



Non-reversing motor starter, Size 1, Three phase full voltage, Solid-state overload relay, OLR amp range 5.5-22A, 24VDC coil, Combination type, 25A circuit breaker, Encl NEMA type 4X 304 S-Steel, Water/dust tight noncorrosive, Extra-wide 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   |
| <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   | 3 hp  |
| • at 220/230 V rated value   | 3 hp  |
| • at 460/480 V rated value   | 10 hp   |
| • at 575/600 V rated value   | 10 hp   |
| <b>Contactors</b>  |   |
| size of contactor  | NEMA controller size 1  |
| 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                           | 27 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                               | 8   |
| 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                            | DC  |
| control supply voltage   |   |
| • at DC rated value  | 24 V  |
| holding power at AC minimum  | 0 W   |
| apparent pick-up power of magnet coil at AC                              | 163 VA  |
| apparent holding power of magnet coil at AC                              | 5.5 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  | 25 %  |
| ON-delay time   | 21 ... 21 ms  |
| OFF-delay time  | 11 ... 11 ms  |
| <b>Overload relay</b>   |   |
| 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   | 5.5 ... 22 A  |
| make time with automatic start after power failure maximum  | 3 s   |
| relative repeat accuracy  | 1 %   |
| 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 <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 (Ui) <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                                      |
| <b>Enclosure</b>  |   |
| design of the housing   | dustproof, waterproof & resistant to corrosion      |
| <b>Circuit Breaker</b>  |   |
| type of the motor protection  | Motor circuit protector (magnetic trip only)        |
| operational current of motor circuit breaker rated value  | 25 A  |
| adjustable current response value current of instantaneous short-circuit trip unit  | 55 ... 180 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 (14 AWG ... 10 AWG) or 1x (12 AWG ... 10 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   | Screw-type terminals                                |
| tightening torque [lbf-in] for load-side outgoing feeder  | 35 ... 35 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 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 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  |

## Short-circuit current rating

|   |                                      |
|---|--------------------------------------|
| 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=US2:18DUD82WS>

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

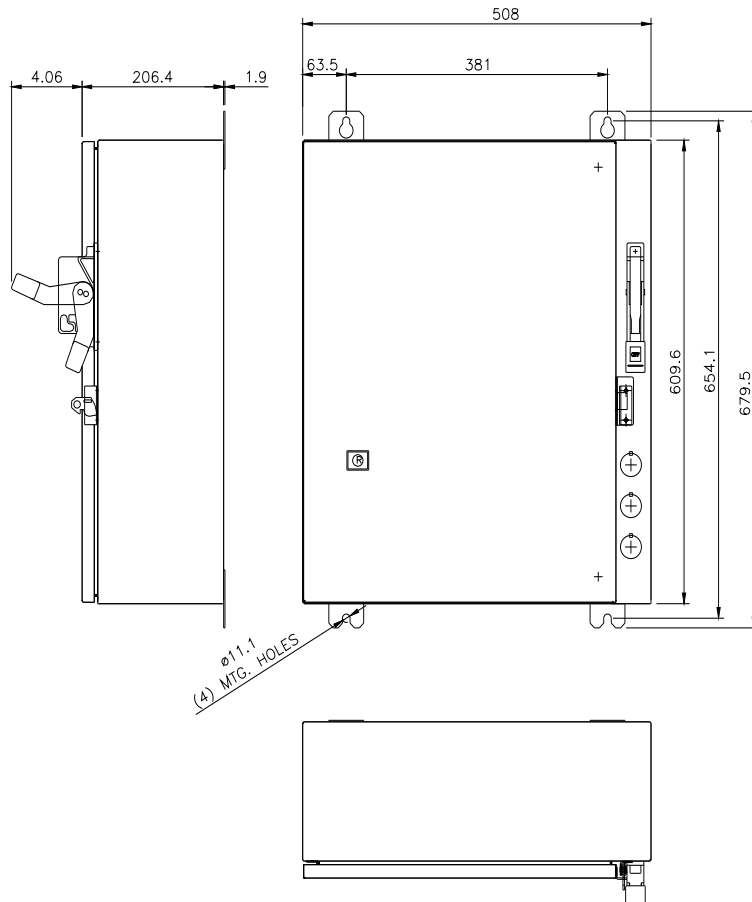
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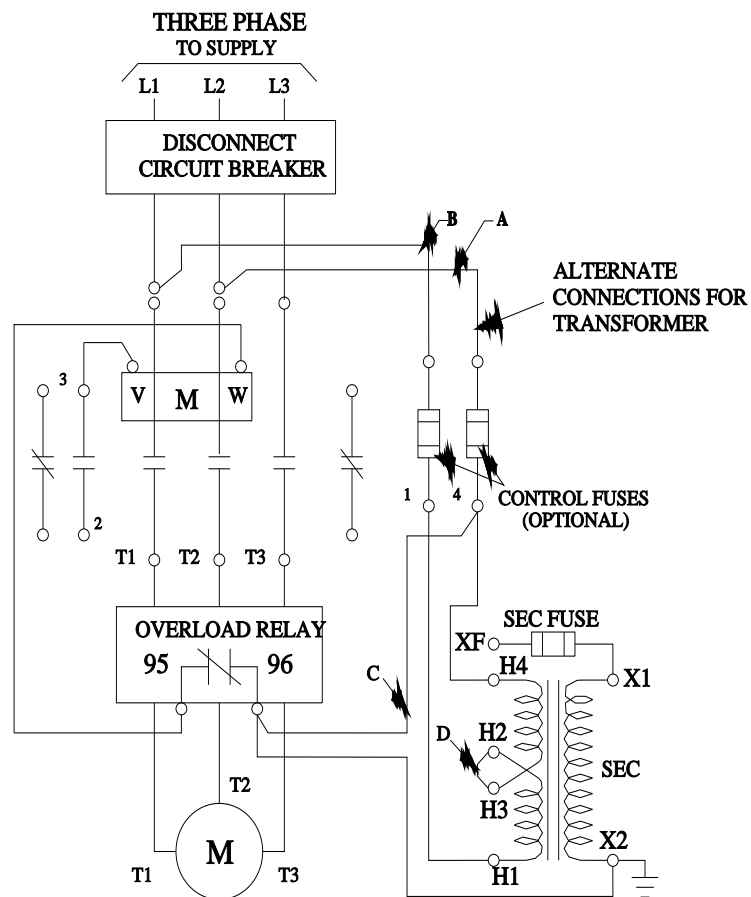
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:18DUD82WS&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:18DUD82WS&lang=en)

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:18DUD82WS/certificate>





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