SIEMENS

Data sheet US2:14HUG320J



Non-reversing motor starter, Size 3, Three phase full voltage, Solid-state overload relay, OLR amp range 25-100A, 24VAC 50-60Hz coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors, Standard width enclosure

Figure similar

	8 1
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]	33 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	25 hp
at 220/230 V rated value	30 hp
• at 460/480 V rated value	50 hp
• at 575/600 V rated value	50 hp
Contactor	
size of contactor	NEMA controller size 3
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	90 A
mechanical service life (operating cycles) of the main contacts typical	5000000
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 50 Hz rated value	24 V
• at AC at 60 Hz rated value	24.1/
	24 V

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 magnet coil	0.85 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	
 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	25 100 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)	
with single-phase operation at AC rated value	600 V
 with multi-phase operation at AC rated value 	300 V
Enclosure	
degree of protection NEMA rating	12
design of the housing	Dust tight and drip proof for indoors
Mounting/wiring	
mounting position	Vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Box lug
tightening torque [lbf·in] for supply	120 120 lbf·in
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded	
	1x(14 - 2/0 AWG)
temperature of the conductor for supply maximum permissible	1x(14 - 2/0 AWG) 75 °C
temperature of the conductor for supply maximum permissible material of the conductor for supply	
	75 °C
material of the conductor for supply	75 °C AL or CU
material of the conductor for supply type of electrical connection for load-side outgoing feeder	75 °C AL or CU Box lug
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 at AWG cables for	75 °C AL or CU Box lug 120 120 lbf·in
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 at AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder	75 °C AL or CU Box lug 120 120 lbf-in 1x(14 - 2/0 AWG)
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 at AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C AL or CU Box lug 120 120 lbf·in 1x(14 - 2/0 AWG) 75 °C AL or CU
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 at 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	75 °C AL or CU Box lug 120 120 lbf·in 1x(14 - 2/0 AWG) 75 °C
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 at 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	75 °C AL or CU Box lug 120 120 lbf-in 1x(14 - 2/0 AWG) 75 °C AL or CU screw-type terminals
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 at 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 at AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum	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
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 at 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 at AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible	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)
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 at 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 at AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum	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
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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 at 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 at AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil	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

maximum permissible material of the conductor at contactor for auxiliary contacts type of electrical connection at overload relay for auxiliary contacts tightening torque [lbf-in] at overload relay for auxiliary contacts type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at overload relay for auxiliary contacts maximum permissible material of the conductor at overload relay for auxiliary contacts Short-circuit current rating design of the fuse link for short-circuit protection of the main circuit required design of the short-circuit trip maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14 Further information		
type of electrical connection at overload relay for auxiliary contacts tightening torque [lbf-in] at overload relay for auxiliary contacts type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at overload relay for auxiliary contacts maximum permissible material of the conductor at overload relay for auxiliary contacts Short-circuit current rating design of the fuse link for short-circuit protection of the main circuit required design of the short-circuit trip maximum short-circuit trip maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 480 V • at 600 V certificate of suitability screw-type terminals Screw-type terminals **C 10 lbf-in 2 x (20 - 14 AWG) **C CU **DOM: 1 0 kA **C CU **DOM: 1 0 kA **C CU **C CU **DOM: 1 0 kA **C CU **DOKA@600V (Class H or K); 100kA@600V (Class R or J) **C CU **DOKA@600V (Class R or J) **C CU **C C	maximum permissible	
tightening torque [lbf-in] at overload relay for auxiliary contacts type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at overload relay for auxiliary contacts maximum permissible material of the conductor at overload relay for auxiliary contacts Short-circuit current rating design of the fuse link for short-circuit protection of the main circuit required design of the short-circuit trip maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	material of the conductor at contactor for auxiliary contacts	CU
type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at overload relay for auxiliary contacts maximum permissible 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 design of the short-circuit trip Thermal magnetic circuit breaker maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	**	screw-type terminals
at AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at overload relay for auxiliary contacts maximum permissible 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 design of the short-circuit trip Thermal magnetic circuit breaker maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	tightening torque [lbf·in] at overload relay for auxiliary contacts	7 10 lbf·in
contacts maximum permissible 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 design of the short-circuit trip Thermal magnetic circuit breaker maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V Certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14		2 x (20 - 14 AWG)
design of the fuse link for short-circuit protection of the main circuit required design of the short-circuit trip maximum short-circuit current breaking capacity (Icu) at 240 V at 480 V at 600 V certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14		75 °C
design of the fuse link for short-circuit protection of the main circuit required design of the short-circuit trip maximum short-circuit current breaking capacity (Icu) at 240 V at 480 V at 600 V to kA at 600 V certificate of suitability 10kA@600V (Class H or K); 100kA@600V (Class R or J) Thermal magnetic circuit breaker 14 kA 10 kA 10 kA NEMA ICS 2; UL 508; CSA 22.2, No.14	material of the conductor at overload relay for auxiliary contacts	CU
circuit required design of the short-circuit trip maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V 10 kA certificate of suitability Thermal magnetic circuit breaker 14 kA 10 kA 10 kA NEMA ICS 2; UL 508; CSA 22.2, No.14	Short-circuit current rating	
maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V 10 kA certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14		10kA@600V (Class H or K); 100kA@600V (Class R or J)
 at 240 V at 480 V at 600 V certificate of suitability 14 kA 10 kA NEMA ICS 2; UL 508; CSA 22.2, No.14 	design of the short-circuit trip	Thermal magnetic circuit breaker
 at 480 V at 600 V certificate of suitability 10 kA NEMA ICS 2; UL 508; CSA 22.2, No.14 	maximum short-circuit current breaking capacity (Icu)	
at 600 V 10 kA certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	● at 240 V	14 kA
certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	● at 480 V	10 kA
·	● at 600 V	10 kA
Further information	certificate of suitability	NEMA ICS 2; UL 508; CSA 22.2, No.14
	Further information	

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

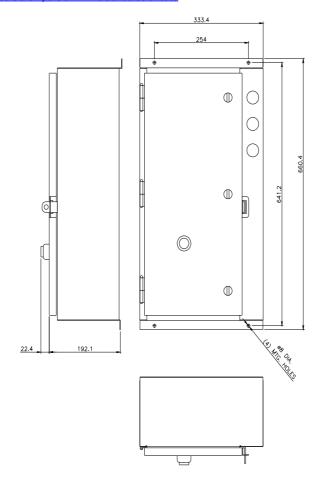
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14HUG320J

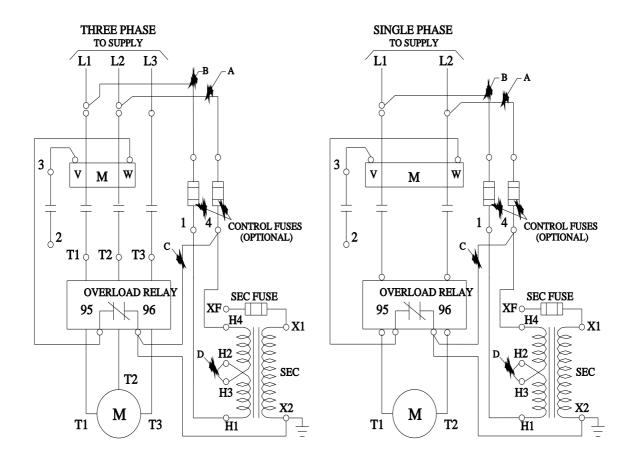
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:14HUG320J

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14HUG320J&lang=en

Certificates/approvals
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last modified: 11/29/2021 🖸