



Product data sheet

Characteristics

CR1F500M7

TeSys F magnetic latching contactor - 3P(3
NO) - 500 A - 220...230 V AC/DC 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-4 AC-3
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...400 Hz DC standard
[Uc] control circuit voltage	220...230 V AC 50...400 Hz 220...230 V DC
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
Standards	EN/IEC 60947-1 EN/IEC 60947-4-1 JIS C8201-4-1 UL 60947-4-1 CSA C22.2 No 60947-4-1
Product certifications	CB Scheme[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]CE[RE
Connections - terminals	Lugs-ring terminals 2 cable(s) 240 mm ² 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	1800 VA AC 50...400 Hz latching 13 VA AC 50...400 Hz unlatching 1800 VA DC latching 13 VA DC 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	27.0 cm
Package 1 Width	30.0 cm
Package 1 Length	30.0 cm
Package 1 Weight	11.97 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes
Environmental Disclosure	 Product Environmental Profile
Circularity Profile	 End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Contractual warranty

Warranty	18 months
----------	-----------