

Product data sheet

Specifications



Harmony, Solid state modular relay, 25 A, DIN rail mount, random switching, input 4...32 V DC, output 48...600 V AC

SSM3A325BDR

Main

Range of product	Harmony Solid State Relays
Product or component type	Solid state relay up to 30 A
Device short name	SSM3
Number of channels	3
Number of phases	3 phases
Output switching mode	Random voltage switching

Complementary

Mounting support	Symmetrical DIN rail
[In] rated current	25 A
Output voltage	48...600 V AC
[Uc] control circuit voltage	4...32 V DC
Tightening torque	0.6...0.7 N.m for input 1.36...1.7 N.m for output
Connections - terminals	Screw terminals: 0.2...1.3 mm², (AWG 24...AWG 16) for input Screw terminals: 1.3...5.3 mm², (AWG 16...AWG 10) for output
Maximum capacitance	8 pF for input/output
Insulation resistance	1000 MOhm
Local signalling	LED (green) for input status
Switching voltage	4 V DC turn-on 1 V DC turn-off
Input current	22...28 mA
Solid state output type	Random voltage switching
Load current	0.1...25 A
Transient overvoltage	1100 V
Surge current	286 A for 20 ms at 50 Hz 300 A for 16.6 ms at 60 Hz
Maximum voltage drop	<1.35 V on-state
Motor power hp	1 hp 40 °C 240 V AC 2 hp 40 °C 380 V AC 3 hp 40 °C 480 V AC
Maximum I²t for fusing	410 A².s for 10 ms at 50 Hz 374 A².s for 8.3 ms at 60 Hz

Maximum leakage current	0.25 mA off-state
DV/Dt	500 V/μs off-state at maximum voltage
Response time	0.5 cycle (turn-off) 0.02 ms (turn-on)
Power factor	0.5 (with maximum load)
Overvoltage category	III
Net weight	0.74 kg

Environment

Dielectric strength	4 kV AC for input/output 4 kV AC for input or output to case
Pollution degree	2
Standards	UL 508 IEC 60950-1 CSA C22.2 No 14
Product certifications	UL EAC CSA
Marking	CSA EAC CE UL
IP degree of protection	IP20
Ambient air temperature for operation	-20...80 °C
Ambient air temperature for storage	-40...100 °C

Packing Units

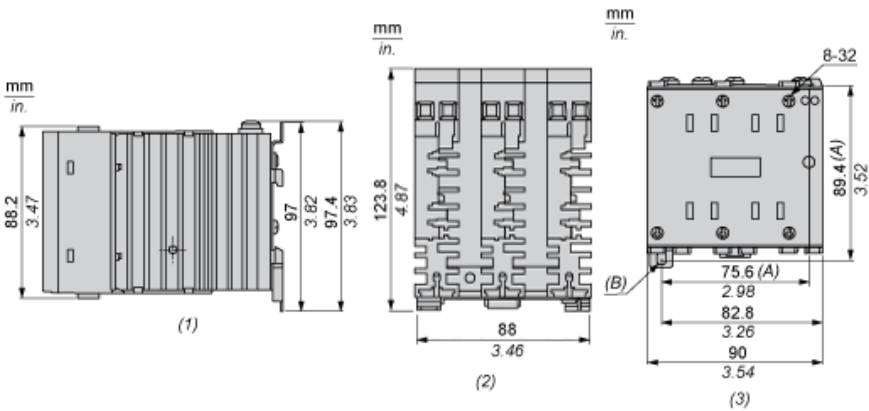
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	803 g
Package 1 Height	14 cm
Package 1 width	11 cm
Package 1 Length	11 cm
Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Weight	4.362 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration

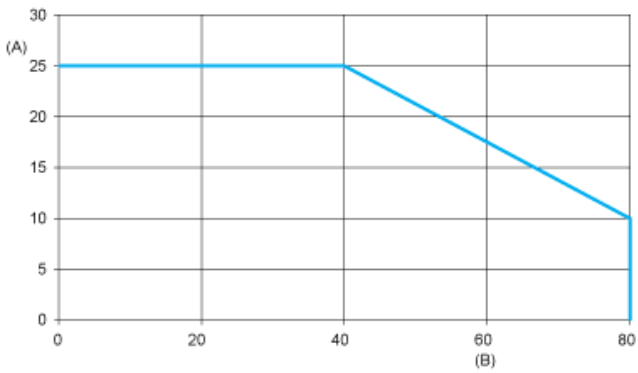
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Dimensions



- (1) Side view
- (2) Top view
- (3) Front view
- (A) Mounting hole
- (B) Mounting hole / slot

Derating Curves



A : Output Current (Arms)
B : Ambient Temperature (°C)