

# SSM1A312B7

Harmony, Solid state modular relay, 12 A, DIN rail mount, zero voltage switching, input 18...36 V AC, output 48...600 V AC



## Main

Range of Product	Harmony Solid State Relays
Product or Component Type	Solid state relay up to 20 A
Device short name	SSM
Number of Channels	1
Number of phases	1 phase
Output switching mode	Zero voltage switching

## Complementary

Mounting Support	Symmetrical DIN rail
Line Rated Current	12 A
Output voltage	48...600 V AC
[Uc] control circuit voltage	18...36 V AC
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 <sup>2</sup> , AWG 22...AWG 16) input Screw terminals 1 x 0.3...1 x 2.5 mm <sup>2</sup> , 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	18 V AC turn-on
Maximum switching voltage	4 V AC turn-off
Input current	3.5...8.5 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 <sup>2</sup> t for fusing	2560 A <sup>2</sup> .S for 10 ms at 50 Hz 2330 A <sup>2</sup> .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) 30 ms (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)
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 61000 IEC 60950-1 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	3606480579554
Nbr. of units in pkg.	1
Package weight(Lbs)	3.46 oz (98 g)
Returnability	No
Country of origin	MX

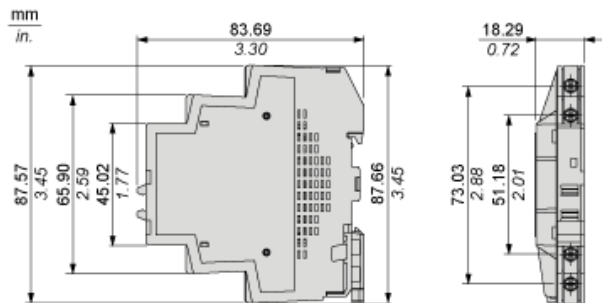
## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	0.98 in (2.5 cm)
Package 1 width	3.54 in (9 cm)
Package 1 Length	3.74 in (9.5 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	72
Package 2 Weight	16.56 lb(US) (7.511 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

## 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

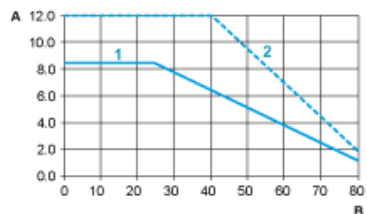
Dimensions



---

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