## SIEMENS

## Data sheet

## US2:22GUG32FG



Reversing motor starter, Size 2 1/2, Three phase full voltage, Solid-state overload relay, OLR amp range 25-100A, Non-combination type, Enclosure type 4X fiberglass, Water/dust tight noncorrosive, Standard width enclosure

| Figures | imilar |
|---------|--------|
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| product brand name  | Class 22                                 |
|---|--|
| design of the product   | Full-voltage reversing motor starter     |
| special product feature   | ESP200 overload relay; Half-size starter |
| General technical data  |  |
| weight [lb]   | 19 lb                                    |
| Height x Width x Depth [in]   | 24 × 15 × 7 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   |  |
| <ul> <li>during storage</li> </ul>                                      | -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  | 15 hp                                    |
| • at 220/230 V rated value  | 20 hp                                    |
| • at 460/480 V rated value  | 30 hp                                    |
| • at 575/600 V rated value  | 30 hp                                    |
| Contactor   |  |
| size of contactor   | Controller half size 2 1/2               |
| 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                          | 60 A                                     |
| mechanical service life (switching cycles) of the main 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                              | 7  |
| 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 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<br>of magnet coil   | 0.85 1.1                                       |
| percental drop-out voltage of magnet coil related to the<br>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  |
| asymmetry detection   | 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-   | 25 100 A                                       |
| dependent overload release  |  |
| make time with automatic start after power failure<br>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<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  | 4X, fiber glass                                |
| design of the housing   | dustproof, waterproof & resistant to corrosion |
| Mounting/wiring   |  |
| mounting position   | Vertical                                       |
| fastening method  | Surface mounting and installation              |
| type of electrical connection for supply voltage line-side  | Box lug  |
| tightening torque [lbf-in] for supply   | 45 45 lbf-in                                   |
| type of connectable conductor cross-sections at line-side   | 1x (14 2 AWG)                                  |
| at AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum                             | 75 °C  |
| permissible   |  |
| material of the conductor for supply  | AL or CU                                       |
| type of electrical connection for load-side outgoing feeder   | Box lug  |
| tightening torque [lbf-in] for load-side outgoing feeder  | 45 45 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)                                 |
|   |  |

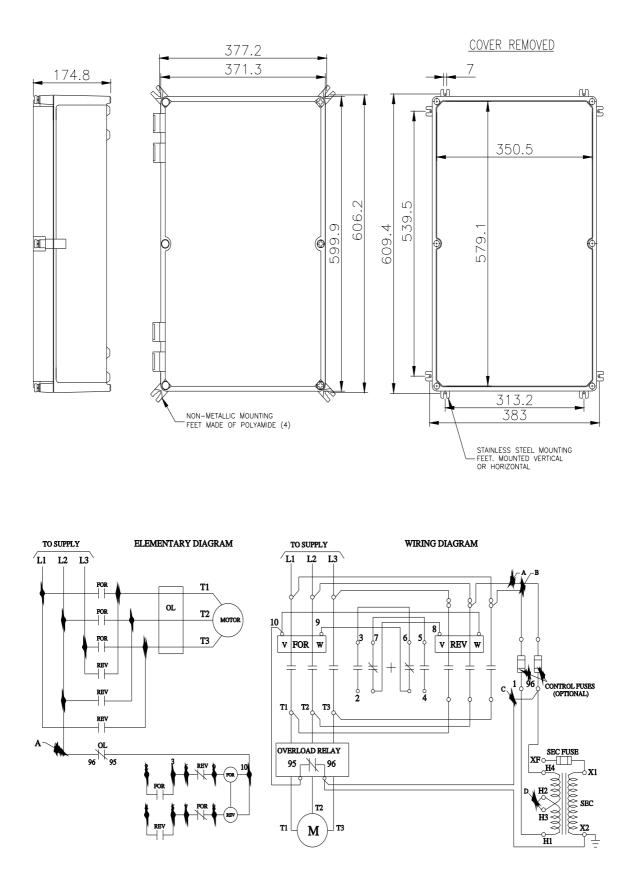
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| coil at AWG cables single or multi-stranded   |   |  |
| temperature of the conductor at magnet coil maximum permissible   | 75 °C   |  |
| material of the conductor at magnet coil  | CU  |  |
| type of electrical connection for auxiliary contacts  | 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 (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                 |  |
| Further information   |   |  |
| Industrial Controls - Product Overview (Catalogs, Brochures,)   |   |  |
| www.usa.siemens.com/iccatalog Industry Mall (Online ordering system)  |   |  |
| https://mail.industry.siemens.com/mail/en/us/Catalog/product?mlfb=US2:22GUG32FG   |   |  |
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:22GUG32FG

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:22GUG32FG&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:22GUG32FG/certificate



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last modified:

1/25/2022 🖸