

Product data sheet

Specifications



Harmony, Solid state modular, Harmony Solid State Relays, relay, 30 A, DIN rail mount, zero voltage switching, input 4...32 V DC, output 48...660 V AC

SSM1A430BD

⚠ To be discontinued

⚠ To be discontinued on: 31 October 2022

⚠ To be end-of-service on: 31 October 2022

Main

Range of product	Harmony Solid State Relays
Product or component type	Solid state relay up to 30 A
Device short name	SSM1
Number of phases	1 phase
Output switching mode	Zero voltage switching

Complementary

Mounting support	Symmetrical DIN rail
[In] rated current	30 A
Output voltage	48...660 V AC
[Uc] control circuit voltage	4...32 V DC
Tightening torque	0.6...0.7 N.m for input 1.36...1.7 N.m for output
Connections - terminals	Screw terminals: 1 x 0.2...1 x 5.3 mm ² , (AWG 24...AWG 10) for input Screw terminals: 1 x 0.2...1 x 5.3 mm ² , (AWG 24...AWG 10) for output
Maximum capacitance	8 pF for input/output
Insulation resistance	1000 MOhm at 500 V DC
Local signalling	LED (green) for input status
Switching voltage	4 V DC turn-on 1 V DC turn-off
Input current	8...12 mA
Solid state output type	SCR output Zero voltage switching
Load current	0.15...30 A
Transient overvoltage	1200 V
Surge current	1200 A for 16.6 ms
Maximum voltage drop	<1.6 V on-state
Maximum I ² t for fusing	6000 A ² .s for 8.3 ms

Maximum leakage current	1 mA off-state
DV/Dt	500 V/ μ s off-state at maximum voltage
Response time	0.5 cycle (turn-on) 0.5 cycle (turn-off)
Overvoltage category	III
Net weight	0.28 kg

Environment

Dielectric strength	4 kV AC for input/output 4 kV AC for input or output to case
Pollution degree	2
Standards	CSA C22.2 No 14 UL 508 IEC 60950-1
Product certifications	CSA UL EAC
Marking	EAC UL CE CSA
IP degree of protection	IP20
Ambient air temperature for operation	-40...80 °C
Ambient air temperature for storage	-40...125 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	299 g
Package 1 Height	3.2 cm
Package 1 width	11 cm
Package 1 Length	11 cm
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Weight	7.47 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

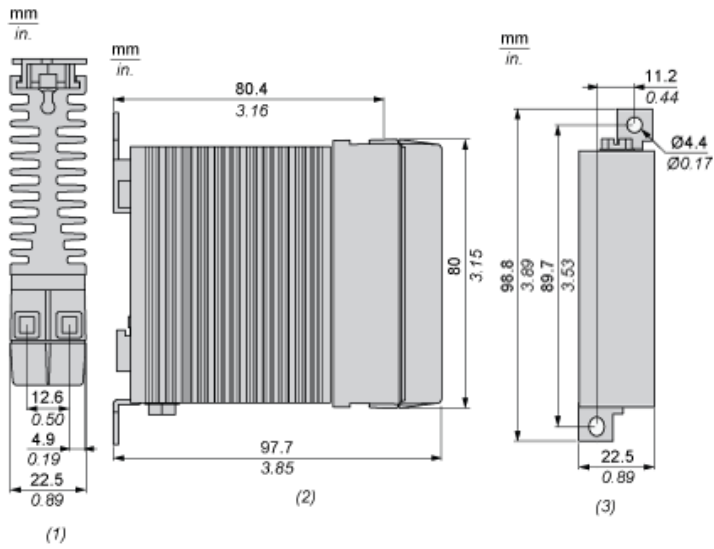
Offer Sustainability

Sustainable offer status	Green Premium product
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

California proposition 65

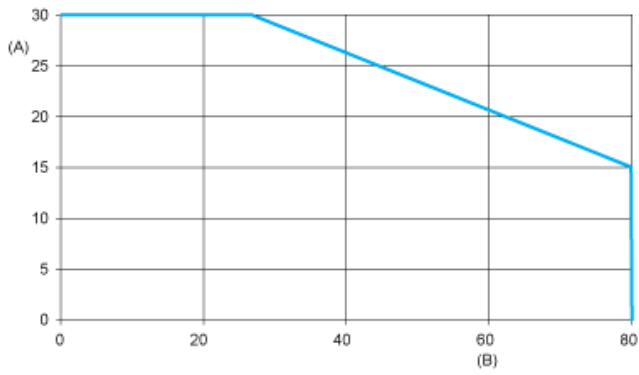
WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Dimensions



- (1) Top view
- (2) Side view
- (3) Front view

Derating Curves



A : Load Current (Amperes)
B : Ambient Temperature (°C)

Recommended replacement(s)

SSM1A430BD is replaced by:

1x



Harmony, Solid state relay, 35 A, DIN rail mount, zero voltage switching, input 4...32 V DC, output 48...600 V AC
SSD1A335BDC1
