

STARTER,FVNR,S00,3PH,SSOLR,120VAC,NEMA 1



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|--|----------------------------------|
| product brand name | Siemens |
| product designation | Non-reversing motor starter |
| special product feature | No factory installed accessories |
| General technical data | |
| weight [lb] | 8 lb |
| Height x Width x Depth [in] | 11 × 7 × 5 in |
| touch protection against electrical shock | NA for enclosed products |
| installation altitude [ft] at height above sea level maximum | 6 560 ft |
| country of origin | Germany |
| Power and control electronics | |
| number of poles for main current circuit | 3 |
| type of voltage of the control supply voltage | AC |
| control supply voltage | |
| • at AC at 50 Hz rated value | 110 V |
| • at AC at 60 Hz rated value | 120 V |
| disconnecter functionality | No |
| yielded mechanical performance [hp] for 3-phase AC motor | |
| • at 200/208 V rated value | 1.5 hp |
| • at 220/230 V rated value | 2 hp |
| • at 460/480 V rated value | 3 hp |
| • at 575/600 V rated value | 5 hp |
| Contactors | |
| number of NO contacts for main contacts | 3 |
| operating voltage at AC-3 rated value maximum | 600 V |
| mechanical service life (operating cycles) of the main contacts typical | 30 000 000 |
| Auxiliary contact | |
| number of NC contacts for auxiliary contacts | 0 |
| number of NO contacts for auxiliary contacts | 1 |
| number of total auxiliary contacts maximum | 6 |
| contact rating of auxiliary contacts of contactor according to UL | 10A@600V(A600), 2.5A@600V(Q600) |
| Coil | |
| apparent pick-up power of magnet coil at AC | 26.4 VA |
| apparent holding power of magnet coil at AC | 4.4 VA |
| operating range factor control supply voltage rated value of magnet coil | 0.8 ... 1.1 |
| ON-delay time | 9 ... 35 ms |
| OFF-delay time | 3.5 ... 14 ms |
| Overload relay | |
| product function | |

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|--|------------------------------------|
| • overload protection | Yes |
| • phase failure detection | Yes |
| • asymmetry detection | Yes |
| • ground fault detection | Yes |
| • test function | Yes |
| • external reset | Yes |
| reset function | Manual, automatic and remote |
| trip class | CLASS 5 / 10 / 20 / 30 |
| adjustment range of thermal overload trip unit | 3 ... 12 |
| number of NC contacts of auxiliary contacts of overload relay | 1 |
| number of NO contacts of auxiliary contacts of overload relay | 1 |
| operational current of auxiliary contacts of overload relay | |
| • at AC at 600 V | 5 A |
| • at DC at 250 V | 1 A |
| contact rating of auxiliary contacts of overload relay according to UL | 5A@600VAC (B600), 1A@250VDC (R300) |
| insulation voltage (Ui) | |
| • with single-phase operation at AC rated value | 600 V |
| • with multi-phase operation at AC rated value | 300 V |

Enclosure

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|---|------------------------------------|
| degree of protection NEMA rating of the enclosure | NEMA 1 standard size enclosure |
| design of the housing | indoors, usable on a general basis |

Mounting/wiring

| | |
|---|---------------------------------------|
| mounting position | Vertical |
| fastening method | Surface mounting and installation |
| type of electrical connection for supply voltage line-side | Screw-type terminals |
| tightening torque [lbf-in] for supply | 7 ... 10 lbf-in |
| type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded | 2x (20 ... 16), 2x (18 ... 14), 2x 12 |
| temperature of the conductor for supply maximum permissible | 60 °C |
| material of the conductor for supply | CU |
| type of electrical connection for load-side outgoing feeder | Screw-type terminals |
| tightening torque [lbf-in] for load-side outgoing feeder | 7 ... 10 lbf-in |
| type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded | 2x (20 ... 16), 2x (18 ... 14), 2x 12 |
| temperature of the conductor for load-side outgoing feeder maximum permissible | 60 °C |
| material of the conductor for load-side outgoing feeder | CU |
| type of electrical connection of magnet coil | Screw-type terminals |
| tightening torque [lbf-in] at magnet coil | 7 ... 10 lbf-in |
| type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded | 2x (20 ... 16), 2x (18 ... 14), 2x 12 |
| temperature of the conductor at magnet coil maximum permissible | 75 °C |
| material of the conductor at magnet coil | CU |
| type of electrical connection for auxiliary contacts | Screw-type terminals |
| tightening torque [lbf-in] at contactor for auxiliary contacts | 7 ... 10 lbf-in |
| type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded | 2x (20 ... 16), 2x (18 ... 14), 2x 12 |
| temperature of the conductor at contactor for auxiliary contacts maximum permissible | 75 °C |
| material of the conductor at contactor for auxiliary contacts | CU |
| tightening torque [lbf-in] at overload relay for auxiliary contacts | 7 ... 10 lbf-in |
| type of connectable conductor cross-sections at overload relay for AWG cables for auxiliary contacts single or multi-stranded | 1x (20 ... 14), 2x (20 ... 14) |
| temperature of the conductor at overload relay for auxiliary contacts maximum permissible | 75 °C |
| material of the conductor at overload relay for auxiliary contacts | CU |

Short-circuit current rating

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|---|----------------------------------|
| design of the fuse link for short-circuit protection of the main circuit required | Class J |
| design of the short-circuit trip | Thermal magnetic circuit breaker |
| maximum short-circuit current breaking capacity (Icu) | |
| • at 240 V | 5 kA |

- at 480 V
- at 600 V

5 kA
5 kA
UL 60947-4-1

certificate of suitability

Approvals Certificates

| | | | |
|--------------------------|-------------------|-------|-------------|
| General Product Approval | Test Certificates | other | Environment |
|--------------------------|-------------------|-------|-------------|



[Confirmation](#)

[Environmental Confirmations](#)

Further information

Industrial Controls - Product Overview (Catalogs, Brochures,...)

www.usa.siemens.com/ccatalog

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=3RE4121-5AA35-4SY0>

Search Datasheet in Service&Support (Manuals)

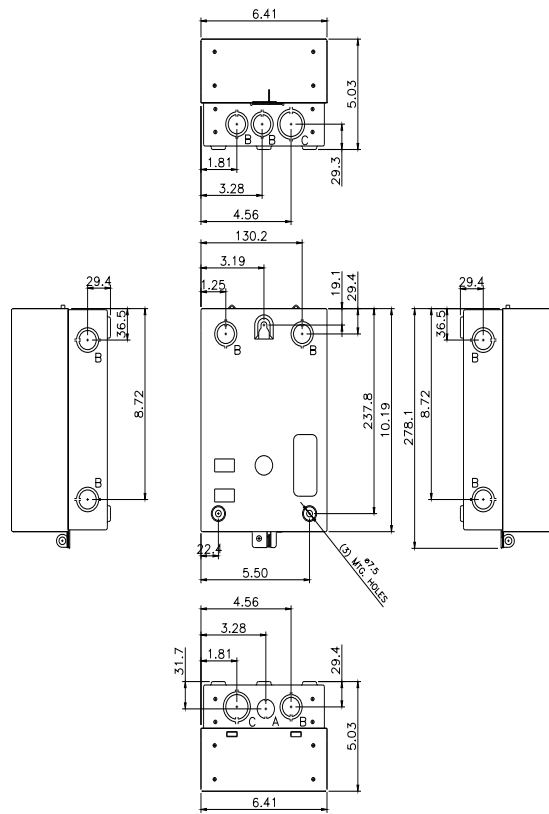
<https://support.industry.siemens.com/cs/US/en/ps/3RE4121-5AA35-4SY0/man>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RE4121-5AA35-4SY0&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/3RE4121-5AA35-4SY0/certificate>



| LETTER | KNOCKOUT & CONDUIT SIZE |
|--------|-------------------------------------|
| A | ø22.2 FOR 12.7 CONDUIT |
| B | ø22.2 X ø28.6 FOR 12.7 & 19 CONDUIT |
| C | ø28.6 X ø34.9 FOR 19 & 25.4 CONDUIT |

last modified:

1/25/2022