## **SIEMENS**

Data sheet US2:22DUD32BC

Reversing motor starter, Size 1, Three phase full voltage, Solid-state overload relay, OLR amp range 5.5-22A, Non-combination type, Enclosure type 1, Indoor general purpose use, Standard width enclosure





Figure similar

| product brand name  | Class 22                             |
|---|--------------------------------------|
| design of the product   | Full-voltage reversing motor starter |
| special product feature   | ESP200 overload relay                |
| General technical data  |                                      |
| weight [lb]   | 23 lb                                |
| Height x Width x Depth [in]   | 20 × 12 × 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                           |
| 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       | 10A@600VAC (A600), 5A@600VDC (P600)  |
| Coil  |                                      |
| type of voltage of the control supply voltage                           | AC                                   |
| control supply voltage  |                                      |
| at AC at 60 Hz rated value  | 220 480 V                            |
| holding power at AC minimum   | 8.6 W                                |
| apparent pick-up power of magnet coil at AC                             | 218 VA                               |

| apparent halding paying of recent and at A.O.  | 0F \/A  |
|--|---|
| 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   |   |
| <ul> <li>overload protection</li> </ul>  | Yes   |
| phase failure detection  | Yes   |
| <ul> <li>asymmetry detection</li> </ul>  | 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-<br>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)  |   |
| <ul> <li>with single-phase operation at AC rated value</li> </ul>  | 600 V   |
| <ul> <li>with multi-phase operation at AC rated value</li> </ul>   | 300 V   |
| Enclosure  |   |
| degree of protection NEMA rating   | 1   |
| design of the housing  | indoors, usable on a general basis  |
| Mounting/wiring  |   |
| mounting position  | Vertical  |
|  | Vortical  |
| fastening method   | Surface mounting and installation   |
| ·  |   |
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| fastening method type of electrical connection for supply voltage line-side  | Surface mounting and installation Screw-type terminals  |
| 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 at   | Surface mounting and installation Screw-type terminals 35 35 lbf·in   |
| 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 at AWG cables single or multi-stranded   | Surface mounting and installation Screw-type terminals 35 35 lbf·in 1x (14 2 AWG)   |
| fastening method type of electrical connection for supply voltage line-side tightening torque [libf-in] for supply type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible  | Surface mounting and installation Screw-type terminals 35 35 lbf·in 1x (14 2 AWG) 75 °C   |
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| 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  |
| 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)                                   |
|   | 10kA@600V (Class H or K); 100kA@600V (Class R or J)  Thermal magnetic circuit breaker |
| circuit required  |   |
| circuit required design of the short-circuit trip   |   |
| circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)                         | Thermal magnetic circuit breaker  |
| circuit required design of the short-circuit trip maximum short-circuit current breaking capacity (Icu)  • at 240 V               | Thermal magnetic circuit breaker  14 kA   |
| circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V | Thermal magnetic circuit breaker  14 kA 10 kA   |

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

www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:22DUD32BC

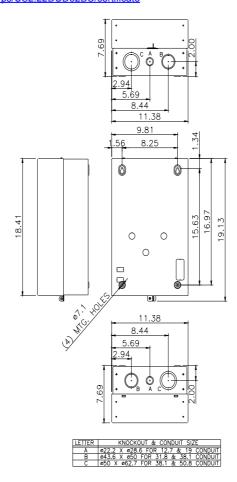
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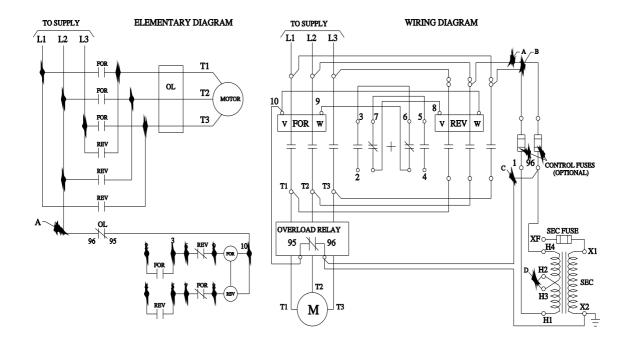
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:22DUD32BC&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:22DUD32BC&lang=en</a>

Certificates/approvals

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