## **SIEMENS**

Data sheet US2:14DUD320S



Non-reversing motor starter, Size 1, Three phase full voltage, Solid-state overload relay, OLRelay amp range 5.5-22a, 24Vdc coil, 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                    |
| General technical data  | ,  |
| 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                                      |
| Horsepower ratings  |  |
| 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                                    |
| Contactor   |  |
| 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                                 |
| Auxiliary contact   |  |
| 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       | 345VA@115VAC / 768VA@240VAC              |
| Coil  |  |
| 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  |   |
| 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-   | 5.5 22 A  |
| dependent overload release  | 0.0 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   | 5A@600VAC (B600), 1A@250VDC (R300)  |
| UL 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 of the enclosure   | NEMA Type 12  |
| degree of protection NEMA rating of the enclosure   | NEMA Type 12  |
| design of the housing   | NEMA Type 12  Dust tight and drip proof for indoors   |
| design of the housing<br>Mounting/wiring  | Dust tight and drip proof for indoors   |
| design of the housing  Mounting/wiring  mounting position   | Dust tight and drip proof for indoors  Vertical   |
| design of the housing  Mounting/wiring  mounting position  fastening method   | Dust tight and drip proof for indoors  Vertical  Surface mounting and installation  |
| design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side   | Vertical Surface mounting and installation Screw-type terminals   |
| design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply   | Vertical Surface mounting and installation Screw-type terminals 35 35 lbf·in  |
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| design of the housing  Mounting/wiring  mounting position fastening method  type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side for  | Vertical Surface mounting and installation Screw-type terminals 35 35 lbf·in  |
| design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf·in] for supply type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded   | Vertical Surface mounting and installation Screw-type terminals 35 35 lbf·in 1x(14 - 2 AWG)   |
| design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible   | Vertical Surface mounting and installation Screw-type terminals 35 35 lbf·in 1x(14 - 2 AWG)   |
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| Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil maximum permissible or multi-stranded temperature of the conductor at magnet coil type of electrical connection for auxiliary contacts tightening torque [lbf-in] at contactor for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary contacts | Dust tight and drip proof for indoors  Vertical  Surface mounting and installation  Screw-type terminals  35 35 lbf-in  1x(14 - 2 AWG)  75 °C  AL or CU  Screw-type terminals  35 35 lbf-in  1x(14 - 2 AWG)  75 °C  AL or CU  screw-type terminals  5 12 lbf-in  2 x (16 - 12 AWG)  75 °C  CU  screw-type terminals  10 15 lbf-in  1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (18 - 16 AWG) |

| 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 (Icu)   |   |
| • 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                 |
| Approvals Certificates  |   |

## **Test Certificates**



Industrial Controls - Product Overview (Catalogs, Brochures,...)

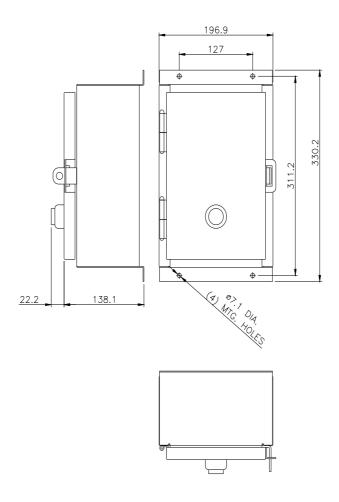
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14DUD320S

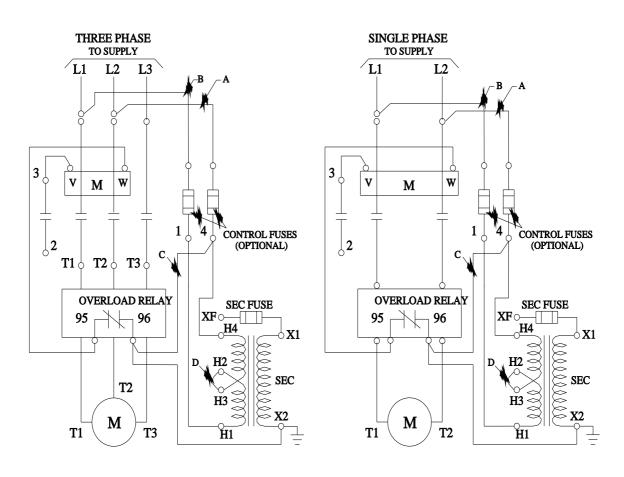
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:14DUD320S

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14DUD320S&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14DUD320S&lang=en</a>

Certificates/approvals

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