

SSM1A312BD

Solid state modular relay, 12 A, zero voltage switching, input 4...32 V DC, output 48...600 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
Line Rated Current	12 A
Output voltage	48...600 V AC
[Uc] control circuit voltage	4...32 V DC
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) input Screw terminals 1 x 0.3...1 x 2.5 mm ² , AWG 22...AWG 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	4 V DC turn-on
Maximum switching voltage	1 V DC turn-off
Input current	9...11 mA
Solid state output type	SCR output Zero voltage switching
Load current	0.15...12 A
Transient overvoltage	1200 V
Surge current	715 A 16.6 ms 750 A 20 ms
Maximum voltage drop	<1.3 V on-state
Maximum Horse Power Rating	0.33 hp 104 °F (40 °C) 240 V AC
Maximum I ² t for fusing	2560 A ² .S for 10 ms at 50 Hz 2330 A ² .s for 8.33 ms at 60 Hz
Maximum leakage current	0.2 mA off-state
DV/dt	500 V/μs off-state at maximum voltage
Response time	0.5 cycle (turn-on) 0.5 cycle (turn-off)
Power factor	0.5 (with maximum load)
Overvoltage category	III
Width	0.71 in (18 mm)
Height	3.56 in (90.3 mm)
Maximum Depth	3.30 in (83.7 mm)
Net Weight	0.20 lb(US) (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 60950-1 IEC 61000 IEC 62314
Product certifications	CSA UL
Marking	CE
IP degree of protection	IP20
Ambient air temperature for operation	-22...176 °F (-30...80 °C)
Ambient air temperature for storage	-22...212 °F (-30...100 °C)

Ordering and shipping details

Category	22375 - INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	00785901970873
Nbr. of units in pkg.	1
Package weight(Lbs)	0.22 lb(US) (0.10 kg)
Returnability	Yes
Country of origin	MX

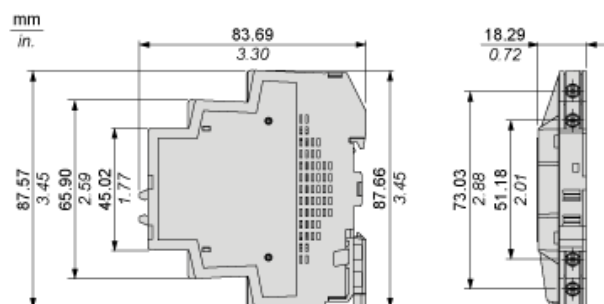
Packing Units

Package 1 Height	0.200 dm
Package 1 width	0.900 dm
Package 1 Length	0.900 dm

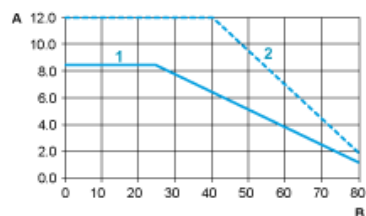
Offer Sustainability

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 Regulation	REACH Declaration
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 18 mm