



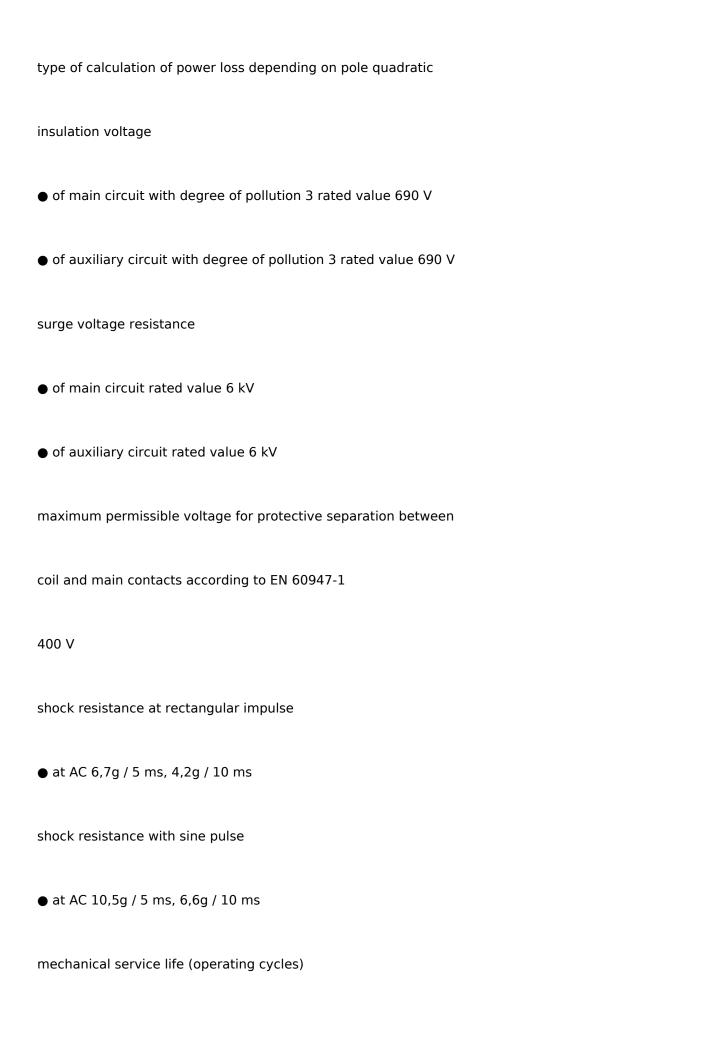
connector 3RT2016-1AF01

URL:https://www.sxplc.com/connector-3rt2016-1af01

Product data sheet

• without load current share typical 1.1 W

General technical data
size of contactor S00
product extension
• function module for communication No
• auxiliary switch Yes
power loss [W] for rated value of the current
• at AC in hot operating state 0.9 W
● at AC in hot operating state per pole 0.3 W



● of contactor typical 30 000 000
● of the contactor with added electronically optimized
auxiliary switch block typical
5 000 000
• of the contactor with added auxiliary switch block typical 10 000 000
reference code according to IEC 81346-2 Q
Substance Prohibitance (Date) 10/01/2009
Ambient conditions
installation altitude at height above sea level maximum 2 000 m
ambient temperature
● during operation -25 +60 °C
● during storage -55 +80 °C
relative humidity minimum 10 %
relative humidity at 55 °C according to IEC 60068-2-30
maximum

Environmental footprin
Environmental Product Declaration(EPD) Yes
Global Warming Potential [CO2 eq] total 39.6 kg
Global Warming Potential [CO2 eq] during manufacturing 1.18 kg
Global Warming Potential [CO2 eq] during operation 38.5 kg
Global Warming Potential [CO2 eq] after end of life -0.155 kg
Main circuit
number of poles for main current circuit 3
number of NO contacts for main contacts 3
operating voltage
● at AC-3 rated value maximum 690 V
● at AC-3e rated value maximum 690 V
operational current
● at AC-1 at 400 V at ambient temperature 40 °C rated

value
22 A
• at AC-1
— up to 690 V at ambient temperature 40 °C rated
value
22 A
— up to 690 V at ambient temperature 60 °C rated
value
20 A ● at AC-3
■ at AC-3
— at 400 V rated value 9 A
— at 500 V rated value 7.7 A
— at 690 V rated value 6.7 A
• at AC-3e
— at 400 V rated value 9 A



minimum cross-section in main circuit at maximum AC-1 rated
value
4 mm ²
operational current for approx. 200000 operating cycles at
AC-4
● at 400 V rated value 4.1 A
● at 690 V rated value 3.3 A
operational current
● at 1 current path at DC-1
— at 24 V rated value 20 A
— at 60 V rated value 20 A
— at 110 V rated value 2.1 A
— at 220 V rated value 0.8 A
— at 440 V rated value 0.6 A
— at 600 V rated value 0.6 A





● at AC-3
— at 230 V rated value 2.2 kW
— at 400 V rated value 4 kW
— at 500 V rated value 4 kW
— at 690 V rated value 5.5 kW
● at AC-3e
— at 230 V rated value 2.2 kW
— at 400 V rated value 4 kW
— at 500 V rated value 4 kW
— at 690 V rated value 5.5 kW
operating power for approx. 200000 operating cycles at AC4
● at 400 V rated value 2 kW
● at 690 V rated value 2.5 kW
operating apparent power at AC-6a
● up to 230 V for current peak value n=20 rated value 2 kVA

● up to 400 V for current peak value n=20 rated value 3.6 kVA
● up to 500 V for current peak value n=20 rated value 4.6 kVA
● up to 690 V for current peak value n=20 rated value 5.9 kVA
operating apparent power at AC-6a
● up to 230 V for current peak value n=30 rated value 1.3 kVA
● up to 400 V for current peak value n=30 rated value 2.4 kVA
● up to 500 V for current peak value n=30 rated value 3.1 kVA
● up to 690 V for current peak value n=30 rated value 4 kVA
short-time withstand current in cold operating state up to
40 °C
• limited to 1 s switching at zero current maximum 155 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 5 s switching at zero current maximum 111 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 10 s switching at zero current maximum 86 A; Use minimum cross-section acc. to AC-1 rated value
● limited to 30 s switching at zero current maximum 66 A; Use minimum cross-section acc. to AC-1

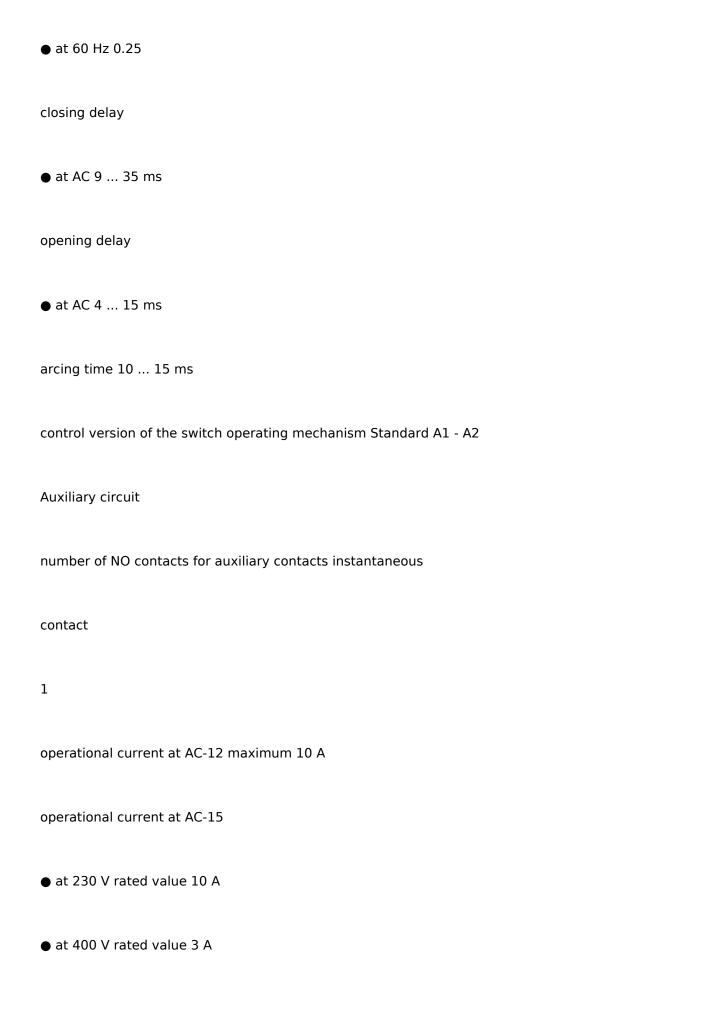
rated value
● limited to 60 s switching at zero current maximum 55 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency
● at AC 10 000 1/h
operating frequency
• at AC-1 maximum 1 000 1/h
• at AC-2 maximum 750 1/h
• at AC-3 maximum 750 1/h
• at AC-3e maximum 750 1/h
• at AC-4 maximum 250 1/h
Control circuit/ Control
type of voltage of the control supply voltage AC

control supply voltage at AC

• at 50 Hz rated value 110 V

• at 60 Hz rated value 110 V

operating range factor control supply voltage rated value of
magnet coil at AC
● at 50 Hz 0.8 1.1
● at 60 Hz 0.85 1.1
apparent pick-up power of magnet coil at AC
● at 50 Hz 27 VA
● at 60 Hz 24.3 VA
inductive power factor with closing power of the coil
● at 50 Hz 0.8
● at 60 Hz 0.75
apparent holding power of magnet coil at AC
● at 50 Hz 4.2 VA
● at 60 Hz 3.3 VA
inductive power factor with the holding power of the coil
● at 50 Hz 0.25



at 500 V rated value 2 A
● at 690 V rated value 1 A
operational current at DC-12
• at 24 V rated value 10 A
• at 48 V rated value 6 A
• at 60 V rated value 6 A
• at 110 V rated value 3 A
• at 125 V rated value 2 A
• at 220 V rated value 1 A
• at 600 V rated value 0.15 A
operational current at DC-13
• at 24 V rated value 10 A
• at 48 V rated value 2 A
• at 60 V rated value 2 A
• at 110 V rated value 1 A

- at 125 V rated value 0.9 A
- at 220 V rated value 0.3 A
- at 600 V rated value 0.1 A

contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA)

UL/CSA ratings

full-load current (FLA) for 3-phase AC motor

- at 480 V rated value 7.6 A
- at 600 V rated value 9 A

yielded mechanical performance [hp]

- for single-phase AC motor
- at 110/120 V rated value 0.33 hp
- at 230 V rated value 1 hp

