## SIEMENS



Figure similar

| product brand name | SIRIUS |
| :--- | :--- | :--- |
| Product designation | $3 R T 2$ contactor |

General technical data:
Insulation voltage

- Rated value

Degree of pollution
Surge voltage resistance Rated value
6
Mechanical service life (switching cycles)

- of the contactor typical
- of the contactor with added electronicscompatible auxiliary switch block typical
- of the contactor with added auxiliary switch block typical

Thermal short-time current restricted to 10 s
Protection class IP

- on the front
- of the terminal

Equipment marking

- acc. to DIN EN 61346-2
- acc. to DIN EN 81346-2

CONTACTOR,AC3:22KW/400V
1NC+1NO,200VAC50HZ/200.220V60HZ 3-POLE, SIZE S2, SCREW TERMINAL

3RT2 contactor

| V | 690 |
| :--- | :--- |
| kV | 3 |
|  | 1000000 <br> 5000000 |
| A | 10000000 |
|  | IP20 <br> IP00 |

Main circuit:

| Number of poles for main current circuit | 3 |  |
| :--- | :--- | :--- |
| Number of NC contacts for main contacts |  | 0 |
| Number of NO contacts for main contacts |  | 3 |
| Operating voltage |  |  |


| - at AC-3 Rated value maximum | V | 690 |
| :---: | :---: | :---: |
| Operating current <br> - at AC-1 |  |  |
| - at 400 V at ambient temperature $40^{\circ} \mathrm{C}$ Rated value | A | 70 |
| — up to 690 V at ambient temperature $40^{\circ} \mathrm{C}$ Rated value | A | 70 |
| - up to 690 V at ambient temperature $60^{\circ} \mathrm{C}$ Rated value | A | 60 |
| - at AC-2 at 400 V Rated value | A | 51 |
| - at AC-3 |  |  |
| - at 400 V Rated value | A | 51 |
| - at 500 V Rated value | A | 50 |
| - at 690 V Rated value | A | 24 |
| - at AC-4 at 400 V Rated value | A | 41 |
| Operating current with 1 current path <br> - at DC-1 |  |  |
|  |  |  |
| - at 24 V Rated value | A | 60 |
| - at 110 V Rated value | A | 4.5 |
| - at 220 V Rated value | A | 2 |
| - at 440 V Rated value | A | 0.4 |
| - at 600 V Rated value | A | 0.25 |
| - at DC-3 at DC-5 |  |  |
| - at 24 V Rated value | A | 35 |
| - at 110 V Rated value | A | 2.5 |
| - at 220 V Rated value | A | 2 |
| - at 440 V Rated value | A | 0.1 |
| - at 600 V Rated value | A | 0.06 |
| Operating current with 2 current paths in series <br> - at DC-1 |  |  |
|  |  |  |
| - at 24 V Rated value | A | 60 |
| - at 110 V Rated value | A | 45 |
| - at 220 V Rated value | A | 5 |
| - at 440 V Rated value | A | 1 |
| - at 600 V Rated value | A | 0.8 |
| - at DC-3 at DC-5 |  |  |
| - at 110 V Rated value | A | 25 |
| - at 220 V Rated value | A | 5 |
| - at 24 V Rated value | A | 55 |
| - at 440 V Rated value | A | 0.27 |
| - at 600 V Rated value | A | 0.16 |
| Operating current with 3 current paths in series |  |  |

- at DC-1
- at 24 V Rated value
- at 110 V Rated value
- at 220 V Rated value
- at 440 V Rated value
- at 600 V Rated value
- at DC-3 at DC-5
- at 110 V Rated value
- at 220 V Rated value
- at 24 V Rated value
- at 440 V Rated value
- at 600 V Rated value


## Operating power

- at AC-1 at 400 V Rated value
- at AC-2 at 400 V Rated value
- at AC-4 at 400 V Rated value


## Operating power

- at AC-1
- at 230 V at $60^{\circ} \mathrm{C}$ Rated value
- at 230 V Rated value
kW 23
kW
26
- at 400 V at $60^{\circ} \mathrm{C}$ Rated value
kW
39
- at 690 V at $60^{\circ} \mathrm{C}$ Rated value
kW
68
- at 690 V Rated value
- at AC-3
- at 230 V Rated value
- at 400 V Rated value
kW 22
- at 500 V Rated value
kW
- at 690 V Rated value

Operating power for $\mathbf{2} \mathbf{2 0 0 0 0 0}$ operating cycles at AC-4

- at 400 V Rated value
- at 690 V Rated value

Operating frequency

- at AC-3 maximum

1/h
1000

## Control circuit/ Control:

| Type of voltage of the control supply voltage |  | AC |
| :--- | :--- | :--- |
| Control supply voltage with AC <br> $\bullet$ • at 50 Hz Rated value <br> $\bullet$ •at 60 Hz Rated value | V | 200 |
| Operating range factor control supply voltage rated <br> value of the magnet coil with AC |  | $200 \ldots 220$ |

- at 50 Hz
- at 60 Hz
0.8 ... 1.1
0.85 ... 1.1


## Auxiliary circuit:

| Number of NC contacts <br> - for auxiliary contacts — instantaneous contact |  | 1 |
| :---: | :---: | :---: |
| Number of NO contacts <br> - for auxiliary contacts — instantaneous contact |  | 1 |
| Product expansion Auxiliary switch |  | Yes |
| Operating current at AC-15 <br> - at 230 V Rated value <br> - at 400 V Rated value <br> - at $690 \vee$ Rated value | A A A | $\begin{aligned} & 10 \\ & 3 \\ & 1 \end{aligned}$ |
| Operating current <br> - at DC-12 at 125 V Rated value <br> - at DC-12 at 220 V Rated value <br> - at DC-12 at 600 V Rated value <br> - at DC-13 at 125 V Rated value <br> - at DC-13 at 220 V Rated value <br> - at DC-13 at 600 V Rated value | A A A A A A | $\begin{aligned} & 2 \\ & 1 \\ & 0.15 \\ & 0.9 \\ & 0.3 \\ & 0.1 \end{aligned}$ |
| Operating current <br> - at DC-12 <br> - at $60 \vee$ Rated value <br> - at 110 V Rated value <br> - at DC-13 <br> - at 24 V Rated value <br> - at 60 V Rated value <br> - at 110 V Rated value | A A A A A | $\begin{aligned} & 6 \\ & 3 \\ & 10 \\ & 2 \\ & 1 \end{aligned}$ |
| Contact reliability of the auxiliary contacts |  | 1 faulty switching per 100 million ( $17 \mathrm{~V}, 1 \mathrm{~mA}$ ) |

## UL/CSA ratings:

| Full-load current (FLA) for three-phase AC motor <br> - at 480 V Rated value <br> - at 600 V Rated value | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | 52 52 |
| :---: | :---: | :---: |
| yielded mechanical performance [hp] <br> - for single-phase AC motor at 110/120 V Rated value <br> - for single-phase AC motor at 230 V Rated value <br> - for three-phase AC motor at 200/208 V Rated value | metric <br> hp <br> metric <br> hp <br> metric <br> hp | 3 10 15 |

- for three-phase AC motor at 220/230 V Rated value
- for three-phase AC motor at 460/480 V Rated value
- for three-phase AC motor at 575/600 V Rated value
Contact rating of the auxiliary contacts acc. to UL
metric 15
hp
metric 40
hp
metric 50
hp


## Short-circuit:

## Design of the fuse link

- for short-circuit protection of the main circuit
— with type of assignment 1 required
- with type of assignment 2 required
- for short-circuit protection of the auxiliary switch required
gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 200 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gL/gG: 10 A


## Installation/ mounting/ dimensions:

mounting position

## Mounting type

- Side-by-side mounting

- for grounded parts
— forwards
—Backwards
— upwards
- at the side
— downwards
- for live parts
— forwards
—Backwards
— upwards
— downwards
$+/-180^{\circ}$ rotation possible on vertical mounting surface; can be tilted forward and backward by +/$22.5^{\circ}$ on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Yes
113.4

55
130
$\mathrm{mm} \quad 0$
$\mathrm{mm} \quad 0$
$\mathrm{mm} \quad 0$
$\mathrm{mm} \quad 0$
$\mathrm{mm} \quad 0$
$\mathrm{mm} \quad 0$
$\mathrm{mm} \quad 0$
$\mathrm{mm} \quad 50$
$\begin{array}{ll}\mathrm{mm} & 6\end{array}$
$\mathrm{mm} \quad 50$
$\mathrm{mm} \quad 0$
$\mathrm{mm} \quad 0$
$\mathrm{mm} \quad 50$
$\mathrm{mm} \quad 50$

## Connections/ Terminals:

Type of electrical connection

- for main current circuit
- for auxiliary and control current circuit

Type of connectable conductor cross-section

- for main contacts
— single or multi-stranded
- finely stranded with core end processing
- for AWG conductors for main contacts
- for auxiliary contacts
— single or multi-stranded
- finely stranded with core end processing
- for AWG conductors for auxiliary contacts

Apparent pick-up power of the magnet coil with AC

- at 50 Hz
- at 60 Hz
screw-type terminals screw-type terminals
$2 x\left(1 \ldots 35 \mathrm{~mm}^{2}\right), 1 \mathrm{x}\left(1 \ldots 50 \mathrm{~mm}^{2}\right)$
$2 x\left(1 \ldots 25 \mathrm{~mm}^{2}\right), 1 \mathrm{x}\left(1 \ldots 35 \mathrm{~mm}^{2}\right)$
2x (18 ... 2), 1x (18 ... 1)
$2 x\left(0,5 \ldots 1,5 \mathrm{~mm}^{2}\right), 2 x\left(0,75 \ldots 2,5 \mathrm{~mm}^{2}\right)$
$2 x\left(0.5 \ldots 1.5 \mathrm{~mm}^{2}\right), 2 x\left(0.75 \ldots 2.5 \mathrm{~mm}^{2}\right)$
$2 x(20 \ldots 16), 2 x(18 \ldots 14)$

212
188

## Safety related data:

Proportion of dangerous failures

- with low demand rate acc. to SN 31920
- with high demand rate acc. to SN 31920

Product function Mirror contact acc. to IEC 60947-4-1
Protection against electrical shock

| $\%$ | 40 |
| :--- | :--- |
| $\%$ | 73 |
|  | Yes |
|  | finger-safe when touched vertically from front acc. to <br>  <br>  <br>  <br>  IEC 60529 |

Mechanical data:
Size of contactor

## S2

## Ambient conditions:

| Installation altitude at height above sea level <br> maximum | m | 2000 |
| :--- | :--- | :--- |
| Ambient temperature |  |  |
| $\bullet$ during operation | ${ }^{\circ} \mathrm{C}$ | $-25 \ldots+60$ |
| $\bullet$ during storage | ${ }^{\circ} \mathrm{C}$ | $-55 \ldots+80$ |

Certificates/ approvals:

| General Product Approval | other |  |
| :--- | :--- | :--- | :--- |
| CSA | Confirmation | $\frac{\text { Environmental }}{\text { Confirmations }}$ |

## Further information

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

## Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT20361AN60
Service\&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RT20361AN60/all
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT20361AN60\&lang=en


last modified:
11.03.2015

