## SIEMENS

## Data sheet

## US2:14IUH32WA



Non-reversing motor starter, Size 3 1/2, Three phase full voltage, Solid-state overload relay, OLR amp range 50-200A, Non-combination type, Encl. type 4X 304 S. Steel, Water/dust tight noncorrosive, Standard width enclosure

product brand name	Class 14
design of the product	Full-voltage non-reversing motor starter
special product feature	ESP200 overload relay; Half-size starter; Dual voltage coil
General technical data	
weight [lb]	36 lb
Height x Width x Depth [in]	26 × 13 × 8 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	30 hp
• at 220/230 V rated value	40 hp
• at 460/480 V rated value	75 hp
• at 575/600 V rated value	75 hp
Contactor	
size of contactor	Controller half size 3 1/2
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	115 A
mechanical service life (operating cycles) of the main contacts typical	500000
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	
• at AC at 60 Hz rated value	110 240 V
holding power at AC minimum	14 W
apparent pick-up power of magnet coil at AC	310 VA
apparent holding power of magnet coil at AC	26 VA

operating range factor control supply voltage rated value of	0.85 1.1
magnet coil	0.05 1.1
percental drop-out voltage of magnet coil related to the input voltage	50 %
ON-delay time	26 41 ms
OFF-delay time	14 19 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- dependent overload release	50 200 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
design of the housing	NEMA 4x 304 stainless steel enclosure Dust-tight, watertight & corrosion resistant
design of the housing Mounting/wiring mounting position	Dust-tight, watertight & corrosion resistant Vertical
design of the housing Mounting/wiring mounting position fastening method	Dust-tight, watertight & corrosion resistant
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 Box lug
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 Box lug 120 120 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	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf·in         1x(14 - 2/0 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	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf·in         1x(14 - 2/0 AWG)         75 °C
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	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf·in         1x(14 - 2/0 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	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug
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	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 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         tightening torque [lbf-in] 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	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf·in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf·in         1x(14 - 2/0 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 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	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf·in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf·in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf·in         1x(14 - 2/0 AWG)         75 °C
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         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 connectable conductor for load-side outgoing feeder         temperature of the conductor for load-side outgoing feeder         maximum permissible         material of the conductor for load-side outgoing feeder	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf·in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf·in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf·in         1x(14 - 2/0 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         tightening torque [lbf-in] 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	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf-in         1x(14 - 2/0 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         type of connectable conductor for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of 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	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf-in         1x(14 - 2/0 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         type of cleatrical connection 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         type of connectable conductor cross-sections of magnet coil for         AWG cables single or multi-stranded	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         screw-type terminals         5 12 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 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         type of electrical connection of nagnet coil         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         type of connectable conductor cross-sections of 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	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         screw-type terminals         5 12 lbf-in         2 x (16 - 12 AWG)         75 °C
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         type of connectable conductor for supply         type of connectable conductor cross-sections for AWG cables         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         type of cables single or multi-stranded         temperature of the conductor at magnet coil maximum         permissible         material of the conductor at magnet coil         tightening torque [lbf-in] at magnet coil	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         screw-type terminals         5 12 lbf-in         2 x (16 - 12 AWG)         75 °C         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         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         type of cables single or multi-stranded         temperature of the conductor at magnet coil maximum         permissible	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf in         1x(14 - 2/0 AWG)         75 °C         AL or CU         screw-type terminals         5 12 lbf in         2 x (16 - 12 AWG)         75 °C         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         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         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         type of cables single or multi-stranded         temperature of the conductor at magnet coil maximum         permissible         material of the conductor at magnet coil         type of electrical c	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf in         1x(14 - 2/0 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
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         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         type of connectable conductor cross-sections of magnet coil for         AWG cables single or multi-stranded         temperature of the conductor at magnet coil         type of electrical connection for auxiliary contacts         tightening torque [lbf-in] at contactor for auxiliary contacts         type of electrical connection for auxiliary contacts         type of electrical connection	Dust-tight & corrosion resistantVerticalSurface mounting and installationBox lug120 120 lbf-in $1x(14 - 2/0 AWG)$ 75 °CAL or CUBox lug120 120 lbf-in $1x(14 - 2/0 AWG)$ 75 °CAL or CUscrew-type terminals5 12 lbf-in2 x (16 - 12 AWG)75 °CCUScrew-type terminals10 15 lbf-in1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (18 - 16 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         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         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         type of electrical connection for auxiliary contacts         type of electrical connection for auxiliary contacts         tightening torque [lbf-in] at contactor for auxiliary contacts	Dust-tight, watertight & corrosion resistant         Vertical         Surface mounting and installation         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf-in         1x(14 - 2/0 AWG)         75 °C         AL or CU         Box lug         120 120 lbf-in         1x(14 - 2/0 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

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

Further information

Industrial Controls - Product Overview (Catalogs, Brochures,...) www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

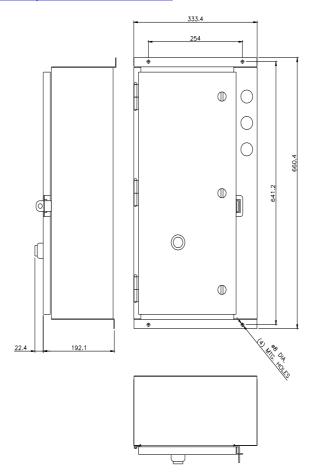
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14IUH32WA

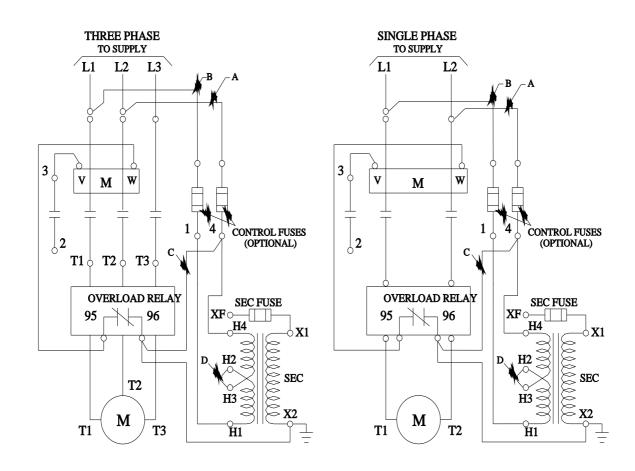
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:14IUH32WA

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14IUH32WA&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14IUH32WA/certificate





last modified:

1/25/2022 🖸