

# CR1F185F7

## Magnetic latching contactor, TeSys

### F,3P(3NO),AC-3 <=440V 185A,110V 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<br>Motor control                                                                                                                                 |
| Utilisation category                     | AC-4<br>AC-1<br>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           | 185 A (at <40 °C) at <= 440 V AC AC-3<br>275 A (at <40 °C) at <= 440 V AC AC-1<br>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<br>DC standard                                                                                                                                |
| [Uc] control circuit voltage             | 110 V AC 50...400 Hz<br>110 V DC                                                                                                                                |
| Irms rated making capacity               | 2100 A                                                                                                                                                          |
| Rated breaking capacity                  | 1800 A at 220...440 V<br>1600 A at 500 V<br>600 A at 1000 V<br>1200 A at 660/690 V                                                                              |
| [Icw] rated short-time withstand current | 1500 A 40 °C - 1 s<br>1500 A 40 °C - 5 s<br>1500 A 40 °C - 10 s<br>920 A 40 °C - 30 s<br>740 A 40 °C - 1 min<br>500 A 40 °C - 3 min<br>400 A 40 °C - 10 min     |
| Associated fuse rating                   | 200 A aM at <= 440 V<br>315 A BS88 at <= 440 V<br>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<br>1000 V conforming to IEC 60947-4<br>1000 V conforming to BS 775<br>1500 V conforming to VDE 0110 group C                    |
| Power dissipation per pole               | 12 W AC-3<br>26 W AC-1                                                                                                                                          |
| Standards                                | EN/IEC 60947-1<br>EN/IEC 60947-4-1<br>JIS C8201-4-1<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1                                                                   |
| Product certifications                   | CB<br>Scheme[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]CE                                                                                                          |
| Connections - terminals                  | Bars 2 cable(s) - busbar cross section: 25 x 3 mm<br>Lugs-ring terminals 1 cable(s) 150 mm²<br>Connector 1 cable(s) 150 mm²<br>Power circuit: bolted connection |

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|                        |                                               |
|------------------------|-----------------------------------------------|
| Tightening torque      | 18 N.m                                        |
| Operating time         | 35...40 ms latching<br>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<br>Unlatching: 0.85...1.1 Uc                                                             |
| Average consumption            | 1750 VA AC 50...400 Hz latching<br>11 VA AC 50...400 Hz unlatching<br>1750 VA DC latching<br>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                  |

## Offer Sustainability

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| REACH Regulation           |  <a href="#">REACH Declaration</a>        |
| EU RoHS Directive          | Compliant with Exemptions                                                                                                   |
| Mercury free               | Yes                                                                                                                         |
| RoHS exemption information |  <a href="#">Yes</a>                     |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>  |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |