SIEMENS

Data sheet

Figure similar

US2:22CP120J81



Reversing motor starter, Size 0, Single Phase, 2-Pole, Amb. compensate bimetal OLR, Contactor amp rating 18A, 24VAC 50-60Hz coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors

product brand name Class 14 & 22 design of the product Full-voltage reversing motor starter General technical data		
General technical data weight [lb] 16.5 lb Height x Width x Depth [in] 13 × 13 × 5 in touch protection against electrical shock NA for enclosed products installation altitude [ft] at height above sea level maximum 6560 ft ambient temperature ['F] -22 +149 °F • during storage -22 +149 °F • during storage -30 +65 °C • during storage -30 +65 °C • during operation -20 +40 °C country of origin USA Horsepower ratings yielded mechanical performance [hp] for single-phase AC motor • at 115 V rated value 1 hp • at 220/230 V rated value 2 hp Contactor NEMA controller size 0 number of NO contacts for main contacts 2 operating voltage for main current circuit at AC at 60 Hz 240 V	product brand name	Class 14 & 22
weight [b] 16.5 lb Height x Width x Depth [in] 13 × 13 × 5 in touch protection against electrical shock NA for enclosed products installation altitude [ft] at height above sea level maximum 6560 ft ambient temperature [°F] -22 +149 °F • during storage -22 +149 °F • during operation -4 +104 °F ambient temperature -30 +65 °C • during operation -20 +40 °C country of origin USA Horsepower ratings -20 +40 °C yielded mechanical performance [hp] for single-phase AC motor 1 hp • at 200/208 V rated value 2 hp • at 220/230 V rated value 2 hp • size of contactor NEMA controller size 0 number of NO contacts for main contacts 2 operating voltage for main current circuit at AC at 60 Hz 240 V	design of the product	Full-voltage reversing motor starter
Height x Width x Depth [in] 13 × 13 × 5 in touch protection against electrical shock NA for enclosed products installation altitude [ft] at height above sea level maximum 6560 ft ambient temperature [°F] -22 +149 °F • during operation -4 +104 °F ambient temperature -23 +65 °C • during operation -20 +40 °C country of origin USA Horsepower ratings -20 +40 °C yielded mechanical performance [hp] for single-phase AC motor - at 115 V rated value • at 200/208 V rated value 2 hp • at 220/230 V rated value 2 hp • gize of contactor NEMA controller size 0 number of NO contacts for main contacts 2 operating voltage for main current circuit at AC at 60 Hz 240 V	General technical data	
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• during storage -22 +149 °F • during operation -4 +104 °F ambient temperature -30 +65 °C • during operation -20 +40 °C country of origin USA Horsepower ratings -20 +40 °C yielded mechanical performance [hp] for single-phase AC motor 1 hp • at 200/208 V rated value 2 hp • at 220/230 V rated value 2 hp contactor NEMA controller size 0 number of NO contacts for main contacts 2 operating voltage for main current circuit at AC at 60 Hz 240 V	installation altitude [ft] at height above sea level maximum	6560 ft
• during operation -4 +104 °F ambient temperature -30 +65 °C • during storage -30 +65 °C • during operation -20 +40 °C country of origin USA Horsepower ratings yielded mechanical performance [hp] for single-phase AC motor • at 115 V rated value 1 hp • at 200/208 V rated value 2 hp • at 220/230 V rated value 2 hp • size of contactor NEMA controller size 0 number of NO contacts for main contacts 2 operating voltage for main current circuit at AC at 60 Hz 240 V	ambient temperature [°F]	
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• during storage-30 +65 °C• during operation-20 +40 °Ccountry of originUSAHorsepower ratingsyielded mechanical performance [hp] for single-phase AC motor• at 115 V rated value1 hp• at 200/208 V rated value2 hp• at 220/230 V rated value2 hpsize of contactorNEMA controller size 0number of NO contacts for main contacts2operating voltage for main current circuit at AC at 60 Hz240 V	 during operation 	-4 +104 °F
• during operation -20 +40 °C country of origin USA Horsepower ratings yielded mechanical performance [hp] for single-phase AC motor • at 115 V rated value 1 hp • at 200/208 V rated value 2 hp • at 220/230 V rated value 2 hp	ambient temperature	
country of originUSAHorsepower ratingsyielded mechanical performance [hp] for single-phase AC motor• at 115 V rated value1 hp• at 200/208 V rated value2 hp• at 200/208 V rated value2 hp• at 220/230 V rated value2 hpContactorNEMA controller size 0size of contactor2number of NO contacts for main contacts2operating voltage for main current circuit at AC at 60 Hz maximum240 V	 during storage 	-30 +65 °C
Horsepower ratings yielded mechanical performance [hp] for single-phase AC motor • at 115 V rated value 1 hp • at 200/208 V rated value 2 hp • at 220/230 V rated value 2 hp • at 220/230 V rated value 2 hp Contactor NEMA controller size 0 number of NO contacts for main contacts 2 operating voltage for main current circuit at AC at 60 Hz 240 V	during operation	-20 +40 °C
yielded mechanical performance [hp] for single-phase AC motor • at 115 V rated value 1 hp • at 200/208 V rated value 2 hp • at 220/230 V rated value 2 hp • at 220/230 V rated value 2 hp Contactor NEMA controller size 0 number of NO contacts for main contacts 2 operating voltage for main current circuit at AC at 60 Hz 240 V	country of origin	USA
• at 115 V rated value 1 hp • at 200/208 V rated value 2 hp • at 220/230 V rated value 2 hp • at 220/230 V rated value 2 hp Contactor 2 hp size of contactor NEMA controller size 0 number of NO contacts for main contacts 2 operating voltage for main current circuit at AC at 60 Hz 240 V	Horsepower ratings	
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• at 220/230 V rated value 2 hp Contactor NEMA controller size 0 size of contactor NEMA controller size 0 number of NO contacts for main contacts 2 operating voltage for main current circuit at AC at 60 Hz maximum 240 V	 at 115 V rated value 	1 hp
Contactor NEMA controller size 0 size of contactor NEMA controller size 0 number of NO contacts for main contacts 2 operating voltage for main current circuit at AC at 60 Hz 240 V	• at 200/208 V rated value	2 hp
size of contactor NEMA controller size 0 number of NO contacts for main contacts 2 operating voltage for main current circuit at AC at 60 Hz maximum 240 V	• at 220/230 V rated value	2 hp
number of NO contacts for main contacts 2 operating voltage for main current circuit at AC at 60 Hz 240 V maximum 240 V	Contactor	
operating voltage for main current circuit at AC at 60 Hz 240 V	size of contactor	NEMA controller size 0
maximum	number of NO contacts for main contacts	2
		240 V
operational current at AC at 600 V rated value 18 A	operational current at AC at 600 V rated value	18 A
mechanical service life (operating cycles) of the main contacts typical 1000000		1000000
Auxiliary contact	Auxiliary contact	
number of NC contacts at contactor for auxiliary contacts 0	number of NC contacts at contactor for auxiliary contacts	0
number of NO contacts at contactor for auxiliary contacts 1	number of NO contacts at contactor for auxiliary contacts	1
number of total auxiliary contacts maximum 8	number of total auxiliary contacts maximum	8
contact rating of auxiliary contacts of contactor according to UL 10A@600VAC (A600), 5A@600VDC (P600)	contact rating of auxiliary contacts of contactor according to UL	10A@600VAC (A600), 5A@600VDC (P600)
Coil	Coil	
type of voltage of the control supply voltage AC	type of voltage of the control supply voltage	AC
control supply voltage	control supply voltage	
• at AC at 50 Hz rated value 24 V	• at AC at 50 Hz rated value	24 V
• at AC at 60 Hz rated value 24 V	• at AC at 60 Hz rated value	24 V
holding power at AC minimum 8.6 W	holding power at AC minimum	8.6 W
apparent pick-up power of magnet coil at AC 218 VA	apparent pick-up power of magnet coil at AC	218 VA
apparent holding power of magnet coil at AC 25 VA	apparent holding power of magnet coil at AC	25 VA

operating range factor control supply voltage rated value of	0.85 1.1
magnet coil percental drop-out voltage of magnet coil related to the input	50 %
Voltage	19 29 ms
ON-delay time OFF-delay time	19 29 ms
Overload relay	10 24 113
product function	
overload protection	Yes
test function	Yes
external reset	Yes
reset function	Manual and automatic
adjustment range of thermal overload trip unit	0.85 1.15
number of NC contacts of auxiliary contacts of overload relay	1
number of NO contacts of auxiliary contacts of overload relay	0
operational current of auxiliary contacts of overload relay	
• at AC at 600 V	5 A
• at DC at 250 V	5 A
contact rating of auxiliary contacts of overload relay according to	5A@600VAC (B600), 5A@250VDC (P300)
UL	
Enclosure	
degree of protection NEMA rating	12
design of the housing	dustproof and drip-proof for indoor use
Mounting/wiring	
mounting position	Vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Screw-type terminals
tightening torque [lbf·in] for supply	20 20 lbf·in
temperature of the conductor for supply maximum permissible	75 °C
material of the conductor for supply	AL or CU
type of electrical connection for load-side outgoing feeder	Screw-type terminals
tightening torque [lbf·in] for load-side outgoing feeder	35 50 lbf·in
type of electrical connection of magnet coil	Screw-type terminals
tightening torque [lbf·in] at magnet coil	5 12 lbf·in
type of connectable conductor cross-sections of magnet coil at AWG cables single or multi-stranded	2x (16 12 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	10 15 lbf·in
type of connectable conductor cross-sections at contactor at AWG cables for auxiliary contacts single or multi-stranded	1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)
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 contacts	Screw-type terminals
tightening torque [lbf in] at overload relay for auxiliary contacts	5 12 lbf·in
type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded	2x (16 12 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	
	10kA@600V (Class H or K); 100kA@600V (Class R or J)
Short-circuit current rating design of the fuse link for short-circuit protection of the main	10kA@600V (Class H or K); 100kA@600V (Class R or J) Thermal magnetic circuit breaker
Short-circuit current rating design of the fuse link for short-circuit protection of the main circuit required	
Short-circuit current rating design of the fuse link for short-circuit protection of the main circuit required design of the short-circuit trip	
Short-circuit current rating design of the fuse link for short-circuit protection of the main circuit required design of the short-circuit trip maximum short-circuit current breaking capacity (Icu)	Thermal magnetic circuit breaker 14 kA 10 kA
Short-circuit current rating design of the fuse link for short-circuit protection of the main circuit required design of the short-circuit trip maximum short-circuit current breaking capacity (Icu) • at 240 V	Thermal magnetic circuit breaker 14 kA

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

www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

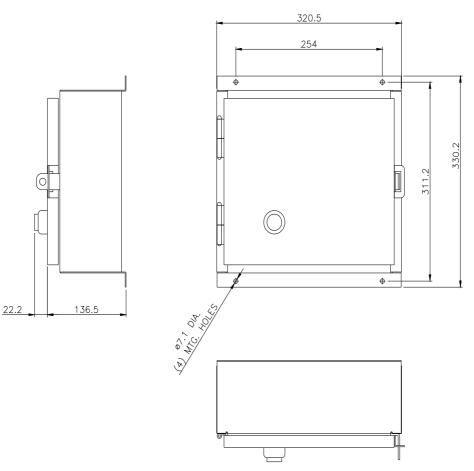
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:22CP120J81

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:22CP120J81

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:22CP120J81&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:22CP120J81/certificate





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