



Figure similar

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, 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   |
| <b>General technical data</b>   |   |
| Height x Width x Depth [in]   | 24 × 11 × 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  | 7.5 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 (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                              | 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 |

### Overload relay

|  |  |
|--|--|
| product function   |  |
| <ul style="list-style-type: none"> <li>● overload protection</li> <li>● phase failure detection</li> <li>● asymmetry detection</li> <li>● ground fault detection</li> <li>● test function</li> <li>● external reset</li> </ul> | Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>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  | 5.5 ... 22 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  |  |
| <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                         |

### Enclosure

|                                  |                                    |
|----------------------------------|------------------------------------|
| degree of protection NEMA rating | 1                                  |
| design of the housing            | indoors, usable on a general basis |

### Circuit Breaker

|  |  |
|--|--|
| 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                                 |

### Mounting/wiring

|   |  |
|---|--|
| 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 at 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 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 coil at 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 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  |
| <b>Short-circuit current rating</b>  |   |
| design of the short-circuit trip   | Instantaneous trip circuit breaker                  |
| breaking capacity maximum short-circuit current (Icu) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 V</li> </ul> | 100 kA<br>100 kA<br>25 kA                           |
| certificate of suitability   | NEMA ICS 2; UL 508; CSA 22.2, No.14                 |
| <b>Further information</b>   |   |

**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=US2:18DUD92BS>

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

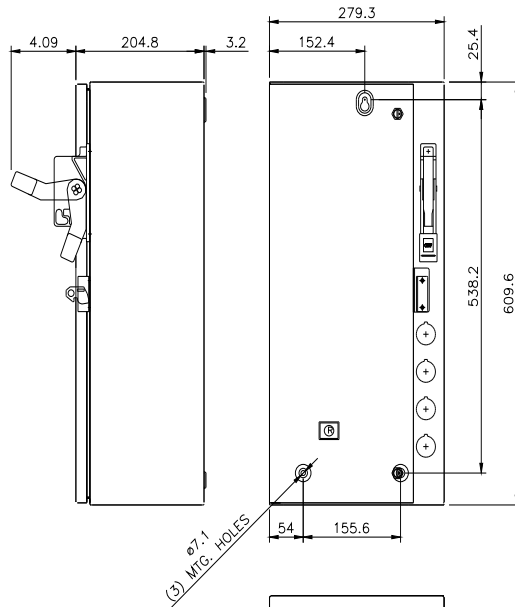
<https://support.industry.siemens.com/cs/US/en/ps/US2:18DUD92BS>

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

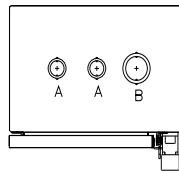
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:18DUD92BS&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:18DUD92BS&lang=en)

**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:18DUD92BS/certificate>



(3) MTC HOLES  
ø7.1



CONDUITS TYP. TOP & BOTTOM

| LETTER | CONDUIT SIZE          |
|--------|-----------------------|
| A      | ø12.7 & ø19 CONDUIT   |
| B      | ø25.4 & ø31.8 CONDUIT |

last modified:

1/25/2022