## **SIEMENS**

Data sheet US2:22BUA32AG



Reversing motor starter, Size 00, Three phase full voltage, Solid-state overload relay, OLRelay amp range 0.25-1a, 190 220/220 240V 50/60HZ coil, Non-combination type, Enclosure type (open), No enclosure

Figure similar

product brand name	Class 22
design of the product	Full-voltage reversing motor starter
special product feature	ESP200 overload relay
General technical data	
weight [lb]	6 lb
Height x Width x Depth [in]	7.69 × 10.5 × 3.92 in
touch protection against electrical shock	Not finger-safe
installation altitude [ft] at height above sea level maximum	6560 ft
ambient temperature [°F]	
<ul> <li>during storage</li> </ul>	-22 +149 °F
during operation	-4 +104 °F
ambient temperature	
during storage	-30 +65 °C
during operation	-20 +40 °C
country of origin	Mexico
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
<ul><li>at 200/208 V rated value</li></ul>	0.17 hp
<ul><li>at 220/230 V rated value</li></ul>	0.17 hp
<ul><li>at 460/480 V rated value</li></ul>	0.33 hp
<ul><li>at 575/600 V rated value</li></ul>	0.5 hp
Contactor	
size of contactor	NEMA controller size 00
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	9 A
mechanical service life (operating cycles) of the main contacts typical	10000000
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	8
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	8.6 W

	040.1/4
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	No
reset function	Manual, automatic and remote
trip class	CLASS 5 / 10 / 20 (factory set) / 30
adjustable current response value current of the current-	0.25 1 A
dependent overload release	
make time with automatic start after power failure maximum	3 \$
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)	
<ul> <li>with single-phase operation at AC rated value</li> </ul>	600 V
with multi-phase operation at AC rated value	300 V
Enclosure	
degree of protection NEMA rating	Open device (no enclosure)
acgree of proteodion relivia rating	open device (no enclosare)
design of the housing	NA
	·
design of the housing	·
design of the housing Mounting/wiring	NA .
design of the housing  Mounting/wiring  mounting position	NA Vertical
design of the housing  Mounting/wiring  mounting position  fastening method	Vertical Surface mounting and installation
design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side	Vertical Surface mounting and installation Screw-type terminals
design of the housing  Mounting/wiring  mounting position fastening method  type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at	Vertical Surface mounting and installation Screw-type terminals 20 20 lbf·in
design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf·in] for supply type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded	Vertical Surface mounting and installation Screw-type terminals 20 20 lbf-in 1x (14 2 AWG)
design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible	Vertical Surface mounting and installation Screw-type terminals 20 20 lbf-in 1x (14 2 AWG) 75 °C
design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor for supply	Vertical Surface mounting and installation Screw-type terminals 20 20 lbf-in 1x (14 2 AWG) 75 °C AL or CU
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design of the housing  Mounting/wiring  mounting position fastening method  type of electrical connection for supply voltage line-side tightening torque [lbf·in] for supply type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor for supply 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	Vertical Surface mounting and installation Screw-type terminals 20 20 lbf-in 1x (14 2 AWG) 75 °C AL or CU Screw-type terminals 20 24 lbf-in 2x (14 10 AWG)
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design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor for supply 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	Vertical Surface mounting and installation Screw-type terminals 20 20 lbf-in 1x (14 2 AWG)  75 °C AL or CU Screw-type terminals 20 24 lbf-in 2x (14 10 AWG)  75 °C  CU Screw-type terminals 2x (14 10 AWG)
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maximum permissible material of the conductor at contactor for auxiliary contacts  type of electrical connection at overload relay for auxiliary contacts  tightening torque [lbf-in] at overload relay for auxiliary contacts  type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded  temperature of the conductor at overload relay for auxiliary contacts maximum permissible  material of the conductor at overload relay for auxiliary contacts  Short-circuit current rating  design of the fuse link for short-circuit protection of the main circuit required  design of the short-circuit turrent breaking capacity (Icu)  • at 240 V  • at 480 V  • at 600 V		
type of electrical connection at overload relay for auxiliary contacts  tightening torque [lbf-in] at overload relay for auxiliary contacts  type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded  temperature of the conductor at overload relay for auxiliary contacts maximum permissible  material of the conductor at overload relay for auxiliary contacts  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 (lcu)  • at 240 V  • at 480 V  Screw-type terminals  7 10 lbf-in  2x (20 14 AWG)  75 °C  CU  CU  Thermal magnetic circuit breaker	maximum permissible	
tightening torque [lbf-in] at overload relay for auxiliary contacts  type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded  temperature of the conductor at overload relay for auxiliary contacts maximum permissible  material of the conductor at overload relay for auxiliary contacts  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  • at 480 V  10 kA	material of the conductor at contactor for auxiliary contacts	CU
type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded  temperature of the conductor at overload relay for auxiliary contacts maximum permissible  material of the conductor at overload relay for auxiliary contacts  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  • at 480 V  10 kA	· ·	Screw-type terminals
at AWG cables for auxiliary contacts single or multi-stranded  temperature of the conductor at overload relay for auxiliary contacts maximum permissible  material of the conductor at overload relay for auxiliary contacts  Short-circuit current rating  design of the fuse link for short-circuit protection of the main circuit required  design of the short-circuit trip  Thermal magnetic circuit breaker  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  10 kA	tightening torque [lbf·in] at overload relay for auxiliary contacts	7 10 lbf-in
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  design of the short-circuit trip  Thermal magnetic circuit breaker  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  10 kA		2x (20 14 AWG)
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  • at 480 V  10 kA		75 °C
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  • at 480 V  10 kA	material of the conductor at overload relay for auxiliary contacts	CU
circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  10 kA	Short-circuit current rating	
maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  10 kA	· ·	10kA@600V (Class H or K); 100kA@600V (Class R or J)
● at 240 V 14 kA ● at 480 V 10 kA	design of the short-circuit trip	Thermal magnetic circuit breaker
• at 480 V 10 kA	maximum short-circuit current breaking capacity (Icu)	
	• at 240 V	14 kA
• at 600 V	• at 480 V	10 kA
	• at 600 V	10 kA
certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	certificate of suitability	NEMA ICS 2; UL 508; CSA 22.2, No.14
Further information	Further information	

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

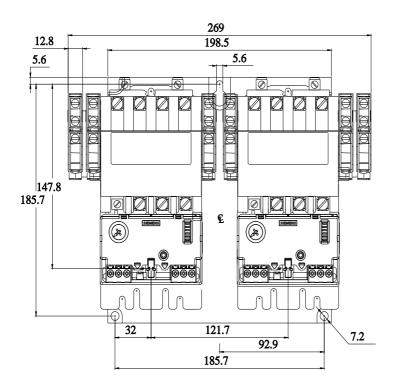
Industry Mall (Online ordering system)
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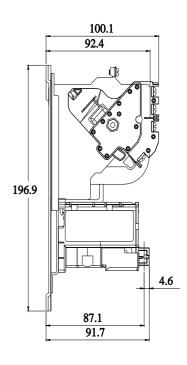
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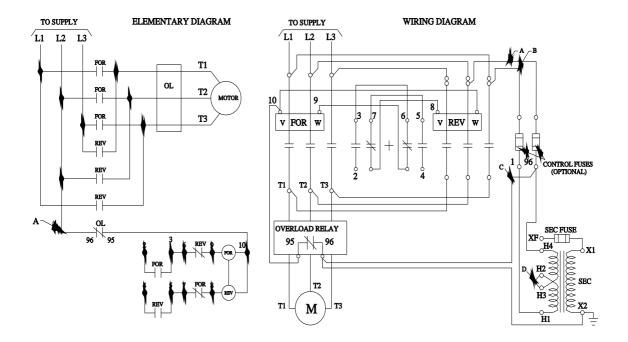
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:22BUA32AG&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:22BUA32AG&lang=en</a>

Certificates/approvals
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