## SIEMENS



CONTACTOR RELAY, 4NO, DC 220V, SIZE SOO, SCREW TERMINAL

## General technical data:

| Product brand name |  | SIRIUS |
| :---: | :---: | :---: |
| Size of the contactor |  | S00 |
| Identification number and letter for switching elements |  | 40 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 | ${ }^{\circ} \mathrm{C}$ | -55 ... 80 |
| Ambient temperature / during operating | ${ }^{\circ} \mathrm{C}$ | -25 ... 60 |
| Shock resistance <br> - at rectangular impulse <br> - at DC <br> - at sine pulse <br> - at DC |  | $10 \mathrm{~g} / 5 \mathrm{~ms}, 5 \mathrm{~g} / 10 \mathrm{~ms}$ $15 \mathrm{~g} / 5 \mathrm{~ms}, 8 \mathrm{~g} / 10 \mathrm{~ms}$ |
| Impulse voltage resistance / rated value | kV | 6 |
| Mechanical operating cycles as operating time <br> - of the contactor / typical |  | 30,000,000 |

- of the contactor with added auxiliary switch block / typical
- of the contactor with added electronics-compatible auxiliary
switch block / typical
$10,000,000$
10,000,000


## Control circuit:

| Type of voltage / of the controlled supply voltage | V | DC |
| :---: | :---: | :---: |
| Control supply voltage / 1 |  |  |
| - for DC / rated value |  | 220 |
| Operating range factor control supply voltage rated value / of the solenoid |  |  |
| - for DC |  | 0.8 ... 1.1 |
| Holding power / of the solenoid / for DC | W | 4 |
| Pull-in power / of the solenoid / for DC | W | 4 |
| Closing delay |  |  |
| - at DC | ms | $30 . .100$ |
| Opening delay |  |  |
| - at DC | ms | $25 . . .90$ |
| Arcing time | s | $10 \ldots 15$ |

## Auxiliary circuit:

Contact reliability / of the auxiliary contacts
Number of NC contacts / for auxiliary contacts / instantaneous
switching
Number of NO contacts / for auxiliary contacts / instantaneous 4
switching
Operating current / of the auxiliary contacts / at AC-12 /
maximum
Operating current / of the auxiliary contacts / at AC-15

- at 230 V
- at 400 V
- at 500 V
- at 690 V


## Operating current

- of the auxiliary contacts / with 1 current path / at DC-12
- at 24 V
- at 110 V
- at 220 V
- with 2 current paths in series / at DC-12
- at $24 \mathrm{~V} /$ rated value
- at 60 V / rated value
- at $110 \mathrm{~V} /$ rated value
- at $220 \mathrm{~V} /$ rated value

1 faulty switching per 100 million ( $17 \mathrm{~V}, 1 \mathrm{~mA}$ )
0

4

A 10

A 6
A 3
A 2
A 1

A 6
A 3
A 1

A 10
A 10
A 4
A 2

- at $440 \mathrm{~V} /$ rated value
- at $600 \mathrm{~V} /$ rated value
- with 3 current paths in series / at DC-12
- at $24 \mathrm{~V} /$ rated value
- at $60 \mathrm{~V} /$ rated value
- at $110 \mathrm{~V} /$ rated value
- at $220 \mathrm{~V} /$ rated value
- at $440 \mathrm{~V} /$ rated value
- at $600 \mathrm{~V} /$ rated value


## Operating current

- of the auxiliary contacts / with 1 current path / at DC-13
- at 24 V
- at 110 V
- at 220 V
- with 2 current paths in series / at DC-13
- at $24 \mathrm{~V} /$ rated value
- at $60 \mathrm{~V} /$ rated value
- at $110 \mathrm{~V} /$ rated value
- at $220 \mathrm{~V} /$ rated value
- at $440 \mathrm{~V} /$ rated value
- at $600 \mathrm{~V} /$ rated value
- with 3 current paths in series / at DC-13
- at 24 V / rated value
- at $60 \mathrm{~V} /$ rated value
- at $110 \mathrm{~V} /$ rated value
- at $220 \mathrm{~V} /$ rated value
- at $440 \mathrm{~V} /$ rated value
- at $600 \mathrm{~V} /$ rated value

Off-load operating frequency

- at AC
- at DC


## Frequency of operation

- at AC-12 / maximum
- at AC-14 / maximum
- at AC-15 / maximum
- at DC-12 / maximum
at DC-13 / maximum

| A | 1.3 |
| :--- | :--- |
| A | 0.65 |

A 10
A 10
A 10
A 3.6
A 2.5
A 1.8

A 6
A 1
A 0.3

A 10
A $\quad 3.5$
A 1.3
A 0.9
A 0.2
A 0.1

A 10
$\begin{array}{ll}\text { A } & 4.7\end{array}$
A 3
A 1.2
A 0.5
A 0.26

| $1 / \mathrm{h}$ | 10,000 |
| :--- | :--- |
| $1 / \mathrm{h}$ | 10,000 |

1/h 1,000
$1 / \mathrm{h} \quad 1,000$
$1 / \mathrm{h} \quad 1,000$
1/h 1,000
$1 / h \quad 1,000$

## Short-circuit:

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

- required

Fuse gL/gG: 10 A , miniature circuit breaker C 6 A (short-circuit current lk < 400 A)

## Installation/mounting/dimensions:

| Built in orientation |  | vertical |
| :--- | :--- | :--- |
| Type of mounting |  | screw and snap-on mounting onto 35 mm standard <br> mounting rail |
| Width | mm | 45 |
| Height | mm | 57.5 |
| Depth | mm | 73 |
| Distance, to be maintained, to the ranks assembly/sidewards | mm | 0 |

## Connections:

Design of the electrical connection

- for auxiliary and control current circuit

Type of the connectable conductor cross-section

- for auxiliary contacts
- solid
- finely stranded
- with conductor end processing
- for AWG conductors / for auxiliary contacts


## screw-type terminals

$2 x\left(0.5 \ldots 1.5 \mathrm{~mm}^{2}\right), 2 x\left(0.75 \ldots 2.5 \mathrm{~mm}^{2}\right), 2 x 4 \mathrm{~mm}^{2}$
$2 \times\left(0.5 \ldots 1.5 \mathrm{~mm}^{2}\right), 2 \times\left(0.75 \ldots 2.5 \mathrm{~mm}^{2}\right)$
$2 x(20 \ldots 16), 2 x(18 \ldots 14), 2 x 12$

| Certificates/approvals: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Product Approval |  |  |  | Test Certificates |  |
| CQC <br> CQC | $\underbrace{}_{C S A}$ | ROSTEST | (U) | Manufacturer |  |
| Shipping Approval |  |  |  |  |  |
| 5 | $\begin{aligned} & \text { 虽迹 } \\ & \text { DNN } \end{aligned}$ | GL(2) <br> 6L | $\frac{\begin{array}{l} \text { Rloyd's } \\ \text { Register } \end{array}}{\text { LRs }}$ | (20 | (2) |
| Shipping Approval | other |  |  |  |  |
|  | $\frac{V_{\mathrm{VE}}}{\mathrm{~V}_{\mathrm{VDE}}}$ |  |  |  |  |

## UL/CSA ratings:

Contact rating designation / for auxiliary contacts / according to UL

Safety:related Parameter:
$B 10$ value / with high demand rate

- according to SN 31920

T1 value / for proof test interval or service life

- according to IEC 61508

Proportion of dangerous failures

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

Failure rate (FIT value) / with low demand rate

- according to SN 31920

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

- comment
$1,000,000$
a $\quad 10$
\% 40
\% 73

FIT $\quad 100$
Yes
with 3RH29

## Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)
http://www.siemens.com/industrial-controls/catalogs
Industry Mall (Online ordering system)
http://www.siemens.com/industrial-controls/mall

## Cax online generator:

http://www.siemens.com/cax
Service\&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RH2140-1BM40/all
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH2140-1BM40



