SSM1A16F7

solid state relay - DIN rail mount - input 90-140 V AC, output 24-280 V AC ,6A





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
Output switching mode	Zero voltage switching

Complementary

Complementary	
Mounting support	Symmetrical DIN rail
[In] rated current	6 A
Output voltage	24280 V AC
[Uc] control circuit voltage	90140 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 mm², (AWG 22AWG 16) for input Screw terminals: 1 x 0.31 x 2.5 mm², (AWG 22AWG 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	90 V AC turn-on
Maximum switching voltage	10 V AC turn-off
Input current	35 mA
Solid state output type	Zero voltage switching SCR output
Load current	0.156 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 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	0.5 cycle (turn-on) 30 ms (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 61000 IEC 62314 IEC 60950-1	
Product certifications	UL[RETURN]CSA	
Marking	CE	
IP degree of protection	IP20	
Ambient air temperature for operation	-3080 °C	
Ambient air temperature for storage	-30100 °C	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.0 cm
Package 1 Width	9.0 cm
Package 1 Length	9.3 cm
Package 1 Weight	74.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	96
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	7.496 kg

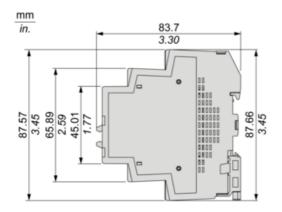
Offer Sustainability

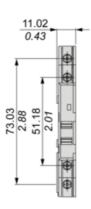
Offer Sustainability	
Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	₫Yes
Environmental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

Product data sheet Dimensions Drawings

SSM1A16F7

Dimensions

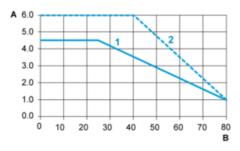




Product data sheet Performance Curves

SSM1A16F7

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