

Non-reversing motor starter Size 2 1/2 Three phase full voltage
 Solid-state overload relay OLRelay amp range 25-100A 24Vdc coil
 Non-combination type Enclosure NEMA type 12 Dust/drip proof for
 indoors Extra-wide enclosure



Figure similar

| General technical data | |
|--|----------------------------|
| Weight [lb] | 19 lb |
| Height x Width x Depth [in] | 16 × 13 × 6 in |
| 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 |
| Ambient temperature [°F] during operation | -4 ... +104 °F |
| Ambient temperature during storage | -30 ... +65 °C |
| Ambient temperature during operation | -20 ... +40 °C |
| Country of origin | USA |

| Horsepower ratings | |
|--|-------|
| Yielded mechanical performance [hp] for three-phase AC motor | |
| <ul style="list-style-type: none"> at 200/208 V rated value | 15 hp |
| <ul style="list-style-type: none"> at 220/230 V rated value | 20 hp |
| <ul style="list-style-type: none"> at 460/480 V rated value | 30 hp |

- at 575/600 V rated value

30 hp

Contactors

| | |
|---|----------|
| Number of NO contacts for main contacts | 3 |
| Operating voltage for main current circuit at AC at 60 Hz maximum | 600 V |
| Operating current at AC at 600 V rated value | 60 A |
| Mechanical service life (switching 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 | DC |
| Control supply voltage | |
| <ul style="list-style-type: none"> • at DC rated value | 24 ... 24 V |
| <ul style="list-style-type: none"> • at AC at 60 Hz rated value | 0 ... 0 V |
| <ul style="list-style-type: none"> • at AC at 50 Hz rated value | 0 ... 0 V |
| Holding power at AC minimum | 0 W |
| Apparent pick-up power of magnet coil at AC | 163 V·A |
| Apparent holding power of magnet coil at AC | 5.5 V·A |
| 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 | 25 % |
| Switch-on delay time | 21 ... 21 ms |
| Off-delay time | 11 ... 11 ms |

Overload relay

| | |
|--|---|
| Product function | |
| <ul style="list-style-type: none"> • Overload protection • Phase failure detection • Phase unbalance • Ground fault detection • Test function • External reset | <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> |
| Reset function | Manual, automatic and remote |
| Trip class | Class 5 / 10 / 20 (factory set) / 30 |

| | |
|--|------------------------------------|
| Adjustable pick-up value current of the current-dependent overload release | 25 ... 100 A |
| Trip 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 |
| Operating 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 | |
| • with single-phase operation at AC rated value | 600 V |
| • with multi-phase operation at AC rated value | 300 V |

Enclosure

| | |
|---|---------------------------------------|
| Degree of protection NEMA rating of the enclosure | NEMA Type 12 |
| Design of the housing | Dust tight and drip proof for indoors |

Mounting/wiring

| | |
|---|-----------------------------------|
| Mounting position | Vertical |
| (mounting type) | 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 at AWG conductors 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 | Box lug |
| Tightening torque [lbf·in] for load-side outgoing feeder | 45 ... 45 lbf·in |
| Type of connectable conductor cross-sections at AWG conductors for load-side outgoing feeder single or multi-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 coil at AWG conductors single or multi-stranded | 2 x (16 - 12 AWG) |
| 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 at AWG conductors for auxiliary contacts single or multi-stranded | 1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (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 at AWG conductors for auxiliary contacts single or multi-stranded | 2 x (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) |
| Design of the short-circuit trip | Thermal magnetic circuit breaker |
| Maximum short-circuit current breaking capacity (I _{cu}) | |
| • at 240 V | 14 kA |
| • at 480 V | 10 kA |
| • at 600 V | 10 kA |

Further information

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=US2:14GUG820S>

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

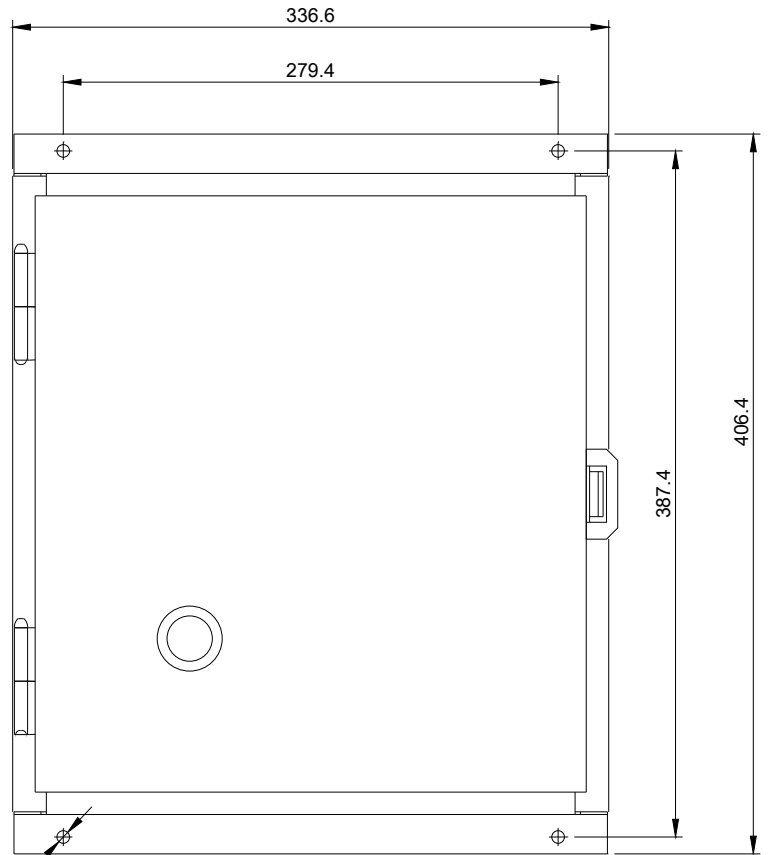
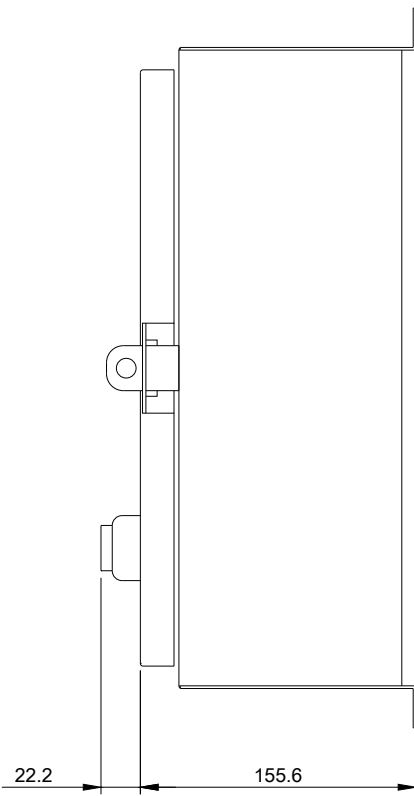
<https://support.industry.siemens.com/cs/US/en/ps/US2:14GUG820S>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

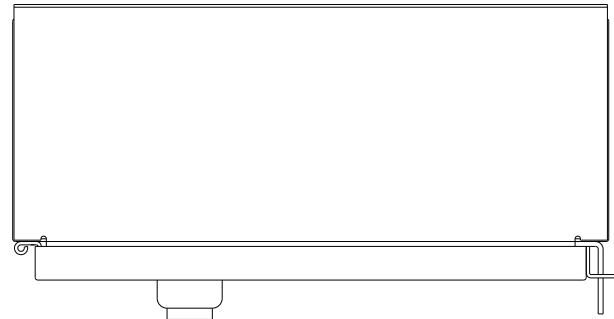
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14GUG820S&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:14GUG820S/certificate>



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