## SIEMENS

Product data sheet


LOAD FEEDER FUSELESS DIRECT START,
AC 400V, SZ S00 2.8. . .4A,
AC 230V SCREW CONNECTION FOR RAIL-MOUNTING,
TYPE OF COORDINATION 2,
IQ = 150KA (ALSO FULFILLS TYPE OF COORDINATION 1)
1NO (CONTACTOR)

## General technical data:

Product brand name
product designation
Design of the product
Size of the load feeder
Protection class IP / on the front
Degree of pollution
Insulation voltage / rated value
Installation altitude / at a height over sea level / maximum
Ambient temperature

- during transport
- during storage
- during operating

Impulse voltage resistance / rated value
Active power loss / per conductor / typical
Item designation

- according to DIN 40719 extendable after IEC 204-2 / according to IEC 750
- according to DIN EN 61346-2

Type of assignement

## SIRIUS

non-fused load feeders 3RA2
direct starter
SOO
IP20
3
690
2,000
${ }^{\circ} \mathrm{C} \quad-55 \ldots 80$
${ }^{\circ} \mathrm{C} \quad-55 \ldots 80$
${ }^{\circ} \mathrm{C} \quad-20 \ldots 60$
kV 6
W 2.3

Q

Q
2

| Mechanical operating cycles as operating time / of the contactor <br> - typical |  | 10,000,000 |
| :---: | :---: | :---: |
| Manufacturer article number <br> - of the circuit-breakers included in the scope of supply <br> - of the contactor included in the scope of supply <br> - of the link module included in the scope of supply |  | $\begin{aligned} & \text { 3RV2011-1EA10 } \\ & \text { 3RT2015-1AP01 } \\ & \text { 3RA1921-1DA00 } \end{aligned}$ |
| Design of the switching contact |  | mechanical |
| Type of the motor protection |  | bimetal |
| Adjustable response current <br> - of the current-dependent overload release | A | 2.8 ... 4 |
| Communication: |  |  |
| Product function / bus-communication |  | No |
| Protocol / will be supported <br> - AS interface protocol <br> - PROFIBUS DP protocol <br> - PROFINET protocol |  | No <br> No <br> No |
| Product extension / function module for communication |  | No |
| 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 $400 \mathrm{~V} /$ rated value <br> - at $\mathrm{AC}-2 /$ at $400 \mathrm{~V} /$ rated value <br> - at $\mathrm{AC}-3$ / at $400 \mathrm{~V} /$ rated value <br> - at $\mathrm{AC}-4$ / at $400 \mathrm{~V} /$ rated value | A A A A | $\begin{aligned} & 4 \\ & 3.6 \\ & 3.6 \\ & 3.6 \end{aligned}$ |
| Service power <br> - at AC-2 / at $400 \mathrm{~V} /$ rated value <br> - at AC-3 <br> - at $400 \mathrm{~V} /$ rated value <br> - at $500 \mathrm{~V} /$ rated value <br> - at $690 \mathrm{~V} /$ rated value <br> - at $\mathrm{AC}-4 /$ at $400 \mathrm{~V} /$ rated value | W w w w w | $\begin{aligned} & 1,500 \\ & 1,500 \\ & 2,200 \\ & 3,000 \\ & 1,500 \end{aligned}$ |
| Off-load operating frequency | 1/h | 10,000 |
| Frequency of operation <br> - at AC-1 / according to IEC 60947-6-2 / maximum <br> - at AC-2 / according to IEC 60947-6-2 / maximum | $1 / \mathrm{h}$ $1 / \mathrm{h}$ | $\begin{aligned} & 1,000 \\ & 750 \end{aligned}$ |

- at AC-3 / according to IEC 60947-6-2 / maximum

| $1 / h$ | 750 |
| :--- | :--- |
| $1 / h$ | 250 |


| Control circuit: |  |  |
| :---: | :---: | :---: |
| Type of voltage / of the controlled supply voltage |  | AC |
| Control supply voltage frequency |  |  |
| - 1 / rated value | Hz | 50 |
| Control supply voltage / 1 |  |  |
| - at 50 Hz / for AC / rated value | V | 230 |
| - at 60 Hz / for AC / rated value | V | 230 |
| Apparent holding power / of the solenoid / for AC | V•A | 4.2 |
| Inductive power factor / with the pull-in power of the coil |  | 0.25 |
| Auxiliary circuit: |  |  |
| Product extension / auxiliary switch |  | Yes |
| Number of NC contacts / for auxiliary contacts |  | 0 |
| Number of NO contacts / for auxiliary contacts |  | 1 |
| Number of change-over switches / for auxiliary contacts |  | 0 |
| Inputs/ Outputs: |  |  |
| Number of digital inputs |  | 0 |
| Short-circuit: |  |  |
| Product function / short circuit protection |  | Yes |
| Design of the short-circuit protection |  | circuit-breakers |
| Breaking capacity limit short-circuit current (lcu) |  |  |
| - at $400 \mathrm{~V} /$ rated value | A | 100,000 |
| - at $500 \mathrm{~V} /$ rated value | A | 100,000 |
| - at $690 \mathrm{~V} /$ rated value | A | 4,000 |

## Installation/mounting/dimensions:

| Built in orientation |  | vertical |
| :---: | :---: | :---: |
| Type of mounting |  | screw and snap-on mounting onto 35 mm standard mounting rail |
| Width | mm | 45 |
| Height | mm | 167.2 |
| Depth | mm | 97.1 |
| Distance, to be maintained, to the ranks assembly |  |  |
| - forwards | mm | 0 |
| - backwards | mm | 0 |
| - upwards | mm | 20 |
| - downwards | mm | 30 |

- sidewards

Distance, to be maintained, to earthed part

- forwards
- backwards
- upwards
- downwards
- sidewards

Distance, to be maintained, conductive elements

- forwards
- backwards
- upwards
- downwards
- sidewards

| mm | 0 |
| :--- | :--- |
| mm | 0 |
| mm | 0 |
| mm | 20 |
| mm | 10 |
| mm | 9 |
| mm | 0 |
| mm | 0 |
| mm | 20 |
| mm | 10 |
| mm | 9 |

## Connections:

## Design of the electrical connection

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

Type of the connectable conductor cross-section

- for main contacts
- solid
- stranded
- finely stranded
- with conductor end processing
- for AWG conductors / for main contacts
- for auxiliary contacts
- solid
- finely stranded
- with conductor end processing
- for AWG conductors / for auxiliary contacts
screw-type terminals
screw-type terminals
$2 x\left(0.75 \ldots 2.5 \mathrm{~mm}^{2}\right), 2 \times 4 \mathrm{~mm}^{2}$
$2 x(0.75 \ldots 2.5 \mathrm{~mm} 2), 2 \mathrm{x} 4 \mathrm{~mm} 2$
$2 x\left(0.75 \ldots 2.5 \mathrm{~mm}^{2}\right)$
$2 x(18 \ldots 14), 2 \times 12$
$2 x\left(0.5 \ldots 1.5 \mathrm{~mm}^{2}\right), 2 x\left(0.75 \ldots 2.5 \mathrm{~mm}^{2}\right), 2 \times 4 \mathrm{~mm}^{2}$
$2 x\left(0.5 \ldots 1.5 \mathrm{~mm}^{2}\right), 2 x\left(0.75 \ldots 2.5 \mathrm{~mm}^{2}\right)$
$2 x(20 \ldots 16), 2 x(18 \ldots 14), 2 x 12$


## Certificates/approvals:

Verification of suitability CE / UL / CSA / CCC

Varification of suitability / ATEX
No


## UL/CSA ratings

yielded mechanical performance (hp)

- for single-phase squirrel cage motors
- at $110 / 120 \mathrm{~V} /$ rated value
- at 230 V / rated value
- for three-phase squirrel cage motors
- at $200 / 208 \mathrm{~V} /$ rated value
- at $220 / 230 \mathrm{~V} /$ rated value
- at 460/480 V / rated value
- at $575 / 600 \mathrm{~V} /$ rated value

| hp | 0.125 |
| :--- | :--- |
| hp | 0.333 |


| hp | 0.75 |
| :--- | :--- |

hp 1
hp 2
hp 3
Operating current (FLA) / for three-phase squirrel cage motors

- at $480 \mathrm{~V} /$ rated value
- at $600 \mathrm{~V} /$ rated value

Contact rating designation / for auxiliary contacts / according to UL

A 4
A 4
A600 / Q600

## Safety:

$B 10$ value / with high demand rate

- according to SN 31920 1,000,000

Failure rate (FIT value) / with low demand rate

- according to SN 31920

FIT 150

Proportion of dangerous failures

- with low demand rate / according to SN 31920
- with high demand rate / according to SN 31920
\% 40

T1 value / for proof test interval or service life

- according to IEC 61508
a $\quad 10$
Protection against electrical shock
finger-safe


## 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/3RA2110-1EA15-1AP0/all
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mIfb=3RA2110-1EA15-1AP0


last change:
Oct 24, 2011

