## **SIEMENS**

Data sheet US2:22HUG32BA



Reversing motor starter, Size 3, Three phase full voltage, Solid-state overload relay, OLR amp range 25-100A, Non-combination type, Enclosure type 1, Indoor general purpose use, Standard width 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]	39 lb
Height x Width x Depth [in]	25 × 14 × 9 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	
<ul> <li>during storage</li> </ul>	-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	25 hp
• at 220/230 V rated value	30 hp
• at 460/480 V rated value	50 hp
• at 575/600 V rated value	50 hp
Contactor	
size of contactor	NEMA controller size 3
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	90 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	
at AC at 60 Hz rated value	110 240 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	0.85 1.1
magnet coil	
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	
<ul> <li>overload protection</li> </ul>	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	25 100 A
make time with automatic start after power failure maximum	3 \$
relative repeat accuracy	1 %
product feature protective coating on printed-circuit board	Yes 4
number of NC contacts of auxiliary contacts of overload relay	1
number of NO contacts of auxiliary contacts of overload relay	1
<ul> <li>operational current of auxiliary contacts of overload relay</li> <li>at AC at 600 V</li> </ul>	5 A
• at DC at 250 V	1A
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 single phase operation at he rated value	
<ul> <li>with multi-phase operation at AC rated value</li> </ul>	300 V
with multi-phase operation at AC rated value  Enclosure	300 V
Enclosure	300 V
Enclosure degree of protection NEMA rating	1
Enclosure  degree of protection NEMA rating  design of the housing	1
Enclosure degree of protection NEMA rating design of the housing Mounting/wiring	1 indoors, usable on a general basis
Enclosure  degree of protection NEMA rating design of the housing  Mounting/wiring mounting position	1 indoors, usable on a general basis  Vertical
Enclosure  degree of protection NEMA rating design of the housing  Mounting/wiring mounting position fastening method	1 indoors, usable on a general basis  Vertical Surface mounting and installation
Enclosure  degree of protection NEMA rating design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side	1 indoors, usable on a general basis  Vertical  Surface mounting and installation  Box lug
degree of protection NEMA rating 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	1 indoors, usable on a general basis  Vertical  Surface mounting and installation  Box lug  120 120 lbf-in
degree of protection NEMA rating 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	1 indoors, usable on a general basis  Vertical  Surface mounting and installation  Box lug  120 120 lbf-in  1x (14 2/0 AWG)
degree of protection NEMA rating 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	1 indoors, usable on a general basis  Vertical  Surface mounting and installation  Box lug  120 120 lbf-in  1x (14 2/0 AWG)  75 °C
degree of protection NEMA rating 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	1 indoors, usable on a general basis  Vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU
degree of protection NEMA rating 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	1 indoors, usable on a general basis  Vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU Box lug
degree of protection NEMA rating 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	1 indoors, usable on a general basis  Vertical  Surface mounting and installation  Box lug  120 120 lbf-in  1x (14 2/0 AWG)  75 °C  AL or CU  Box lug  120 120 lbf-in
degree of protection NEMA rating 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	1 indoors, usable on a general basis  Vertical  Surface mounting and installation  Box lug  120 120 lbf-in  1x (14 2/0 AWG)  75 °C  AL or CU  Box lug  120 120 lbf-in  1x (14 2/0 AWG)
degree of protection NEMA rating 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	1 indoors, usable on a general basis  Vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)
degree of protection NEMA rating 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	1 indoors, usable on a general basis  Vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)
degree of protection NEMA rating 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	1 indoors, usable on a general basis  Vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU Screw-type terminals
degree of protection NEMA rating 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	1 indoors, usable on a general basis  Vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU Screw-type terminals 5 12 lbf-in
degree of protection NEMA rating 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 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	1 indoors, usable on a general basis  Vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C  AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG)
degree of protection NEMA rating 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 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	1 indoors, usable on a general basis  Vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C  AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG)
degree of protection NEMA rating 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 permissible material of the conductor at magnet coil maximum permissible	1 indoors, usable on a general basis  Vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C  AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG)  75 °C  CU
degree of protection NEMA rating 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 permissible material of the conductor at magnet coil maximum permissible	Indoors, usable on a general basis  Vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or 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	
design of the fuse link for short-circuit protection of the main circuit required	none
design of the short-circuit trip	none
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	0 kA
• at 480 V	0 kA
• at 600 V	0 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=US2:22HUG32BA

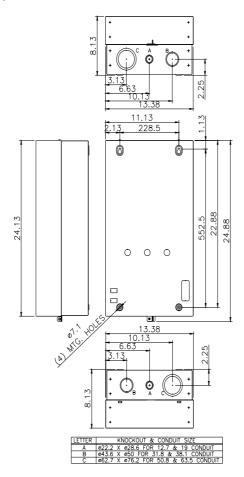
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

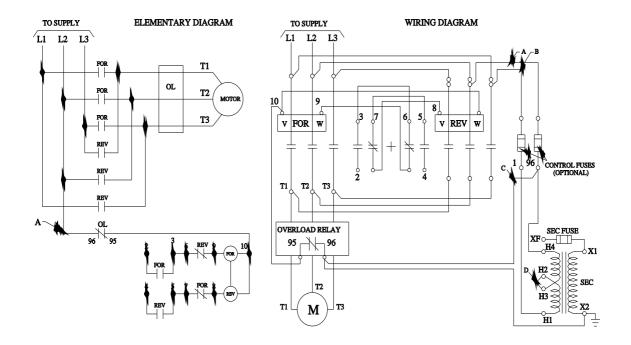
https://support.industry.siemens.com/cs/US/en/ps/US2:22HUG32BA

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=US2:22HUG32BA&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:22HUG32BA&lang=en</a>

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:22HUG32BA/certificate





D46590003

last modified: 1/25/2022 🖸