



Figure similar

Non-reversing motor starter, Size 6, Three phase full voltage, Solid-state overload relay, OLR amp range 160-630A, 110-127V 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
<b>General technical data</b>	
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
<b>Horsepower ratings</b>	
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
<b>Contactors</b>	
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
<b>Auxiliary contact</b>	
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)
<b>Coil</b>	
type of voltage of the control supply voltage	AC/DC
control supply voltage	
• at DC rated value	110 ... 127 V
• at AC at 50 Hz rated value	110 ... 127 V
• at AC at 60 Hz rated value	110 ... 127 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
percentual 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	
<ul style="list-style-type: none"> <li>• overload protection</li> <li>• phase failure detection</li> <li>• asymmetry detection</li> <li>• ground fault detection</li> <li>• test function</li> <li>• external reset</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>No</li> <li>Yes</li> <li>Yes</li> </ul>
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	
<ul style="list-style-type: none"> <li>• at AC at 600 V</li> <li>• at DC at 250 V</li> </ul>	<ul style="list-style-type: none"> <li>5 A</li> <li>1 A</li> </ul>
contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 1A@250VDC (R300)
insulation voltage (Ui)	
<ul style="list-style-type: none"> <li>• with single-phase operation at AC rated value</li> <li>• with multi-phase operation at AC rated value</li> </ul>	<ul style="list-style-type: none"> <li>600 V</li> <li>300 V</li> </ul>

#### 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	180 ... 195 lbf-in
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded	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)
temperature of the conductor for supply maximum permissible	75 °C
type of electrical connection for load-side outgoing feeder	Box lug
tightening torque [lbf-in] for load-side outgoing feeder	180 ... 220 lbf-in
type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-stranded	2 x 2/0 AWG - 500 MCM
temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C
material of the conductor for load-side outgoing feeder	CU
type of electrical connection of magnet coil	screw-type terminals
tightening torque [lbf-in] at magnet coil	7 ... 10 lbf-in
type of connectable conductor cross-sections of magnet coil at AWG cables single or multi-stranded	2 x (18 - 14 AWG)
temperature of the conductor at magnet coil maximum permissible	75 °C
material of the conductor at magnet coil	CU
type of electrical connection for auxiliary contacts	screw-type terminals
tightening torque [lbf-in] at contactor for auxiliary contacts	7 ... 10 lbf-in
type of connectable conductor cross-sections at contactor at AWG cables for auxiliary contacts single or multi-stranded	2x (20 - 16), 2x (18 - 14)
temperature of the conductor at contactor for auxiliary contacts maximum permissible	75 °C
material of the conductor at contactor for auxiliary contacts	CU
type of electrical connection at overload relay for auxiliary	screw-type terminals

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,...)

[www.usa.siemens.com/iccatalog](http://www.usa.siemens.com/iccatalog)

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14MPX320F>

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

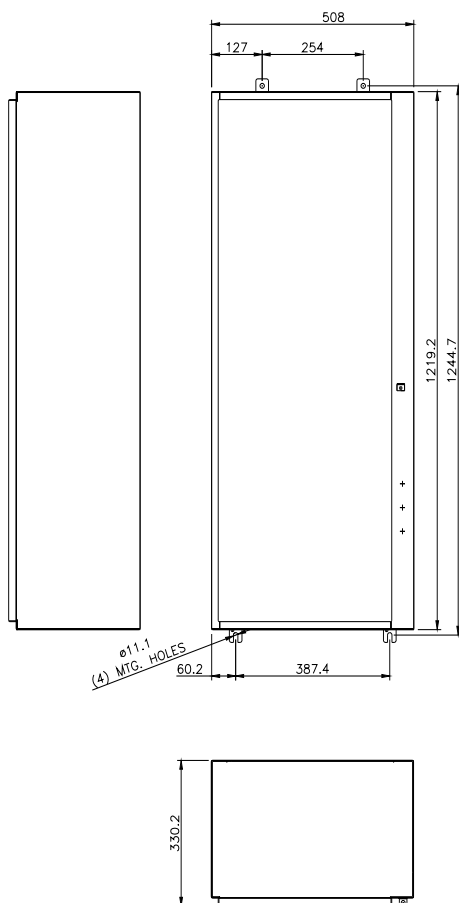
<https://support.industry.siemens.com/cs/US/en/ps/US2:14MPX320F>

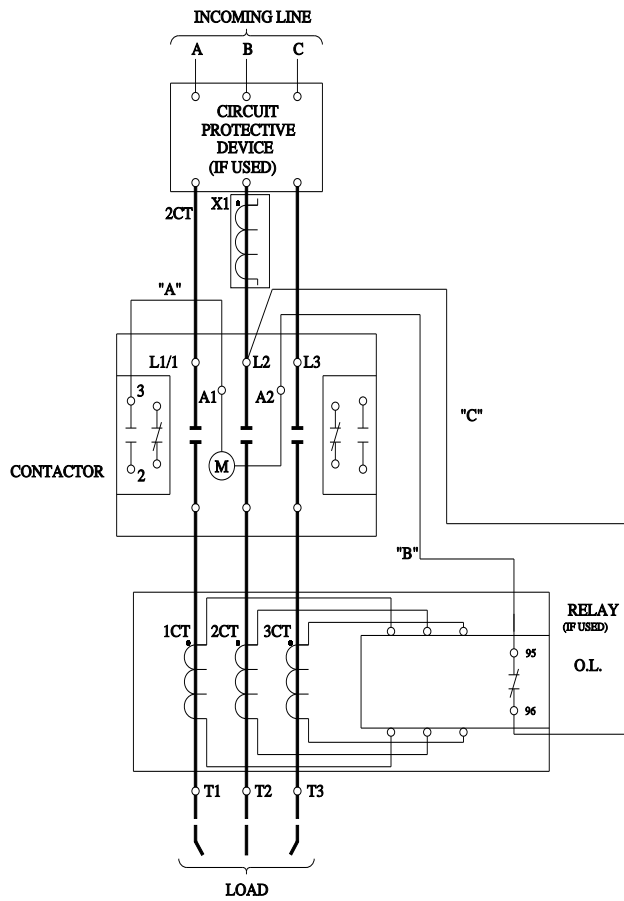
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:14MPX320F&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14MPX320F&lang=en)

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:14MPX320F/certificate>





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