## **SIEMENS**

Data sheet US2:22CUA32AH



Reversing motor starter Size 0 Three phase full voltage Solid-state overload relay OLRelay amp range 0.25-1A 380-440/440-480V 50/60HZ coil Non-combination type Enclosure type (open)

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]	
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	Mexico
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
• at 200/208 V rated value	0.17 hp
• at 220/230 V rated value	0.17 hp
<ul><li>at 460/480 V rated value</li></ul>	0.33 hp
• at 575/600 V rated value	0.5 hp
Contactor	
size of contactor	NEMA controller size 0
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	18 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	
at AC at 50 Hz rated value	380 440 V
holding power at AC minimum	8.6 W
apparent pick-up power of magnet coil at AC	218 VA

apparent halding paying of manual and at A.O.	OE MA
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	
<ul> <li>overload protection</li> </ul>	Yes
phase failure detection	Yes
<ul> <li>asymmetry detection</li> </ul>	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- dependent overload release	0.25 1 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)	
<ul> <li>with single-phase operation at AC rated value</li> </ul>	600 V
<ul> <li>with multi-phase operation at AC rated value</li> </ul>	300 V
Enclosure	
degree of protection NEMA rating	Open device (no enclosure)
design of the housing	NA
Mounting/wiring	
mounting position	Vertical
mounting position fastening method	Vertical Surface mounting and installation
· · ·	
fastening method	Surface mounting and installation
fastening method type of electrical connection for supply voltage line-side	Surface mounting and installation Screw-type terminals
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	Surface mounting and installation Screw-type terminals 20 20 lbf·in
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	Surface mounting and installation Screw-type terminals 20 20 lbf-in 1x (14 2 AWG)
fastening method type of electrical connection for supply voltage line-side tightening torque [libf-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	Surface mounting and installation Screw-type terminals 20 20 lbf·in 1x (14 2 AWG) 75 °C
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	Surface mounting and installation Screw-type terminals 20 20 lbf·in 1x (14 2 AWG) 75 °C AL or CU
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	Surface mounting and installation Screw-type terminals 20 20 lbf·in 1x (14 2 AWG) 75 °C AL or CU Screw-type terminals
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	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
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	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)
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	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
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	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
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	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
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	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 5 12 lbf·in
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	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 5 12 lbf·in 2x (16 12 AWG)
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 permissible	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 5 12 lbf-in 2x (16 12 AWG) 75 °C
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  permissible  material of the conductor at magnet coil	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 5 12 lbf-in 2x (16 12 AWG) 75 °C CU
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  permissible  material of the conductor at magnet coil	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  5 12 lbf-in  2x (16 12 AWG)  75 °C  CU  Screw-type terminals

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	
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
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	Thermal magnetic circuit breaker  14 kA 10 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=US2:22CUA32AH

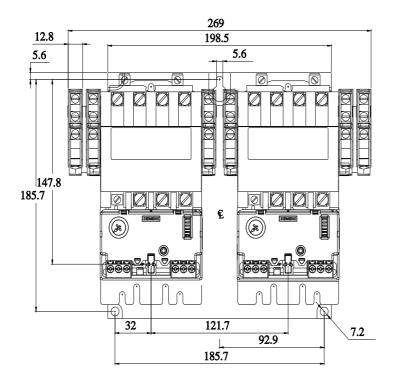
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

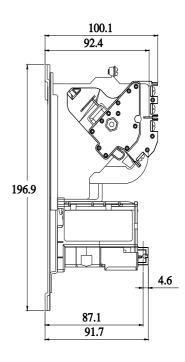
https://support.industry.siemens.com/cs/US/en/ps/US2:22CUA32AH

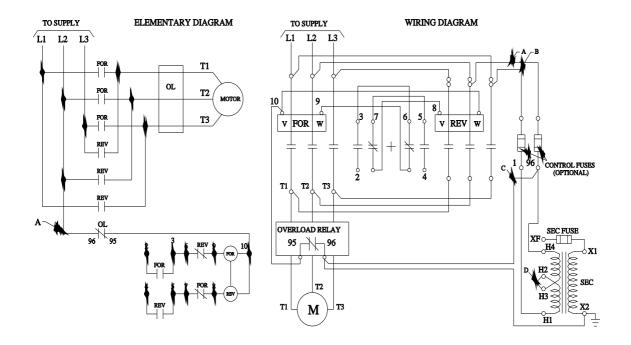
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:22CUA32AH&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:22CUA32AH/certificate







D46590003

last modified: 11/29/2021 🖸