

Non-reversing motor starter, Size 0, Single phase full voltage, Solid-state overload relay, OLR amp range 5.5-22A, 110V 50Hz / 120V 60Hz coil, Non-combination type, Enclosure type 1, Indoor general purpose use, 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]   | 8 lb                                     |
| Height x Width x Depth [in]   | 11 × 7 × 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>Contactor</b>  |  |
| size of contactor   | NEMA controller size 0                   |
| 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                          | 18 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  | 110 V                                    |
| • at AC at 60 Hz rated value  | 120 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 |
| 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 |

### 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> | <ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> </ul> |
| 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  |  |
| <ul style="list-style-type: none"> <li>● at AC at 600 V</li> <li>● at DC at 250 V</li> </ul>   | <ul style="list-style-type: none"> <li>5 A</li> <li>1 A</li> </ul>   |
| 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>  | <ul style="list-style-type: none"> <li>600 V</li> <li>300 V</li> </ul>   |

### Enclosure

|                                  |                            |
|----------------------------------|----------------------------|
| degree of protection NEMA rating | 1                          |
| design of the housing            | Indoor general purpose use |

### 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  | 20 ... 20 lbf-in                                   |
| type of connectable conductor cross-sections at line-side for 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   | 20 ... 20 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                      | 2 x (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 | 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 for 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                    |
| maximum short-circuit current breaking capacity (I <sub>cu</sub> )                |   |
| • at 240 V  | 14 kA   |
| • at 480 V  | 10 kA   |
| • at 600 V  | 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/ccatalog](http://www.usa.siemens.com/ccatalog)

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14CUD12BF>

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

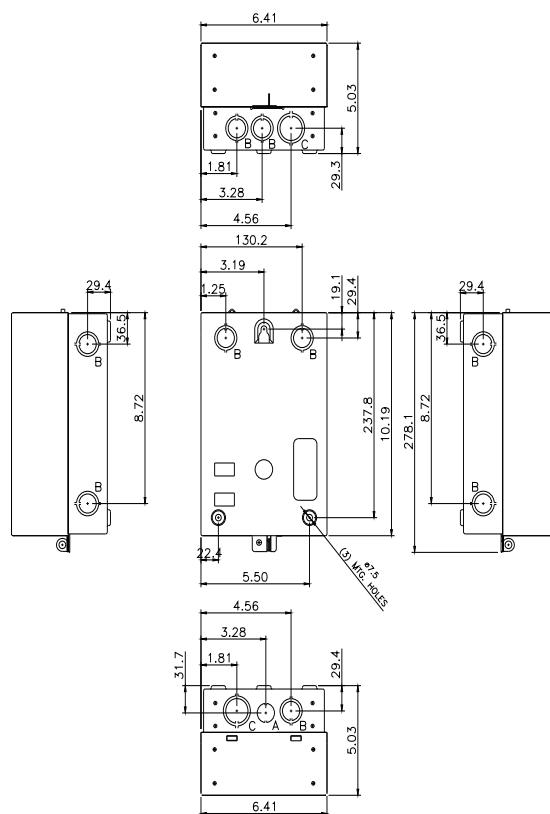
<https://support.industry.siemens.com/cs/US/en/ps/US2:14CUD12BF>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:14CUD12BF&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14CUD12BF&lang=en)

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:14CUD12BF/certificate>



| LETTER | KNOCKOUT & CONDUIT SIZE             |
|--------|-------------------------------------|
| A      | Ø22.2 FOR 12.7 CONDUIT              |
| B      | Ø22.2 X Ø28.6 FOR 12.7 & 19 CONDUIT |
| C      | Ø28.6 X Ø34.9 FOR 19 & 25.4 CONDUIT |



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