

Power contactor, AC-3 17 A, 7.5 kW / 400 V 110 V AC, 50 Hz / 120 V, 60 Hz 3-pole, Size S0 Screw terminal !!! Phased-out product !!! Successor is SIRIUS 3RT2 Preferred successor type is >>3RT2025-1AK60<<



Figure similar

| | |
|---|-----------------|
| Product brand name | SIRIUS |
| Product designation | power contactor |
| General technical data | |
| Size of contactor | S0 |
| Degree of pollution | 3 |
| Protection class IP | |
| • on the front | IP20 |
| • of the terminal | IP20 |
| Mechanical service life (switching cycles) | |
| • of contactor typical | 10 000 000 |
| • of the contactor with added electronics-compatible auxiliary switch block typical | 5 000 000 |
| • of the contactor with added auxiliary switch block typical | 10 000 000 |
| Reference code acc. to DIN EN 81346-2 | Q |
| Ambient conditions | |
| Installation altitude at height above sea level | |

| | |
|---|---|
| <ul style="list-style-type: none"> • maximum | 2 000 m |
| Ambient temperature <ul style="list-style-type: none"> • during operation | -25 ... +60 °C |
| Main circuit | |
| Number of poles for main current circuit | 3 |
| Number of NO contacts for main contacts | 3 |
| Number of NC contacts for main contacts | 0 |
| Operating current <ul style="list-style-type: none"> • at AC-1 at 400 V <ul style="list-style-type: none"> — at ambient temperature 40 °C rated value • at AC-1 <ul style="list-style-type: none"> — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 60 °C rated value • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value • at AC-4 at 400 V rated value | 40 A 40 A 35 A 17 A 15.5 A |
| Operating current <ul style="list-style-type: none"> • at 1 current path at DC-1 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value • with 2 current paths in series at DC-1 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value • with 3 current paths in series at DC-1 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value | 35 A 4.5 A 35 A 35 A 35 A 35 A |
| Operating current <ul style="list-style-type: none"> • at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value • with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value • with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value | 20 A 2.5 A 35 A 15 A 35 A 35 A |
| Operating power <ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — at 400 V rated value | 23 kW |

| | |
|---|--------------------------|
| <ul style="list-style-type: none"> • at AC-2 at 400 V rated value | 7.5 kW |
| <ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value — at 500 V rated value — at 690 V rated value | 7.5 kW 10 kW 11 kW |
| Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor | 0.9 W |

Control circuit/ Control

| | |
|--|----------------------------|
| Type of voltage of the control supply voltage | AC |
| Control supply voltage at AC | |
| <ul style="list-style-type: none"> • at 50 Hz rated value • at 60 Hz rated value | 110 V 120 V |
| Control supply voltage frequency | |
| <ul style="list-style-type: none"> • 1 rated value • 2 rated value | 50 Hz 60 Hz |
| Operating range factor control supply voltage rated value of magnet coil at AC | |
| <ul style="list-style-type: none"> • at 50 Hz • at 60 Hz | 0.8 ... 1.1 0.8 ... 1.1 |
| Apparent pick-up power of magnet coil at AC | 69 V·A |
| Inductive power factor with closing power of the coil | 0.76 |
| Apparent holding power of magnet coil at AC | 7.5 V·A |
| Inductive power factor with the holding power of the coil | 0.28 |

Auxiliary circuit

| | |
|--|-----------------------------|
| Number of NC contacts for auxiliary contacts | |
| <ul style="list-style-type: none"> • instantaneous contact | 0 |
| Number of NO contacts for auxiliary contacts | |
| <ul style="list-style-type: none"> • instantaneous contact | 0 |
| Operating current at AC-12 maximum | 10 A |
| Operating current at AC-15 | |
| <ul style="list-style-type: none"> • at 230 V rated value • at 400 V rated value | 6 A 3 A |
| Operating current at DC-12 | |
| <ul style="list-style-type: none"> • at 60 V rated value • at 110 V rated value • at 220 V rated value | 6 A 3 A 1 A |
| Operating current at DC-13 | |
| <ul style="list-style-type: none"> • at 24 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value | 10 A 2 A 1 A 0.3 A |

| | |
|---|---|
| Contact reliability of auxiliary contacts | 1 faulty switching per 100 million (17 V, 1 mA) |
| Short-circuit protection | |
| Design of the fuse link | |
| <ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required | <p>fuse gL/gG: 63 A</p> <p>fuse gL/gG: 25 A</p> <p>fuse gL/gG: 10 A</p> |
| Installation/ mounting/ dimensions | |
| Mounting type | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 |
| <ul style="list-style-type: none"> • Side-by-side mounting | Yes |
| Height | 85 mm |
| Width | 45 mm |
| Depth | 91 mm |
| Required spacing | |
| <ul style="list-style-type: none"> • for grounded parts <ul style="list-style-type: none"> — at the side | 6 mm |
| Connections/Terminals | |
| Type of electrical connection | |
| <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit | <p>screw-type terminals</p> <p>screw-type terminals</p> |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts | <p>2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), max. 2x 10 mm²</p> <p>2x (1 ... 2,5 mm²), 2x (2,5 ... 6 mm²), max. 2x 10 mm²</p> <p>2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²)</p> <p>2x (16 ... 12), 2x (14 ... 10), 1x 8</p> |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid — finely stranded with core end processing • at AWG conductors for auxiliary contacts | <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14), 1x 12</p> |
| Certificates/approvals | |

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



[Type Examination Certificate](#)



| | |
|-------------------|-------------------|
| Test Certificates | Marine / Shipping |
|-------------------|-------------------|

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



| | |
|-------------------|-------|
| Marine / Shipping | other |
|-------------------|-------|



[Miscellaneous](#)

[Confirmation](#)

Further information

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1025-1AK60>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1025-1AK60>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1025-1AK60>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

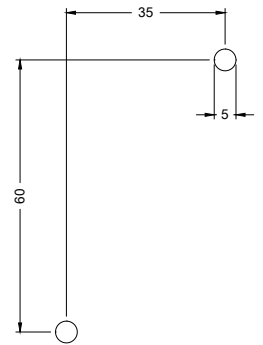
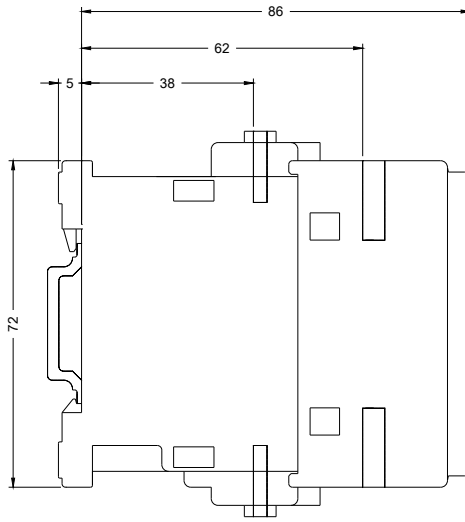
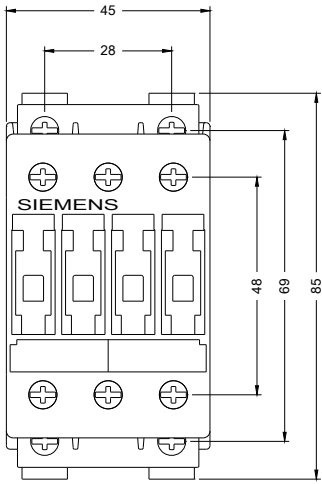
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1025-1AK60&lang=en

Characteristic: Tripping characteristics, I_t, Let-through current

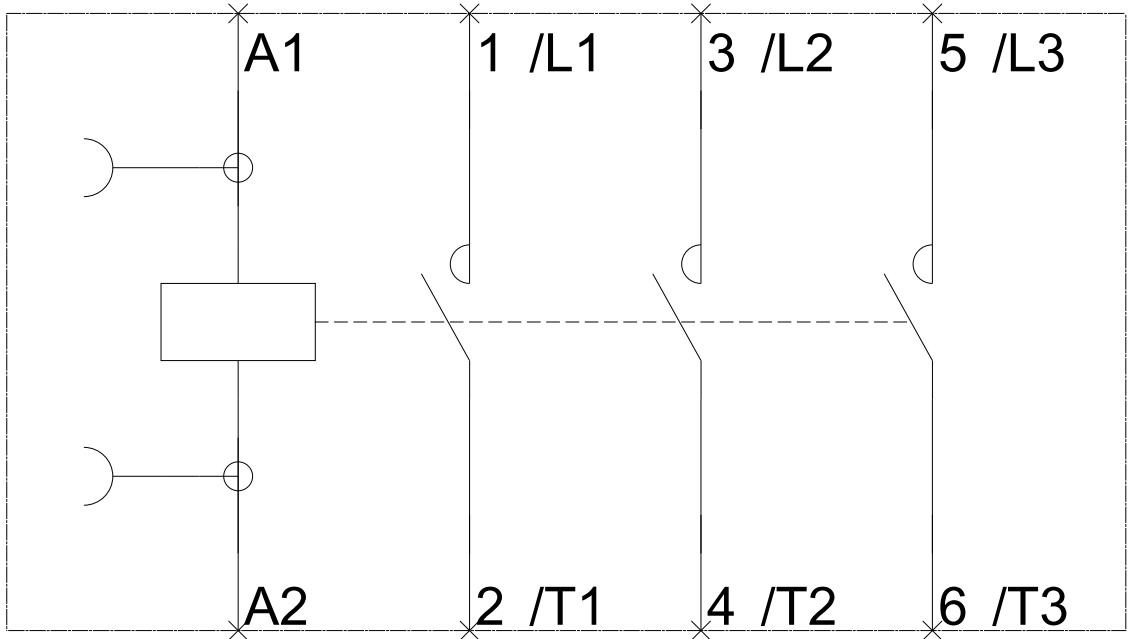
<https://support.industry.siemens.com/cs/ww/en/ps/3RT1025-1AK60/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1025-1AK60&objecttype=14&gridview=view1>



-Q



last modified:

01/21/2019