

Product datasheet

Specifications



TeSys F magnetic latching contactor - 3P - 500 A - 220 V/24 V AC/DC coil

CR1F500MB7

⚠ 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	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	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	700 A (at 40 °C)
Irms rated making capacity	5000 A
Rated breaking capacity	5000 A at 220...440 V 4500 A at 500 V 2500 A at 1000 V 3560 A at 660/690 V

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[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
	800 A BS88 at <= 440 V
	800 A gG at <= 440 V
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
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	1650 VA AC 50/60 Hz latching
	9.5 VA AC 50/60 Hz unlatching
	1800 VA AC 400 Hz latching
	1800 W DC latching
	13 VA AC 400 Hz unlatching
	13 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	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