Product data sheet
Characteristics

SSM1A16BDR
single phase relay, Harmony Solid State Modular Relays, 6A, DIN rail mount, random swtching, input 4 to 32V DC, output 24 to 280V AC

Main

Range of product	Harmony Solid State Relays
Product or component type	Solid state relay up to 10 A
Device short name	SSM
Number of channels	1
Number of phases	1 phase
Output switching mode	Random voltage switching

Complementary

Mounting support	Symmetrical DIN rail
[In] rated current	6 A
Output voltage	24...280 V AC
[Uc] control circuit voltage	4...32 V DC
Tightening torque	0.5...0.8 N.m for input 0.5...0.8 N.m for output
Connections - terminals	Screw terminals: 1 x 0.3...1 x 1.5 mm², (AWG 22...AWG 16) for input Screw terminals: 1 x 0.3...1 x 2.5 mm², (AWG 22...AWG 14) for output
Maximum capacitance	10 pF for input/output
Insulation resistance	1000 MOhm at 500 V DC
Local signalling	LED (green) for input status
Minimum switching voltage	4 V DC turn-on
Maximum switching voltage	1 V DC turn-off
Input current	8…11 mA
Solid state output type	SCR output Random voltage switching
Load current	0.15…6 A
Transient overvoltage	600 V
Surge current	285 A for 16.6 ms 300 A for 20 ms
Maximum voltage drop	<1.3 V on-state
Motor power hp	0.16 hp 40 °C 240 V AC
Maximum I²t for fusing	410 A².S for 10 ms at 50 Hz 375 A².s for 8.33 ms at 60 Hz
Maximum leakage current	0.1 mA off-state
DV/dt	500 V/µs off-state at maximum voltage
Response time	0.5 cycle (turn-off) 0.1 ms (turn-on)
Power factor	0.5 (with maximum load)
Overvoltage category	III
Width	11 mm
Height	90.3 mm

Depth	83.7 mm
Net weight	0.05 kg

Environment

Flame retardance	V0 conforming to UL 94
Dielectric strength	4 KV AC for input/output 4 kV AC for input or output to case
Pollution degree	2
Standards	IEC 62314 IEC 60950-1 IEC 61000
Product certifications	UL[RETURN]CSA
Marking	CE
IP degree of protection	IP20
Ambient air temperature for operation	-30…80 °C
Ambient air temperature for storage	-30…100 °C

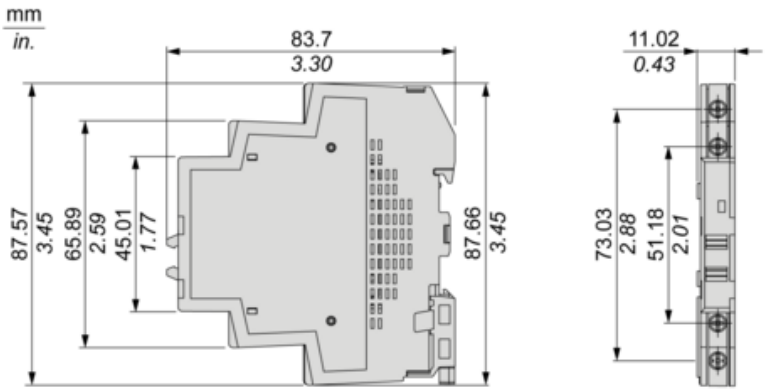
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.000 cm
Package 1 Width	9.000 cm
Package 1 Length	9.000 cm
Package 1 Weight	65.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	96
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	6.717 kg

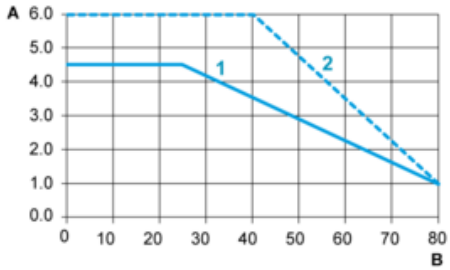
Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

Dimensions


mm
in.
83.7
3.30
87.57
3.45
65.89
2.59
45.01
1.77
87.66
3.45
11.02
0.43
73.03
2.88
51.18
2.01

Derating Curves



A : Load Current (Amperes)

B : Ambient Temperature (°C)

1 : Multiple units, no minimum spacing between components

2 : Installed single unit, distance to adjacent components more than 11 mm