

# Product datasheet

Specifications



## Bistable contactor CR1-F - 3P - AC-3 440V 500 A - coil 380..400 V

CR1F500Q7

⚠ Discontinued on: 1 Nov 2020

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### Main

Range	TeSys
Product name	TeSys F
Product or component type	Magnetic latching contactor
Device short name	CR1F
Device application	Control
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-1 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	380...400 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	700 A (at 40 °C) for power circuit
Irms rated making capacity	5000 A for power circuit
Rated breaking capacity	5000 A at 220...440 V for power circuit 4500 A at 500 V for power circuit 2500 A at 1000 V for power circuit 3560 A at 660/690 V for power circuit

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

<b>[Icw] rated short-time withstand current</b>	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
<b>Associated fuse rating</b>	500 A aM at <= 440 V for power circuit 800 A BS88 at <= 440 V for power circuit 800 A gG at <= 440 V for power circuit
<b>Average impedance</b>	0.18 mOhm - Ith 700 A 50 Hz
<b>[Ui] rated insulation voltage</b>	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
<b>Power dissipation per pole</b>	45 W AC-3 88 W AC-1
<b>Mounting support</b>	Notched AM1-EC rail
<b>Standards</b>	EN/IEC 60947-1 EN/IEC 60947-4-1 JIS C8201-4-1 UL 60947-4-1 CSA C22.2 No 60947-4-1
<b>Product certifications</b>	CB Scheme UL CSA EAC CE UKCA
<b>Connections - terminals</b>	Lugs-ring terminals 2 cable(s) 240 mm <sup>2</sup> Bars 2 cable(s) - busbar cross section: 40 x 5 mm
<b>Tightening torque</b>	35 N.m
<b>Operating time</b>	40...80 ms latching 50...100 ms unlatching
<b>Mechanical durability</b>	1 Mcycles
<b>Maximum operating rate</b>	120 cyc/h 40 °C

## Complementary

<b>Control circuit voltage limits</b>	Latching: 0.85...1.1 Uc Unlatching: 0.85...1.1 Uc
<b>average consumption</b>	1800 VA AC 50...400 Hz latching 13 VA AC 50...400 Hz unlatching 1800 VA DC latching 13 VA DC unlatching

## Environment

<b>IP degree of protection</b>	IP20 front face conforming to IEC 60529
<b>Protective treatment</b>	TH
<b>Ambient air temperature for operation</b>	-15...70 °C
<b>Ambient air temperature for storage</b>	-60...80 °C
<b>Operating altitude</b>	3000 m without derating
<b>Height</b>	238 mm
<b>Width</b>	233 mm
<b>Depth</b>	232 mm

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Net weight	11.3 kg
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## Packing Units

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Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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Package 1 Height	27.0 cm
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Package 1 Width	30.0 cm
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Package 1 Length	30.0 cm
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Package 1 Weight	11.78 kg
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## Contractual warranty

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Warranty (in months)	18
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## 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 Better



### Materials and Substances

Packaging made with recycled cardboard

Yes

Packaging without single use plastic

No

[EU RoHS Directive](#)

Compliant with Exemptions

## Use Longer



### Lifetime extension

Repair

No

## Use Again



### Repack and remanufacture

WEEE Label



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins