## **SIEMENS**

Data sheet US2:22MPX32AJ



Reversing motor starter Size 6 Three phase full voltage Solid-state overload relay OLRelay amp range 160-630A 23-26V 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	
<ul><li>at 200/208 V rated value</li></ul>	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
size of contactor number of NO contacts for main contacts	NEMA controller size 6 3
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz	3
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum	3 600 V
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts	3 600 V 540 A
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical	3 600 V 540 A
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact	3 600 V 540 A 10000000
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum 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	3 600 V 540 A 10000000
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum 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	3 600 V 540 A 10000000
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum 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	3 600 V 540 A 10000000 2 2 2 8
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum 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	3 600 V 540 A 10000000 2 2 2 8
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum 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	3 600 V 540 A 10000000 2 2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300)
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum 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	3 600 V 540 A 10000000 2 2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300)
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum 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	3 600 V 540 A 10000000 2 2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300)
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum 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 ontrol supply voltage  • at DC rated value	3 600 V 540 A 10000000 2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300) AC/DC 23 26 V
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum 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	3 600 V 540 A 10000000  2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300)  AC/DC  23 26 V 23 26 V

	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	
<ul> <li>overload protection</li> </ul>	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
<ul> <li>with multi-phase operation at AC rated value</li> </ul>	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	3
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
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	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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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 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	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  75 °C  CU  Screw-type terminals  7 10 lbf-in  2x (18 14 AWG)  75 °C  CU  Screw-type terminals  7 10 lbf-in

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,...)

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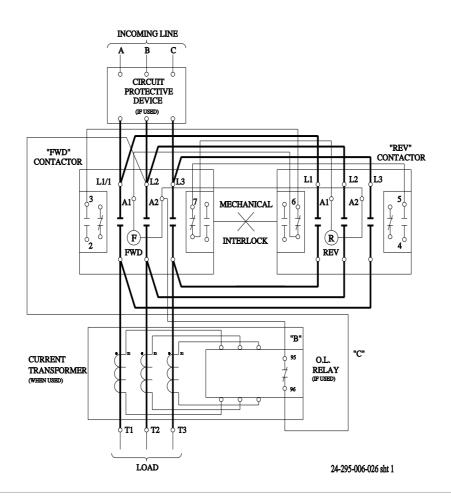
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