

Electrical Contactor



Product Overview

4NO Contactor, AC1: 50A DC 110V 50Hz, 120V 60Hz 4-Pole

Height - 2.28In (58mm)

Width - 1.77In (45mm)

Depth - 2.24In 57mm)

General Technical Specifications:

Utilisation category	AC-1
Poles description	4P
Pole contact composition	4 NO
System Voltage	690 V AC 50/60 Hz Power Circuit
(ie) rated operational current	20 A (<= 122 F (50C)) at <= 440 V AC AC-1 power circuit 16 A (<= 158 F (70C)) at 690 V AC AC-1 power circuit
Control circuit type	AC 50/60Hz
(Uc) control circuit voltage	110 V AC 50/60Hz
(Uimp) rated impulse withstand voltage	8 KV
Overvoltage category	III
(Ith) conventional free air thermal current	20 A at <= 122 F (50 C) power circuit
Irms rated making capacity	110 A AC power circuit conforming to NF C 63-110 110 A AC power circuit conforming to IEC 60947
Rated breaking capacity	110 A at 415 V conforming to IEC 60947 110 A at 440 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 110 A at 220...230 V conforming to IEC 60947 110 A at 380...400 V conforming to IEC 60947 70 A at 660...690 V conforming to IEC 60947
(Icw) rated short-time withstand current	20 A <= 50 C >= 15 min power circuit 90 A <= 122 F (50 C) 1 s power circuit 85 A <= 122 F (50 C) 5 s power circuit 80 A <= 122 F (50 C) 10 s power circuit 60 A <= 122 F (50 C) 30 s power circuit 45 A <= 122 F (50 C) 1 min power circuit 40 A <= 122 F (50 C) 3 min power circuit
Associated fuse rating	25 A gG at <= 440 V power circuit 25 A aM power circuit
Average impedance	3 mOhm at 50hz—lth 20 A power circuit



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(UI) rated insulation voltage	600 V power circuit conforming to CSA C22.2 No 14 690 V power circuit conforming to IEC60947-4-1 600 V power circuit conforming to UL 508
Inrush power in VA	30 VA at 68F (20C)
Hold-in power consumption in VA	4.5 VA at 68F (20C)
Heat dissipation	1.3 W
Control circuit voltage limits	0.2...0.75 U _c at ≤ 122F (50C) drop-out 0.2...0.75 U _c at ≤ 122F (50C) operational
Connections - terminals	Screw clamp terminals 1 cable(s) (1.5...4mm sq) – cable stiffness: solid Screw clamp terminals 1 cable(s) (0.75...4mm sq) – cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) (0.34...2.5mm sq) – cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) (1.5...4mm sq)– cable stiffness: solid Screw clamp terminals 2 cable(s) (0.75...4mm sq)– cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) (0.34...1.5mm sq) – cable stiffness: flexible - with cable end
Operating rate	3600 cyc/h
Signalling circuit frequency	≤ 400Hz
Mounting support	Plate Rail
Tightening torque	11.5 lbf.in (1.3 N.m) - on screw clamp terminals—with screwdriver Philips no 2 11.5 lbf.in (1.3 N.m) - on screw clamp terminals—with screwdriver flat 6mm
Operating time	10...20 ms coil de-energisation and NO opening 10...20 ms coil energisation and NO closing
Safety reliability level	B10d =1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	10 Mcycles
Electrical durability	0.18 Mcycles 20 A AC-1 at U _e ≤ 440V
Mechanical robustness	Shocks contactor closed, on X axis 10 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Y axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Z axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on X axis 6 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on X axis 10 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on X axis 10 Gn for 11 ms IEC 60068-2-27 Vibration contactor closed 4 Gn, 5...300 Hz IEC 60068-2-6 Vibration contactor opened 2 Gn, 5...200 Hz IEC 60068-2-6
















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Environment:

Standards	BS 5424 IEC 60947 NF C 63-110 VDE 0660
Product certifications	CSA UL
IP degree of protection	IP2x conforming to VDE 0106
Protective treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
Ambient air temperature for operation	-13...122 F (-25...50C)
Ambient air temperature for storage	-58...176 F (-50...80C)
Operating altitude	6561.68ft (2000m) without derating in temperature
Flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102

Certificates/approvals:

General Product Approval				Declaration of Conformity	Test Certificates
 CCC	 CSA	 GOST	 UL	 EG-Konf.	Special Test Certificate
Shipping Approval					
 ABS	 DNV	 GL	 LRS	 PRS	 RINA
 RMRS	 VDE				

