

Non-reversing motor starter, Size 1, Three phase full voltage, Solid-state overload relay, OLRelay amp range 0.75-3.4a, 24VAC 50-60HZ coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors, Extra-wide enclosure



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] | 15 lb |
| Height x Width x Depth [in] | 13 × 13 × 5 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 | 0.5 hp |
| <ul style="list-style-type: none"> • at 220/230 V rated value | 0.75 hp |
| <ul style="list-style-type: none"> • at 460/480 V rated value | 1.5 hp |
| <ul style="list-style-type: none"> • at 575/600 V rated value | 2 hp |

Contactor

| | |
|---|------------------------|
| Size of contactor | NEMA controller size 1 |
| 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 | 27 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 | 8 |
| Contact rating of auxiliary contacts of contactor according to UL | 10A@600VAC (A600), 5A@600VDC (P600) |

Coil

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| 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 | 8.6 W |
| Apparent pick-up power of magnet coil at AC | 218 V·A |
| Apparent holding power of magnet coil at AC | 25 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 | 19 ... 29 ms |
| Off-delay time | 10 ... 24 ms |

Overload relay

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|---|-----|
| 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 | 0.75 ... 3.4 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 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 | Screw-type terminals |
| Tightening torque [lbf-in] for supply | 35 ... 35 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 | Screw-type terminals |
| Tightening torque [lbf-in] for load-side outgoing feeder | 20 ... 24 lbf-in |
| Type of connectable conductor cross-sections at AWG conductors for load-side outgoing feeder single or multi-stranded | 2 x (14 - 10 AWG) |

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|--|--|
| Temperature of the conductor for load-side outgoing feeder maximum permissible | 75 °C |
| Material of the conductor for load-side outgoing feeder | 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

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|---|---|
| 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 |
| 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=US2:14DUB820J>

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

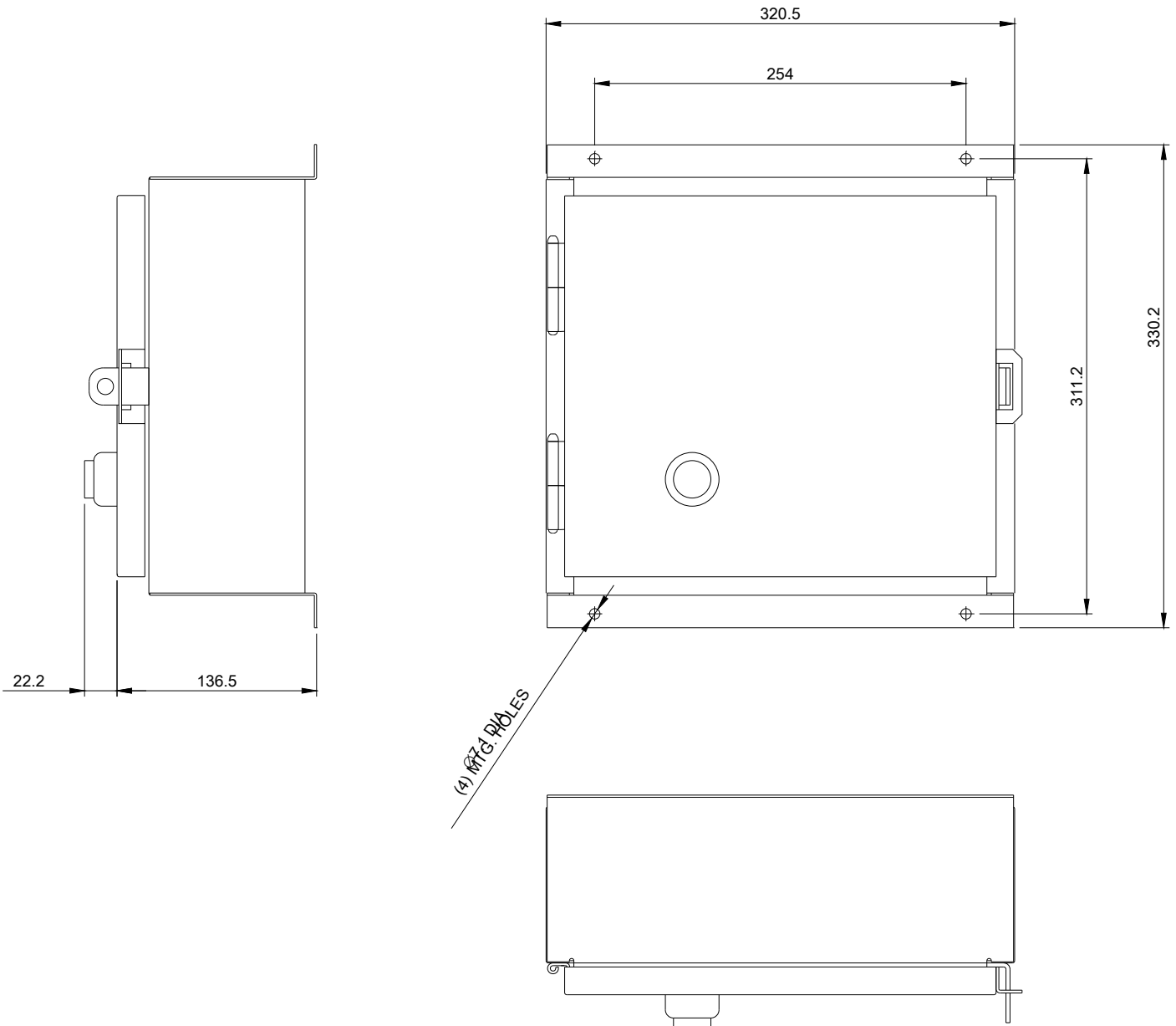
<https://support.industry.siemens.com/cs/US/en/ps/US2:14DUB820J>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14DUB820J&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:14DUB820J/certificate>





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