# SIEMENS

#### Data sheet

### 3RE4121-5BA31-1EH3



STARTER, 3RE41215BA311EY0, 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]   | 12 lb  |  |
| Height x Width x Depth [in]   | 14 × 8 × 7 in  |  |
| touch protection against electrical shock                               | NA for enclosed products                                     |  |
| installation altitude [ft] at height above sea level maximum            | 6 560 ft   |  |
| ambient temperature [°F] during storage                                 | -22 +149 °F  |  |
| ambient temperature [°F] during operation                               | -4 +104 °F   |  |
| ambient temperature during storage                                      | -30 +65 °C   |  |
| ambient temperature during operation                                    | -20 +40 °C   |  |
| 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  |  |  |
| <ul> <li>at AC at 50 Hz rated value</li> </ul>                          | 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  | 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   |  |
| Contactor   |  |  |
| number of NO contacts for main contacts                                 | 3  |  |
| operating voltage for main current circuit at AC at 60 Hz<br>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   |  |
| 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            | 0.8 1.1  |  |

| magnet coil  |  |
|--|--|
| ON-delay time  | 9 35 ms  |
| OFF-delay time   | 3.5 14 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   | 2.8 4  |
| 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  | 5A@600VAC (B600), 1A@250VDC (R300)                     |
| UL   |  |
| Enclosure  |  |
| degree of protection NEMA rating of the enclosure  | NEMA 1 large 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<br>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<br>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<br>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   |
| type of electrical connection at overload relay for auxiliary<br>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<br>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   |
| Short-circuit current rating   |  |
| design of the fuse link for short-circuit protection of the main<br>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   |

#### Further information

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

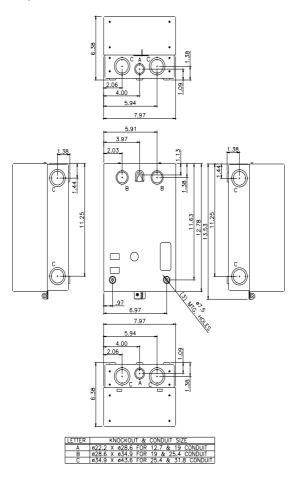
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Industry Mall (Online ordering system) om/mall/en/us/Catalog/product?mlfb=3RE4121-5BA31-1EH3 https://r all.industry.siemens.c

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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RE4121-5BA31-1EH3&lang=en Certificates/approvals

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