## **SIEMENS**

## **Data sheet**

## 3RE4122-5CA31-4AH3

|                                                                          | STARTER, 3RE41225CA314AY0, 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 |  |  |
| General technical data                                                   |                                                              |  |  |
| weight [lb]                                                              | 15 lb(av)                                                    |  |  |
| 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                                                      |  |  |
| 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                                                        |  |  |
| disconnector functionality                                               | No                                                           |  |  |
| yielded mechanical performance [hp] for 3-phase AC motor                 |                                                              |  |  |
| • at 200/208 V rated value                                               | 5 hp                                                         |  |  |
| • at 220/230 V rated value                                               | 5 hp                                                         |  |  |
| • at 460/480 V rated value                                               | 10 hp                                                        |  |  |
| • at 575/600 V rated value                                               | 15 hp                                                        |  |  |
| Contactor                                                                | TO TIP                                                       |  |  |
| number of NO contacts for main contacts                                  | 3                                                            |  |  |
| operating voltage for main current circuit at AC at 60 Hz                | 600 V                                                        |  |  |
| maximum                                                                  |                                                              |  |  |
| 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                             | 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)                              |  |  |
| Coil                                                                     |                                                              |  |  |
| 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                                                      |  |  |
| Overload relay                                                           |                                                              |  |  |
| 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                           | 11 16                                                        |  |  |
| 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)                           |  |  |
| Enclosure                                                                |                                                              |  |  |
|                                                                          |                                                              |  |  |

| degree of protection NE                                                                                                       | MA rating of the enclosur                                          | е               | NEMA 3/3R/4/12 enclosure          |                            |             |  |
|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-----------------|-----------------------------------|----------------------------|-------------|--|
| design of the housing                                                                                                         |                                                                    |                 | Dust-                             | & watertight for outdoor u | ise         |  |
| Mounting/wiring                                                                                                               |                                                                    |                 |                                   |                            |             |  |
| mounting position                                                                                                             | ,                                                                  |                 | vertic                            | al                         |             |  |
| fastening method                                                                                                              |                                                                    |                 | Surface mounting and installation |                            |             |  |
| type of electrical connec                                                                                                     | ction for supply voltage lin                                       | e-side          | Screw-type terminals              |                            |             |  |
| tightening torque [lbf·in]                                                                                                    | for supply                                                         |                 | 18 21 lbf-in                      |                            |             |  |
| type of connectable con-<br>AWG cables single or m                                                                            | ductor cross-sections at I                                         | ine-side for    | 2x (16 12), 2x (14 8)             |                            |             |  |
| temperature of the cond                                                                                                       | uctor for supply maximun                                           | n permissible   | 60 °C                             |                            |             |  |
| material of the conducto                                                                                                      | r for supply                                                       |                 | CU                                |                            |             |  |
| type of electrical connec                                                                                                     | ction for load-side outgoin                                        | g feeder        | Screw-type terminals              |                            |             |  |
| tightening torque [lbf·in]                                                                                                    | for load-side outgoing fee                                         | eder            | 18 21 lbf-in                      |                            |             |  |
|                                                                                                                               | ductor cross-sections for<br>eder single or multi-stran            |                 | 2x (16 12), 2x (14 8)             |                            |             |  |
| temperature of the cond maximum permissible                                                                                   | uctor for load-side outgoi                                         | ng feeder       | 60 °C                             |                            |             |  |
| material of the conducto                                                                                                      | r for load-side outgoing fe                                        | eeder           | CU                                |                            |             |  |
| type of electrical connec                                                                                                     | ction of magnet coil                                               |                 | Screw-type terminals              |                            |             |  |
| tightening torque [lbf·in]                                                                                                    | at magnet coil                                                     |                 | 7 10 lbf·in                       |                            |             |  |
| type of connectable con-<br>AWG cables single or m                                                                            | ductor cross-sections of roulti-stranded                           | nagnet coil for | 2x (16 12), 2x (14 8)             |                            |             |  |
| temperature of the cond permissible                                                                                           | uctor at magnet coil maxi                                          | mum             | 75 °C                             |                            |             |  |
| material of the conducto                                                                                                      | r at magnet coil                                                   |                 | CU                                |                            |             |  |
| type of electrical connec                                                                                                     | ction for auxiliary contacts                                       |                 | Screw-type terminals              |                            |             |  |
| tightening torque [lbf·in]                                                                                                    | at contactor for auxiliary                                         | contacts        | 7 10 lbf-in                       |                            |             |  |
|                                                                                                                               | ductor cross-sections at o                                         |                 | 2x (20 16), 2x (18 14)            |                            |             |  |
| temperature of the cond maximum permissible                                                                                   | uctor at contactor for aux                                         | iliary contacts | 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 cond contacts maximum perm                                                                                 | uctor at overload relay fonissible                                 | r auxiliary     | 70 °C                             |                            |             |  |
| material of the conducto                                                                                                      | material of the conductor at overload relay for auxiliary contacts |                 |                                   | CU                         |             |  |
| Short-circuit current rati                                                                                                    | ing                                                                |                 |                                   |                            |             |  |
| design of the fuse link fo                                                                                                    | or short-circuit protection                                        | of the main     | Class J                           |                            |             |  |
| design of the short-circu                                                                                                     | it trip                                                            |                 | Thermal magnetic circuit breaker  |                            |             |  |
| maximum short-circuit c                                                                                                       | maximum short-circuit current breaking capacity (lcu)              |                 |                                   |                            |             |  |
| • at 240 V                                                                                                                    |                                                                    | 5 kA            | 5 kA                              |                            |             |  |
| • at 480 V                                                                                                                    |                                                                    |                 | 5 kA                              |                            |             |  |
| ● at 600 V                                                                                                                    |                                                                    |                 | 5 kA                              |                            |             |  |
| certificate of suitability UL 60947-4-1                                                                                       |                                                                    |                 |                                   |                            |             |  |
| Approvals Certificates                                                                                                        |                                                                    |                 |                                   |                            |             |  |
| General Product Approval                                                                                                      | Test Certificates                                                  | other           |                                   | Dangerous goods            | Environment |  |





Confirmation

**Transport Information** 

**Environmental Confirmations** 

## Further information

Industrial Controls - Product Overview (Catalogs, Brochures,...) www.usa.siemens.com/iccatalog

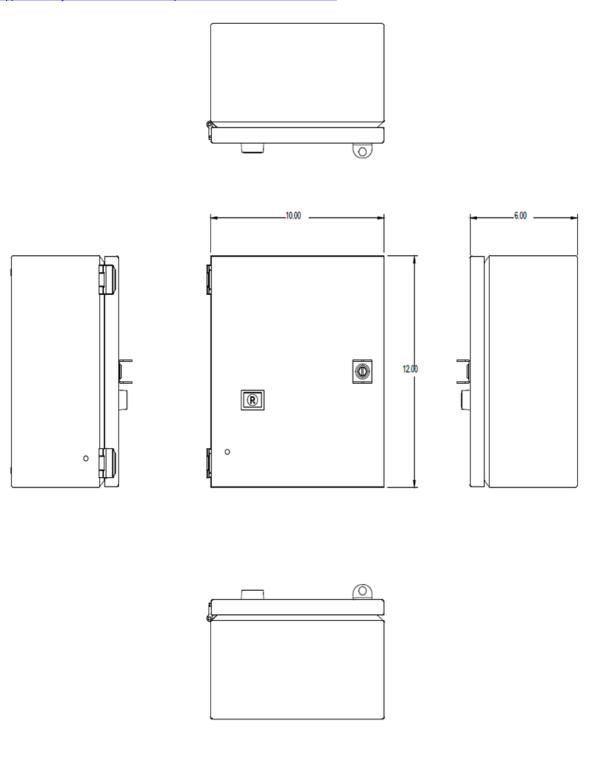
Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=3RE4122-5CA31-4AH3

Search Datasheet in Service&Support (Manuals) https://support.industry.siemens.com/cs/US/en/ps/3RE4122-5CA31-4AH3/man

Certificates/approvals

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