



Non-reversing motor starter, Size 1, Three phase full voltage, Solid-state overload relay, OLR amp range 5.5-22A, 24VAC 50-60Hz 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 (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                           | AC                                                                    |
| control supply voltage                                                  |                                                                       |
| • at AC at 50 Hz rated value                                            | 24 V                                                                  |
| • at AC at 60 Hz rated value                                            | 24 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                                                          |

|                                                                                                                    |                                                     |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 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                                | 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                                                        |                                                     |
| • 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                                                           | 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                                                      | 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 (I <sub>cu</sub> )                                                            |                                     |
| • 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=US2:18DUD92BJ>

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

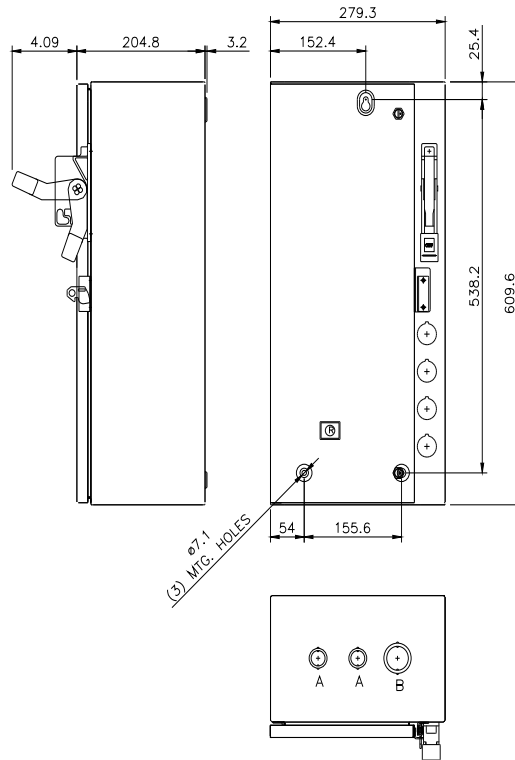
<https://support.industry.siemens.com/cs/US/en/ps/US2:18DUD92BJ>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:18DUD92BJ&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:18DUD92BJ&lang=en)

**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:18DUD92BJ/certificate>



CONDUITS TYP. TOP & BOTTOM

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

