

FUSELESS MOTOR STARTER DIRECT START 600V AC SZ S0
 27-32A 24V DC SCREW CONNECTION FOR SCREW MOUNTING
 OR 35 MM RAIL-MOUNTING TYPE OF COORDINATION 2 IQ = 150
 KA ALSO FULFILLS TYPE OF COORDINATION 1 1NO+1NC (MSP)
 1NO+1NC (CONTACTOR)

| | |
|--|-------------------------------|
| Product brand name | SIRIUS |
| Product designation | non-fused motor starter 3RA2 |
| Design of the product | direct starter |
| Manufacturer's article number | |
| <ul style="list-style-type: none"> • of the supplied contactor | 3RT2027-1BB40 |
| <ul style="list-style-type: none"> • of the supplied circuit-breakers | 3RV2021-4EA15 |
| <ul style="list-style-type: none"> • of the supplied link module | 3RA2921-1BA00 |

General technical data

| | |
|--|------------|
| Size of the circuit-breaker | S0 |
| Size of load feeder | S0 |
| Product extension | |
| <ul style="list-style-type: none"> • Auxiliary switch | Yes |
| Insulation voltage | |
| <ul style="list-style-type: none"> • with degree of pollution 3 at AC rated value | 690 V |
| Degree of pollution | 3 |
| Surge voltage resistance rated value | 6 kV |
| Protection class IP | |
| <ul style="list-style-type: none"> • on the front | IP20 |
| <ul style="list-style-type: none"> • of the terminal | IP00 |
| Shock resistance | |
| <ul style="list-style-type: none"> • acc. to IEC 60068-2-27 | 6g / 11 ms |
| Mechanical service life (switching cycles) | |
| <ul style="list-style-type: none"> • of contactor typical | 10 000 000 |
| Type of assignment | 2 |

Main circuit

| | |
|---|-------------------|
| Number of poles for main current circuit | 3 |
| Design of the switching contact | electromechanical |
| Adjustable pick-up value current of the current-dependent overload release | 27 ... 32 A |
| Operating voltage | |
| <ul style="list-style-type: none"> • rated value | 690 V |
| <ul style="list-style-type: none"> • at AC-3 rated value maximum | 690 V |
| Operating frequency rated value | 50 ... 60 Hz |

| | |
|---|--|
| Operating current | |
| <ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value | 29 A |
| Operating power | |
| <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 | 15 000 W 18 500 W |
| Control circuit/ Control | |
| Control supply voltage at DC | |
| <ul style="list-style-type: none"> • rated value | 24 V |
| Holding power of magnet coil at DC | 5.9 W |
| Auxiliary circuit | |
| Number of NC contacts for auxiliary contacts | 2 |
| Number of NO contacts for auxiliary contacts | 2 |
| Protective and monitoring functions | |
| Trip class | CLASS 10 |
| Design of the overload release | thermal (bimetallic) |
| Response value current | |
| <ul style="list-style-type: none"> • of instantaneous short-circuit trip unit | 416 A |
| UL/CSA ratings | |
| Full-load current (FLA) for three-phase AC motor | |
| <ul style="list-style-type: none"> • at 480 V rated value • at 600 V rated value | 27 A 27 A |
| Yielded mechanical performance [hp] | |
| <ul style="list-style-type: none"> • for single-phase AC motor <ul style="list-style-type: none"> — at 230 V rated value • for three-phase AC motor <ul style="list-style-type: none"> — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value | 5 hp 10 hp 10 hp 20 hp 25 hp |
| Short-circuit protection | |
| Product function Short circuit protection | Yes |
| Design of the short-circuit trip | magnetic |
| Conditional short-circuit current (I_q) | |
| <ul style="list-style-type: none"> • at 400 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value | 153 000 A 100 000 A |
| Installation/ mounting/ dimensions | |
| Mounting position | vertical |

| | |
|--|---|
| Mounting type | Snap-mounted to DIN rail or screw-mounted with additional push-in lug |
| Height | 193.1 mm |
| Width | 45 mm |
| Depth | 107 mm |
| Required spacing | |
| <ul style="list-style-type: none"> • for grounded parts <ul style="list-style-type: none"> — forwards 10 mm — Backwards 0 mm — upwards 30 mm — at the side 9 mm — downwards 10 mm • for live parts <ul style="list-style-type: none"> — forwards 10 mm — Backwards 0 mm — upwards 30 mm — downwards 10 mm — at the side 9 mm | |

Connections/ Terminals

| | |
|---|----------------------|
| Type of electrical connection | |
| <ul style="list-style-type: none"> • for main current circuit | screw-type terminals |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — stranded 1 ... 10 mm², 2x (2.5 ... 6 mm²) • at AWG conductors for main contacts 2x (16 ... 12), 2x (14 ... 8) | |
| Connectable conductor cross-section for main contacts | |
| <ul style="list-style-type: none"> • finely stranded with core end processing 1 ... 6 mm² | |

Safety related data

| | |
|--|--|
| B10 value | |
| <ul style="list-style-type: none"> • with high demand rate acc. to SN 31920 1 000 000 | |
| Proportion of dangerous failures | |
| <ul style="list-style-type: none"> • with high demand rate acc. to SN 31920 73 % | |

Certificates/ approvals

| | | |
|--------------------------|--------------------------------|---------------------------|
| General Product Approval | For use in hazardous locations | Declaration of Conformity |
|--------------------------|--------------------------------|---------------------------|



[Miscellaneous](#)

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

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



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



[Confirmation](#)

[Vibration and Shock](#)

Further information

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2125-4EA27-0BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-4EA27-0BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4EA27-0BB4>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-4EA27-0BB4&lang=en

Characteristic: Tripping characteristics, I_t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4EA27-0BB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-4EA27-0BB4&objecttype=14&gridview=view1>

last modified:

03/30/2020