



Figure similar

Non-reversing motor starter, Size 2 1/2, Three phase full voltage, Solid-state overload relay, OLR amp range 25-100A, Combination type, 100A non-fusible disconnect, Enclosure NEMA type 1, Indoor general purpose use, Extra-wide enclosure

|   |  |
|---|--|
| product brand name  | Class 17 & 25  |
| design of the product   | Full-voltage non-reversing motor starter with non-fusible disconnect |
| special product feature   | ESP200 overload relay; Half-size controller                          |
| <b>General technical data</b>   |  |
| Height x Width x Depth [in]   | 36 × 24 × 8 in   |
| touch 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  |
| • during operation  | -4 ... +104 °F   |
| ambient temperature   |  |
| • during storage  | -30 ... +65 °C   |
| • during operation  | -20 ... +40 °C   |
| <b>Horsepower ratings</b>   |  |
| yielded mechanical performance [hp] for 3-phase AC motor                |  |
| • at 200/208 V rated value  | 15 hp  |
| • at 220/230 V rated value  | 20 hp  |
| • at 460/480 V rated value  | 30 hp  |
| • at 575/600 V rated value  | 30 hp  |
| <b>Contactors</b>   |  |
| size of contactor   | Controller half size 2 1/2   |
| number of NO contacts for main contacts                                 | 3  |
| operational current at AC at 600 V rated value                          | 60 A   |
| mechanical service life (switching cycles) of the main contacts typical | 10000000   |
| <b>Auxiliary contact</b>  |  |
| 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)                                  |
| <b>Coil</b>   |  |
| type of voltage of the control supply voltage                           | AC   |
| control supply voltage  |  |
| • at AC at 50 Hz rated value  | 380 ... 440 V  |
| • at AC at 60 Hz rated value  | 440 ... 480 V  |
| holding power at AC minimum   | 8.6 W  |
| apparent pick-up power of magnet coil at AC                             | 218 VA   |

|   |                                      |
|---|--------------------------------------|
| apparent holding power of magnet coil at AC   | 25 VA                                |
| 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 %                                 |
| ON-delay time   | 19 ... 29 ms                         |
| OFF-delay time  | 10 ... 24 ms                         |
| <b>Overload relay</b>   |                                      |
| product function  |                                      |
| • overload protection   | Yes                                  |
| • phase failure detection   | Yes                                  |
| • asymmetry detection   | 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 current response 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                                    |
| operational 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 (Ui)   |                                      |
| • with single-phase operation at AC rated value   | 600 V                                |
| • with multi-phase operation at AC rated value  | 300 V                                |
| <b>Disconnect Switch</b>  |                                      |
| response value of switch disconnecter   | 100A / 600V                          |
| design of fuse holder   | non-fusible                          |
| operating class of the fuse link  | non-fusible                          |
| <b>Enclosure</b>  |                                      |
| degree of protection NEMA rating  | 1                                    |
| design of the housing   | Extra-wide                           |
| design of the housing   | indoors, usable on a general basis   |
| <b>Mounting/wiring</b>  |                                      |
| mounting position   | vertical                             |
| fastening method  | 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  | 45 ... 45 lbf·in                     |
| type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-stranded | 1x (14 ... 2 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  | 2x (16 ... 12 AWG)                   |

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| coil at AWG cables single or multi-stranded  |   |
| 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 cables 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 cables 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

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|---|---|
| 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) |
| certificate of suitability  | NEMA ICS 2; UL 508; CSA 22.2, No.14                 |

#### 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=US2:17GUG82BH>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:17GUG82BH>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:17GUG82BH&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:17GUG82BH&lang=en)

**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:17GUG82BH/certificate>

last modified:

1/25/2022 