



CONTACTOR RELAY, 3NO+1NC, AC 48V,
50/60 HZ, SIZE S00, SCREW TERMINAL

| General technical data: | | |
|---|----|----------------------------|
| product brand name | | SIRIUS |
| Size of the contactor | | S00 |
| Identification number and letter for switching elements | | 31 E |
| Product extension / auxiliary switch | | Yes |
| Protection class IP / on the front | | IP20 |
| Protection against electrical shock | | finger-safe |
| Degree of pollution | | 3 |
| Insulation voltage / with degree of pollution 3 / rated value | V | 690 |
| Installation altitude / at a height over sea level / maximum | m | 2,000 |
| Ambient temperature | | |
| • during storage | °C | -55 ... +80 |
| • during operating | °C | -25 ... +60 |
| Shock resistance | | |
| • at rectangular impulse | | |
| • at AC | | 7,3g / 5 ms, 4,7g / 10 ms |
| • at sine pulse | | |
| • at AC | | 11,4g / 5 ms, 7,3g / 10 ms |
| Impulse voltage resistance / rated value | kV | 6 |
| Mechanical operating cycles as operating time | | |

| | | |
|---|--|------------|
| • of the contactor / typical | | 30,000,000 |
| • of the contactor with added auxiliary switch block / typical | | 10,000,000 |
| • of the contactor with added electronics-compatible auxiliary switch block / typical | | 5,000,000 |

Control circuit/ Control:

| | | |
|---|-----|--------------|
| Voltage type / of control feed voltage | | AC |
| Control supply voltage | | |
| • at 50 Hz / at AC / rated value | V | 48 |
| • at 60 Hz / at AC / rated value | V | 48 |
| Operating range factor control supply voltage rated value / of the magnet coil | | |
| • at 50 Hz / for AC | | 0.8 ... 1.1 |
| • at 60 Hz / for AC | | 0.85 ... 1.1 |
| Apparent pull-in power / of the solenoid / for AC | V·A | 37 |
| Apparent holding power / of the solenoid / for AC | V·A | 5.7 |
| Inductive power factor | | |
| • with the pull-in power of the coil | | 0.8 |
| • with the pull-in power of the coil | | 0.25 |
| Closing delay | | |
| • at AC | ms | 8 ... 33 |
| Opening delay | | |
| • at AC | ms | 6 ... 25 |
| Arcing time | s | 10 ... 15 |

Auxiliary circuit:

| | | |
|---|---|---|
| Contact reliability / of the auxiliary contacts | | 1 faulty switching per 100 million (17 V, 1 mA) |
| Number of NC contacts / for auxiliary contacts / instantaneous switching | | 1 |
| Number of NO contacts / for auxiliary contacts / instantaneous switching | | 3 |
| Operating current | | |
| • at AC-12 / maximum | A | 10 |
| • at AC-15 | | |
| • at 230 V / rated value | A | 10 |
| • at 400 V / rated value | A | 3 |
| • at 500 V / rated value | A | 2 |
| • at 690 V / rated value | A | 1 |
| Operating current | | |
| • with 1 current path / at DC-12 | | |
| • at 24 V / rated value | A | 10 |
| • at 110 V / rated value | A | 3 |

| | | |
|---|-----|--------|
| • at 220 V / rated value | A | 1 |
| • at 440 V / rated value | A | 0.3 |
| • at 600 V / rated value | A | 0.15 |
| • with 2 current paths in series / at DC-12 | | |
| • at 24 V / rated value | A | 10 |
| • at 60 V / rated value | A | 10 |
| • at 110 V / rated value | A | 4 |
| • at 220 V / rated value | A | 2 |
| • at 440 V / rated value | A | 1.3 |
| • at 600 V / rated value | A | 0.65 |
| • with 3 current paths in series / at DC-12 | | |
| • at 24 V / rated value | A | 10 |
| • at 60 V / rated value | A | 10 |
| • at 110 V / rated value | A | 10 |
| • at 220 V / rated value | A | 3.6 |
| • at 440 V / rated value | A | 2.5 |
| • at 600 V / rated value | A | 1.8 |
| Operating current | | |
| • with 1 current path / at DC-13 | | |
| • at 24 V / rated value | A | 10 |
| • at 110 V / rated value | A | 1 |
| • at 220 V / rated value | A | 0.3 |
| • at 440 V / rated value | A | 0.14 |
| • at 600 V / rated value | A | 0.1 |
| • with 2 current paths in series / at DC-13 | | |
| • at 24 V / rated value | A | 10 |
| • at 60 V / rated value | A | 3.5 |
| • at 110 V / rated value | A | 1.3 |
| • at 220 V / rated value | A | 0.9 |
| • at 440 V / rated value | A | 0.2 |
| • at 600 V / rated value | A | 0.1 |
| • with 3 current paths in series / at DC-13 | | |
| • at 24 V / rated value | A | 10 |
| • at 60 V / rated value | A | 4.7 |
| • at 110 V / rated value | A | 3 |
| • at 220 V / rated value | A | 1.2 |
| • at 440 V / rated value | A | 0.5 |
| • at 600 V / rated value | A | 0.26 |
| Off-load operating frequency | | |
| • at AC | 1/h | 10,000 |

| | | |
|-------------------------------|-----|--------|
| • at DC | 1/h | 10,000 |
| Frequency of operation | | |
| • at AC-12 / maximum | 1/h | 1,000 |
| • at AC-14 / maximum | 1/h | 1,000 |
| • at AC-15 / maximum | 1/h | 1,000 |
| • at DC-12 / maximum | 1/h | 1,000 |
| • at DC-13 / maximum | 1/h | 1,000 |

Short-circuit:

Design of the fuse link / for short-circuit protection of the auxiliary switch

- required

fuse gL/gG: 10 A

Design of the miniature circuit breaker / for short-circuit protection of the auxiliary circuit / up to 230 V

C characteristic: 6 A; 0.4 kA

Installation/ mounting/ dimensions:

mounting position

+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface

Mounting type

screw and snap-on mounting onto 35 mm standard mounting rail

Width

mm 45

Height

mm 57.5

Depth

mm 73

Connections/ terminals:

Design of the electrical connection

- for auxiliary and control current circuit
- for auxiliary contacts / finely stranded / with conductor end processing
- for AWG conductors / for auxiliary contacts

screw-type terminals

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 2x 12

Certificates/ approvals:

| | | |
|---------------------------------|--|----------------------------------|
| General Product Approval | Functional Safety / Safety of Machinery | Declaration of Conformity |
|---------------------------------|--|----------------------------------|



[Type Examination](#)



Test Certificates

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Shipping Approval



Shipping Approval

other



[Environmental Confirmations](#)

UL/CSA ratings:

Contact rating designation / for auxiliary contacts / according to UL

A600 / Q600

Safety related data:

B10 value / with high demand rate

- according to SN 31920
- note

1,000,000

With 0.3 x Ie

T1 value / for proof test interval or service life

- according to IEC 61508

a

20

Proportion of dangerous failures

- with low demand rate / according to SN 31920
- with high demand rate / according to SN 31920

%

40

%

73

Failure rate [FIT] / with low demand rate

- according to SN 31920

FIT

100

Product function / positively driven operation to IEC 60947-5-1

Yes

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

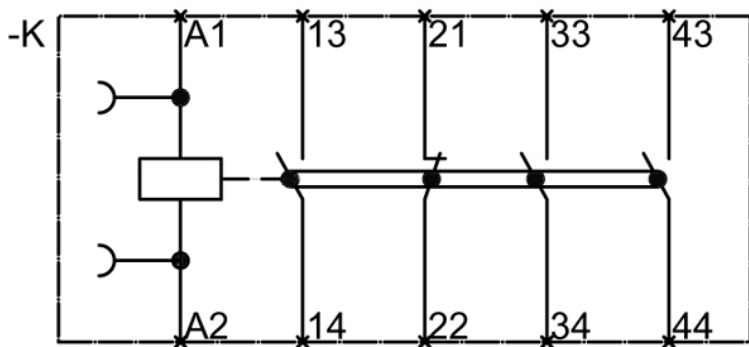
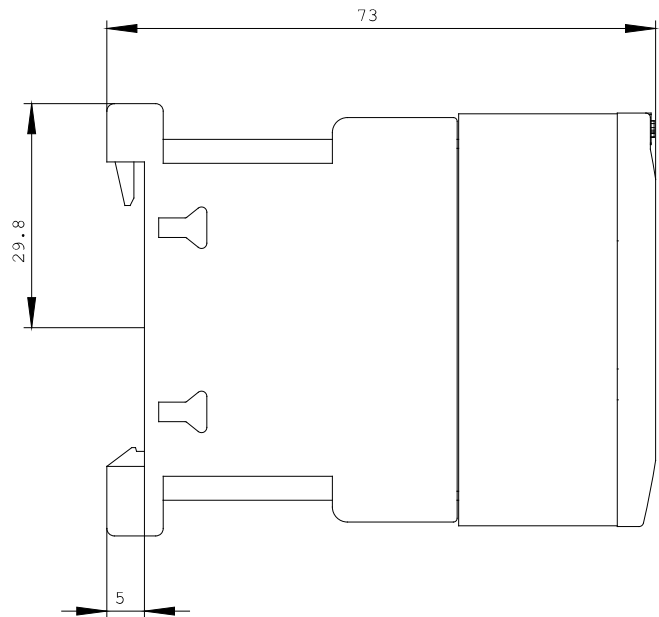
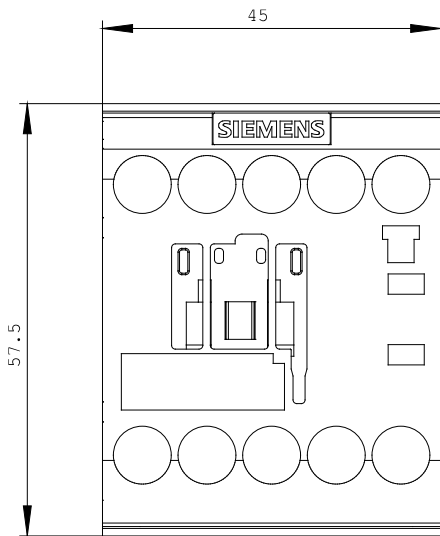
<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://mall.industry.siemens.com/>

Cax online generator

<http://www.siemens.com/cax>



last change:

Aug 4, 2014