## **SIEMENS**

Data sheet US2:14LPU320D



Non-reversing motor starter, Size 5, Three phase full voltage, Solid-state overload relay, OLR amp range 55-250A, 200-220V 50-60Hz/DC coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors, Standard width enclosure

product brand name	Class 14	
design of the product	Full-voltage non-reversing motor starter	
General technical data		
weight [lb]	113 lb	
Height x Width x Depth [in]	40 × 20 × 11 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	75 hp	
• at 220/230 V rated value	100 hp	
• at 460/480 V rated value	200 hp	
• at 575/600 V rated value	200 hp	
Contactor		
size of contactor	NEMA controller size 5	
number of NO contacts for main contacts	3	
operating voltage for main current circuit at AC at 60 Hz	600 V	
maximum		
maximum operational current at AC at 600 V rated value	270 A	
	270 A 10000000	
operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts		
operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical		
operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical Auxiliary contact	10000000	
operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts	10000000	
operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts	10000000 2 2	
operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum	10000000 2 2 2 8	
operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL	10000000 2 2 2 8	
operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil	10000000  2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300)	
operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil type of voltage of the control supply voltage	10000000  2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300)	
operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil type of voltage of the control supply voltage control supply voltage	10000000  2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300)  AC/DC	
operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage control supply voltage  • at DC rated value	10000000  2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300)  AC/DC  200 220 V	
operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage control supply voltage  • at DC rated value • at AC at 50 Hz rated value	10000000  2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300)  AC/DC  200 220 V 200 220 V	

	0.7.1/4
apparent holding power of magnet coil at AC	6.7 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	60 %
ON-delay time	30 95 ms
OFF-delay time	40 80 ms
Overload relay	
product function	
<ul> <li>overload protection</li> </ul>	Yes
phase failure detection	Yes
asymmetry detection	Yes
ground fault detection	No
• test function	Yes
external reset	Yes
reset function	Manual and automatic
trip class	CLASS 20
adjustable current response value current of the current- dependent overload release	55 250 A
product feature protective coating on printed-circuit board	No
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	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	Surface mounting and installation  Box lug
	· ·
type of electrical connection for supply voltage line-side	Box lug
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	Box lug  180 195 lbf·in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG
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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)
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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C
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 type of electrical connection for load-side outgoing feeder	Box lug  180 195 lbf·in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C  Box lug
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 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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C  Box lug  180 220 lbf-in
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 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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C  Box lug  180 220 lbf-in  2 x 2/0 AWG - 500 MCM
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 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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C  Box lug  180 220 lbf-in  2 x 2/0 AWG - 500 MCM
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 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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C  Box lug  180 220 lbf-in  2 x 2/0 AWG - 500 MCM  75 °C  CU
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 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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C  Box lug  180 220 lbf-in  2 x 2/0 AWG - 500 MCM  75 °C  CU  screw-type terminals
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 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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C  Box lug  180 220 lbf-in  2 x 2/0 AWG - 500 MCM  75 °C  CU  screw-type terminals  7 10 lbf-in
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 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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C  Box lug  180 220 lbf-in  2 x 2/0 AWG - 500 MCM  75 °C  CU  screw-type terminals  7 10 lbf-in  2 x (18 - 14 AWG)
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 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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C  Box lug  180 220 lbf-in  2 x 2/0 AWG - 500 MCM  75 °C  CU  screw-type terminals  7 10 lbf-in  2 x (18 - 14 AWG)  75 °C
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 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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C  Box lug  180 220 lbf-in  2 x 2/0 AWG - 500 MCM  75 °C  CU  screw-type terminals  7 10 lbf-in  2 x (18 - 14 AWG)  75 °C  CU
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 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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C  Box lug  180 220 lbf-in  2 x 2/0 AWG - 500 MCM  75 °C  CU  screw-type terminals  7 10 lbf-in  2 x (18 - 14 AWG)  75 °C  CU  screw-type terminals
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 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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C  Box lug  180 220 lbf-in  2 x 2/0 AWG - 500 MCM  75 °C  CU  screw-type terminals  7 10 lbf-in  2 x (18 - 14 AWG)  75 °C  CU  screw-type terminals  7 10 lbf-in
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 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 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	Box lug  180 195 lbf-in  3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back)  75 °C  Box lug  180 220 lbf-in  2 x 2/0 AWG - 500 MCM  75 °C  CU  screw-type terminals  7 10 lbf-in  2 x (18 - 14 AWG)  75 °C  CU  screw-type terminals  7 10 lbf-in  2 x (10 - 16), 2x (18 - 14)

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	14kA@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	14 kA
• at 600 V	14 kA
certificate of suitability	NEMA ICS 2; UL 508
Further information	

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

www.usa.siemens.com/iccatalog

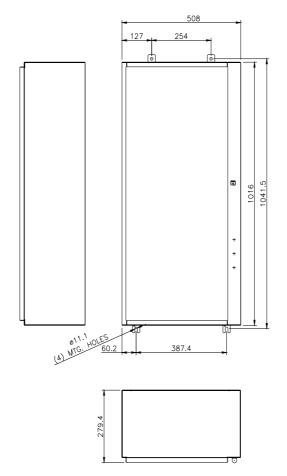
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14LPU320D

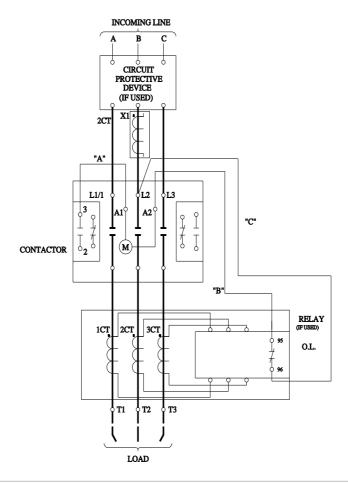
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Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14LPU320D/certificate





last modified: 11/29/2021 🖸