

Non-reversing motor starter, Size 3, Three phase full voltage, Solid-state overload relay, OLRelay amp range 25-100A, 208VAC 60HZ coil, Combination type, 100A non-fusible disconnect, Enclosure NEMA type 1, Indoor general purpose use, Extra-wide enclosure



Figure similar

| General technical data   |   |
|--|---|
| Height x Width x Depth [in]  | 36 × 24 × 8 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                                      |
| 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> <li>• at 220/230 V rated value</li> <li>• at 460/480 V rated value</li> <li>• at 575/600 V rated value</li> </ul> | <p>20 hp</p> <p>25 hp</p> <p>50 hp</p> <p>50 hp</p> |
| Contactor  |   |

|   |         |
|---|---------|
| Number of NO contacts for main contacts                                 | 3       |
| 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   |               |
| • at DC rated value  | 0 ... 0 V     |
| • at AC at 60 Hz rated value   | 208 ... 208 V |
| • at AC at 50 Hz rated value   | 0 ... 0 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   |                                      |
| • Overload protection  | Yes                                  |
| • Phase failure detection  | Yes                                  |
| • Phase unbalance  | Yes                                  |
| • Ground fault detection   | Yes                                  |
| • Test function  | Yes                                  |
| • External reset   | Yes                                  |
| 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                         |
| Make time with automatic start after power failure 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   | 5 A<br>1 A                         |
| <ul style="list-style-type: none"> <li>• at AC at 600 V</li> <li>• at DC at 250 V</li> </ul>  | 5 A<br>1 A                         |
| Contact rating of auxiliary contacts of overload relay according to UL  | 5A@600VAC (B600), 1A@250VDC (R300) |
| Insulation voltage  | 600 V<br>300 V                     |
| <ul style="list-style-type: none"> <li>• with single-phase operation at AC rated value</li> <li>• with multi-phase operation at AC rated value</li> </ul> | 600 V<br>300 V                     |

### Disconnect Switch

|  |             |
|--|-------------|
| Rated response values of switch disconnecter | 100A / 600V |
| Design of fuse holder                        | non-fusible |
| Operating class of the fuse link             | non-fusible |

### 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                |
| 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                | 2x (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      | 1x (12 AWG), 2x (16 ... 14 AWG), 2x (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 | 2x (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) |
|---|---|

#### 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=US2:17HUG82BD>

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

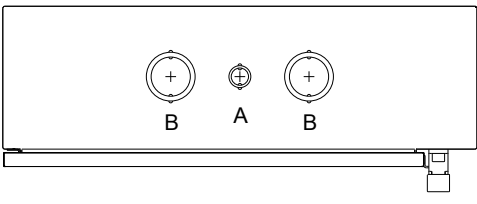
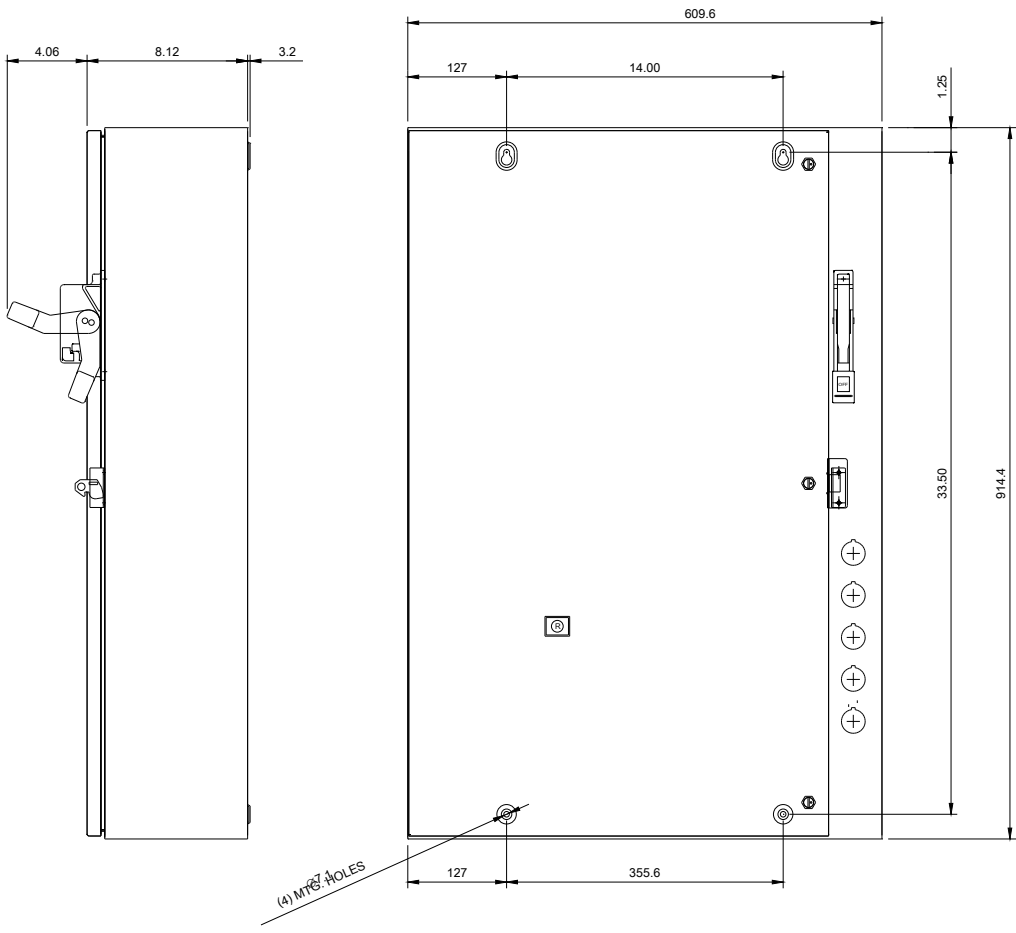
<https://support.industry.siemens.com/cs/US/en/ps/US2:17HUG82BD>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:17HUG82BD&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:17HUG82BD&lang=en)

##### Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:17HUG82BD/certificate>



LCONDUITS TYP. TOP & BOTTOM

| LETTER | CONDUIT SIZE              |
|--------|---------------------------|
| A      | %%C12.7 & %%C19 CONDUIT   |
| B      | %%C31.8 & %%C38.1 CONDUIT |



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