

Non-reversing motor starter Size 3 Three phase full voltage Solid-state overload relay OLRelay amp range 25-100A 110VAC 50HZ / 120VAC 60HZ coil Combination type Water/dust tight weather proof



Figure similar

| General technical data                                                     |                            |
|----------------------------------------------------------------------------|----------------------------|
| Weight [lb]                                                                | 41 lb                      |
| Height x Width x Depth [in]                                                | 24 × 24 × 7 in             |
| Protection against electrical shock                                        | (NA for enclosed products) |
| Installation altitude [ft] at height above sea level maximum               | 6560 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                                                          | USA                        |
| Horsepower ratings                                                         |                            |
| Yielded mechanical performance [hp] for three-phase AC motor               |                            |
| <ul style="list-style-type: none"> <li>at 200/208 V rated value</li> </ul> | 25 hp                      |
| <ul style="list-style-type: none"> <li>at 220/230 V rated value</li> </ul> | 30 hp                      |
| <ul style="list-style-type: none"> <li>at 460/480 V rated value</li> </ul> | 50 hp                      |

- at 575/600 V rated value

50 hp

### Contactors

|                                                                         |         |
|-------------------------------------------------------------------------|---------|
| Number of NO contacts for main contacts                                 | 3       |
| Operating voltage for main current circuit at AC at 60 Hz maximum       | 600 V   |
| Operating current at AC at 600 V rated value                            | 90 A    |
| Mechanical service life (switching cycles) of the main contacts typical | 5000000 |

### Auxiliary contact

|                                                                   |                                     |
|-------------------------------------------------------------------|-------------------------------------|
| Number of NC contacts at contactor for auxiliary contacts         | 0                                   |
| Number of NO contacts at contactor for auxiliary contacts         | 1                                   |
| Number of total auxiliary contacts maximum                        | 7                                   |
| Contact rating of auxiliary contacts of contactor according to UL | 10A@600VAC (A600), 5A@600VDC (P600) |

### Coil

|                                                                                |               |
|--------------------------------------------------------------------------------|---------------|
| Type of voltage of the control supply voltage                                  | AC            |
| Control supply voltage                                                         |               |
| <ul style="list-style-type: none"> <li>• at DC rated value</li> </ul>          | 0 ... 0 V     |
| <ul style="list-style-type: none"> <li>• at AC at 60 Hz rated value</li> </ul> | 120 ... 120 V |
| <ul style="list-style-type: none"> <li>• at AC at 50 Hz rated value</li> </ul> | 110 ... 110 V |
| Holding power at AC minimum                                                    | 14 W          |
| Apparent pick-up power of magnet coil at AC                                    | 310 V·A       |
| Apparent holding power of magnet coil at AC                                    | 26 V·A        |
| Operating range factor control supply voltage rated value of magnet coil       | 0.85 ... 1.1  |
| Percental drop-out voltage of magnet coil related to the input voltage         | 50 %          |
| Switch-on delay time                                                           | 26 ... 41 ms  |
| Off-delay time                                                                 | 14 ... 19 ms  |

### Overload relay

|                                                                                                                                                                                                                            |                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| Product function                                                                                                                                                                                                           |                                                                   |
| <ul style="list-style-type: none"> <li>• Overload protection</li> <li>• Phase failure detection</li> <li>• Phase unbalance</li> <li>• Ground fault detection</li> <li>• Test function</li> <li>• External reset</li> </ul> | <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> |
| Reset function                                                                                                                                                                                                             | Manual, automatic and remote                                      |
| Trip class                                                                                                                                                                                                                 | Class 5 / 10 / 20 (factory set) / 30                              |

|                                                                            |                                    |
|----------------------------------------------------------------------------|------------------------------------|
| Adjustable pick-up value current of the current-dependent overload release | 25 ... 100 A                       |
| Trip time at phase-loss maximum                                            | 3 s                                |
| Relative repeat accuracy                                                   | 1 %                                |
| Product feature Protective coating on printed-circuit board                | Yes                                |
| Number of NC contacts of auxiliary contacts of overload relay              | 1                                  |
| Number of NO contacts of auxiliary contacts of overload relay              | 1                                  |
| Operating 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                                                         |                                    |
| • with single-phase operation at AC rated value                            | 600 V                              |
| • with multi-phase operation at AC rated value                             | 300 V                              |

### Enclosure

|                                                   |                                              |
|---------------------------------------------------|----------------------------------------------|
| Degree of protection NEMA rating of the enclosure | NEMA 4X fiberglass enclosure                 |
| Design of the housing                             | Dust-tight, watertight & corrosion resistant |

### Mounting/wiring

|                                                                                                                       |                                   |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Mounting position                                                                                                     | Vertical                          |
| (mounting type)                                                                                                       | Surface mounting and installation |
| Type of electrical connection for supply voltage line-side                                                            | Box lug                           |
| Tightening torque [lbf·in] for supply                                                                                 | 120 ... 120 lbf·in                |
| Type of connectable conductor cross-sections at line-side at AWG conductors single or multi-stranded                  | 1x(14 - 2/0 AWG)                  |
| Temperature of the conductor for supply maximum permissible                                                           | 75 °C                             |
| Material of the conductor for supply                                                                                  | AL or CU                          |
| Type of electrical connection for load-side outgoing feeder                                                           | Box lug                           |
| Tightening torque [lbf·in] for load-side outgoing feeder                                                              | 120 ... 120 lbf·in                |
| Type of connectable conductor cross-sections at AWG conductors for load-side outgoing feeder single or multi-stranded | 1x(14 - 2/0 AWG)                  |
| Temperature of the conductor for load-side outgoing feeder maximum permissible                                        | 75 °C                             |
| Material of the conductor for load-side outgoing feeder                                                               | AL or CU                          |
| Type of electrical connection of magnet coil                                                                          | screw-type terminals              |

|                                                                                                                                  |                                                    |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Tightening torque [lbf-in] at magnet coil                                                                                        | 5 ... 12 lbf-in                                    |
| Type of connectable conductor cross-sections of magnet coil at AWG conductors single or multi-stranded                           | 2 x (16 - 12 AWG)                                  |
| 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                                                                   | 10 ... 15 lbf-in                                   |
| Type of connectable conductor cross-sections at contactor at AWG conductors for auxiliary contacts single or multi-stranded      | 1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (18 - 16 AWG) |
| 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 at AWG conductors for auxiliary contacts single or multi-stranded | 2 x (20 - 14 AWG)                                  |
| 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

|                                                                                                      |                                                     |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| Design of the fuse link for short-circuit protection of the main circuit required                    | 10kA@600V (Class H or K); 100kA@600V (Class R or J) |
| Design of the short-circuit trip                                                                     | Thermal magnetic circuit breaker                    |
| Maximum short-circuit current breaking capacity (I <sub>cu</sub> )                                   |                                                     |
| <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 V</li> </ul> | 14 kA<br>10 kA<br>10 kA                             |

### 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=US2:14HUG32FF>

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

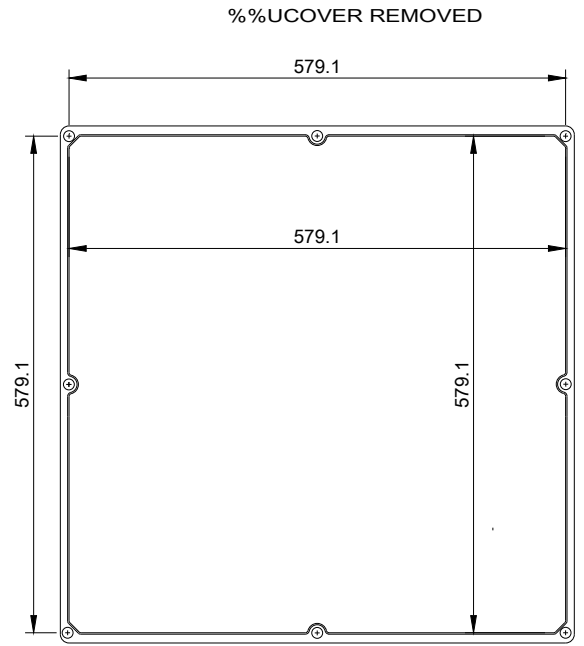
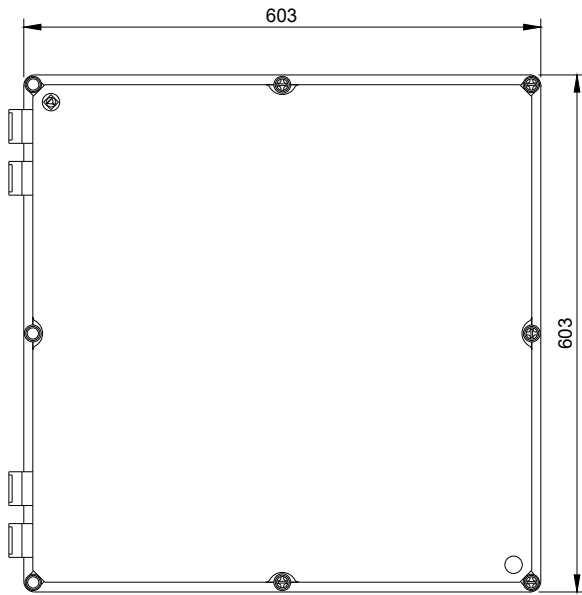
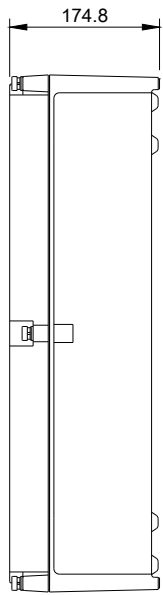
<https://support.industry.siemens.com/cs/US/en/ps/US2:14HUG32FF>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:14HUG32FF&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14HUG32FF&lang=en)

**Certificates/approvals**

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