

## Product data sheet

### Characteristics

# SSM1A16BD

Harmony, Solid state modular relay, 6 A, DIN rail mount, zero voltage switching, input 4...32 V DC, output 24...280 V 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	Zero 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 mm <sup>2</sup> , (AWG 22...AWG 16) for input Screw terminals: 1 x 0.3...1 x 2.5 mm <sup>2</sup> , (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	Zero voltage switching SCR output
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 I <sup>2</sup> t for fusing	410 A <sup>2</sup> .S for 10 ms at 50 Hz 375 A <sup>2</sup> .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-on) 0.5 cycle (turn-off)
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 61000 IEC 60950-1
Product certifications	CSA UL
Marking	CE
IP degree of protection	IP20
Ambient air temperature for operation	-30...80 °C
Ambient air temperature for storage	-30...100 °C

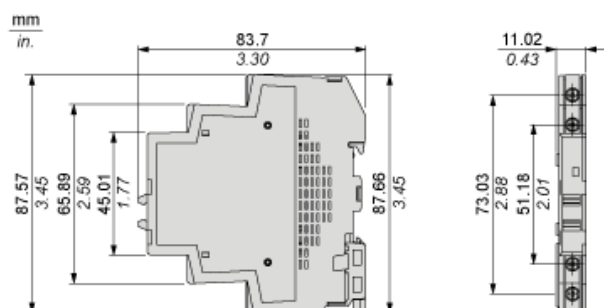
## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	66 g
Package 1 Height	2 cm
Package 1 width	9 cm
Package 1 Length	9 cm
Unit Type of Package 2	S02
Number of Units in Package 2	96
Package 2 Weight	6.797 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

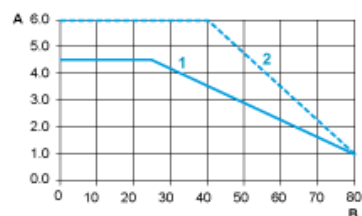
## Offer Sustainability

Sustainable offer status	Green Premium product
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	 <a href="#">Yes</a>
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
Environmental Disclosure	 <a href="#">Product Environmental Profile</a>
Circularity Profile	 <a href="#">End Of Life Information</a>

## Dimensions



## 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