

Product data sheet

Characteristics

SSD1A320M7RC1

solid state relay-DIN rail, 1phase, 48-600Vac
output, 90-280Vac/Vdc control, 20A



Main

Range of product	Harmony Relay
Product or component type	Solid state relay
Device short name	SSD1
Number of channels	1
Network number of phases	1 phase
Product configuration type	Relay configuration
Mounting support	35 mm symmetrical DIN rail conforming to EN/IEC 60715
[In] rated current	20 A
Contacts type and composition	1 NO

Complementary

Network frequency	47...440 Hz
Rated duty	Uninterrupted
Output voltage	48...600 V AC
[Uc] control circuit voltage	90...280 V AC/DC
Tightening torque	1.5...1.7 N.m for control input 13...15 lb.in for control input 1.5...1.7 N.m for load output 13...15 lb.in for load output
Connections - terminals	Screw terminals, clamping connection capacity:1...4 m ² , AWG 18...AWG 12 for input Screw terminals, clamping connection capacity:1...6 m ² , AWG 18...AWG 10 for output
Dielectric strength	4 KV AC for input/output circuit 4 KV AC for input or output to case
[Uimp] rated impulse withstand voltage	6 KV for input/output circuit 6 KV for input or output to case
Insulation resistance	1000 MOhm at 500 V DC
Local signalling	LED (green) for control voltage
Minimum switching voltage	90 V AC/DC turn-on
Maximum switching voltage	5 V AC/DC turn-off
Input current limits	6...10 MA
Output type	SCR output
Solid state output type	Random voltage switching
Load current	0.1...20 A
Absolute maximum voltage	1200 V
Inrush current	300 A at 60 Hz
Maximum voltage drop	<1.3 V on-state

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Motor power kW	0.37 KW/0.5 Hp at 120 V AC 1.12 KW/1.5 Hp at 240 V AC 2.24 KW/3 Hp at 480 V AC
Electromagnetic compatibility	Electrostatic discharge 6 kV criteria A contact discharge conforming- to IEC 61000-4-2 Electrostatic discharge 8 kV criteria A air discharge conforming to IEC 61000-4-2 Conducted RF disturbances 10 V, 0.15...80 MHz criteria A level 3 conforming- to IEC 61000-4-6 Electrical fast transient/burst immunity test 2 kV, 5/100 kHz criteria B output- ports conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test 1 kV, 5/100 kHz criteria B input- ports conforming to IEC 61000-4-4 Radiated radio-frequency electromagnetic field immuni- ty test 10 V/m, 80 MHz...1 GHz criteria A conforming to IEC 61000-4-3 Radiated radio-frequency electromagnetic field immuni- ty test 3 V/m, 1.4...2 GHz criteria A conforming to IEC 61000-4-3 Radiated radio-frequency electromagnetic field immuni- ty test 1 V/m, 2...2.7 GHz criteria A conforming to IEC 61000-4-3 Surge immunity test 1 kV criteria A output ports line to line conforming- to IEC 61000-4-5 Surge immunity test 2 kV criteria A output ports line to earth conforming- to IEC 61000-4-5 Surge immunity test 1 kV criteria A input ports line to line conforming- to IEC 61000-4-5 Surge immunity test 2 kV criteria A input ports line to earth conforming- to IEC 61000-4-5 Radiated emission environment B for AC input supply conforming- to IEC 60947-4-3 Conducted emission environment A for AC input supply conforming- to IEC 60947-4-3 Immunity to microbreaks and voltage drops 30 %, 500 ms criteria A conforming- to IEC 61000-4-11 Immunity to microbreaks and voltage drops 100 %, 20 ms criteria B conforming- to IEC 61000-4-11
Contact form	Form 5 semiconductor output DOL contactor
Maximum I ² t for fusing	409 A ² .S for 10 ms 375 A ² .S for 8.33 ms
Maximum leakage current	1 MA off-state
DV/dt	500 V/μs off-state at maximum rated voltage
Response time	20 ms (turn-on) 30 ms (turn-off)
Power factor	0.5 with maximum load
Coordination type	Type 1 Type 2
Oversupply category	III
Width	22.5 Mm
Height	93.2 Mm
Depth	116.5 Mm
Net weight	0.298 Kg
Device presentation	Complete product

Environment

Flame retardance	V-0 conforming to UL 94
Vibration resistance	0.75 mm (f = 10...150 Hz) conforming to EN/IEC 60068-2-6
Shock resistance	50 gn for 11 ms (peak acceleration) , longitudinal position conforming- to EN/IEC 60068-2-27 30 gn for 11 ms (peak acceleration) , vertical position conforming- to EN/IEC 60068-2-27
Pollution degree	2
Standards	IEC 61373: class B: category 1 IEC 60947-4-3 IEC 62314 IEC 60950-1 CSA C22.2 No 14-13 UL 508
IP degree of protection	IP20
Ambient air temperature for operation	-40...80 °C
Ambient air temperature for storage	-40...100 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	320 G
Package 1 Height	2.25 Cm
Package 1 width	9.32 Cm
Package 1 Length	11.65 Cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<input checked="" type="checkbox"/> REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <input checked="" type="checkbox"/> EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	<input checked="" type="checkbox"/> Yes
China RoHS Regulation	<input checked="" type="checkbox"/> China RoHS Declaration
Environmental Disclosure	<input checked="" type="checkbox"/> Product Environmental Profile
Circularity Profile	<input checked="" type="checkbox"/> End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Product Life Status : **Commercialised**