



Product data sheet

Characteristics

CR1F185E7

TeSys F magnetic latching contactor - 3P(3
NO) - 185 A - 48 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-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	185 A (at <40 °C) at ≤ 440 V AC AC-3 275 A (at <40 °C) at ≤ 440 V AC AC-1 170 A (at <40 °C) at ≤ 440 V AC AC-4
Motor power kW	90 kW at 400 V AC 50/60 Hz (AC-4)
Control circuit type	AC at 50...400 Hz DC standard
[Uc] control circuit voltage	48 V AC 50...400 Hz 48 V DC
Irms rated making capacity	2100 A
Rated breaking capacity	1800 A at 220...440 V 1600 A at 500 V 600 A at 1000 V 1200 A at 660/690 V
[Icw] rated short-time withstand current	1500 A 40 °C - 1 s 1500 A 40 °C - 5 s 1500 A 40 °C - 10 s 920 A 40 °C - 30 s 740 A 40 °C - 1 min 500 A 40 °C - 3 min 400 A 40 °C - 10 min
Associated fuse rating	200 A aM at ≤ 440 V 315 A BS88 at ≤ 440 V 315 A gG at ≤ 440 V
Average impedance	0.36 mOhm - Ith 275 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	12 W AC-3 26 W AC-1
Connections - terminals	Bars 2 cable(s) - busbar cross section: 25 x 3 mm Lugs-ring terminals 1 cable(s) 150 mm² Connector 1 cable(s) 150 mm² Power circuit: bolted connection
Tightening torque	18 N.m
Operating time	35...40 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	1750 VA AC 50...400 Hz latching 11 VA AC 50...400 Hz unlatching 1750 VA DC latching 11 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	174 mm
Width	168.5 mm
Depth	181 mm
Net weight	4.6 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	21 cm
Package 1 Width	20 cm
Package 1 Length	24 cm
Package 1 Weight	5.075 kg

Offer Sustainability

Sustainable offer status	Green Premium product
EU RoHS Directive	Compliant EU RoHS Declaration
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
PVC free	Yes

Contractual warranty

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