Product datasheet

Specifications

TeSys F magnetic latching contactor - 3P - 400 A - 220 V/24 V AC/DC coil

CR1F400MB7

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	Resistive load Motor control
Utilisation category	AC-1 AC-3 AC-4
Poles description	3P
power pole contact composition	3 NO
[Ue] rated operational voltage	1000 V AC 25...200 Hz
[Ie] rated operational current	400 A (at <40 °C) at <= 440 V AC AC-3 500 A (at <40 °C) at <= 440 V AC AC-1 370 A (at <40 °C) at <= 440 V AC AC-4
Motor power kW	185 kW at 1000 V AC 50/60 Hz 280 kW at 690 V AC 50/60 Hz 257 kW at 500...660 V AC 50/60 Hz 250 kW at 440 V AC 50/60 Hz 220 kW at 415 V AC 50/60 Hz 200 kW at 380...400 V AC 50/60 Hz 110 kW at 220...230 V AC 50/60 Hz
motor power HP (UL / CSA)	300 hp at 575...600 V AC 50/60 Hz for 3 phases motors 250 hp at 460...480 V AC 50/60 Hz for 3 phases motors 125 hp at 220...240 V AC 50/60 Hz for 3 phases motors 100 hp at 200...208 V AC 50/60 Hz for 3 phases motors
[Uc] control circuit voltage	220 V AC 50/60 Hz special latching 220 V AC 400 Hz special latching 220 V DC special latching 24 V AC 50/60 Hz special unlatching 24 V AC 400 Hz special unlatching 24 V DC special unlatching
[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	500 A (at 40 °C)
Irms rated making capacity	4500 A
Rated breaking capacity	4000 A at 220...440 V 3500 A at 500 V 1200 A at 1000 V 3000 A at 660/690 V

[Icw] rated short-time withstand current	3600 A 40 °C - 1 s 3600 A 40 °C - 5 s 3600 A 40 °C - 10 s 2400 A 40 °C - 30 s 1700 A 40 °C - 1 min 1200 A 40 °C - 3 min 1000 A 40 °C - 10 min
Associated fuse rating	400 A aM at <= 440 V 500 A BS88 at <= 440 V 500 A gG at <= 440 V
Average impedance	0.28 mOhm - Ith 500 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 70 W AC-1
Connections - terminals	Lugs-ring terminals 2 cable(s) 150 mm² Bars 2 cable(s) - busbar cross section: 30 x 5 mm
Tightening torque	35 N.m
Operating time	40...75 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	1450 VA AC 50/60 Hz latching 12 VA AC 50/60 Hz unlatching 1600 VA AC 400 Hz latching 1600 W DC latching 16 VA AC 400 Hz unlatching 16 W DC unlatching

Environment

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	206 mm
Width	213 mm
Depth	219 mm
Net weight	9.1 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