SIEMENS

Data sheet US2:22MPX32AF



Reversing motor starter Size 6 Three phase full voltage Solid-state overload relay OLRelay amp range 160-630A 110-127V 50-60HZ/DC coil Non-combination type Enclosure type (open)

Figure similar

product brand name	Class 22
design of the product	Full-voltage reversing motor starter
General technical data	
weight [lb]	60 lb
touch protection against electrical shock	Main circuit (not finger-safe); Control circuit (finger-safe)
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	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

	0.2374
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	No
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
Enclosure	
degree of protection NEMA rating	Open device (no enclosure)
design of the housing	NA
Mounting/wiring	
mounting position	Vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Box lug
tightening torque [lhf-in] for supply	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	S S S S S S S S S S S S S S S S S S S
type of connectable conductor cross-sections at line-side at	180 195 lbf·in 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x 2/0
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded	180 195 lbf-in 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x 2/0 AWG 2x 500 MCM (both front & back)
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible	180 195 lbf-in 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x 2/0 AWG 2x 500 MCM (both front & back) 75 °C
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	180 195 lbf-in 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x 2/0 AWG 2x 500 MCM (both front & back) 75 °C Box lug
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	180 195 lbf-in 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x 2/0 AWG 2x 500 MCM (both front & back) 75 °C Box lug 180 220 lbf-in
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	180 195 lbf-in 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x 2/0 AWG 2x 500 MCM (both front & back) 75 °C Box lug 180 220 lbf-in 2x 2/0 AWG 500 MCM
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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	2x (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; CSA 22.2, No.14
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=US2:22MPX32AF

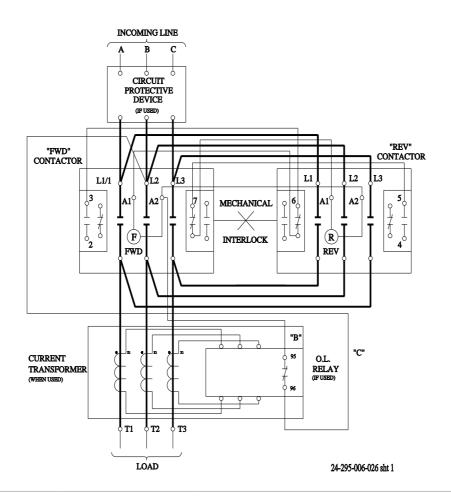
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:22MPX32AF

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:22MPX32AF&lang=en

Certificates/approvals

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