



STARTER,FVNR,S0,3PH,THOLR,120V,N3R/4/12

|  |                                  |
|--|----------------------------------|
| product brand name   | Siemens                          |
| product designation  | Non-reversing motor starter      |
| special product feature  | No factory installed accessories |
| <b>General technical data</b>  |                                  |
| weight [lb]  | 15 lb                            |
| Height x Width x Depth [in]  | 12 × 10 × 6 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                          |
| <b>Power and control electronics</b>                                     |                                  |
| 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   | 2 hp                             |
| • at 220/230 V rated value   | 3 hp                             |
| • at 460/480 V rated value   | 5 hp                             |
| • at 575/600 V rated value   | 7.5 hp                           |
| <b>Contactors</b>  |                                  |
| number of NO contacts for main contacts                                  | 3                                |
| operating voltage for main current circuit at AC at 60 Hz maximum        | 600 V                            |
| operating voltage at AC-3 rated value maximum                            | 600 V                            |
| mechanical service life (operating cycles) of the main contacts typical  | 10 000 000                       |
| <b>Auxiliary contact</b>   |                                  |
| number of NC contacts for auxiliary contacts                             | 1                                |
| number of NO contacts for auxiliary contacts                             | 1                                |
| number of total auxiliary contacts maximum                               | 8                                |
| contact rating of auxiliary contacts of contactor according to UL        | 10A@600V(A600), 2.5A@600V(Q600)  |
| <b>Coil</b>  |                                  |
| apparent pick-up power of magnet coil at AC                              | 67 VA                            |
| apparent holding power of magnet coil at AC                              | 6.5 VA                           |
| operating range factor control supply voltage rated value of magnet coil | 0.8 ... 1.1                      |
| ON-delay time  | 9 ... 38 ms                      |
| OFF-delay time   | 4 ... 16 ms                      |
| <b>Overload relay</b>  |                                  |

|   |                          |  |                    |
|---|--------------------------|--|--------------------|
| product function  |                          |  |                    |
| • overload protection   |                          | Yes  |                    |
| • test function   |                          | Yes  |                    |
| • external reset  |                          | Yes  |                    |
| reset function  |                          | Manual, automatic and remote (with optional accessory) |                    |
| adjustment range of thermal overload trip unit  |                          | 28 ... 40  |                    |
| number of NC contacts of auxiliary contacts of overload relay   |                          | 1  |                    |
| number of NO contacts of auxiliary contacts of overload relay   |                          | 1  |                    |
| contact rating of auxiliary contacts of overload relay according to UL  |                          | 5A@600VAC (B600), 1A@250VDC (R300)                     |                    |
| <b>Enclosure</b>  |                          |  |                    |
| degree of protection NEMA rating of the enclosure   |                          | NEMA 3/3R/4/12 enclosure                               |                    |
| design of the housing   |                          | Dust- & watertight for outdoor use                     |                    |
| <b>Mounting/wiring</b>  |                          |  |                    |
| 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   |                          | 18 ... 21 lbf-in                                       |                    |
| type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded                             |                          | 2x (16 ... 12), 2x (14 ... 8)                          |                    |
| 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  |                          | 18 ... 21 lbf-in                                       |                    |
| type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded            |                          | 2x (16 ... 12), 2x (14 ... 8)                          |                    |
| 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 (16 ... 12), 2x (14 ... 8)                          |                    |
| 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)                         |                    |
| temperature of the conductor at contactor for auxiliary contacts maximum permissible  |                          | 75 °C  |                    |
| material of the conductor at contactor for auxiliary contacts   |                          | CU   |                    |
| type of electrical connection at overload relay for auxiliary contacts  |                          | Screw-type terminals                                   |                    |
| 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 |                          | 2x (20 ... 16), 2x (18 ... 14)                         |                    |
| temperature of the conductor at overload relay for auxiliary contacts maximum permissible                                     |                          | 70 °C  |                    |
| material of the conductor at overload relay for auxiliary contacts  |                          | CU   |                    |
| <b>Short-circuit current rating</b>   |                          |  |                    |
| 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  |                          | 5 kA   |                    |
| • at 600 V  |                          | 5 kA   |                    |
| certificate of suitability  |                          | UL 60947-4-1   |                    |
| <b>Approvals Certificates</b>   |                          |  |                    |
| <b>General Product Approval</b>   | <b>Test Certificates</b> | <b>other</b>   | <b>Environment</b> |



[Confirmation](#)

[Environmental Confirmations](#)

Further information

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

[www.usa.siemens.com/iccatalog](http://www.usa.siemens.com/iccatalog)

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=3RE4122-3CA31-4FY0>

Search Datasheet in Service&Support (Manuals)

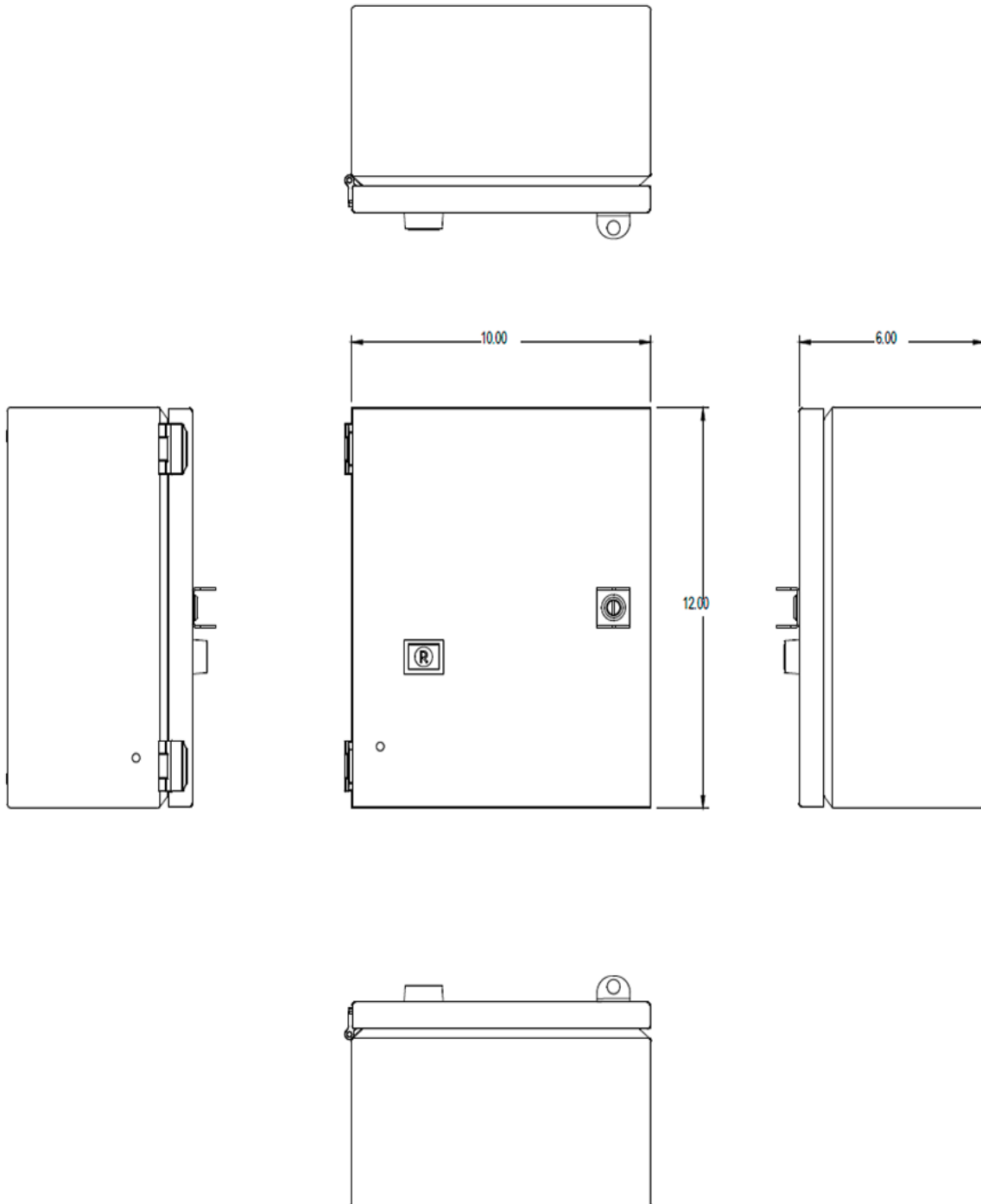
<https://support.industry.siemens.com/cs/US/en/ps/3RE4122-3CA31-4FY0/man>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RE4122-3CA31-4FY0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RE4122-3CA31-4FY0&lang=en)

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/3RE4122-3CA31-4FY0/certificate>



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last modified:

4/15/2021 