## **SIEMENS**

Data sheet US2:22GP320D81



Reversing motor starter, Size 2 1/2, Three phase full voltage, Amb. compensate bimetal OLR, Contactor amp rating 60A, 208VAC 60Hz coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors

Figure similar

design of the product special product feature  Half-size starter  General technical data  weight [lb] Height x Width x Depth [in] touch protection against electrical shock installation altitude [ft] at height above sea level maximum ambient temperature [°F]  Full-voltage reversing motor starter  Half-size starter  21 lb  16 × 13 × 6 in  NA for enclosed products  6560 ft		
special product feature  General technical data  weight [lb]  Height x Width x Depth [in]  touch protection against electrical shock installation altitude [ft] at height above sea level maximum  Half-size starter  21 lb  16 × 13 × 6 in  NA for enclosed products  6560 ft		
Weight [lb]  Height x Width x Depth [in]  touch protection against electrical shock installation altitude [ft] at height above sea level maximum  21 lb  16 × 13 × 6 in  NA for enclosed products 6560 ft		
weight [lb]  Height x Width x Depth [in]  16 × 13 × 6 in  touch protection against electrical shock Installation altitude [ft] at height above sea level maximum  6560 ft		
Height x Width x Depth [in]  16 × 13 × 6 in  touch protection against electrical shock  NA for enclosed products  installation altitude [ft] at height above sea level maximum  6560 ft		
touch protection against electrical shock  NA for enclosed products installation altitude [ft] at height above sea level maximum  6560 ft		
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 15 hp		
• at 220/230 V rated value 20 hp		
• at 460/480 V rated value 30 hp		
• at 575/600 V rated value 30 hp		
Contactor		
size of contactor Controller half size 2 1/2		
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 60 A		
mechanical service life (operating cycles) of the main contacts typical		
Auxiliary contact		
number of NC contacts at contactor for auxiliary contacts 0		
number of NO contacts at contactor for auxiliary contacts 1		
number of total auxiliary contacts maximum 7		
contact rating of auxiliary contacts of contactor according to UL 10A@600VAC (A600), 5A@600VDC (P600)		
Coil		
type of voltage of the control supply voltage AC		
control supply voltage		
• at AC at 60 Hz rated value 208 V		
holding power at AC minimum 8.6 W		
apparent pick-up power of magnet coil at AC 218 VA		

apparent holding power of magnet coil at AC	25 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	50 %	
ON-delay time	19 29 ms	
OFF-delay time	10 24 ms	
Overload relay		
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	10 A	
• at DC at 250 V	5 A	
contact rating of auxiliary contacts of overload relay according to	10A@600VAC (A600), 5A@250VDC (P300)	
UL		
Enclosure	12	
degree of protection NEMA rating design of the housing	dustproof and drip-proof for indoor use	
Mounting/wiring	dustproof and unp-proof for indoor use	
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	45 45 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	2x (16 12 AWG)	
AWG cables single or multi-stranded		
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		
Short-circuit current rating		
Short-circuit current rating design of the fuse link for short-circuit protection of the main circuit required	10kA@600V (Class H or K); 100kA@600V (Class R or J)	
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	
design of the fuse link for short-circuit protection of the main circuit required		
design of the fuse link for short-circuit protection of the main circuit required design of the short-circuit trip		
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	
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	

## Further information

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

www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

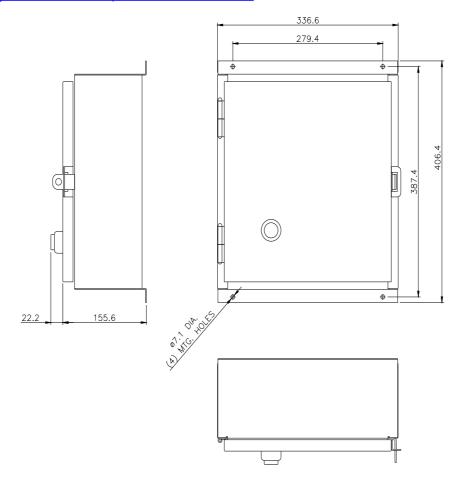
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:22GP320D81

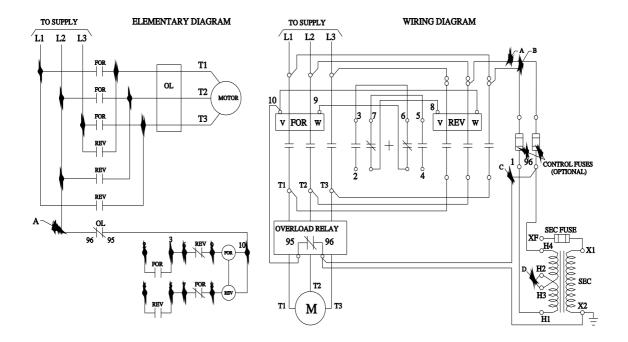
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:22GP320D81

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:22GP320D81&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:22GP320D81/certificate





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