## SIEMENS

## Data sheet

## US2:14CUC32FF



Non-reversing motor starter, Size 0, Three phase full voltage, Solid-state overload relay, OLR amp range 3-12A, 110V 50Hz / 120V 60Hz coil, Non-combination type, Enclosure type 4X fiberglass, Water/dust tight noncorrosive, Standard width enclosure

| 0   |  |
|---|--|
| 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]   | 14 lb                                    |
| Height x Width x Depth [in]   | 15 × 12 × 7 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   |  |
| <ul> <li>during storage</li> </ul>                                      | -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  | 2 hp                                     |
| <ul> <li>at 220/230 V rated value</li> </ul>                            | 2 hp                                     |
| • at 460/480 V rated value  | 5 hp                                     |
| • at 575/600 V rated value  | 5 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 | 1000000                                  |
| 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  | 110 V                                    |
| at AC at 60 Hz rated value  | 120 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 coil   |  |
| percental drop-out voltage of magnet coil related to the input<br>voltage   | 50 %   |
| ON-delay time   | 19 29 ms   |
| OFF-delay time  | 10 24 ms   |
| Overload relay  |  |
| product function  |  |
| <ul> <li>overload protection</li> </ul>   | Yes  |
| <ul> <li>phase failure detection</li> </ul>   | Yes  |
| <ul> <li>asymmetry detection</li> </ul>   | Yes  |
| <ul> <li>ground fault detection</li> </ul>  | 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-<br>dependent overload release   | 3 12 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  |  |
| contact rating of auxiliary contacts of overload relay according to UL  | 5A@600VAC (B600), 1A@250VDC (R300)   |
| insulation voltage (Ui)   |  |
| <ul> <li>with single-phase operation at AC rated value</li> </ul>   | 600 V  |
|   |  |
| <ul> <li>with multi-phase operation at AC rated value</li> </ul>  | 300 V  |
| with multi-phase operation at AC rated value Enclosure  | 300 V  |
| Enclosure<br>degree of protection NEMA rating   | 300 V<br>4X, fiber glass   |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing  |  |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring   | 4X, fiber glass<br>Dust-tight, watertight & corrosion resistant  |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring<br>mounting position  | 4X, fiber glass<br>Dust-tight, watertight & corrosion resistant<br>Vertical  |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring<br>mounting position<br>fastening method  | 4X, fiber glass<br>Dust-tight, watertight & corrosion resistant<br>Vertical<br>Surface mounting and installation   |
| Enclosure degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side  | 4X, fiber glass<br>Dust-tight, watertight & corrosion resistant<br>Vertical<br>Surface mounting and installation<br>Screw-type terminals   |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring<br>mounting position<br>fastening method  | 4X, fiber glass<br>Dust-tight, watertight & corrosion resistant<br>Vertical<br>Surface mounting and installation   |
| Enclosure degree of protection NEMA rating 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  | 4X, fiber glass<br>Dust-tight, watertight & corrosion resistant<br>Vertical<br>Surface mounting and installation<br>Screw-type terminals<br>20 20 lbf-in   |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>tightening torque [lbf-in] for supply<br>type of connectable conductor cross-sections at line-side for<br>AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum permissible  | 4X, fiber glass<br>Dust-tight, watertight & corrosion resistant<br>Vertical<br>Surface mounting and installation<br>Screw-type terminals<br>20 20 lbf-in<br>1x(14 - 2 AWG)<br>75 °C  |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>tightening torque [lbf in] for supply<br>type of connectable conductor cross-sections at line-side for<br>AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum permissible<br>material of the conductor for supply  | 4X, fiber glass<br>Dust-tight, watertight & corrosion resistant<br>Vertical<br>Surface mounting and installation<br>Screw-type terminals<br>20 20 lbf in<br>1x(14 - 2 AWG)<br>75 °C<br>AL or CU  |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>tightening torque [lbf·in] for supply<br>type of connectable conductor cross-sections at line-side for<br>AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum permissible<br>material of the conductor for supply<br>type of electrical connection for load-side outgoing feeder   | 4X, fiber glass<br>Dust-tight, watertight & corrosion resistant<br>Vertical<br>Surface mounting and installation<br>Screw-type terminals<br>20 20 lbf-in<br>1x(14 - 2 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals  |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>tightening torque [lbf·in] for supply<br>type of connectable conductor cross-sections at line-side for<br>AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum permissible<br>material of the conductor for supply<br>type of electrical connection for load-side outgoing feeder<br>tightening torque [lbf·in] for load-side outgoing feeder   | 4X, fiber glass<br>Dust-tight, watertight & corrosion resistant<br>Vertical<br>Surface mounting and installation<br>Screw-type terminals<br>20 20 lbf-in<br>1x(14 - 2 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>20 20 lbf-in  |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>tightening torque [lbf·in] for supply<br>type of connectable conductor cross-sections at line-side for<br>AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum permissible<br>material of the conductor for supply<br>type of electrical connection for load-side outgoing feeder   | 4X, fiber glass<br>Dust-tight, watertight & corrosion resistant<br>Vertical<br>Surface mounting and installation<br>Screw-type terminals<br>20 20 lbf-in<br>1x(14 - 2 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>20 20 lbf-in<br>1x(14 - 2 AWG)  |
| Enclosure         degree of protection NEMA rating         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         tightening torque [lbf·in] for load-side outgoing feeder   | 4X, fiber glass<br>Dust-tight, watertight & corrosion resistant<br>Vertical<br>Surface mounting and installation<br>Screw-type terminals<br>20 20 lbf-in<br>1x(14 - 2 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>20 20 lbf-in  |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>tightening torque [lbf·in] for supply<br>type of connectable conductor cross-sections at line-side for<br>AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum permissible<br>material of the conductor for supply<br>type of electrical connection for load-side outgoing feeder<br>tightening torque [lbf·in] for load-side outgoing feeder<br>type of connectable conductor cross-sections for AWG cables<br>for load-side outgoing feeder<br>type of connectable conductor cross-sections for AWG cables<br>for load-side outgoing feeder single or multi-stranded<br>temperature of the conductor for load-side outgoing feeder  | 4X, fiber glass<br>Dust-tight, watertight & corrosion resistant<br>Vertical<br>Surface mounting and installation<br>Screw-type terminals<br>20 20 lbf-in<br>1x(14 - 2 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>20 20 lbf-in<br>1x(14 - 2 AWG)  |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>tightening torque [lbf-in] for supply<br>type of connectable conductor cross-sections at line-side for<br>AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum permissible<br>material of the conductor for supply<br>type of electrical connection for load-side outgoing feeder<br>tightening torque [lbf-in] for load-side outgoing feeder<br>tightening torque [lbf-in] for load-side outgoing feeder<br>type of connectable conductor cross-sections for AWG cables<br>for load-side outgoing feeder single or multi-stranded<br>temperature of the conductor for load-side outgoing feeder<br>maximum permissible   | 4X, fiber glass         Dust-tight, watertight & corrosion resistant         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         Screw-type terminals         AL or CU         screw-type terminals                          |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>tightening torque [lbf-in] for supply<br>type of connectable conductor cross-sections at line-side for<br>AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum permissible<br>material of the conductor for supply<br>type of electrical connection for load-side outgoing feeder<br>tightening torque [lbf-in] for load-side outgoing feeder<br>type of connectable conductor cross-sections for AWG cables<br>for load-side outgoing feeder single or multi-stranded<br>temperature of the conductor for load-side outgoing feeder<br>type of connectable conductor for load-side outgoing feeder<br>temperature of the conductor for load-side outgoing feeder<br>type of electrical connection of magnet coil<br>tightening torque [lbf-in] at magnet coil  | 4X, fiber glass         Dust-tight, watertight & corrosion resistant         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   |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>tightening torque [lbf·in] for supply<br>type of connectable conductor cross-sections at line-side for<br>AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum permissible<br>material of the conductor for supply maximum permissible<br>material of the conductor for supply<br>type of electrical connection for load-side outgoing feeder<br>tightening torque [lbf·in] for load-side outgoing feeder<br>type of connectable conductor cross-sections for AWG cables<br>for load-side outgoing feeder single or multi-stranded<br>temperature of the conductor for load-side outgoing feeder<br>maximum permissible<br>material of the conductor for load-side outgoing feeder<br>type of electrical connection of magnet coil  | 4X, fiber glass         Dust-tight, watertight & corrosion resistant         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         Screw-type terminals         AL or CU         screw-type terminals                          |
| Enclosure         degree of protection NEMA rating         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 connectable conductor cross-sections for AWG cables         for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of connectable conductor 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         type of electrical connection of magnet coil         tightening torque [lbf-in] at magnet coil         tightening torque [lbf-in] at magnet coil  | 4X, fiber glass         Dust-tight, watertight & corrosion resistant         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   |
| Enclosure         degree of protection NEMA rating         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 connectable conductor cross-sections for AWG cables         for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of electrical connection of load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of connectable 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   | 4X, fiber glass         Dust-tight, watertight & corrosion resistant         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)   |
| Enclosure<br>degree of protection NEMA rating<br>design of the housing<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>tightening torque [lbf·in] for supply<br>type of connectable conductor cross-sections at line-side for<br>AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum permissible<br>material of the conductor for supply<br>type of electrical connection for load-side outgoing feeder<br>tightening torque [lbf·in] for load-side outgoing feeder<br>type of connectable conductor cross-sections for AWG cables<br>for load-side outgoing feeder single or multi-stranded<br>temperature of the conductor for load-side outgoing feeder<br>type of connectable conductor for load-side outgoing feeder<br>material of the conductor for load-side outgoing feeder<br>type of electrical connection of magnet coil<br>tightening torque [lbf·in] at magnet coil<br>tightening torque [lbf·in] at magnet coil<br>type of connectable conductor cross-sections of magnet coil for<br>AWG cables single or multi-stranded<br>temperature of the conductor at magnet coil maximum<br>permissible  | 4X, fiber glass         Dust-tight, watertight & corrosion resistant         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   |
| Enclosure         degree of protection NEMA rating         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         type of connectable 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 | 4X, fiber glass         Dust-tight, watertight & corrosion resistant         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                              |
| Enclosure         degree of protection NEMA rating         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         tightening torque [lbf-in] for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of electrical connection of magnet coil         temperature 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         permiss | 4X, fiber glass         Dust-tight, watertight & corrosion resistant         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 |

| 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<br>for AWG cables for auxiliary contacts single or multi-stranded | 2 x (20 - 14 AWG)                                   |
| temperature of the conductor at overload relay for auxiliary<br>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<br>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)  |   |
| • 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  |   |

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=US2:14CUC32FF

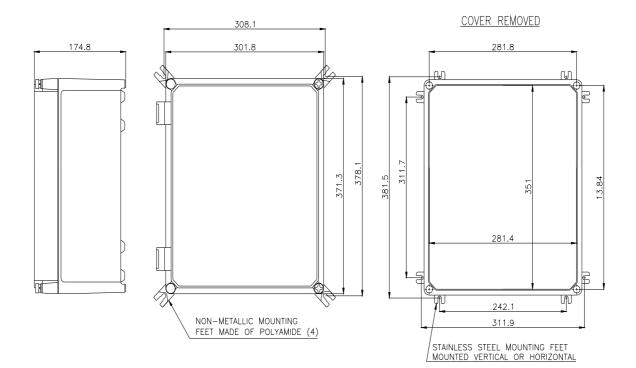
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:14CUC32FF

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14CUC32FF&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14CUC32FF/certificate





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