



Figure similar

Non-reversing motor starter, Size 1, Single phase full voltage, Solid-state overload relay, OLR amp range 5.5-22A, Non-combination type, Enclosure type 12, Dust/drip proof for indoors, Standard width enclosure

|   |  |
|---|--|
| product brand name  | Class 14                                 |
| design of the product   | Full-voltage non-reversing motor starter |
| special product feature   | ESP200 overload relay                    |
| <b>General technical data</b>   |  |
| weight [lb]   | 11 lb                                    |
| Height x Width x Depth [in]   | 13 × 8 × 5 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                           |
| country of origin   | USA                                      |
| <b>Horsepower ratings</b>   |  |
| yielded mechanical performance [hp] for single-phase AC motor           |  |
| • at 115 V rated value  | 1 hp                                     |
| • at 200/208 V rated value  | 2 hp                                     |
| • at 220/230 V rated value  | 2 hp                                     |
| <b>Contactors</b>   |  |
| size of contactor   | NEMA controller size 1                   |
| number of NO contacts for main contacts                                 | 2  |
| operating voltage for main current circuit at AC at 60 Hz maximum       | 240 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                           | AC                                       |
| control supply voltage  |  |
| • at AC at 50 Hz rated value  | 190 ... 220 V                            |

|  |               |
|--|---------------|
| • at AC at 60 Hz rated value   | 220 ... 240 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  |

### Overload relay

|   |                                      |
|---|--------------------------------------|
| 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                         |
| tripping time at phase-loss 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                                |

### Enclosure

|                                  |                                       |
|----------------------------------|---------------------------------------|
| degree of protection NEMA rating | 12                                    |
| design of the housing            | Dust tight and drip proof for indoors |

### Mounting/wiring

|   |                                   |
|---|-----------------------------------|
| mounting position   | Vertical                          |
| fastening method  | Surface mounting and installation |
| type of electrical connection for supply voltage line-side  | Screw-type terminals              |
| tightening torque [lbf-in] for supply   | 35 ... 35 lbf-in                  |
| type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded                  | 1x(14 - 2 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                | 2 x (16 - 12 AWG)                 |
| temperature of the conductor at magnet coil maximum   | 75 °C                             |

|  |  |
|--|--|
| permissible  |  |
| 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      | 1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (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 | 2 x (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 fuse link for short-circuit protection of the main circuit required  | 10kA@600V (Class H or K); 100kA@600V (Class R or J) |
| design of the short-circuit trip   | Thermal magnetic 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> | 14 kA<br>10 kA<br>10 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=US2:14DUD120G>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:14DUD120G>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:14DUD120G&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14DUD120G&lang=en)

**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:14DUD120G/certificate>

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