SIEMENS

Data sheet

US2:22LPU32BF



Reversing motor starter, Size 5, Three phase full voltage, Solid-state overload relay, OLR amp range 55-250A, 110-127V 50-60Hz/DC coil, Non-combination type, Enclosure type 1, Indoor general purpose use, Standard width enclosure

product brand name	Class 22
design of the product	Full-voltage reversing motor starter
General technical data	
weight [lb]	134 lb
Height x Width x Depth [in]	40 × 20 × 11 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	75 hp
• at 220/230 V rated value	100 hp
• at 460/480 V rated value	200 hp
• at 575/600 V rated value	200 hp
Contactor	
size of contactor	NEMA controller size 5
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	270 A
mechanical service life (operating cycles) of the main contacts typical	1000000
Auxiliary contact	
number of NC contacts at contactor for auxiliary contacts	2
number of NO contacts at contactor for auxiliary contacts	2
number of total auxiliary contacts maximum	8
contact rating of auxiliary contacts of contactor according to UL	10A@240VAC (A300), 2.5A@250VDC (Q300)
Coil	
type of voltage of the control supply voltage	AC/DC
control supply voltage	
• at DC rated value	110 127 V
• at AC at 50 Hz rated value	110 127 V
• at AC at 60 Hz rated value	110 127 V
holding power at AC minimum	7.4 W
apparent pick-up power of magnet coil at AC	590 VA

annexest holding new of meanst soil at AC	6.7 VA
apparent holding power of magnet coil at AC	
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	60 %
ON-delay time	30 95 ms
OFF-delay time	40 80 ms
Overload relay	
product function	
 overload protection 	Yes
 phase failure detection 	Yes
 asymmetry detection 	Yes
 ground fault detection 	No
test function	Yes
external reset	Yes
reset function	Manual and automatic
trip class	CLASS 20
adjustable current response value current of the current- dependent overload release	55 250 A
product feature protective coating on printed-circuit board	No
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	
design of the housing	indeers weekle on a general hasis
design of the housing	indoors, usable on a general basis
Mounting/wiring	
Mounting/wiring mounting position	Vertical
Mounting/wiring mounting position fastening method	Vertical Surface mounting and installation
Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side	Vertical Surface mounting and installation Box lug
Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf·in] for supply	Vertical Surface mounting and installation Box lug 180 195 lbf·in
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 for AWG cables single or multi-stranded	Vertical Surface mounting and installation Box lug 180 195 lbf·in 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x 2/0 AWG 2x 500 MCM (both front & back)
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 for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible	Vertical Surface mounting and installation Box lug 180 195 lbf·in 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x 2/0 AWG 2x 500 MCM (both front & back) 75 °C
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 for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible type of electrical connection for load-side outgoing feeder	Vertical Surface mounting and installation Box lug 180 195 lbf-in 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x 2/0 AWG 2x 500 MCM (both front & back) 75 °C Box lug
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 for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible type of electrical connection for load-side outgoing feeder tightening torque [lbf·in] for load-side outgoing feeder	Vertical Surface mounting and installation Box lug 180 195 lbf·in 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x 2/0 AWG 2x 500 MCM (both front & back) 75 °C Box lug 180 220 lbf·in
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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 for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible type of electrical connection for load-side outgoing feeder tightening torque [lbf·in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder 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	Vertical Surface mounting and installation Box lug 180 195 lbf·in 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x 2/0 AWG 2x 500 MCM (both front & back) 75 °C Box lug 180 220 lbf·in 2x 2/0 AWG 500 MCM 75 °C CU Screw-type terminals 7 10 lbf·in
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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 for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for 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 tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection for auxiliary contacts tightening torque [lbf-in] at contactor for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary contacts type of connectable conductor at contactor for auxiliary contacts maximum permissible material of the conductor at contactor for auxiliary contacts maximum permissible	Vertical Surface mounting and installation Box lug 180 195 lbf-in 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x 2/0 AWG 2x 500 MCM (both front & back) 75 °C Box lug 180 220 lbf-in 2x 2/0 AWG 500 MCM 75 °C CU Screw-type terminals 7 10 lbf-in 2x (18 14 AWG) 75 °C CU Screw-type terminals 7 10 lbf-in 2x (20 16 AWG), 2x (18 14 AWG) 75 °C CU Screw-type terminals 7 10 lbf-in 2x (20 16 AWG), 2x (18 14 AWG) 75 °C CU

type of connectable conductor cross-sections at overload relay for 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	14kA@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	14 kA
• at 600 V	14 kA
certificate of suitability	NEMA ICS 2; UL 508
Further information	

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=US2:22LPU32BF

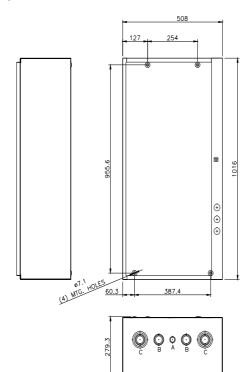
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:22LPU32BE

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:22LPU32BF&lang=en

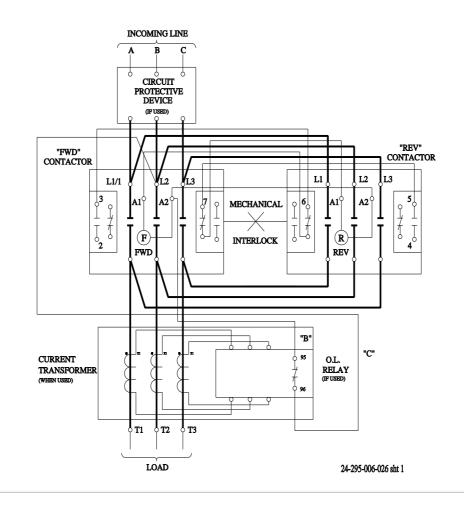
Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:22LPU32BF/certificate



CONDUITS TYP. TOP & BOTTOM

LETTER	CONDUIT SIZE
	ø12.7 & ø19 CONDUIT
	ø31.8 & ø38.1 CONDUIT
C	Ø50.8 & Ø76.2 CONDUIT



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