

TWOMASTER



TWOMASTER FSD
Fuse Switch Disconnect

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Fuse Switch Disconnecter

100A-630A

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The solution for

- Protection of industrial processes
- Main switchboard
- Distribution panel
- Compensation board

Compliance with standards

- IEC 60947-1:2021
- IEC 60947-2:2017+A1:2020

Approvals and certifications

UDEM International Certification



Products Description

Introduction

FSD series integrate control, isolation, and fuse base function in one device. These functions can also be realized by using of di?er

Function

Fuse switch disconnecter has following functions:
The load change over. The work speed and breaking capacity of the fuse is associated with the specific operation situation of the operator.

Fuse brake piece form the dynamic contact of the fuse.

Fuse is installed in the fuse base.

By manipulating the handle , the fuse base can operate the main active contact.

When the fuse base is in the OFF position(OFF), contacts can indicate information.

With DIN type blade industry fuse (NH), it can provide power distribution circuit with short circuit or overload protection.

The solution of different combined components

By using isolating switch and the fuse installed on di?erent fuse base,it can protect the power distribution circuit and the motor.

The function of each component can provide.

The load switch (opening and closing) and isolation (isolating switch).

Short circuit or overload protection (fuse).

With the aid of these components, it has Interpact INS isolating switch function between 40A~ 800A .

In accordance with the protection degree

FSD fuse can prevent direct contact. Its protection degree conform to the IEC 60529 standard IP (20).

Conform to the standard

FSD fuses accessories meet the following international standards and national standards GB14048.3 and specifications:

IEC 60947-1 general rule.

IEC 60947-1; Switch, isolator, isolation switch and fuse composition unit.

IEC 60947-5.1 and below: control circuit devices and switching components, control components.

Class of pollution

FSD fuse is certified. It can work in level III pollution environment.

The pollution level is in accordance with industrial environment IEC 60947 standard.

Environment temperature

FSD fuse operating temperature range from 25 °C to + 70 °C.

When the temperature is higher than 40 °C, squad coeffcent must be used.

As long as no more than a certain duration,it can operate under the condition of ambient temperature below -35 °C.

Product Code

TWOMASTER-FSD Fuse Switch Disconnect			
Rating (A) 690VAC	Product Code	No. of poles	Fuse Size
100	32223010	3 Pole	NH000
160	32223016	3 Pole	NH00
250	32223025	3 Pole	NH1
400	32223040	3 Pole	NH2
630	32223063	3 Pole	NH3

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Technical Parameters

FSD isolating switch fuse			
Electrode number/Fuse model		IEC60 2692-1 standard, clause 1	
Electric property in accordance with IEC 60947-1 GB14048.3			
The rated load current (A)		ventilation lth	At 40°C
	The maximum loss power of the fuse(W)		
	inner of shell lthe	At 40°C	
	The maximum loss power of the fuse (W)		
rated insulation voltage (V)		Ui	AC 50/60 Hz / DC
Rated impulse withstand voltage		Uimp	
The rated operating voltage (V)		Ue	AC 50/60 Hz
			DC
The rated operating voltage (AC20 and DC20) (V)Ue			
Rated current (A)		Ie	AC 50/60 Hz
			220/240 V
			380/415 V
			440/480 V
			500 V
			660/690 V
		DC/Tandem electrode	
			125 V /Electrode number
			220 V /Electrode number
			440 V /Electrode number
working mode		continuously operate	
rated short circuit breaking capacity (kA rms) / Icn/Icm/In fuse		415 V	
rated short-circuit		500 V	
closing capacity (Peak value kA) fuse (A) ⁽³⁾		690 V	
Service life (class B) (CO cycle)		Machinery	
		AC	AC22B 415 V
		electricity	AC21B 690 V
Suitable for isolation			
Visible breakpoint			
class of pollution			
Control			
The lock of rotation handle on direct front panel		Padlock	
		Seal retainer	
Auxiliary indicator			
Auxiliary contact			
Fuse monitor			
Fuse failure indicator contact			
Installation and connection accessories			
Installation site		Horizontal	
		Vertical	
Bare cable connector			
Other connector		For bare copper/aluminum cable	
		Used for bus	
Power connector			
Copper cable lug			
Comb bus			
The comb bus insulation cover			
Comb bus input connector			
Terminal cover			
Dimensions and Weight			
Overall dimension H x W x D (mm)		3poles	
No fuse reference weight (kg)		3poles	

Technical Parameters

FSD-100		FSD-160		FSD-250		FSD-400		FSD-630	
3P/DIN (NH)		3P/DIN (NH)		3P/DIN (NH)		3P/DIN (NH)		3P/DIN (NH)	
100 ⁽¹⁾		160		250		400		630	
9		12		23		34		48	
100 ⁽¹⁾		160		250		400		630	
9		12		23		34		48	
690		800		800		800		800	
6		8		8		8		8	
690		690		690		690		690	
440		440		440		440		440	
690		800		800		800		800	
AC21B	AC22B	AC21B	AC22B	AC21B	AC22B	AC21B	AC22B	AC21B	AC22B
100	100	160	160	250	250	400	400	630	630
100	100	160	160	250	250	400	400	630	630
100	-	160	-	250	-	400	-	630	-
100	-	100	-	250	-	400	-	630	-
100	-	100	-	250	-	400	-	630	-
DC21B	DC22B	DC21B	DC22B	DC21B	DC22B	DC21B	DC22B	DC21B	DC22B
100/1	-	160/1	-	250/1	-	400/1	-	630/1	-
100/1	-	160/1	-	250/1	-	400/1	-	630/1	-
100/1	-	160/2	-	250/2	-	400/2	-	630/2	-
80 / 176 / 100		50 / 105 / 160		50 / 105 / 250		50 / 105 / 400		50 / 105 / 630	
50 / 105 / 100		50 / 105 / 160		50 / 105 / 250		50 / 105 / 400		50 / 105 / 630	
50 / 105 / 100		50 / 105 / 100		50 / 105 / 200		50 / 105 / 315		50 / 105 / 500	
2000		1600		1600		1000		1000	
300		200		200		200		200	
300		200		200		200		200	
3		3		3		3		3	
-		-		-		-		-	
-		-		-		-		-	
-		-		-		-		-	
-		-		-		-		-	
-		-		-		-		-	
-		-		-		-		-	
-		-		-		-		-	
-		-		-		-		-	
-		-		-		-		-	
-		-		-		-		-	
-		-		-		-		-	
141 x 89 x 71		163 x 107 x 80		246 x 186 x 110		271 x 210 x 127		271 x 250 x 132	
0.46		0.64		2.06		2.96		4.00	

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Technical Parameters

FSD isolating switch fuse type		FSD-100	FSD-160	FSD-250	FSD-400	FSD-630
The model of fuse						
	DIN NH000			-	-	-
	DIN NH00	-		-	-	-
	DIN NH1	-	-		-	-
	DIN NH2	-	-	-		-
	DIN NH3	-	-	-	-	
Installation and connection						
Symmetric guide			-	-	-	-
Direct connection on the back						
Hook connection with the spacing of 60 mm bus						
Temperature drop capacity (using the gG type fuse) (1) (2)		100/160 ⁽³⁾	160	250	400	630
	40°C	100/160	160	250	400	630
	45°C	95/152	152	238	380	599
	50°C	90/144	144	225	360	567
"vertical installation"	lth (A)	55°C	85/136	136	213	340
Vertical fuse		60°C	80/128	128	200	320
		65°C	75/120	120	188	300
		70°C	70/112	112	175	280
		40°C	100/160	160	250	400
	lth (A)	45°C	95/152	152	238	380
		50°C	90/144	144	225	360
"horizontal installation"		55°C	85/136	136	213	340
Horizontal fuse		60°C	80/128	128	200	320
		65°C	75/120	120	188	300
		70°C	70/112	112	175	280

(1) drop volume data based on:

- equipment fuse maximum rated value
- the maximum heat loss

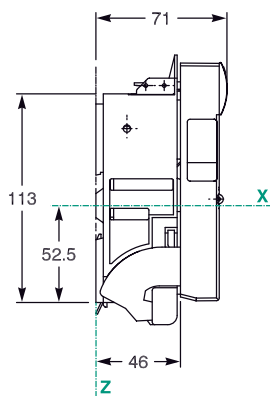
(2) When install top mounted , it needs another 10% reduction

(3)Using 100/160 A f

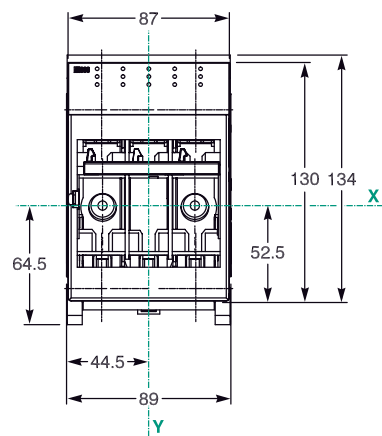
Dimensions

FSD-100

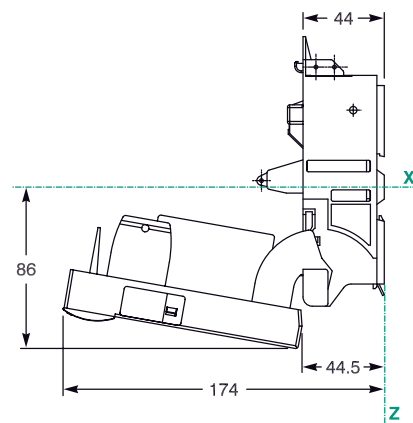
Fuse switch closure



Front side



Fuse switch open



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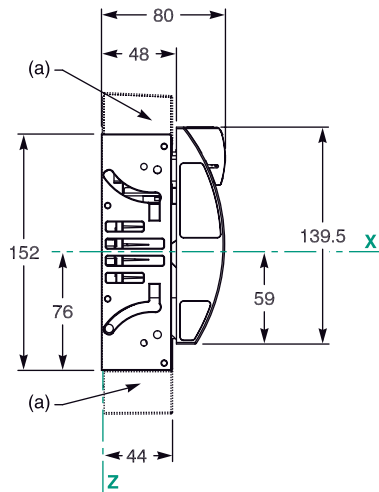
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Dimensions

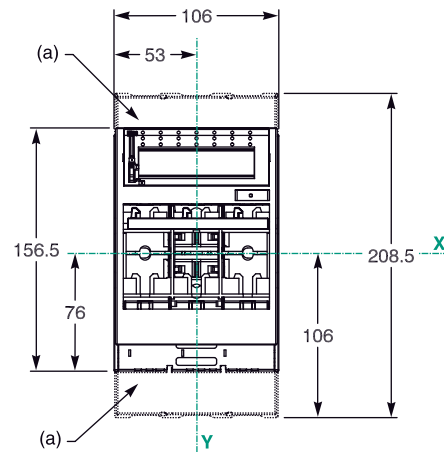
FSD-160

Fuse switch close

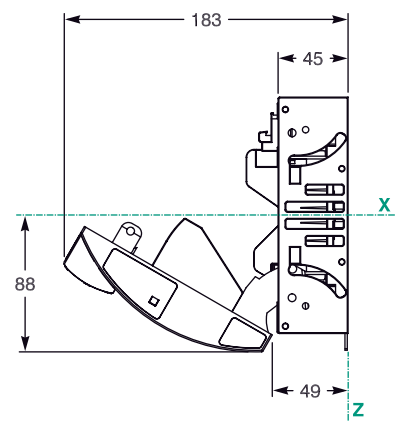


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Front side



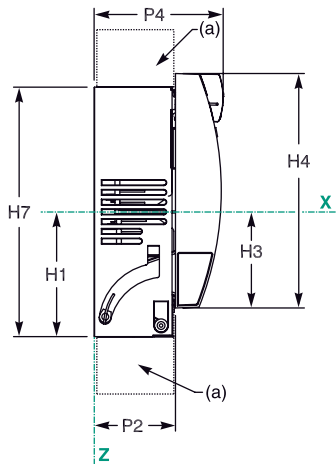
Fuse switch open



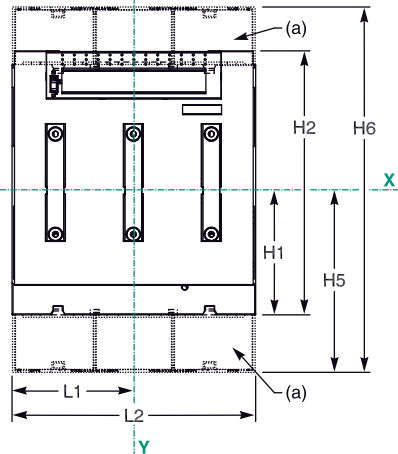
Dimensions

FSD 250-630

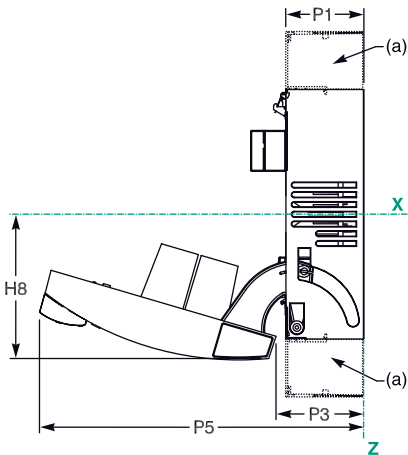
Fuse switch close



Front side



Fuse switch open



	H1	H2	H3	H4	H5	H6	H7	H8	L1	L2	P1	P2	P3	P4	P5	R1	R2	P6	P7
FSD-250	115	245	86	216	174	348	230	133	92	184	68	72	78	110	293	-	-	316	148
FSD-400	128	270	99	241	187	374	256	144	105	210	82	84	91	127	331	65	130	319	148
FSD-630	128	270	99	241	187	374	256	147	125	250	82	84	91	132	332	80	160	319	148

