Product data sheet Characteristics

SSM1A16F7R

Solid state modular relay, 6 A, random swtching, input 90...140 V AC, output 24...280 V AC



Commercial status

To be discontinued on: 01 October 2020

End-of-service soon on: 01 October 2020

(!) To be discontinued

Main

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

Complementary

Complementary		
Mounting support	Symmetrical DIN rail	
[In] rated current	6 A 24280 V AC	
Output voltage	24280 V AC	
[Uc] control circuit voltage	90140 V AC	
Contacts type and configuration	1 NO	
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)input status:	
Minimum switching voltage	90 V AC turn-on	
Maximum switching voltage	10 V AC turn-off	
Input current	35 mA SCR output	
Solid state output type	SCR output Random voltage switching	
Load current	0.156 A 600 V	
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	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 61000 IEC 62314 IEC 60950-1	
Product certifications	UL REACH CSA	
Marking	CE	
IP degree of protection	IP20	
Ambient air temperature for operation	-3080 °C	
Ambient air temperature for storage	-30100 °C	

Packing Units

Package 1 Weight	0.076 kg	
Package 1 Height	0.100 dm	
Package 1 width	0.900 dm	
Package 1 Length	0.950 dm	

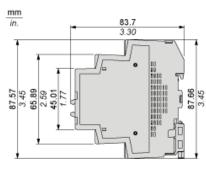
Offer Sustainability

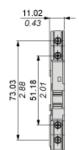
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	

Product data sheet Dimensions Drawings

SSM1A16F7R

Dimensions



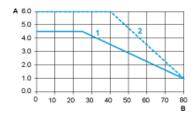




Product data sheet Performance Curves

SSM1A16F7R

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

