Product datasheet
Characteristics

SSM1A312B7
solid state relay - DIN rail mount - input 18-36 V AC, output 48-600 V AC ,12A

Main

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

Complementary

Mounting support	Symmetrical DIN rail
[In] rated current	12 A
Output voltage	48...600 V AC
[Uc] control circuit voltage	18...36 V AC
Contacts type and composition	1 NO
Tightening torque	Input : 0.5...0.8 N.m Output : 0.5...0.8 N.m
Connections - terminals	Screw terminals : 1 x 0.3...1 x 1.5 mm², (AWG 22...AWG 16) for input Screw terminals : 1 x 0.3...1 x 2.5 mm², (AWG 22...AWG 14) for output
Capacitance unbalance	<= 10 pF for input/output
Insulation resistance	1000 MOhm at 500 V DC
Local signalling	LED green for input status
Minimum switching voltage	18 V AC turn-on
Maximum switching voltage	4 V AC turn-off
Input current limits	3.5...8.5 mA
Solid state output type	Zero voltage switching SCR output
Load current	0.00015...12 A
Absolute maximum voltage	1200 V
Surge current	<= 715 A for 16.6 ms <= 750 A for 20 ms
Voltage drop	<= 1.3 V on-state
Motor power hp	0.33 hp at 40 °C 240 V AC
Maximum I²t for fusing	2560 A².s for 10 ms at 50 Hz half cycle 2330 A².s for 8.33 ms at 60 Hz half cycle
Leakage current	<= 0.2 mA off-state
DV/dt	500 V/µs off-state at maximum voltage
Response time	0.5 cycle turn-on 30 ms turn-off
Cos phi	>= 0.5 with maximum load
Overvoltage category	III
Width	18 mm
Height	90.3 mm
Depth	83.7 mm
Product weight	0.09 kg

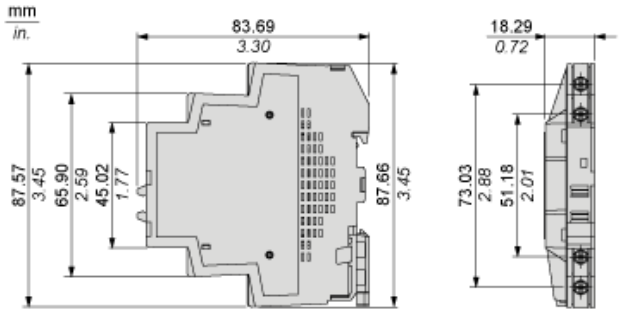
Environment

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 60950-1 IEC 62314
product certifications	CSA UL REACH
marking	CE
IP degree of protection	IP20
ambient air temperature for operation	-30...80 °C
ambient air temperature for storage	-30...100 °C

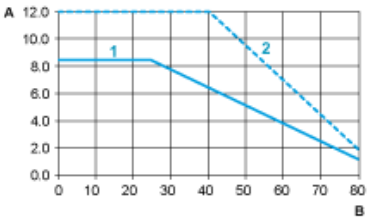
Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1328 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

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 18 mm