



Product data sheet

Characteristics

CR1F500U7

TeSys F magnetic latching contactor - 3P(3
NO) - 500 A - 240 V AC coil



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	250 kW at 400 V AC 50/60 Hz (AC-4)
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	240 V AC 50/60 Hz
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
[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 Power circuit: bolted connection
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

Environment

Protective treatment	TC
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
Package 1 Height	27 cm
Package 1 Width	30 cm
Package 1 Length	30 cm
Package 1 Weight	11.78 kg

Contractual warranty

Warranty	18 months
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