## **SIEMENS**

## Data sheet US2:30GUGG32A2VA



2-speed 3-phase motor starter Size 2 1/2 One winding consequent pole Constant or variable torque Solid-state overload relays Low SPD OLR range 25-100A High SPD OLR range 25-100A 110-120/220-240VAC 60HZ coil Enclosure NEMA type (open) No enclosure

| product brand name  | Class 30   |
|---|--|
| design of the product   | Full-voltage two speed motor starter                           |
| special product feature   | ESP200 overload relay; Half-size controller; Dual voltage coil |
| General technical data  |  |
| weight [lb]   | 10 lb  |
| Height x Width x Depth [in]   | 9 × 16 × 4 in  |
| touch protection against electrical shock                               | Not finger-safe  |
| 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   | Mexico   |
| Horsepower ratings  |  |
| yielded mechanical performance [hp] for 3-phase AC motor                |  |
| <ul> <li>at 200/208 V rated value</li> </ul>                            | 15 hp  |
| <ul> <li>at 220/230 V rated value</li> </ul>                            | 20 hp  |
| <ul> <li>at 460/480 V rated value</li> </ul>                            | 30 hp  |
| <ul> <li>at 575/600 V rated value</li> </ul>                            | 30 hp  |
| Contactor   |  |
| size of contactor   | Controller half size 2 1/2                                     |
| number of NO contacts for main contacts                                 | 6  |
| 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 (operating cycles) of the main contacts typical | 10000000   |
| Auxiliary contact   |  |
| number of NC contacts at contactor for auxiliary contacts               | 2  |
| number of NO contacts at contactor for auxiliary contacts               | 2  |
| number of total auxiliary contacts maximum                              | 7  |
| contact rating of auxiliary contacts of contactor according to UL       | 10A@600VAC (A600), 2.5A@300VDC (Q300)                          |
| Coil  |  |
| type of voltage of the control supply voltage                           | AC   |
| control supply voltage  |  |
| at AC at 60 Hz rated value  | 110 240 V  |
| holding power at AC minimum   | 17 W   |
| apparent pick-up power of magnet coil at AC                             | 436 VA   |
| apparent holding power of magnet coil at AC                             | 50 VA  |

| operating range factor control supply voltage rated value of magnet coil  | 01   |
|---|--|
| 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  |  |
| overload protection   | Yes  |
| phase failure detection   | Yes  |
| <ul> <li>asymmetry detection</li> </ul>   | Yes  |
| <ul> <li>ground fault detection</li> </ul>  | Yes  |
| • test function   | Yes  |
| external reset  | No   |
| reset function  | Manual, automatic and remote   |
| trip class  | CLASS 5 / 10 / 20 (factory set) / 30   |
| adjustable current response value current of overload relay   |  |
| <ul> <li>for low rotational speed</li> </ul>  | 25 100 A   |
| for high rotational speed   | 25 100 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 UL  | 5  |
| insulation voltage (Ui)   |  |
| <ul> <li>with single-phase operation at AC rated value</li> </ul>   | 600 V  |
|   |  |
| with multi-phase operation at AC rated value  | 300 V  |
|   |  |
| with multi-phase operation at AC rated value  |  |
| with multi-phase operation at AC rated value     Mounting/wiring  | 300 V  |
| with multi-phase operation at AC rated value     Mounting/wiring     mounting position  | 300 V vertical   |
| with multi-phase operation at AC rated value  Mounting/wiring  mounting position  fastening method  | vertical Surface mounting and installation   |
| with multi-phase operation at AC rated value  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side  | vertical Surface mounting and installation Box lug   |
| with multi-phase operation at AC rated value  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 Box lug 45 45 lbf-in  |
| with multi-phase operation at AC rated value      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 Box lug 45 45 lbf-in 1  |
| with multi-phase operation at AC rated value      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 Box lug 45 45 lbf·in 1 75 °C AL or CU Box lug   |
| with multi-phase operation at AC rated value  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  | vertical Surface mounting and installation Box lug 45 45 lbf·in 1 75 °C AL or CU Box lug 45 45 lbf·in  |
| with multi-phase operation at AC rated value      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  | vertical Surface mounting and installation Box lug 45 45 lbf·in 1 75 °C AL or CU Box lug 45 45 lbf·in 1  |
| with multi-phase operation at AC rated value      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   | vertical Surface mounting and installation Box lug 45 45 lbf-in 1 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C  |
| with multi-phase operation at AC rated value      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   | vertical Surface mounting and installation Box lug 45 45 lbf-in 1 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU   |
| with multi-phase operation at AC rated value      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  | vertical Surface mounting and installation Box lug 45 45 lbf-in 1 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals  |
| with multi-phase operation at AC rated value      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  | vertical Surface mounting and installation Box lug 45 45 lbf-in 1 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU   |
| with multi-phase operation at AC rated value      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  | vertical Surface mounting and installation Box lug 45 45 lbf·in 1 75 °C AL or CU Box lug 45 45 lbf·in 1 75 °C AL or CU Screw-type terminals 5 12 lbf·in  |
| with multi-phase operation at AC rated value  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   | vertical Surface mounting and installation Box lug 45 45 lbf·in 1 75 °C AL or CU Box lug 45 45 lbf·in 1 75 °C AL or CU Screw-type terminals 5 12 lbf·in 2  |
| with multi-phase operation at AC rated value  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  | vertical Surface mounting and installation Box lug 45 45 lbf-in 1 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2 75 °C CU                                     |
| with multi-phase operation at AC rated value      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   | vertical Surface mounting and installation Box lug 45 45 lbf-in 1 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2 75 °C CU Screw-type terminals                |
| with multi-phase operation at AC rated value      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     material of the conductor at magnet coil maximum     permissible     material 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 | vertical Surface mounting and installation Box lug 45 45 lbf-in 1 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2 75 °C CU                                     |
| with multi-phase operation at AC rated value      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 at magnet coil maximum     permissible     material of the conductor at magnet coil maximum     permissible     material of the conductor at magnet coil maximum     permissible     material of the conductor at magnet coil     type of electrical connection for auxiliary contacts     tightening torque [lbf-in] at contactor for auxiliary contacts     tightening torque [lbf-in] at contactor for auxiliary contacts   | vertical Surface mounting and installation Box lug 45 45 lbf-in 1 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2 75 °C CU Screw-type terminals 10 15 lbf-in   |
| with multi-phase operation at AC rated value      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 maximum permissible     material of the conductor 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 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                                     | vertical Surface mounting and installation Box lug 45 45 lbf-in 1 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2 75 °C CU Screw-type terminals 10 15 lbf-in 1 |

| 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                                   |
| 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   | 10                                  |
| 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 |
| Further information   |                                     |

Industrial Controls - Product Overview (Catalogs, Brochures,...) <a href="https://www.usa.siemens.com/iccatalog">www.usa.siemens.com/iccatalog</a>

Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2;30GUGG32A2VA

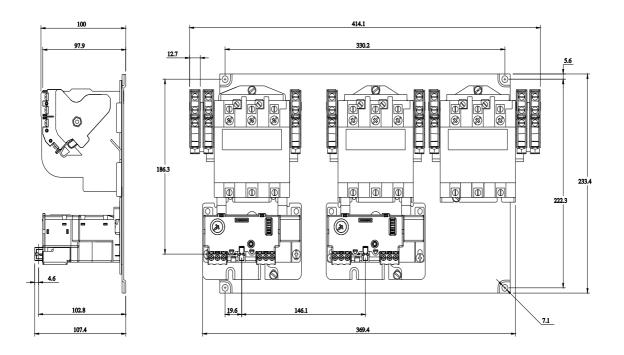
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

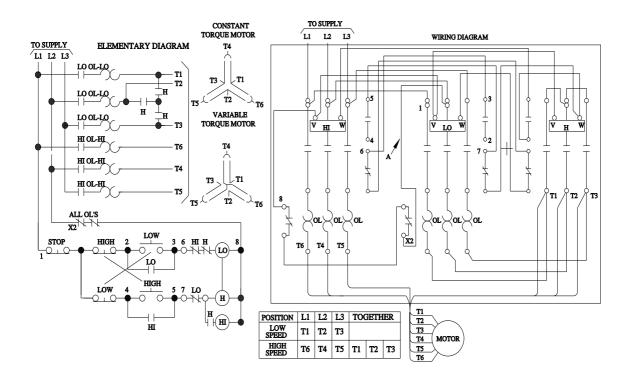
https://support.industry.siemens.com/cs/US/en/ps/US2:30GUGG32A2VA

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=US2:30GUGG32A2VA&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:30GUGG32A2VA&lang=en</a>

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:30GUGG32A2VA/certificate





D26434001

last modified: 12/3/2022 🖸