

SSM1A16B7R

Solid state modular relay, 6 A, random switching,
input 18...36 V AC, output 24...280 V AC



Main

Range of product	Harmony Relay
Product or component type	Solid state relay
Device short name	SSM
Number of channels	1
Number of phases	1 phase

Complementary

Mounting support	Symmetrical DIN rail
[In] rated current	6 A
Output voltage	24...280 V AC
[Uc] control circuit voltage	18...36 V AC
Contacts type and configuration	1 NO
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 ² , (AWG 22...AWG 16) for input Screw terminals: 1 x 0.3...1 x 2.5 mm ² , (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) input status:
Minimum switching voltage	18 V AC turn-on
Maximum switching voltage	4 V AC turn-off
Input current	3.5...8.5 mA
Solid state output type	Random 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 ² t for fusing	410 A ² .s for 10 ms at 50 Hz 375 A ² .s for 8.33 ms at 60 Hz

Maximum leakage current	0.1 mA off-state
DV/Dt	500 V/ μ s off-state at maximum voltage
Response time	30 ms (turn-off) 20 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 60950-1 IEC 62314 IEC 61000
Product certifications	REACH UL CSA
Marking	CE
IP degree of protection	IP20
Ambient air temperature for operation	-30...80 °C
Ambient air temperature for storage	-30...100 °C

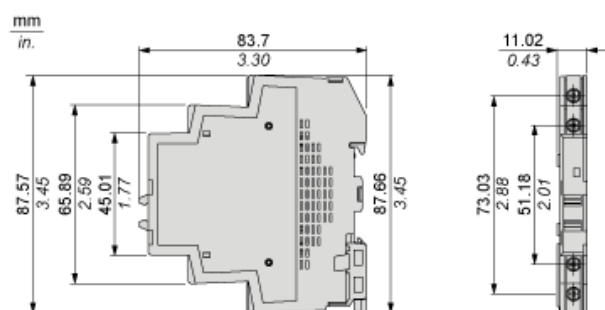
Packing Units

Package 1 Weight	0.076 kg
Package 1 Height	0.150 dm
Package 1 width	0.900 dm
Package 1 Length	0.950 dm

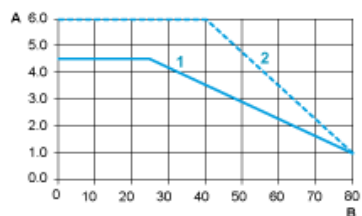
Offer Sustainability

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

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

