## **SIEMENS**

Data sheet US2:14CUD32WL



Non-reversing motor starter Size 0 Three phase full voltage Solid-state overload relay OLRelay amp range 5.5-22A 240VAC 50HZ / 277VAC 60HZ coil Combination type Water/dust tight non-corrosive

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]	11 lb
Height x Width x Depth [in]	13 × 8 × 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]	
<ul><li>during storage</li></ul>	-22 +149 °F
<ul> <li>during operation</li> </ul>	-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	3 hp
<ul> <li>at 220/230 V rated value</li> </ul>	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	240 V
at AC at 60 Hz rated value	277 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	
magnet coil	E0.0/
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- dependent overload release	5.5 22 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	1 A
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
Enclosure	
degree of protection NEMA rating of the enclosure	NEMA 4x 304 stainless steel enclosure
degree of protection NEMA rating of the enclosure design of the housing	NEMA 4x 304 stainless steel enclosure  Dust-tight, watertight & corrosion resistant
degree of protection NEMA rating of the enclosure	
degree of protection NEMA rating of the enclosure design of the housing Mounting/wiring mounting position	Dust-tight, watertight & corrosion resistant  Vertical
degree of protection NEMA rating of the enclosure design of the housing Mounting/wiring mounting position fastening method	Dust-tight, watertight & corrosion resistant  Vertical  Surface mounting and installation
degree of protection NEMA rating of the enclosure design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side	Dust-tight, watertight & corrosion resistant  Vertical  Surface mounting and installation  Screw-type terminals
degree of protection NEMA rating of the enclosure 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	Dust-tight, watertight & corrosion resistant  Vertical  Surface mounting and installation  Screw-type terminals  20 20 lbf-in
degree of protection NEMA rating of the enclosure 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)
degree of protection NEMA rating of the enclosure 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) 75 °C
degree of protection NEMA rating of the enclosure 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
degree of protection NEMA rating of the enclosure 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
degree of protection NEMA rating of the enclosure 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
degree of protection NEMA rating of the enclosure 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	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)
degree of protection NEMA rating of the enclosure 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)
degree of protection NEMA rating of the enclosure 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)
degree of protection NEMA rating of the enclosure 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	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)  AL or CU Screw-type terminals 20 20 lbf-in 1x(14 - 2 AWG)  75 °C  AL or CU Screw-type terminals
degree of protection NEMA rating of the enclosure 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	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)
degree of protection NEMA rating of the enclosure 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 2 x (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 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 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 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	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
degree of protection NEMA rating of the enclosure  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 screw-type terminals
degree of protection NEMA rating of the enclosure 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 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
degree of protection NEMA rating of the enclosure 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 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 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 2 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)
degree of protection NEMA rating of the enclosure 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 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 temperature of the conductor 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) 75 °C
degree of protection NEMA rating of the enclosure 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 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 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 type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor 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 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)

contacts	
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)
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	

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

Industry Mall (Online ordering system)

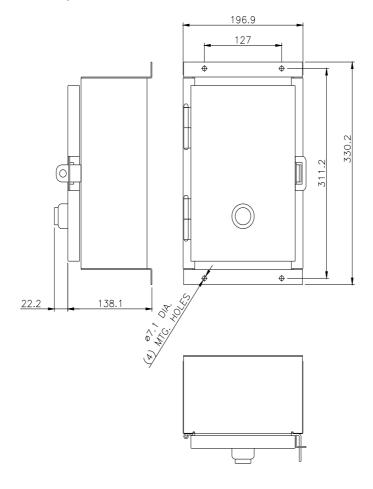
 $\underline{https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14CUD32WL}$ 

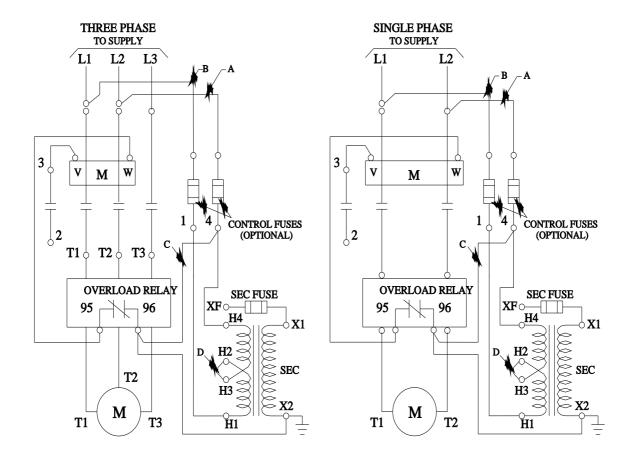
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:14CUD32WL

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14CUD32WL&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14CUD32WL/certificate





last modified: 1/25/2022 🖸