SIEMENS

Data sheet US2:14CUD820H



Non-reversing motor starter, Size 0, Three phase full voltage, Solid-state overload relay, OLRelay amp range 5.5-22a, 380 440/440 480V 50/60HZ coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors, Extra-wide enclosure

| product brand name | Class 14 |
|---|--|
| design of the product | Full-voltage 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 |
| 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 | 3 hp |
| • at 220/230 V rated value | 3 hp |
| Contactor | |
| size of contactor | NEMA controller size 0 |
| 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 | 18 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 | 8 |
| 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 AC at 50 Hz rated value | 380 440 V |
| at AC at 60 Hz rated value | 440 480 V |
| holding power at AC minimum | 8.6 W |
| 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 | 0.85 1.1 |

| magnet ceil | |
|---|--|
| magnet coil | FO 9/ |
| 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- | 5.5 22 A |
| dependent overload release | 0.0 ZZ /1 |
| 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 | 5A@600VAC (B600), 1A@250VDC (R300) |
| UL | |
| insulation voltage (Ui) | |
| with single-phase operation at AC rated value | 600 V |
| with multi-phase operation at AC rated value | 300 V |
| Enclosure | |
| design of the housing | Extra-wide |
| | |
| degree of protection NEMA rating of the enclosure | Extra-wide NEMA Type 12 |
| design of the housing | Extra-wide NEMA Type 12 Dust tight and drip proof for indoors |
| · · · · · · · · · · · · · · · · · · · | |
| design of the housing | |
| design of the housing Mounting/wiring | Dust tight and drip proof for indoors |
| design of the housing Mounting/wiring mounting position | Dust tight and drip proof for indoors Vertical |
| design of the housing Mounting/wiring mounting position fastening method | Dust tight and drip proof for indoors Vertical Surface mounting and installation |
| design of the housing 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 Screw-type terminals |
| design of the housing 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 Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) |
| design of the housing 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 Screw-type terminals 20 20 lbf·in 1x(14 - 2 AWG) |
| design of the housing 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 | Vertical Surface mounting and installation Screw-type terminals 20 20 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU |
| design of the housing 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 | Vertical Surface mounting and installation Screw-type terminals 20 20 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals |
| design of the housing 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 Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in |
| design of the housing 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 | Vertical Surface mounting and installation Screw-type terminals 20 20 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals |
| design of the housing 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 | Vertical Surface mounting and installation Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in |
| design of the housing 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 | Vertical Surface mounting and installation Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) |
| design of the housing 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 Screw-type terminals 20 20 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf·in 1x(14 - 2 AWG) |
| design of the housing 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 Screw-type terminals 20 20 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf·in 1x(14 - 2 AWG) |
| design of the housing 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 Screw-type terminals 20 20 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals |
| design of the housing 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 Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 5 12 lbf-in |
| design of the housing 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 Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 20 21 lbf-in 2x(16 - 12 AWG) |
| design of the housing 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 Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 5 12 lbf-in 2 x (16 - 12 AWG) 75 °C CU |
| 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 Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 5 12 lbf-in 2 x (16 - 12 AWG) 75 °C CU screw-type terminals |
| 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 | Vertical Surface mounting and installation Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 2 12 lbf-in 2 x (16 - 12 AWG) 75 °C CU screw-type terminals 10 15 lbf-in |
| 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 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 type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded | Vertical Surface mounting and installation Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2 x (16 - 12 AWG) 75 °C CU Screw-type terminals 10 15 lbf-in 1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (18 - 16 AWG) |
| 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 Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 2 x (16 - 12 AWG) 75 °C CU screw-type terminals 5 12 lbf-in 2 x (16 - 12 AWG) 75 °C CU screw-type terminals |

| 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 | 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) |
| | 10kA@600V (Class H or K); 100kA@600V (Class R or J) Thermal magnetic circuit breaker |
| circuit required | |
| circuit required design of the short-circuit trip | |
| circuit required design of the short-circuit trip maximum short-circuit current breaking capacity (Icu) | Thermal magnetic circuit breaker |
| circuit required design of the short-circuit trip maximum short-circuit current breaking capacity (Icu) • at 240 V | Thermal magnetic circuit breaker 14 kA |
| circuit required design of the short-circuit trip maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V | Thermal magnetic circuit breaker 14 kA 10 kA |

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

www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

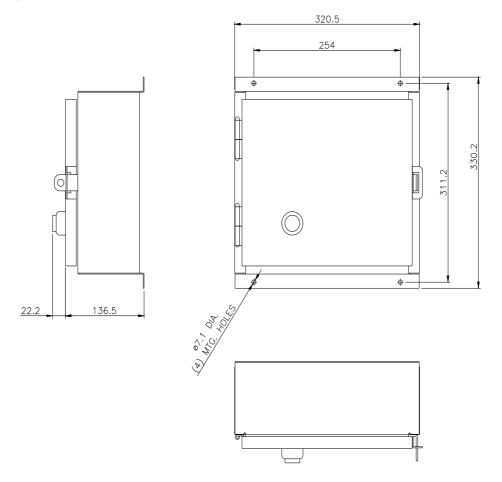
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:14CUD820H

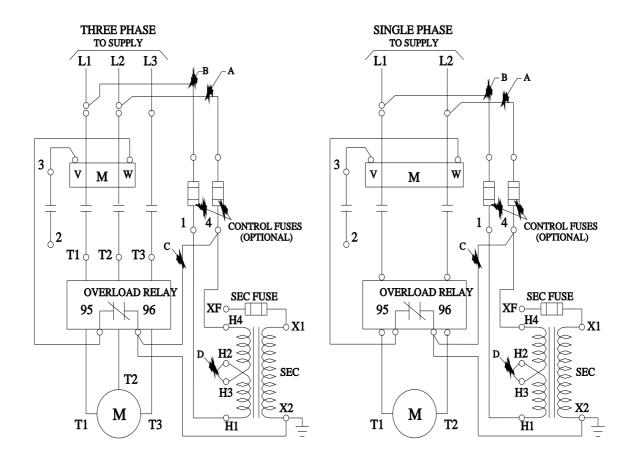
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14CUD820H&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14CUD820H/certificate





last modified: 11/29/2021 🖸