Product datasheet

Specifications

Bistable contactor CR1-F - 3P - AC-3 440V 500 A - coil 415 V

CR1F500N7

Discontinued on: 1 Nov 2020

Discontinued

Main

Range	TeSys
Product name	TeSys F
Product or component type	Magnetic latching contactor
Device short name	CR1F
Device application	Control
Contactor application	Motor control Resistive load
Utilisation category	AC-4 AC-3 AC-1
Poles description	3P
power pole contact composition	3 NO
[Ue] rated operational voltage	1000 V AC 25...200 Hz
[Ie] rated operational current	500 A (at <40 °C) at <= 440 V AC AC-3 700 A (at <40 °C) at <= 440 V AC AC-1 460 A (at <40 °C) at <= 440 V AC AC-4
Motor power kW	335 kW at 1000 V AC 50/60 Hz 335 kW at 690 V AC 50/60 Hz 335 kW at 500...660 V AC 50/60 Hz 295 kW at 440 V AC 50/60 Hz 280 kW at 415 V AC 50/60 Hz 250 kW at 380...400 V AC 50/60 Hz 147 kW at 220...230 V AC 50/60 Hz
motor power HP (UL / CSA)	500 hp at 575...600 V AC 50/60 Hz for 3 phases motors 400 hp at 460...480 V AC 50/60 Hz for 3 phases motors 200 hp at 220...240 V AC 50/60 Hz for 3 phases motors 150 hp at 200...208 V AC 50/60 Hz for 3 phases motors
[Uc] control circuit voltage	415 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	700 A (at 40 °C) for power circuit
Irms rated making capacity	5000 A for power circuit
Rated breaking capacity	5000 A at 220...440 V for power circuit 4500 A at 500 V for power circuit 2500 A at 1000 V for power circuit 3560 A at 660/690 V for power circuit

[Icw] rated short-time withstand current	4200 A 40 °C - 1 s 4200 A 40 °C - 5 s 4200 A 40 °C - 10 s 3200 A 40 °C - 30 s 2400 A 40 °C - 1 min 1500 A 40 °C - 3 min 1200 A 40 °C - 10 min
Associated fuse rating	500 A aM at <= 440 V for power circuit 800 A BS88 at <= 440 V for power circuit 800 A gG at <= 440 V for power circuit
Average impedance	0.18 mOhm - Ith 700 A 50 Hz
[Ui] rated insulation voltage	1000 V conforming to IEC 60158-1 1000 V conforming to IEC 60947-4 1000 V conforming to BS 775 1500 V conforming to VDE 0110 group C
Power dissipation per pole	45 W AC-3 88 W AC-1
Mounting support	Notched AM1-EC rail
Standards	IEC 60947-4 JEM 1038 VDE 0660 BS 5424 NF C 63-110
Product certifications	CSA GL BV UL USSR LROS (Lloyds register of shipping) RINA Veritas ASE
Connections - terminals	Lugs-ring terminals 2 cable(s) 240 mm² Bars 2 cable(s) - busbar cross section: 40 x 5 mm
Tightening torque	35 N.m
Operating time	40...80 ms latching 50...100 ms unlatching
Mechanical durability	1 Mcycles
Maximum operating rate	120 cyc/h 40 °C

Complementary

Control circuit voltage limits	Latching: 0.85...1.1 Uc Unlatching: 0.85...1.1 Uc
average consumption	1800 VA AC 50...400 Hz latching 13 VA AC 50...400 Hz unlatching 1800 VA DC latching 13 VA DC unlatching

Environment

IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH
Ambient air temperature for operation	-15…70 °C
Ambient air temperature for storage	-60…80 °C
Operating altitude	3000 m without derating
Height	238 mm
Width	233 mm

Depth	232 mm
Net weight	11.3 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Environmental Disclosure	Product Environmental Profile

Use Longer

Lifetime extension

Repair	No