



Non-reversing motor starter Size 2 1/2 Three phase full voltage Solid-state overload relay OLRelay amp range 25-100A 240V 50HZ / 277V 60HZ coil Combination type 100A circuit breaker Enclosure NEMA type 1 Indoor general purpose use Standard width enclosure

|   |   |
|---|---|
| product brand name  | Class 18 & 26   |
| design of the product   | Full-voltage non-reversing motor starter with motor circuit protector |
| special product feature   | ESP200 overload relay; Half-size controller                           |
| <b>General technical data</b>   |   |
| Height x Width x Depth [in]   | 24 × 20 × 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   |
| operating voltage for main current circuit at AC at 60 Hz maximum       | 600 V   |
| operational current at AC at 600 V rated value                          | 60 A  |
| mechanical service life (operating 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  | 240 V   |
| • at AC at 60 Hz rated value  | 277 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            | 0.85 ... 1.1  |

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| magnet coil  |   |
| percentual 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>Enclosure</b>   |   |
| degree of protection NEMA rating   | 1   |
| design of the housing  | indoors, usable on a general basis                  |
| <b>Circuit Breaker</b>   |   |
| type of the motor protection   | Motor circuit protector (magnetic trip only)        |
| operational current of motor circuit breaker rated value   | 100 A   |
| adjustable current response value current of instantaneous short-circuit trip unit                                 | 315 ... 1000 A                                      |
| <b>Mounting/wiring</b>   |   |
| mounting position  | Vertical  |
| fastening method   | Surface mounting and installation                   |
| type of electrical connection for supply voltage line-side   | Box lug   |
| type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded                  | 1x (10 AWG ... 1/0 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   | 45 ... 45 lbf-in                                    |
| type of connectable conductor cross-sections for 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 coil for AWG cables 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 for  | 1x (12 AWG), 2x (16 ... 14 AWG), 2x (18 ... 16 AWG) |

|   |                                     |
|---|-------------------------------------|
| AWG cables for auxiliary contacts single or multi-stranded  |                                     |
| 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 for 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                                  |
| <b>Short-circuit current rating</b>   |                                     |
| design of the short-circuit trip  | Instantaneous trip circuit breaker  |
| maximum short-circuit current breaking capacity (Icu)   |                                     |
| • at 240 V  | 100 kA                              |
| • at 480 V  | 100 kA                              |
| • at 600 V  | 25 kA                               |
| 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=US2:18GUG92BL>

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

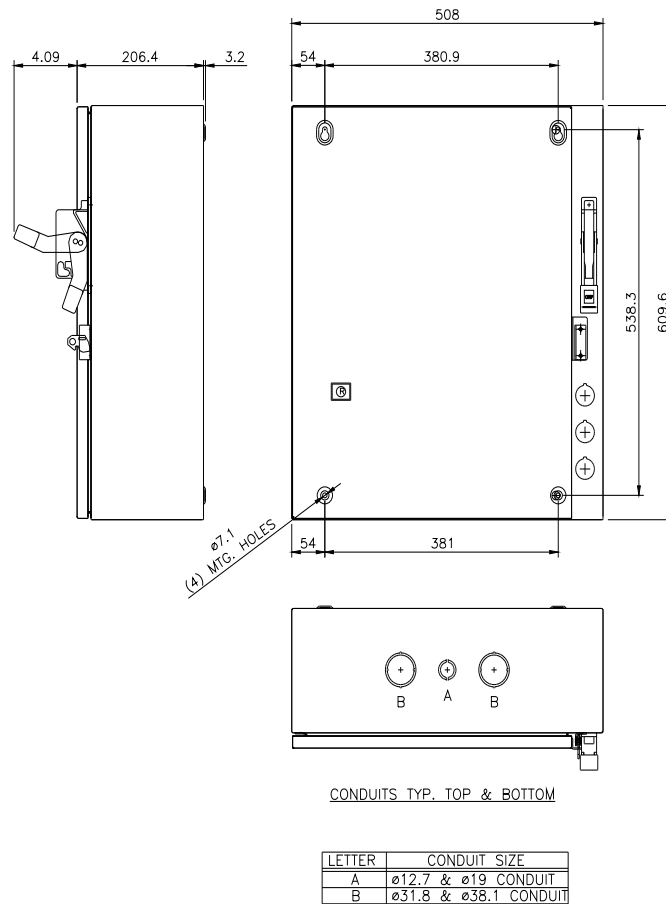
<https://support.industry.siemens.com/cs/US/en/ps/US2:18GUG92BL>

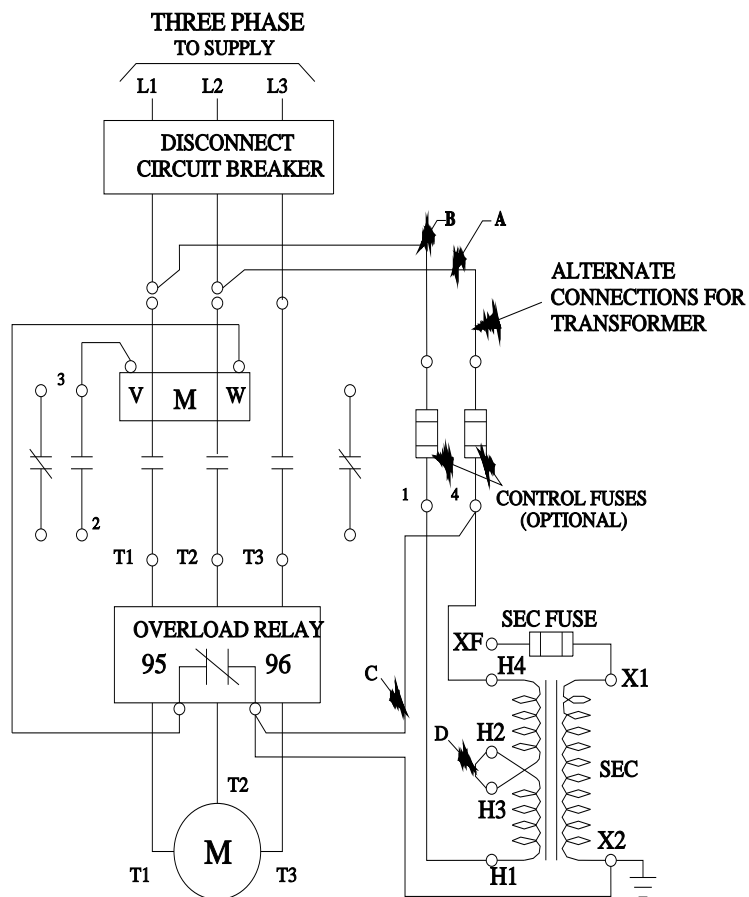
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:18GUG92BL&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:18GUG92BL&lang=en)

**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:18GUG92BL/certificate>





last modified:

1/25/2022