

NOARK[®]

Catalog UL 1500VDC Disconnect Switch ASD25 DC



Company Overview

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 primary distribution center is located in Pomona, CA, 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 wholly subsidiary of the largest electrical manufacturing group in Asia with over 50 thousand employees and sales revenue of \$22 billion USD. We have corporate facilities in Los Angeles, Shanghai and Prague to service the requirements of individual markets and countries.

140+	300+	20	22	3	10,000,000+	50,000+
Countries	Overseas Distributors	Overseas Subsidiaries	Logistics Centers	R & D Centers	Sq.Ft. Manufacturing Space	Employees Worldwide



DC Disconnect Switch

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DC Disconnect Switch
Overview/Selection Guide

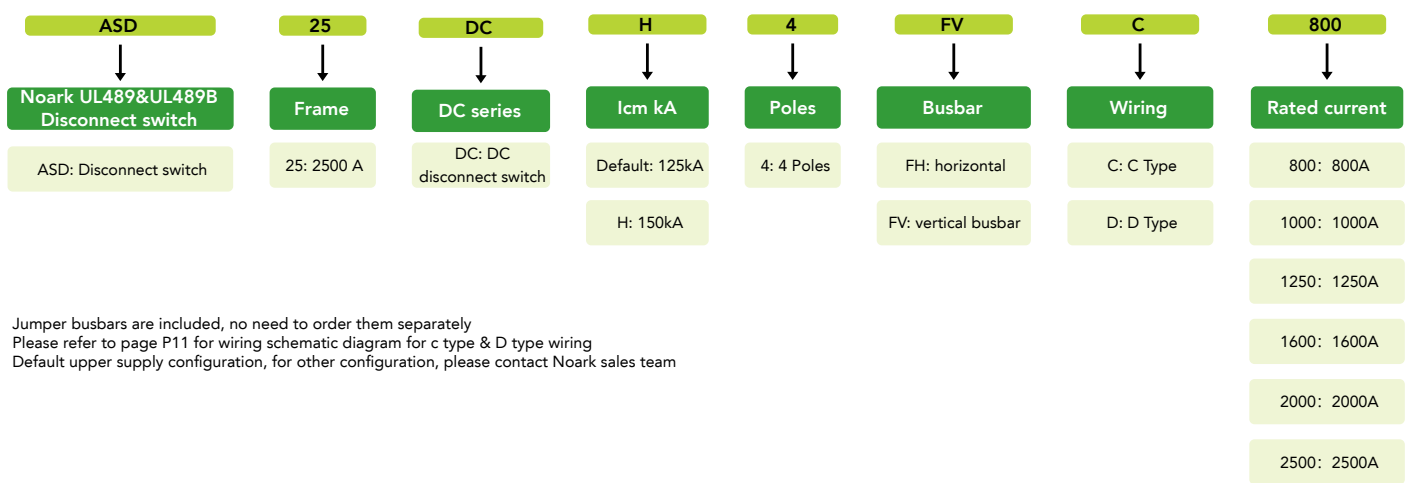
Features

The Noark ASD25 DC Disconnect Switch complies with
UL489B - For Photovoltaic Systems and UL 489
SUPPLEMENT SC - Batteries and Energy Storage Systems.

- Rated voltage up to 1,500Vdc (4 poles in series)
- Rated short-time withstand current up to 150kA
- Mechanical life 12,500 times (maintenance free)
- Electrical life 2,000 times (maintenance-free)

ASD25 DC series Disconnect Switch can be equipped with various accessories commonly used in UL certification, these accessories are also suitable for UL certified A32 series AC Power circuit breakers

Product Selection Guides



Jumper busbars are included, no need to order them separately
Please refer to page P11 for wiring schematic diagram for c type & D type wiring
Default upper supply configuration, for other configuration, please contact Noark sales team

DC Disconnect Switch

Specifications

		ASD25 DC
Rated voltage (Vdc)		1,500 (4 poles in series)
Rated current (A)		800/1,000/1,250/1,600/2,000/2,500
Poles		4 Poles
Installation		Fixed
Standards		UL489 SUPPLEMENT SC / UL489B
Frame		2,500A
Short time withstand current (kA,50ms)		125/150
Operating time (ms)	Max Breaking time	≤30
	Max Closing time	≤70
life (times)	Mechanical life	12,500
	Electrical life	2,000
Dimensions H×W×D (in/mm)	800A-2,000A	15.43×18.31×17.01 (392×465×433)
	2,500A	15.43×18.31×17.95 (392×465×456)

Temperature

ASD25 DC ambient temperature for use is: -40°C~70°C

ASD25 DC When the operating environment exceeds 40°C, please refer to the following table of derating coefficients

h (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 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)	<2,000	2,600	3,900	4,900
Rated voltage (V)	1xUe	0.95xUe	0.8xUe	0.7xUe
Rated current (A)	1xIn	0.99xIn	0.96xIn	0.94xIn

DC Disconnect Switch

Undervoltage Release/UVT



Product	Order code	SKU	Description
Undervoltage release	1800276	+UVT12NA	24-30 VDC, Optional accessories, factory installed
	1800277	+UVT12NB	48-60 VDC/DC, Optional accessories, factory installed
	1800278	+UVT12NC	110-130 VAC/DC, Optional accessories, factory installed
	1800279	+UVT12ND	200-240 VAC/DC, Optional accessories, factory installed
	1800280	+UVT12NE	380-440 VAC, 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.

UVT parameters

Operating Voltage	Operational voltage range 85-110%	Dropout voltage 30%-60%	Inrush/continuous power consumption	Operating time(ms)
24-30 Vdc	20-33 Vdc	7-14 Vdc	500 W/4.5W	70
48-60 Vdc	41-66 Vdc	14- 29 Vdc	500 W/4.5 W	70
110-130 Vac/Vdc	94-143 Vac/Vdc	33-78 Vac/ Vdc	500 W/4.5 W	70
200-240 Vac/ Vdc	170-264 Vac/Vdc	60-144 Vac/ Vdc	500 W/4.5 W	70
380-440 Vac	323-484 Vac	114-264 Vac	500 W/4.5W	70

DC Disconnect Switch

Shunt Release/SHT



Product	Order code	SKU	Description
Shunt release	1800268	+SHT12NA	24-30 VDC, Optional accessories, factory installed
	1800269	+SHT12NB	48-60 VDC, Optional accessories, factory installed
	1800270	+SHT12NC	110-130 VAC/DC, Optional accessories, factory installed
	1800271	+SHT12ND	200-240 VAC/DC, Optional accessories, factory installed
	1800446	+SHT12NE	380-440 Vac, Optional accessories, factory installed

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

SHT Parameters

Control Voltage	Operational voltage range 70-110%	Inrush/continuous power consumption	Operating time (ms)
24-30 Vdc	17– 33 Vdc	500 W/4.5 W	35
48-60 Vdc	34–66 Vdc	500 W/4.5 W	35
110-130 Vac/Vdc	77–143 Vac/Vdc	500 W/4.5 W	35
200-240 Vac/ Vdc	146-264 Vac/Vdc	500 W/4.5 W	35
380-440 Vac	266-484 Vac	500 W/4.5 W	35

DC Disconnect Switch

Closing Release/XF



Product	Order code	SKU	Description
Closing release	1800260	+XF12NA	24-30 VDC, Optional accessories, factory installed
	1800261	+XF12NB	48-60 VDC, Optional accessories, factory installed
	1800262	+XF12NC	110-130 VAC/DC, Optional accessories, factory installed
	1800263	+XF12ND	208-240 VAC/DC, Optional accessories, factory installed
	1800444	+XF12NE	380-440 Vac, Optional accessories, factory installed

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

XF Parameters

Control voltage	Operational voltage range 70-110%	Inrush/continuous power consumption	Operating time (ms)
24-30 Vdc	17– 33 Vdc	500 W/4.5 W	35
48-60 Vdc	34–66 Vdc	500 W/4.5 W	35
110-130 Vac/Vdc	77–143 Vac/Vdc	500 W/4.5 W	35
200-240 Vac/ Vdc	146-264 Vac/Vdc	500 W/4.5 W	35
380-440 Vac	266-484 Vac	500 W/4.5 W	35

DC Disconnect Switch

Auxiliary Contact/AX

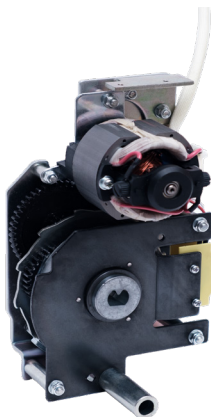


Product	Order code	SKU	Description
Auxiliary Contact	1800286	+AX12NF44	4NO+4NC, standard accessories, factory pre-installed
	1800287	+AX12NF66	6NO+6NC, standard accessories, factory pre-installed
	1800288	+AX12NF44C	4NO/4NC, standard accessories, factory pre-installed
	1800289	+AX12NF66C	6NO/6NC, standard accessories, factory pre-installed

Voltage (V)		Rated current (A)
AC	240	5
	480	2
DC	110	0.25
	220	0.25

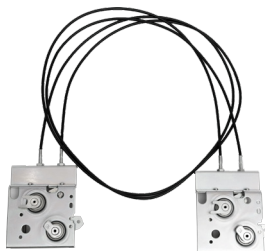
DC Disconnect Switch

Motor Operator / Mechanical Interlocks With Cables



Product	Order code	SKU	Description
Motor Operator	1800429	+MD11NA	24-30 VDC, Standard accessories, factory installed
	1800430	+MD11NB	48-60 VAC/VDC, Standard accessories, factory installed
	1800431	+MD11NC	110-130 VAC/DC, Standard accessories, factory installed
	1800432	+MD11ND	208-240 VAC/DC, Standard accessories, factory installed
	1800433	+MD11NE	380-440 VAC , 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



Product	Order code	SKU	Description
Mechanical Interlocks with cables	1800338	+IPA12N	Mechanical Interlocks with cables, optional accessories

Maximum distance between mounting positions of the interlocks is 78 in(2m)
Configuration: 2 locks and 2 cables (2 disconnectors), 3 locks and 6 cables (3 disconnectors)

DC Disconnect Switch

OFF Position Keylock / Pushbutton Lock Device



Product	Order code	SKU	Description
OFF position keylock	1800316	+KLK12N1	OFF position keylock, 1 lock 1 key, standard accessories, factory installed
	1800317	+KLK12N2	OFF position keylock, 2 lock 1 key, standard accessories, factory installed
	1800318	+KLK12N3	OFF position keylock, 3 lock 2 key, standard accessories, 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



Product	Order code	SKU	Description
Pushbutton lock device	1800314	+VBP12N	Pushbutton lock device, optional accessories, factory installed

Pushbutton lock device Prevents access to the control pushbuttons of the breaker

Factory installed only

Lock is not included

DC Disconnect Switch

Door Frame / Phase Barrier / Ready To Close Contact



Product	Order code	SKU	Description
Door frame	1800439	+CDP11N	standard accessories, factory installed

IP Grade: IP40



Product	Order code	SKU	Description
Phase barrier	1800331	+PHS12N3	standard accessories

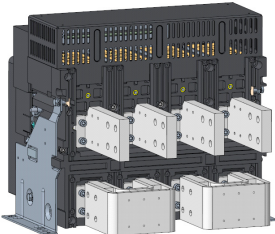
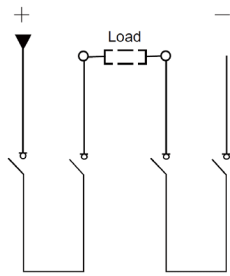
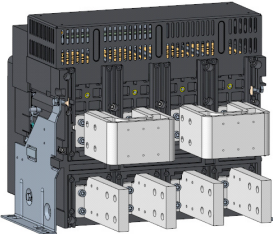
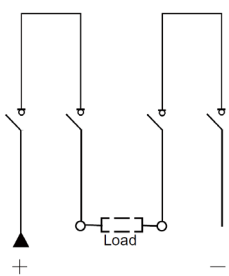
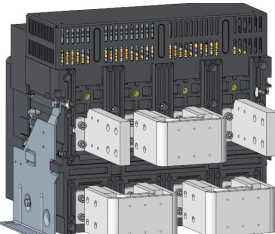
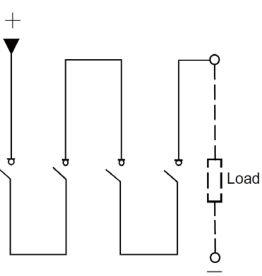
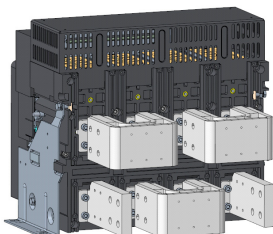
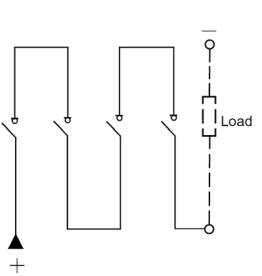
Increase the insulation level between adjacent phases
Shipped in a combination package (three pieces)



Product	Order code	SKU	Description
Ready to close contact	1800312	+PF12N	optional accessories, factory installed

DC Disconnect Switch

Wiring Type

C TYPE*			
vertical busbar		vertical busbar	
			
D型接线*			
			

*Type C: only suitable for ungrounded systems

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

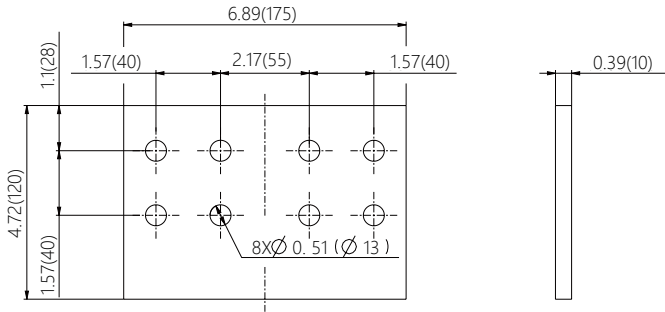
DC Disconnect Switch

Wiring Type

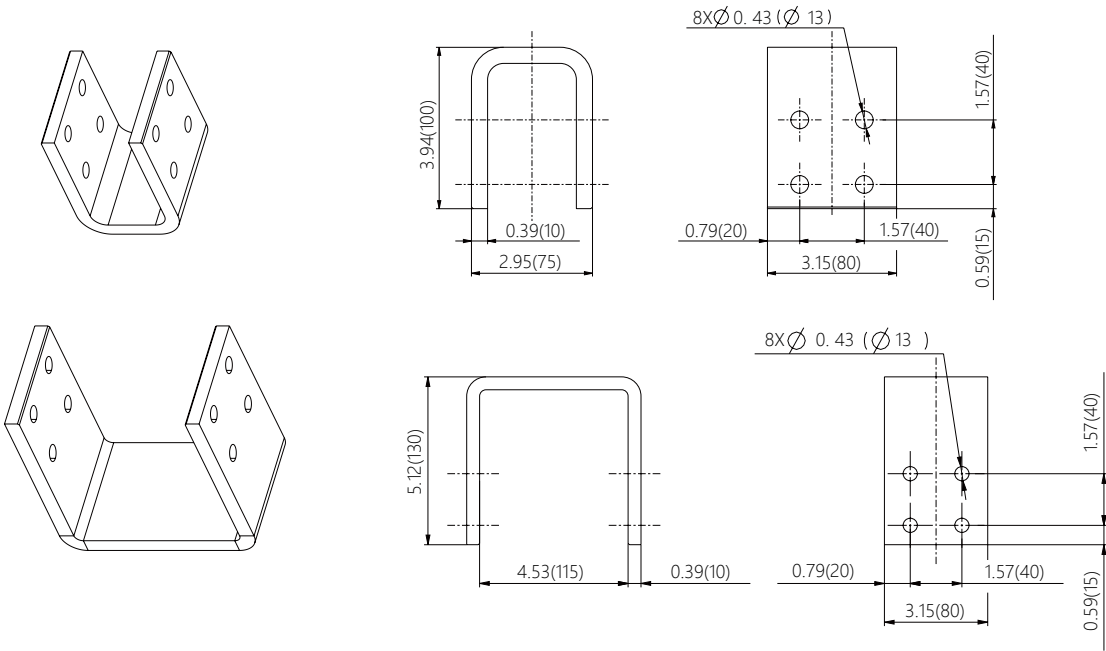
Jumper dimensions:

in(mm)

800-2000A:



2500A:



Recommended busbar specifications:

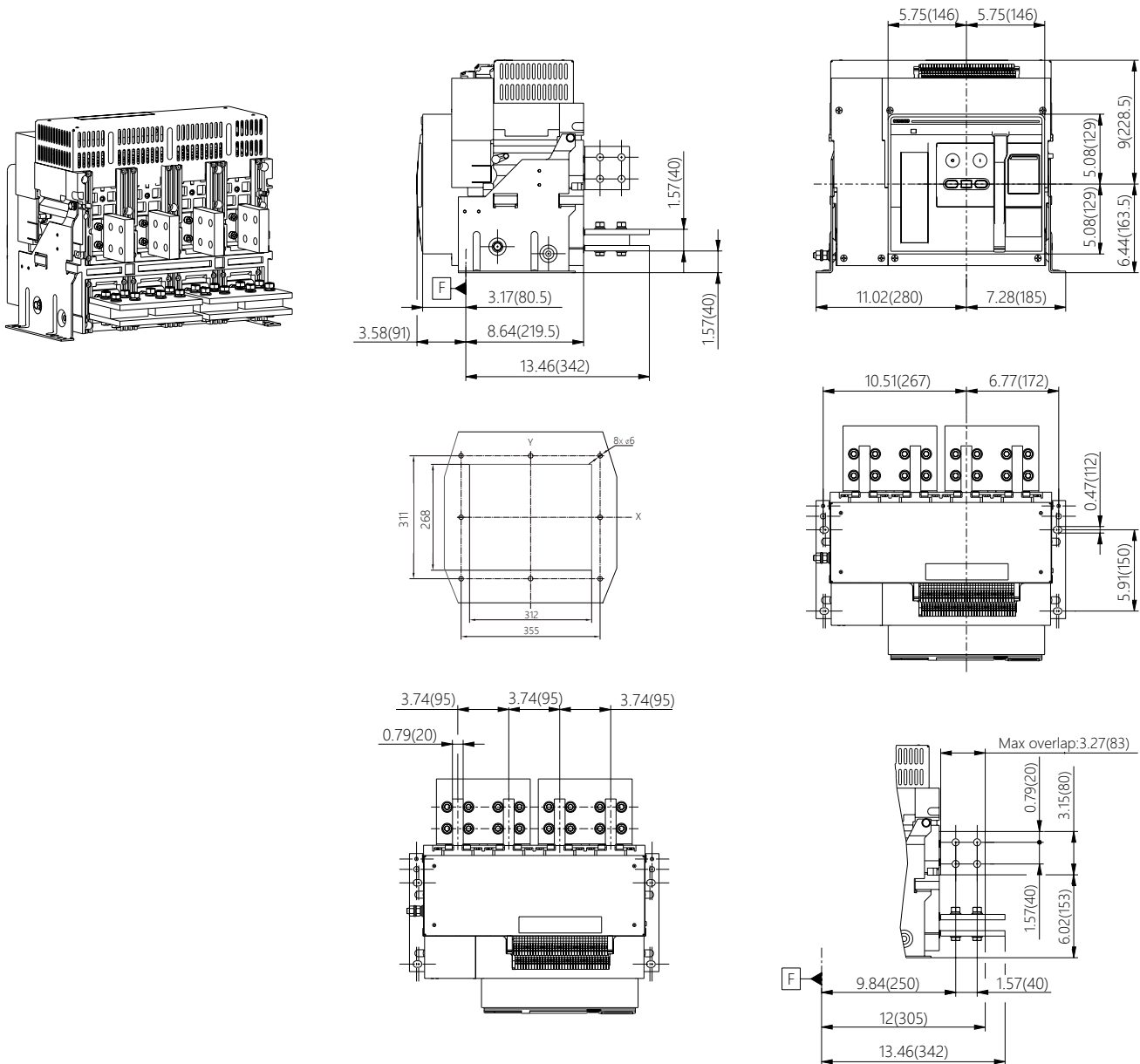
Rated current	Horizontal	Vertical
800A	6.35TX76.2X1ea (inch:1/4X3X1ea)	6.35TX76.2X1ea (inch:1/4X3X1ea)
	10TX50X1ea	10TX50X1ea
1600A	6.35TX76.2X2ea (inch:1/4X3X2ea)	6.35TX76.2X2ea (inch:1/4X3X2ea)
	10TX50X2ea	10TX50X2ea
2000A	6.35TX101.6X2ea (inch:1/4X4X2ea)	6.35TX101.6X2ea (inch:1/4X4X2ea)
	10TX80X2ea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

DC Disconnect Switch

Dimensions

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

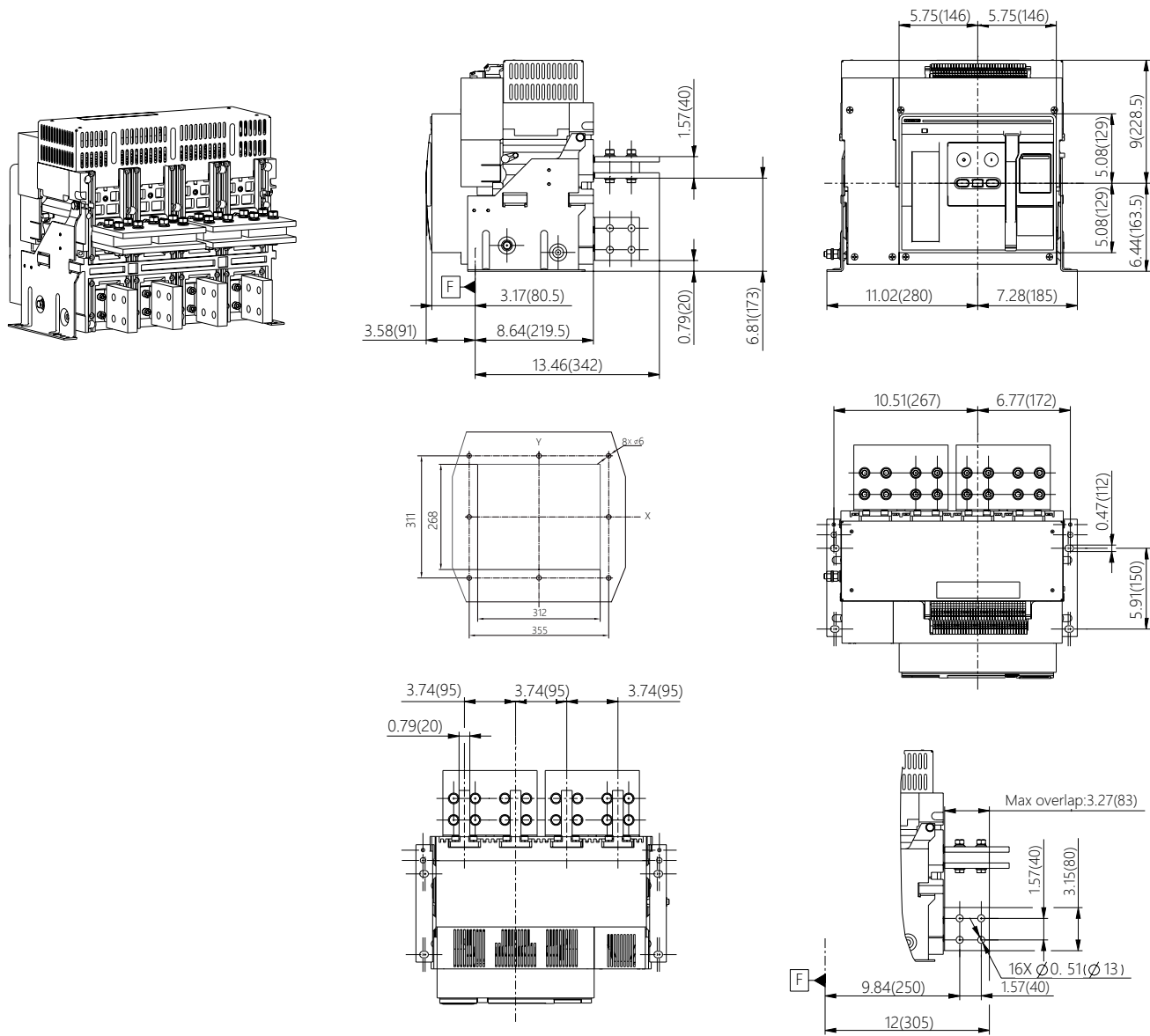
in(mm)



DC Disconnect Switch
Dimensions

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

in(mm)

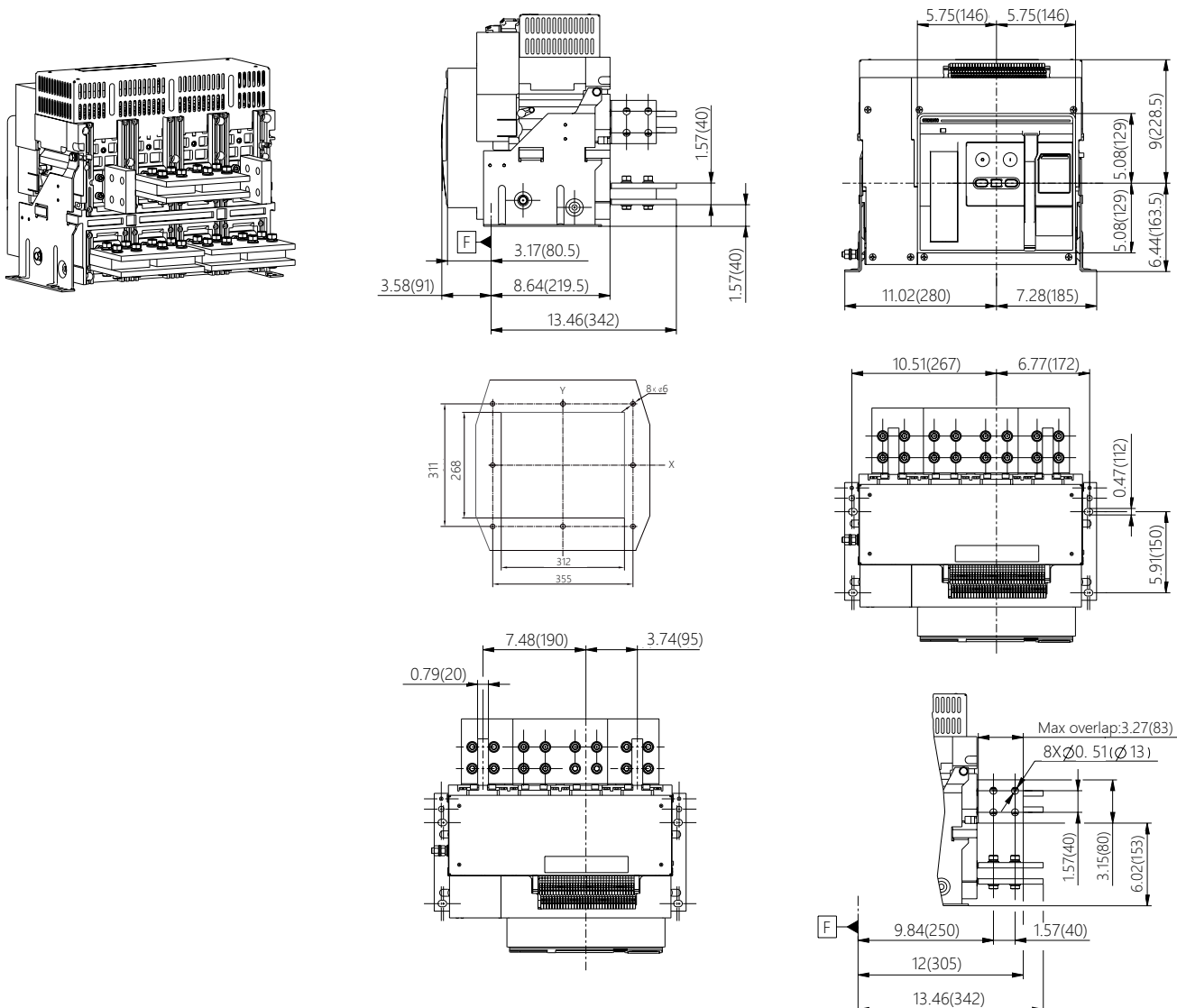


DC Disconnect Switch

Dimensions

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

in(mm)

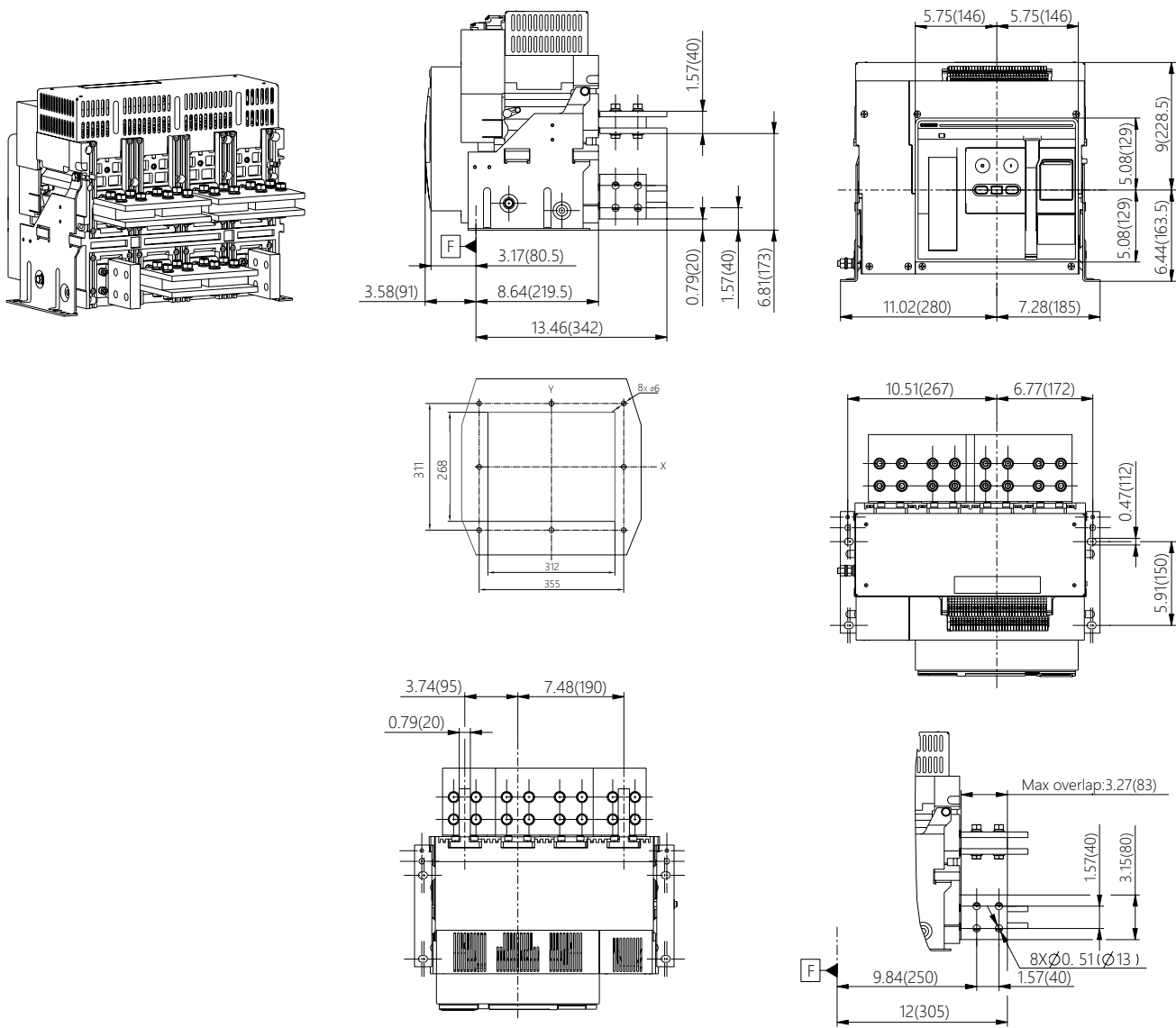


DC Disconnect Switch

Dimensions

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

in(mm)

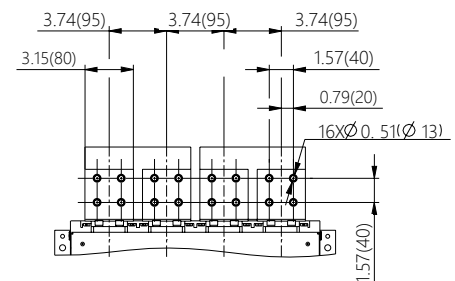
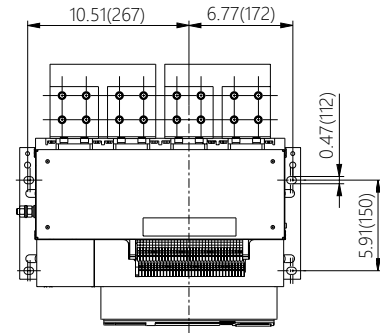
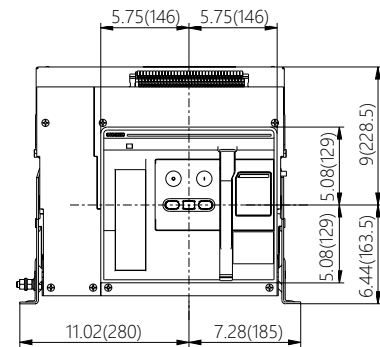
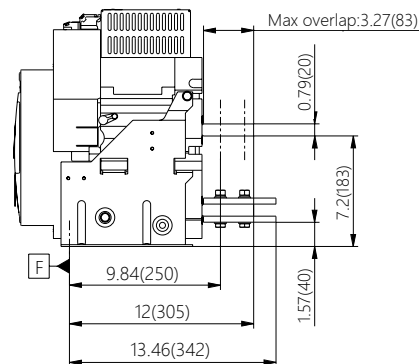
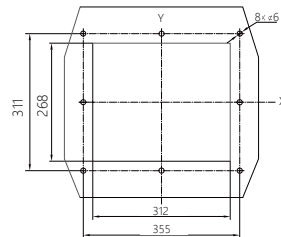
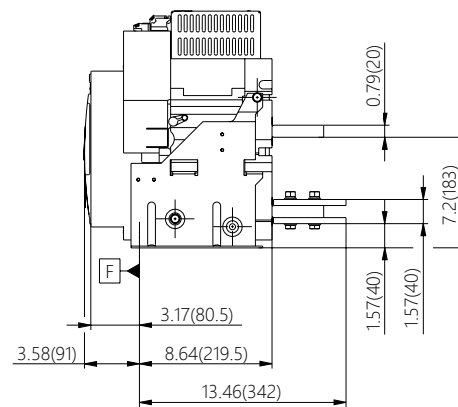
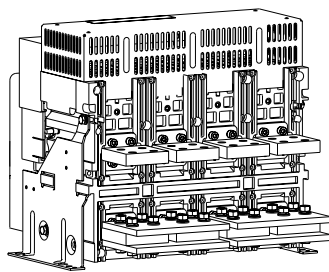


DC Disconnect Switch

Dimensions

800A-2000A Type C horizontal, upper supply

in(mm)

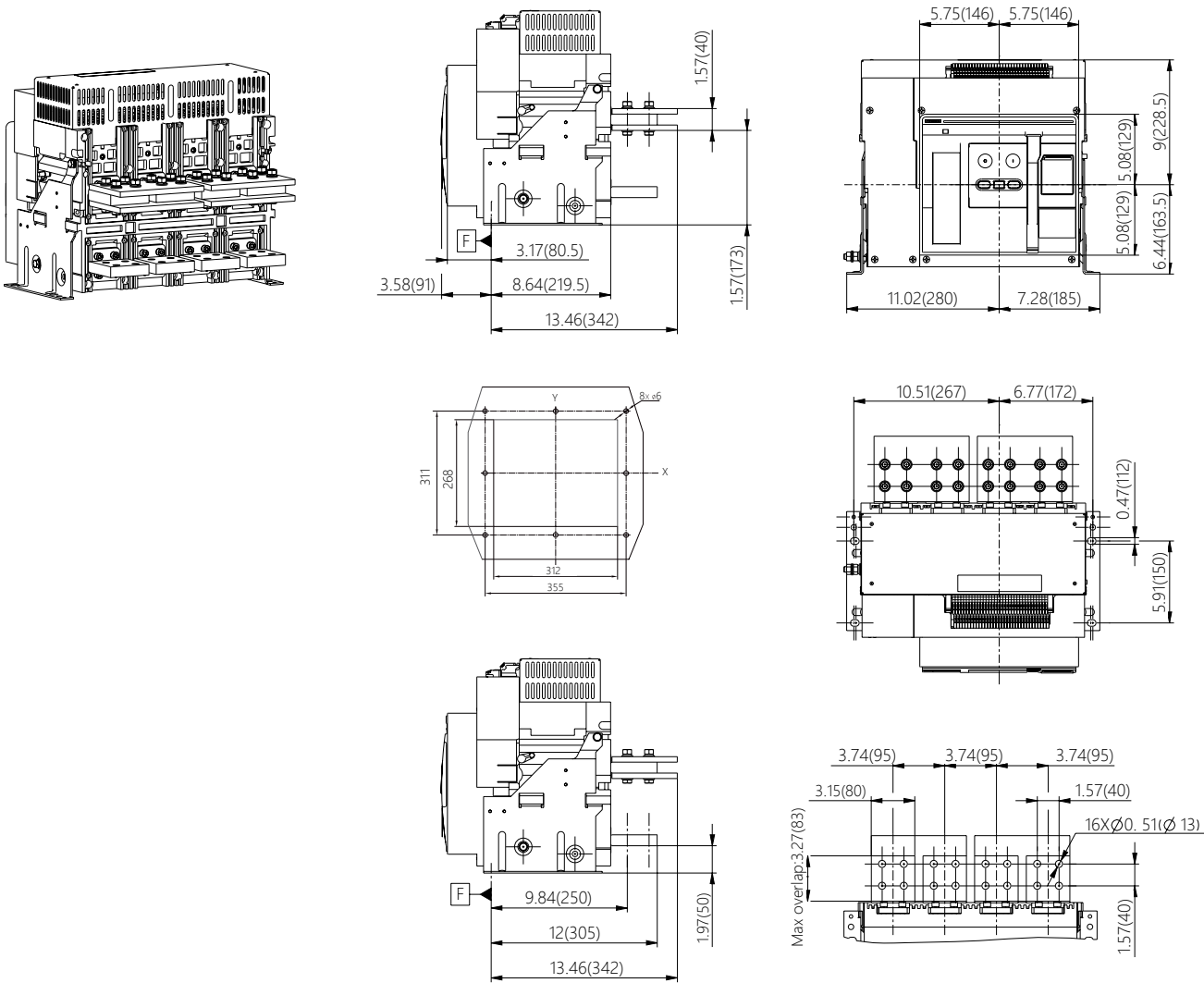


DC Disconnect Switch

Dimensions

800A-2000A Type C horizontal, lower supply

in(mm)

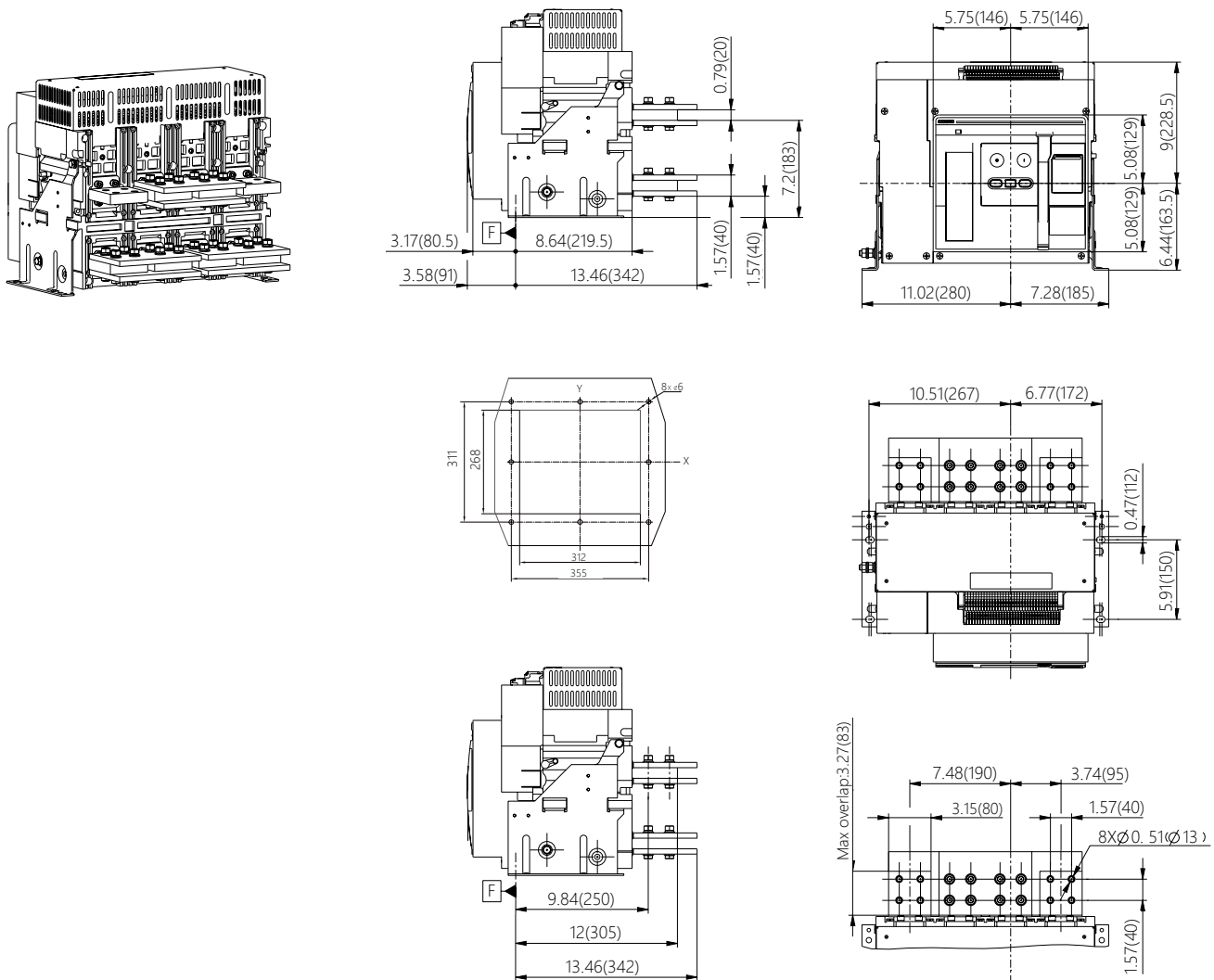


DC Disconnect Switch

Dimensions

800A-2000A Type D horizontal, upper supply

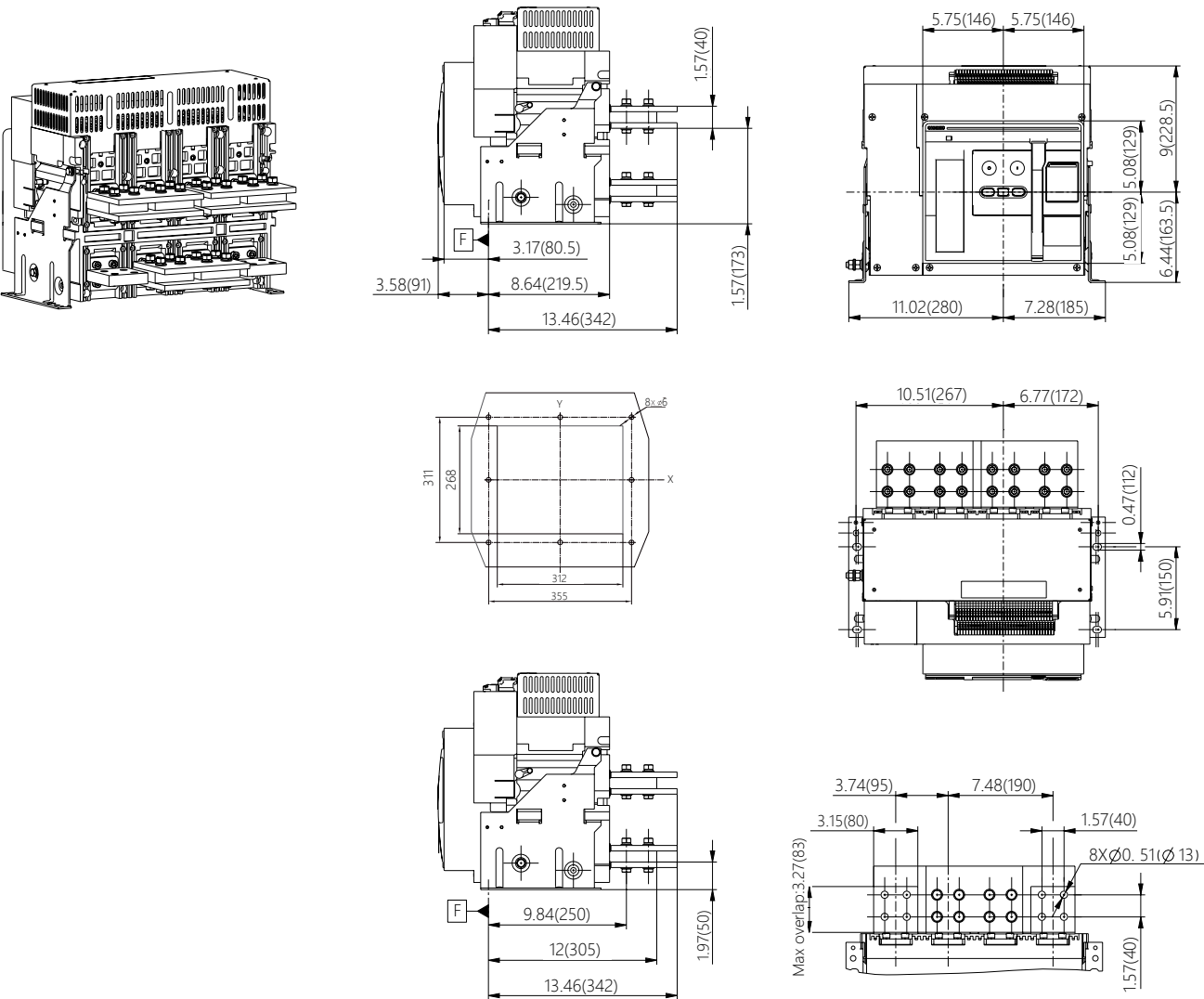
in(mm)



DC Disconnect Switch
Dimensions

800A-2000A Type D horizontal, lower supply

in(mm)

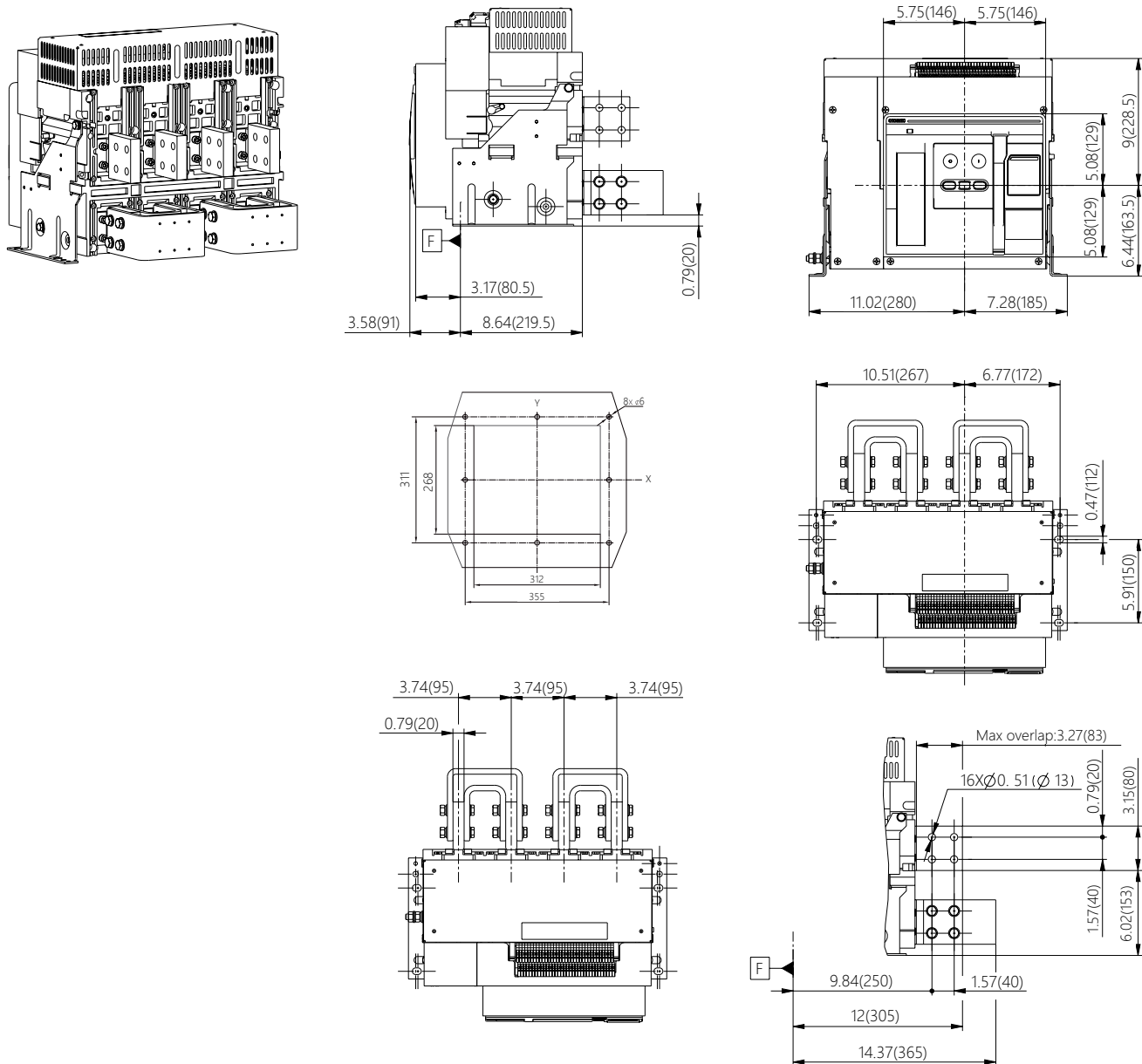


DC Disconnect Switch

Dimensions

2500A Type C, vertical, upper supply

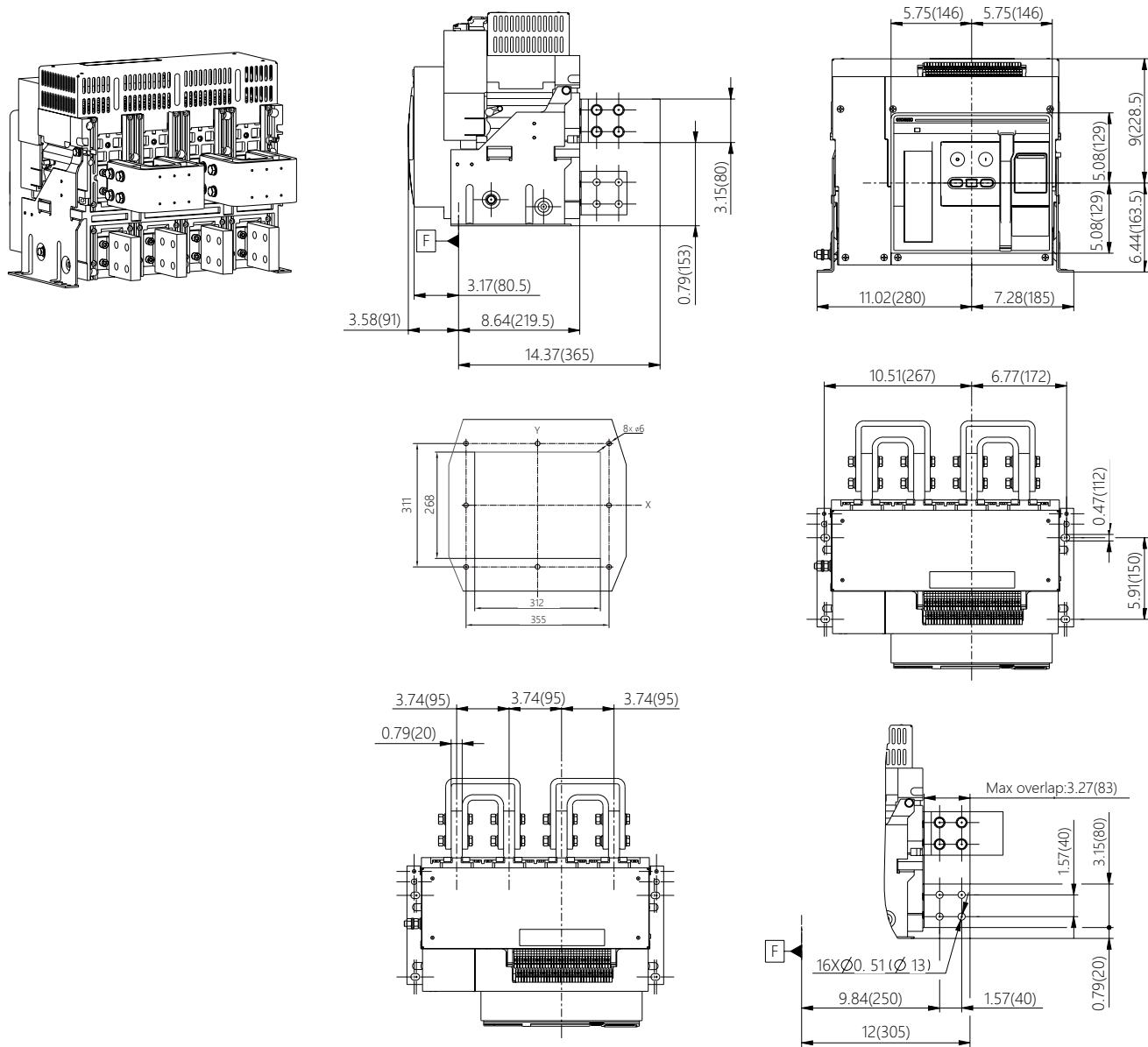
in(mm)



DC Disconnect Switch
Dimensions

2500A Type C vertical, lower supply

in(mm)

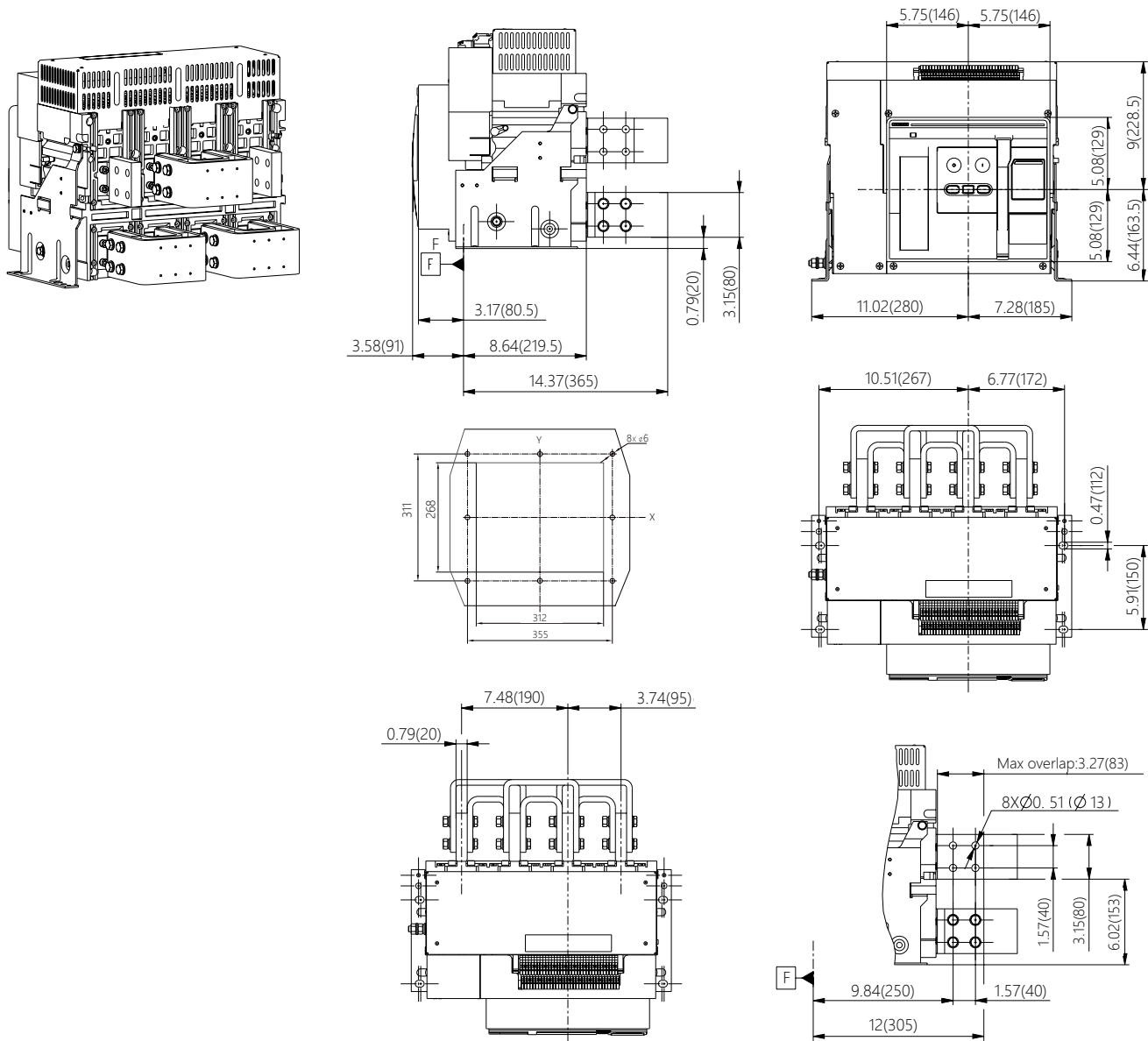


DC Disconnect Switch

Dimensions

2500A Type D, vertical, upper supply

in(mm)

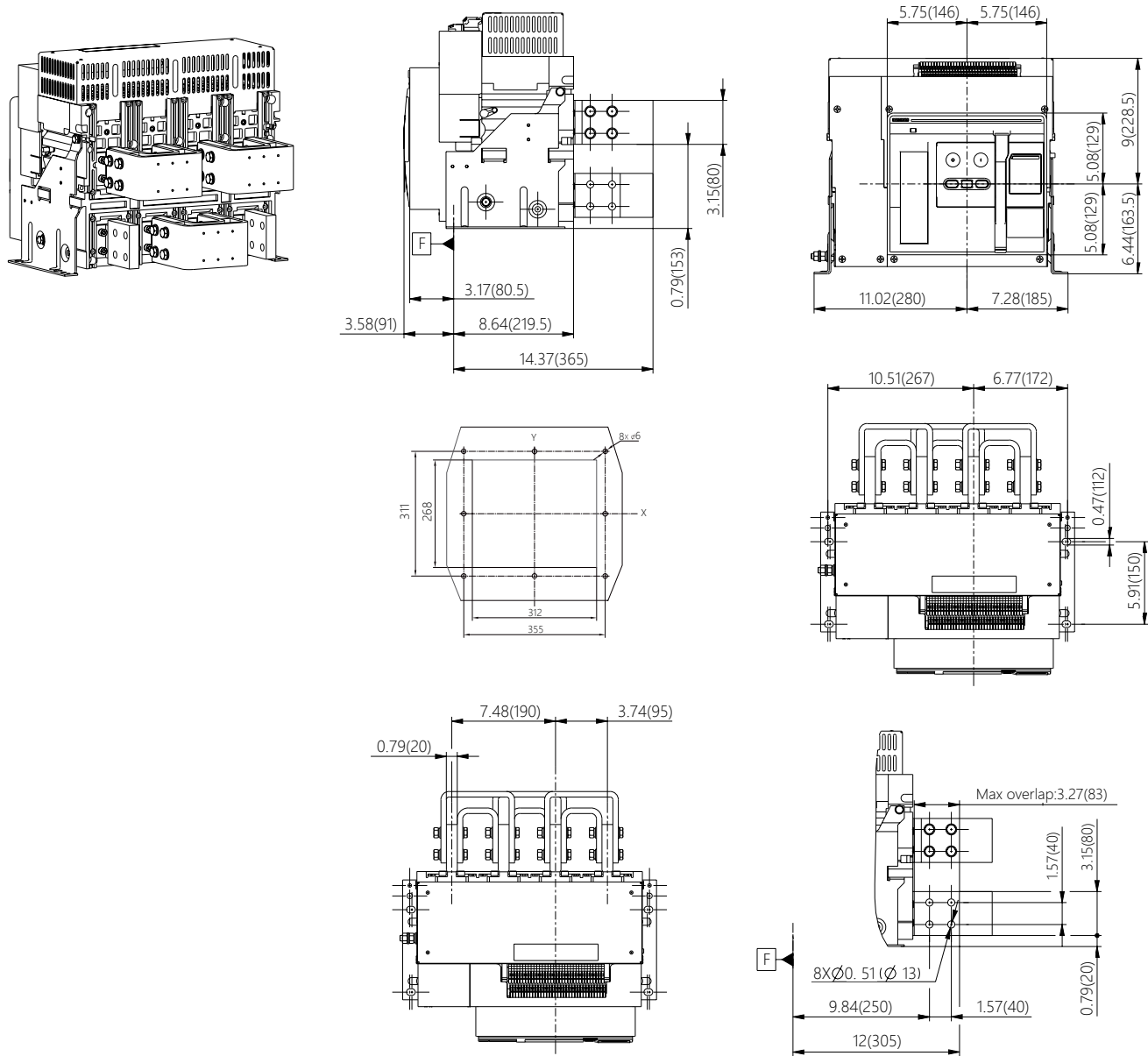


DC Disconnect Switch

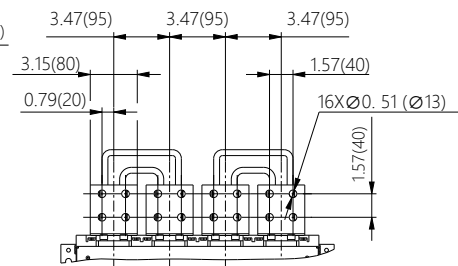
Dimensions

2500A Type D, vertical, lower supply

in(mm)



in(mm)

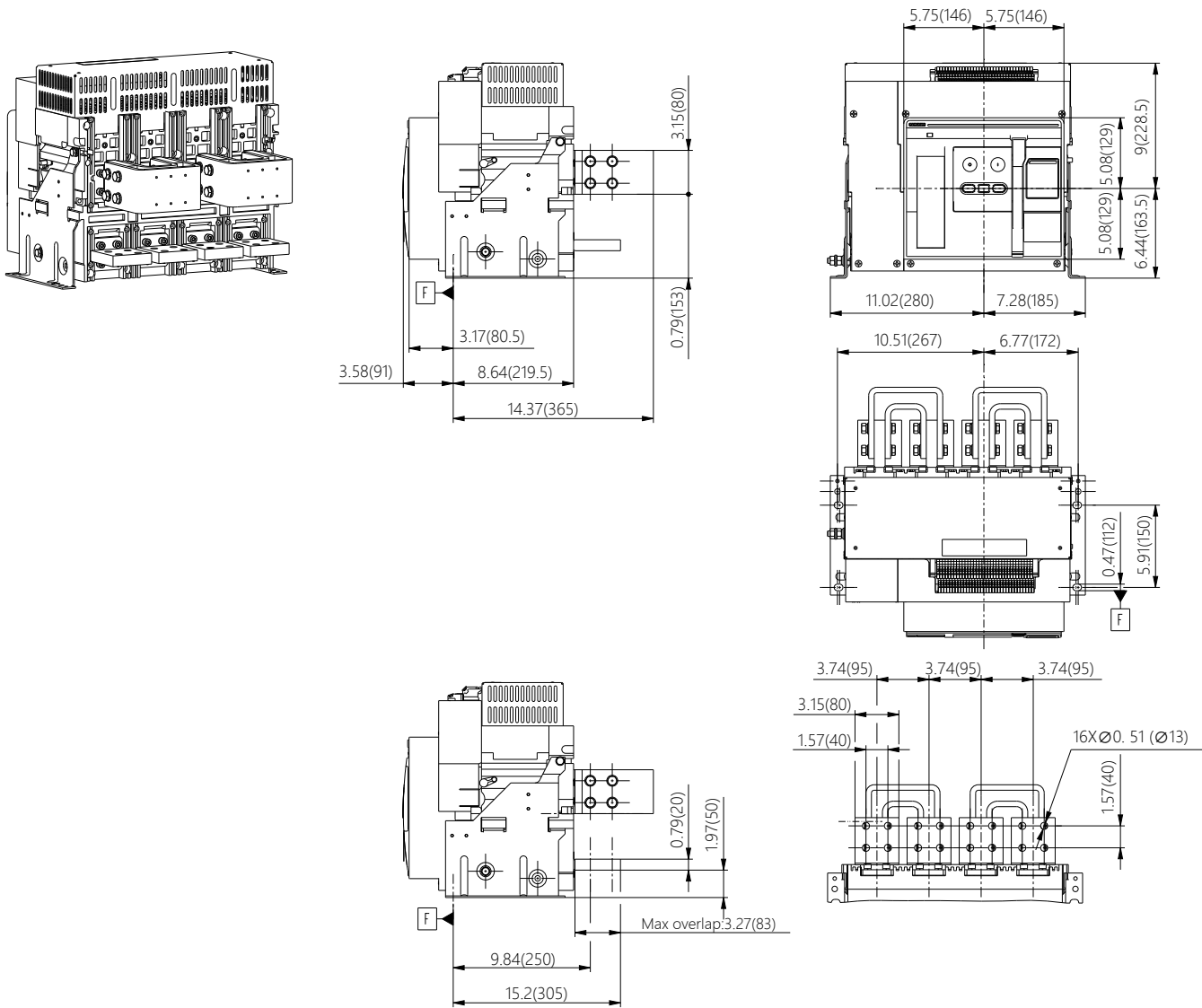


DC Disconnect Switch

Dimensions

2500A Type C, horizontal, lower supply

in(mm)

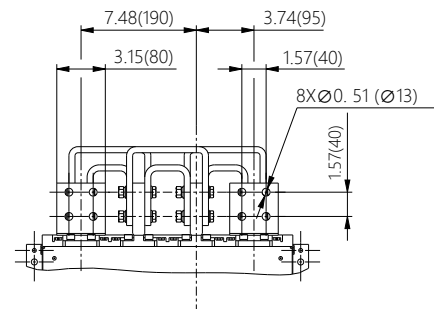
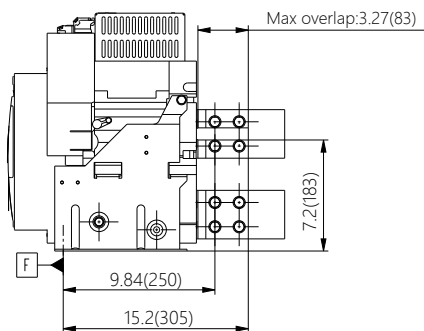
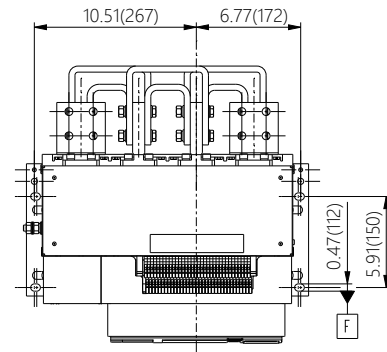
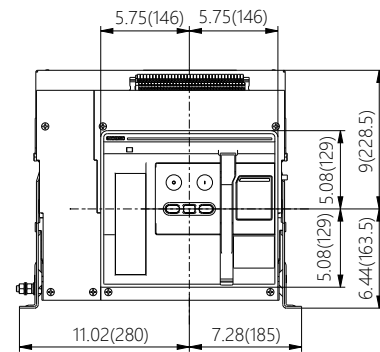
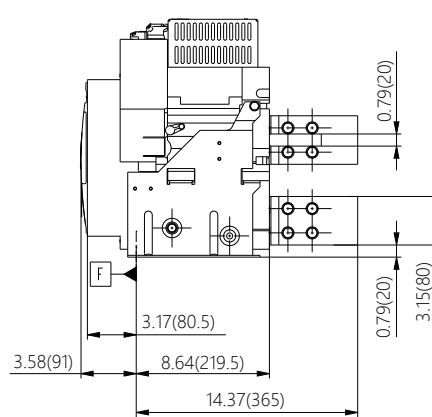
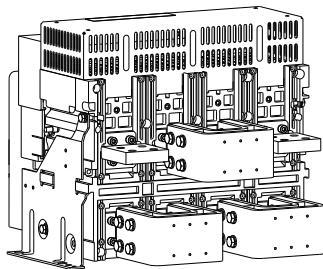


DC Disconnect Switch

Dimensions

2500A Type D, horizontal, upper supply

in(mm)

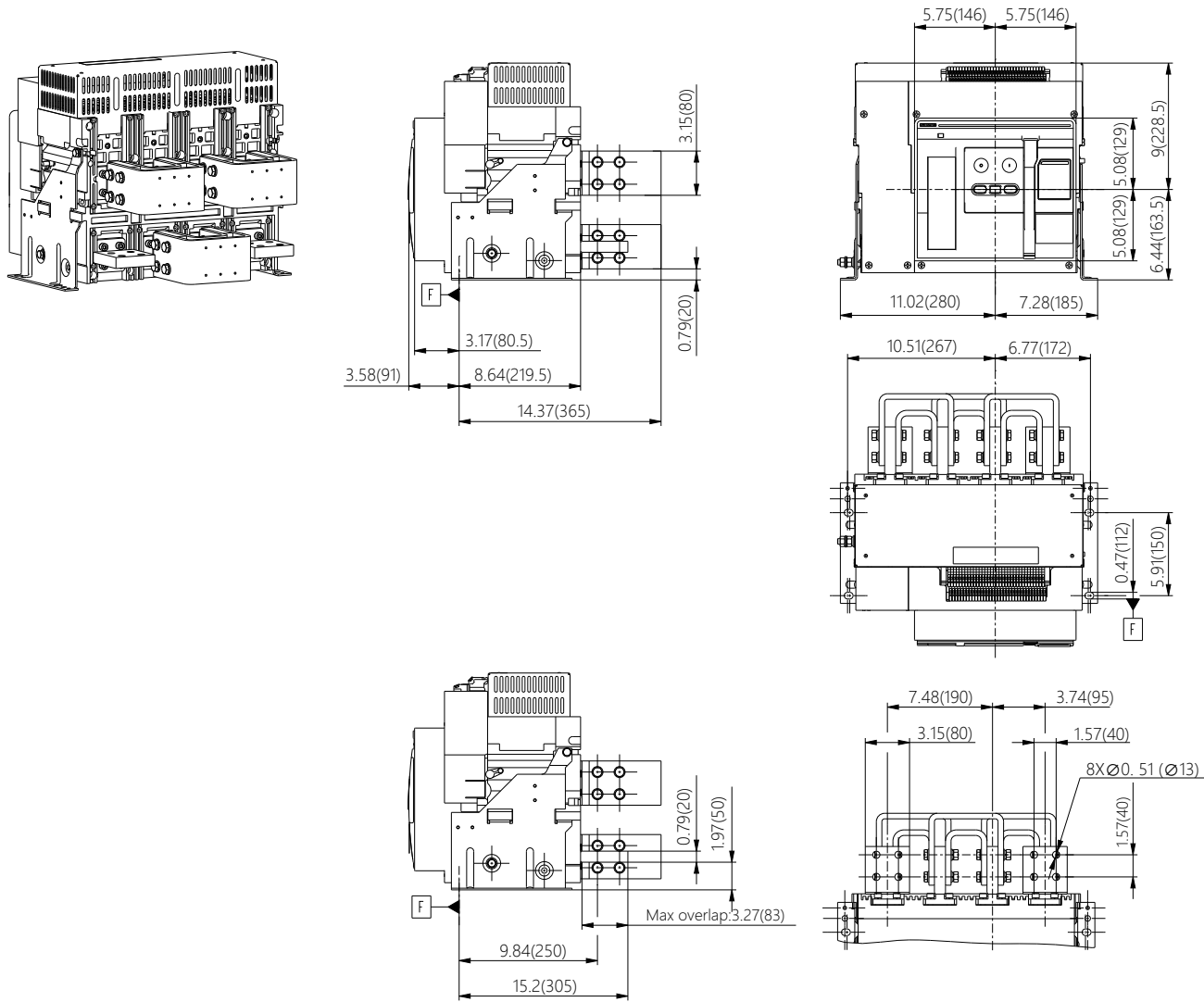


DC Disconnect Switch

Dimensions

2500A Type D, horizontal, lower supply

in(mm)

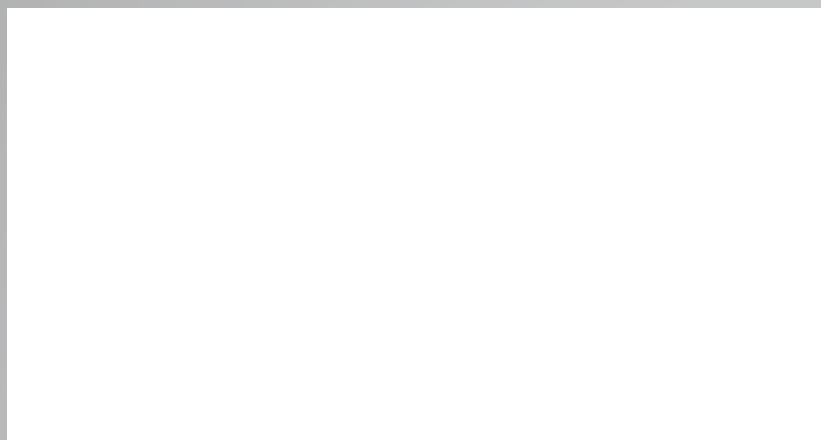




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