SIEMENS

Data sheet US2:22CUB320A



Reversing motor starter, Size 0, Three phase full voltage, Solid-state overload relay, OLR amp range 0.75-3.4A, Non-combination type, Enclosure type 12, Dust/drip proof for indoors, Standard width enclosure

Figure similar

design of the product special product special product feature ESP200 overload relay Seporal technical data	product brand name	Class 22
weight [Ib]	design of the product	Full-voltage reversing motor starter
weight [ib]	special product feature	ESP200 overload relay
Height Width x Depth [in] touch protection against electrical shock Installation altitude [ft] at height above sea level maximum ambient temperature ["F] • during storage • during operation ambient temperature • during storage • during operation - during storage • during operation - 20 +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 • at 2200/230 V rated value • at 450/480 V rated value • at 450/480 V rated value • at 450/480 V rated value • at 575/600 V rated value 2 hp Contactor size of contactor 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 (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contacts for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contacts of contactor according to UL Coil type of voltage of the control supply voltage AC	General technical data	
touch protection against electrical shock installation altitude [ft] at height above sea level maximum ambient temperature [°F] • during storage	weight [lb]	17 lb
installation altitude [ft] at height above sea level maximum ambient temperature [°F] • during storage • during operation • during storage • during operation • during storage • during operation • during operation • 20 +65 °C • during operation • 20 +40 °C country of origin Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 450/480 V rated value • at 450/480 V rated value • at 575/600 V rated value • at 600 V rated value operating voltage for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V vated value number of NO contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NO conta	Height x Width x Depth [in]	13 × 13 × 5 in
ambient temperature [*F] • during storage • during operation ambient temperature • during storage • during operation • during storage • during operation • 20 +65 °C - 20 +40 °C Country of origin Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value • at 575/600 V rated value • at 575/600 V rated value • bype of NO contacts for main contacts Operational current at AC at 600 V rated value mechanical service life (switching cycles) of the main contacts typical Auxiliary contact to during storage -22 +149 °F -4 +104 °F -20 +40 °C -	touch protection against electrical shock	NA for enclosed products
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yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 200/208 V rated value • at 460/480 V rated value • at 460/480 V rated value • at 575/600 V rated value • at 575/600 V rated value Size of contactor	during operation	-20 +40 °C
yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 460/480 V rated value • at 575/600 V rated value • 2 hp Contactor size of contactor 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 18 A mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum 8 contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC	country of origin	USA
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• at 575/600 V rated value Contactor size of contactor 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 (switching 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 NEMA controller size 0 NEMA controller size 0 1000 V 10	• at 220/230 V rated value	0.75 hp
size of contactor size of contactor 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 (switching 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 NEMA controller size 0 NEMA controller size 0 18 A 000 V 100000000 100000000 1000000000 1000000	• at 460/480 V rated value	1.5 hp
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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 1 1 10A@600VAC (A600), 5A@600VDC (P600) AC	Auxiliary contact	
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 8 10A@600VAC (A600), 5A@600VDC (P600) AC	number of NC contacts at contactor for auxiliary contacts	0
contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage 10A@600VAC (A600), 5A@600VDC (P600) AC	number of NO contacts at contactor for auxiliary contacts	1
to UL Coil type of voltage of the control supply voltage AC	number of total auxiliary contacts maximum	8
type of voltage of the control supply voltage AC		10A@600VAC (A600), 5A@600VDC (P600)
	Coil	
control supply voltage	type of voltage of the control supply voltage	AC
	control supply voltage	

• at AC at 60 Hz rated value	110 240 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
phase failure detection	Yes
asymmetry detection	Yes
ground fault detection	Yes
• test function	Yes
external reset	Yes
reset function	
	Manual, automatic and remote
trip class	CLASS 5 / 10 / 20 (factory set) / 30
adjustable current response value current of the current- dependent overload release	0.75 3.4 A
make time with automatic start after power failure maximum	3 s
relative repeat accuracy	1 %
product feature protective coating on printed-circuit board	Yes
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	12
design of the housing	dustproof and drip-proof for indoor use
Mounting/wiring	addition and any proof for macon acc
	Vertical
mounting position	Vertical Surface mounting and installation
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
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded	1x (14 2 AWG)
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	20 24 lbf·in
type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-stranded	2x (14 10 AWG)
temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C
material of the conductor for load-side outgoing feeder	CU
type of electrical connection of magnet coil	Screw-type terminals
<u> </u>	
tightening torque [lbf·in] at magnet coil	5 12 lbf·in

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	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	10kA@600V (Class H or K); 100kA@600V (Class R or J)
design of the short-circuit trip	Thermal magnetic circuit breaker
breaking capacity maximum short-circuit current (Icu)	
• at 240 V	14 kA
• at 480 V	10 kA
• at 600 V	10 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=US2:22CUB320A

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:22CUB320A

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:22CUB320A&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:22CUB320A/certificate

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