

Non-reversing motor starter Size 3 Three phase full voltage Solid-state overload relay OLRRelay amp range 25-100A 24VAC 50-60HZ coil Combination type Indoor general purpose use



Figure similar

| | |
|-------------------------|-----------------------------|
| Product brand name | Class 14 |
| Design of the product | Non-reversing motor starter |
| Special product feature | ESP200 overload relay |

| General technical data | |
|--|----------------------------|
| Weight [lb] | 32 lb |
| Height x Width x Depth [in] | 20 × 12 × 8 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 maximum | 149 °F |
| • during operation maximum | 104 °F |
| Ambient temperature | |
| • during storage maximum | 65 °C |
| • during operation maximum | 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 | 25 hp |
| <ul style="list-style-type: none"> • at 220/230 V rated value | 30 hp |
| <ul style="list-style-type: none"> • at 460/480 V rated value | 50 hp |
| <ul style="list-style-type: none"> • at 575/600 V rated value | 50 hp |

Contactor

| | |
|---|------------------------|
| Size of contactor | NEMA controller size 3 |
| 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 | 90 A |
| Mechanical service life (switching cycles) of the main contacts typical | 5000000 |

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 | |
| <ul style="list-style-type: none"> • at AC at 50 Hz rated value | 24 V |
| <ul style="list-style-type: none"> • at AC at 60 Hz rated value | 24 V |
| Holding power at AC minimum | 14 W |
| Apparent pick-up power of magnet coil at AC | 310 V·A |
| Apparent holding power of magnet coil at AC | 26 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 | 50 % |
| Switch-on delay time | 26 ... 41 ms |
| Off-delay time | 14 ... 19 ms |

Overload relay

| | |
|---|-----|
| Product function | |
| <ul style="list-style-type: none"> • Overload protection | Yes |
| <ul style="list-style-type: none"> • Phase failure detection | Yes |
| <ul style="list-style-type: none"> • Phase unbalance | Yes |
| <ul style="list-style-type: none"> • Ground fault detection | Yes |

| | |
|---|--------------------------------------|
| <ul style="list-style-type: none"> • Test function | Yes |
| <ul style="list-style-type: none"> • External reset | Yes |
| 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 | |
| <ul style="list-style-type: none"> • at AC at 600 V | 5 A |
| <ul style="list-style-type: none"> • 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 | |
| <ul style="list-style-type: none"> • with single-phase operation at AC rated value | 600 V |
| <ul style="list-style-type: none"> • with multi-phase operation at AC rated value | 300 V |

Enclosure

| | |
|---|----------------------------|
| Degree of protection NEMA rating of the enclosure | NEMA Type 1 |
| Design of the housing | Indoor general purpose use |

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 | 120 ... 120 lbf·in |
| Type of connectable conductor cross-sections at line-side at AWG conductors single or multi-stranded | 1x(14 - 2/0 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 | 120 ... 120 lbf·in |
| Type of connectable conductor cross-sections at AWG conductors for load-side outgoing feeder single or multi-stranded | 1x(14 - 2/0 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 (Icu) <ul style="list-style-type: none"> • at 240 V • at 480 V • at 600 V | 14 kA 10 kA 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://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14HUG82BJ>

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

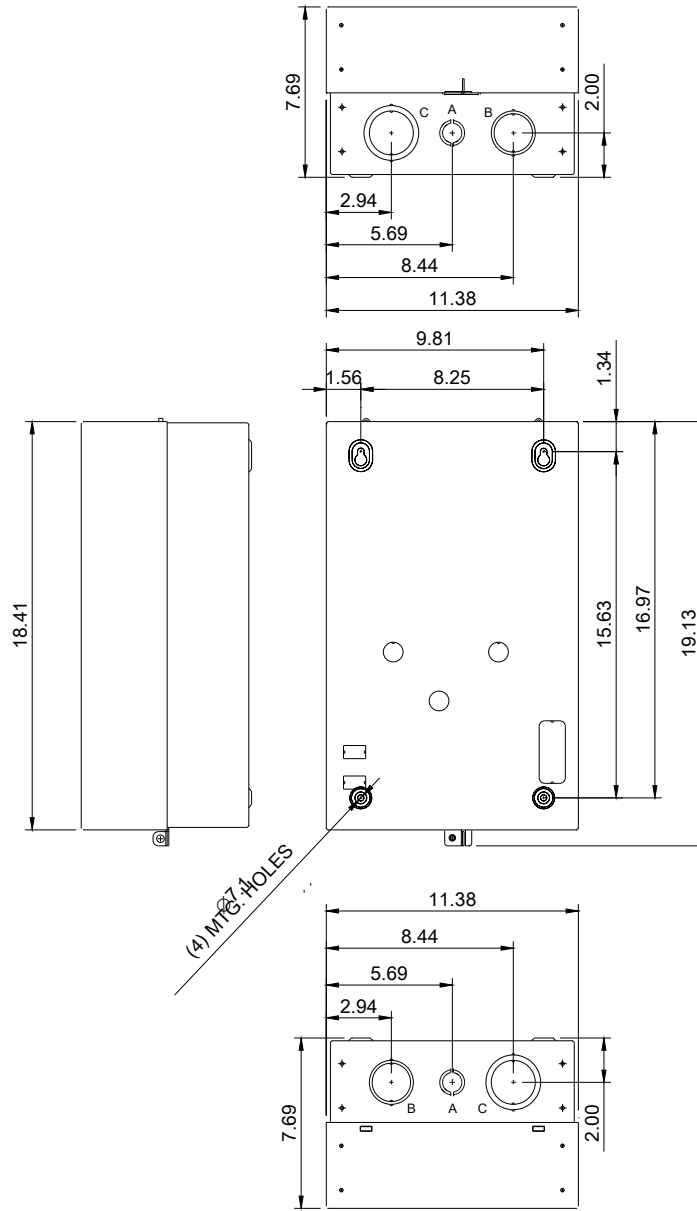
<https://support.industry.siemens.com/cs/US/en/ps/US2:14HUG82BJ>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14HUG82BJ&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:14HUG82BJ/certificate>



| LETTER | KNOCKOUT & CONDUIT SIZE |
|--------|---|
| A | %%C22.2 X %%C28.6 FOR 12.7 & 19 CONDUIT |
| B | %%C43.6 X %%C50 FOR 31.8 & 38.1 CONDUIT |
| C | %%C50 X %%C62.7 FOR 38.1 & 50.8 CONDUIT |



D46590001

last modified:

11/15/2019