SURGE PROTECTIVE DEVICES

ISM™ 50kA – 300kA
Integrated Suppression Module

The ISM™ (Integrated Suppression Module) is an integral component utilized in the Current Technology SL3, TG3, and PX3 series surge protection devices. The ISM is now available as an integral component for custom switchgear, switchboard, panelboard, and motor control center applications. The ISM comes with 6 different monitoring options that can be remotely mounted to the surface of the equipment.

kA rating   Configuration

I S M - 3 0 0 - 2 4 0 - 3 D - F

Model   Voltage   Filter
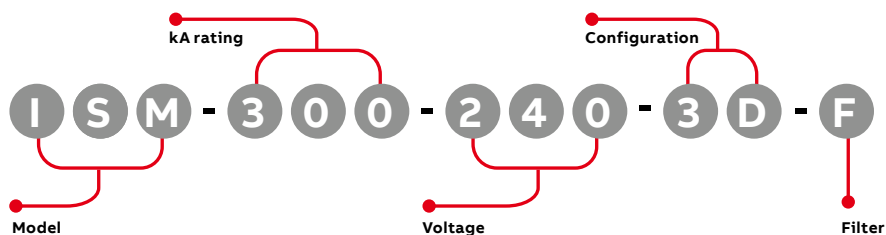
kA Rating	Voltage * (Must Choose One)		Configuration (Must Choose One)	
050	208	120/208	1G	1 Phase, Grounded
080	240	120/240	2G	2 Phase, Grounded, Split Phase
100	380	220/380	3Y	3 Phase, Grounded Wye
125	480	277/480	3H	3 Phase, Grounded, High Leg Delta
150	600	347/600	3D	3 Phase, Grounded Delta
200				
250				
300				

*Not available with Integral Disconnect option.

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Product Specifications

General Specifications

Safety Listings	C-UL-US Listed per ANSI/UL 1449 5th Edition VZCA:E316636 and VZCA7:E316636 Type 1 or 2 – open-type SPD suitable for use in Type 1 or 2 SPD Applications; UL Type 2 has UL 1283 listed filter CSA C22.2 No. 8-M1986, C233.1-87 RoHS compliant
Protection Method	Thermally protected MOVs, capacitive filter
Product Design	Individual thermally fused and protected MOVs, and all copper, tin-plated bus
Installation Location	Indoor
Operating Environment	-40 °C to +60 °C 5% – 95% Non-Condensing Humidity
Short Circuit Current Rating (SCCR)	200 kA
Connection Method	Parallel
Protection Modes	All Modes (L-N, L-G, N-G, L-L)
Operating Frequency	47 – 63 Hz
Limited Warranty	15 Years

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Filtering Attenuation Frequencies (Per Mil-Std-220B)*

10 KHz	100 KHz	1 MHz	10 MHz	Max at 142 KHz
18.1 dB	44 dB	22.8 dB	15.3 dB	54.6 dB

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Maximum Continuous Operating Voltage (MCOV)

Voltage	L-N MCOV	Voltage	L-L MCOV
120 V	150 V	240 V	300 V
277 V	320 V	480 V	552 V
347 V	420 V	600 V	690 V

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Typical Clamping Voltage Data

System Voltage	Mode	B3 Ringwave	B3/C1 Comb. Wave	C3 Comb. Wave	UL 1449 5th Edition
240/120 208Y/120	L-N	300	400	550	600
	L-G	400	400	600	600
	N-G	325	475	800	600
	L-L	425	725	900	1,000
480Y/120	L-N	500	875	1,050	1,000
	L-G	825	825	1,025	1,200
	N-G	650	875	1,200	1,000
	L-L	700	1,625	1,825	2,000

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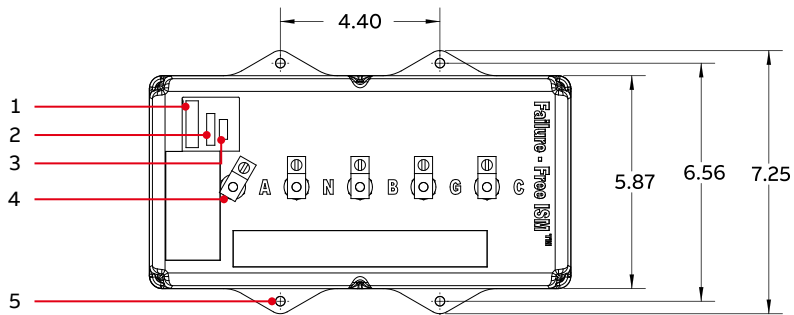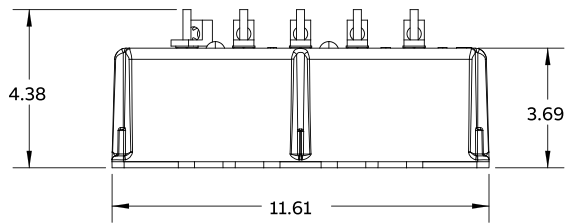SPD Integral to Switchgear

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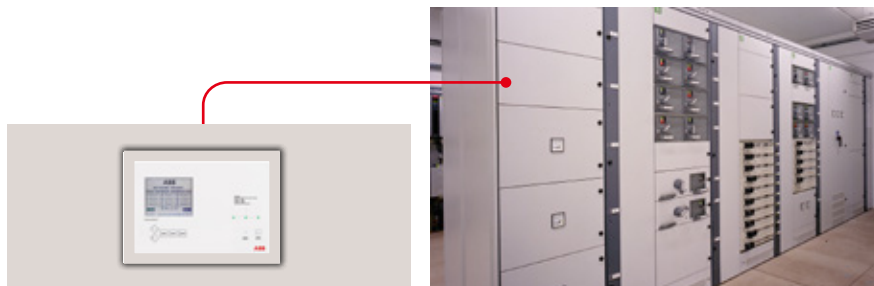
Example showing the ISM integrated into the switchgear and the M6EX remotely mounted on the surface of the switchgear.
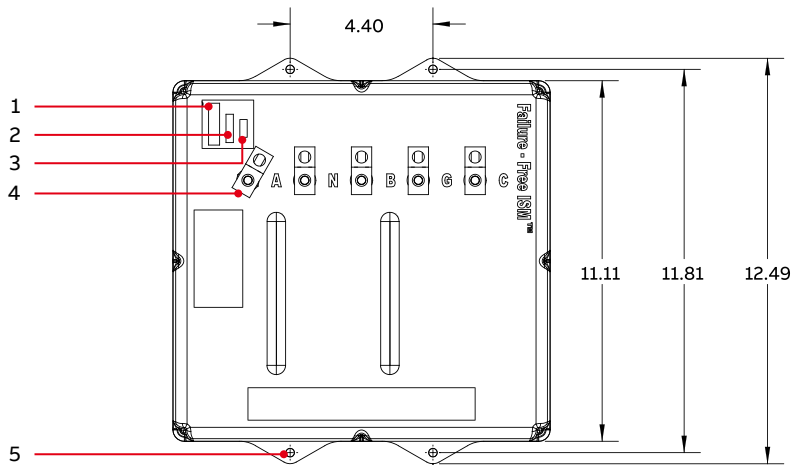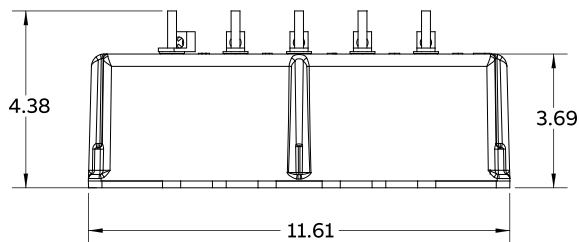
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Dimensional specifications

125kA – 300kA

1. 20 pin ribbon connector
2. 5 Pin ribbon connector
3. 3 pin N-G filter jumper
4. Terminal lug (for #2 AWG wire max)
5. Ø .267 typ.

50kA – 100kA

1. 20 pin ribbon connector
2. 5 Pin ribbon connector
3. 3 pin N-G filter jumper
4. Terminal lug (for #6 AWG wire max)
5. Ø .267 typ.

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Voltage/configuration options

Not all voltage configurations are displayed, contact Thomas & Betts Power Solutions for additional configurations.	1-Phase, Grounded	2-Phase, Grounded, Split-Phase	3-Phase, Grounded, Wye	3-Phase, Grounded, High-Leg Delta	3-Phase, Grounded, Delta
	1G	2G	3Y	3H	3D
Voltage	**Configuration**				
120	X				
208	X		X		X
220	X	X			X
230	X				X
240	X	X		X	X
380		X	X		X
415		X	X		X
480		X	X		X
600		X	X		X

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ISM™ Components

- Individual Thermally Fused MOVs – ensure seamless product performance in the event of single MOV failure
- Heavy-duty filter capacitors ensure industry's best high frequency noise and transient filtering
- Solid copper bus construction – cumulative surge current is carried on copper bus bars, thereby eliminating reliance on PCB trace to conduct full magnitude current

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ISM™ performance data

System Voltage	Mode	B3 Ring Wave 6kV, 500A	Combo Wave 6kV, 500A	B3/C1	Combo Wave 6kV, 3kA	UL 1449 5th Edition
120/240 120/208	L-N	300	400	550	600	600
	L-G	400	400	560	600	600
	N-G	325	475	540	600	600
	L-L	425	725	935	1,000	1,000
277/480	L-N	500	875	990	1,000	1,000
	L-G	825	825	1,005	1,200	1,200
	N-G	650	875	930	1,000	1,000
	L-L	700	1,625	1,825	2,000	2,000

All ISM™ systems voltage protection ratings (VPR) are peak values (±10%) measured from the 90° reference point and are in compliance with test and evaluation procedures outlined in ANSI/IEEE C62.41

c(UL)us   ✔ RoHS Compliant