

# NOARK

Catalog

## ASD16 & ASD25

UL 1500VDC Disconnect Switches



## ABOUT US

**NOARK Electric** is a global manufacturer of low-voltage electrical components for industrial applications. We specialize in motor controls and circuit protection for original equipment manufacturers. Our mission is to provide customers with the highest quality products at an exceptional value and back them with world-class service and support. Every NOARK product is tested and certified to the highest industry standards and covered by our exclusive five-year limited warranty.

### Research and Development

The entire portfolio of high-quality NOARK products is designed for manufacturing and assembly (DFMA). Each component is developed in-house by our engineering team to meet the strictest standards and performance requirements. This dedication to excellence has led to the development of patented technology found in many of our products.

### World-class Manufacturing

After being thoroughly tested, approved and certified – each NOARK product is sent into production at our state-of-the-art manufacturing facilities. This allows us to maintain strict quality control standards throughout the manufacturing process. In addition, NOARK Electric adheres to a policy of environmental protection and sustainability.

### North American Distribution

NOARK's distribution centers are located in Pomona, CA and Kitchener, ON, with the aim of ensuring prompt and reliable deliveries of the entire product range to our customers all over North America. Our supply chain team works closely with our factories and logistics partners to ensure the availability of our products on the North American market and provide logistics services on the level which our customers expect. NOARK Electric is a subsidiary of the largest electrical manufacturing group in Asia with over 30 thousand employees and sales revenue of \$10 billion USD. We have corporate facilities in Los Angeles, Shanghai and Prague to service the requirements of individual markets and countries.

|             |                       |                       |                   |               |                            |                     |
|-------------|-----------------------|-----------------------|-------------------|---------------|----------------------------|---------------------|
| <b>140+</b> | <b>300+</b>           | <b>20</b>             | <b>22</b>         | <b>3</b>      | <b>10,000,000+</b>         | <b>30,000+</b>      |
| Countries   | Overseas Distributors | Overseas Subsidiaries | Logistics Centers | R & D Centers | Sq.Ft. Manufacturing Space | Employees Worldwide |





## TABLE OF CONTENTS

---

### **A. ASD16 DC Disconnect Switches**

|                                  |   |
|----------------------------------|---|
| a. Overview.....                 | 4 |
| b. Product Label.....            | 5 |
| c. Product Selection Guide.....  | 6 |
| d. Technical Specifications..... | 7 |
| e. Environmental conditions..... | 8 |
| f. Dimensions.....               | 9 |

### **B. ASD25 DC Disconnect Switches**

|                                    |    |
|------------------------------------|----|
| a. Overview.....                   | 11 |
| b. Product Label.....              | 12 |
| c. Production Selection Guide..... | 13 |
| d. Technical Specifications.....   | 14 |
| e. Environmental conditions.....   | 15 |
| f. Dimensions.....                 | 16 |
| g. Wiring Connection.....          | 33 |

### **C. ASD16/ASD25 DC Disconnect Switch Accessories**

|                    |    |
|--------------------|----|
| a. Electrical..... | 34 |
| b. Mechanical..... | 37 |





## ASD16 DC Disconnect Switches

### Overview

---

### Features

Noark Electric ASD16 DC disconnect switches comply with UL489B - For Photovoltaic Systems and UL 489 Supplement SC – For Batteries and Energy Storage Systems. The DC switch is available in current ratings of 600A through 1600A with short-time withstand current up to 75kA @ 1500 Vdc. The ASD16 DC disconnect switch features a poles-in-series design and a jumper connection configuration for ungrounded systems. The ASD16 DC disconnect switch is backed by a 1-year limited warranty.

- Rated current 600A - 1600A
- Rated operational voltage up to 1500Vdc (4-Pole in series)
- Short circuit withstand current 75kA
- 12,500 Operations, before maintenance (Mechanical )
- Compact design for limited space in combiner box or the solar inverter
- An extensive range of accessories
- Factory mounted connection jumpers comply with UL regulations



### Certifications

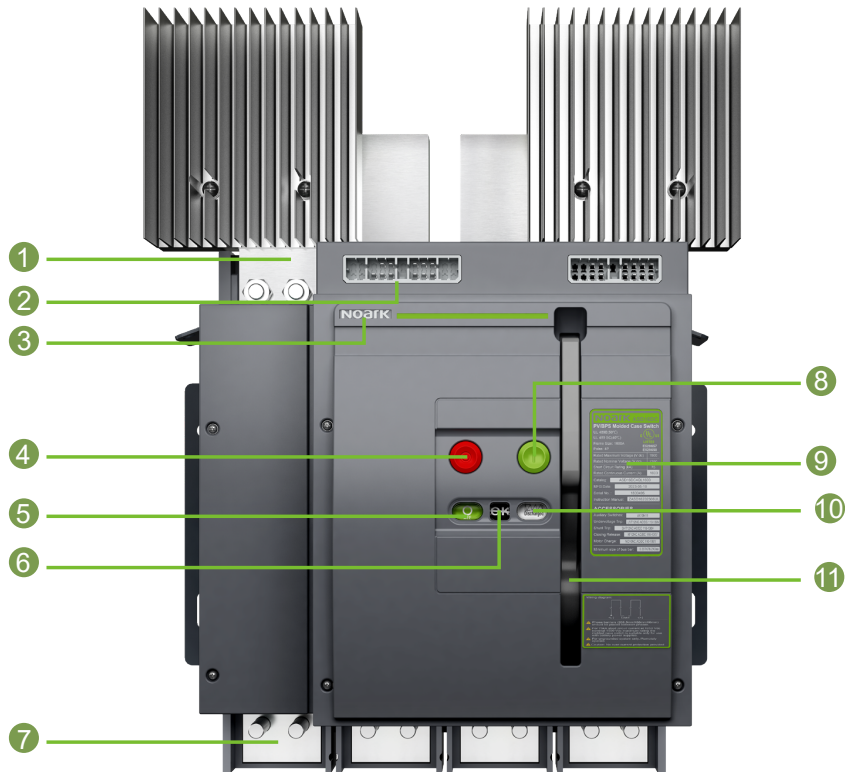
- UL489B - Photovoltaic Systems
- UL 489 SUPPLEMENT SC - Batteries and Energy Storage Systems





# ASD16 DC Disconnect Switches

Product Label



- 1. Jumper busbar
- 2. Control circuit wiring terminals
- 3. Trademark
- 4. Opening push-button (O)
- 5. Contact position indicator
- 6. Ready to close indicator
- 7. Terminal connectors
- 8. Closing push-button (I)
- 9. Nameplate
- 10. Spring charged/discharged indicator
- 11. Charge handle

a) opening



b) closing

a) Spring charged



b) Spring discharged



6. Ready to close indicator

a) ready



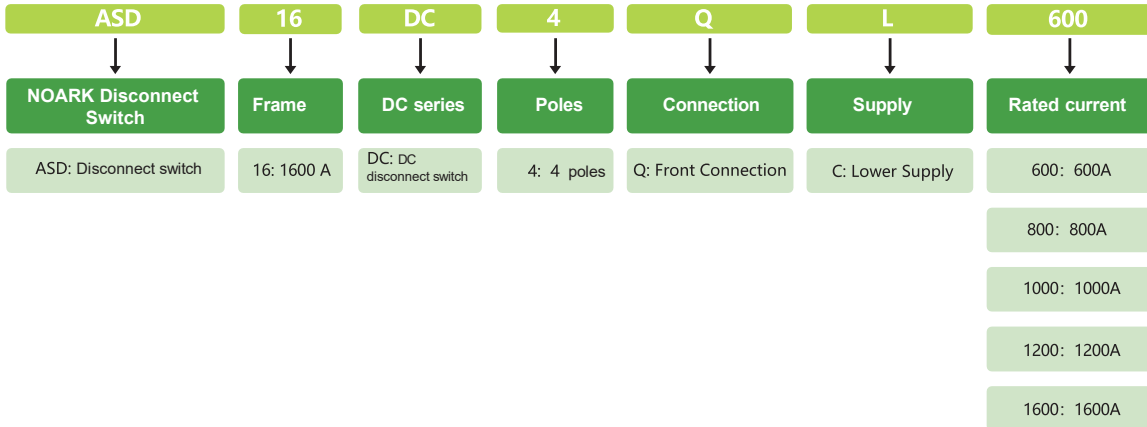
b) not ready





# ASD16 DC Disconnect Switches

## Product Selection Guide



- Jumper busbars are included, no need to order separately

| Short Time Withstand Current Rating | Rated Current (A) | Terminal Connection | C Type Connection |             |
|-------------------------------------|-------------------|---------------------|-------------------|-------------|
|                                     |                   |                     | Catalog Number    | Part Number |
| 75kA                                | 600               | Front Connection    | ASD16DC4QL600     | 1800491     |
|                                     | 800               |                     | ASD16DC4QL800     | 1800492     |
|                                     | 1000              |                     | ASD16DC4QL1000    | 1800493     |
|                                     | 1200              |                     | ASD16DC4QL1200    | 1800494     |
|                                     | 1600              |                     | ASD16DC4QL1600    | 1800495     |



# ASD16 DC Disconnect Switches

## Technical Specification

| Product                           |                                      | ASD16DC                      |
|-----------------------------------|--------------------------------------|------------------------------|
| Rated Maximum Voltage (Vdc)       |                                      | 1500Vdc (4-Pole in series)   |
| Rated current(A)                  |                                      | 600/800/1000/1200/1600       |
| Pole                              |                                      | 4-Pole                       |
| Standards                         |                                      | UL489 SUPPLEMENT SC / UL489B |
| Short time withstand current (kA) |                                      | 75                           |
| Operating time (ms)               | Max. Breaking time                   | <30                          |
|                                   | Max. Closing time                    | <60                          |
| Number of operations (times)      | Mechanical (before maintenance)      | 12,500                       |
|                                   | Electrical life (before maintenance) | 500                          |
| Installation type                 |                                      | Fixed, Front connection      |
| Jumper busbar connection type     |                                      | <p>Lower supply</p>          |
| Dimensions                        |                                      |                              |
| H×W×D (mm)                        |                                      | 473x364x198.5                |
| Weight: lb (kg)                   |                                      | 61.73 (28)                   |



# ASD16 DC Disconnect Switches

## Environmental Conditions

### Ambient Temperature

ASD16DC disconnect switch can operate in -45°C ~ 70°C environmental conditions. ASD16DC disconnect switch can operate at higher temperatures than the reference temperature 40°C, in this case, the derating coefficients shown in the table must be applied. The disconnect switch needs to be specially customized when the operating temperature is below -25°C.

| Rated Current (A) | Temperature (°C) |      |      |      |      |      |      |
|-------------------|------------------|------|------|------|------|------|------|
|                   | <40              | 45   | 50   | 55   | 60   | 65   | 70   |
| 600               | 100%             | 100% | 100% | 100% | 100% | 100% | 100% |
| 800               | 100%             | 100% | 100% | 100% | 100% | 100% | 100% |
| 1000              | 100%             | 100% | 100% | 100% | 100% | 100% | 100% |
| 1200              | 100%             | 100% | 100% | 100% | 100% | 100% | 100% |
| 1600              | 100%             | 100% | 100% | 95%  | 92%  | 85%  | 80%  |

### Altitude

ASD16DC disconnect switch does not change in rated performance up to 2000m. Above 2000m, the derating coefficients shown in the table must be applied.

| Elevation (m)     | <2000 | 3000    | 4000    | 5000    |
|-------------------|-------|---------|---------|---------|
| Rated Voltage (V) | 1xUe  | 0.95xUe | 0.8xUe  | 0.7xUe  |
| Rated Current (A) | 1xIn  | 0.99xIn | 0.96xIn | 0.94xIn |

### Humidity

The relative humidity must not exceed 85% at 40°C and the monthly average relative humidity in the wettest month must not exceed 90%. The effect of surface condensation caused by temperature changes on product performance should be taken into consideration



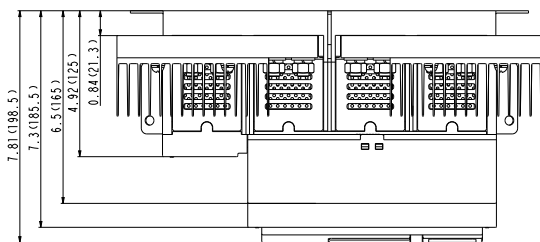
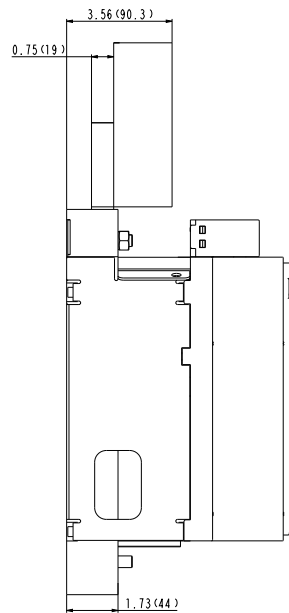
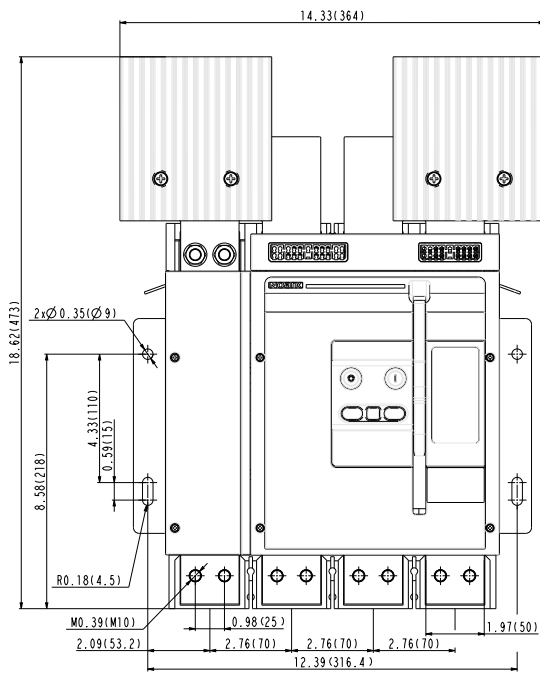


# ASD16 DC Disconnect Switches

## Dimensions

600A-1600A Fixed, Front Connection

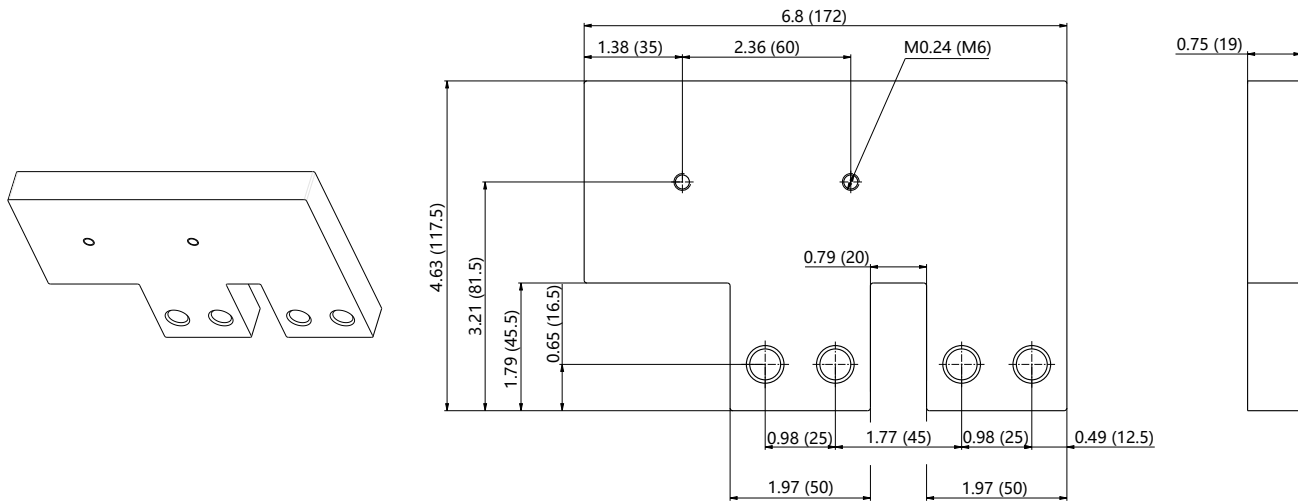
in(mm)





# ASD16 DC Disconnect Switches

## Jumper Dimensions



| Recommended busbar specification |   |
|----------------------------------|---|
| Rated Current(A)                 | Vertical type                                     |
| 600                              | 6.35TX57.2X1ea (inch:1/4X2-1/4X1ea)<br>10TX40X1ea |
| 800                              | 6.35TX76.2X1ea (inch:1/4X3X1ea)<br>10TX50X1ea     |
| 1000                             | 6.35TX50.8X2ea (inch:1/4X2X2ea)<br>10TX65X1ea     |
| 1200                             | 6.35TX57.2X2ea (inch:1/4X2-1/4X2ea)<br>10TX80X1ea |
| 1600                             | 6.35TX76.2X2ea (inch:1/4X3X2ea)<br>10TX50X2ea     |



## ASD25 DC Disconnect Switches

### Overview

---

### Features

Noark Electric ASD25 DC disconnect switches comply with UL489B - For Photovoltaic Systems and UL 489 Supplement SC – For Batteries and Energy Storage Systems. The DC switch is available in current ratings of 800A – 2500A with short-time withstand current up to 150kA @ 1500 Vdc. The ASD25 DC disconnect switch features a poles-in-series design and a jumper connection configurations are offered for grounded and ungrounded systems. The ASD25 DC disconnect switch is backed by a 1-year limited warranty

- UL489B / UL489 Supplement SC Compliant
- Operating voltage up to 1500Vdc (4 poles in series)
- Rated short time withstand current up to 150kA
- Ambient temperature - 45°C ~ 70°C
- Can be used in grounded and ungrounded systems
- Full line of internal and external accessories available



### Certifications

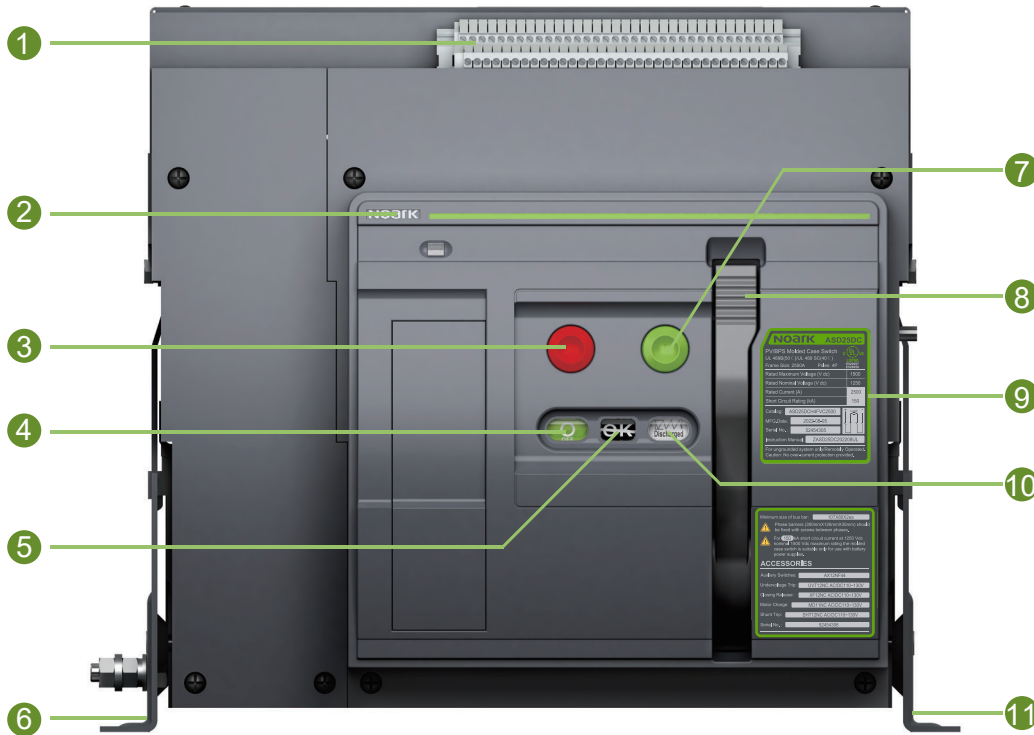
- UL489B - For Photovoltaic Systems
- UL 489 SUPPLEMENT SC - Batteries and Energy Storage Systems



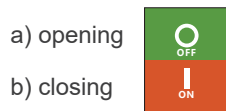


# ASD25 DC Disconnect Switches

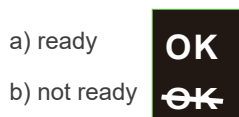
## Product Label



- 1. Control circuit wiring terminal
- 2. Brand
- 3. Opening push-button (O)
- 4. Contact position indicator

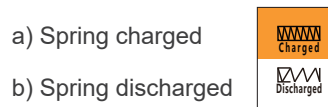


- 5. Closing ready indicator



- 6. Fixed plate (left)

- 7. Closing push-button (I)
- 8. Manual spring charge handle
- 9. Nameplate
- 10. Spring charged/discharged indicator

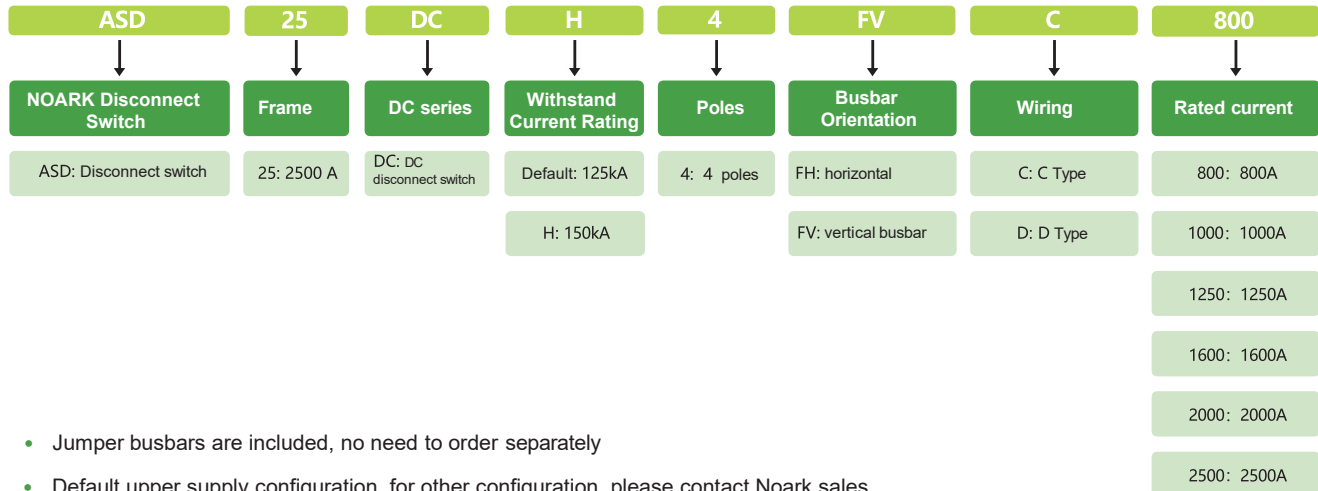


- 11. Fixed plate (right)



# ASD25 DC Disconnect Switches

## Product Selection Guide

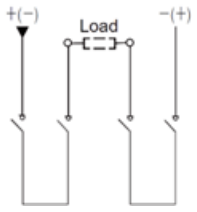
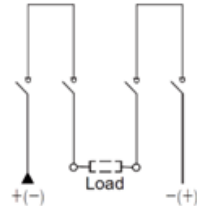
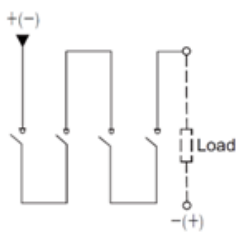
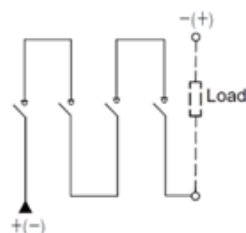


| Short Time Withstand Current Rating | Rated Current (A) | Terminal Connection | C Type Connection |             | D Type Connection |             |                  |         |
|-------------------------------------|-------------------|---------------------|-------------------|-------------|-------------------|-------------|------------------|---------|
|                                     |                   |                     | Catalog Number    | Part Number | Catalog Number    | Part Number |                  |         |
| 125kA                               | 800               | Horizontal          | ASD25DC4FHC800    | 1800381     | ASD25DC4FHD800    | 1800405     |                  |         |
|                                     | 1000              |                     | ASD25DC4FHC1000   | 1800382     | ASD25DC4FHD1000   | 1800406     |                  |         |
|                                     | 1250              |                     | ASD25DC4FHC1250   | 1800383     | ASD25DC4FHD1250   | 1800407     |                  |         |
|                                     | 1600              |                     | ASD25DC4FHC1600   | 1800384     | ASD25DC4FHD1600   | 1800408     |                  |         |
|                                     | 2000              |                     | ASD25DC4FHC2000   | 1800385     | ASD25DC4FHD2000   | 1800409     |                  |         |
|                                     | 2500              |                     | ASD25DC4FHC2500   | 1800386     | ASD25DC4FHD2500   | 1800410     |                  |         |
|                                     | 800               | Vertical            | ASD25DC4FVC800    | 1800387     | ASD25DC4FVD800    | 1800411     |                  |         |
|                                     | 1000              |                     | ASD25DC4FVC1000   | 1800388     | ASD25DC4FVD1000   | 1800412     |                  |         |
|                                     | 1250              |                     | ASD25DC4FVC1250   | 1800389     | ASD25DC4FVD1250   | 1800413     |                  |         |
|                                     | 1600              |                     | ASD25DC4FVC1600   | 1800390     | ASD25DC4FVD1600   | 1800414     |                  |         |
|                                     | 2000              |                     | ASD25DC4FVC2000   | 1800391     | ASD25DC4FVD2000   | 1800415     |                  |         |
|                                     | 2500              |                     | ASD25DC4FVC2500   | 1800392     | ASD25DC4FVD2500   | 1800416     |                  |         |
|                                     | 150kA             |                     | 800               | Horizontal  | ASD25DCH4FHC800   | 1800393     | ASD25DCH4FHD800  | 1800417 |
|                                     |                   |                     | 1000              |             | ASD25DCH4FHC1000  | 1800394     | ASD25DCH4FHD1000 | 1800418 |
| 1250                                |                   | ASD25DCH4FHC1250    | 1800395           |             | ASD25DCH4FHD1250  | 1800419     |                  |         |
| 1600                                |                   | ASD25DCH4FHC1600    | 1800396           |             | ASD25DCH4FHD1600  | 1800420     |                  |         |
| 2000                                |                   | ASD25DCH4FHC2000    | 1800397           |             | ASD25DCH4FHD2000  | 1800421     |                  |         |
| 2500                                |                   | ASD25DCH4FHC2500    | 1800398           |             | ASD25DCH4FHD2500  | 1800422     |                  |         |
| 800                                 |                   | Vertical            | ASD25DCH4FVC800   | 1800399     | ASD25DCH4FVD800   | 1800423     |                  |         |
| 1000                                |                   |                     | ASD25DCH4FVC1000  | 1800400     | ASD25DCH4FVD1000  | 1800424     |                  |         |
| 1250                                |                   |                     | ASD25DCH4FVC1250  | 1800401     | ASD25DCH4FVD1250  | 1800425     |                  |         |
| 1600                                |                   |                     | ASD25DCH4FVC1600  | 1800402     | ASD25DCH4FVD1600  | 1800426     |                  |         |
| 2000                                |                   |                     | ASD25DCH4FVC2000  | 1800403     | ASD25DCH4FVD2000  | 1800427     |                  |         |
| 2500                                |                   |                     | ASD25DCH4FVC2500  | 1800404     | ASD25DCH4FVD2500  | 1800428     |                  |         |



# ASD25 DC Disconnect Switches

## Technical Specification

| Model                             |                   | ASD25 DC   |               |
|-----------------------------------|-------------------|--|---------------|
| Rated voltage (Vdc)               |                   | 1500Vdc (4-Pole in series)   |               |
| Rated current (A)                 |                   | 800A/1000A/1250A/1600A/2000A/2500A   |               |
| Pole                              |                   | 4 Pole   |               |
| Installation type                 |                   | Fixed  |               |
| Standards                         |                   | UL489 SUPPLEMENT SC / UL489B   |               |
| Frame size                        |                   | 2500A  |               |
| Short time withstand current (kA) |                   | 125KA/150KA  |               |
| Operating time (ms)               | Max. Opening time | 30   |               |
|                                   | Max. Closing time | 70   |               |
| Life cycle (times)                | Mechanical        | 12,500   |               |
|                                   | Electrical        | 2,000  |               |
| Connection type                   | C type connection | (Upper supply)  (Lower supply)  |               |
|                                   | D type connection | (Upper supply)  (Lower supply)  |               |
| Dimensions<br>H×W×D In (mm)       | 800A-2000A        | 15.43×18.31×17.01<br>(392×465×433)   |               |
|                                   | 2500A             | 15.43×18.31×18.78<br>(392×465×477)   |               |
| Weight<br>lb (kg)                 | <b>Frame Size</b> | <b>Type C</b>  | <b>Type D</b> |
|                                   | 800A-2000A        | 154 (70)   | 163 (74)      |
|                                   | 2500A             | 160 (73)   | 168 (76)      |



# ASD25 DC Disconnect Switches

## Environmental Conditions

### Temperature

ASD25 DC disconnect switch ambient temperature for use is: - 45°C ~ 70°C. When the operating environment exceeds 40°C, please refer to the following table of derating coefficients.

| In (A) | Temperature (°C)  |      |      |      |      |      |      |                 |      |      |      |      |      |      |
|--------|-------------------|------|------|------|------|------|------|-----------------|------|------|------|------|------|------|
|        | Horizontal busbar |      |      |      |      |      |      | Vertical busbar |      |      |      |      |      |      |
|        | <40               | 45   | 50   | 55   | 60   | 65   | 70   | <40             | 45   | 50   | 55   | 60   | 65   | 70   |
| 800    | 100%              | 100% | 100% | 100% | 100% | 100% | 100% | 100%            | 100% | 100% | 100% | 100% | 100% | 100% |
| 1600   | 100%              | 100% | 100% | 100% | 100% | 95%  | 90%  | 100%            | 100% | 100% | 100% | 100% | 100% | 100% |
| 2000   | 100%              | 100% | 100% | 100% | 95%  | 90%  | 85%  | 100%            | 100% | 100% | 100% | 100% | 95%  | 93%  |
| 2500   | 100%              | 100% | 100% | 95%  | 90%  | 85%  | 80%  | 100%            | 100% | 100% | 100% | 95%  | 93%  | 90%  |

### Altitude

ASD25 DC disconnect switch rated performance will not be compromised at altitudes below 2000m. When the altitude is more than 2,000m, please refer to the following table of derating coefficients.

| Elevation (m)     | <2000 | 3000    | 4000    | 5000    |
|-------------------|-------|---------|---------|---------|
| Rated Voltage(V)  | 1xUe  | 0.9xUe  | 0.8xUe  | 0.7xUe  |
| Rated Current (A) | 1xIn  | 0.98xIn | 0.96xIn | 0.94xIn |

### Humidity

The relative humidity must not exceed 85% at 40°C and the monthly average relative humidity in the wettest month must not exceed 90%. The effect of surface condensation caused by temperature changes on product performance should be taken into consideration

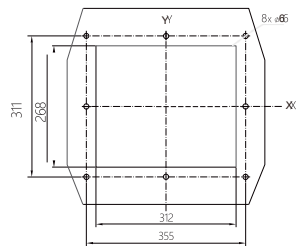
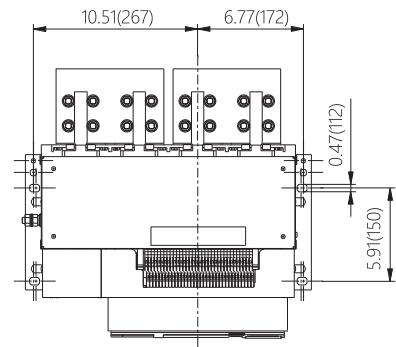
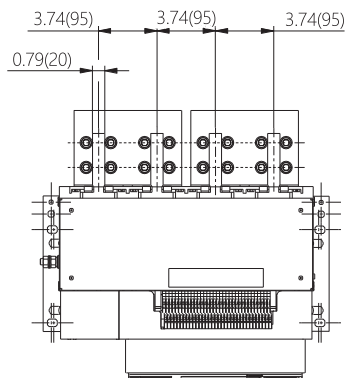
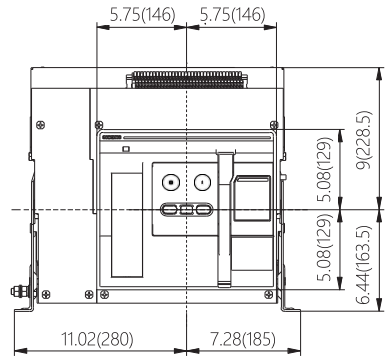
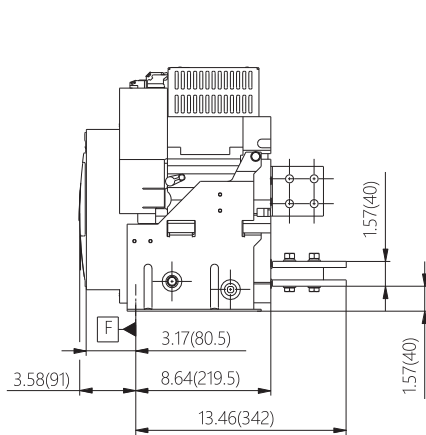
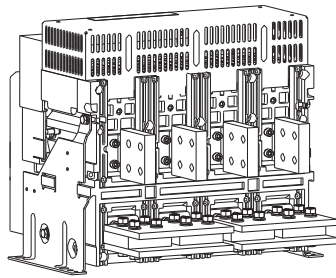


# ASD25 DC Disconnect Switches

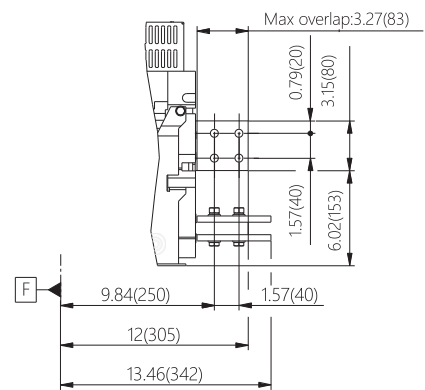
## Dimensions

800A-2000A Type C, vertical, upper supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch





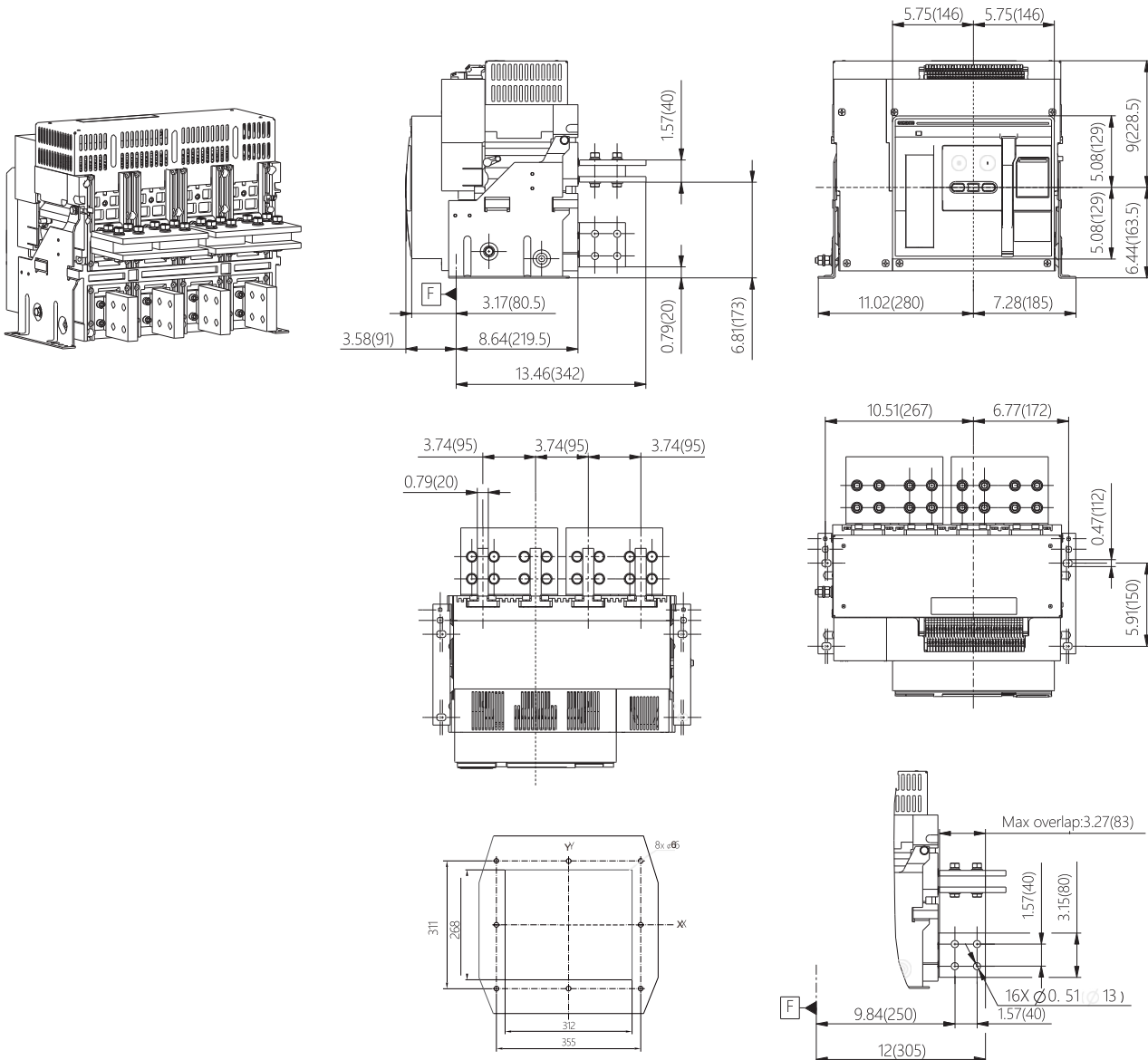


# ASD25 DC Disconnect Switches

## Dimensions

800A-2000A Type C, vertical, lower supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch

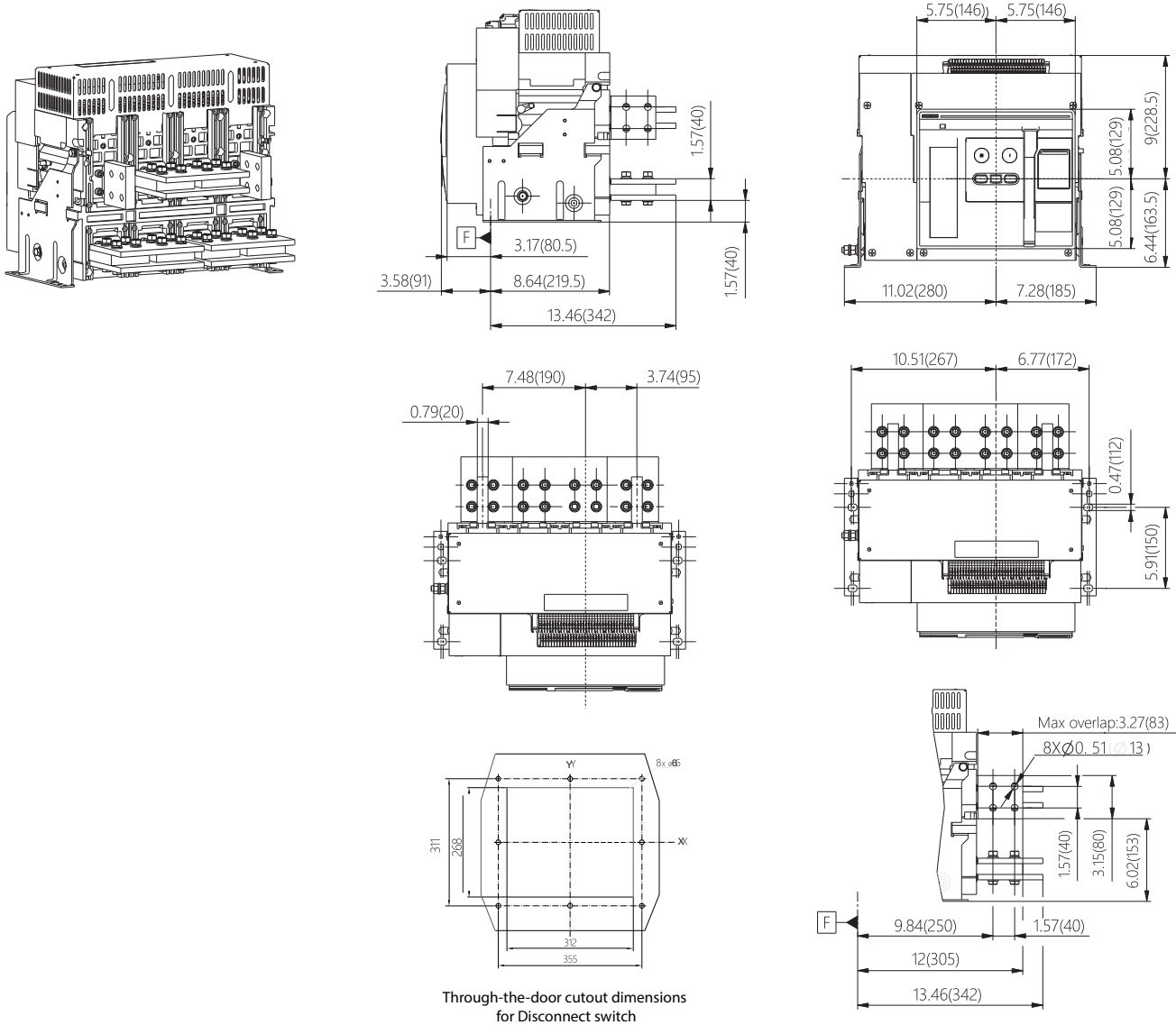


# ASD25 DC Disconnect Switches

## Dimensions

800A-2000A Type D, vertical, upper supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch

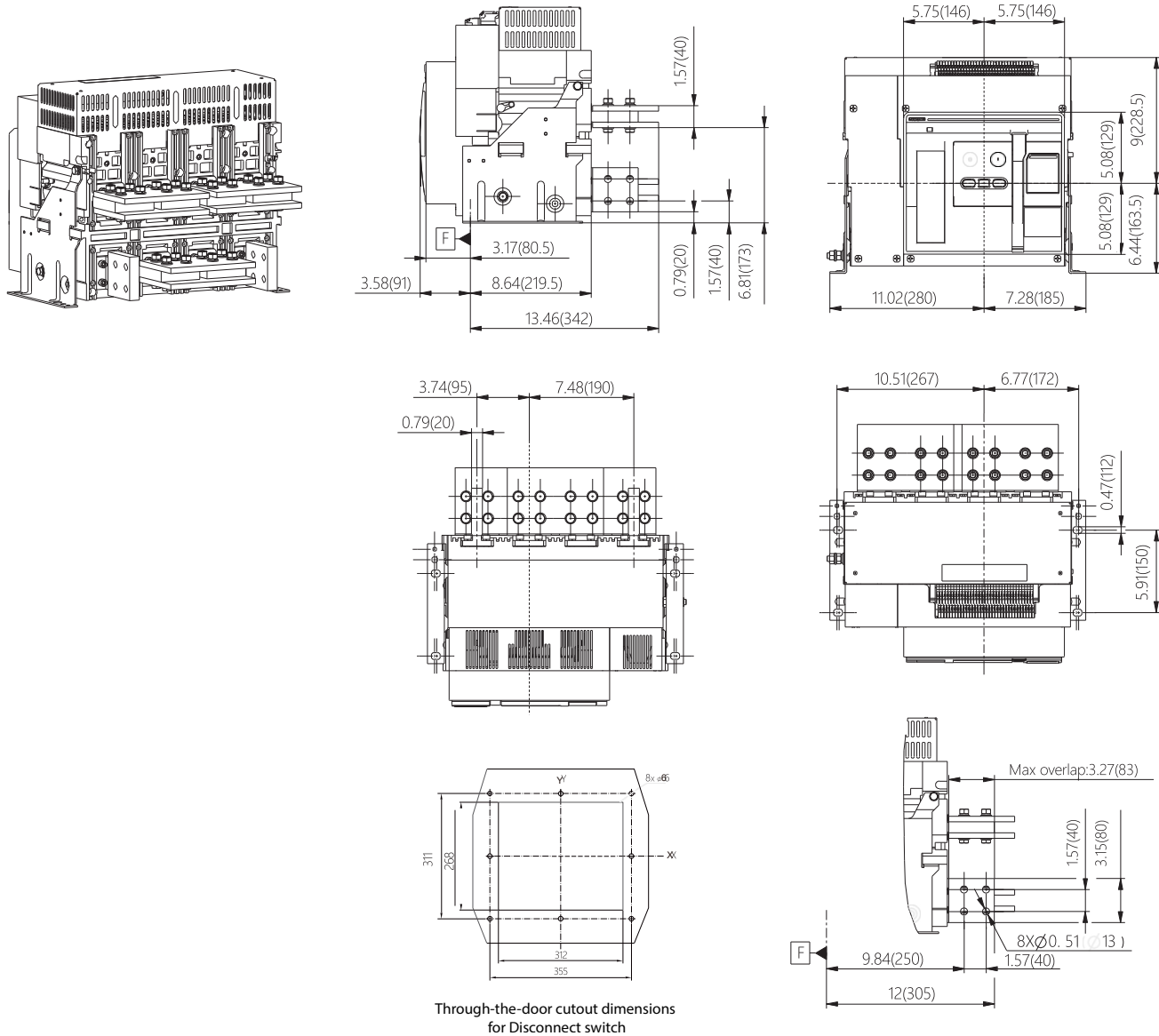


# ASD25 DC Disconnect Switches

## Dimensions

800A-2000A Type D, vertical, lower supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch

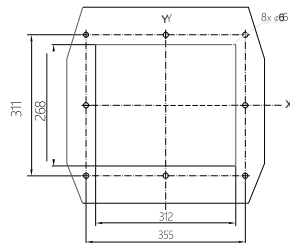
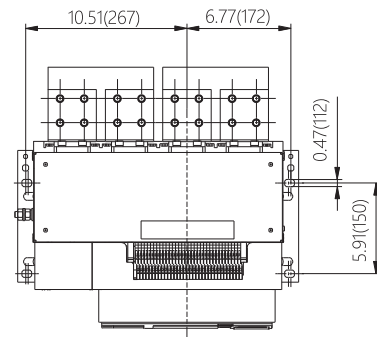
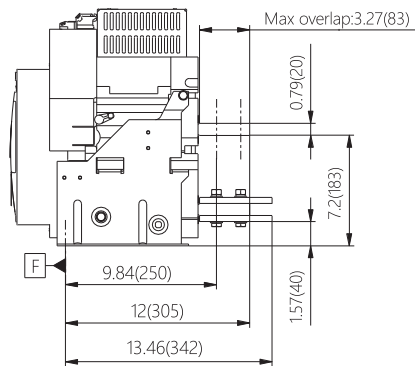
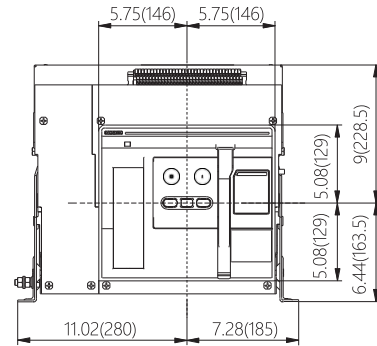
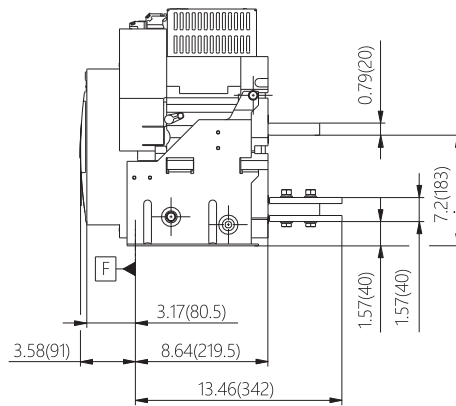
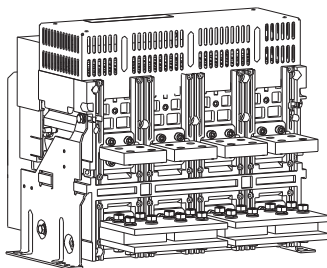


# ASD25 DC Disconnect Switches

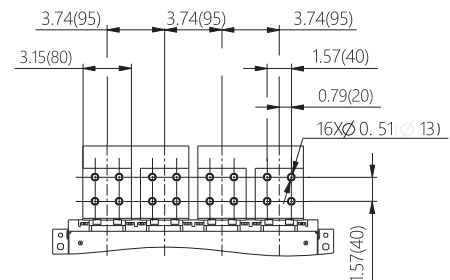
## Dimensions

800A-2000A Type C, horizontal, upper supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch



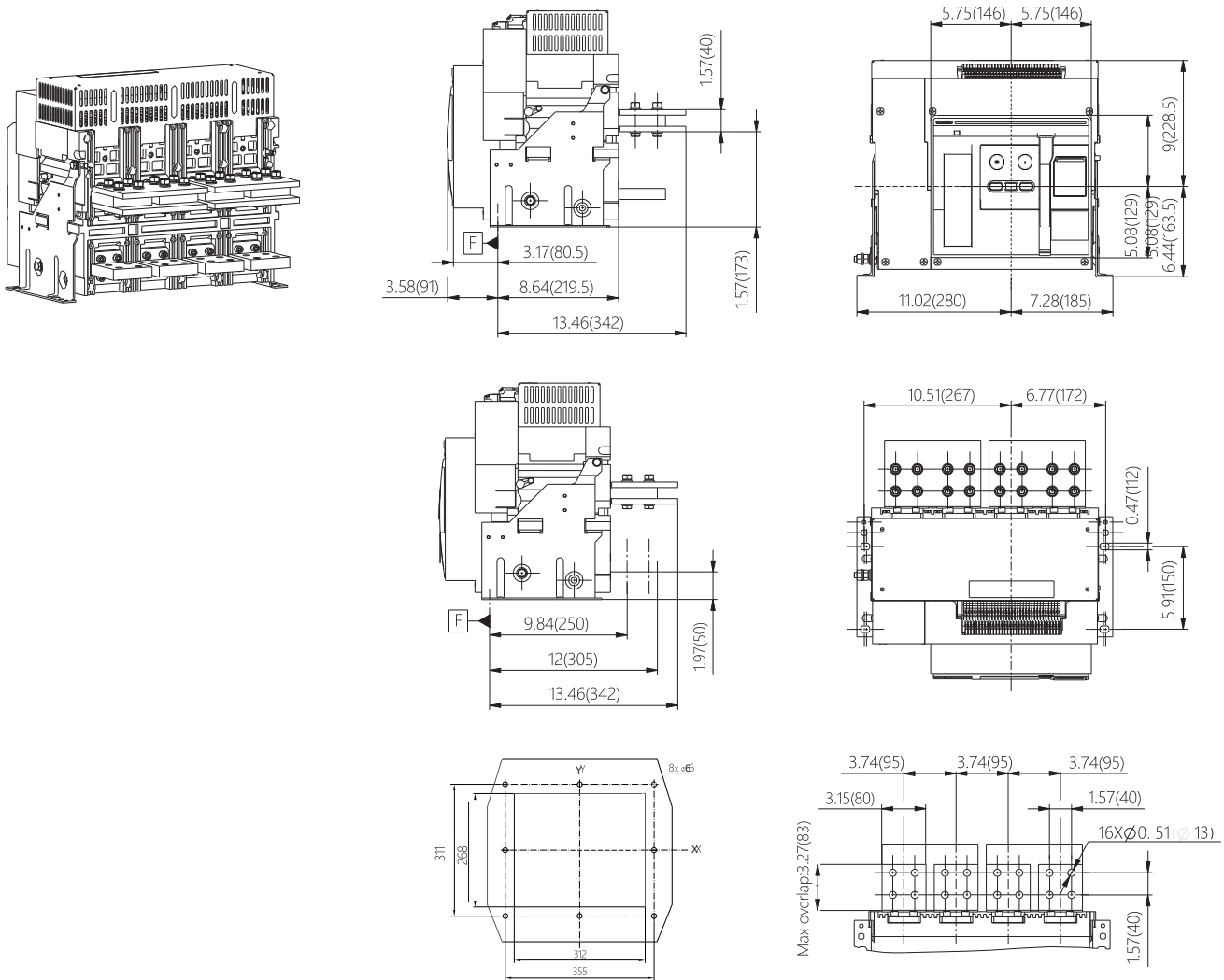


# ASD25 DC Disconnect Switches

## Dimensions

800A-2000A Type C, horizontal, lower supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch

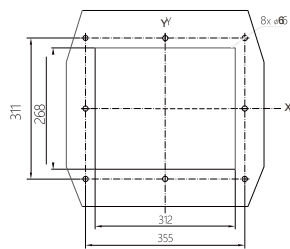
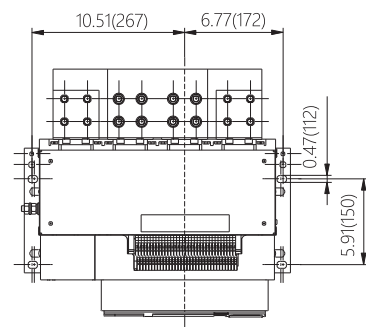
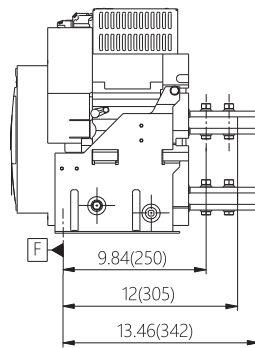
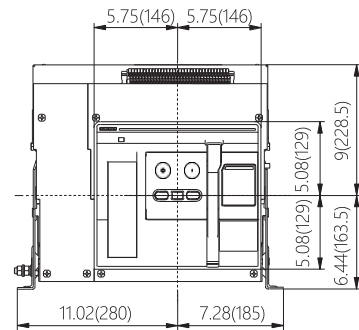
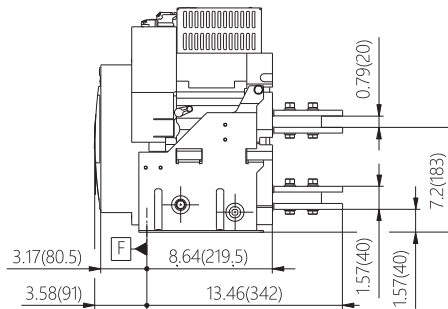
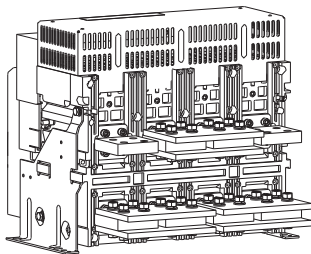


# ASD25 DC Disconnect Switches

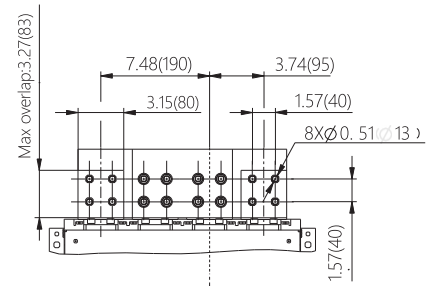
## Dimensions

800A-2000A Type D, horizontal, upper supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch



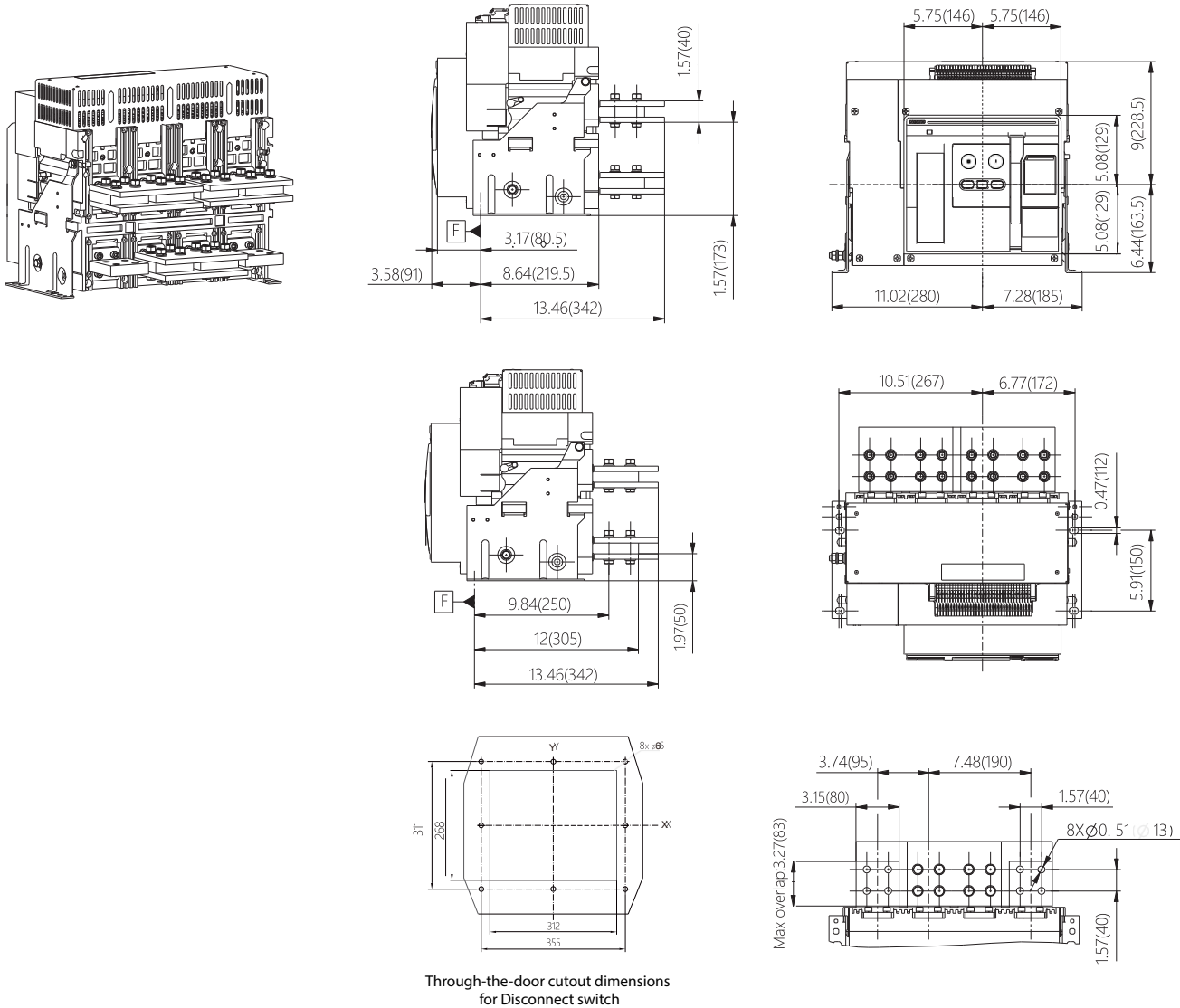


# ASD25 DC Disconnect Switches

## Dimensions

800A-2000A Type D, horizontal, lower supply

in(mm)



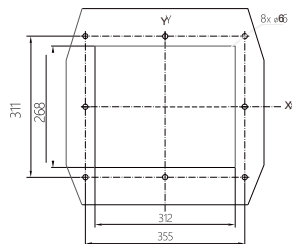
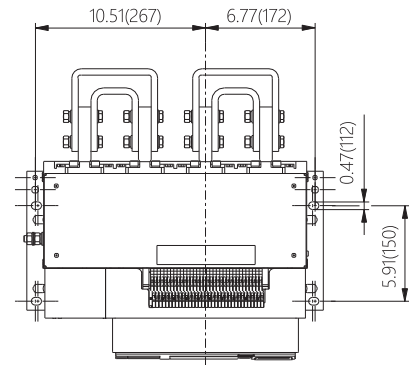
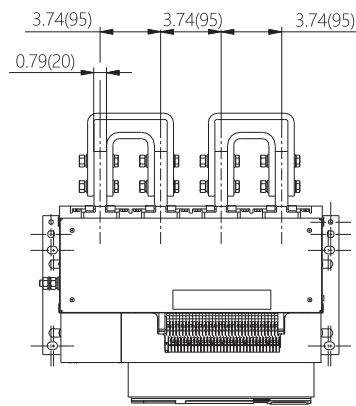
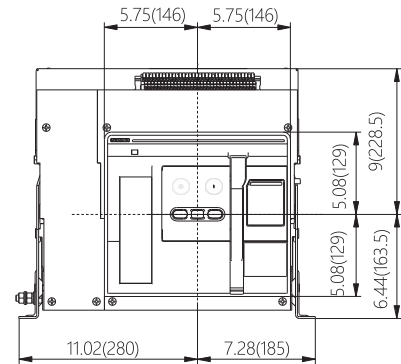
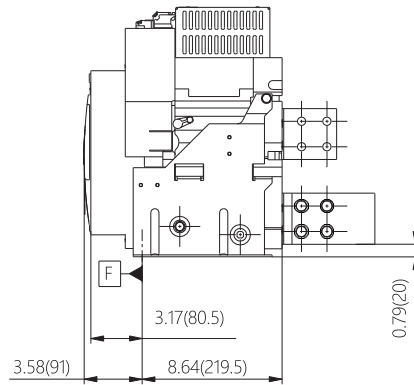
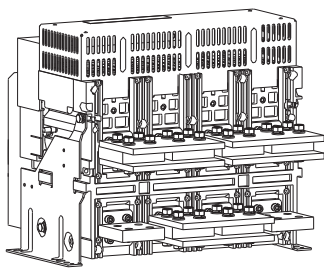


# ASD25 DC Disconnect Switches

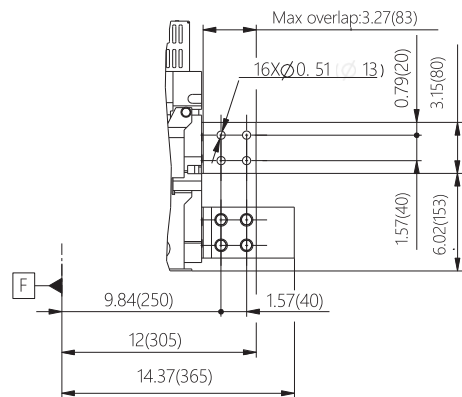
## Dimensions

2500A Type C, vertical, upper supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch





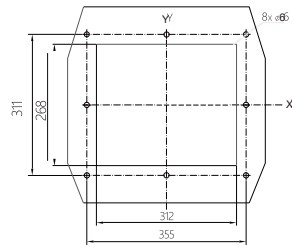
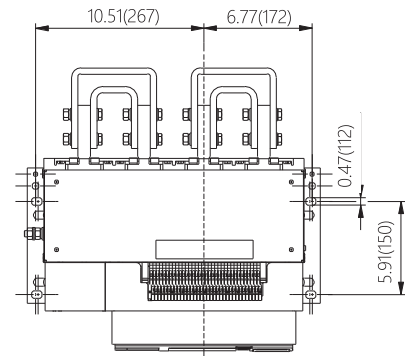
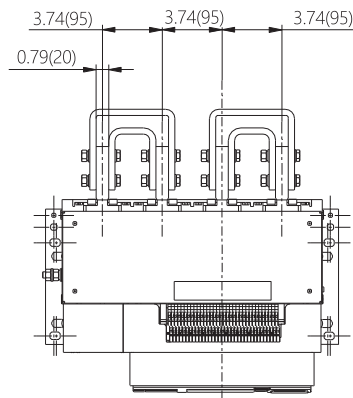
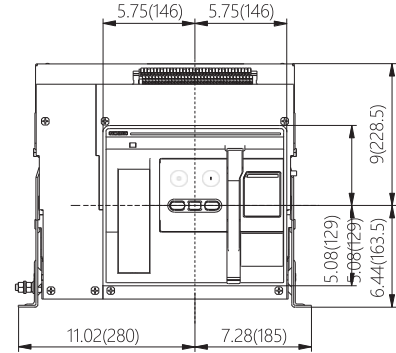
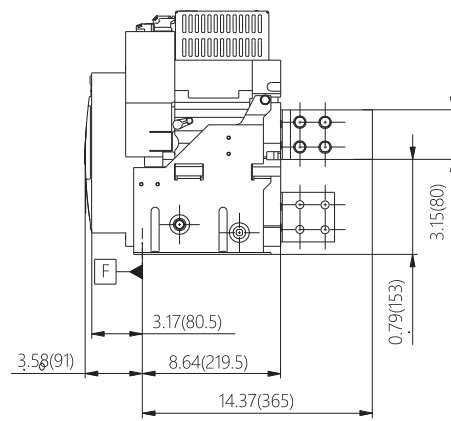
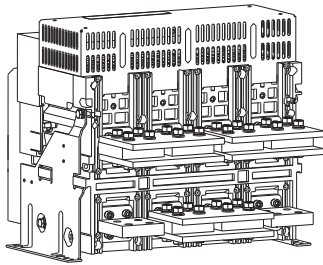


# ASD25 DC Disconnect Switches

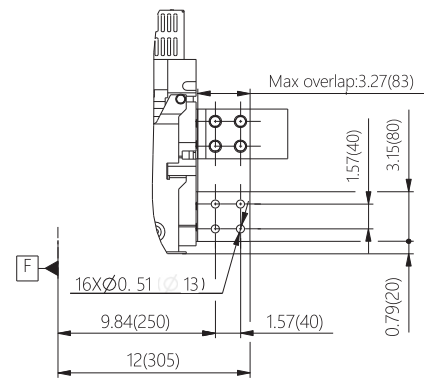
## Dimensions

2500A Type C, vertical, lower supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch



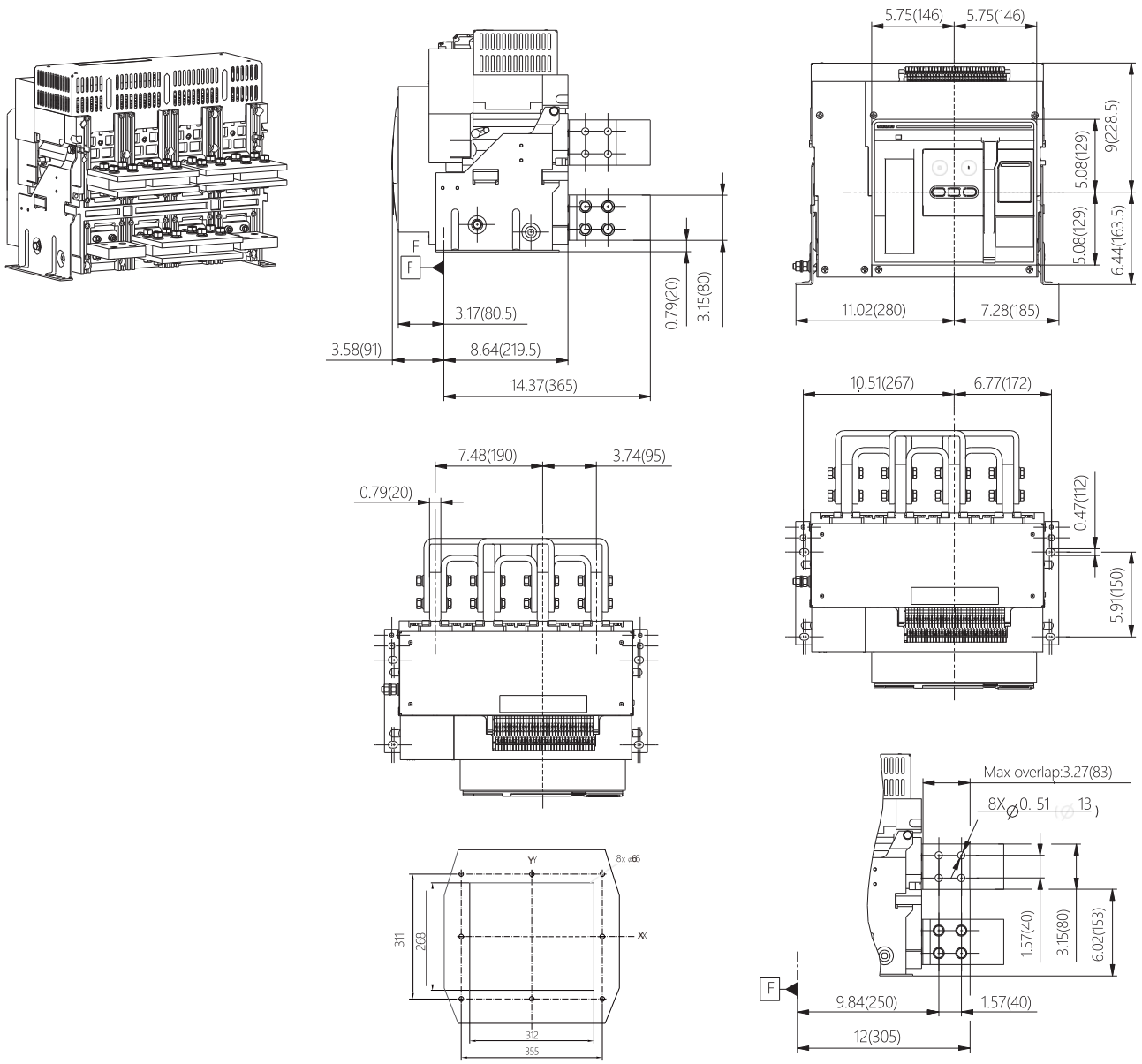


# ASD25 DC Disconnect Switches

## Dimensions

2500A Type D, vertical, upper supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch

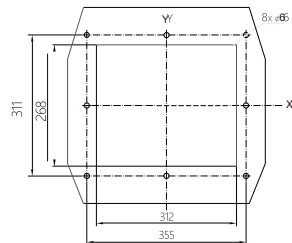
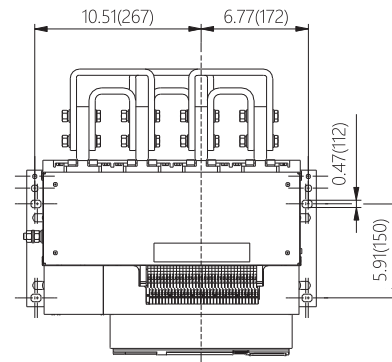
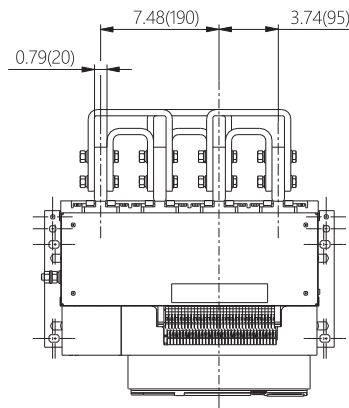
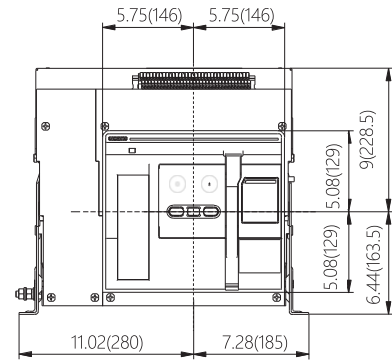
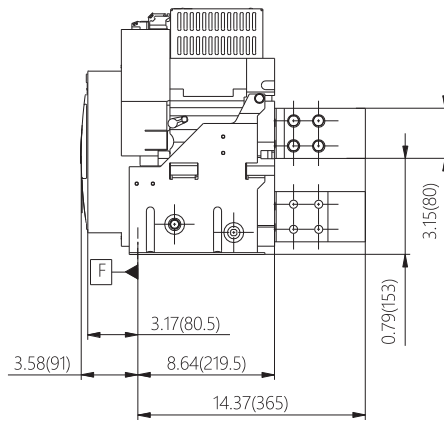
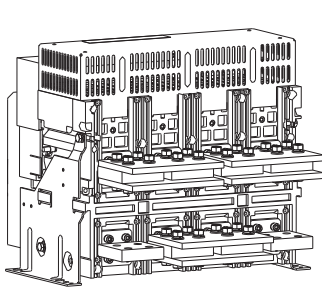


# ASD25 DC Disconnect Switches

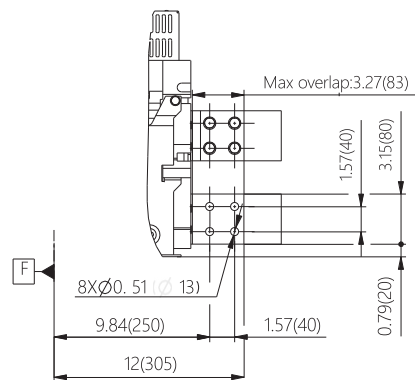
## Dimensions

2500A Type D, vertical, lower supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch



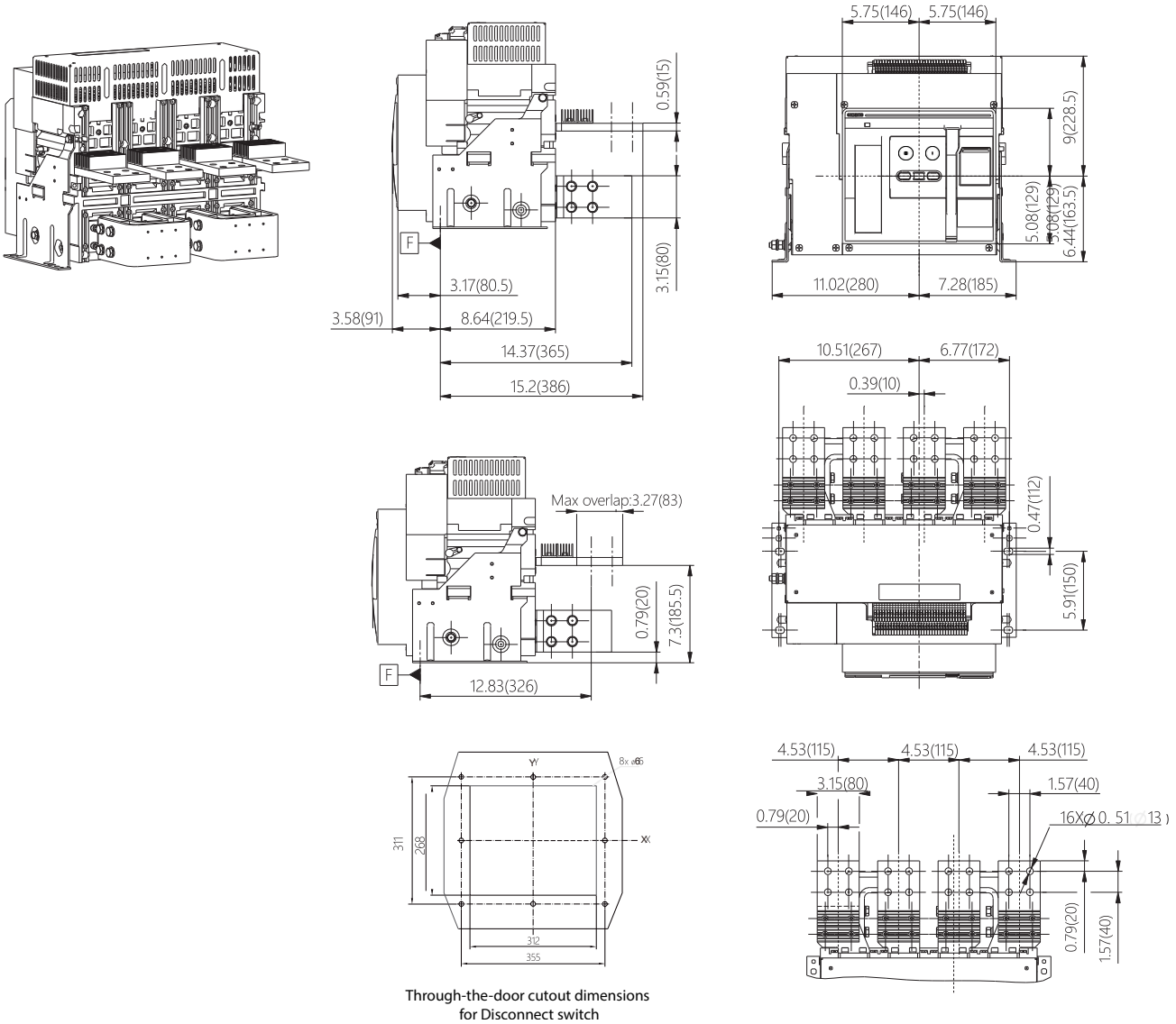


# ASD25 DC Disconnect Switches

## Dimensions

2500A Type C, horizontal, upper supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch

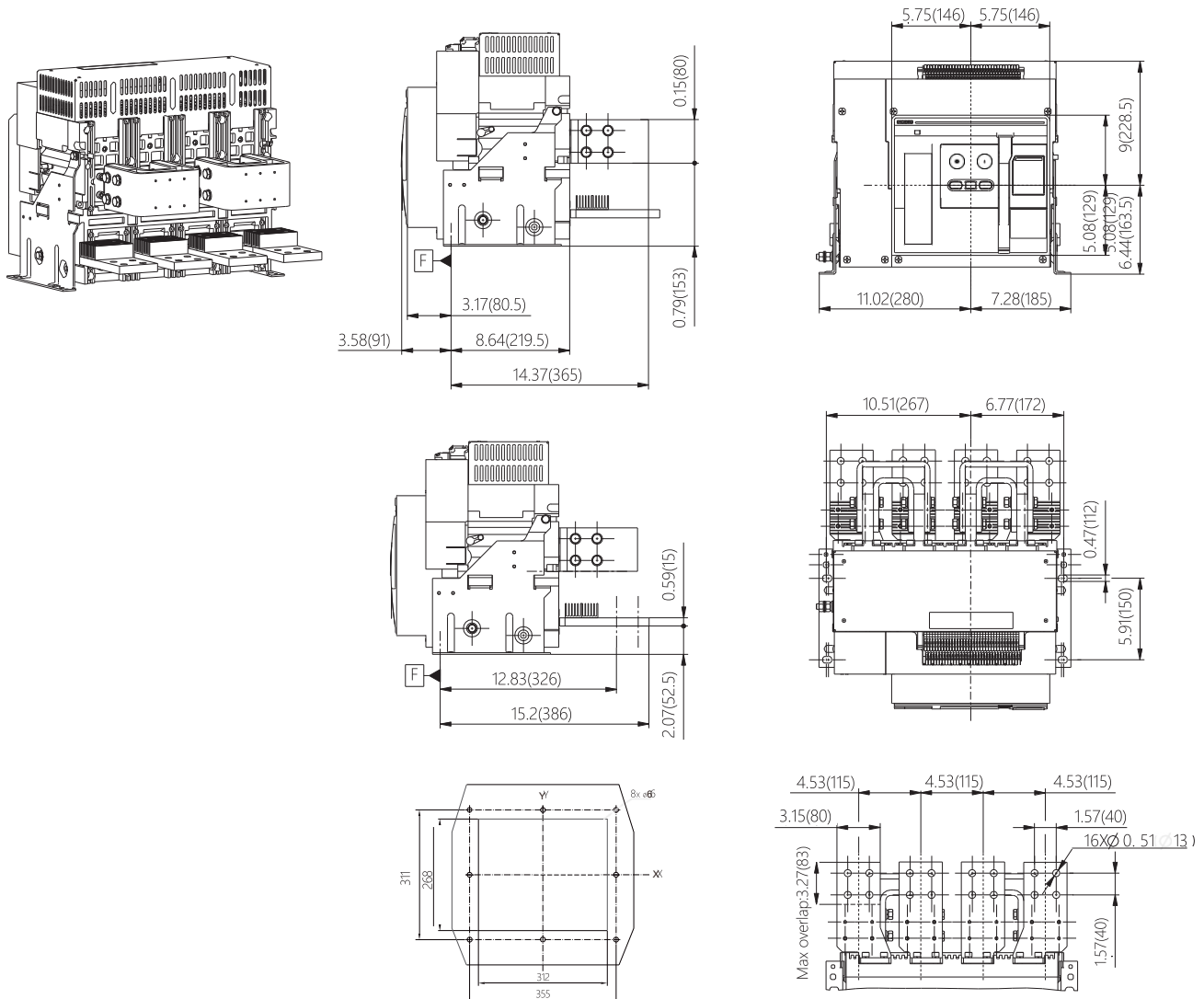


# ASD25 DC Disconnect Switches

## Dimensions

2500A Type C, horizontal, lower supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch

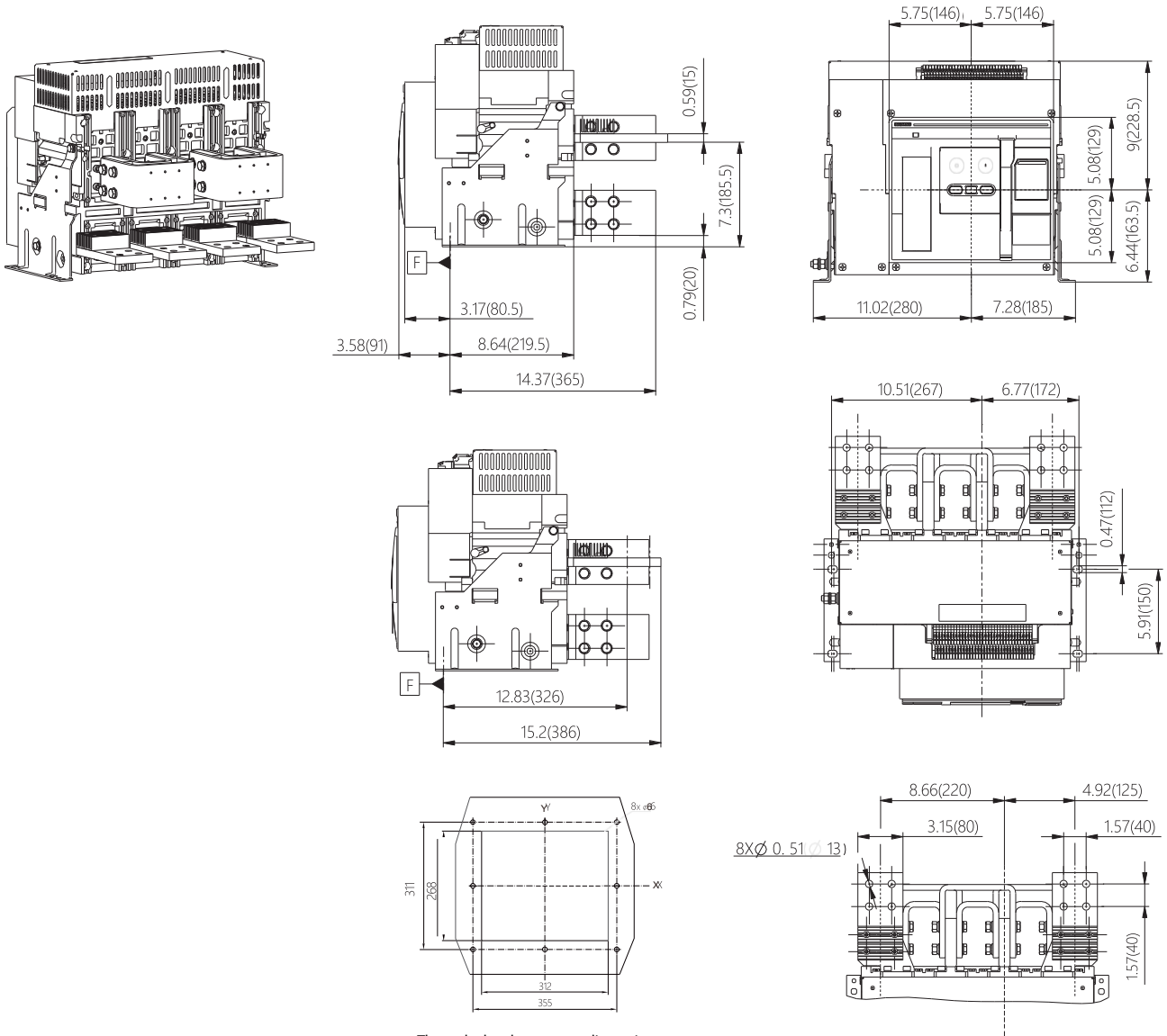


# ASD25 DC Disconnect Switches

## Dimensions

2500A Type D, horizontal, upper supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch

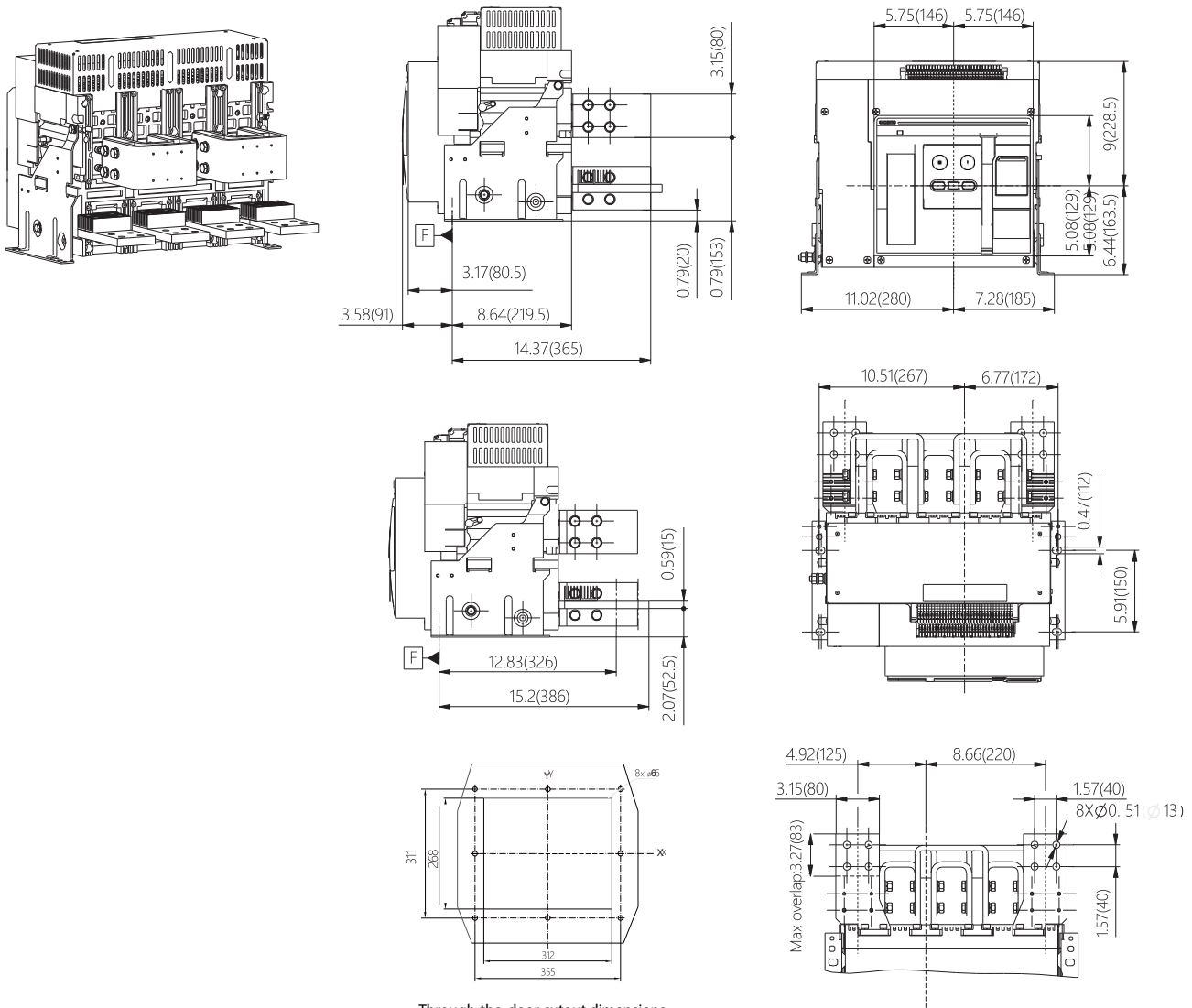


# ASD25 DC Disconnect Switches

## Dimensions

2500A Type D, horizontal, lower supply

in(mm)



Through-the-door cutout dimensions for Disconnect switch

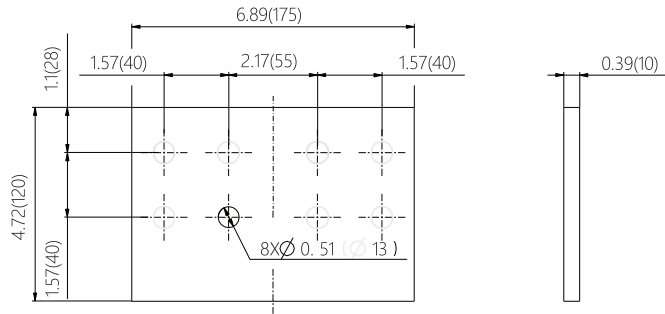


# ASD25 DC Disconnect Switches

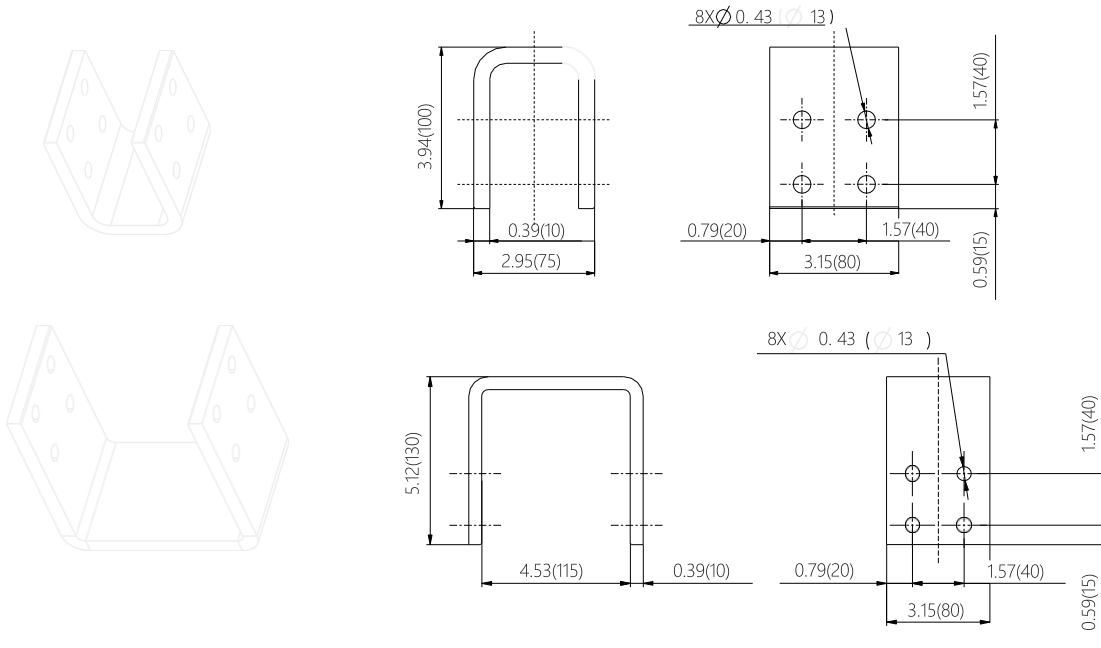
## Jumper Dimensions

in(mm)

800-2000A:



2500A:



| Recommended busbar specifications: |                                  |                                  |
|------------------------------------|----------------------------------|----------------------------------|
| Rated current                      | Horizontal                       | Vertical                         |
| 800A                               | 6.35TX76.2X1ea (inch:1/4X3X1ea)  | 6.35TX76.2X1ea (inch:1/4X3X1ea)  |
|                                    | 10TX50X1ea                       | 10TX50X1ea                       |
| 1600A                              | 6.35TX76.2X2ea (inch:1/4X3X2ea)  | 6.35TX76.2X2ea (inch:1/4X3X2ea)  |
|                                    | 10TX50X2ea                       | 10TX50X2ea                       |
| 2000A                              | 6.35TX101.6X2ea (inch:1/4X4X2ea) | 6.35TX101.6X2ea (inch:1/4X4X2ea) |
|                                    | 10TX80X2ea                       | 10TX80X2ea                       |
| 2500A                              | 10TX80X2ea                       | 6.35TX127X2ea (inch:1/4X5X2ea)   |
|                                    | 10TX100X2ea                      | 10TX80X2ea                       |
|                                    |                                  | 10TX100X2ea                      |

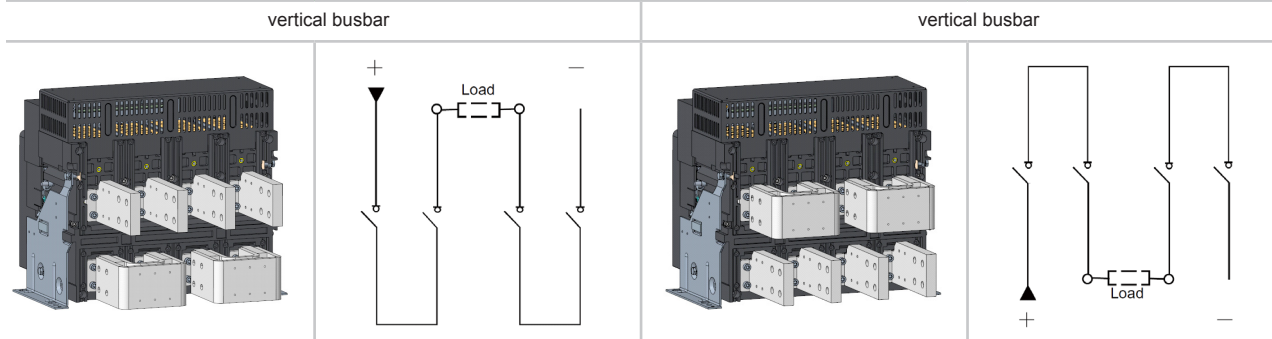




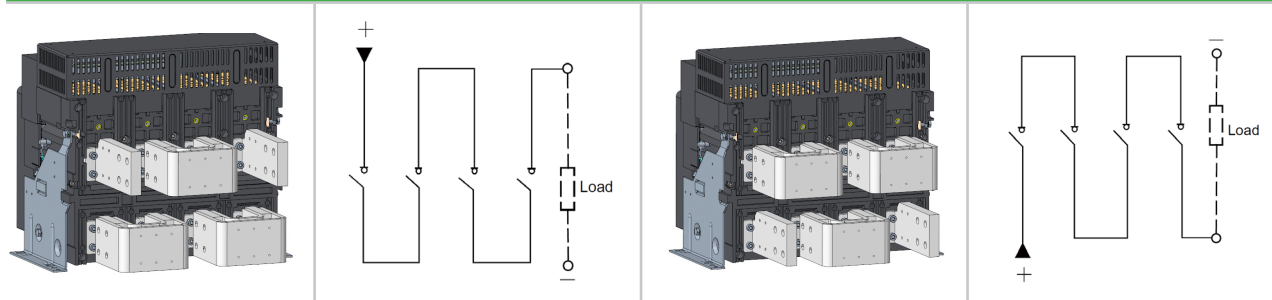
# ASD25 DC Disconnect Switches

## Wiring Connection

### C TYPE\*



### D TYPE\*



\*Type C: only suitable for ungrounded systems

\*Type D: Can be used in grounded or ungrounded systems in photovoltaic systems



# ASD16 / ASD25 DC Disconnect Switches

Electrical Accessories

## Undervoltage Release



| Product Family | Part Number | Catalog Number | Description  |
|----------------|-------------|----------------|--|
| ASD16          | 1800554     | +UVT12NA16     | 24-30VDC, Optional accessories, factory installed      |
|                | 1800555     | +UVT12NB16     | 48-60VDC/DC, Optional accessories, factory installed   |
|                | 1800556     | +UVT12NC16     | 110-130VAC/DC, Optional accessories, factory installed |
|                | 1800557     | +UVT12ND16     | 200-240VAC/DC, Optional accessories, factory installed |
|                | 1800558     | +UVT12NE16     | 380-415VAC, Optional accessories, factory installed    |
| ASD25          | 1800276     | +UVT12NA       | 24-30VDC, Optional accessories, factory installed      |
|                | 1800277     | +UVT12NB       | 48-60VDC/DC, Optional accessories, factory installed   |
|                | 1800278     | +UVT12NC       | 110-130VAC/DC, Optional accessories, factory installed |
|                | 1800279     | +UVT12ND       | 200-240VAC/DC, Optional accessories, factory installed |
|                | 1800280     | +UVT12NE       | 380-415VAC, Optional accessories, factory installed    |

When the voltage drops to 30-60% of the rated voltage, the undervoltage release trips. If the trip unit voltage is less than 85% of the supply voltage, the circuit breaker cannot be closed electrically or manually.

| Operating Voltage | Operational Voltage range 85-110% | Dropout voltage 30%-60% | Inrush/continuous Power Consumption | Operating Time (ms) |
|-------------------|-----------------------------------|-------------------------|-------------------------------------|---------------------|
| 24-30 Vdc         | 20-33Vdc                          | 7-14 Vdc                | 250 W/4.5W                          | 70                  |
| 48-60 Vdc         | 41-66 Vdc                         | 14- 29 Vdc              | 275 W/4.5 W                         | 70                  |
| 110-130 Vac/Vdc   | 94-143Vac/Vdc                     | 33-78Vac/ Vdc           | 275 W/4.5 W                         | 70                  |
| 200-240Vac/ Vdc   | 170-264Vac/Vdc                    | 60-144 Vac/ Vdc         | 275 W/4.5 W                         | 70                  |
| 380-415 Vac       | 323-457 Vac                       | 114-249 Vac             | 450 W/4.5W                          | 70                  |

## Shunt Release



| Product Family | Part Number | Catalog Number | Description  |
|----------------|-------------|----------------|--|
| ASD16          | 1800544     | +SHT12NA16     | 24-30VDC, Optional accessories, factory installed      |
|                | 1800545     | +SHT12NB16     | 48-60VDC, Optional accessories, factory installed      |
|                | 1800546     | +SHT12NC16     | 110-130VAC/DC, Optional accessories, factory installed |
|                | 1800547     | +SHT12ND16     | 208-240VAC/DC, Optional accessories, factory installed |
|                | 1800548     | +SHT12NE16     | 380-415VAC, Optional accessories, factory installed    |
| ASD25          | 1800268     | +SHT12NA       | 24-30VDC, Optional accessories, factory installed      |
|                | 1800269     | +SHT12NB       | 48-60VDC, Optional accessories, factory installed      |
|                | 1800270     | +SHT12NC       | 110-130VAC/DC, Optional accessories, factory installed |
|                | 1800271     | +SHT12ND       | 208-240VAC/DC, Optional accessories, factory installed |
|                | 1800446     | +SHT12NE       | 380-415VAC, Optional accessories, factory installed    |

Note: When the coil is energized, the shunt tripper can realize remote opening

| Operating Voltage | Operational Voltage range 85-110% | Inrush/continuous Power Consumption | Operating Time (ms) |
|-------------------|-----------------------------------|-------------------------------------|---------------------|
| 24-30 Vdc         | 17- 33 Vdc                        | 250 W/4.5W                          | 35                  |
| 48-60 Vdc         | 34-66 Vdc                         | 275 W/4.5 W                         | 35                  |
| 110-130 Vac/Vdc   | 77-143Vac/Vdc                     | 275 W/4.5 W                         | 35                  |
| 200-240Vac/ Vdc   | 146-264Vac/Vdc                    | 275 W/4.5 W                         | 35                  |
| 380-415 Vac       | 266-457Vac                        | 275 W/4.5 W                         | 35                  |



# ASD16 / ASD25 DC Disconnect Switches

## Electrical Accessories

### Closing Release



| Product Family | Part Number | Catalog Number | Description  |
|----------------|-------------|----------------|--|
| ASD16          | 1800534     | +XF12NA16      | 24-30VDC, Optional accessories, factory installed      |
|                | 1800535     | +XF12NB16      | 48-60VDC, Optional accessories, factory installed      |
|                | 1800536     | +XF12NC16      | 110-130VAC/DC, Optional accessories, factory installed |
|                | 1800537     | +XF12ND16      | 208-240VAC/DC, Optional accessories, factory installed |
|                | 1800538     | +XF12NE16      | 380-415VAC, Optional accessories, factory installed    |
| ASD25          | 1800260     | +XF12NA        | 24-30VDC, Optional accessories, factory installed      |
|                | 1800261     | +XF12NB        | 48-60VDC, Optional accessories, factory installed      |
|                | 1800262     | +XF12NC        | 110-130VAC/DC, Optional accessories, factory installed |
|                | 1800263     | +XF12ND        | 208-240VAC/DC, Optional accessories, factory installed |
|                | 1800444     | +XF12NE        | 380-415VAC, Optional accessories, factory installed    |

Note: When the coil is energized, closing release can realize the remote closing of the circuit breaker

| Operating Voltage | Operational Voltage range 75-110% | Inrush/continuous Power Consumption | Operating Time (ms) |
|-------------------|-----------------------------------|-------------------------------------|---------------------|
| 24-30 Vdc         | 17– 33 Vdc                        | 250 W/4.5W                          | 35                  |
| 48-60 Vdc         | 34–66 Vdc                         | 275 W/4.5 W                         | 35                  |
| 110-130 Vac/Vdc   | 77–143Vac/Vdc                     | 275 W/4.5 W                         | 35                  |
| 200-240Vac/ Vdc   | 146-264Vac/Vdc                    | 275 W/4.5 W                         | 35                  |
| 380–415 Vac       | 266-457Vac                        | 275 W/4.5 W                         | 35                  |

### Auxiliary Contacts



| Product Family | Part Number | Catalog Number | Description  |
|----------------|-------------|----------------|--|
| ASD16          | 1800496     | +AX10N11       | 1NO+1NC, standard accessories, factory pre-installed |
|                | 1800497     | +AX10N22       | 2NO+2NC, standard accessories, factory pre-installed |
|                | 1800498     | +AX10N22C      | 2NO/NC, standard accessories, factory pre-installed  |
|                | 1800499     | +AX10N44C      | 4NO/NC, standard accessories, factory pre-installed  |
| ASD25          | 1800286     | +AX12NF44      | 4NO+4NC, standard accessories, factory pre-installed |
|                | 1800287     | +AX12NF66      | 6NO+6NC, standard accessories, factory pre-installed |
|                | 1800288     | +AX12NF44C     | 4NO/4NC, standard accessories, factory pre-installed |
|                | 1800289     | +AX12NF66C     | 6NO/6NC, standard accessories, factory pre-installed |

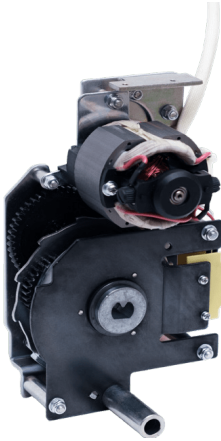
| Voltage (V) | Operational voltage range 85-110% | Rated current(A) |
|-------------|-----------------------------------|------------------|
| AC          | 240                               | 5                |
|             | 480                               | 2                |
| DC          | 110                               | 0.25             |
|             | 220                               | 0.25             |



# ASD16 / ASD25 DC Disconnect Switches

Electrical Accessories

## Motor Operator



| Product Family | Part Number | Catalog Number | Description  |
|----------------|-------------|----------------|--|
| ASD16          | 1800504     | +MD10NA        | 24-30VDC, Standard accessories, factory installed      |
|                | 1800505     | +MD10NB        | 48-60VAC/VDC, Standard accessories, factory installed  |
|                | 1800506     | +MD10NC        | 110-130VAC/DC, Standard accessories, factory installed |
|                | 1800507     | +MD10ND        | 208-240VAC/DC, Standard accessories, factory installed |
|                | 1800508     | +MD10NE        | 380-415VAC, Standard accessories, factory installed    |
| ASD25          | 1800429     | +MD11NA        | 24-30VDC, Standard accessories, factory installed      |
|                | 1800430     | +MD11NB        | 48-60VAC/VDC, Standard accessories, factory installed  |
|                | 1800431     | +MD11NC        | 110-130VAC/DC, Standard accessories, factory installed |
|                | 1800432     | +MD11ND        | 208-240VAC/DC, Standard accessories, factory installed |
|                | 1800433     | +MD11NE        | 380-415VAC, Standard accessories, factory installed    |

- Motor operator for automatic charging of circuit breaker closing springs
- Capable of using mechanical handle to store energy when servicing or when power is not available
- Equipped with limit switch contacts to display spring charging status signal

## Ready To Close Contact



| Product Family | Part Number | Catalog Number | Description                             |
|----------------|-------------|----------------|---|
| ASD16          | 1800312     | +PF12N         | Optional accessories, factory installed |
| ASD25          |             |                |   |

## Jumper

| Product Name | Rated Current | Connection Type | Part Number | Catalog Number | Description                               |
|--------------|---------------|-----------------|-------------|----------------|---|
| ASD16        | 600-1600A     | C               | 1800514     | +JPR10N16      | Jumper for 1600A Frame, 600-1600A         |
| ASD25        | 800-2000A     | C               | 1800440     | +JPR11NC20     | Jumper for 2500A Frame, 800-2000A, Type C |
|              |               | D               | 1800442     | +JPR11ND20     | Jumper for 2500A Frame, 800-2000A, Type D |
|              | 2500A         | C               | 1800441     | +JPR11NC25     | Jumper for 2500A Frame, 2500A, Type C     |
|              |               | D               | 1800443     | +JPR11ND25     | Jumper for 2500A Frame, 2500A, Type D     |

## Front Connection Plates

| Product Name | Rated Current | Part Number | Catalog Number | Description  |
|--------------|---------------|-------------|----------------|--|
| ASD16        | 600-1600A     | 1800525     | +ACP10N16      | Front connection plates for 1600A Frame, 600-1600A |



# ASD16 / ASD25 DC Disconnect Switches

## Mechanical Accessories

### OFF Position Keylock



| Product Family | Part Number | Catalog Number | Description   |
|----------------|-------------|----------------|---|
| ASD16          | 1800519     | +KLK10N1       | OFF position keylock, 1 lock 1 key, factory installed |
|                | 1800520     | +KLK10N2       | OFF position keylock, 2 lock 1 key, factory installed |
|                | 1800521     | +KLK10N3       | OFF position keylock 3 lock 2 key, factory installed  |
| ASD25          | 1800316     | +KLK12N1       | OFF position keylock, 1 lock 1 key, factory installed |
|                | 1800317     | +KLK12N2       | OFF position keylock, 2 lock 1 key, factory installed |
|                | 1800318     | +KLK12N3       | OFF position keylock 3 lock 2 key, factory installed  |

- Used to lock the circuit breaker in OFF position, preventing the circuit breaker from being closed
- One disconnecter comes standard with one lock and one key
- Two disconnectors provide two locks and one key
- Three disconnectors provide three locks and two keys

### Pushbutton Lock Device



| Product Family | Part Number | Catalog Number | Description   |
|----------------|-------------|----------------|---|
| ASD16          | 1800517     | +VBP10N        | Pushbutton lock device, optional accessories, factory installed |
| ASD25          | 1800314     | +VBP12N        |   |

- Pushbutton lock device Prevents access to the control pushbuttons of the breaker
- Factory installed only
- Lock is not included

### Door Frame



| Product Family | Part Number | Catalog Number | Description                             |
|----------------|-------------|----------------|---|
| ASD25          | 1800439     | +CDP11N        | Standard accessories, factory installed |

- IP Grade: IP40



# ASD16 / ASD25 DC Disconnect Switches

Mechanical Accessories

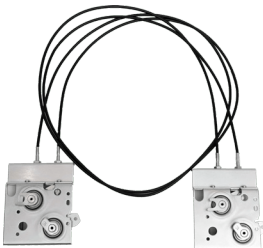
## Phase Barrier



| Product Family | Part Number | Catalog Number | Description          |
|----------------|-------------|----------------|----------------------|
| ASD16          | 1800515     | +PHS10N3       | Standard accessories |
| ASD25          | 1800331     | +PHS12N3       | Standard accessories |

- Increase the insulation level between adjacent phases
- Shipped in a combination package (three pieces)

## Mechanical Interlocks with Cables





| Product Family | Part Number | Catalog Number | Description   |
|----------------|-------------|----------------|---|
| ASD25          | 1800338     | +IPA12N        | Mechanical Interlocks with cables, optional accessories |

# NOARK



 NOARK Electric USA  
2188 Pomona Blvd.  
Pomona, CA 91768  
 (626) 330-7007  
nasales@noark-electric.com

 NOARK Electric Canada  
975 Bleams Rd. Unit 3  
Kitchener, ON N2E 3Z5  
 519-790-0605  
 casales@noark-electric.com

 [na.noark-electric.com](http://na.noark-electric.com)



Note: NOARK Electric reserves the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. NOARK Electric nor any of its affiliates or subsidiaries shall be responsible or liable for potential errors or possible lack of information in this document. NOARK Electric reserves all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of NOARK Electric.