5.45 [138.5]	6.24 [158.5]
40~65 11	6.50 [165]	5.08 [129]	4.56 [116]	6.08 [154.5]	6.87 [174.5]
40~65 40	7.08 [180]			6.51 [165.5]	7.30 [185.5]
80~95 11	7.36 [187]		5 [127]	6.31 [160.5]	7.10 [180.5]
80~95 40	8.07 [205]				

Note: 1) Ex9CDS40~80: 11 = 3NO+1NO/1NC, 40 = 4NO

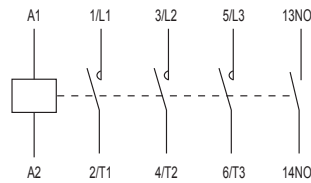
IEC Contactors

Ex9CMS/CDS Wiring Diagrams

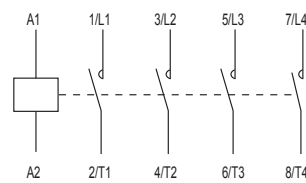
Ex9CMS06~12



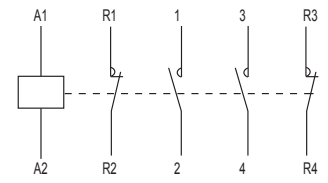
Ex9CMS... 3P 3NO+1NC



Ex9CMS... 3P 3NO+1NO

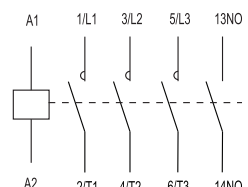


Ex9CMS... 4P 4NO

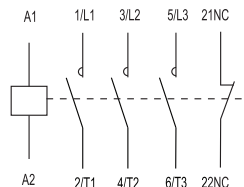


Ex9CMS... 4P 2NO+2NC

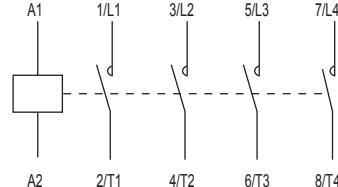
Ex9CDS09~32



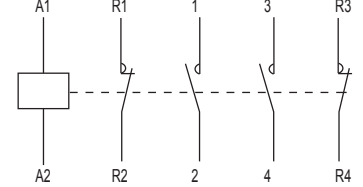
Ex9CDS... 3P 3NO+1NO



Ex9CDS... 3P 3NO+1NC

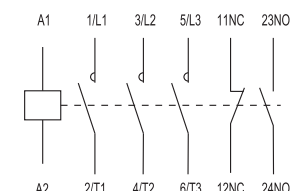


Ex9CDS... 4P 4NO

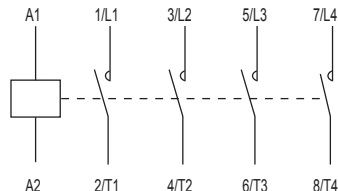


Ex9CDS... 4P 2NO+2NC

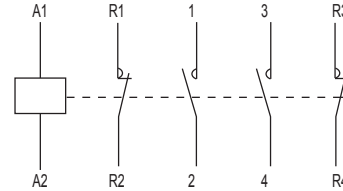
Ex9CDS40~95



Ex9CDS... 3P 3NO+1NO/1NC

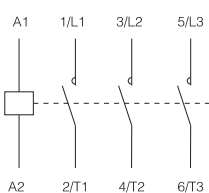


Ex9CDS... 4P 4NO

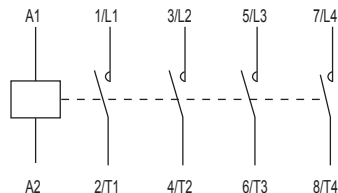


Ex9CDS... 4P 2NO+2NC

Ex9CDS115~630



Ex9CDS... 3P 3NO



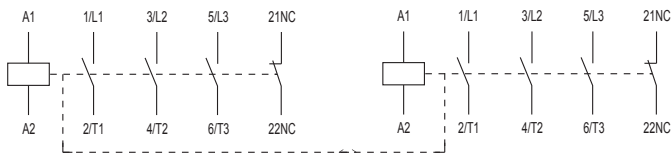
Ex9CDS... 4P 4NO

C

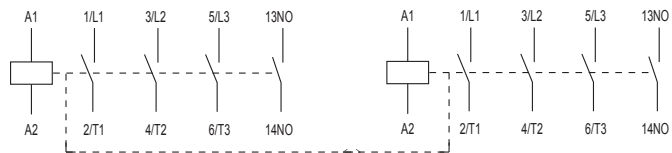
IEC Contactors

Ex9CMR/CDR Wiring Diagrams

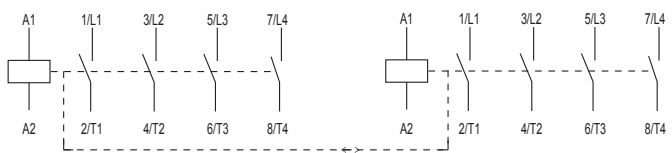
Ex9CMR06~12



Ex9CMR... 3P 3NO+1NC



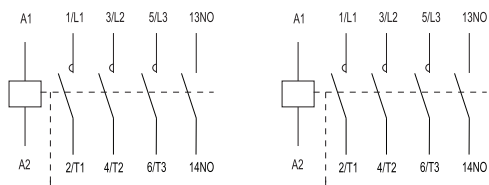
Ex9CMR... 3P 3NO+1NO



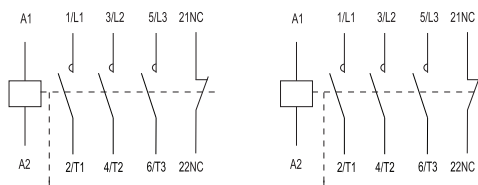
Ex9CMR... 4P 4NO

Ex9CMR... 4P 2NO+2NC

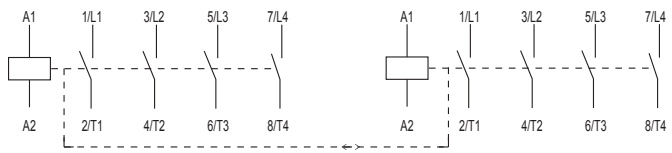
Ex9CDR09~32



Ex9CDR... 3P 3NO+1NO

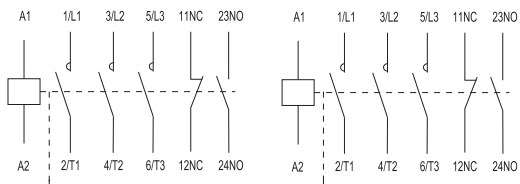


Ex9CDR... 3P 3NO+1NC

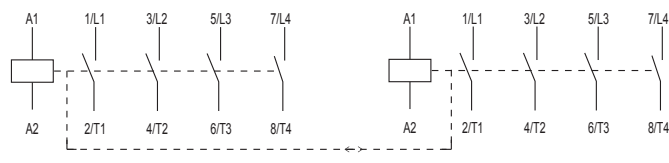


Ex9CDR... 4P 4NO

Ex9CDR40~95



Ex9CDR... 3P 3NO+1NO/1NC

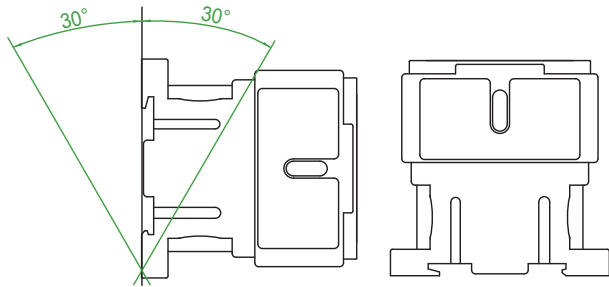


Ex9CDR... 4P 4NO

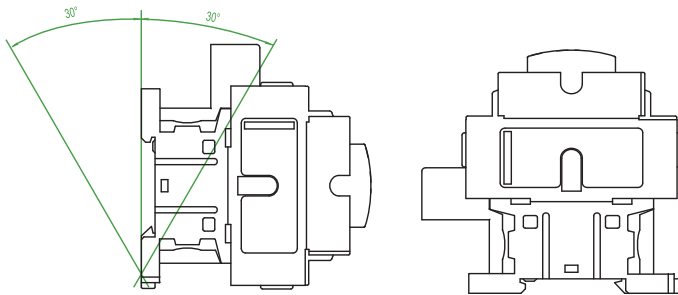
IEC Contactors

Ex9CM/CD Mounting Positions

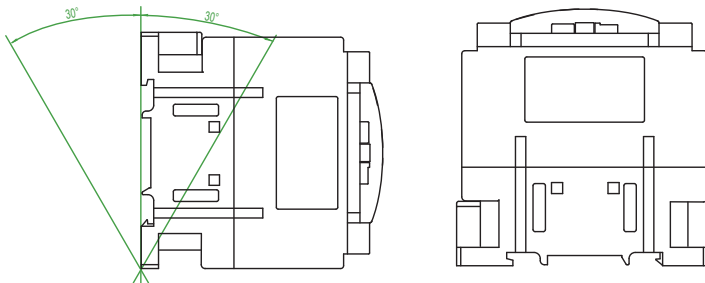
Ex9CMS/CMR06~12



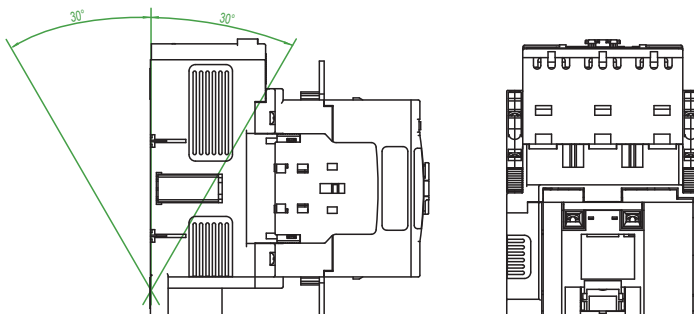
Ex9CDS/CDR09~32



Ex9CDS/CDR40~95



Ex9CDS115~630



C

IEC Contactors

Ex9CD/CM Accessories: Auxiliary Contact



Front Mount

- For contactors Ex9CD, Ex9CDR, Ex9CM and Ex9CMR
- For subsequent mounting
- One unit used with a contactor
- Do not limit a possibility to install overload relays Ex9RD38 and Ex9RD100



Side Mount

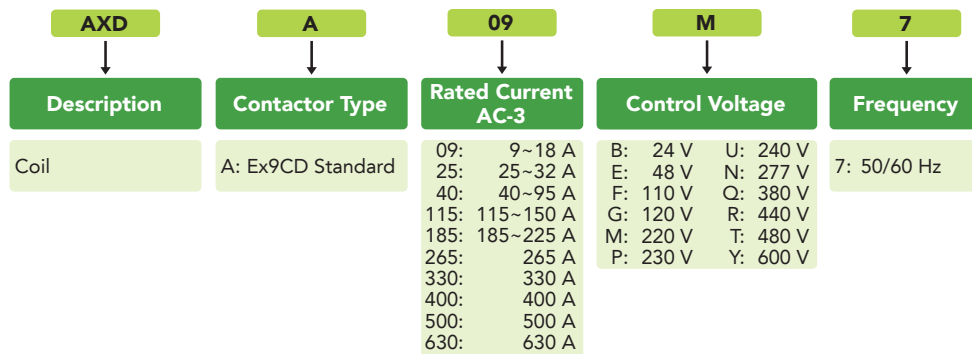
- For contactors Ex9CDS
- **NOT UL Approved**
- For subsequent mounting
- One unit used with a contactor on the left and one unit on the right

AX	A	11
Description	Contactor Type and Rated Current	Auxiliary Contact
Auxiliary Contact	A: Ex9CD Standard Front Mount 09~630 A	02: 2NC
	B: Ex9CM Mini Front Mount 0~12 A	04: 4NC
	FA: Ex9CDS Standard Side Mount 09~95 A (Not UL Approved)	11: 1NO+1NC
		13: 1NO+3NC
		20: 2NO
		22: 2NO+2NC
		31: 3NO+1NC
		40: 4NO

Accessory Description	Matched Contactor	Product	Part Number	
Auxiliary Contact Mechanically Linked Contacts (in accordance with IEC 60947-5-1 Annex L) and Mirror Contacts (in accordance with IEC 60947-4-1 Annex F)	Ex9CDS09~630 Ex9CDR09~630	AXA02	1311709	
		AXA04	1311715	
		AXA11	1311711	
		AXA13	1311713	
		AXA20	1311710	
		AXA22	1311712	
		AXA31	1311714	
		AXA40	1311716	
		Ex9CMS06~12 Ex9CMR06~12	AXB02	1311717
			AXB04	1311723
	AXB11		1311719	
	AXB13		1311721	
	Ex9CDS09~95	AXB20	1311718	
		AXB22	1311720	
AXB31		1311722		
AXB40		1311724		
		AXFA11	1313990	

IEC Contactors

Ex9CD/CM Accessories: Coil



Note:
 115-265A: 110-440Vac Coil available
 330-630A: 110-380Vac Coil available



		Ex9CMS/ CMR - Mini	Ex9CDS/CDR - Standard												
			06~12*	09~12	18	25	32	40~60	80~95	115~150	185~225	265	330	400	500
Coil Power	In-Rush (VA)	25~40	70		110		200		660	966	840	1,500		1,700	
	Sealed (VA)	2~7	8	8	11		20		85.5	91.2	150	34.2			
	Power (W)	1~4	1.8~2.7	3~4		6~10		-	-	-	-	-	-	-	-
Operation Range	Operation Voltage (Us)	85~110%													
	Drop-Out Voltage (Us)	20~75%													
Coil Voltage (50/60 Hz)		24~600													

Note: Ex9CMS/CMR coil is not field changeable.

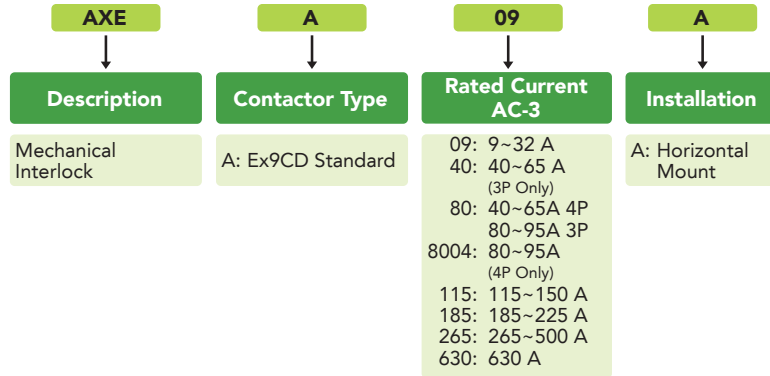
IEC Contactors

Ex9CD/CM Accessories: Coil

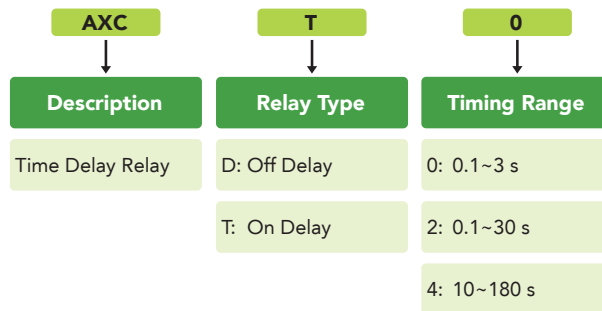
Accessory Description	Coil Voltage (Vac)	09~18 A		25~32 A		40~95 A			
		Product	Part Number	Product	Part Number	Product	Part Number		
	24	AXDA09B7	1311750	AXDA25B7	1311786	AXDA40B7	1311810		
	48	AXDA09E7	1311978	AXDA25E7	1312014	AXDA40E7	1312038		
	110	AXDA09F7	1311742	AXDA25F7	1311778	AXDA40F7	1311802		
	120	AXDA09G7	1311744	AXDA25G7	1311780	AXDA40G7	1311804		
	220	AXDA09M7	1311972	AXDA25M7	1312008	AXDA40M7	1312032		
	230	AXDA09P7	1311746	AXDA25P7	1311782	AXDA40P7	1311806		
	240	AXDA09U7	1311748	AXDA25U7	1311784	AXDA40U7	1311808		
	277	AXDA09N7	1311980	AXDA25N7	1312016	AXDA40N7	1312040		
	380	AXDA09Q7	1311974	AXDA25Q7	1312010	AXDA40Q7	1312034		
	440	AXDA09R7	1311976	AXDA25R7	1312012	AXDA40R7	1312036		
	480	AXDA09T7	1311752	AXDA25T7	1311788	AXDA40T7	1311812		
	600	AXDA09Y7	1311970	AXDA25Y7	1312006	AXDA40Y7	1312030		
		115~150 A		185~225 A		265 A		330 A	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Coil	110	AXDA115F7	1311862	AXDA185F7	1311886	AXDA265F7	1311910	AXDA330F7	1311922
	120	AXDA115G7	1311864	AXDA185G7	1311888	AXDA265G7	1311912	AXDA330G7	1311924
	220	AXDA115M7	1312092	AXDA185M7	1312116	AXDA265M7	1312140	AXDA330M7	1312152
	230	AXDA115P7	1311866	AXDA185P7	1311890	AXDA265P7	1311914	AXDA330P7	1311926
	240	AXDA115U7	1311868	AXDA185U7	1311892	AXDA265U7	1311916	AXDA330U7	1311928
	277	AXDA115N7	1312100	AXDA185N7	1312124	AXDA265N7	1312148	AXDA330N7	1312160
	380	AXDA115Q7	1312094	AXDA185Q7	1312118	AXDA265Q7	1312142	AXDA330Q7	1312154
		400 A		500 A		630 A			
		Product	Part Number	Product	Part Number	Product	Part Number		
	110	AXDA400F7	1311934	AXDA500F7	1311946	AXDA630F7	1311958		
	120	AXDA400G7	1311936	AXDA500G7	1311948	AXDA630G7	1311960		
	220	AXDA400M7	1312164	AXDA500M7	1312176	AXDA630M7	1312188		
	230	AXDA400P7	1311938	AXDA500P7	1311950	AXDA630P7	1311962		
	240	AXDA400U7	1311940	AXDA500U7	1311952	AXDA630U7	1311964		
	277	AXDA400N7	1312172	AXDA500N7	1312184	AXDA630N7	1312196		
	380	AXDA400Q7	1312166	AXDA500Q7	1312178	AXDA630Q7	1312190		

IEC Contactors

Ex9CD/CM Accessories: Mechanical Interlock and Time Delay Relay



Accessory Description	Product	Part Number
Mechanical Interlock	AXEA09A	1311732
	AXEA40A	1311737
	AXEA80A	1311740
	AXEA8004A	1600135
	AXEA115A	1313230
	AXEA185A	1313232
	AXEA265A	1313234
	AXEA630A	1313238



Accessory Description	Matched Contactor	Product	Part Number
Time Delay Relay (Pneumatic Timer)	Ex9CDS09~630	AXCT0	1311726
		AXCT2	1311727
		AXCT4	1311728
		AXCD0	1311730
		AXCD2	1311729
		AXCD4	1311731

IEC Contactors

Ex9CD/CM Accessory Specifications

	Auxiliary Contact																
	CMS/CMR Front Mount AXB								CDS/CDR Front Mount AXA								Side Mount AXFA
	02	04	13	20	22	31	40		02	04	11	13	20	22	31	40	11
UL Standard File Number	E353866																
IEC Standard File Number	IEC/EN 60947-5-1																
Certifications	UL Listed, CSA, CCC, RoHS																
Electrical Parameters																	
Contacts	2NC	4NC	1NO+3NC	2NO	2NO+2NC	3NO+1NC	4NO	2NC	4NC	1NO+1NC	1NO+3NC	2NO	2NO+2NC	3NO+1NC	4NO	1NO+1NC	
Rated Frequency (Hz)	50/60																
Rated Working Voltage U _e	AC-15 (V)	380/400/415														24/230/400/690	
	DC-13 (V)	220/250														125/250	
Rated Working Current I _e	AC-15 (A)	0.19														6.00 (24 V) 3.13 (230 V) 1.80 (400 V) 1.04 (690 V)	
	DC-13 (A)	0.31														0.55 (125 V) 0.27 (250 V)	
Rated Capacity	AC-15 (VA)	720															
	DC-13 (W)	69															
Rated Thermal Current I _{th} (A)	10																
Rated Impulse Withstand Voltage U _{imp} (kV)	6 (1.2/50 μs)																
Rated Insulation Voltage U _i (V)	690																
Mechanical Parameters																	
Device Width in (mm)	1.30 (33)							1.89 (48)							0.39 (10)		
Device Height in (mm)	1.54 (39)							1.46 (37)							2.52 (64)		
Device Depth in (mm)	1.46 (37)							1.02 (26)			1.77 (45)				2.68 (68)		
Degree of Protection	IP 20																
Terminal Capacity AWG (mm ²)	17-9 (1-6)																
Torque of Terminals in-lb (N.m)	8.85 (1)																

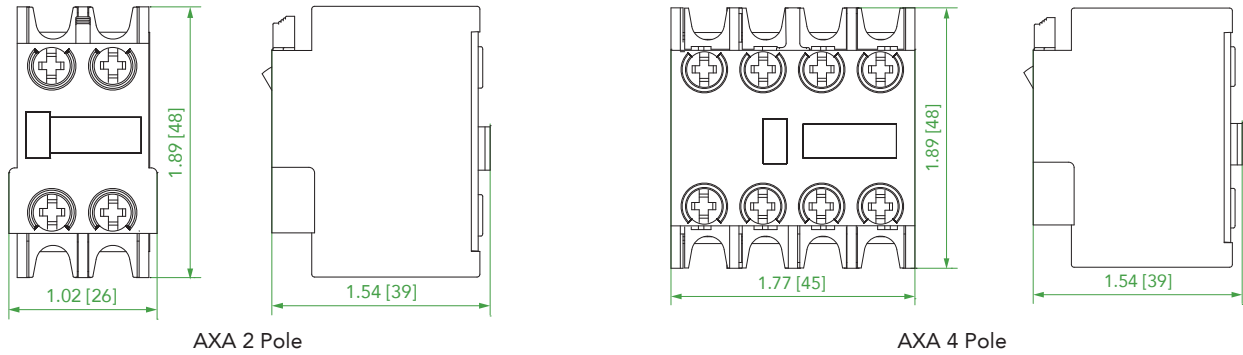
IEC Contactors

Ex9CD/CM Accessory Dimensions

AXA

Front Mount Auxiliary Contact for Standard Contactor

Unit: in [mm]

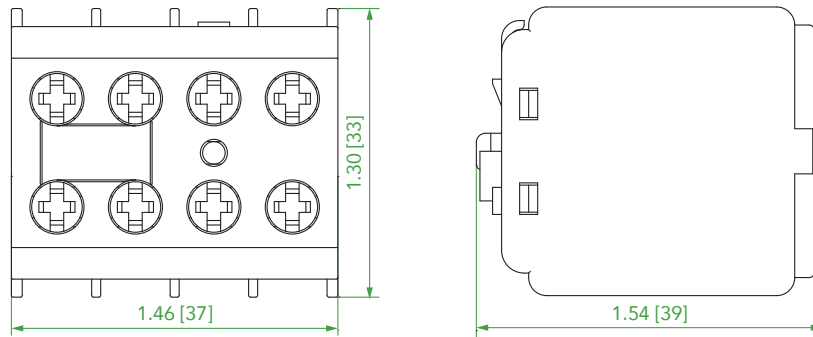


C

AXB

Front Mount Auxiliary Contact for Mini Contactor

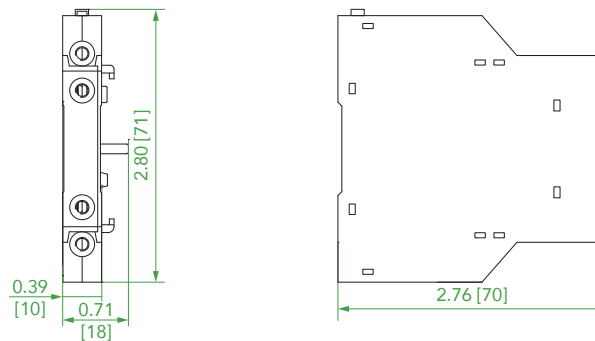
Unit: in [mm]



AXFA

Side Mount Auxiliary Contact for Standard Contactor

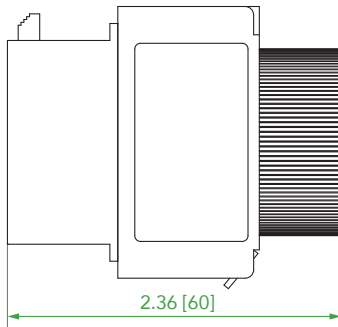
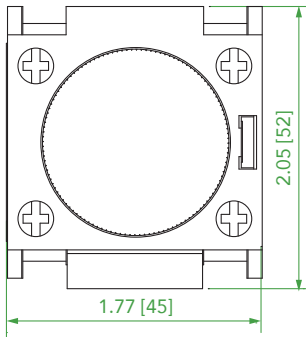
Unit: in [mm]



IEC Contactors

Ex9CD/CM Accessory Dimensions

AXC
Time Delay Relay
Unit: in [mm]

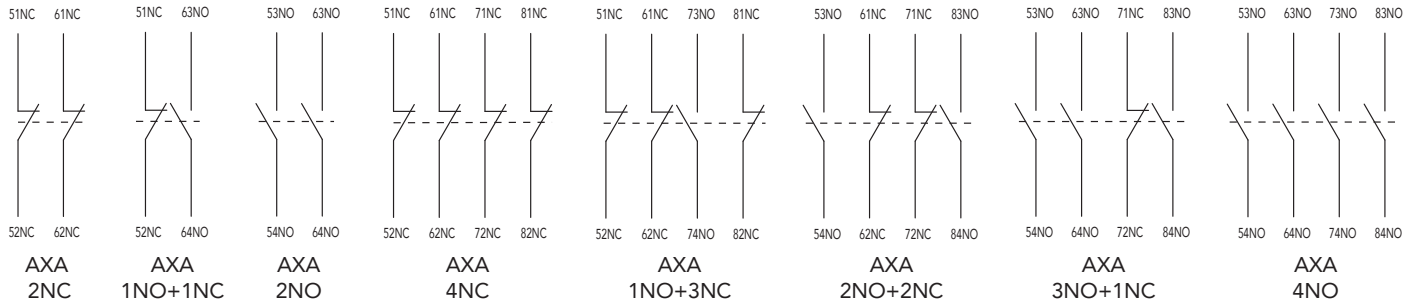


IEC Contactors

Ex9CD/CM Accessory Wiring Diagrams

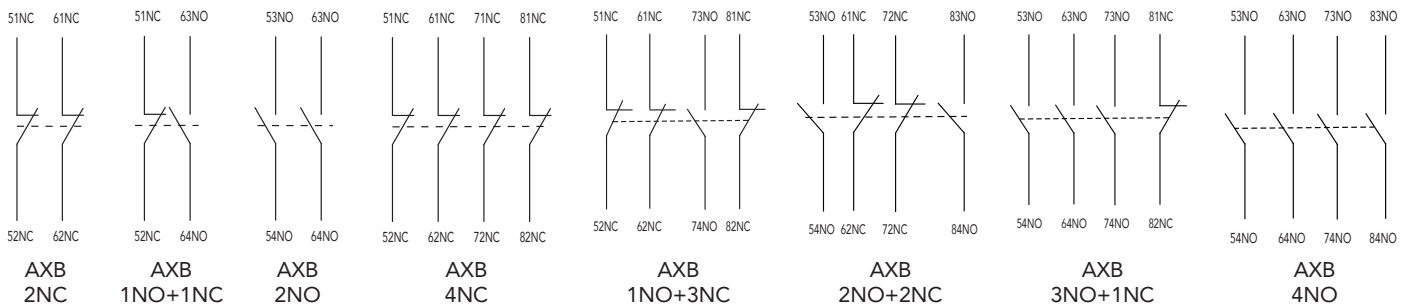
AXA

Front Mount Auxiliary Contact



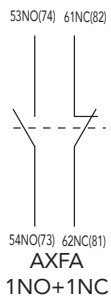
AXB

Front Mount Auxiliary Contact



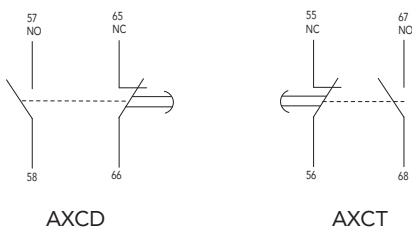
AXFA

Side Mount Auxiliary Contact



AXC

Time Delay Relay



THERMAL OVERLOAD RELAYS



Ex9RD

Thermal Overload Relays

Ex9RD Product Overview

Features

- Rated current up to 630 A @ 600 Vac, 50/60 Hz
- Overload protection trip Class 10 A
- Phase loss sensitivity
- Temperature compensation from -13 to 131 °F (-25 to +55 °C)
- Adjustable current setting for overload protection
- Automatic or manual reset selectable
- Trip-free mechanism
- Status indication
- STOP and TEST function
- Direct mount to contactors or 35 mm DIN rail mounting base option

Thermal Overload Relays

Ex9RD National and International Standards

Certifications

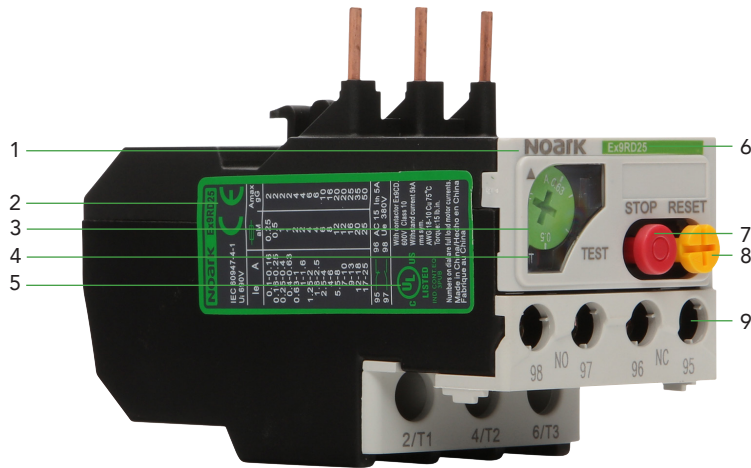
- UL Listed, File Number E353865
- Certified for Canada according to CSA standards
- IEC/EN 60947-4-1
- CE Compliant



Thermal Overload Relays

Ex9RD Product Selection Guide

Label



1. Brand
2. CE Mark
3. Adjustable Current Range
4. Push to Test
5. UL Listed Mark
6. Product Series/Frame Amperage
7. Manual Stop
8. Manual/Auto Reset
9. Auxiliary Contacts



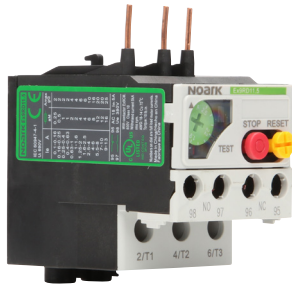
Product Selection Guide

Ex9RD	25	A	13																																
NOARK Ex9RD Series	Frame Size	Trip Class*	Setting Amperage																																
	11.5: 11.5 A 25: 25 A 36: 36 A 93: 93 A 200: 200 A 630: 630 A	A: Class 10 A	<table border="0"> <tr> <td>0.16: 0.1~0.16 A</td> <td>36: 28~36 A</td> </tr> <tr> <td>0.25: 0.16~25 A</td> <td>40: 30~40 A</td> </tr> <tr> <td>0.4: 0.25~0.4 A</td> <td>50: 37~50 A</td> </tr> <tr> <td>0.63: 0.4~0.63 A</td> <td>65: 48~65 A</td> </tr> <tr> <td>1: 0.63~1 A</td> <td>70: 55~70 A</td> </tr> <tr> <td>1.6: 1~1.6 A</td> <td>80: 63~80 A</td> </tr> <tr> <td>2: 1.25~2 A</td> <td>93: 80~93 A</td> </tr> <tr> <td>2.5: 1.6~2.5 A</td> <td>125: 80~125 A</td> </tr> <tr> <td>4: 2.5~4 A</td> <td>160: 100~160 A</td> </tr> <tr> <td>6: 4~6 A</td> <td>200: 125~200 A</td> </tr> <tr> <td>8: 5.5~8 A</td> <td>250: 160~250 A</td> </tr> <tr> <td>10: 7~10 A</td> <td>315: 200~315 A</td> </tr> <tr> <td>13: 9~13 A</td> <td>400: 250~400 A</td> </tr> <tr> <td>18: 12~18 A</td> <td>500: 315~500 A</td> </tr> <tr> <td>25: 17~25 A</td> <td>630: 400~630 A</td> </tr> <tr> <td>32: 23~32 A</td> <td></td> </tr> </table>	0.16: 0.1~0.16 A	36: 28~36 A	0.25: 0.16~25 A	40: 30~40 A	0.4: 0.25~0.4 A	50: 37~50 A	0.63: 0.4~0.63 A	65: 48~65 A	1: 0.63~1 A	70: 55~70 A	1.6: 1~1.6 A	80: 63~80 A	2: 1.25~2 A	93: 80~93 A	2.5: 1.6~2.5 A	125: 80~125 A	4: 2.5~4 A	160: 100~160 A	6: 4~6 A	200: 125~200 A	8: 5.5~8 A	250: 160~250 A	10: 7~10 A	315: 200~315 A	13: 9~13 A	400: 250~400 A	18: 12~18 A	500: 315~500 A	25: 17~25 A	630: 400~630 A	32: 23~32 A	
0.16: 0.1~0.16 A	36: 28~36 A																																		
0.25: 0.16~25 A	40: 30~40 A																																		
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4: 2.5~4 A	160: 100~160 A																																		
6: 4~6 A	200: 125~200 A																																		
8: 5.5~8 A	250: 160~250 A																																		
10: 7~10 A	315: 200~315 A																																		
13: 9~13 A	400: 250~400 A																																		
18: 12~18 A	500: 315~500 A																																		
25: 17~25 A	630: 400~630 A																																		
32: 23~32 A																																			

Thermal Overload Relays

Ex9RD 11.5~36 A

Certifications
IEC/EN 60947-4-1



11.5 A



25 A



36 A

Current Range Amp (Min-Max)	Use with Contactors: Ex9CM06~12				Use with Contactors: Ex9CD09~32				Use with Contactors: Ex9CD32			
	Matched Fuse		Product	Part Number	Matched Fuse		Product	Part Number	Matched Fuse		Product	Part Number
aM	gG	aM			gG	aM			gG			
0.1-0.16	0.25	2	Ex9RD11.5A0.16	1410001	0.25	2	Ex9RD25A0.16	1410014	-	-	-	-
0.16-0.25	0.5	2	Ex9RD11.5A0.25	1410002	0.5	2	Ex9RD25A0.25	1410015	-	-	-	-
0.25-0.4	1	2	Ex9RD11.5A0.4	1410003	1	2	Ex9RD25A0.4	1410016	-	-	-	-
0.4-0.63	1	2	Ex9RD11.5A0.63	1410004	1	2	Ex9RD25A0.63	1410017	-	-	-	-
0.63-1	2	4	Ex9RD11.5A1	1410005	2	4	Ex9RD25A1	1410018	-	-	-	-
1-1.6	2	4	Ex9RD11.5A1.6	1410008	2	4	Ex9RD25A1.6	1410019	-	-	-	-
1.25-2	4	6	Ex9RD11.5A2	1410006	4	6	Ex9RD25A2	1410020	-	-	-	-
1.6-2.5	4	6	Ex9RD11.5A2.5	1410007	4	6	Ex9RD25A2.5	1410021	-	-	-	-
2.5-4	6	10	Ex9RD11.5A4	1410009	6	10	Ex9RD25A4	1410022	-	-	-	-
4-6	8	16	Ex9RD11.5A6	1410010	8	16	Ex9RD25A6	1410023	-	-	-	-
5.5-8	12	20	Ex9RD11.5A8	1410011	12	20	Ex9RD25A8	1410024	-	-	-	-
7-10	12	20	Ex9RD11.5A10	1410012	12	20	Ex9RD25A10	1410025	-	-	-	-
9-13	16	25	Ex9RD11.5A13	1410013	16	25	Ex9RD25A13	1410026	-	-	-	-
12-18	-	-	-	-	20	35	Ex9RD25A18	1410027	-	-	-	-
17-25	-	-	-	-	25	50	Ex9RD25A25	1410028	-	-	-	-
23-32	-	-	-	-	-	-	-	-	40	63	Ex9RD36A32	1410030
28-36	-	-	-	-	-	-	-	-	40	80	Ex9RD36A36	1410031

Thermal Overload Relays

Ex9RD 93~630 A

Certifications
IEC/EN 60947-4-1



93 A

200 A

630 A

Current Range Amp (Min-Max)	Use with Contactors: Ex9CD40~95				Use with Contactors: Ex9CD115~225				Use with Contactors: Ex9CD185~630			
	Matched Fuse		Product	Part Number	Matched Fuse		Product	Part Number	Matched Fuse		Product	Part Number
	aM	gG			aM	gG			aM	gG		
23-32	40	63	Ex9RD93A32	1410032	-	-	-	-	-	-	-	
30-40	40	100	Ex9RD93A40	1410033	-	-	-	-	-	-	-	
37-50	63	100	Ex9RD93A50	1410034	-	-	-	-	-	-	-	
48-65	63	100	Ex9RD93A65	1410035	-	-	-	-	-	-	-	
55-70	80	125	Ex9RD93A70	1410036	-	-	-	-	-	-	-	
63-80	80	125	Ex9RD93A80	1410037	-	-	-	-	-	-	-	
80-93	100	160	Ex9RD93A93	1410038	-	-	-	-	-	-	-	
80-125	-	-	-	-	125	200	Ex9RD200A125	1410039	-	-	-	-
100-160	-	-	-	-	160	250	Ex9RD200A160	1410040	-	-	-	-
125-200	-	-	-	-	200	315	Ex9RD200A200	1410041	-	-	-	-
160-250	-	-	-	-	-	-	-	-	250	400	Ex9RD630A250	1410042
200-315	-	-	-	-	-	-	-	-	315	500	Ex9RD630A315	1410043
250-400	-	-	-	-	-	-	-	-	400	630	Ex9RD630A400	1410044
315-500	-	-	-	-	-	-	-	-	500	800	Ex9RD630A500	1410045
400-630	-	-	-	-	-	-	-	-	630	800	Ex9RD630A630	1410046

D

Thermal Overload Relays

Ex9RD Specifications

Ex9RD		11.5 A														
Current Class (A)		13														
Phase Failure Protection Function																
Automatic and Manual Reset																
Temperature Compensation																
Tripping Indicator		Yes														
Test and Stop Pushbutton																
Mounting Mode	Plug-In															
	Independent															
Number of Contacts		1NO+1NC														
Auxiliary Contacts	Rated Current (A)	AC-15 220 V	2.73													
		AC-15 380 V	1.58													
		DC-13 220 V	0.2													
Current Setting Range (A)		0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.25~2	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~13		
Matched Fuse	aM (A)	0.25	0.5	1		2		4		6	8	12		16		
	gG (A)	2			4		6		10	16	20		25			
Ex9RD		25 A														
Current Class (A)		25														
Phase Failure Protection Function																
Automatic and Manual Reset																
Temperature Compensation																
Tripping Indicator		Yes														
Test and Stop Pushbutton																
Mounting Mode	Plug-In															
	Independent															
Number of Contacts		1NO+1NC														
Auxiliary Contacts	Rated Current (A)	AC-15 220 V	2.73													
		AC-15 380 V	1.58													
		DC-13 220 V	0.2													
Current Setting Range (A)		0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.25~2	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~13	12~18	17~25
Matched Fuse	aM (A)	0.25	0.5	1		2		4		6	8	12	16	20	25	
	gG (A)	2			4		6		10	16	20	25	35	50		
Ex9RD		36 A														
Current Class (A)		36														
Phase Failure Protection Function																
Automatic and Manual Reset																
Temperature Compensation																
Tripping Indicator		Yes														
Test and Stop Pushbutton																
Mounting Mode	Plug-In															
	Independent															
Number of Contacts		1NO+1NC														
Auxiliary Contacts	Rated Current (A)	AC-15 220 V	2.73													
		AC-15 380 V	1.58													
		DC-13 220 V	0.2													
Current Setting Range (A)		23~32						28~36								
Matched Fuse	aM (A)	40						40								
	gG (A)	63						80								

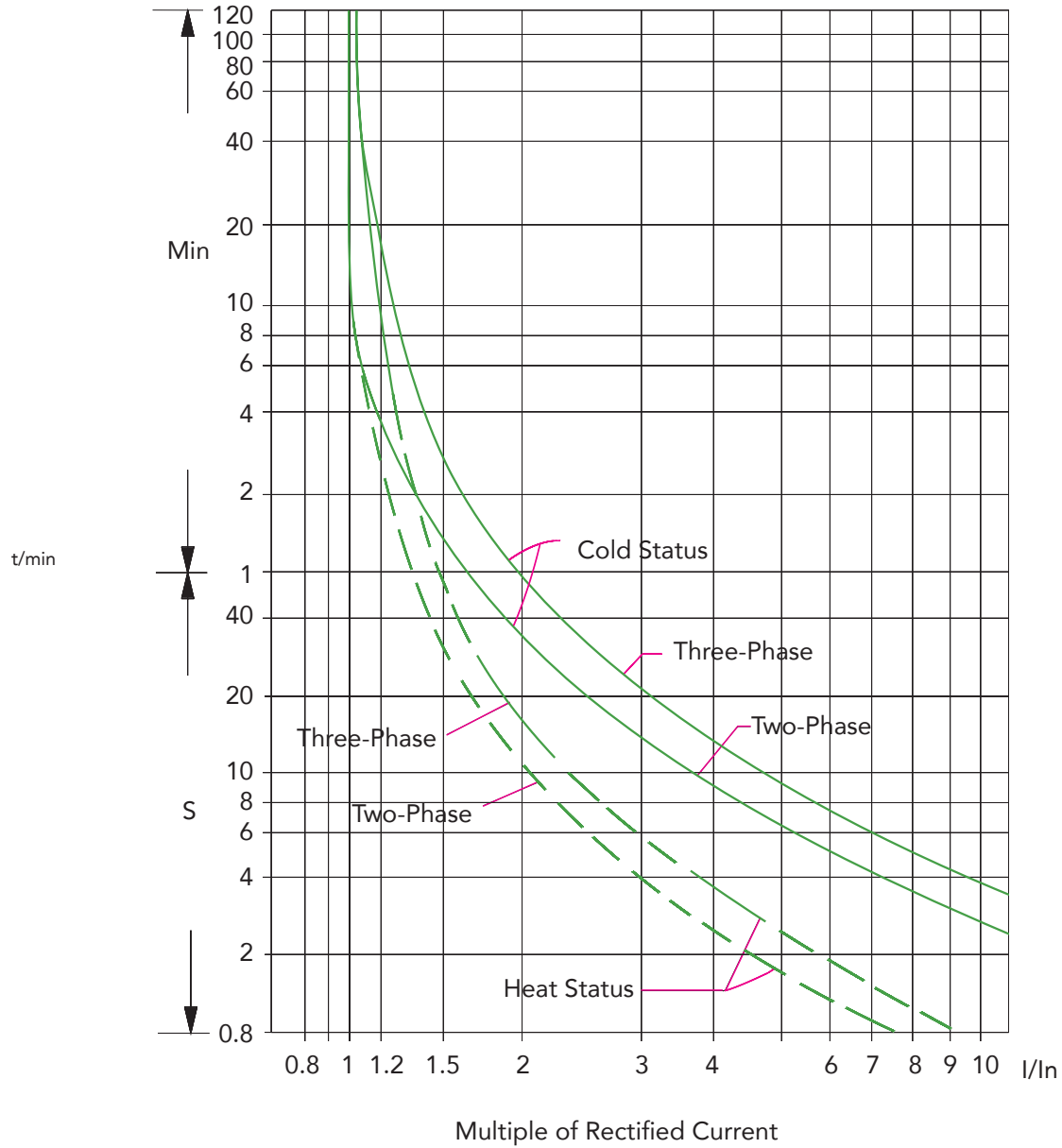
Thermal Overload Relays

Ex9RD Specifications

Ex9RD		93 A						
Current Class (A)		93						
Phase Failure Protection Function								
Automatic and Manual Reset								
Temperature Compensation								
Tripping Indicator		Yes						
Test and Stop Pushbutton								
Mounting Mode	Plug-In							
	Independent							
Number of Contacts		1NO+1NC						
Auxiliary Contacts	Rated Current (A)	AC-15 220 V	2.73					
		AC-15 380 V	1.58					
		DC-13 220 V	0.2					
Current Setting Range (A)		23~32	30~40	37~50	48~65	55~70	63~80	80~93
Matched Fuse	aM (A)	40		63		80		100
	gG (A)	63	100			125		160
Ex9RD		200A						
Current Class (A)		200						
Phase Failure Protection Function								
Automatic and Manual Reset								
Temperature Compensation		Yes						
Tripping Indicator								
Test and Stop Pushbutton								
Mounting Mode	Plug-In	No						
	Independent	Yes						
Number of Contacts		1NO+1NC						
Auxiliary Contacts	Rated Current (A)	AC-15 220 V	2.73					
		AC-15 380 V	1.58					
		DC-13 220 V	0.2					
Current Setting Range (A)		80~125		100~160		125~200		
Matched Fuse	aM (A)	125		160		200		
	gG (A)	200		250		315		
Ex9RD		630 A						
Current Class (A)		630						
Phase Failure Protection Function								
Automatic and Manual Reset								
Temperature Compensation		Yes						
Tripping Indicator								
Test and Stop Pushbutton								
Mounting Mode	Plug-In	No						
	Independent	Yes						
Number of Contacts		1NO+1NC						
Auxiliary Contacts	Rated Current (A)	AC-15 220 V	2.73					
		AC-15 380 V	1.58					
		DC-13 220 V	0.2					
Current Setting Range (A)		160~250	200~315	250~400	315~500	400~630		
Matched Fuse	aM (A)	250	315	400	500	630		
	gG (A)	400	500	630	800			

D

Thermal Overload Relays Ex9RD Trip Curves

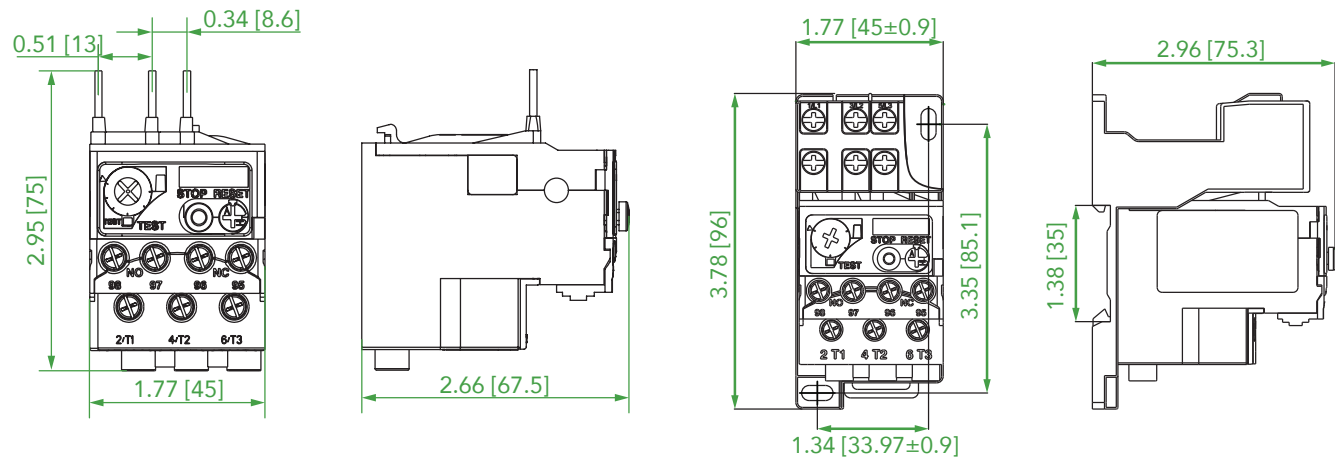


Thermal Overload Relays

Ex9RD Dimensions

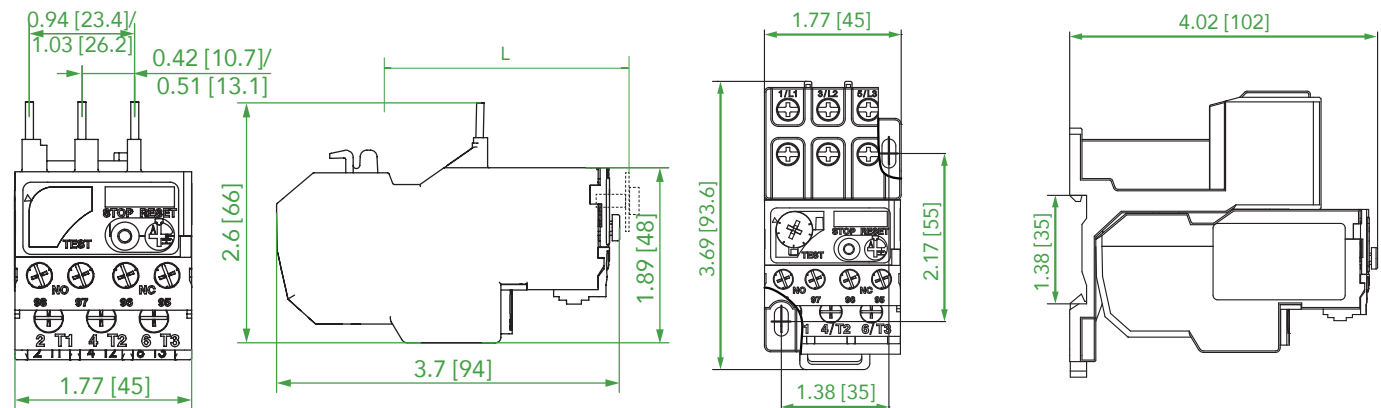
Ex9RD11.5

Unit: in [mm]



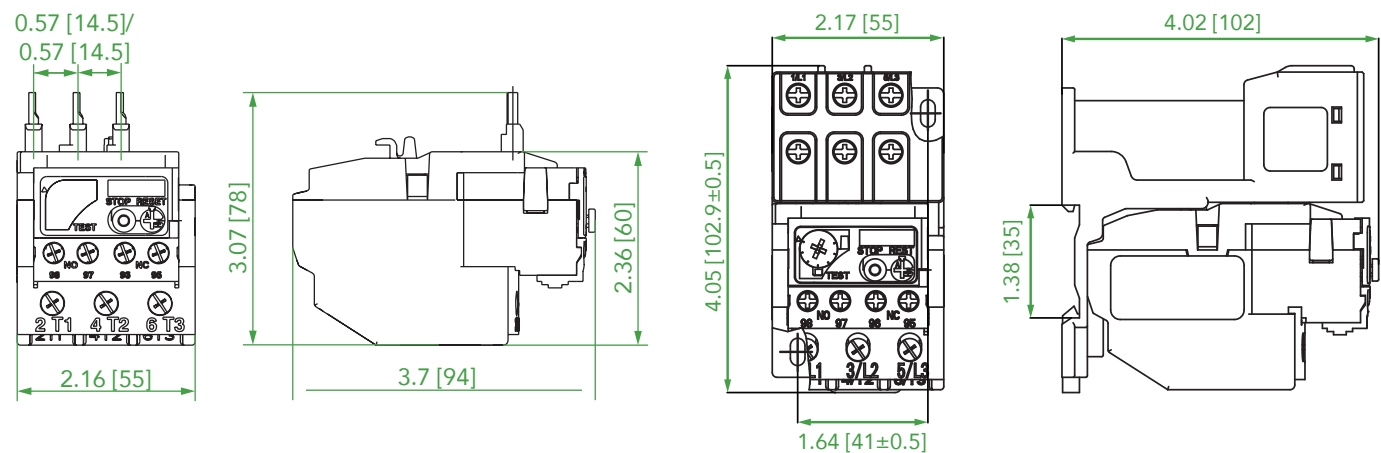
Ex9RD25

Unit: in [mm]



Ex9RD36

Unit: in [mm]

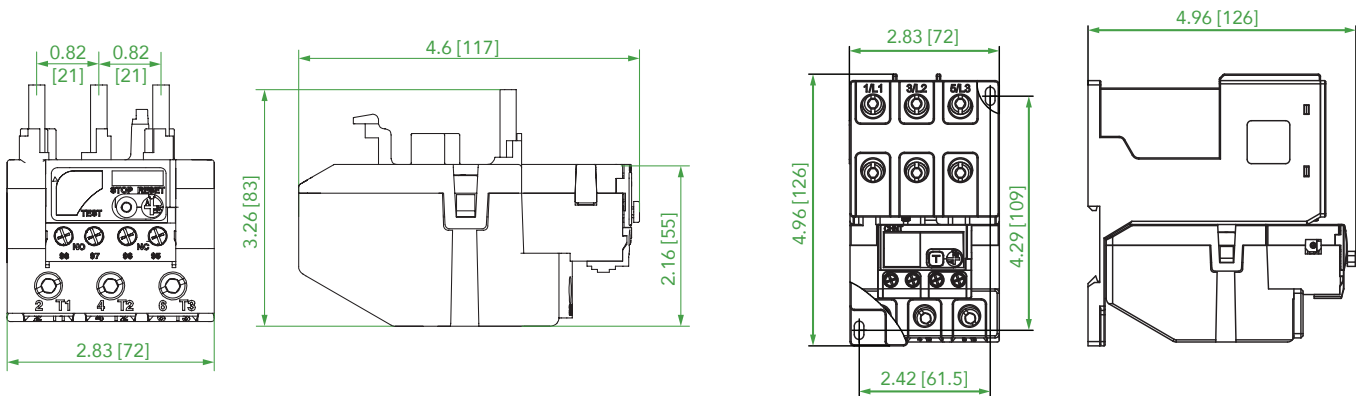


Thermal Overload Relays

Ex9RD Dimensions

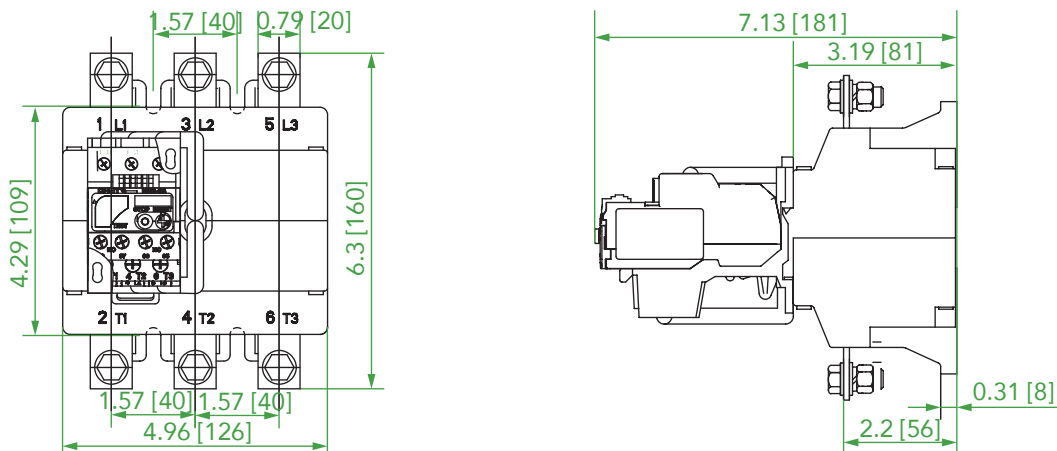
Ex9RD93

Unit: in [mm]



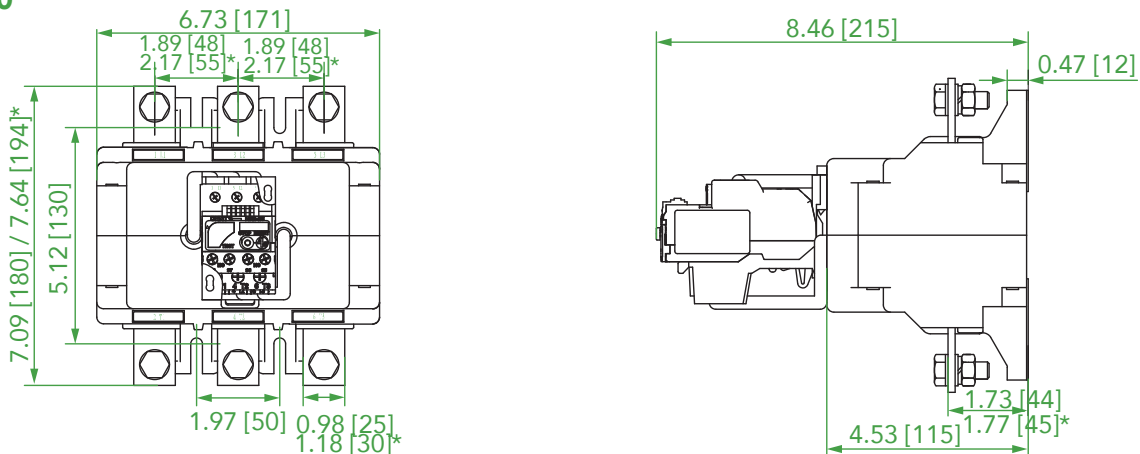
Ex9RD200

Unit: in [mm]



Ex9RD630

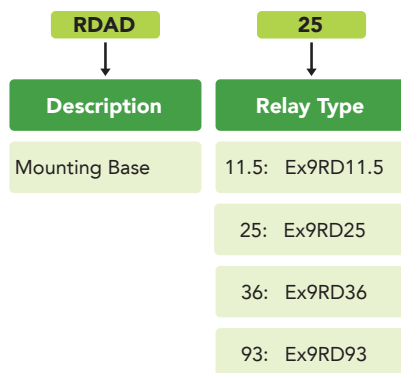
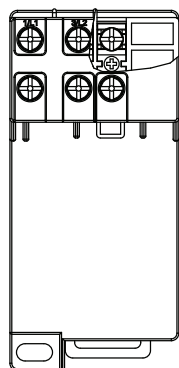
Unit: in [mm]



Note: Dimensions with "*" for the product over 400 A.

Thermal Overload Relays

Ex9RD Accessories: Mounting Base

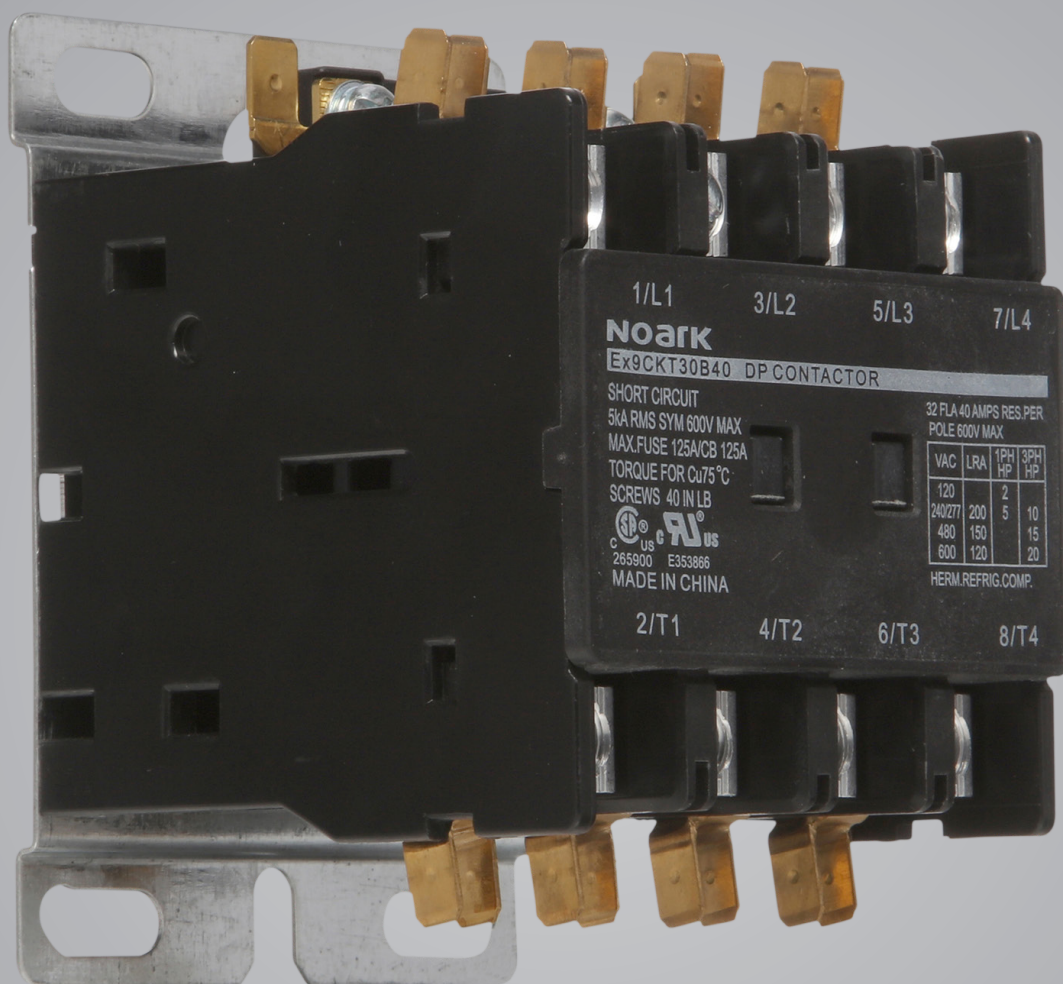


Accessory Description	Product	Part Number
Mounting Base	RDAD11.5	1410052
	RDAD25	1410049
	RDAD36	1410050
	RDAD93	1410051

D

Mounting Base	RDAD11.5	RDAD25	RDAD36	RDAD93
Current Rating (A)	11.5	25	36	93
Voltage (Vac)	600			
Terminal Wire Range	#18-12 AWG	#18-10 AWG #8 AWG Str		#12-10 AWG #8-1 AWG, Str
Terminal Torque in-lb (N.m)	7 (0.80)	22 (2.50)		80 (9)
Wire Strip Length in (mm)	0.39 (10)	0.51 (13)		0.71 (18)
Matched Contactor Type	Ex9CMS6~12	Ex9CDS09~32	Ex9CDS32	Ex9CDS40~95

DEFINITE PURPOSE CONTACTORS



Ex9CKT

Definite Purpose Contactors

Ex9CKT Product Overview

Features

Ex9CKT Series DP Contactors provide high performance with both flexibility and reliability. They are designed to match numerous applications including:

- Air conditioning
- Resistive heating
- Refrigeration equipment
- Motors
- Welding
- Pumps
- Power supplies
- Food service equipment
- Compressors
- Business machines
- Lighting (25-50A)

Available as:

- 20~90A, 1 to 4 pole available now
- Enclosed coil standard for all 1 to 4 pole frame sizes
- Industry standard mounting plate provides easily accessible mounting holes
- Connection terminal options, including screw or lug connections each with quick connect spades
- Coil is Class B 266°F (130°C) insulation system with a wide range of voltages and 50/60 Hz ratings
- Double E magnet assembly provides optimal performance with reduced power consumption
- Base assembly is made from high arc-resistant polyester
- 100,000 to 250,000 cycles by UL 508/UL60947-4-1 for air resistance heating application

Definite Purpose Contactors

NOARK Ex9CKT Series

Certifications

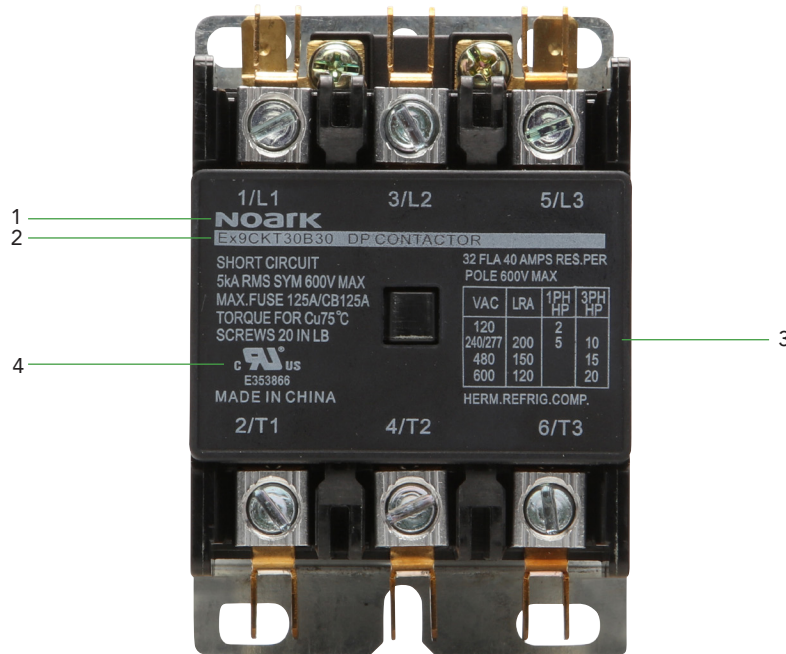
- UL 60947-1; UL 60947-4-1; UL 508; UL E353866
- CSA Certified, C22.2 No. 265900
- IEC/EN 60947-4-1 Compliant
- CE Approved
- Compliance to ARI-780 HVAC standards



Definite Purpose Contactors

Ex9CKT Product Selection Guide

Label



1. Brand
2. Product Selection
3. AC Coil Voltage
4. UL Recognized Component

F

Product Selection Guide

Ex9CKT	40	A	30	G	7	N	Q
NOARK Ex9CKT Series	Full Load Amperage (FLA)	Terminal	Poles	Coil Voltage	Frequency	Power Pole QCT Option	Coil QCT Option
	20: 20 A 25: 25 A 30: 30 A 32: 32 A 40: 40 A 50: 50 A 60: 60 A 75: 75 A 90: 90 A	A: Phillips screw with pressure plate B: Lug Terminal with slot screw C: Lug Terminal with hex socket screw	10: 1NO + 1 Shunt 20: 2NO 30: 3NO 40: 4NO	B: 24 V G: 120 V XU: 208/240 V N: 277 V R: 440 V T: 480 V Y: 600 V	7: 50/60 Hz	N: No QCT on power pole Blank: Dual QCT on each pole Q ^Δ : Quad QCT on each pole	Blank: Dual QCT Q: Quad QCT

Δ 1 & 2 Pole only

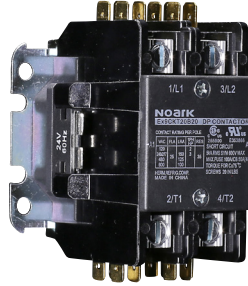
NOARK Standard: L means coil mounted on top side; T means coil mounted on bottom side
Contact NOARK Sales for more configuration

Definite Purpose Contactors

Ex9CKT 20A



20A, Screw, 50/60Hz, Dual QCT



20A, Screw, 50/60Hz, Quad QCT



Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT20A10B7	1314177	Ex9CKT20A10B7Q	1314115
120	Ex9CKT20A10G7	1314178	Ex9CKT20A10G7Q	1314116
208~240	Ex9CKT20A10XU7	1314179	Ex9CKT20A10XU7Q	1314117
277	Ex9CKT20A10N7	1314180	Ex9CKT20A10N7Q	1314118
440	Ex9CKT20A10R7	1314181	Ex9CKT20A10R7Q	1314119
480	Ex9CKT20A10T7	1314182	Ex9CKT20A10T7Q	1314120
600	Ex9CKT20A10Y7	1313992	Ex9CKT20A10Y7Q	1314083

20A, Screw, 50/60Hz, Dual QCT

20A, Screw, 50/60Hz, Quad QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT20A20B7	1314491	Ex9CKT20A20B7Q	1314431
120	Ex9CKT20A20G7	1314492	Ex9CKT20A20G7Q	1314432
208~240	Ex9CKT20A20XU7	1314493	Ex9CKT20A20XU7Q	1314433
277	Ex9CKT20A20N7	1314494	Ex9CKT20A20N7Q	1314434
440	Ex9CKT20A20R7	1314495	Ex9CKT20A20R7Q	1314435
480	Ex9CKT20A20T7	1314496	Ex9CKT20A20T7Q	1314436
600	Ex9CKT20A20Y7	1313997	Ex9CKT20A20Y7Q	1314623

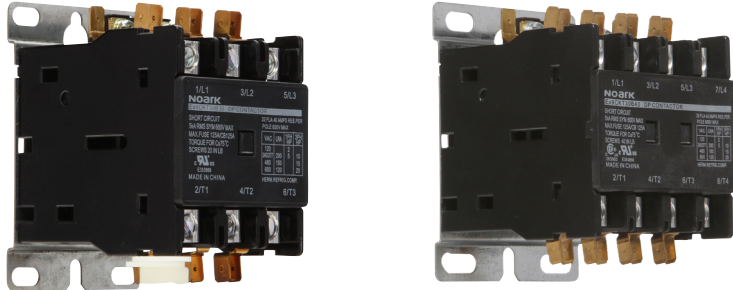
20A, Screw, 50/60Hz, Dual QCT

20A, Screw, 50/60Hz, Dual QCT

Coil Voltage Vac	3 Pole 3NO		4 Pole 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT20A30B7	1314312	Ex9CKT20A40B7	1314372
120	Ex9CKT20A30G7	1314313	Ex9CKT20A40G7	1314373
208~240	Ex9CKT20A30XU7	1314314	Ex9CKT20A40XU7	1314374
277	Ex9CKT20A30N7	1314315	Ex9CKT20A40N7	1314375
440	Ex9CKT20A30R7	1314316	Ex9CKT20A40R7	1314376
480	Ex9CKT20A30T7	1314317	Ex9CKT20A40T7	1314377
600	Ex9CKT20A30Y7	1314002	Ex9CKT20A40Y7	1314030

Definite Purpose Contactors

Ex9CKT 20A



Certifications
IEC/EN 60947-4-1




20A, Lug, 50/60Hz, Dual QCT 20A, Lug, 50/60Hz, Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT20B10B7	1314146	Ex9CKT20B10B7Q	1314085
120	Ex9CKT20B10G7	1314147	Ex9CKT20B10G7Q	1314086
208~240	Ex9CKT20B10XU7	1314148	Ex9CKT20B10XU7Q	1314087
277	Ex9CKT20B10N7	1314149	Ex9CKT20B10N7Q	1314088
440	Ex9CKT20B10R7	1314150	Ex9CKT20B10R7Q	1314089
480	Ex9CKT20B10T7	1314151	Ex9CKT20B10T7Q	1314090
600	Ex9CKT20B10Y7	1314012	Ex9CKT20B10Y7Q	1314629

20A, Lug, 50/60Hz, Dual QCT 20A, Lug, 50/60Hz, Quad QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT20B20B7	1314461	Ex9CKT20B20B7Q	1314201
120	Ex9CKT20B20G7	1314462	Ex9CKT20B20G7Q	1314402
208~240	Ex9CKT20B20XU7	1314463	Ex9CKT20B20XU7Q	1314403
277	Ex9CKT20B20N7	1314464	Ex9CKT20B20N7Q	1314404
440	Ex9CKT20B20R7	1314465	Ex9CKT20B20R7Q	1314405
480	Ex9CKT20B20T7	1314466	Ex9CKT20B20T7Q	1314406
600	Ex9CKT20B20Y7	1314017	Ex9CKT20B20Y7Q	1314634

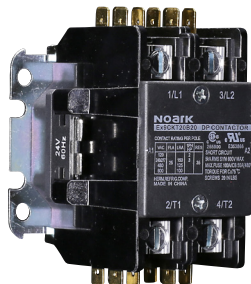
20A, Lug, 50/60Hz, Dual QCT 20A, Lug, 50/60Hz, Dual QCT

Coil Voltage Vac	3 Pole 3NO		4 Pole 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT20B30B7	1314282	Ex9CKT20B40B7	1314342
120	Ex9CKT20B30G7	1314283	Ex9CKT20B40G7	1314343
208~240	Ex9CKT20B30XU7	1314284	Ex9CKT20B40XU7	1314344
277	Ex9CKT20B30N7	1314285	Ex9CKT20B40N7	1314345
440	Ex9CKT20B30R7	1314286	Ex9CKT20B40R7	1314346
480	Ex9CKT20B30T7	1314287	Ex9CKT20B40T7	1314347
600	Ex9CKT20B30Y7	1314073	Ex9CKT20B40Y7	1314078

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Definite Purpose Contactors

Ex9CKT 25A



Certifications
IEC/EN 60947-4-1

25A, Screw, 50/60Hz, Dual QCT

25A, Screw, 50/60Hz, Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT25A10B7	1314183	Ex9CKT25A10B7Q	1314121
120	Ex9CKT25A10G7	1314184	Ex9CKT25A10G7Q	1314122
208~240	Ex9CKT25A10XU7	1314185	Ex9CKT25A10XU7Q	1314123
277	Ex9CKT25A10N7	1314186	Ex9CKT25A10N7Q	1314124
440	Ex9CKT25A10R7	1314187	Ex9CKT25A10R7Q	1314125
480	Ex9CKT25A10T7	1314188	Ex9CKT25A10T7Q	1314126
600	Ex9CKT25A10Y7	1313993	Ex9CKT25A10Y7Q	1314084

25A, Screw, 50/60Hz, Dual QCT

25A, Screw, 50/60Hz, Quad QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT25A20B7	1314497	Ex9CKT25A20B7Q	1314437
120	Ex9CKT25A20G7	1314498	Ex9CKT25A20G7Q	1314438
208~240	Ex9CKT25A20XU7	1314499	Ex9CKT25A20XU7Q	1314439
277	Ex9CKT25A20N7	1314500	Ex9CKT25A20N7Q	1314440
440	Ex9CKT25A20R7	1314501	Ex9CKT25A20R7Q	1314441
480	Ex9CKT25A20T7	1314502	Ex9CKT25A20T7Q	1314442
600	Ex9CKT25A20Y7	1313998	Ex9CKT25A20Y7Q	1314624

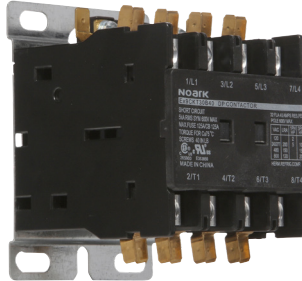
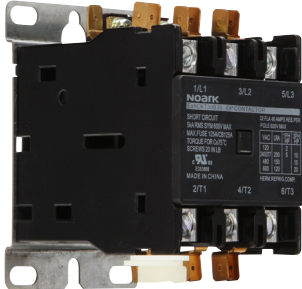
25A, Screw, 50/60Hz, Dual QCT

25A, Screw, 50/60Hz, Dual QCT

Coil Voltage Vac	3 Pole 3NO		4 Pole 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT25A30B7	1314318	Ex9CKT25A40B7	1314378
120	Ex9CKT25A30G7	1314319	Ex9CKT25A40G7	1314379
208~240	Ex9CKT25A30XU7	1314320	Ex9CKT25A40XU7	1314380
277	Ex9CKT25A30N7	1314321	Ex9CKT25A40N7	1314381
440	Ex9CKT25A30R7	1314322	Ex9CKT25A40R7	1314382
480	Ex9CKT25A30T7	1314323	Ex9CKT25A40T7	1314383
600	Ex9CKT25A30Y7	1314003	Ex9CKT25A40Y7	1314008

Definite Purpose Contactors

Ex9CKT 25A



Certifications
IEC/EN 60947-4-1

25A, Lug, 50/60Hz, Dual QCT

25A, Screw, 50/60Hz, Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT25B10B7	1314152	Ex9CKT25B10B7Q	1314091
120	Ex9CKT25B10G7	1314153	Ex9CKT25B10G7Q	1314092
208~240	Ex9CKT25B10XU7	1314154	Ex9CKT25B10XU7Q	1314093
277	Ex9CKT25B10N7	1314155	Ex9CKT25B10N7Q	1314094
440	Ex9CKT25B10R7	1314156	Ex9CKT25B10R7Q	1314095
480	Ex9CKT25B10T7	1314157	Ex9CKT25B10T7Q	1314096
600	Ex9CKT25B10Y7	1314013	Ex9CKT25B10Y7Q	1314630

25A, Lug, 50/60Hz, Dual QCT

25A, Screw, 50/60Hz, Quad QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT25B20B7	1314467	Ex9CKT25B20B7Q	1314407
120	Ex9CKT25B20G7	1314468	Ex9CKT25B20G7Q	1314408
208~240	Ex9CKT25B20XU7	1314469	Ex9CKT25B20XU7Q	1314409
277	Ex9CKT25B20N7	1314470	Ex9CKT25B20N7Q	1314410
440	Ex9CKT25B20R7	1314471	Ex9CKT25B20R7Q	1314411
480	Ex9CKT25B20T7	1314472	Ex9CKT25B20T7Q	1314412
600	Ex9CKT25B20Y7	1314018	Ex9CKT25B20Y7Q	1314635

25A, Lug, 50/60Hz, Dual QCT

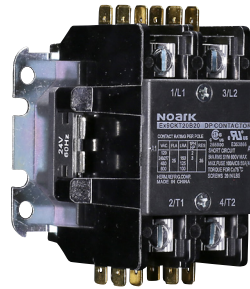
25A, Screw, 50/60Hz, Dual QCT

Coil Voltage Vac	3 Pole 3NO		4 Pole 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT25B30B7	1314288	Ex9CKT25B40B7	1314348
120	Ex9CKT25B30G7	1314289	Ex9CKT25B40G7	1314349
208~240	Ex9CKT25B30XU7	1314290	Ex9CKT25B40XU7	1314350
277	Ex9CKT25B30N7	1314291	Ex9CKT25B40N7	1314351
440	Ex9CKT25B30R7	1314292	Ex9CKT25B40R7	1314352
480	Ex9CKT25B30T7	1314293	Ex9CKT25B40T7	1314353
600	Ex9CKT25B30Y7	1314074	Ex9CKT25B40Y7	1314079

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Definite Purpose Contactors

Ex9CKT 30A



30A, Screw, 50/60Hz, Dual QCT

30A, Screw, 50/60Hz, Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT30A10B7	1314189	Ex9CKT30A10B7Q	1314127
120	Ex9CKT30A10G7	1314190	Ex9CKT30A10G7Q	1314128
208~240	Ex9CKT30A10XU7	1314191	Ex9CKT30A10XU7Q	1314129
277	Ex9CKT30A10N7	1314692	Ex9CKT30A10N7Q	1314130
440	Ex9CKT30A10R7	1314693	Ex9CKT30A10R7Q	1314131
480	Ex9CKT30A10T7	1314694	Ex9CKT30A10T7Q	1314132
600	Ex9CKT30A10Y7	1313994	Ex9CKT30A10Y7Q	1314620

30A, Screw, 50/60Hz, Dual QCT

30A, Screw, 50/60Hz, Quad QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT30A20B7	1314503	Ex9CKT30A20B7Q	1314443
120	Ex9CKT30A20G7	1314504	Ex9CKT30A20G7Q	1314444
208~240	Ex9CKT30A20XU7	1314505	Ex9CKT30A20XU7Q	1314445
277	Ex9CKT30A20N7	1314506	Ex9CKT30A20N7Q	1314446
440	Ex9CKT30A20R7	1314507	Ex9CKT30A20R7Q	1314447
480	Ex9CKT30A20T7	1314508	Ex9CKT30A20T7Q	1314448
600	Ex9CKT30A20Y7	1313999	Ex9CKT30A20Y7Q	1314625

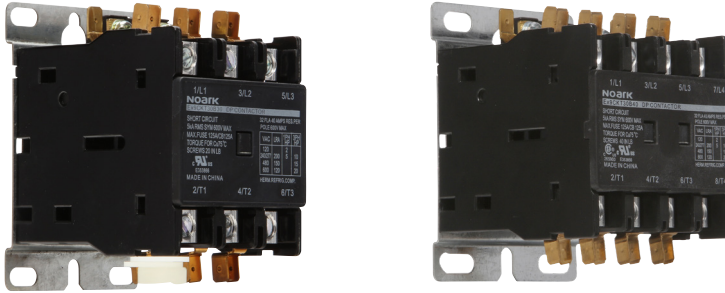
30A, Screw, 50/60Hz, Dual QCT

30A, Screw, 50/60Hz, Dual QCT

Coil Voltage Vac	3 Pole 3NO		4 Pole 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT30A30B7	1314324	Ex9CKT30A40B7	1314384
120	Ex9CKT30A30G7	1314325	Ex9CKT30A40G7	1314385
208~240	Ex9CKT30A30XU7	1314326	Ex9CKT30A40XU7	1314386
277	Ex9CKT30A30N7	1314327	Ex9CKT30A40N7	1314387
440	Ex9CKT30A30R7	1314328	Ex9CKT30A40R7	1314388
480	Ex9CKT30A30T7	1314329	Ex9CKT30A40T7	1314389
600	Ex9CKT30A30Y7	1314004	Ex9CKT30A40Y7	1314009

Definite Purpose Contactors

Ex9CKT 30A



30A, Lug, 50/60Hz, Dual QCT 30A, Lug, 50/60Hz, Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT30B10B7	1314158	Ex9CKT30B10B7Q	1314097
120	Ex9CKT30B10G7	1314160	Ex9CKT30B10G7Q	1314098
208~240	Ex9CKT30B10XU7	1314161	Ex9CKT30B10XU7Q	1314099
277	Ex9CKT30B10N7	1314162	Ex9CKT30B10N7Q	1314100
440	Ex9CKT30B10R7	1314163	Ex9CKT30B10R7Q	1314101
480	Ex9CKT30B10T7	1314164	Ex9CKT30B10T7Q	1314102
600	Ex9CKT30B10Y7	1314014	Ex9CKT30B10Y7Q	1314631

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30A, Lug, 50/60Hz, Dual QCT 30A, Lug, 50/60Hz, Quad QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT30B20B7	1314473	Ex9CKT30B20B7Q	1314413
120	Ex9CKT30B20G7	1314474	Ex9CKT30B20G7Q	1314414
208~240	Ex9CKT30B20XU7	1314475	Ex9CKT30B20XU7Q	1314415
277	Ex9CKT30B20N7	1314476	Ex9CKT30B20N7Q	1314416
440	Ex9CKT30B20R7	1314477	Ex9CKT30B20R7Q	1314417
480	Ex9CKT30B20T7	1314478	Ex9CKT30B20T7Q	1314418
600	Ex9CKT30B20Y7	1314019	Ex9CKT30B20Y7Q	1314636

30A, Lug, 50/60Hz, Dual QCT 30A, Lug, 50/60Hz, Dual QCT

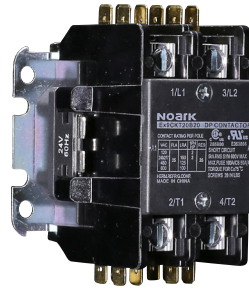
Coil Voltage Vac	3 Pole 3NO		4 Pole 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT30B30B7	1314294	Ex9CKT30B40B7	1314354
120	Ex9CKT30B30G7	1314295	Ex9CKT30B40G7	1314355
208~240	Ex9CKT30B30XU7	1314296	Ex9CKT30B40XU7	1314356
277	Ex9CKT30B30N7	1314297	Ex9CKT30B40N7	1314357
440	Ex9CKT30B30R7	1314298	Ex9CKT30B40R7	1314358
480	Ex9CKT30B30T7	1314299	Ex9CKT30B40T7	1314359
600	Ex9CKT30B30Y7	1314075	Ex9CKT30B40Y7	1314080

Definite Purpose Contactors

Ex9CKT 32A



32A, Screw, 50/60Hz, Dual QCT



32A, Screw, 50/60Hz, Quad QCT



Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT32A10B7	1314695	Ex9CKT32A10B7Q	1314133
120	Ex9CKT32A10G7	1314704	Ex9CKT32A10G7Q	1314134
208~240	Ex9CKT32A10XU7	1314705	Ex9CKT32A10XU7Q	1314135
277	Ex9CKT32A10N7	1314706	Ex9CKT32A10N7Q	1314136
440	Ex9CKT32A10R7	1314707	Ex9CKT32A10R7Q	1314137
480	Ex9CKT32A10T7	1314716	Ex9CKT32A10T7Q	1314139
600	Ex9CKT32A10Y7	1313995	Ex9CKT32A10Y7Q	1314621

32A, Screw, 50/60Hz, Dual QCT

32A, Screw, 50/60Hz, Quad QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT32A20B7	1314509	Ex9CKT32A20B7Q	1314449
120	Ex9CKT32A20G7	1314510	Ex9CKT32A20G7Q	1314450
208~240	Ex9CKT32A20XU7	1314511	Ex9CKT32A20XU7Q	1314451
277	Ex9CKT32A20N7	1314512	Ex9CKT32A20N7Q	1314452
440	Ex9CKT32A20R7	1314513	Ex9CKT32A20R7Q	1314453
480	Ex9CKT32A20T7	1314514	Ex9CKT32A20T7Q	1314454
600	Ex9CKT32A20Y7	1314000	Ex9CKT32A20Y7Q	1314626

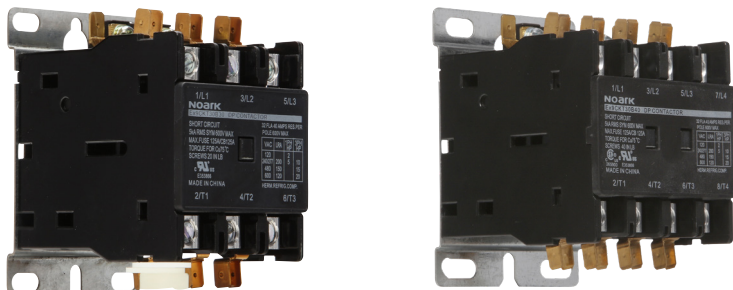
32A, Screw, 50/60Hz, Dual QCT

32A, Screw, 50/60Hz, Dual QCT

Coil Voltage Vac	3 Pole 3NO		4 Pole 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT32A30B7	1314330	Ex9CKT32A40B7	1314390
120	Ex9CKT32A30G7	1314331	Ex9CKT32A40G7	1314391
208~240	Ex9CKT32A30XU7	1314332	Ex9CKT32A40XU7	1314392
277	Ex9CKT32A30N7	1314333	Ex9CKT32A40N7	1314393
440	Ex9CKT32A30R7	1314334	Ex9CKT32A40R7	1314394
480	Ex9CKT32A30T7	1314335	Ex9CKT32A40T7	1314395
600	Ex9CKT32A30Y7	1314005	Ex9CKT32A40Y7	1314010

Definite Purpose Contactors

Ex9CKT 32A



32A, Lug, 50/60Hz, Dual QCT 32A, Lug, 50/60Hz, Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT32B10B7	1314165	Ex9CKT32B10B7Q	1314103
120	Ex9CKT32B10G7	1314166	Ex9CKT32B10G7Q	1314104
208~240	Ex9CKT32B10XU7	1314167	Ex9CKT32B10XU7Q	1314105
277	Ex9CKT32B10N7	1314168	Ex9CKT32B10N7Q	1314106
440	Ex9CKT32B10R7	1314169	Ex9CKT32B10R7Q	1314107
480	Ex9CKT32B10T7	1314170	Ex9CKT32B10T7Q	1314108
600	Ex9CKT32B10Y7	1314015	Ex9CKT32B10Y7Q	1314632

32A, Lug, 50/60Hz, Dual QCT 32A, Lug, 50/60Hz, Quad QCT

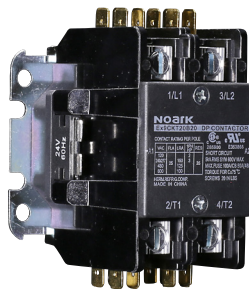
Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT32B20B7	1314479	Ex9CKT32B20B7Q	1314419
120	Ex9CKT32B20G7	1314480	Ex9CKT32B20G7Q	1314420
208~240	Ex9CKT32B20XU7	1314481	Ex9CKT32B20XU7Q	1314421
277	Ex9CKT32B20N7	1314482	Ex9CKT32B20N7Q	1314422
440	Ex9CKT32B20R7	1314483	Ex9CKT32B20R7Q	1314423
480	Ex9CKT32B20T7	1314484	Ex9CKT32B20T7Q	1314424
600	Ex9CKT32B20Y7	1314071	Ex9CKT32B20Y7Q	1314637

32A, Lug, 50/60Hz, Dual QCT 32A, Lug, 50/60Hz, Dual QCT

Coil Voltage Vac	3 Pole 3NO		4 Pole 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT32B30B7	1314300	Ex9CKT32B40B7	1314360
120	Ex9CKT32B30G7	1314301	Ex9CKT32B40G7	1314361
208~240	Ex9CKT32B30XU7	1314302	Ex9CKT32B40XU7	1314362
277	Ex9CKT32B30N7	1314303	Ex9CKT32B40N7	1314363
440	Ex9CKT32B30R7	1314304	Ex9CKT32B40R7	1314364
480	Ex9CKT32B30T7	1314305	Ex9CKT32B40T7	1314365
600	Ex9CKT32B30Y7	1314076	Ex9CKT32B40Y7	1314081

Definite Purpose Contactors

Ex9CKT 40A



40A, Screw, 50/60Hz, Dual QCT

40A, Screw, 50/60Hz, Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT40A10B7	1314717	Ex9CKT40A10B7Q	1314140
120	Ex9CKT40A10G7	1314718	Ex9CKT40A10G7Q	1314141
208~240	Ex9CKT40A10XU7	1314719	Ex9CKT40A10XU7Q	1314142
277	Ex9CKT40A10N7	1314728	Ex9CKT40A10N7Q	1314143
440	Ex9CKT40A10R7	1314729	Ex9CKT40A10R7Q	1314144
480	Ex9CKT40A10T7	1314730	Ex9CKT40A10T7Q	1314145
600	Ex9CKT40A10Y7	1313996	Ex9CKT40A10Y7Q	1314622

40A, Screw, 50/60Hz, Dual QCT

40A, Screw, 50/60Hz, Quad QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT40A20B7	1314515	Ex9CKT40A20B7Q	1314455
120	Ex9CKT40A20G7	1314516	Ex9CKT40A20G7Q	1314456
208~240	Ex9CKT40A20XU7	1314517	Ex9CKT40A20XU7Q	1314457
277	Ex9CKT40A20N7	1314518	Ex9CKT40A20N7Q	1314458
440	Ex9CKT40A20R7	1314519	Ex9CKT40A20R7Q	1314459
480	Ex9CKT40A20T7	1314520	Ex9CKT40A20T7Q	1314460
600	Ex9CKT40A20Y7	1314001	Ex9CKT40A20Y7Q	1314627

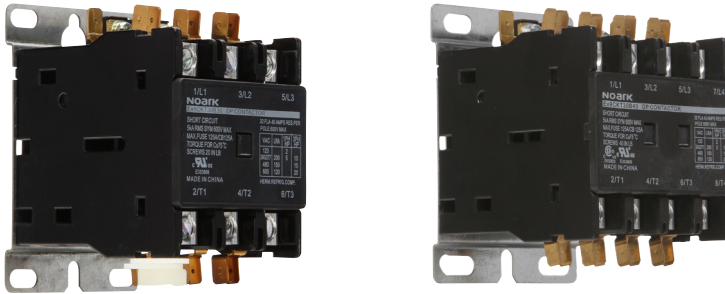
40A, Screw, 50/60Hz, Dual QCT

40A, Screw, 50/60Hz, Dual QCT

Coil Voltage Vac	3 Pole 3NO		4 Pole 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT40A30B7	1314336	Ex9CKT40A40B7	1314396
120	Ex9CKT40A30G7	1314337	Ex9CKT40A40G7	1314397
208~240	Ex9CKT40A30XU7	1314338	Ex9CKT40A40XU7	1314398
277	Ex9CKT40A30N7	1314339	Ex9CKT40A40N7	1314399
440	Ex9CKT40A30R7	1314340	Ex9CKT40A40R7	1314400
480	Ex9CKT40A30T7	1314341	Ex9CKT40A40T7	1314401
600	Ex9CKT40A30Y7	1314006	Ex9CKT40A40Y7	1314011

Definite Purpose Contactors

Ex9CKT 40A



Certifications
IEC/EN 60947-4-1

40A, Lug, 50/60Hz, Dual QCT 40A, Lug, 50/60Hz, Dual QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT40B10B7	1314171	Ex9CKT40B10B7Q	1314109
120	Ex9CKT40B10G7	1314172	Ex9CKT40B10G7Q	1314110
208~240	Ex9CKT40B10XU7	1314173	Ex9CKT40B10XU7Q	1314111
277	Ex9CKT40B10N7	1314174	Ex9CKT40B10N7Q	1314112
440	Ex9CKT40B10R7	1314175	Ex9CKT40B10R7Q	1314113
480	Ex9CKT40B10T7	1314176	Ex9CKT40B10T7Q	1314114
600	Ex9CKT40B10Y7	1314016	Ex9CKT40B10Y7Q	1314633

40A, Lug, 50/60Hz, Dual QCT 40A, Lug, 50/60Hz, Dual QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT40B20B7	1314485	Ex9CKT40B20B7Q	1314425
120	Ex9CKT40B20G7	1314486	Ex9CKT40B20G7Q	1314426
208~240	Ex9CKT40B20XU7	1314487	Ex9CKT40B20XU7Q	1314427
277	Ex9CKT40B20N7	1314488	Ex9CKT40B20N7Q	1314428
440	Ex9CKT40B20R7	1314489	Ex9CKT40B20R7Q	1314429
480	Ex9CKT40B20T7	1314490	Ex9CKT40B20T7Q	1314430
600	Ex9CKT40B20Y7	1314072	Ex9CKT40B20Y7Q	1314638

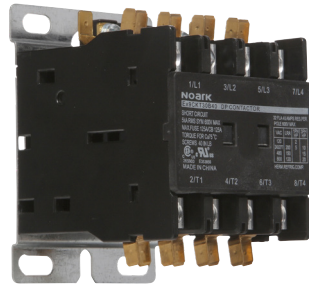
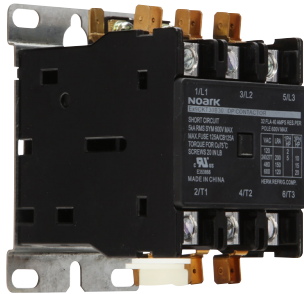
40A, Lug, 50/60Hz, Dual QCT 40A, Lug, 50/60Hz, Dual QCT

Coil Voltage Vac	3 Pole 3NO		4 Pole 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT40B30B7	1314306	Ex9CKT40B40B7	1314366
120	Ex9CKT40B30G7	1314307	Ex9CKT40B40G7	1314367
208~240	Ex9CKT40B30XU7	1314308	Ex9CKT40B40XU7	1314368
277	Ex9CKT40B30N7	1314309	Ex9CKT40B40N7	1314369
440	Ex9CKT40B30R7	1314310	Ex9CKT40B40R7	1314370
480	Ex9CKT40B30T7	1314311	Ex9CKT40B40T7	1314371
600	Ex9CKT40B30Y7	1314077	Ex9CKT40B40Y7	1314082

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Definite Purpose Contactors

Ex9CKT 50-90A



50A, Lug, 50/60Hz, Dual QCT 60A, Lug, 50/60Hz, Dual QCT

Coil Voltage Vac	3 Pole 3NO		3 Pole 3NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT50B30B7	1314521	Ex9CKT60B30B7	1314533
120	Ex9CKT50B30G7	1314524	Ex9CKT60B30G7	1314536
208~240	Ex9CKT50B30XU7	1314527	Ex9CKT60B30XU7	1314539
277	Ex9CKT50B30N7	1314528	Ex9CKT60B30N7	1314540
440	Ex9CKT50B30R7	1314530	Ex9CKT60B30R7	1314542
480	Ex9CKT50B30T7	1314531	Ex9CKT60B30T7	1314543
600	Ex9CKT50B30Y7	1314532	Ex9CKT60B30Y7	1314544

75A, Lug, 50/60Hz, Dual QCT 90A, Lug, 50/60Hz, Dual QCT

Coil Voltage Vac	3 Pole 3NO		3 Pole 3NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT75B30B7	1314545	Ex9CKT90B30B7	1314557
120	Ex9CKT75B30G7	1314548	Ex9CKT90B30G7	1314560
208~240	Ex9CKT75B30XU7	1314551	Ex9CKT90B30XU7	1314563
277	Ex9CKT75B30N7	1314552	Ex9CKT90B30N7	1314564
440	Ex9CKT75B30R7	1314554	Ex9CKT90B30R7	1314566
480	Ex9CKT75B30T7	1314555	Ex9CKT90B30T7	1314567
600	Ex9CKT75B30Y7	1314556	Ex9CKT90B30Y7	1314568

Definite Purpose Contactors

Ex9CKT Packaging

Packaging

Full Load Amperage (A)	Poles	MOQ	Quantity (pc/carton)	Carton Weight lbs (kgs)		Piece Weight lbs (kgs)		Carton Dimensions in (mm)
				Gross	Net	Gross	Net	
20	1	64	64	45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64(0.29)	15.67x9.53x12.64 (398x250x335)
25	1	64	64	45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64(0.29)	
30	1	64	64	45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64(0.29)	
32	1	64	64	45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64(0.29)	
40	1	64	64	45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64(0.29)	
20	2	64	64	53.62 (24.32)	48.00 (21.77)	0.84(0.38)	0.75(0.34)	
25	2	64	64	53.62 (24.32)	48.00 (21.77)	0.84(0.38)	0.75(0.34)	
30	2	64	64	53.62 (24.32)	48.00 (21.77)	0.84(0.38)	0.75(0.34)	
32	2	64	64	53.62 (24.32)	48.00 (21.77)	0.84(0.38)	0.75(0.34)	
40	2	64	64	53.62 (24.32)	48.00 (21.77)	0.84(0.38)	0.75(0.34)	
20	3	54	54	56.48(25.62)	52.14(23.65)	1.04(0.47)	0.97(0.44)	15.67x9.53x12.64 (476x325x291)
25	3	54	54	56.48(25.62)	52.14(23.65)	1.04(0.47)	0.97(0.44)	
30	3	54	54	56.48(25.62)	52.14(23.65)	1.04(0.47)	0.97(0.44)	
32	3	54	54	56.48(25.62)	52.14(23.65)	1.04(0.47)	0.97(0.44)	
40	3	54	54	56.48(25.62)	52.14(23.65)	1.04(0.47)	0.97(0.44)	
20	4	24	24	32.83(14.89)	30.42(13.8)	1.37(0.62)	1.27(0.58)	15.67x9.53x12.64 (424x254x206)
25	4	24	24	32.83(14.89)	30.42(13.8)	1.37(0.62)	1.27(0.58)	
30	4	24	24	32.83(14.89)	30.42(13.8)	1.37(0.62)	1.27(0.58)	
32	4	24	24	32.83(14.89)	30.42(13.8)	1.37(0.62)	1.27(0.58)	
40	4	24	24	32.83(14.89)	30.42(13.8)	1.37(0.62)	1.27(0.58)	

F

Definite Purpose Contactors

Ex9CKT Specifications

20~40 FLA

Description	Poles	Full Load Amperage (A)			Resistive @ 600 Vac (A)	Locked Rotor (A)			Horsepower (hp)		
		240/277 V	480 V	600 V		240/277 V	480 V	600 V	Voltage (V)	1-Phase	3-Phase
Ex9CKT20	1&2	25			35	150	125	100	120	1	-
									240	2	-
									120	2	-
									240	3	-
Ex9CKT25	1&2				35	150	125	100	120	1	-
									240	2	-
									120	2	-
									240	3	-
Ex9CKT30	1&2	32			40	200	150	120	120	1	-
									240	2	-
									120	2	-
									240	3	-
Ex9CKT32	1&2				40	200	150	120	120	1	-
									240	2	-
									120	2	-
									240	3	-
Ex9CKT40	1&2	40			50	240	200	160	120	2	-
									240	3	-
									120	2	-
									240	3	-
Ex9CKT20	3 & 4	25			35	150	125	100	120	2	-
									240/277	5	10
									480	-	15
									600	-	20
Ex9CKT25	3 & 4				35	150	125	100	120	2	-
									240/277	5	10
									480	-	15
									600	-	20
Ex9CKT30	3 & 4	32			40	200	150	120	120	2	-
									240/277	5	10
									480	-	15
									600	-	20
Ex9CKT32	3 & 4				40	200	150	120	120	2	-
									240/277	5	10
									480	-	15
									600	-	20
Ex9CKT40	3 & 4	40			50	240	200	160	120	3	-
									240/277	7.5	10
									480	-	20
									600	-	25

Definite Purpose Contactors

Ex9CKT Specifications

50~90A FLA

Description	Poles	Full Load Amperage (A)			Resistive @ 600 Vac (A)	Locked Rotor (A)			Horsepower (hp)		
		240/277 V	480 V	600 V		240/277 V	480 V	600 V	Voltage (V)	1-Phase	3-Phase
Ex9CKT50	3	50	65	90	65	300	250	200	110/120	3	-
									200/208	7.5	15
									240/277	10	15
									480	-	25
									600	-	25
Ex9CKT60	3	65	75	90	75	360	300	240	110/120	5	-
									200/208	7.5	25
									240/277	10	25
									480	-	30
									600	-	30
Ex9CKT75	3	75	90	90	90	450	375	300	110/120	5	-
									200/208	10	20
									240/277	15	25
									480	-	50
									600	-	50
Ex9CKT90	3	90	120	120	120	540	450	360	110/120	7.5	-
									200/208	15	25
									240/277	20(88A FLA)	30
									480	-	60
									600	-	60(62 A FLA)

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Mechanical & Electrical Life

Mechanical	1,000,000 cycles
Electrical	250,000 cycle (AC Resistance Air Heating Load) /100,000 cycle (Inductive Load)

Definite Purpose Contactors

Ex9CKT Specifications

20~40 FLA Coil

1 Pole Contactors (20-40A)

	Coil Data						
	24V	120V	208-240V	277V	440V	480V	600V
Nominal Coil Resistance (Ω)	14.8	420	1185	2050	5400	6890	9480
Nominal Coil Voltage (Vac)	24	120	208-240	277	440	480	600
Pick-up Voltage (Max.)	20.4	102	177	236	374	408	510
Drop-out Voltage (Min)	4.8	24	48	56	88	96	120
Nominal Inrush (VA)							
50Hz	32	32	32	32	32	32	32
60Hz	31.5	31.5	31.5	31.5	31.5	31.5	31.5
Nominal Seal (VA)							
50Hz	9.3	9.3	9.3	9.3	9.3	9.3	9.3
60Hz	9	9	9	9	9	9	9

2 Pole Contactors (20-40A)

	Coil Data						
	24V	120V	208-240V	277V	440V	480V	600V
Nominal Coil Resistance (Ω)	10.5	250	880	1400	3630	3845	6250
Nominal Coil Voltage (Vac)	24V	120V	208-240V	277V	440	480	600
Pick-up Voltage (Max.)	20.4	102	177	236	374	408	510
Drop-out Voltage (Min)	4.8	24	48	56	88	96	120
Nominal Inrush (VA)							
50Hz	40	40	40	40	40	40	40
60Hz	38.5	38.5	38.5	38.5	38.5	38.5	38.5
Nominal Seal (VA)							
50Hz	10	10	10	10	10	10	10
60Hz	9.5	9.5	9.5	9.5	9.5	9.5	9.5

Definite Purpose Contactors

Ex9CKT Specifications

20~40 FLA Coil

3 Pole Contactors (20-40A)

	Coil Data						
	24V	120V	208-240V	277V	440V	480V	600V
Nominal Coil Resistance (Ω)	8.5	178	630	1180	1205	2650	5150
Nominal Coil Voltage (Vac)	24	120	208 - 240	277	440	480	600
Pick-up Voltage (Max.)	20.4	102	177	236	374	408	510
Drop-out Voltage (Min)	4.8	24	48	56	88	96	120
Nominal Inrush (VA)							
50Hz	60	60	75	60	60	60	60
60Hz	53	53	68	53	53	53	53
Nominal Seal (VA)							
50Hz	8	8	11	8	8	8	8
60Hz	6.5	6.5	8.8	6.5	6.5	6.5	6.5

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4 Pole Contactors (20-40A)

	Coil Data						
	24V	120V	208-240V	277V	440V	480V	600V
Nominal Coil Resistance (Ω)	6	152.5	527	790	1700	2530	3480
Nominal Coil Voltage (Vac)	24	120	208 - 240	277	440	408	600
Pick-up Voltage (Max.)	20.4	102	177	236	374	320	510
Drop-out Voltage (Min)	4.8	24	48	56	88	96	120
Nominal Inrush (VA)							
50Hz	80.5	80.5	80.5	80.5	84	80.5	80.5
60Hz	73	73	73	73	76	73	73
Nominal Seal (VA)							
50Hz	10.5	10.5	10.5	10.5	10.5	10.5	10.5
60Hz	8.8	8.8	8.8	8.8	8.8	8.5	8.8

Definite Purpose Contactors

Ex9CKT Specifications

50~90 FLA Coil

50-60A FLA Coil

	Coil Data				
	24V	120V	277V	480V	600V
Nominal Coil Resistance (Ω)	4.2	125	620	2150	2620
Nominal Coil Voltage (Vac)	24	120	277	480	600
Pick-up Voltage (Max.)	20.4	102	235.45	408	510
Drop-out Voltage (Min)	4.8	24	55.4	96	120
Nominal Inrush (VA)					
50Hz	110	110	110	110	115
60Hz	95	95	95	95	105
Nominal Seal (VA)					
50Hz	15	15	15	15	14.5
60Hz	10	10	10	10	10.5

75-90A FLA Coil

	Coil Data				
	24V	120V	277V	480V	600V
Nominal Coil Resistance (Ω)	1.2	31	150	520	8450
Nominal Coil Voltage (Vac)	24	120	277	480	600
Pick-up Voltage (Max.)	20.4	102	235.45	408	510
Drop-out Voltage (Min)	4.8	24	55.4	96	120
Nominal Inrush (VA)					
50Hz	250	250	250	250	265
60Hz	210	210	210	210	250
Nominal Seal (VA)					
50Hz	30	30	30	30	31
60Hz	22	22	22	22	27

Definite Purpose Contactors

Ex9CKT Specifications

20~90 FLA Terminal

1 and 2 Pole (20-40A)

			20	25	30	32	40	
Line and Load Terminals			#10-32 Screw Box Lug					
Copper Cable AWG (mm ²)	Ridge Wire with Single Core	Screw	14~10 (2.5~6)		12~8 (6~10)		10~8 (4~10)	
		Lug	14~10 (2.5~6)		12~8 (6~10)		10~8 (4~10)	
	Flexible Stranded Wire	Screw	14~12 (2.5~4)		14~10 (2.5~6)		14~10 (2.5~6)	
		Lug	14~12 (2.5~4)		14~10 (2.5~6)		14~10 (2.5~6)	
Tightening Torque in-lb (N.m)	Coil		-					
	Main Circuit	Screw	20 (2.3)					
		Lug	40 (4.5)					
Quick Connects	Coil Terminals		Dual 0.250 QC (2)					
	Power Terminals		Dual 0.25 QC (2 or 4)					
Insulation System			Class B 266 °F (130 °C)					

3 and 4 Pole (20-40A)

			20	25	30	32	40			
Line and Load Terminals			#10-32 Screw Box Lug					F		
Copper Cable AWG (mm ²)	Ridge Wire with Single Core	Screw	14~10 (2.5~6)		12~8 (4~10)	¹⁶⁻⁸ _(1.5-10)	2~8 (4~10)	¹⁶⁻⁸ _(1.5-10)	2~8 (4~10)	¹⁶⁻⁸ _(1.5-10)
		Lug			14~8 (2.5~10)					
	Flexible Stranded Wire	Screw			14~12 (2.5~6)					
		Lug			14~8 (2.5~10)					
Tightening Torque in-lb (N.m)	Coil		10.5(1.2)							
	Main Circuit	Screw	20 (2.3)							
		Lug	40 (4.5)							
Quick Connects	Coil Terminals		Dual 0.250 QC (2)							
	Power Terminals		3/4P Dual							
Insulation System			Class B 266 °F (130 °C)							

50-90A

			50	60	75	90
Line and Load Terminals			#10-32 Screw Box Lug			
Copper Cable AWG (mm ²)	Ridge Wire with Single Core	Screw			-	
		Lug	14~4 (2.5~25)		6~3 (16~35)	4~3 (25~35)
	Flexible Stranded Wire	Screw			-	
		Lug	14~4 (2.5~25)		8~4 (10~25)	6~4 (16~25)
Tightening Torque in-lb (N.m)	Coil		10 (0.8)			
	Main Circuit	Screw	-			
		Lug	40 (4.5)		50 (5.6)	
Quick Connects	Coil Terminals			6-32 Screw and 0.250 QC (2)		Dual 0.250 QC (2)
	Power Terminals		Dual 0.250 QC (2)	Dual 0.250 QC (2)		
Insulation System			Class B 266 °F (130 °C)			

Definite Purpose Contactors

Ex9CKT Specifications

SCCR Ratings

* CB: must be NOARK UL MCCB M1N

SCCR (kA)	600V			480V	
	Ex9CKT	Fuse Type	Max. Rated Current	CB*	Max. Rated Current
100	Ex9CKT20...	Class J	80A	M1H50T3L	50A
	Ex9CKT25...				
	Ex9CKT30...				
	Ex9CKT32...				
	Ex9CKT40...		100A	M1H70T3L	70A
	Ex9CKT50...		200A	M1H100T3L	100A
	Ex9CKT60...				
	Ex9CKT75...				
Ex9CKT90...	M1H125T3 M2H125T3	125A			

Lighting Data

25-40A; 1P/2P

Inductive Rating (DP Contactor FLA)	Tungsten & Ballast Rating
25A	30A
30A	40A
40A	40A (Ballast) 50A (Tungsten)

25-40A; 3P/4P

Inductive Rating (DP Contactor FLA)	Tungsten & Ballast Rating
25A	30A
30A	40A
40A	40A (Ballast) 50A (Tungsten)

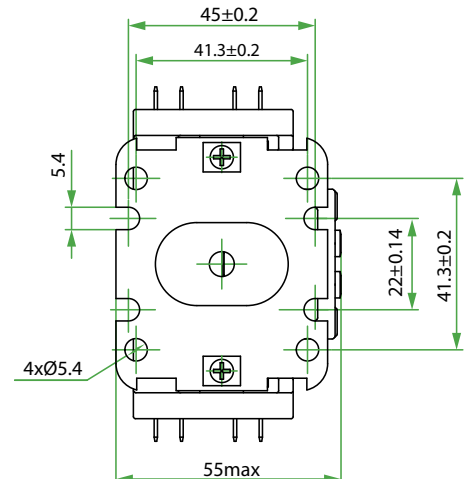
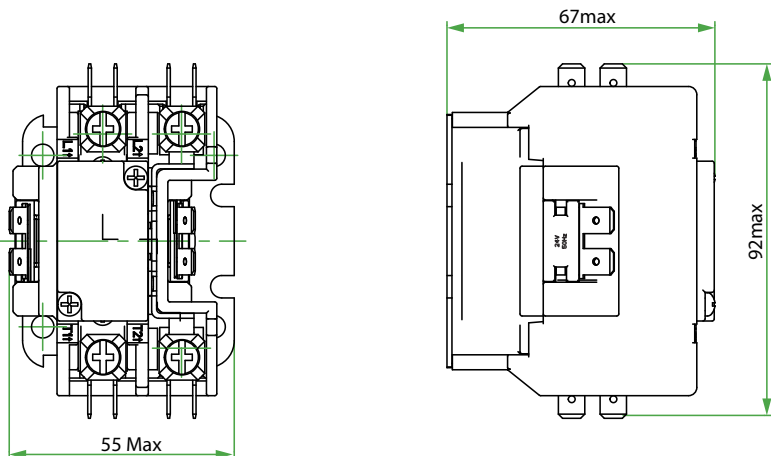
Definite Purpose Contactors

Ex9CKT Dimensions 20~40

Ex9CKT20~40 Screw

1 Pole

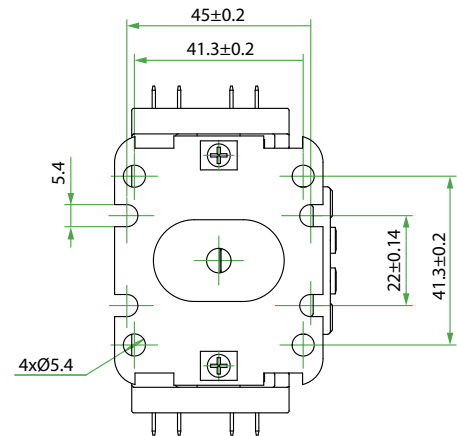
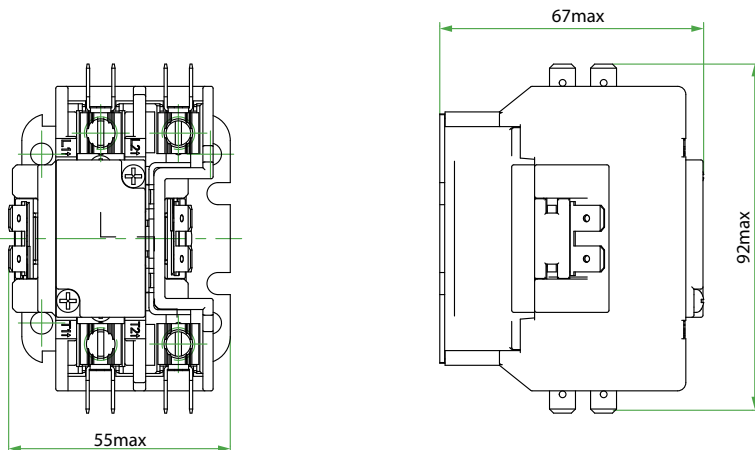
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Ex9CKT20~40 Lug

1 Pole

Unit: in. [mm]



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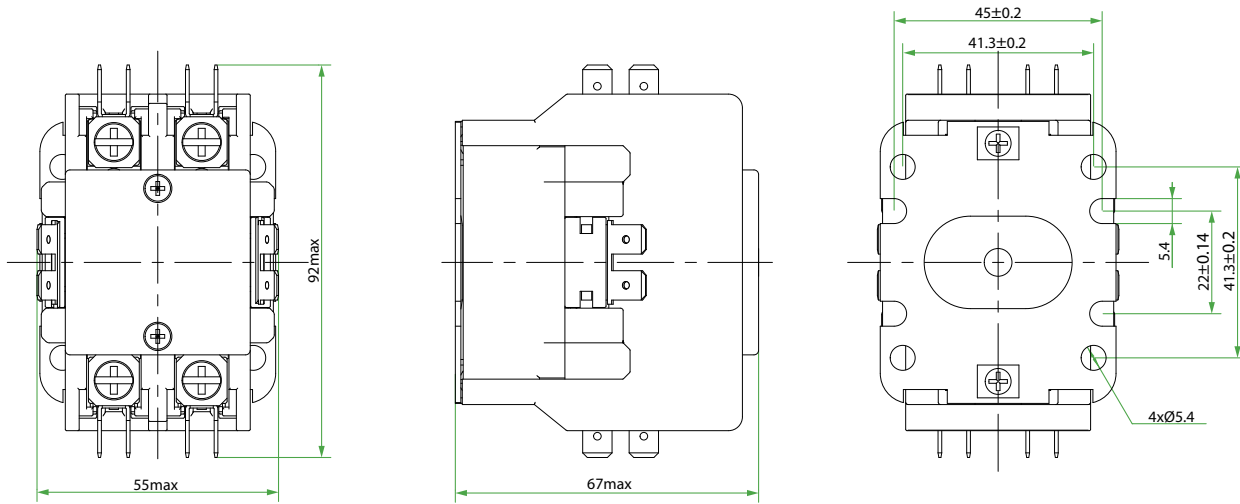
Definite Purpose Contactors

Ex9CKT Dimensions 20~40

Ex9CKT20~40 Screw

2 Pole

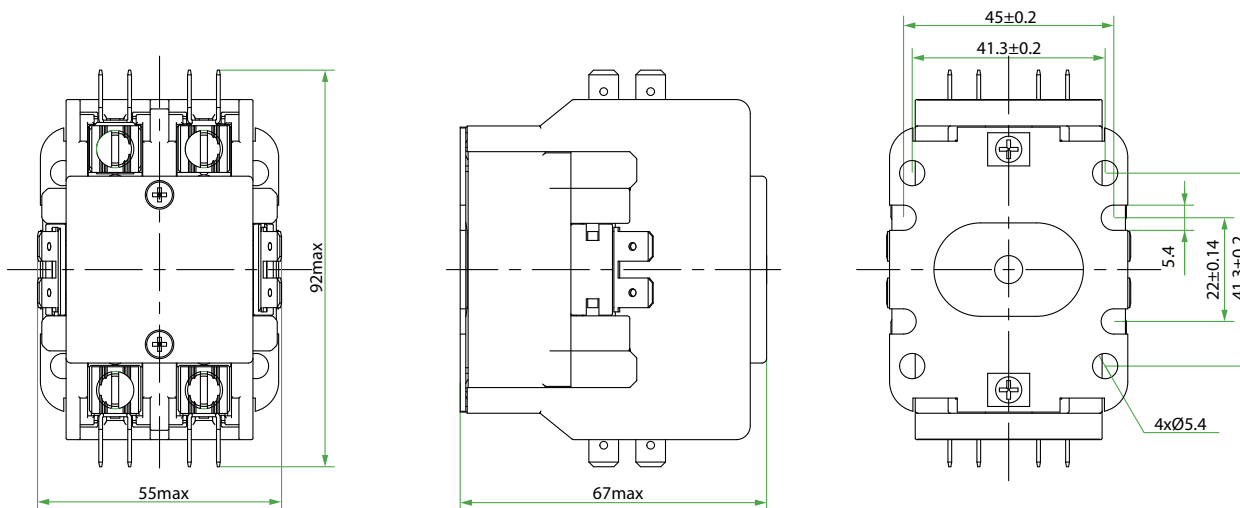
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Ex9CKT20~40 Lug

2 Pole

Unit: in. [mm]



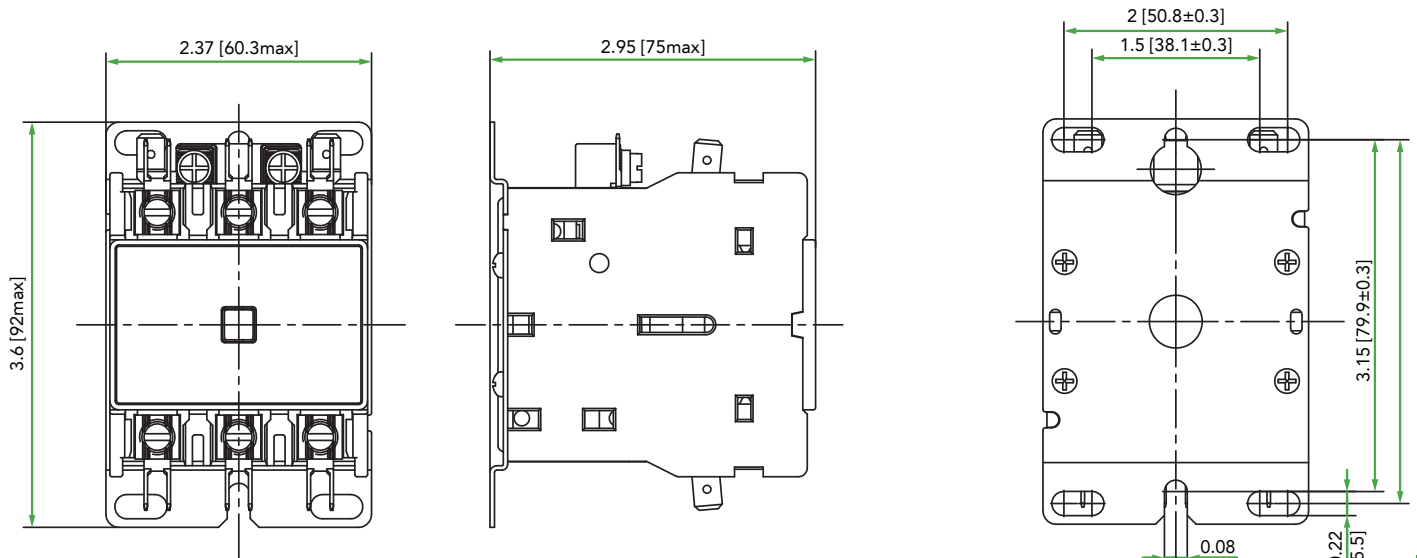
Definite Purpose Contactors

Ex9CKT Dimensions 20~40

Ex9CKT20~40

3 Pole

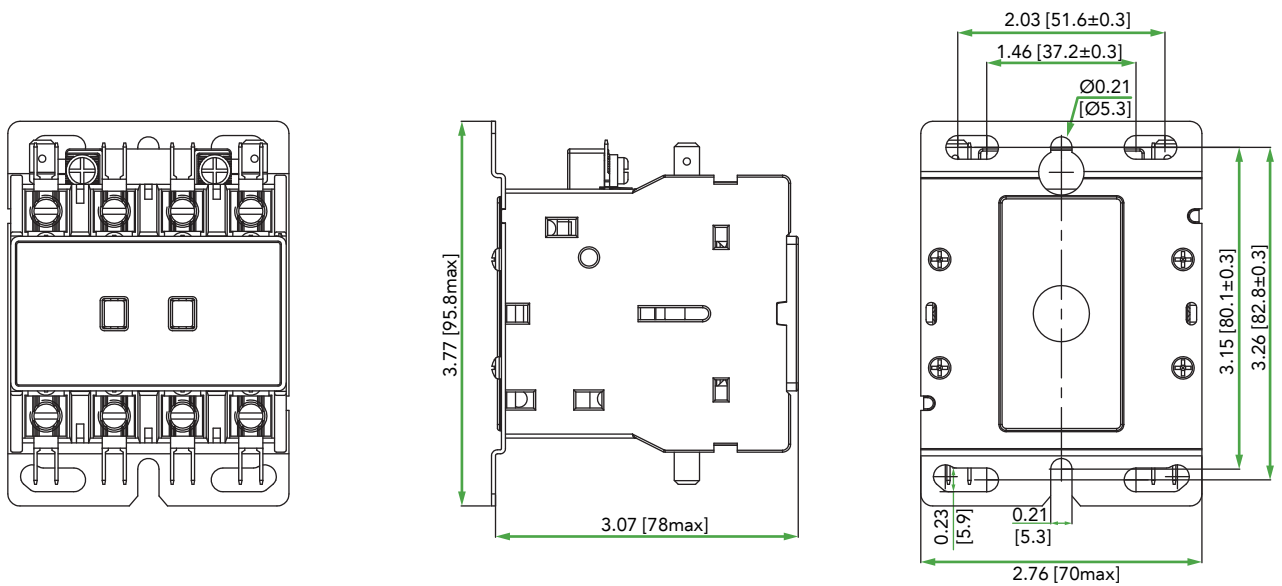
Unit: in. [mm]



Ex9CKT20~40

4 Pole

Unit: in. [mm]



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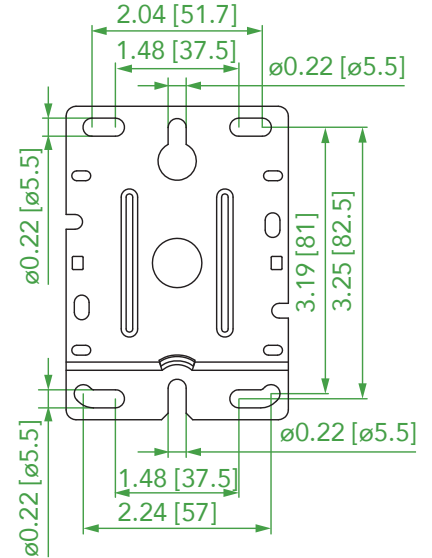
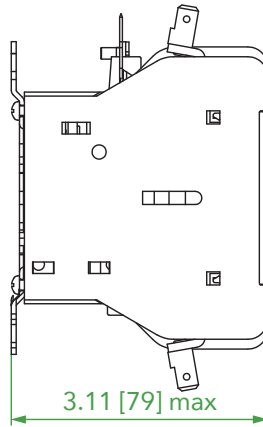
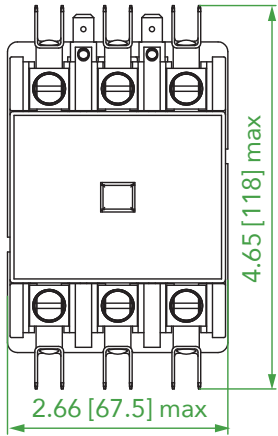
Definite Purpose Contactors

Ex9CKT Dimensions 50~90

Ex9CKT50~60

3 Poles

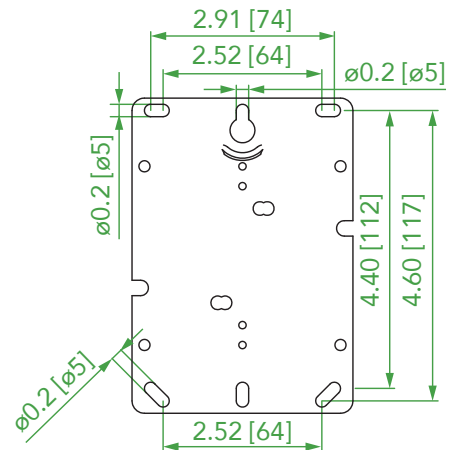
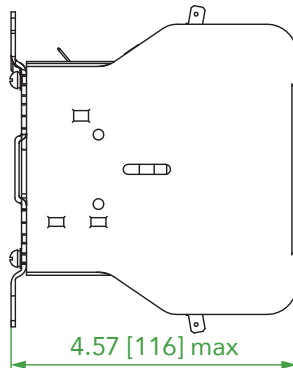
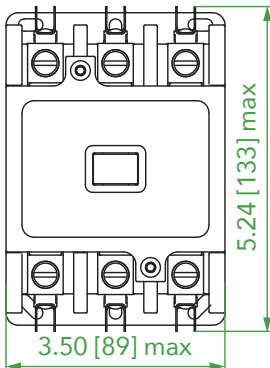
Unit: in [mm]



Ex9CKT75~90

3 Poles

Unit: in [mm]

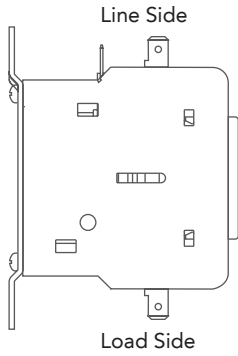


Definite Purpose Contactors

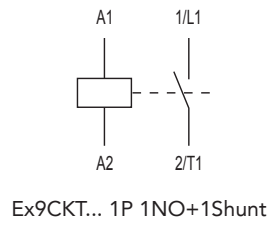
Ex9CKT Wiring Diagram

Wiring Diagram

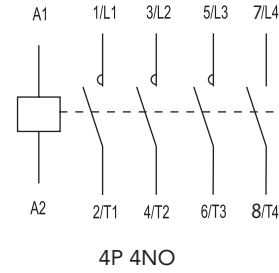
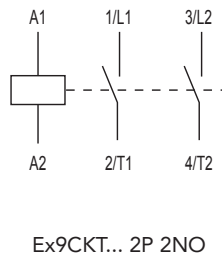
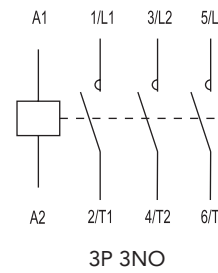
Ex9CKT20~40



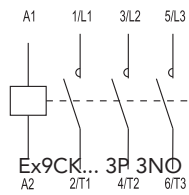
Ex9CKT20~40



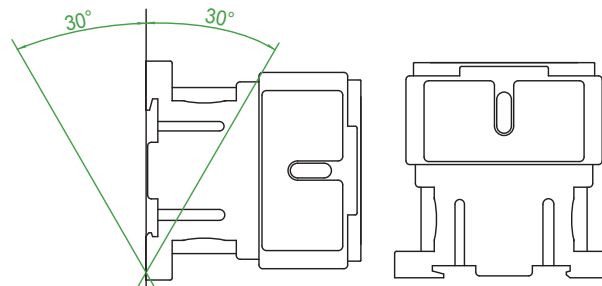
Ex9CKT20~40



Ex9CKT20~95



Ex9CKT20~90



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Definite Purpose Contactors

Ex9CKT Accessories and Specifications



AXF	C	11	Q
Description	Coil	Pole	Connection
Auxiliary Contact (Side Mount)	C: Auxiliary Contact D: Microswitch	11: 1NO+1NC 22: 2NO+2NC	Q: Quick Connect Blank: Screw Connect

- Contact a NOARK sales representative for more information.

Accessory Description	Matched Contactor	Product	Part Number
Auxiliary Contact (Side Mount)	Ex9CK20~90 3P Ex9CKT20~40 3P & 4P	AXFC11	1311725
		AXFC11Q	1314051
Microswitch	Ex9CKT20~40 3P & 4P	AXFD11	1314052
		AXFD22	1314053

Auxiliary Contact	AXFC11/AXFC11Q	AXFD11	AXFD22
Microswitch	-	SPDT One Switch Per Side	SPDT Two Switches Per Side
Mounting	Side Mounted (Maximum of two) Ex9CKT 20-40 Side Mounted Only	One Auxiliary Only	
	1NO+1NC	1NO+1NC	2NO+2NC
Wiring	0.250 Quick Connection Terminals		
	#6~32 Screw Terminal	-	

Contact Ratings - AXFC

Break (A)	120 Vac	3
	240 Vac	1.50
	480 Vac	0.75
	600 Vac	0.60
Make (A)	120 Vac	30
	240 Vac	15
	480 Vac	7.50
	600 Vac	6
Continuous (A)	120 Vac	10
	240 Vac	
	480 Vac	
	600 Vac	

Contact Ratings - AXFD

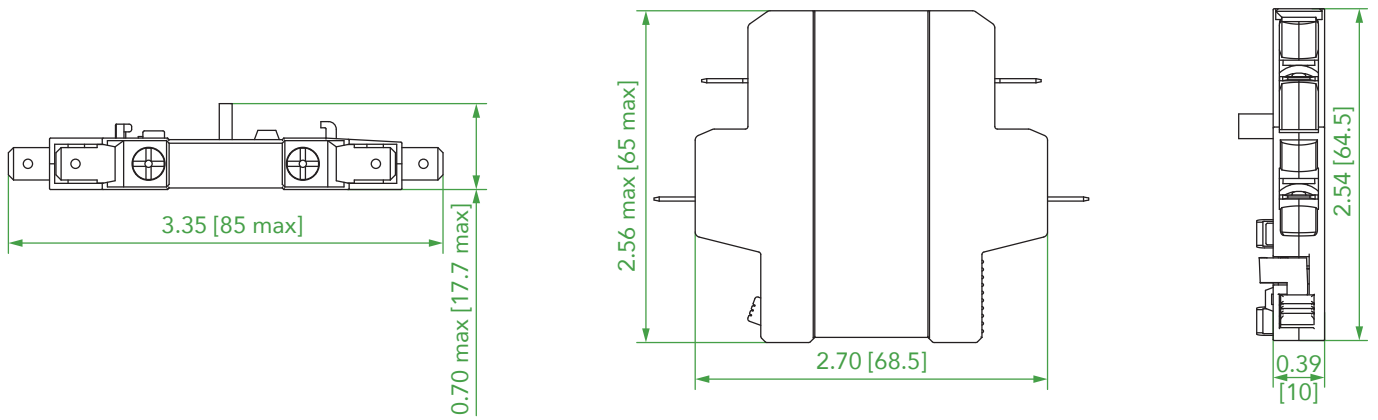
125 or 250 Vac	15A
120 Vac on Lamp Load	4 A
125 Vdc	1/2 A
250 Vdc	1/4 A

Definite Purpose Contactors

Ex9CKT Accessories Dimensions

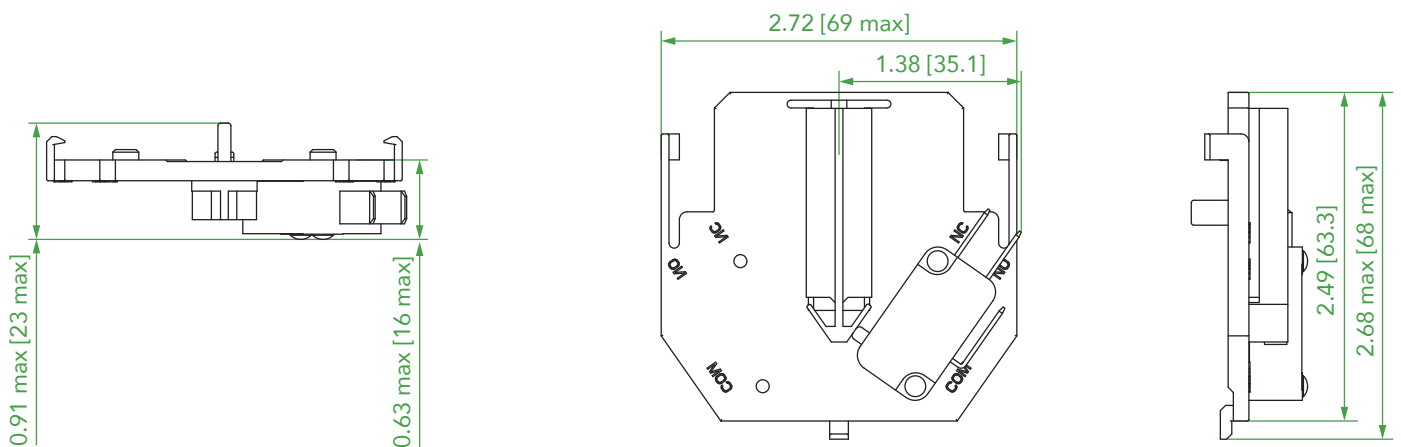
AXFC11/AXFC11Q

Unit: in. [mm]



AXFD11/AXFD22

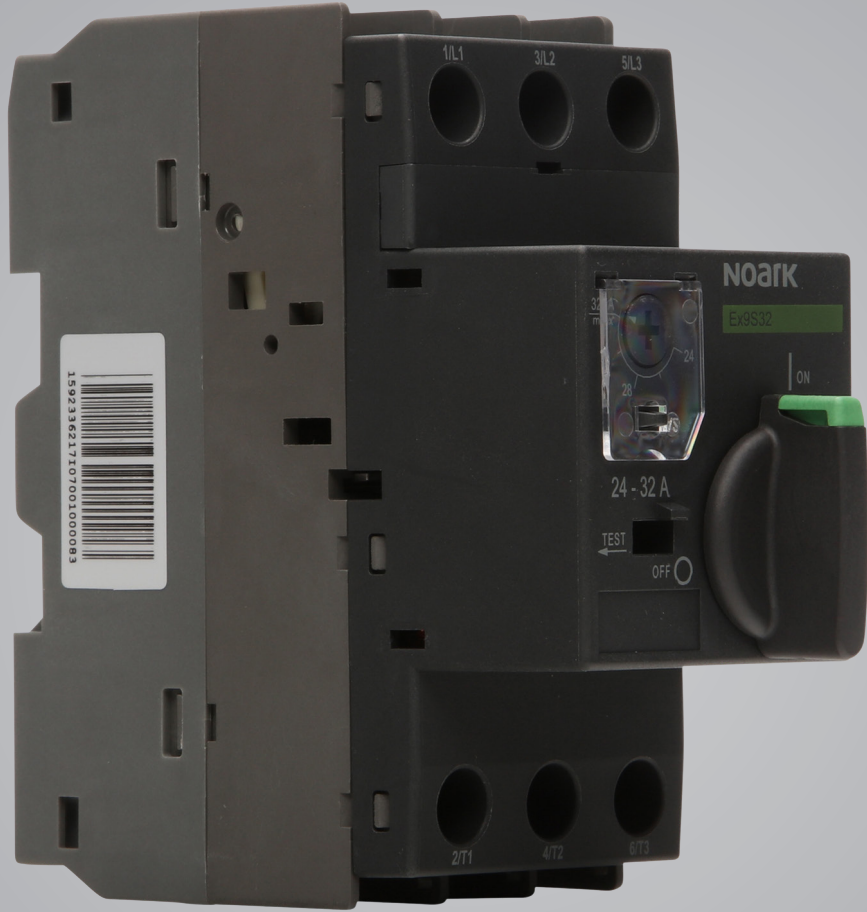
Unit: in. [mm]



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• Contact a NOARK sales representative for AXFB11 and AXFB11Q dimensions.

MANUAL MOTOR STARTERS



Ex9S32

Manual Motor Starters

Ex9S32 Product Overview

Features

Ex9S32 Manual Motor Starter provide manual isolation, manual motor control, and overcurrent protection. Ex9S32 Manual Motor Starters are electro-mechanical devices combining the functions below in one unit.

- Disconnect for Motor Branch Circuit
- Manual Motor Control (automatic when used with contactor)
- Branch-Circuit Short Circuit Protection (Magnetic Protection)
- Overload Protection (Thermal Protection) - Trip Class 10
- 5-year limited warranty

The National Electrical Codes requires an individual Motor Branch Circuit to be protected by a UL/CSA Listed Fuse, Circuit breaker or Self-Protected Combination Motor Controller.

Available as:

- Up to 32A @600Vac
- UL 60941-4-1 (formerly UL 508) Type E Self Protection or UL 609474-1 Type F Group Motor Protection
- Built-in fault indication
- Full range of accessories
- Lockable handle

Manual Motor Starters

NOARK Ex9S32 Series

Certifications

- UL60947-4-1 listed, MMC, file No. E467185
- UL60947-4-1 listed, CMC, file No. E476273
- IEC/EN 60947-2/-4-1
- CCC Certified



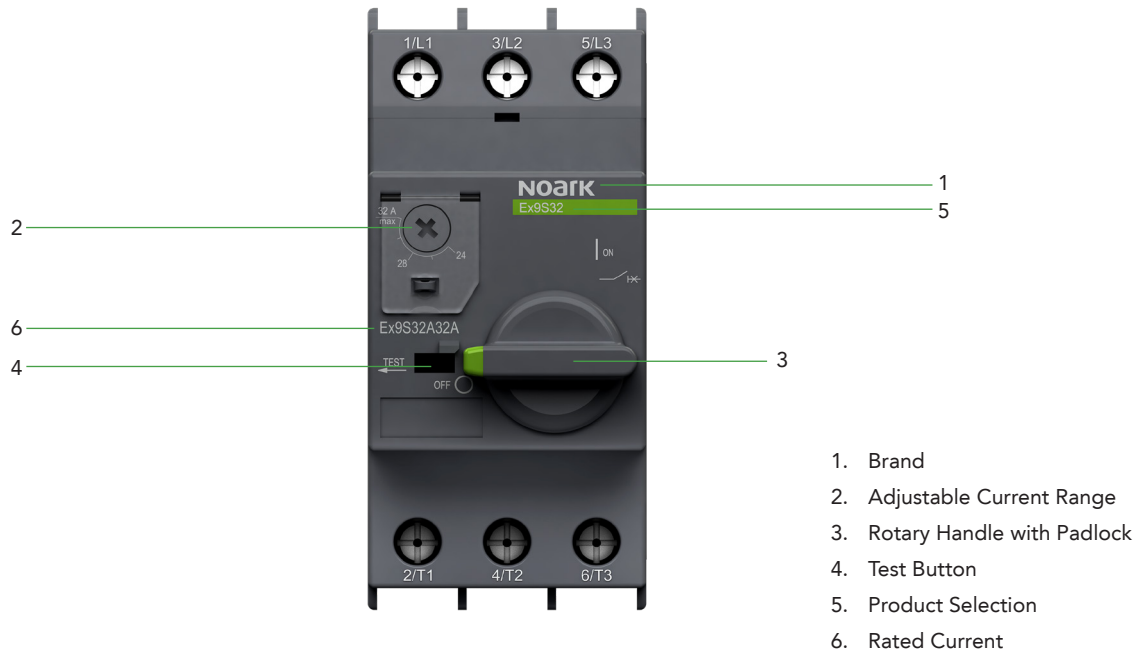
Standards Compliance

- IEC/EN 60947-1, -2, -4-1, -5-1
- UL 60947-1; -4-1
- GB 14048.1, 2, 4

Manual Motor Starters

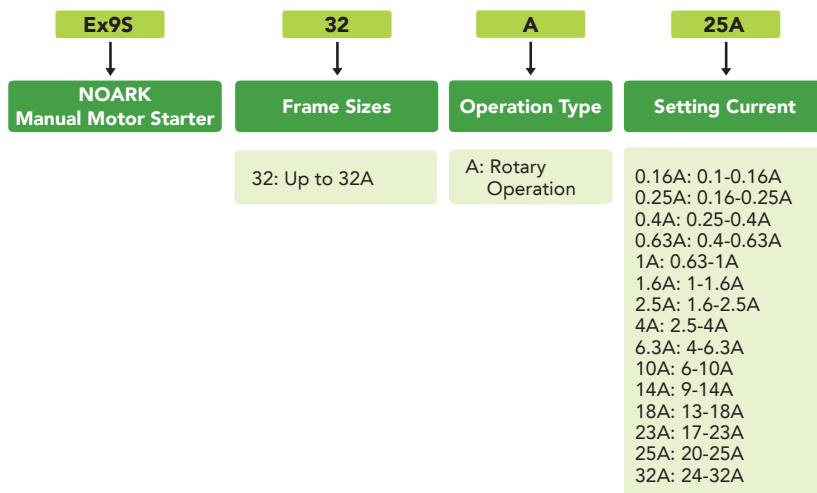
Ex9S32 Product Selection and Packaging

Label



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Product Selection Guide



Manual Motor Starters

Ex9S32 Specifications



32 A

Rated Current Amp (Min-Max)	Rotary Handle	
	Product	Part Number
0.10~0.16	Ex9S32A0.16A	1600046
0.16~0.25	Ex9S32A0.25A	1600047
0.25~0.40	Ex9S32A0.4A	1600048
0.40~0.63	Ex9S32A0.63A	1600049
0.63~1	Ex9S32A1A	1600050
1~1.6	Ex9S32A1.6A	1600051
1.6~2.5	Ex9S32A2.5A	1600052
2.5~4	Ex9S32A4A	1600053

Certifications
IEC/EN 60947-4-1

32 A

Rated Current Amp (Min-Max)	Rotary Handle	
	Product	Part Number
4~6.3	Ex9S32A6.3A	1600054
6~10	Ex9S32A10A	1600055
9~14	Ex9S32A14A	1600056
13~18	Ex9S32A18A	1600057
17~23	Ex9S32A23A	1600058
20~25	Ex9S32A25A	1600059
24~32	Ex9S32A32A	1600060

Technical Data

(Table 1)

Description		Ex9S32
Rated operational current I_n (A)		32A
Conventional rated thermal current I_{th} (A)		0.16~32A
Tripping Class		10
Rated insulation voltage U_i (Vac)		690/IEC; 600/UL, CSA
Rated operational voltage U_n (AC)		230/240, 400/415, 460/480, 575/600
Rated impulse withstand voltage U_{imp} (AC)		6000V
Rated Operational Frequency (Hz)		50/60Hz
Resistance to shock		30 gn -11 ms
Resistance to vibrations		5gn (5 -150Hz)
Environmental Temperature	Transportation or Storage	-40°F to 176°F (-40°C to 80°C) ¹
	Working at	-4°F to 140°F (-20°C to 60°C) ²
	Testing at	59°F to 77°F (15°C to 25°C)
	Instantaneous limit	-31°F to 158°F (-35°C to 70°C)
Altitude ft (m)		Not to exceed 6,562 (2,000)
Ambient Conditions		At mounting site, relative humidity not exceed 90% at the max testing temperature 104°F (40°C), higher relative humidity is allowable under lower temperature
Pollution Grade		III
Mounting Conditions		The inclination between the mounting plane and the vertical plane shall not exceed 30°; The product shall be installed and operated at a place without obvious shake, impact and vibration.
Interrupting Rating I_{cu}		Check Table 3 & 4
Service life* (cycles)	Electrical	50000
	Mechanical	100,000
Duty Class (cycles/hr)		30, max. operating rate
Degree of Protection		IP 20

1: 24 hours max. at the ultimated temperature

2: with temperature reduction factor, table 7

*: close/open operation, and 30 cycles/hr for AC-3 Duty@400/415Vac

Manual Motor Starters

Ex9S32 Specifications

(Table 2)

Overload Protection Properties						
Series Number	Multiple of Setting Current	Initial Status	Time	Expected Results	Ambient Temperature	
1	1.05	Cold Status	$t \geq 2h$	Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)	
2	1.25	Heat Status (right after test 1)	$t < 2h$	Tripping		
3	1.50		$t < 4 \text{ min}$			
4	7.20	Cold Status	$4s < t \leq 10s$			
Phase Failure Protection Properties						
Series Number	Multiple of Setting Current		Initial Status	Time	Expected Results	Ambient Temperature
	Any 2 Phase	The Other Phase				
1	1.0	0.9	Cold Status	$t \geq 2h$	Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)
2	1.15	0	Heat Status (right after test 1)	$t < 2h$	Tripping	
Temperature Compensation Properties						
Series Number	Multiple of Setting Current	Initial Status	Time	Expected Results	Ambient Temperature	
1	1.0	Cold Status	$t \geq 2h$	Non-Tripping	104°F to ±35.6°F (+40°C to ±2°C)	
2	1.25	Heat Status (right after test 1)	$t < 2h$	Tripping		
3	1.05	Cold Status	$t \geq 2h$	Non-Tripping	-23°F to ±35.6°F (-5°C to ±2°C)	
4	1.3	Heat Status (right after test 1)	$t < 2h$	Tripping		

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Interrupting Capacity

For IEC (Table 3)

Type	400Vac		690Vac	
	Icu kA	Ics kA	Icu kA	Ics kA
0.16A	100	100	100	100
0.25A	100	100	100	100
0.4A	100	100	100	100
0.63A	100	100	100	100
1A	100	100	100	100
1.6A	100	100	100	100
2.5A	100	100	100	100
4A	100	100	6	4
6.3A	100	100	6	4
10A	100	100	6	4
14A	100	100	6	4
18A	50	30	6	4
23A	50	30	6	4
25A	50	30	6	4
32A	50	30	6	4

Manual Motor Starters

Ex9S32 Specifications

Interrupting Capacity continued

For UL (Table 4)

Type	Short-Circuit Rating 240/ 480Vac kA	Manual motor controllers for motor disconnect 600 Vac kA	Max. Horsepower Rating					
			1PH		3PH			
			110/120Vac	230/240Vac	200/208Vac	230/240Vac	460/480Vac	575/600Vac
0.16A	65	5	-	-	-	-	-	-
0.25A	65	5	-	-	-	-	-	-
0.4A	65	5	-	-	-	-	-	-
0.63A	65	5	-	-	-	-	-	-
1A	65	5	-	-	-	-	-	1/2
1.6A	65	5	-	1/10	-	-	3/4	3/4
2.5A	65	5	-	1/6	1/2	1/2	1	1.5
4A	65	5	1/8	1/3	3/4	3/4	2	3
6.3A	65	5	1/4	1/2	1	1.5	3	5
10A	65	5	1/2	1.5	2	3	5	7.5
14A	65	5	3/4	2	3	3	10	10
18A	42	5	1	3	5	5	10	15
23A	42	5	1.5	3	5	7.5	15	20
25A	42	5	2	-	-	7.5	15	20
32A	42	5	2	5	7.5	10	20	25

Short-Circuit Current Rating

Type E: Self-Protected Combination Motor Controller (with AL5111 and CCT51/CCE51) (Table 5)

Manual self-protected starter	Overload Trip Range	Max. HP Rating						SCCR (kA)	
		1PH		3PH				240/480Y	600Y
		110/120Vac	230/240Vac	200/208Vac	230/240Vac	460/480Vac	575/600Vac		
Ex9S32A 0.16A	0.1 - 0.16A	-	-	-	-	-	-	65	10
Ex9S32A 0.25A	0.16 - 0.25A	-	-	-	-	-	-	65	10
Ex9S32A 0.4A	0.25 - 4A	-	-	-	-	-	-	65	10
Ex9S32A 0.63A	0.4 - 0.63A	-	-	-	-	-	-	65	10
Ex9S32A 1A	0.63 - 1A	-	-	-	-	-	1/2	65	10
Ex9S32A 1.6A	1 - 1.6A	-	1/10	-	-	3/4	3/4	65	10
Ex9S32A 2.5A	1.6 - 2.5A	-	1/6	1/2	1/2	1	1.5	65	10
Ex9S32A 4A	2.5 - 4A	1/8	1/3	3/4	3/4	2	3	65	10
Ex9S32A 6.3A	4 - 6.3A	1/4	1/2	1	1.5	3	5	65	10
Ex9S32A 10A	6 - 10A	1/2	1.5	2	3	5	7.5	65	10
Ex9S32A14A	9 - 14A	3/4	2	3	3	10	10	65	10
Ex9S32A18A	13 - 18A	1	3	5	5	10	-	42	-
Ex9S32A23A	17 - 23A	1.5	3	5	7.5	15	-	42	-
Ex9S32A25A	20 - 25A	2	-	-	7.5	15	-	42	-
Ex9S32A32A	24 - 32A	2	5	7.5	10	20	-	42	-

Manual Motor Starters

Ex9S32 Specifications

Short-Circuit Current Rating Continued

Type F: Manual Self-Protected Combination Motor Controller (Table 6)

Manual Self-Protected Starter	Associated Cable, AWG 75°C, Cu	Type of Contactor Required	Overload Trip Range(A)	Standard Motor Ratings@50/60						SCCR (kA)			Combination Block	Mounting Bracket
				1 PH		3 PH				240V	480Y/277V	600Y/347V		
				110/120V	230/240V	200/208V	230/240V	460/480V	575/600V					
Ex9S32A0.16A	14	Ex9CS06/09 Ex9C09	0.1-0.16	-	-	-	-	-	-	65	10	CC51/CC52	-/DRA51	
Ex9S32A0.25A			0.16-0.25	-	-	-	-	-						
Ex9S32A0.4A			0.25-0.4	-	-	-	-	-						
Ex9S32A0.63A			0.4-.63	-	-	-	-	-						
Ex9S32A1A			0.63-1	-	-	-	-	1/2						
Ex9S32A1.6A			1-1.6	-	1/10	-	-	3/4	3/4					
Ex9S32A2.5A			1.6-2.5	-	1/6	1/2	1/2	1	1.5					
Ex9S32A4A			2.5-4	1/8	1/3	3/4	3/4	2	3					
Ex9S32A6.3A			4-6.3	1/4	1/2	1	1.5	3	5					
Ex9S32A10A			6-10	Ex9CS12/9C12	1/2	1.5	2	3	5					7.5
Ex9S32A14A	12	Ex9C18	9-14	3/4	2	3	3	10	10	42	-	CC52	DRA51	
Ex9S32A18A		Ex9C25	13-18	1	3	5	5	10	-					
Ex9S32A23A	10	Ex9C38/32	17-23	1.5	3	5	7.5	15	-	42	-	CC53	DRA51	
Ex9S32A25A			20-25	2	-	-	7.5	15	-					
Ex9S32A32A	8		24-32	2	5	7.5	10	20	-					



Temperature Derating Factor

For Ex9S32 (Table 7)

Device	7°(-4°F)		-5°(23°F)		40°(104°F)		60°(140°F)		70°(158°F)		
	single	group	single	group	single	group	single	group	single	group	
Ex9S32A0.16A	1.04		1.00		1.00	1.00	0.98	0.90	0.85		
Ex9S32A0.25A					0.99	0.98	0.97				
Ex9S32A0.4A					0.96	0.96	0.93				
Ex9S32A0.63A					0.97	0.96	0.94				
Ex9S32A1A					0.96	0.94	0.91				
Ex9S32A1.6A					0.96	0.96	0.93				
Ex9S32A2.5A					1.00	1.00	0.99				
Ex9S32A4A					0.98	0.98	0.96				
Ex9S32A6.3A					0.98	0.96	0.95				
Ex9S32A10A					0.94	0.95	0.91			0.88	0.83
Ex9S32A14A					0.92	0.95	0.90				
Ex9S32A18A					0.93	0.92	0.90			0.85	0.80
Ex9S32A23A					0.96	0.93	0.90				
Ex9S32A25A					0.96	0.93	0.90				
Ex9S32A32A				0.91	0.92	0.87					

Manual Motor Starters Ex9S32 Specifications

Thermal Settings And Magnetic Trip Current*

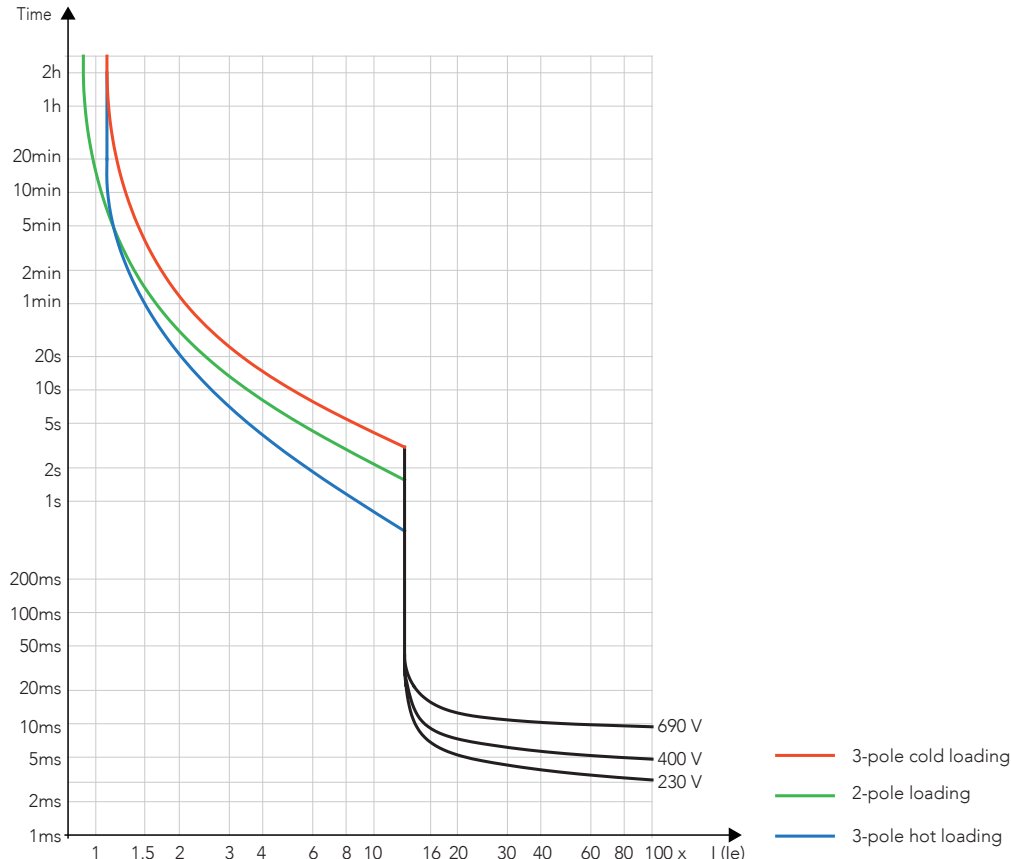
*Rated supply current Ambient Temperature at 40°C (Table 8)

Ex9S Heater Designation	Thermal Setting (A)		Magnetic Trip Rating (A)
	Minimum	Maximum	
0.16A	0.1	0.16	2.1
0.25	.16	0.25	3.2
0.4A	0.25	4	4.8
0.63A	0.4	0.63	7.2
1A	0.63	1	11
1.6A	1	1.6	20
2.5A	1.6	2.5	30
4A	2.5	4	50

Ex9S Heater Designation	Thermal Setting (A)		Magnetic Trip Rating (A)
	Minimum	Maximum	
6.3A	4	6.3	72.5
10A	6	10	130
14A	9	14	175
18A	13	18	230
23A	17	23	280
25A	20	25	322
32A	24	32	416

Rated supply current (Ith) at Ambient Temperature: Check Ex9S32 Temperature Reduction Factor table

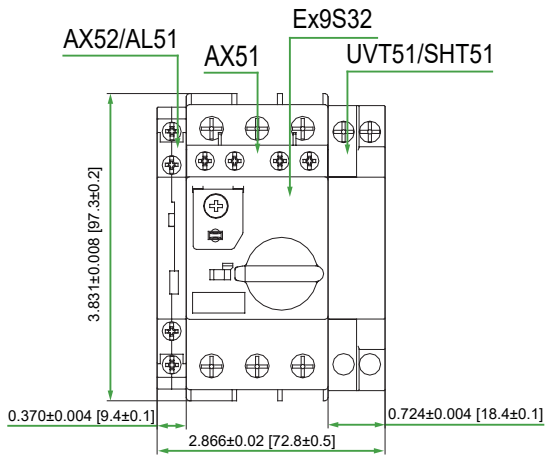
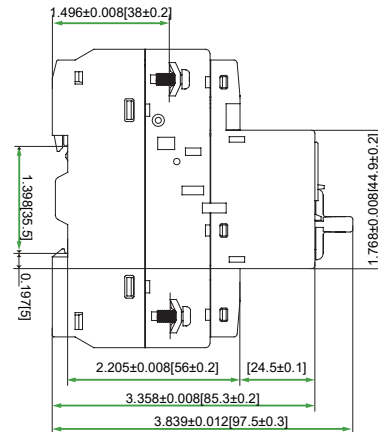
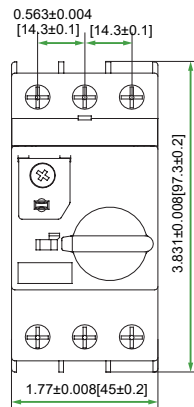
9S32 Trip Curves



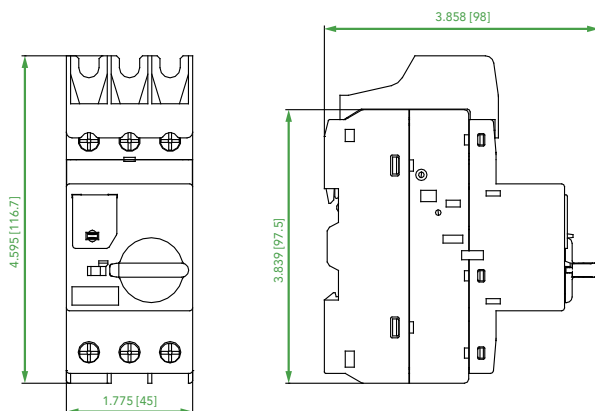
Manual Motor Starters

Ex9S32 Dimensions

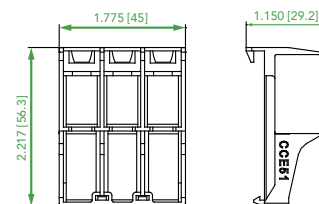
Ex9S32
Unit: in. [mm]



Ex9S32 + CCE51
Unit: in [mm]



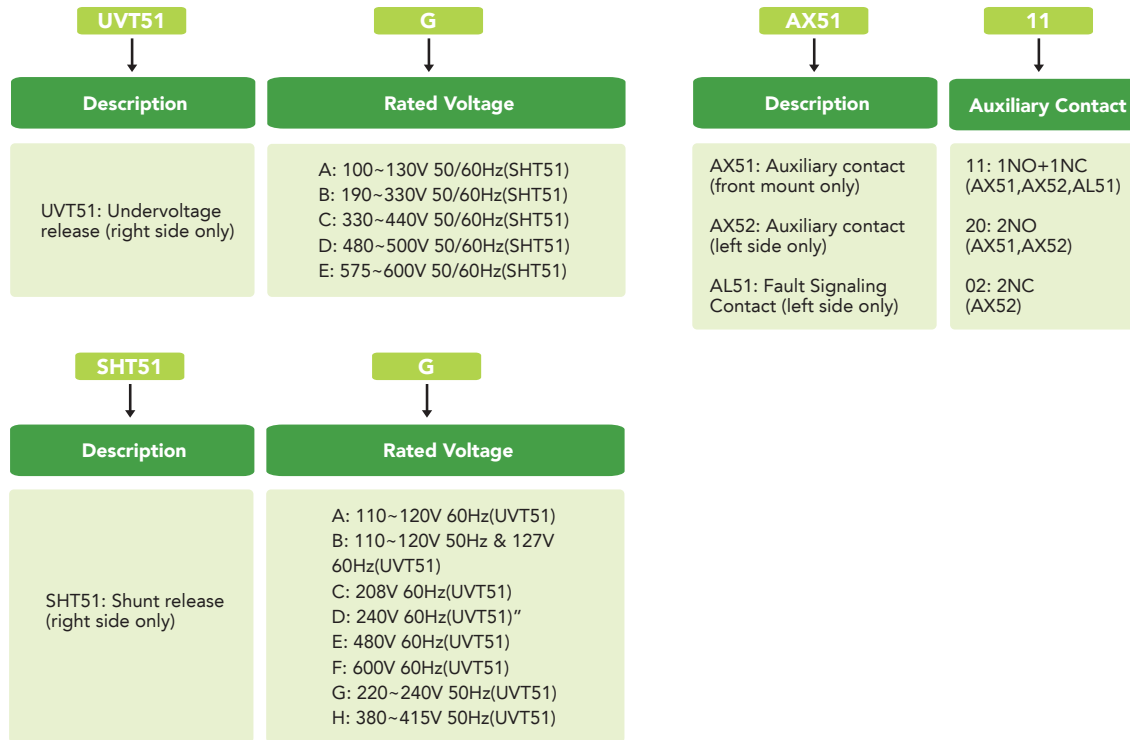
CCE51
Unit: in [mm]



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Manual Motor Starters Ex9S32 Accessories Selection Guide

Selection



CC	51
Description	Type
Combination Block	51: Ex9CS 12A
	52: Ex9C09-18A
	53: Ex9C 25-38A

DRA	51
Description	Type
Mounting Bracket	51: for mounting Ex9S32 with Ex9C 09-38A

ERH	51	B
Description	Type	Color of Handle
Extended Rotary Handle	51: for Ex9S	B: Black/Gray
		Y: Yellow/Red

WPB	51	B
Description	Type	Color of Handle
Waterproof Enclosure	51: for Ex9S32	B: Black/Gray
		Y: Yellow/Red

Manual Motor Starters

Ex9S32 Accessories: Specifications



AX52

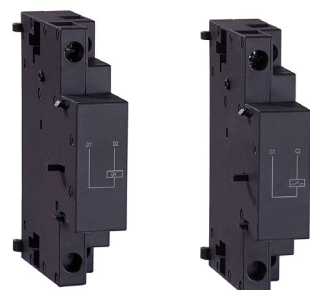
AL51



AX51

Auxiliary Contact Blocks

Description	Mounting Location	Max. No. of Blocks	Contact Type	SKU
Instantaneous auxiliary contacts	Front	1	NO+NC	AX5111
			NO+NO	AX5120
	Left Side	2	NO+NC	AX5211
			NO+NO	AX5220
Fault Signaling Contact		1	NC+NC	AX5202
			NO+NC	AL5111



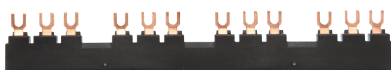
UVT51

SHT51

Electrical Trip Unit

Description	Mounting Location	Voltage	Hz	SKU
Undervoltage Release	Right Side	110-120V	60	UVT51A
		127V	60	UVT51B
		110-120V	50	UVT51B
		208V	60	UVT51C
		240V	60	UVT51D
		480V	60	UVT51E
		600V	60	UVT51F
		220-240V	50	UVT51G
Shunt Release	Right Side	380-415V	50	UVT51H
		100-130V	50/60	SHT51A
		190-330V	50/60	SHT51B
		330-440V	50/60	SHT51C
		480-500V	50/60	SHT51D
		575-600V	50/60	SHT51E

G



BBUM 4

Busbars

Description	No. of Ex9S32 Starter	No. of Side-Mounted Aux Contact on each Ex9S32 starter	Busbar Pitch (mm)	SKU
Sets of 3-pole, 63A Busbar	2	None	45	BBUM 245
		1 of AX52, AL51	54	BBUM 254
		2 of AX52 or 1 UVT51, SHT51	63	BBUM 263
	3	None	45	BBUM 345
		1 of AX52, AL51	54	BBUM 354
		2 of AX52 or 1 UVT51, SHT51	63	BBUM 363
	4	None	45	BBUM 445
		1 of AX52, AL51	54	BBUM 454
		2 of AX52 or 1 UVT51, SHT51	63	BBUM 463
	5	None	45	BBUM 545
		1 of AX52, AL51	54	BBUM 554
		2 of AX52 or 1 UVT51, SHT51	63	BBUM 563

Manual Motor Starters

Ex9S32 Accessories: Specifications



CCE51

Wiring Accessories

Description	Application	SKU
Input Terminal for CBB51 Busbar	Terminal block for power supply to one or more CBB51 bus bar	FD51
Protective end cover	For unused busbar outlets	PC51
Terminal Cover	Terminal cover for Ex9S32 for use in type E application	CCE51



WPB51B



WPB51Y

Enclosures

Description	Type	Color	Rating	SKU
Waterproof Enclosure; Ex9S32 Protectors	Operation by rotary handle	Black/ Gray	NEMA 4X/4, IP 65	WPB51B
		Yellow/ Red		WPB51Y



ERH51B

Operation Handle

Description	Type	Color	Rating	SKU
Extended Rotary Handle	9 inch (230mm) shaft, with bracket	Black/ Gray	NEMA 4X/4, IP65	ERH51B
		Yellow/ Red		ERH51Y

The extended rotary handle makes it possible for a door-mounted rotary handle to operate starter installed on the inside back panel of an enclosure. The extended rotary handle consists of the following:

- a set of screws onto the handle of the starter
- an assembly (handle and front plate) that fits on the enclosure door
- an extension shaft which must be adjusted according to the distance between the mounting surface and the door: 9 inch (230 mm)
- a bracket that install with starter and the shaft through



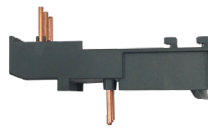
DRA51

Mounting Accessories

Description	Application	SKU
Combination Block	Between Ex9S32 and Ex9C Mini Type Contactor, 09-12A	CC51
	Between Ex9S32 and Ex9C Standard Type Contactor, 09-18A	CC52
	Between Ex9S32 and Ex9C Standard Type Contactor, 25-38A	CC53
Mounting Bracket	For mounting a Ex9S32 to a Ex9C Standard Type Contactor, 09-38A	DRA51



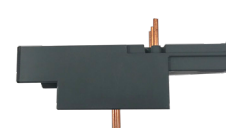
Ex9S32 + CC53 + Ex9C32 + DRA51



CC51



CC52



CC53

Manual Motor Starters

Ex9S32 Accessories: Specifications

Technical Data

	Auxiliary contacts - AX51	Auxiliary contacts - AX52	Auxiliary contacts - AL51
Rated operational voltage Ue	300V	600V	600V
Rated frequency	50/60Hz	50/60Hz	50/60Hz
Rated impulse withstand voltage Uimp	2500V	6000V	6000V
Conventional rated thermal current (Ith)"	2.5A	5A	5A
Mechanical life (C-O operations)	100000	100000	100000
Electrical Rating	C300,Q300	B600,Q300	B600,Q300

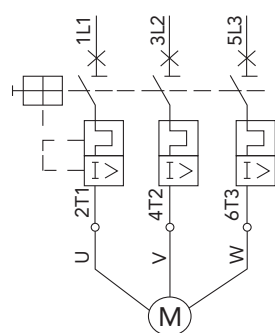
Terminal Wiring

Ex9S32 Main Terminal	Screw Type	M4, Phil-Slot head
	Pull wire length inch (mm)	0.4 (10)
	Wire range AWG	(1)x14-(2)x8
	Torques lb-in (N.m)	22 (2.5)

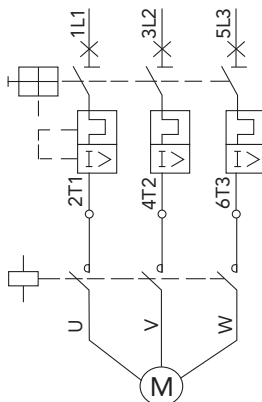
Model	Wire Ranges(AWG)	Torques lb-in (N.m)	Screw Type	Phil-Slot Head
AX51	(1)x18-(2)x12	7 (0.8)	M3	
AX52	(1)x18-(2)x12	7 (0.8)	M3	
AL51	(1)x18-(2)x12	7 (0.8)	M3	
UVT51	(1)x18-(2)x12	15 (1.7)	M3.5	
SHT51	(1)x18-(2)x12	15 (1.7)	M3.5	

G

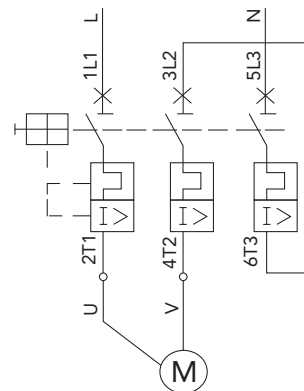
Electrical Diagram



Operating principle diagram of starter



Principle connection diagram of starter and contactor



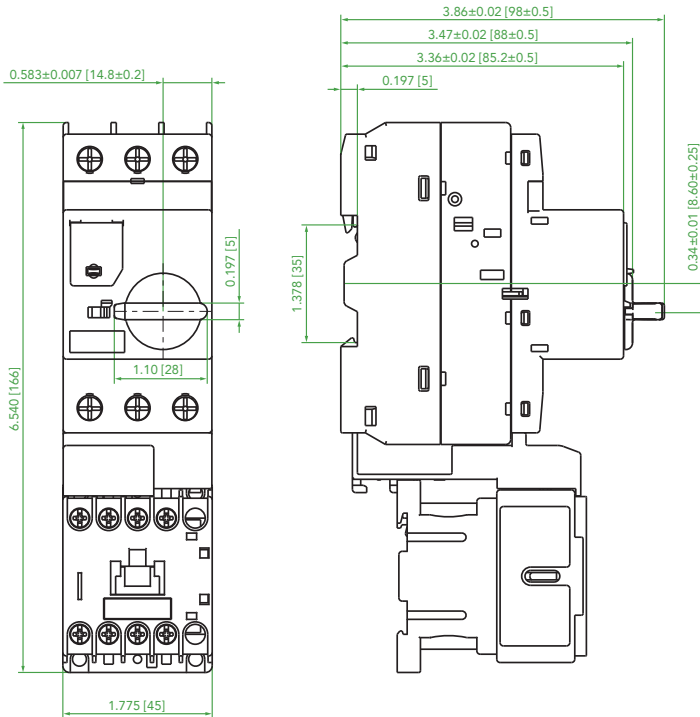
Principle connection diagram of single-phase Motor

Manual Motor Starters

Ex9S32 Accessory Dimensions

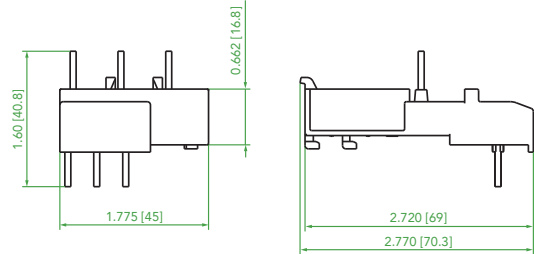
Ex9S32 + CC51 + Ex9CS06, 09, 12

Unit: in [mm]



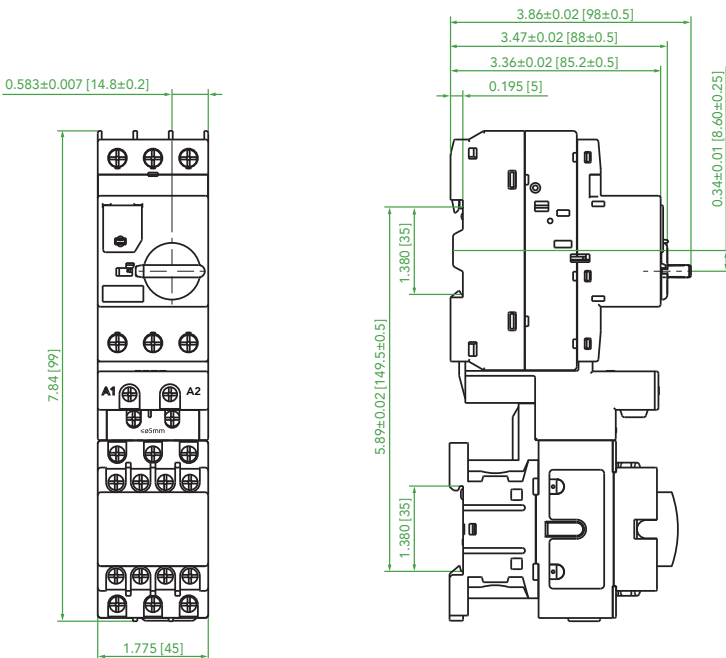
CC51

Unit: in [mm]



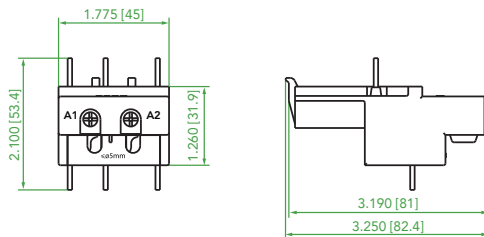
Ex9S32 + CC52 + Ex9C09, 12 18

Unit: in [mm]



CC52

Unit: in [mm]

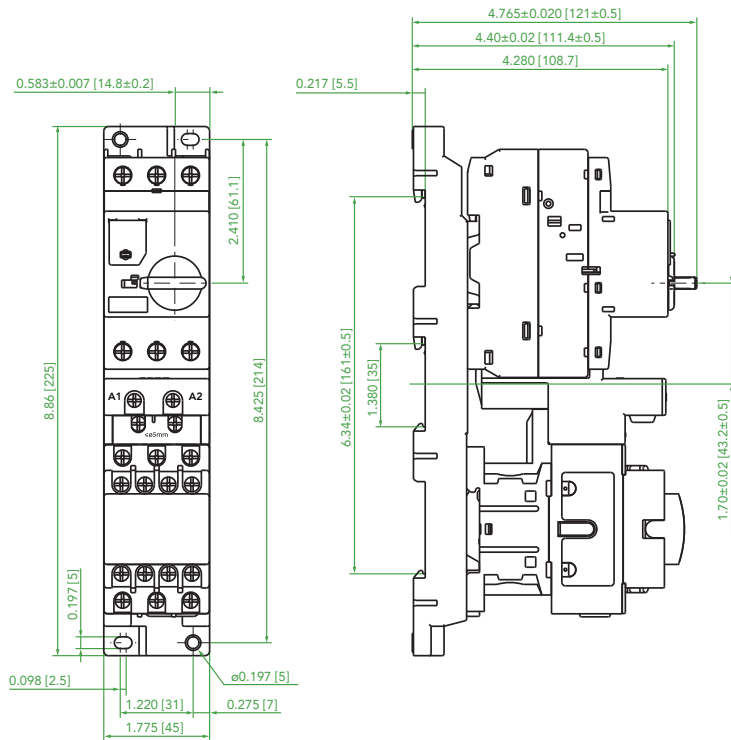


Manual Motor Starters

Ex9S32 Accessory Dimensions

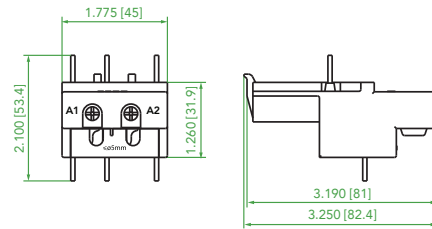
Ex9S32 + CC52 + Ex9C09, 12, 18 + DRA51

Unit: in [mm]



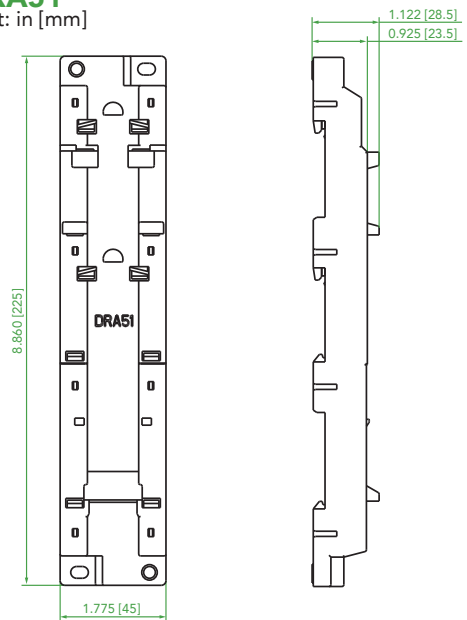
CC52

Unit: in [mm]



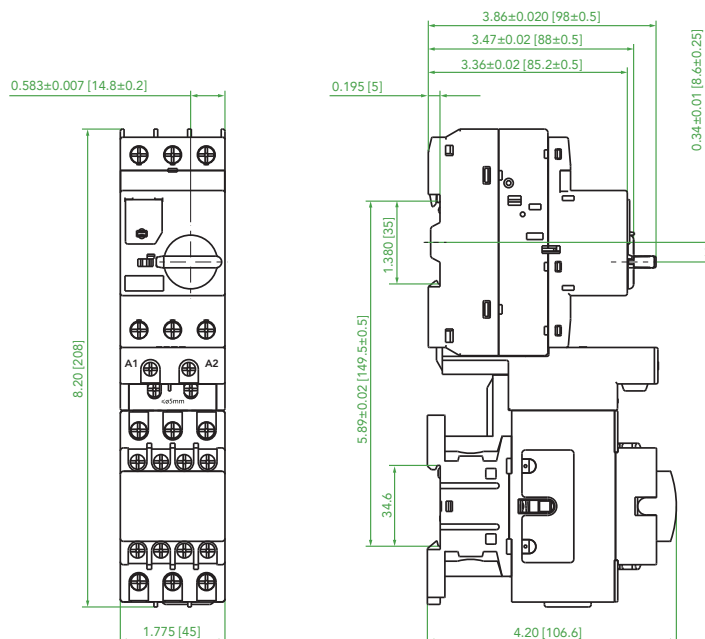
DRA51

Unit: in [mm]



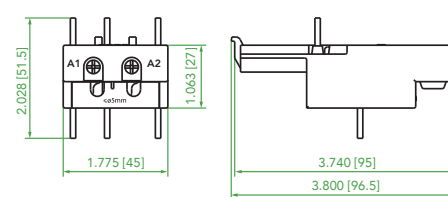
Ex9S32 + CC53 + Ex9C25, 32, 38

Unit: in [mm]



CC53

Unit: in [mm]

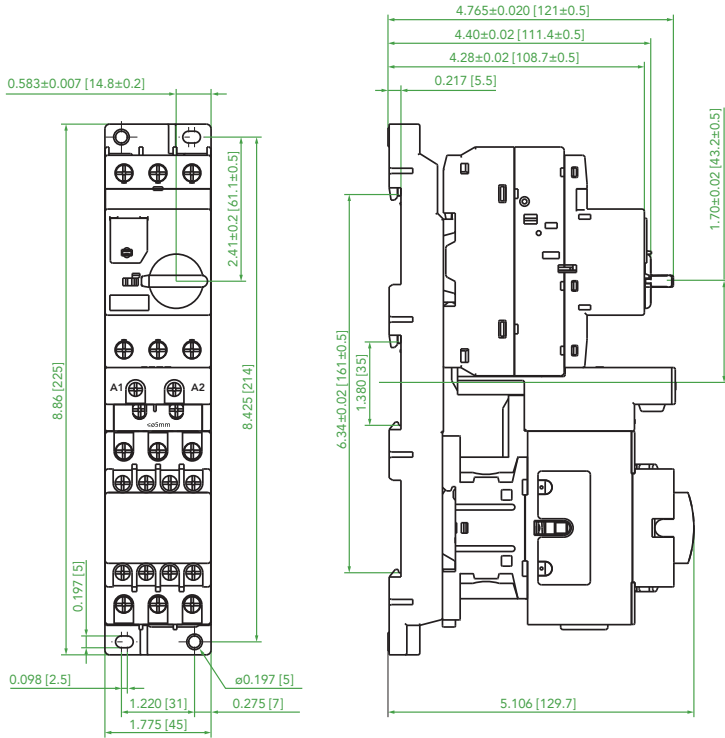


Manual Motor Starters

Ex9S32 Accessory Dimensions

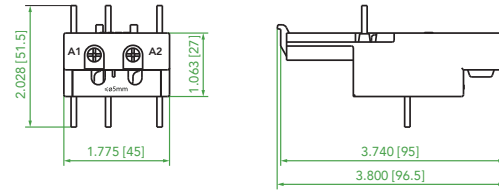
Ex9S32 + CC53 + Ex9C25, 32, 38 + DRA51

Unit: in [mm]



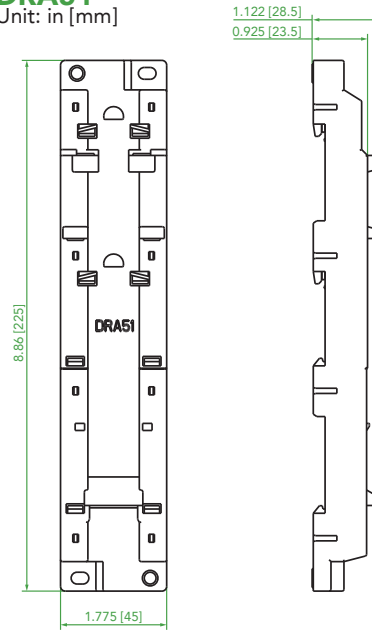
CC53

Unit: in [mm]



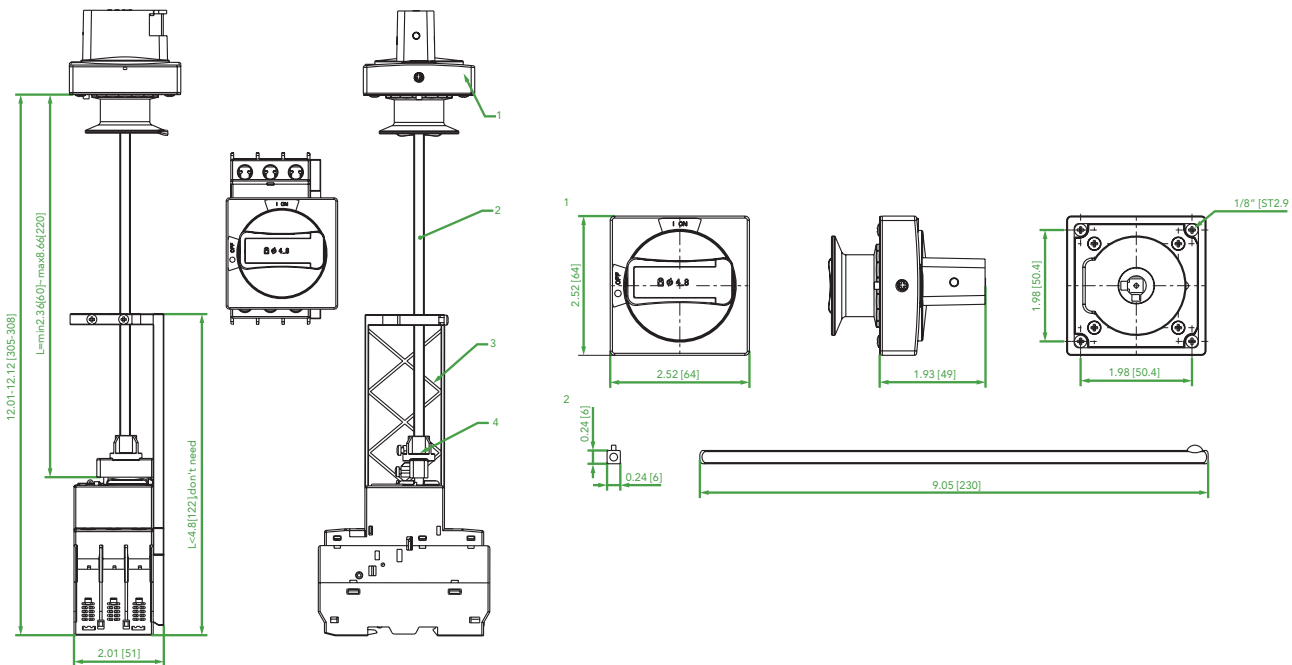
DRA51

Unit: in [mm]



ERH51

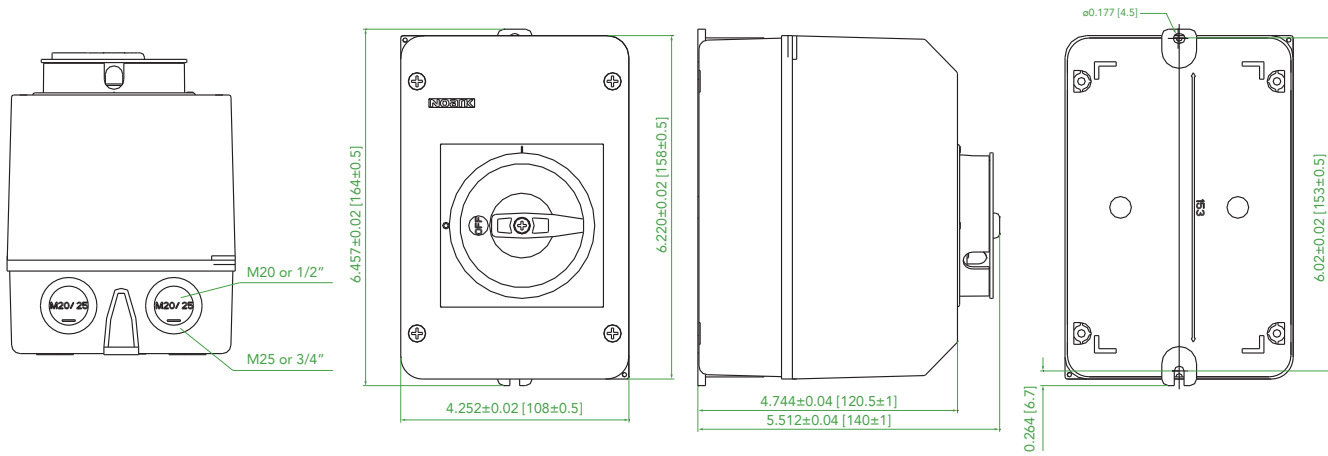
Unit: in [mm]



Manual Motor Starters

Ex9S32 Accessory Dimensions

WPB51
Unit: in [mm]



MANUAL MOTOR STARTERS



Ex9SN

Manual Motor Starters

Ex9SN Product Overview

Features

Manual motor starters are electromechanical protection devices for the main circuit. They are used mainly to switch motors manually ON/OFF and protect them fuse less against short circuit and loss-phase. None-fuss protection with a manual motor starter saves costs, space and ensures a quick reaction under short-circuit condition, by switching off the motor within milliseconds. Manual motor starter combinations are setup together with contactors and overload relays.

- Available with enclosed coils for protection against particle contamination
- Short-circuit protection
- Disconnect function
 - Overload protection
 - Loss-phase protection
- Suitable for three and single-phase application
- Trip-free mechanism
- Clear switch position indication ON/OFF/TRIP
- Lockable handle

Manual Motor Starters

Ex9SN National and International Standards

Certifications

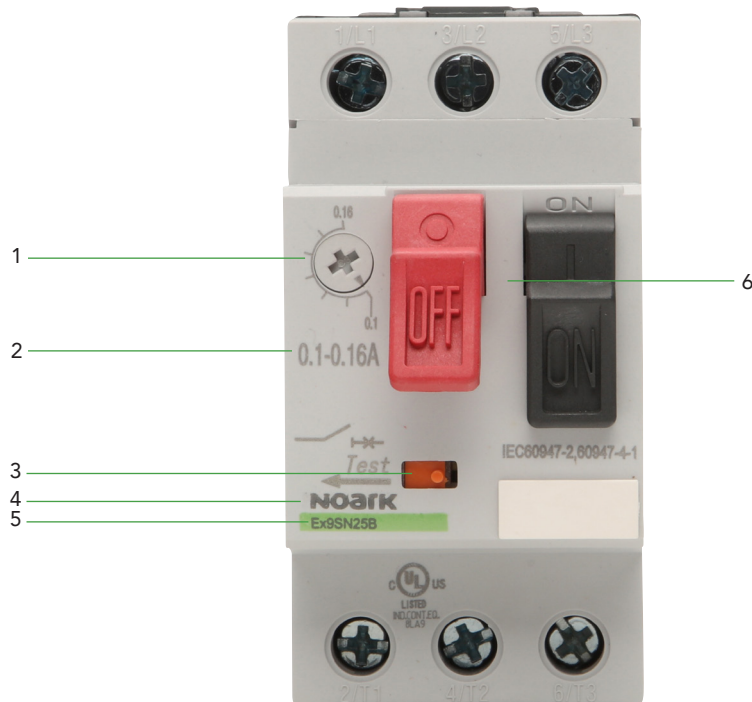
- UL 508 Listed, File Number E467185, UL 60947-1 and 60947-4-1
- Certified for Canada according to CSA standards 22.2 No. 14
- IEC/EN 60947-2 and 60947-4-1
- CE Approved
- RoHS Compliant



Manual Motor Starters

Ex9SN Product Selection Guide

Label



1. Adjustable Current Range
2. Rated Current
3. Test Button
4. Brand
5. Product Selection
6. OFF/ON Push Buttons or Rotary Handle with Padlock

H

Product Selection Guide

Ex9SN	25	A	0.16A																												
↓	↓	↓	↓																												
NOARK Ex9SN Series	Frame Size	Style	Rated Current																												
	25: 25 A	A: Rotary Handle B: Pushbutton	<table border="0"> <tr><td>0.16A:</td><td>0.10~0.16 A</td></tr> <tr><td>0.25A:</td><td>0.16~0.25 A</td></tr> <tr><td>0.4A:</td><td>0.25~0.40 A</td></tr> <tr><td>0.63A:</td><td>0.40~0.63 A</td></tr> <tr><td>1A:</td><td>0.63~1 A</td></tr> <tr><td>1.6A:</td><td>1~1.6 A</td></tr> <tr><td>2.5A:</td><td>1.6~2.5 A</td></tr> <tr><td>4A:</td><td>2.5~4 A</td></tr> <tr><td>6.3A:</td><td>4~6.3 A</td></tr> <tr><td>10A:</td><td>6~10 A</td></tr> <tr><td>14A:</td><td>9~14 A</td></tr> <tr><td>18A:</td><td>13~18 A</td></tr> <tr><td>23A:</td><td>17~23 A</td></tr> <tr><td>25A:</td><td>20~25 A</td></tr> </table>	0.16A:	0.10~0.16 A	0.25A:	0.16~0.25 A	0.4A:	0.25~0.40 A	0.63A:	0.40~0.63 A	1A:	0.63~1 A	1.6A:	1~1.6 A	2.5A:	1.6~2.5 A	4A:	2.5~4 A	6.3A:	4~6.3 A	10A:	6~10 A	14A:	9~14 A	18A:	13~18 A	23A:	17~23 A	25A:	20~25 A
0.16A:	0.10~0.16 A																														
0.25A:	0.16~0.25 A																														
0.4A:	0.25~0.40 A																														
0.63A:	0.40~0.63 A																														
1A:	0.63~1 A																														
1.6A:	1~1.6 A																														
2.5A:	1.6~2.5 A																														
4A:	2.5~4 A																														
6.3A:	4~6.3 A																														
10A:	6~10 A																														
14A:	9~14 A																														
18A:	13~18 A																														
23A:	17~23 A																														
25A:	20~25 A																														

Manual Motor Starters

Ex9SN 25 A

Certifications
IEC/EN 60947-4-1



25 A

Rated Current Amp (Min-Max)	Rotary Handle		Pushbutton	
	Product	Part Number	Product	Part Number
0.10~0.16	Ex9SN25A0.16A	1600001	Ex9SN25B0.16A	1600015
0.16~0.25	Ex9SN25A0.25A	1600002	Ex9SN25B0.25A	1600016
0.25~0.40	Ex9SN25A0.4A	1600003	Ex9SN25B0.4A	1600017
0.40~0.63	Ex9SN25A0.63A	1600004	Ex9SN25B0.63A	1600018
0.63~1	Ex9SN25A1A	1600005	Ex9SN25B1A	1600019
1~1.6	Ex9SN25A1.6A	1600006	Ex9SN25B1.6A	1600020
1.6~2.5	Ex9SN25A2.5A	1600007	Ex9SN25B2.5A	1600021
2.5~4	Ex9SN25A4A	1600008	Ex9SN25B4A	1600022
4~6.3	Ex9SN25A6.3A	1600009	Ex9SN25B6.3A	1600023
6~10	Ex9SN25A10A	1600010	Ex9SN25B10A	1600024
9~14	Ex9SN25A14A	1600011	Ex9SN25B14A	1600025
13~18	Ex9SN25A18A	1600012	Ex9SN25B18A	1600026
17~23	Ex9SN25A23A	1600013	Ex9SN25B23A	1600027
20~25	Ex9SN25A25A	1600014	Ex9SN25B25A	1600028

SpecificationsH202 to 203
Dimensions.....H204

Wiring Diagram.....H205
Accessories.....H206 to 211

Manual Motor Starters

Ex9SN Specifications

Operating Conditions

Tripping Class	Class 10 A	
Environmental Temperature	Transportation or Storage	-76 to 176 °F (-60 to +80 °C)
	Working at	-4 to 131 °F (-20 to +55 °C)
	Testing at	23 to 104 °F (-5 to +40 °C)
Altitude ft (m)	Not to exceed 6,562 (2,000)	
Ambient Conditions	At mounting site, relative humidity not exceed 50% at the max temperature of 104 °F (+40 °C), higher relative humidity is allowable under lower temperature	
Pollution Grade	Class III	
Release Grade	10 A (SN25)	
Rated Operational Frequency (Hz)	50/60	
Mounting Conditions	The inclination between the mounting plane and the vertical plane shall not exceed 5°. The product shall be installed and operated at a place without obvious shake, impact and vibration.	
Rated Insulation Voltage Ui (V)	IEC 690, UL/CSA 600	
Rated Operational Voltage Ue (V)	230/240, 400/415, 460/480, 575/600	
Rated Impulse Withstand Voltage Uimp (V)	6,000	
Interrupting Rating Icu	5 kA	
Service Life	Electrical	2,000
	Mechanical	10,000
Degree of Protection	IP 20	

Overload Protection Properties

Series Number	Multiple of Setting Current	Initial Status	Time	Expected Results	Ambient Temperature
1	1.05	Cold Status	$t \geq 2h$	Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)
2	1.20	Heat Status (right after test 1)	$t < 2h$	Tripping	
3	1.50		$t < 2 \text{ min}$		
4	7.20	Cold Status	$2s < t \leq 10s$		

Phase Failure Protection Properties

Series Number	Multiple of Setting Current		Initial Status	Time	Expected Results	Ambient Temperature
	Any 2 Phase	The Other Phase				
1	1.0	0.9	Cold Status	$t \geq 2h$	Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)
2	1.15	0	Heat Status (right after test 1)	$t < 2h$	Tripping	

Temperature Compensation Properties

Series Number	Multiple of Setting Current	Initial Status	Time	Expected Results	Ambient Temperature
1	1.0	Cold Status	$t \geq 2h$	Non-Tripping	104°F to ±35.6°F (+40°C to ±2°C)
2	1.2	Heat Status (right after test 1)	$t < 2h$	Tripping	
3	1.05	Cold Status	$t \geq 2h$	Non-Tripping	-23°F to ±35.6°F (-5°C to ±2°C)
4	1.3	Heat Status (right after test 1)	$t < 2h$	Tripping	

Manual Motor Starters

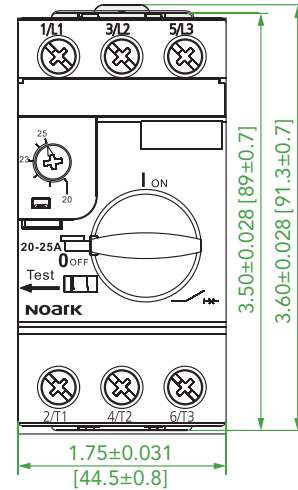
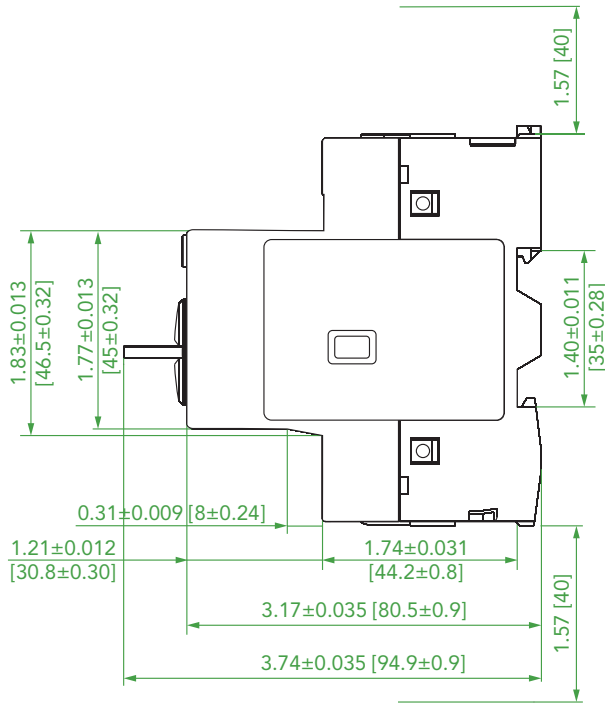
Ex9SN Specifications

Setting Current Range (A)		0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.6~2.5	2.5~4	4~6.3	6~10	9~14	13~18	17~23	20~25			
Rated Current of Release		0.16	0.25	0.4	0.63	1	1.6	2.5	4	6.3	10	14	18	23	25			
UL Ratings																		
Single-Phase (HP)	120 Vac						-	-	1/8	1/4	1/2	3/4	1	1.5	2			
	240 Vac					-	1/10	1/6	1/3	1/2	1.5	2	3					
Three-Phase (HP)	240 Vac	-	-	-	-		-	1/2	1	1.5	3		7.5					
	480 Vac					1/2	3/4	1	2	3	5	10	10	15				
	600 Vac							1.5	3	5	7.5	10	15	20				
IEC Ratings																		
400/415 Vac	Icu (kA)						100					15						
	Ics % Icu	100										50		40				
690 Vac	Icu (kA)											3						
	Ics % Icu											75						
Rated Ultimate Short-Circuit Breaking Capacity Icu (kA)	230/240 V						100					100		50				
	400/415 V						100					100		15				
	440 V						100					50	15	8	6			
	480/500 V						100					50	10	6	4			
	660/690 V						100					3						
Rated Service Short-Circuit Breaking Capacity Ics (kA)	230/240 V						100					100		50				
	400/415 V						100					100		7.5				
	440 V						100					50	15	4	3			
	480/500 V						100					50	10	4.5	3			
	660/690 V						100					2.25						
Arcing Distance in (mm)		1.57 (40)																
Standard Rated Power of Three-Phase Motor (kW)	230/240 V					-	-	0.37	0.75	1.1	2.2	3	4	5.5				
	400 V					-	-	0.37	0.75	1.5	2.2	4	5.5	7.5	11			
	415 V					-	-	0.37	0.75	1.1	2.2	3	5.5	9	11	11		
	440 V					0.37	0.55	0.75	1.1	2.2	3.7	5.5	7.5	9	11	15		
	500 V					0.37	0.55	0.75	1.1	1.5	3	4	7.5	9	11	15		
660/690 V					0.37	0.55	1.1	1.5	3	4	7.5	9	11	15	18.5			
Current Setting Value of Instantaneous Electromagnetic Release Ir (A)		1.5	2.4	5	8	13	22.5	33.5	51	78	138	170	223	327				
Current Rating of Fuse-Link of Back-Up Fuse, Which is Only Needed in Case of Icc>Icu (Icc: Prospective Short-Circuit Breaking Current)	230/240 V											†		80				
												†		100				
	400/415 V											†		63				
												†		80				
	440 V											†		80				
												†		63				
	500 V											†		63				
690 V											†		63					
†: Fuse is not Required												16		25				
												20		32				
												32		40				
												40		50				

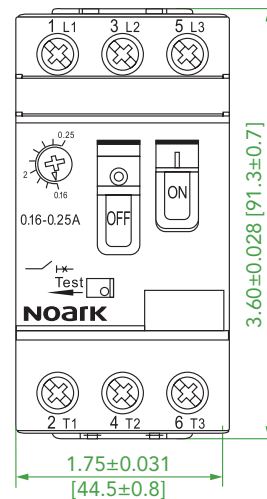
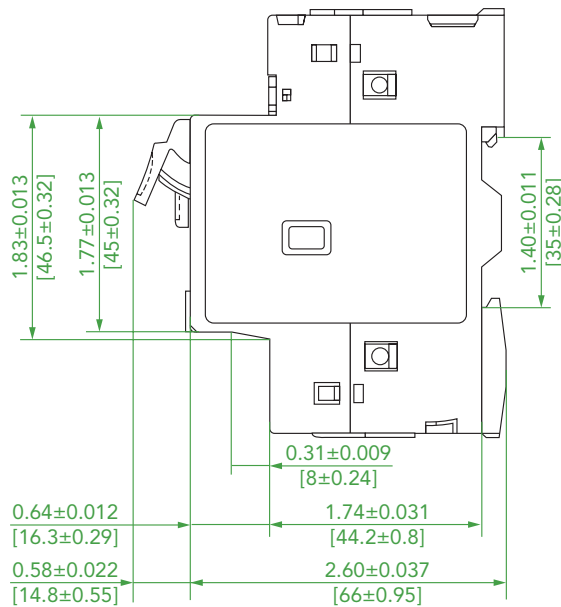
Manual Motor Starters

Ex9SN Dimensions

Ex9SN25A
Rotary Handle
Unit: in [mm]



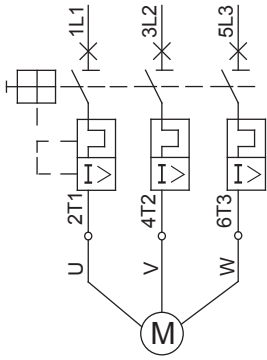
Ex9SN25B
Pushbutton
Unit: in [mm]



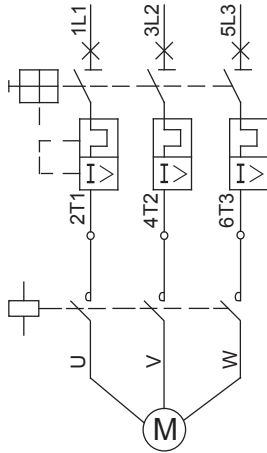
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Manual Motor Starters Ex9SN Wiring Diagrams

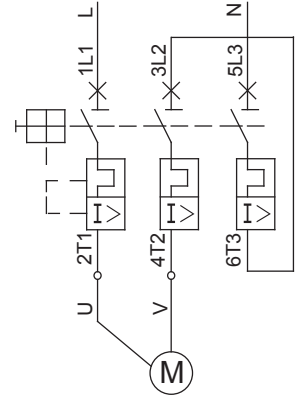
Ex9SN25A/B



Operating principle diagram of starter



Principle connection diagram of starters and contactors



Principle connection diagram of single-phase or DC motor

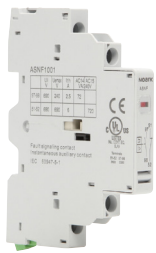
Manual Motor Starters

Ex9SN Accessories: Auxiliary Contact and Enclosure



ASNA

ASNB



ASNF

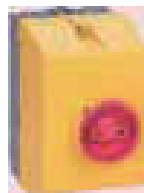
ASN	A	11
Description	Type	Auxiliary Contact
Manual Motor Starter Accessory	A: Auxiliary Contact Side Mount	11: 1NO+1NC
	B: Auxiliary Contact Front Mount	20: 2NO
	F: Auxiliary Contact with Fault Signal Contact	1001: 1NO (Fault)+ 1NC (Auxiliary)
		0101: 1NC (Fault)+ 1NC (Auxiliary)
		1010: 1NO (Fault)+ 1NO (Auxiliary)
		0110: 1NC (Fault)+ 1NO (Auxiliary)

Accessory Description	Type	Product	Part Number
Auxiliary Contact	Side Mount	ASNA11	1600030
		ASNA20	1600029
	Front Mount	ASNB11	1600032
		ASNB20	1600031
	Fault Signal Contact	ASNF1001	1600039
		ASNF0101	1600040
	ASNF1010	1600041	
	ASNF0110	1600042	

Specifications H208 to 209
Dimensions H210 to 211



ASNEA



ASNEC1 & ASNEC2



ASNEB

ASN	EA
Description	Type
Manual Motor Starter Accessory	EA: Enclosure with Actuating Diaphragm
	EB: Enclosure with Emergency Stop Pushbutton
	EC1: Enclosure with Rotary Handle (Black/Gray)
	EC2: Enclosure with Rotary Handle (Red./Yellow)

Specifications H208 to 209
Dimensions H210 to 211

Accessory Description	Product	Part Number
Enclosure	ASNEA	1600043
	ASNEB	1600044
	ASNEC1	1600045
	ASNEC2	1600081

Manual Motor Starters

Ex9SN Accessories: Shunt Trip and Under-Voltage Release



Specifications H208 to 209
Dimensions H210 to 211

ASN	T	A
Description	Type	Rated Voltage
Manual Motor Starter Accessory	T: Shunt Trip Release	A: 110~115 Vac 50 Hz 127 V 60 Hz B: 220~240 Vac 60 Hz C: 380~400 Vac 50 Hz 440 V 60 Hz

Accessory Description	Product	Part Number
Shunt Trip Release (Side Mount)	ASNTA	1600036
	ASNTB	1600037
	ASNTC	1600038



Specifications H208 to 209
Dimensions H210 to 211

ASN	UV	A
Description	Type	Rated Voltage
Manual Motor Starter Accessory	UV: Under-Voltage Release	A: 110~115 Vac 50 Hz 127 V 60 Hz B: 220~240 Vac 60 Hz C: 380~400 Vac 50 Hz 440 V 60 Hz

Accessory Description	Product	Part Number
Under-Voltage Release (Side Mount)	ASNUVA	1600033
	ASNUVB	1600034
	ASNUVC	1600035

Manual Motor Starters

Ex9SN Accessory Specifications

	Auxiliary Contact			Enclosure		Shunt Trip Release	Under-Voltage Release		
	Side Mount	Front Mount	Fault Signal Contact	Actuating Diaphragm	Emergency Stop Pushbutton				
	ASNA	ASNB	ASNF	ASNEA	ASNEB	ASNT	ASNUV		
UL File Number	E467185								
UL Ratings									
Electrical Contact Type	B600	D300	Fault: D300 Auxiliary: B600	-		-			
Rated Insulation Voltage Ui (V)	690	250	690			690			
Voltage Range of Operation (Ue)	-					70~110%		35~70%	
Ue Max (V)	690	250	Fault: 240 Auxiliary: 690			-		-	
Conventional Heating Current Ith (A)	6	2.5	Fault: 2.5 Auxiliary: 6						
AC-15	720 Vac 240 V	120 Vac 240 V	Fault: 720 Vac/240 V Auxiliary: 720 Vac/240 V						
IEC File Number	IEC/EN 60947-5-1					IEC/EN 60947-2			
IEC Ratings									
Pick-Up Voltage (Un)	-			-		-	85~110%		
Drop-Off Voltage (Un)						70~110%	35~70%		
IP Class				IP 55		-			

H

Manual Motor Starters

Ex9SN Accessory Specifications

Utilization Category	Auxiliary Contact			
	Side Mount	Front Mount	Fault Signal Contact	
	ASNA	ASNB	ASNF	
	AC-15		AC-14	
Rated Operational Current I _e (A)	24 Vac	-	2	1.50
	48 Vac	6	1.25	1
	110/127 Vac	4.50	1	0.50
	230/240 Vac	3.30	0.50	0.30
	380/415 Vac	2.20	-	
	440 Vac	1.50		
	500 Vac	1		
	690 Vac	0.60		
	DC-13			
	24 Vdc	6	1	
	48 Vdc	5	0.30	
	60 Vdc	3	0.15	
	110 Vdc	1.30	-	
	220 Vdc	0.50		
		AC-15		AC-14
Normal Operational Power P (W)	24 Vac	-	48	36
	48 Vac	300	60	48
	110/127 Vac	500	127	72
	230/240 Vac	720	120	
	380/415 Vac	850	-	
	440 Vac	650		
	500 Vac	500		
	690 Vac	400		
	DC-13			
	24 Vdc	140	24	
	48 Vdc	240	15	
	60 Vdc	180	9	
	110 Vdc	140	-	
	220 Vdc	120		
Operational Features (Times)		-		1,000

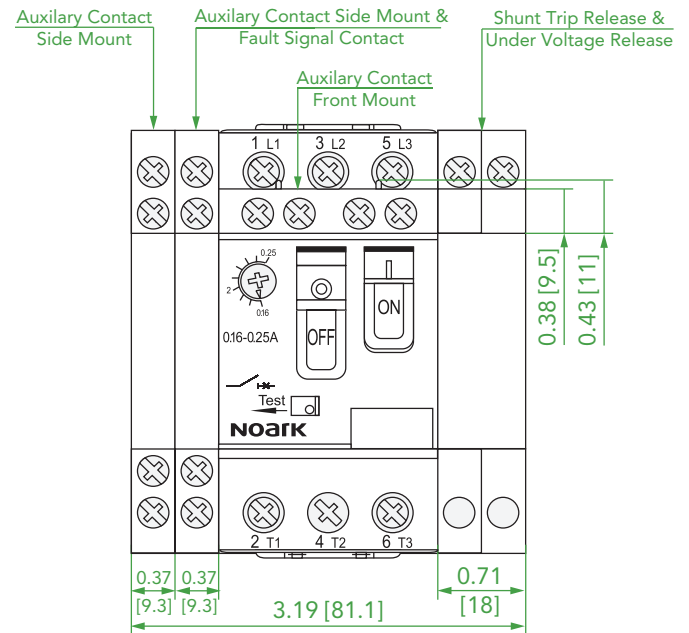
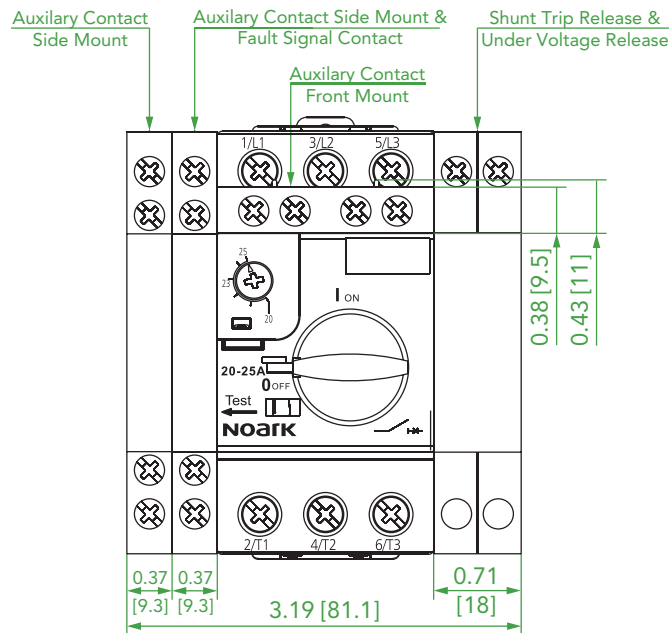
Utilization Category	Auxiliary Contact			
	Fault Signal Contact			
	ASNF			
	AC-14		AC-15	DC-13
Connection	I/I _e	6	10	1.10
	U/U _e	1.10		
	Cos φ or t 0.95	0.70	0.30	6 Pe
Disconnection	I/I _e	6	10	1.10
	U/U _e	1.10		
	Cos φ or t 0.95	0.70	0.30	6 Pe
Number of On/Off Operation Cycles and Operation Frequency	Number of Operation Cycles	10		
	Number of Operation Cycles Per Minute	2		
	On Power Time	0.05		

Manual Motor Starters

Ex9SN Accessory Dimensions

Manual Motor Starter with Accessories

Unit: in [mm]



H

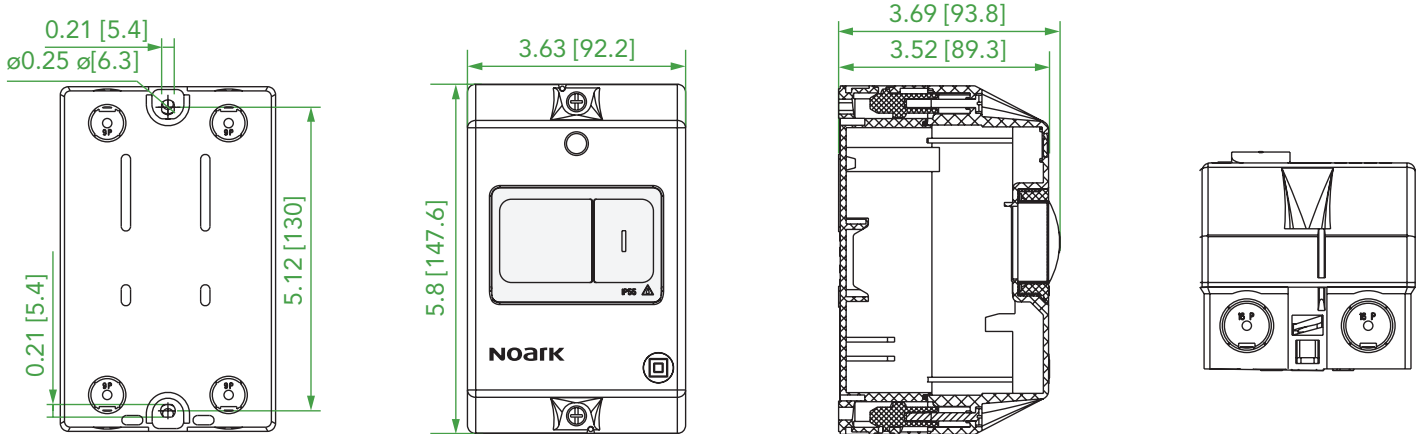
Manual Motor Starters

Ex9SN Accessory Dimensions

ASNEA

Enclosure with Actuating Diaphragm

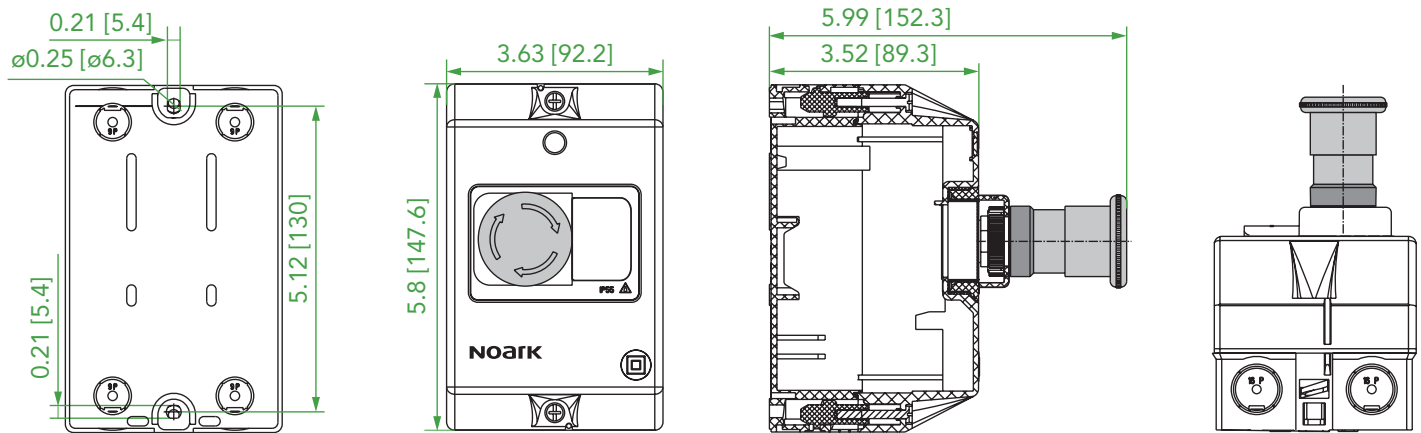
Unit: in [mm]



ASNEB

Enclosure with Emergency Stop Pushbutton

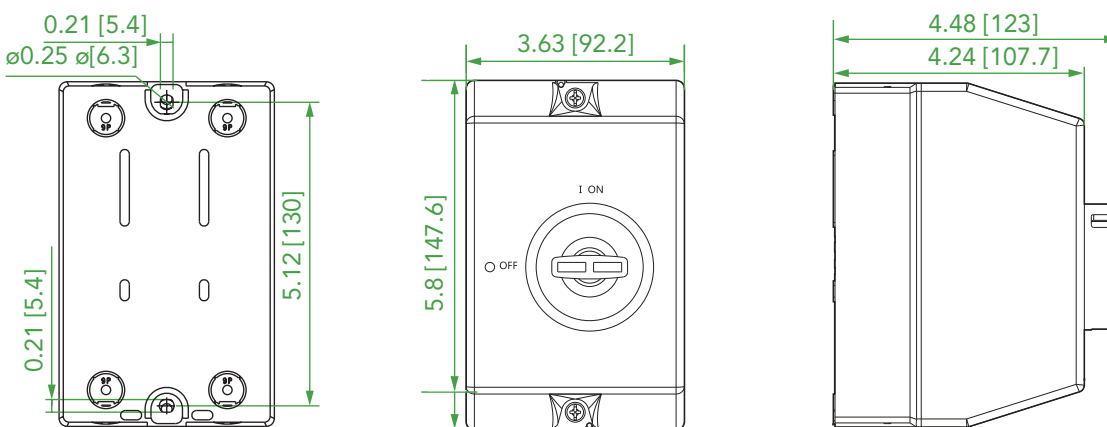
Unit: in [mm]



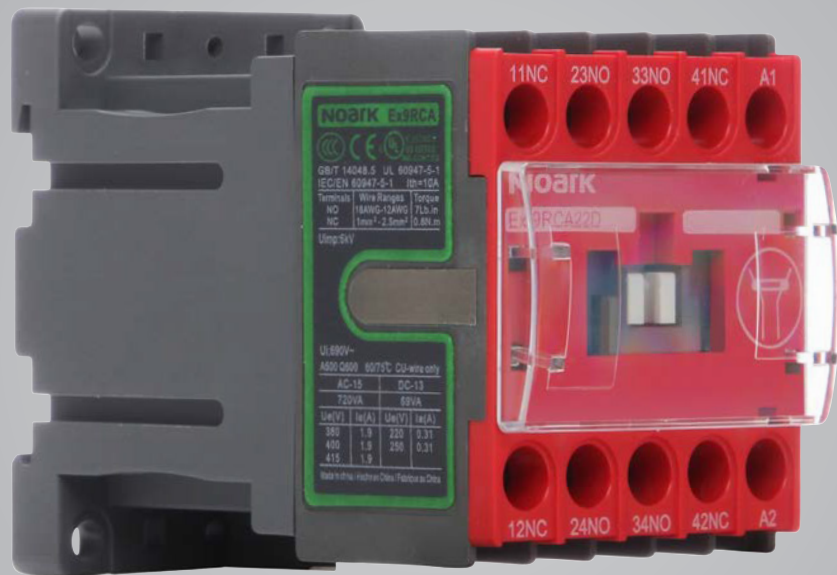
ASNEC

Enclosure with Rotary Handle

Unit: in [mm]



SAFETY CONTROL RELAYS



Ex9RCA

Safety Control Relay

Ex9RCA Product Overview

Features

The new NOARK Electric Ex9RCA Safety Control Relay is designed to provide fail-safe performance for safety function applications. It features mechanically linked contacts for use on safety feedback circuits with up to 6 NCs in contact configuration. When installed the normally closed contact is force guided with the normally open contacts making the Ex9RCA ideal for SRP/CS*.

*SRP/CS is the term given by ISO short for safety-related part of a control system, meaning part of a control system that responds to safety-related input signals and generates safety-related output signals

- Force guided/mechanically linked contacts as per IEC/UL60947-5-1 Annex L
- Mechanically linked contacts symbol prominently displayed on red front cover
- Fixed transparent anti-dust cover allows easy identification of device action and prevents manual operation
- AC or DC operating coils 4-pole models
- Extended contacts configuration up to 8 poles with permanent front block
- Easily mounts on DIN 35mm or panel
- 5 year limited warranty

Safety Control Relay

Ex9RCA National and International Standards

Certifications

- UL Listed, File Number E353865, UL 60947-1
- Certified for Canada according to CSA standards
- IEC/EN 60947-5-1
- CE Approved
- CCC Certified
- RoHS Compliant



Safety Control Relay

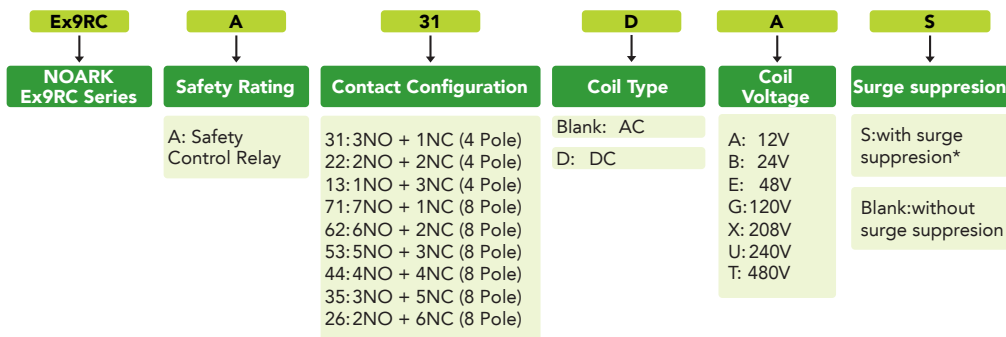
Ex9RCA Product Selection Guide

Label



1. Brand
2. Product Selection
3. Label with UL logo, CE logo and data
4. Mechanically linked contact symbol
5. Fixed clear anti-dust front cover

Product Selection Guide



*: only For DC coil type

Safety Control Relay

Ex9RCA



Certifications

IEC/EN 60947-1



Coil Voltage		4 Pole					
		Product	Part Number	Product	Part Number	Product	Part Number
		1NO,3NC		2NO,2NC		3NO,1NC	
Vac	24	Ex9RCA13B	1321920	Ex9RCA22B	1321919	Ex9RCA31B	1321918
	48	Ex9RCA13E	1321923	Ex9RCA22E	1321922	Ex9RCA31E	1321921
	120	Ex9RCA13G	1321926	Ex9RCA22G	1321925	Ex9RCA31G	1321924
	208	Ex9RCA13X	1321929	Ex9RCA22X	1321928	Ex9RCA31X	1321927
	240	Ex9RCA13U	1321932	Ex9RCA22U	1321931	Ex9RCA31U	1321930
	480	Ex9RCA13T	1321935	Ex9RCA22T	1321934	Ex9RCA31T	13219233
Vdc	12	Ex9RCA13DAS	1321884	Ex9RCA22DAS	1321883	Ex9RCA31DAS	1321882
	24	Ex9RCA13DBS	1321887	Ex9RCA22DBS	1321886	Ex9RCA31DBS	1321855
	48	Ex9RCA13DES	1321890	Ex9RCA22DES	1321889	Ex9RCA31DES	1321888
	120	Ex9RCA13DGS	1321893	Ex9RCA22DGS	1321892	Ex9RCA31DGS	1321891

Safety Control Relay

Ex9RCA



Certifications

IEC/EN 60947-1



Coil Voltage	8 Pole						
	Product	Part Number	Product	Part Number	Product	Part Number	
	2NO,6NC		3NO,5NC		4NO,4NC		
Vdc	12	Ex9RCA26DAS	1321899	Ex9RCA35DAS	1321898	Ex9RCA44DAS	1321897
	24	Ex9RCA26DBS	1321905	Ex9RCA35DBS	1321904	Ex9RCA44DBS	1321903
	48	Ex9RCA26DES	1321911	Ex9RCA35DES	1321910	Ex9RCA44DES	1321909
	120	Ex9RCA26DGS	1321917	Ex9RCA35DGS	1321916	Ex9RCA44DGS	1321915

Coil Voltage	8 Pole						
	Product	Part Number	Product	Part Number	Product	Part Number	
	5NO,3NC		6NO,2NC		7NO,1NC		
Vdc	12	Ex9RCA53DAS	1321896	Ex9RCA62DAS	1321895	Ex9RCA71DAS	1321894
	24	Ex9RCA53DBS	1321902	Ex9RCA62DBS	1321901	Ex9RCA71DBS	1321900
	48	Ex9RCA53DES	1321908	Ex9RCA62DES	1321907	Ex9RCA71DES	1321906
	120	Ex9RCA53DGS	1321914	Ex9RCA62DGS	1321913	Ex9RCA71DGS	1321912

Safety Control Relay

Specifications

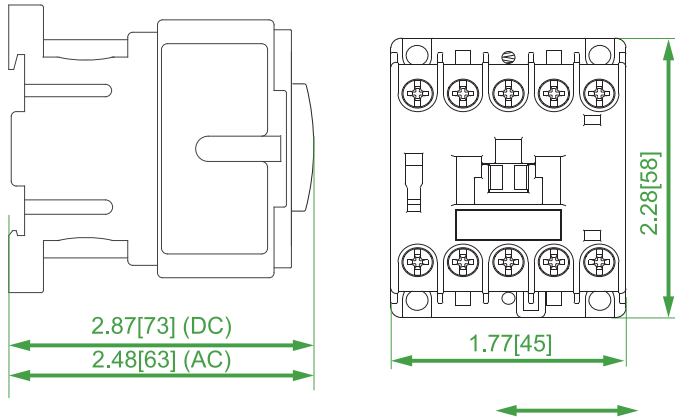
		Ex9RCA	
General Information			
Poles		4, 8	
Production Standard		UL 60947-5-1, GB/T 14048.5, IEC/EN 60947-5-1	
Rated Operating Voltage (U _e)	AC 50/60 HZ	24, 48, 120, 208, 240, 480	
	DC	12, 24, 48, 120	
Rated Insulating Voltage U _i (V)	IEC	690	
	UL, CSA	600	
Rated Impulse Withstand Voltage U _{imp} (kV)		6	
Electrical Life AC-15 (240V/2A) (million cycles)		1	
Mechanical Life (million cycles)		10	
Protection Class		IP20	
Ambient Temperature	Transportation or Storage (°C)	-60...+80	
	Operation at rated voltage (°C)	-20...+60	
Max. Altitude of Installation Site (m)		2000	
AC-12 Rated Thermal Current I_{th}			
Ambient temperature 40°C	24...240V (A)	10	
	230...500V (A)	10	
	230...690V (A)	10	
Ambient temperature 60°C I _{th}	24...240V (A)	10	
	230...500V (A)	10	
	230...690V (A)	10	
AC-15/A600			
I _e	120V (A)	6	
	230V (A)	3	
	240V (A)	3	
	400V (A)	1.9	
	480V (A)	1.5	
	500V (A)	1.4	
	600V (A)	1.2	
DC-13 Rated Thermal Current I_{th}			
I _e	24V (A)	Auxiliary Poles	Main Poles
		2.8	5
	48V (A)	1.2	2.5
	110V (A)	0.55	1.1
	220V (A)	0.27	0.55
	440V (A)	0.15	0.3
	600V (A)	0.1	0.2
Load Carrying Capacity per UL			
Rated voltage AC (V)		Max. 600	
Continuous rating 40 °C (A)		10	
Switching capacity AC (A)		A600	
Rated voltage DC (V)		Max. 600	
Switching capacity DC (A)		Auxiliary Poles: Q600	Main Poles: P600
Tolerance of Control Voltage			
AC control (50/60 Hz)	pick-up (x U _s)	0.85...1.1	
	dropout (x U _s)	0.2...0.75	
DC control	pick-up (x U _s)	0.8...1.1 (4 pole), 0.85...1.1 (8 pole)	
	dropout (x U _s)	0.1...0.75	
Coil Power Consumption			
AC control(50/60 Hz)	pick-up (VA)	40	
	hold-in (VA)	9	
DC control	pick-up (W)	3.2-4.0	
	hold-in (W)	3.2-4.0	
Operating Time			
AC	closing delay (ms)	15...30	
	opening delay (ms)	15...25	
DC	closing delay (ms)	25...40	
	opening delay (ms)	10...15	

Safety Control Relay

Dimensions

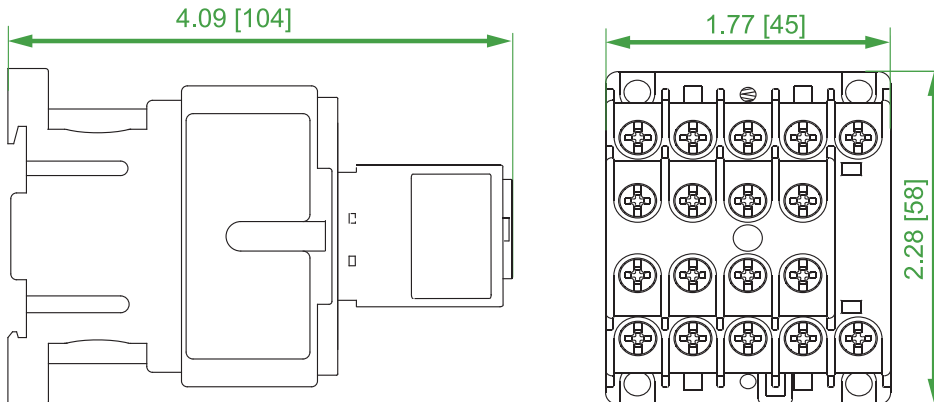
Ex9RCA 4 Poles

Unit: in. [mm]



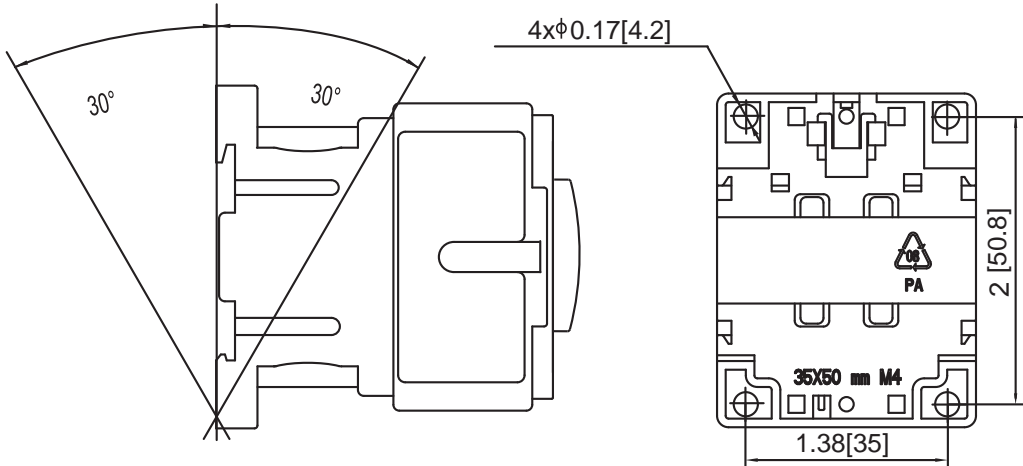
Ex9RCA 8 Poles

Unit: in. [mm]



Safety Control Relay

Mounting Position



Safety Control Relay

Dimensions

Poles	Configuration	NO	NC	SKU*	Mechanically Linked Contacts
4		3	1	9RCA31	Yes
4		2	2	9RCA22	Yes
4		1	3	9RCA13	Yes
8		7	1	9RCA71	Yes
8		6	2	9RCA62	Yes

*The SKU is incomplete

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Safety Control Relay

Mounting Position

Poles	Configuration	NO	NC	SKU*	Mechanically Linked Contacts
8		5	3	9RCA53	Yes
8		4	4	9RCA44	Yes
8		3	5	9RCA35	Yes
8		2	6	9RCA26	Yes

Electronic Overload Relay



Ex9RE

Electronic Thermal Overload Relay

Product Overview

Features

NOARK Electric Ex9RE40 electronic thermal overload relays are designed to provide dependable and accurate protection for motors if an overload or phase failure occur. They also offer jam, stall and current unbalance protection. The Ex9RE40 is available with coil voltages of 24Vac/dc, 110Vac and 220Vac with current ranges from 0.1A to 40A. Each unit has selectable trip class settings of 5, 10, 20 and 30 providing a wide range of coverage with fewer products. They are also equipped with integrated diagnostics via LED lights to allow for quick status identification. Control settings are protected by a clear plastic cover.

- Coil voltages: 24Vac/dc, 110Vac, 220Vac
- Available in 4 current ranges: 0.1 - 0.5A, 0.4 - 2A, 1.8 - 9A, 8 - 40A
- Integrated diagnostics with LED indicators
- Selectable trip class: 5, 10, 20, 30
- 1 NO + 1 NC auxiliary contact
- Manual or automatic reset
- Compact 45 mm size
- Easily mounts on NOARK Ex9C 09-38 A contactor or on DIN 35mm
- 5 year limited warranty

Electronic Thermal Overload Relay

Product Overview

Certifications

- UL 60947-4-1, UL 60947-5-1
- GB/T 14048.4, GB/T 14048.5
- IEC/EN 60947-4-1, IEC/EN 60947-5-1



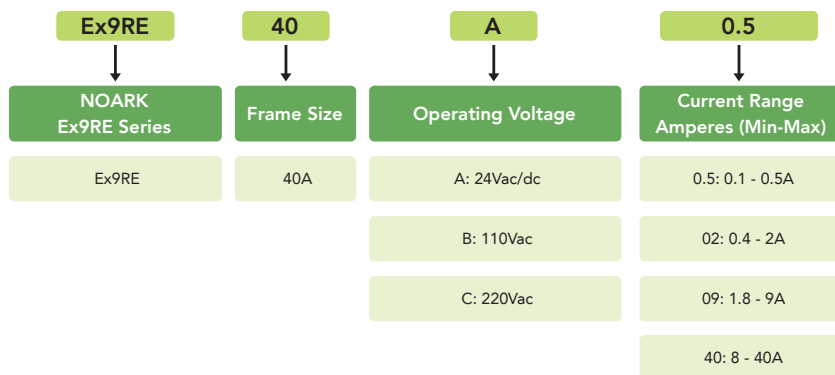
Electronic Thermal Overload Relay Product Selection Guide

Label



1. Brand
2. Adjustable Current Range
3. Manual Reset
4. Operating Voltage
5. Product Series/Frame Amperage
6. Tripping class
7. Push to test
8. Auxiliary Contacts

Product Selection Guide



Electronic Thermal Overload Relay

Ex9RE 40A



Certifications
 IEC/EN 60947-4-1
 UL 60947-4-1, 60947-5-1

CE cULus LISTED

40 A

Current Range Amp (Min-Max)	Operating Voltage	Product	Part Number
0.1-0.5	24 Vac/dc	Ex9RE40A0.5	1420048
	110Vac	Ex9RE40B0.5	1420049
	220Vac	Ex9RE40C0.5	1420050
0.4-2	24 Vac/dc	Ex9RE40A02	1420051
	110Vac	Ex9RE40B02	1420052
	220Vac	Ex9RE40C02	1420053
1.8-9	24 Vac/dc	Ex9RE40A09	1420054
	110Vac	Ex9RE40B09	1420055
	220Vac	Ex9RE40C09	1420056
8-40	24 Vac/dc	Ex9RE40A40	1420057
	110Vac	Ex9RE40B40	1420058
	220Vac	Ex9RE40C40	1420059

J

Electronic Thermal Overload Relay

Specifications

General Information		Ex9RE
Number of Poles		3
Mounting		Mounts on DIN rail 35mm, contactor or base
Rated Insulation Voltage U_i (V)	IEC	690
	UL, CSA	600
Rated Operating Voltage U_e (V)	AC 50/60 HZ	24, 110, 220
	DC	24
Rated Impulse Withstand Voltage U_{imp} (kV)		6
Product certifications		UL, CE, CB, CCC
Degree of protection		IP 20 (front face)
Ambient air temperature around the device (°C)	Storage	- 55 C to + 80 C
	Normal operation without derating	- 25 C to + 40 C
Maximum operating altitude (m)		2000
Shock resistance		15 gn - 11 ms
Vibration resistance		4 gn
Surge withstand (kV)		6
Immunity to fast transient currents (kV)		2
Electromagnetic compatibility		Class B
Electrical characteristics of power circuit		
Setting range (A)		0.1-40
Tripping class		5/10/20/30
Rated impulse withstand voltage U_{imp}		690V
Frequency limits (Hz)		50-60
Connection by cable or lug-clamps		
Flexible cable without cable end (1 conductor) (AWG/mm ²)	Min	18/1
	Max	8/10
Flexible cable with cable end (1 conductor) (AWG/mm ²)	Min	18/1
	Max	8/10
Ø of screw (mm)		M4
Tightening torque (Lb.in/N.m)		18/2.0
Short circuit current rating		25kA@600Vac with MCCB M1; @600Vac max. with Fuse 100kA@480Vac with MCCB M1; @600Vac max. with Fuse

Electronic Thermal Overload Relay

Specifications

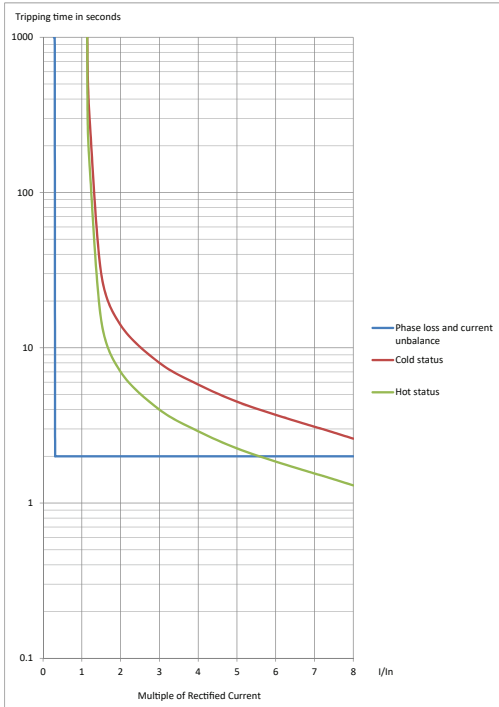
Auxiliary contact characteristics		
Rated Insulation Voltage U _i (V)	IEC	250
Rated Operating Voltage U _e (V)	AC-15	AC250V/3A
	DC-13	DC30V/3A
Rated Impulse Withstand Voltage U _{imp} (V)		2.5
Contact type		1NO+1NC
Conventional thermal current (A)		3
Short-circuit protection (A)		RT36-00/4
Connection by cable or lug-clamps		
Flexible cable without cable end (1 or 2 conductors) (AWG/mm ²)	Min	1 × (18/1)
	Max	2 × (12/2.5)
Flexible cable with cable end (1 or 2 conductors) (AWG/mm ²)	Min	1 × (18/1)
	Max	1 × (16/1.5) + 1 × (12/2.5)
Ø of screw (mm)		M3
Tightening torque (Lb.in/N.m)		7/0.8

Operating characteristics		
Reset	Manual	Reset button
	Automatic	120s fixed
Status and fault signalling (see Instruction Booklet for details)		2 LEDs
Stop/Test		Stop/Test button
Sensitivity to current unbalance		phase difference > 36%, trip in 2s
Stall and jam protection		> 480% FLA, trip in 3s

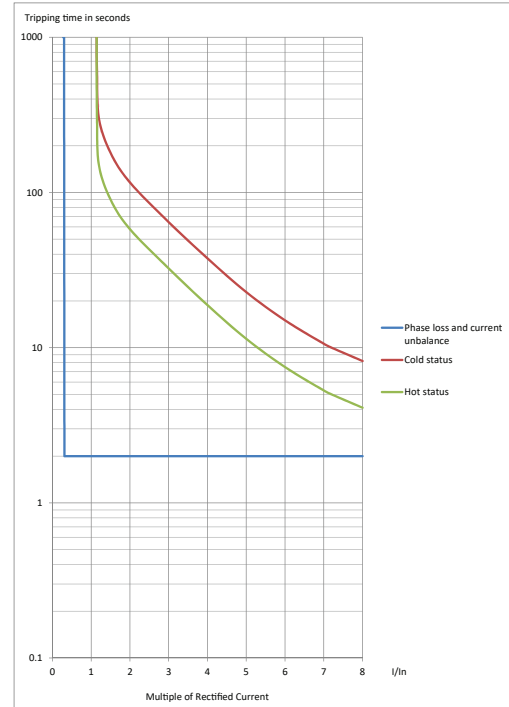
Electronic Thermal Overload Relay

Trip Curves

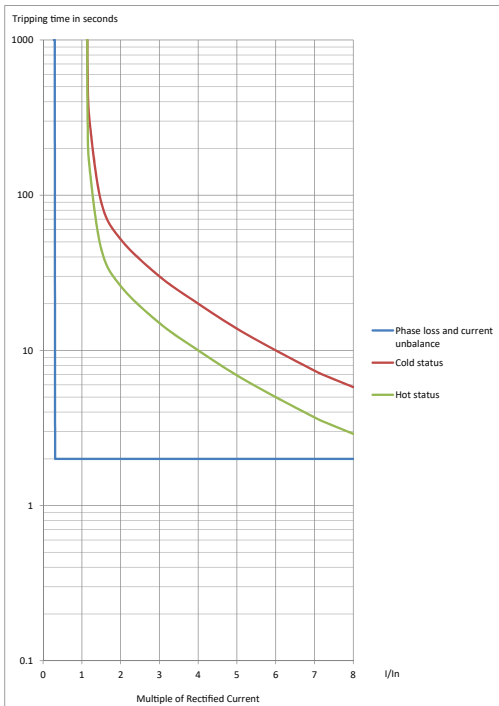
Class 5



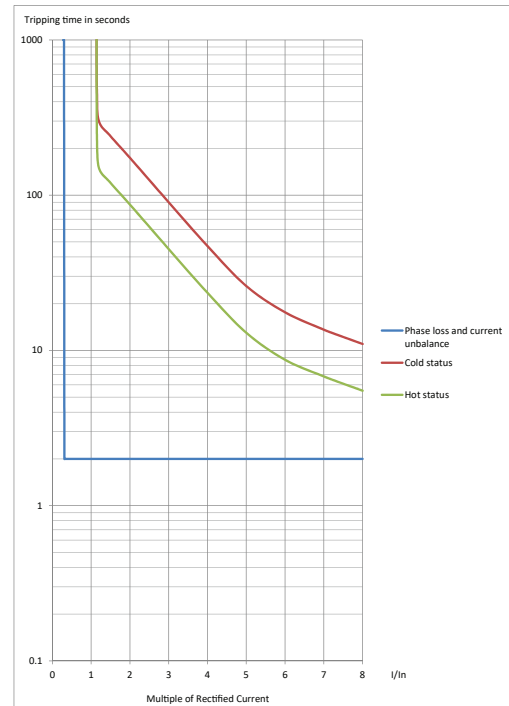
Class 20



Class 10

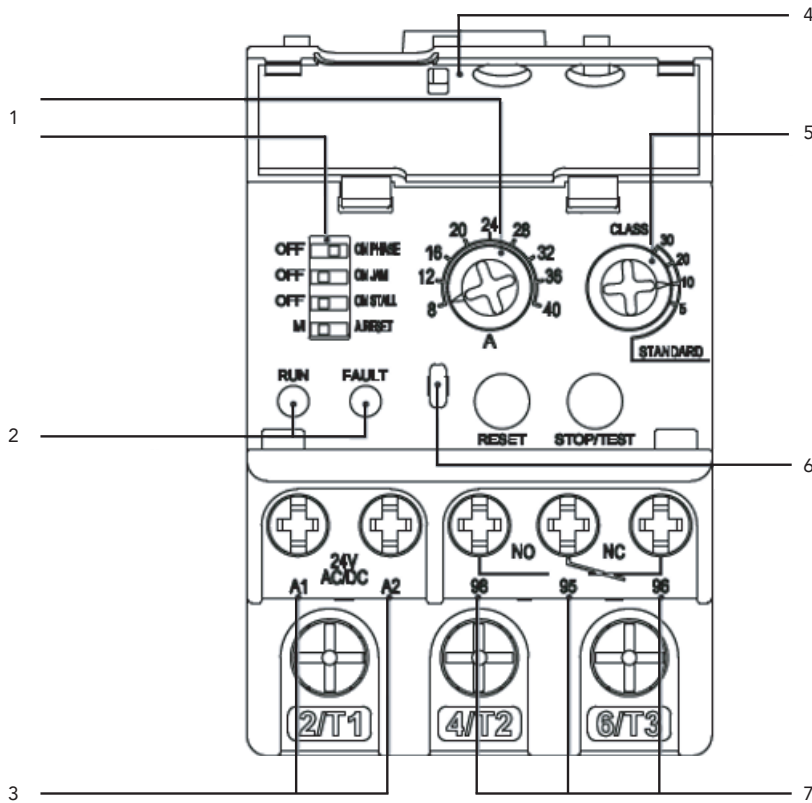


Class 30



Electronic Thermal Overload Relay

Control Functions



1. Current setting Dip switch (1)
2. Action indication (2)
3. Power supply
4. Transparent cover
5. Trip Class setting
6. Lock
7. Relay output

- (1) Select function by Dip SW.
- Dip SW1: Current imbalance OFF/ON
 - Dip SW2: Jam OFF/ON
 - Dip SW3: Stall OFF/ON
 - Dip SW4: Reset Manual / Auto

(2) Combined signals from red and green LEDs indicate motor status including trip causes.

Condition	LED Signal(Pulse Chart)	
	Green LED	Red LED
Power on	On	Off
Steady state	On	Off
Current imbalance	Off	On
Stall	Off	On
Jam	Off	On
Others	Off	On

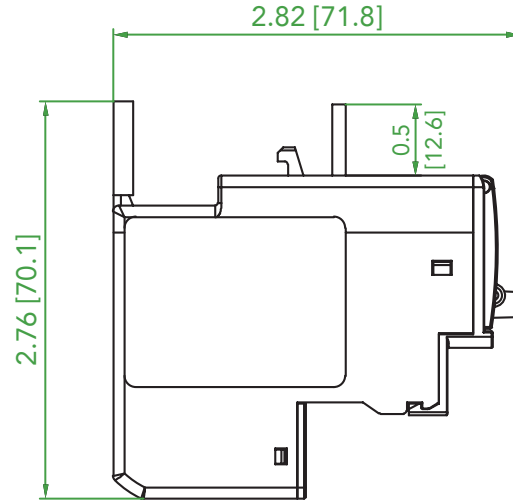
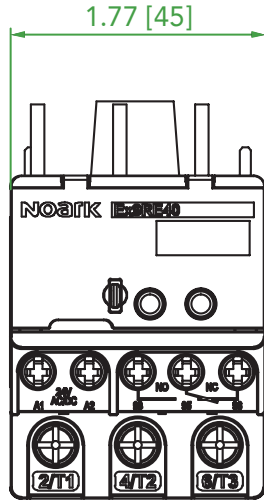


Electronic Thermal Overload Relay

Ex9RE 40 Dimensions

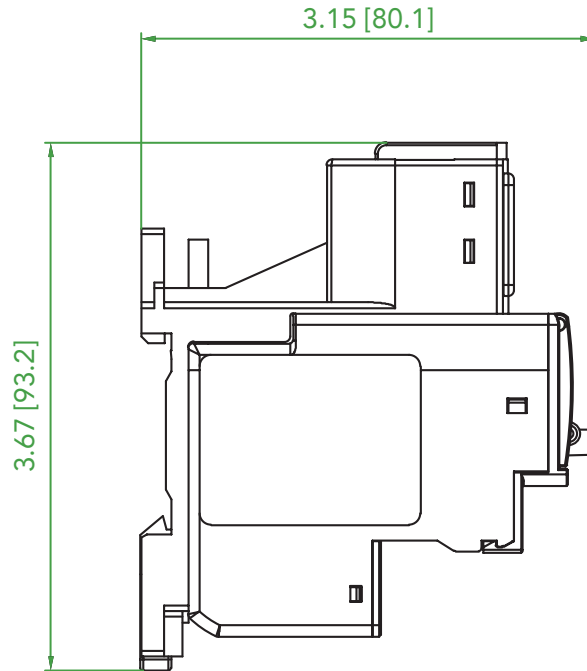
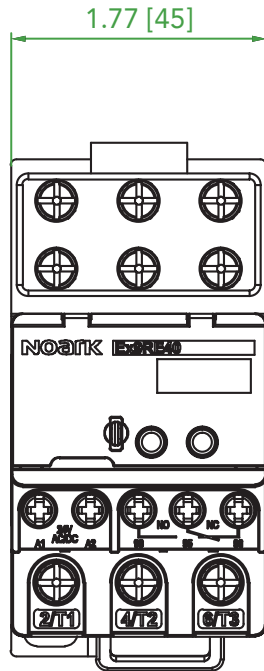
Ex9RE40

Unit: in [mm]



Ex9RE40+AD57

Unit: in [mm]

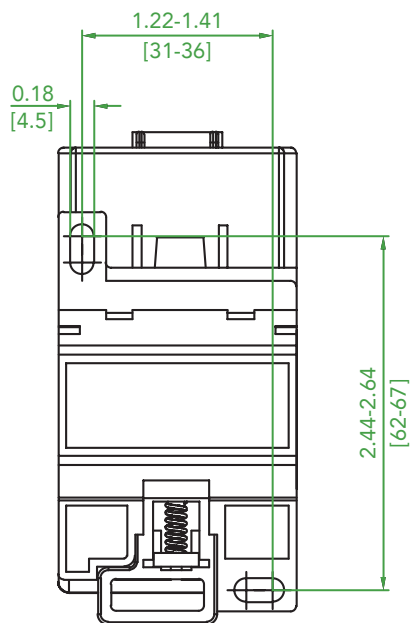
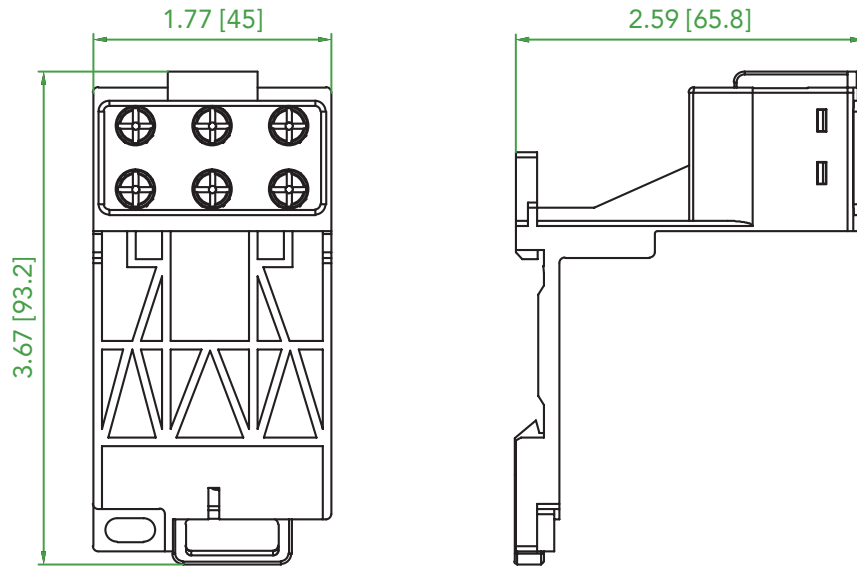


Electronic Thermal Overload Relay

Ex9RE Accessory Dimensions

AD57

Unit: in [mm]



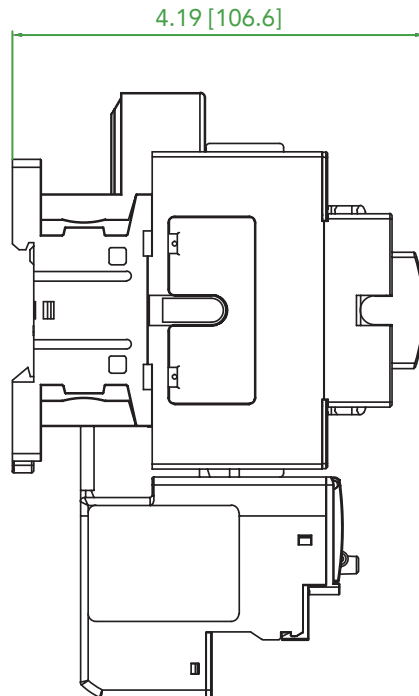
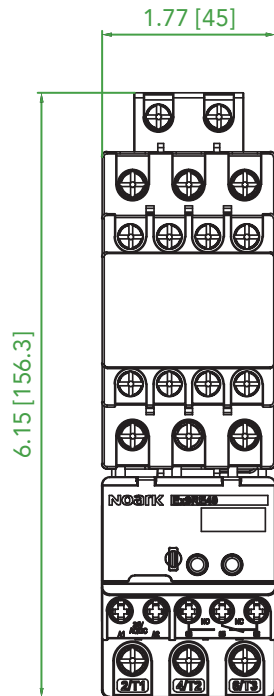
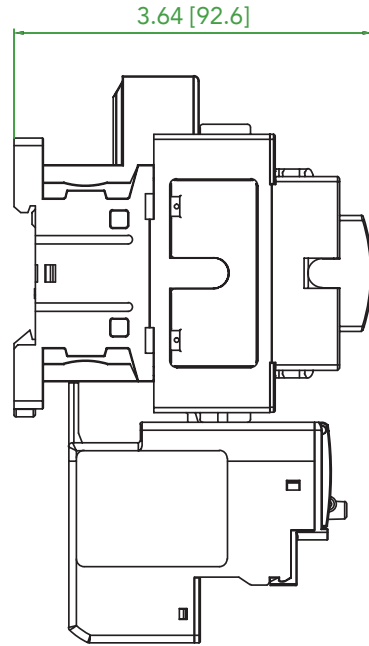
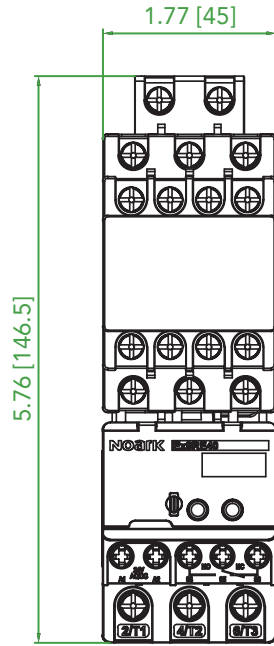
J

Electronic Thermal Overload Relay

Ex9RE 40 Dimensions

Ex9RE40+Ex9C09~18

Unit: in [mm]

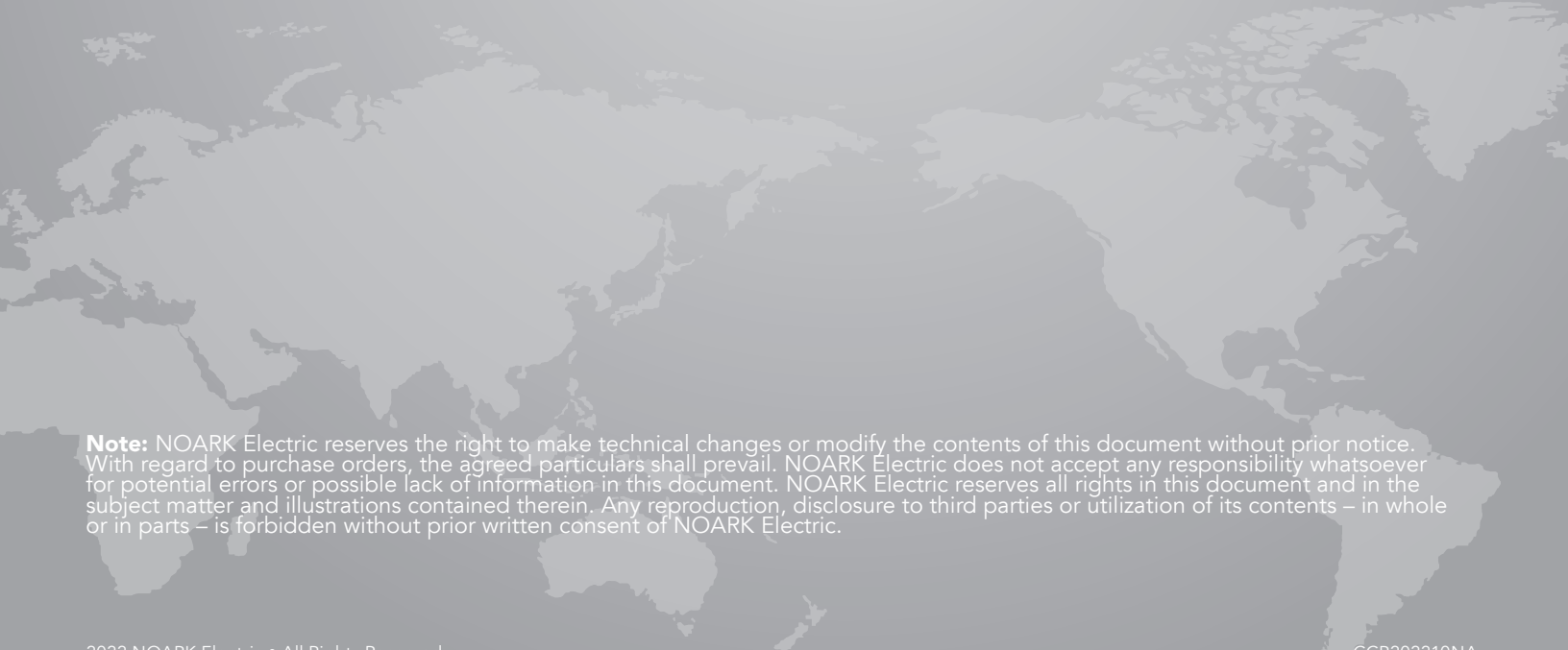


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