

SM15 - Series Earth Leakages

The SM15 is a single phase heavy duty industrial earth leakage circuit breaker available as a surface mount and CBI Mini Rail mount device. This earth leakage circuit breaker is available with earth leakage sensitivity of 30, 50, 100, 250, 375, 500 and 1000 mA.



SM15A
Mini Rail &
Surface Mount

Features

- Hydraulic-magnetic technology
- 100% rating capability, independent of ambient temperature
- VC 8035 compliant
- AS/NZS 3111 and AS/NZS 3190 compliant
- Immune to pulsating DC load current
- Operating Voltage 110 and 240 V AC
- Ratings 10 to 100 A
- Earth Leakage sensitivity 30 mA, 50 mA, 100 mA, 250 mA, 375 mA, 500 mA, 1000 mA
- Single pole plus switched neutral earth leakage protection
- Precision tripping characteristics
- Reset immediately after overload
- Suitable to use for electrical isolation

Applications

- Mining, heavy industrial and commercial applications requiring high sensitivity earth leakage protection from electrical shock and fire hazards
- Telecom / datacom equipment
- Lighting control
- UPS equipment
- Alternative energy equipment
- Mobile power generation equipment
- Railway signalling equipment

Approvals

VC 8035



AS/NZS 3111



AS/NZS 3190

SM15 - Series Earth Leakages

Technical Data

Product Type	SM15
Approvals	VC 8035
Number of Poles	1+N
Standard Ampere Ratings	10 to 100 A
Sensitivity	30 mA, 50 mA, 100 mA, 250 mA, 375 mA, 500 mA, 1000 mA
Rated Voltage	110 V and 240 V
Rated Interrupting	5 kA
Time Delay Curves	2

Product Type	SM15
Approvals	AS/NZS 3111, AS/NZS 3190
Number of Poles	1+N
Standard Ampere Ratings	10 to 100 A
Sensitivity	30 mA, 50 mA, 100 mA, 250 mA, 375 mA, 500 mA, 1000 mA
Rated Voltage	110 V and 240 V
Rated Interrupting	6 kA
Time Delay Curves	2

Product Type	SM15
Operating Temperature Range	-40 °C to +85 °C
Mounting Options	CBI Mini Rail, surface mount
Time Delay Curves	2
Endurance	1500 electrical operations (AS/NZS 3111, AS/NZS 3190)
Dielectric Strength	1480 V (single pole) / 1830 V (multi pole), 50 Hz for one minute after testing
Weight	500 g per pole (unpacked)
Humidity	35 to 85% relative
Altitude	Certification tests done at altitude ≈ 2000 metres. Will operate at higher altitudes.
Shock	16 G (IEC 600068-2-27)
Vibration	2 G (IEC 600068-2-27) (sinusoidal wave)
Flammability	I3 - Ignition does not persist at 850 °C after glow wire is withdrawn with an oxygen index of ≥ 28
Toxicity	F1 - Smoke index of ≤ 20 which determines the fume class
Pollution Degree	PD2 - Normally only non-conductive pollution occurs. Temporary conductivity caused by condensation is to be expected.

Earth Leakage	Wire Size mm ² (IEC)	Torque (IEC)	Comments
1+N	0.75 - 35 mm ²	2.5 Nm	Pozidriv #2 Combi head

SM15 - Series Earth Leakages

Ordering Information

Example Code: **SM-15-A--2-100A-100mA-240V**

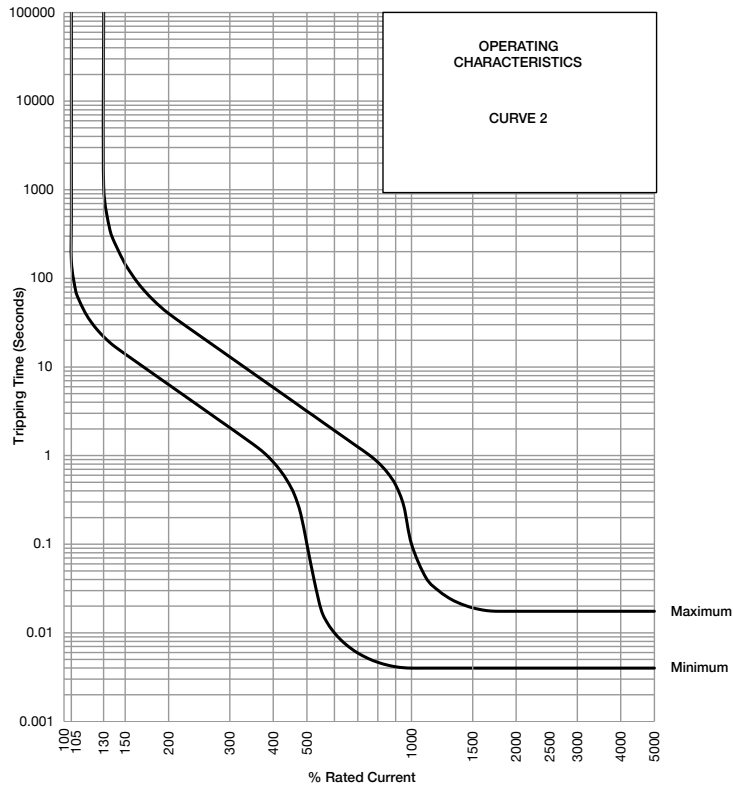
Group	1	2	3	4	5	6	7	8	9	10
Requirement	S Frame	Type M	1 pole + N	Overload	No auxiliary	Medium delay curve 2	Current rating 100 A	Sensitivity 100 mA	Voltage 240V AC	No special termination
Long Code	S	M	15	A	-	2	100A	100mA	240V	-

Group 1: Frame Type	Code	Description	Comments
	S	65 mm wide earth leakage	
Group 2: Product Type	Code	Description	Comments
	N	110 V AC, 6 kA	
	M	240 V AC, 6 kA	
Group 3: No of Poles	Code	Description	Comments
	15	Single pole plus switched neutral (1+N)	SM15
Group 4: E-L Type	Code	Description	Comments
	A	Overload (auto tripping)	White and green handle
Group 5: Auxiliary / Additional Pole	Code	Description	Comments
	-	Not applicable	Use this code if no auxiliary used
Group 6: Time Delays	Code	Description	Comments
	2	Medium time delay	
Group 7: Current Ratings	Code / Description		Comments
	10, 15, 16, 20, 30, 40, 45, 50, 60, 80, 100 A		SM15 Ratings available vary depending on certification * Other ratings are available as special orders. Check availability.
Group 8: Sensitivity	Code	Description	Comments
	K	30 mA	Standard
	L	50 mA	Standard
	M	100 mA	Standard
	N	250 mA	Standard
	P	375 mA	Standard
	O	500 mA	Standard
R	1000 mA	Standard	
Group 9: Voltage	Code	Description	Comments
	110V	110 V AC	
	240V	240 V AC	
Group 10: Special Termination	Code	Description	Comments
	-	No special termination	

For options not listed, please contact CBI

SMI5 - Series Earth Leakages

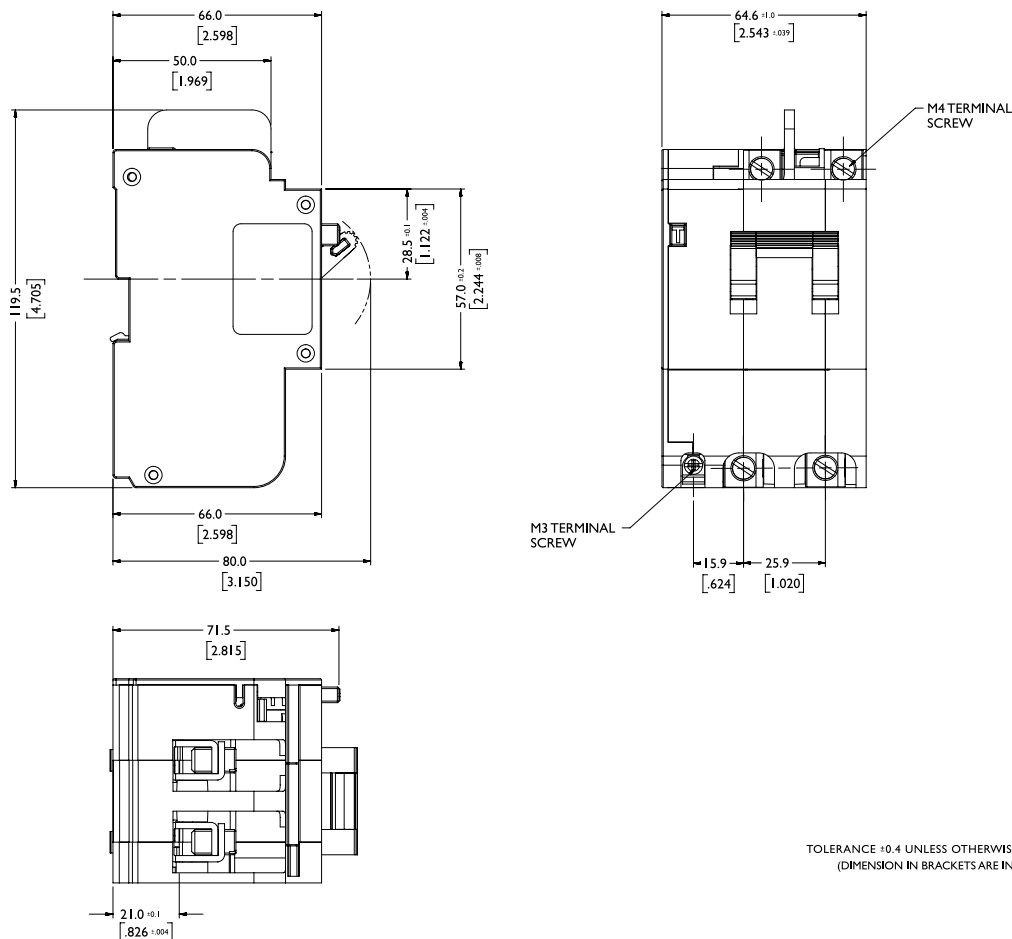
Time Delay Curves



* The published time delay curves are generated at 30°C ambient temperature with the Circuit Breaker mounted in the up-right position. The “must hold”, “must trip” and “instantaneous trip” current values are not affected by temperature, although delay time for the other operating current values may have to be adjusted using the temperature compensation curve which is available on request.

SM15 - Series Earth Leakages

Outline Dimensions: SM15



TOLERANCE ± 0.4 UNLESS OTHERWISE SPECIFIED
(DIMENSION IN BRACKETS ARE IN INCH)

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