



STARTER, 3RE41227CA314BY0, WITH MODS

|                                                                          |                                                              |
|--------------------------------------------------------------------------|--------------------------------------------------------------|
| product brand name                                                       | Siemens                                                      |
| product designation                                                      | Non-reversing motor starter                                  |
| special product feature                                                  | Hand-Off-Auto Selector Switch, CPT Std Capacity 480/240:120V |
| <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                                               | 10 hp                                                        |
| • at 220/230 V rated value                                               | 10 hp                                                        |
| • at 460/480 V rated value                                               | 20 hp                                                        |
| • at 575/600 V rated value                                               | 25 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  | 30 000 000                                                   |
| <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                              | 79 VA                                                        |
| apparent holding power of magnet coil at AC                              | 8.5 VA                                                       |
| operating range factor control supply voltage rated value of magnet coil | 0.8 ... 1.1                                                  |
| ON-delay time                                                            | 8 ... 40 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                                                                                |                          |              |                       | 14 ... 20                                              |
| 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 (I <sub>cu</sub> )                                                            |                          |              |                       |                                                        |
| • 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>Dangerous Good</b> | <b>Environment</b>                                     |



[Confirmation](#)

[Transport Information](#)

[Environmental Con-  
firmations](#)

#### 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=3RE4122-7CA31-4BH3>

Search Datasheet in Service&Support (Manuals)

<https://support.industry.siemens.com/cs/US/en/ps/3RE4122-7CA31-4BH3/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=3RE4122-7CA31-4BH3&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RE4122-7CA31-4BH3&lang=en)

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/3RE4122-7CA31-4BH3/certificate>



---

last modified:

4/15/2021 