Product data sheet Characteristics

SSM1A16B7R

single phase relay, Harmony Solid State Modular Relays, 6A, DIN rail mount, random switching, input 18 to 36V AC, 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
Line Rated Current	6 A
Output voltage	24280 V AC
[Uc] control circuit voltage	1836 V AC
Tightening torque	0.50.8 N.m for input 0.50.8 N.m for output
Connections - terminals	Screw terminals 1 x 0.31 x 1.5 mm ² , AWG 22AWG 16) input Screw terminals 1 x 0.31 x 2.5 mm ² , AWG 22AWG 14) output
Maximum capacitance	10 pF for input/output
Insulation resistance	1000 MOhm at 500 V DC
Local signalling	For input status LED (green)
Minimum switching voltage	18 V AC turn-on
Maximum switching voltage	4 V AC turn-off
Input current	3.58.5 mA
Solid state output type	Random voltage switching SCR output
Load current	0.156 A
Transient overvoltage	600 V
Surge current	285 A 16.6 ms 300 A 20 ms
Maximum voltage drop	<1.3 V on-state
Maximum Horse Power Rating	0.16 hp 104 °F (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/µs 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	0.4 in (11 mm)
Height	3.6 in (90.3 mm)

Depth	3.3 in (83.7 mm)
Net Weight	0.11 lb(US) (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	UL[RETURN]CSA
Marking	CE
IP degree of protection	IP20
Ambient Air Temperature for Operation	-22176 °F (-3080 °C)
Ambient Air Temperature for Storage	-22212 °F (-30100 °C)

Ordering and shipping details

Category	US10CP222375	
Discount Schedule	0CP2	
GTIN	3606480579448	
Returnability	No	
Country of origin	MX	

Packing Units

PCE
1
0.6 in (1.5 cm)
3.5 in (9.0 cm)
3.7 in (9.5 cm)
2.7 oz (76.0 g)
S02
96
5.9 in (15.0 cm)
11.8 in (30.0 cm)
15.7 in (40.0 cm)
16.91 lb(US) (7.67 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
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
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

Product data sheet Dimensions Drawings

SSM1A16B7R

Dimensions



Product data sheet Performance Curves

SSM1A16B7R

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