SIEMENS

Data sheet US2:14MPX320E



Non-reversing motor starter, Size 6, Three phase full voltage, Solid-state overload relay, OLR amp range 160-630A, 575-600V 50-60Hz/DC coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors, Standard width enclosure

Figure similar

product brand name	Class 14
design of the product	Full-voltage non-reversing motor starter
General technical data	
weight [lb]	145 lb
Height x Width x Depth [in]	48 × 20 × 13 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	150 hp
• at 220/230 V rated value	200 hp
• at 460/480 V rated value	400 hp
• at 575/600 V rated value	400 hp
Contactor	
size of contactor	NEMA controller size 6
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	540 A
mechanical service life (operating cycles) of the main contacts typical	10000000
Auxiliary contact	
number of NC contacts at contactor for auxiliary contacts	2
number of NO contacts at contactor for auxiliary contacts	2
number of total auxiliary contacts maximum	8
contact rating of auxiliary contacts of contactor according to UL	10A@240VAC (A300), 2.5A@250VDC (Q300)
Coil	
type of voltage of the control supply voltage	AC/DC
control supply voltage	
at DC rated value	575 600 V
 at AC at 50 Hz rated value 	575 600 V
at AC at 60 Hz rated value	575 600 V
holding power at AC minimum	10 W

apparent pick-up power of magnet coil at AC	830 VA
apparent holding power of magnet coil at AC	9.2 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	45 100 ms
OFF-delay time	60 100 ms
Overload relay	
product function	
 overload protection 	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	160 630 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)	
 with single-phase operation at AC rated value 	600 V
 with multi-phase operation at AC rated value 	300 V
- man mana priace operation at No rated value	
Enclosure	
	12
Enclosure	
Enclosure degree of protection NEMA rating	12
Enclosure degree of protection NEMA rating design of the housing	12
Enclosure degree of protection NEMA rating design of the housing Mounting/wiring	12 Dust tight and drip proof for indoors
Enclosure degree of protection NEMA rating design of the housing Mounting/wiring mounting position	12 Dust tight and drip proof for indoors Vertical
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method	12 Dust tight and drip proof for indoors Vertical Surface mounting and installation
Enclosure degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side	12 Dust tight and drip proof for indoors Vertical Surface mounting and installation Box lug
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at	12 Dust tight and drip proof for indoors Vertical Surface mounting and installation 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
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded	Dust tight and drip proof for indoors Vertical Surface mounting and installation 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)
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible	Dust tight and drip proof for indoors Vertical Surface mounting and installation 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
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible type of electrical connection for load-side outgoing feeder	12 Dust tight and drip proof for indoors Vertical Surface mounting and installation 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
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at 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 at AWG cables for	Dust tight and drip proof for indoors Vertical Surface mounting and installation 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
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at 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 at AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder	Dust tight and drip proof for indoors Vertical Surface mounting and installation 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
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at 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 at AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible	Dust tight and drip proof for indoors Vertical Surface mounting and installation 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
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at 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 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	Dust tight and drip proof for indoors Vertical Surface mounting and installation 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
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at 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 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	12 Dust tight and drip proof for indoors Vertical Surface mounting and installation 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
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at 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 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	12 Dust tight and drip proof for indoors Vertical Surface mounting and installation 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
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at 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 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	Dust tight and drip proof for indoors Vertical Surface mounting and installation 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)
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at 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 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	Dust tight and drip proof for indoors Vertical Surface mounting and installation 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
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at 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 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 maximum permissible	Dust tight and drip proof for indoors Vertical Surface mounting and installation 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
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at 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 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 maximum permissible	Dust tight and drip proof for indoors Vertical Surface mounting and installation 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
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at 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 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 maximum permissible	Dust tight and drip proof for indoors Vertical Surface mounting and installation 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
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at 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 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 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 at AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary contacts maximum permissible	Dust tight and drip proof for indoors Vertical Surface mounting and installation 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 (20 - 16), 2x (18 - 14) 75 °C
degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at 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 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 maximum permissible 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 at AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary contacts	Dust tight and drip proof for indoors Vertical Surface mounting and installation 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 (20 - 16), 2x (18 - 14)

contacts	
tightening torque [lbf-in] at overload relay for auxiliary contacts	7 10 lbf·in
type of connectable conductor cross-sections at overload relay at 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	18kA@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	18 kA
• at 480 V	18 kA
• at 600 V	18 kA
certificate of suitability	NEMA ICS 2; UL 508
Further information	

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

Industry Mall (Online ordering system)

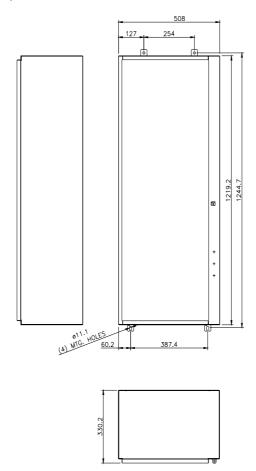
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14MPX320E

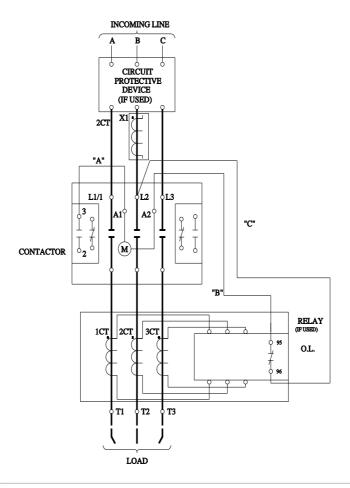
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:14MPX320E

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14MPX320E&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14MPX320E/certificate





last modified: 11/29/2021 🖸