SIEMENS

Data sheet US2:84GUG950MG



Duplex starter w/o alternator, Size 2 1/2, Three phase full voltage, Solid-state overload relay, OLR amp range 25-100A, 190-220/220-240V 50/60Hz coil, Combination type, Two 100A circuit breakers, Enclosure NEMA type 12, Dust/drip proof for indoors

| product brand name | Class 84 |
|---|--|
| design of the product | Duplex controller with two MCPs without alternator |
| special product feature | ESP200 overload relay; Half-size controller |
| General technical data | |
| weight [lb] | 70 lb |
| Height x Width x Depth [in] | 56 × 29 × 10 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 | 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 (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 | 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 DC rated value | 0 0 V |
| • 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 |

| | 040.1/4 |
|--|--|
| 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 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 | |
| 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- dependent overload release | 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 | 1A |
| contact rating of auxiliary contacts of overload relay according to UL | 5A@600VAC (B600), 1A@250VDC (R300) |
| insulation voltage (Ui) | |
| with single-phase operation at AC rated value | 600 V |
| with multi-phase operation at AC rated value | 300 V |
| · · · | 333 1 |
| Enclosure | |
| degree of protection NEMA rating of the enclosure | NEMA Type 12 |
| degree of protection NEMA rating of the enclosure | NEMA Type 12 |
| degree of protection NEMA rating of the enclosure design of the housing | NEMA Type 12 dustproof and drip-proof for indoor use |
| degree of protection NEMA rating of the enclosure design of the housing Circuit Breaker | dustproof and drip-proof for indoor use |
| degree of protection NEMA rating of the enclosure design of the housing Circuit Breaker type of the motor protection | dustproof and drip-proof for indoor use Motor circuit protector (magnetic trip only) |
| degree of protection NEMA rating of the enclosure design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value | Motor circuit protector (magnetic trip only) 100 A |
| degree of protection NEMA rating of the enclosure design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit | dustproof and drip-proof for indoor use Motor circuit protector (magnetic trip only) |
| degree of protection NEMA rating of the enclosure design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring | Motor circuit protector (magnetic trip only) 100 A 315 1000 A |
| degree of protection NEMA rating of the enclosure design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position | Motor circuit protector (magnetic trip only) 100 A 315 1000 A |
| degree of protection NEMA rating of the enclosure design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method | Motor circuit protector (magnetic trip only) 100 A 315 1000 A |
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| degree of protection NEMA rating of the enclosure design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side 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 | Motor circuit protector (magnetic trip only) 100 A 315 1000 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug |
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| degree of protection NEMA rating of the enclosure design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side 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 for load-side outgoing feeder maximum permissible material 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 tightening torque [lbf-in] at magnet coil | dustproof and drip-proof for indoor use Motor circuit protector (magnetic trip only) 100 A 315 1000 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug 45 45 lbf·in 1x (14 2 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf·in |
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| type of electrical connection at contactor 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 for AWG cables for auxiliary contacts single or multi-stranded | 1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG) |
| temperature of the conductor at contactor for auxiliary 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 relay for 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 short-circuit trip | Instantaneous trip circuit breaker |
| maximum short-circuit current breaking capacity (Icu) | |
| • at 240 V | 100 kA |
| • at 480 V | 100 kA |
| • at 600 V | 25 kA |
| certificate of suitability | NEMA ICS 2; UL 508; CSA 22.2, No.14 |
| Further information | |

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

Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:84GUG950MG

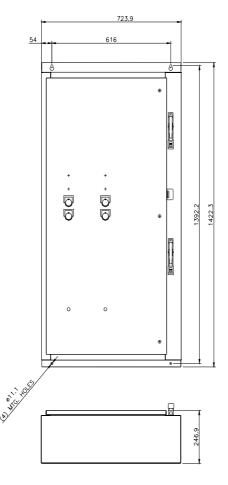
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:84GUG950MG

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:84GUG950MG&lang=en

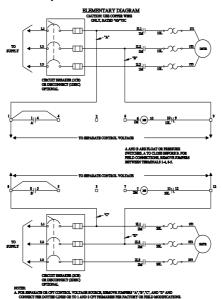
Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:84GUG950MG/certificate



SCHEMATIC DIAGRAM

Class 83 & 84 Duplex W/Manual Alternation Size 0-4



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