## **SIEMENS**

Data sheet US2:22IP320G81



Reversing motor starter Size 3 1/2 Three phase full voltage Amb compensate bimetal OLrelay Contactor amp rating 115Amp Non-combination type Enclosure NEMA type 12 Dust/drip proof for indoors

Figure similar

product brand name	Class 14 & 22
design of the product	Full-voltage reversing motor starter
special product feature	Half-size starter
General technical data	. 10.1. 5.1.5 5.01 (0)
weight [lb]	53.8 lb
Height x Width x Depth [in]	25 × 17 × 7 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
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
at 200/208 V rated value	30 hp
• at 220/230 V rated value	40 hp
• at 460/480 V rated value	75 hp
• at 575/600 V rated value	75 hp
Contactor	
size of contactor	Controller half size 3 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	115 A
mechanical service life (operating cycles) of the main contacts typical	5000000
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	
<ul> <li>at AC at 50 Hz rated value</li> </ul>	190 220 V
at AC at 60 Hz rated value	220 240 V
holding power at AC minimum	14 W

apparent pick-up power of magnet coil at AC	310 VA
apparent holding power of magnet coil at AC	26 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	26 41 ms
OFF-delay time	14 19 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	3
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	0.16000 AUG (D000), ON60200 ADO (1 000)
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
	Box lug
type of electrical connection for supply voltage line-side	120 120 lbf·in
tightening torque [lbf-in] for supply	75 °C
temperature of the conductor for supply maximum permissible	
material of the conductor for supply	AL or CU
type of electrical connection for load-side outgoing feeder	Screw-type terminals 35 50 lbf-in
tightening torque [lbf-in] for load-side outgoing feeder	
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	75 °C
permissible	
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	1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)
AWG cables for auxiliary contacts single or multi-stranded	
temperature of the conductor at contactor for auxiliary contacts	75 °C
maximum permissible	CU
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	2x (16 12 AWG)
at AWG cables for auxiliary contacts single or multi-stranded	EA (10 12 / 11/0)
temperature of the conductor at overload relay for auxiliary	75 °C
contacts maximum permissible	
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	10kA@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	14 kA
• at 480 V	10 kA
• at 600 V	10 kA
- at 000 v	10 10 1

## Further information

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

www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

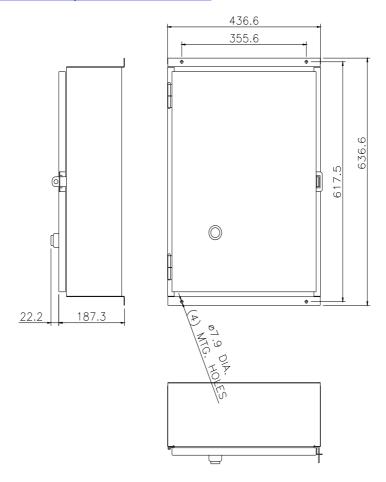
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:22IP320G81

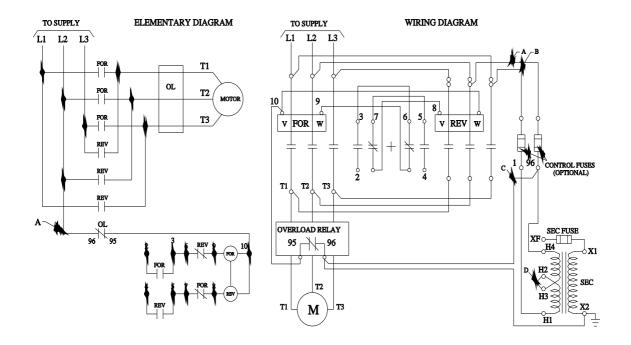
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:22IP320G81

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:22IP320G81&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:22IP320G81&lang=en</a>

Certificates/approvals

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