## SIEMENS

## Data sheet

## US2:22CUD32BG

Reversing motor starter, Size 0, 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]   |                                      |
| <ul> <li>during storage</li> </ul>   | -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                                 |
| <ul> <li>at 220/230 V rated value</li> </ul>                               | 3 hp                                 |
| • at 460/480 V rated value   | 0 hp                                 |
| • at 575/600 V rated value   | 0 hp                                 |
| Contactor  |                                      |
| size of contactor  | NEMA controller size 0               |
| 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                             | 18 A                                 |
| mechanical service life (switching cycles) of the main<br>contacts typical | 1000000                              |
| 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   |                                      |

| <ul> <li>at AC at 50 Hz rated value</li> </ul>  | 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<br>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                                  |
| <ul> <li>phase failure detection</li> </ul>   | Yes                                  |
| <ul> <li>asymmetry detection</li> </ul>   | Yes                                  |
| <ul> <li>ground fault detection</li> </ul>  | 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<br>make time with automatic start after power failure                                      | 3 s                                  |
| maximum   |                                      |
| relative repeat accuracy  | 1%                                   |
| product feature protective coating on printed-circuit board   | Yes                                  |
| number of NC contacts of auxiliary contacts of overload<br>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<br>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                             |
| 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 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  | 20 20 lbf-in                         |
| type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-<br>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  | 2x (16 12 AWG)                       |
| <u>_</u>  |                                      |

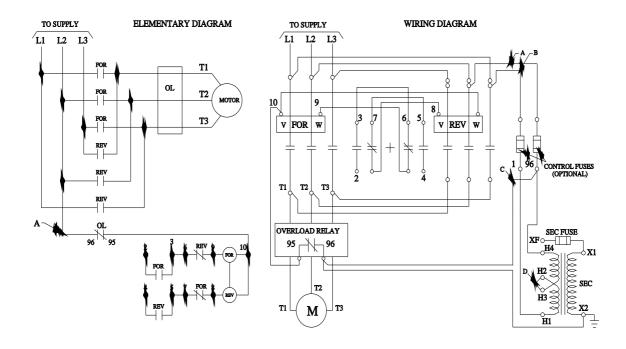
| coil at AWG cables single or multi-stranded   |   |
|---|---|
| temperature of the conductor at magnet coil maximum permissible   | 75 °C   |
| material of the conductor at magnet coil  | CU  |
| type of electrical connection for auxiliary contacts  | Screw-type terminals                                |
| tightening torque [lbf-in] at contactor for auxiliary contacts  | 10 15 lbf·in  |
| type of connectable conductor cross-sections at contactor<br>at AWG cables for auxiliary contacts single or multi-<br>stranded      | 1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)         |
| temperature of the conductor at contactor for auxiliary<br>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<br>relay at AWG cables for auxiliary contacts single or multi-<br>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<br>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 (lcu)   |   |
| • 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, Brochu<br>www.usa.siemens.com/iccatalog<br>Industry Mall (Online ordering system) | ires,)  |
| https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:22CUD32BG   |   |

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:22CUD32BG

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:22CUD32BG&lang=en

Certificates/approvals

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