SIEMENS

Data sheet US2:22LPU32BD



Reversing motor starter, Size 5, Three phase full voltage, Solid-state overload relay, OLR amp range 55-250A, 200-220V 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	
ains of a subsection	NITMA
size of contactor	NEMA controller size 5
number of NO contacts for main contacts	NEMA controller size 5
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz	3
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum	3 600 V
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 (operating cycles) of the main contacts	3 600 V 270 A
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 (operating cycles) of the main contacts typical	3 600 V 270 A
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 (operating cycles) of the main contacts typical Auxiliary contact	3 600 V 270 A 10000000
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 (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts	3 600 V 270 A 10000000
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 (operating 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	3 600 V 270 A 10000000
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 (operating 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	3 600 V 270 A 10000000 2 2 2
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 (operating 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	3 600 V 270 A 10000000 2 2 2
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 (operating 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	3 600 V 270 A 10000000 2 2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300)
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 (operating 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	3 600 V 270 A 10000000 2 2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300)
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 (operating 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 control supply voltage	3 600 V 270 A 10000000 2 2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300)
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 (operating 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 ontrol supply voltage at DC rated value	3 600 V 270 A 10000000 2 2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300) AC/DC 200 220 V
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 (operating 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 control supply voltage • at DC rated value • at AC at 50 Hz rated value	3 600 V 270 A 10000000 2 2 8 10A@240VAC (A300), 2.5A@250VDC (Q300) AC/DC 200 220 V 200 220 V

	0.7.1/4
apparent holding power of magnet coil at AC	6.7 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	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	
degree of protection NEMA rating	1
design of the housing	indoors, usable on a general basis
Mounting/wiring	
mounting position	Vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	D 1
tightoning torque [lbf.in] for supply	Box lug
tightening torque [lbf·in] for supply	180 195 lbf-in
tigntening torque [inf-in] for supply type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	S S S S S S S S S S S S S S S S S S S
type of connectable conductor cross-sections at line-side for	180 195 lbf·in 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x 2/0
type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	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)
type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible	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
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	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
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	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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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 type of connectable conductor cross-sections of magnet coil for	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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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 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	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
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tightening torque [lbf·in] at overload relay for auxiliary contacts	7 10 lbf·in
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	

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

www.usa.siemens.com/iccatalog

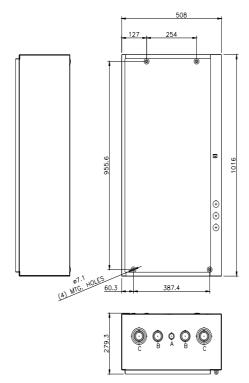
Industry Mall (Online ordering system)
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:22LPU32BD

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:22LPU32BD&lang=en

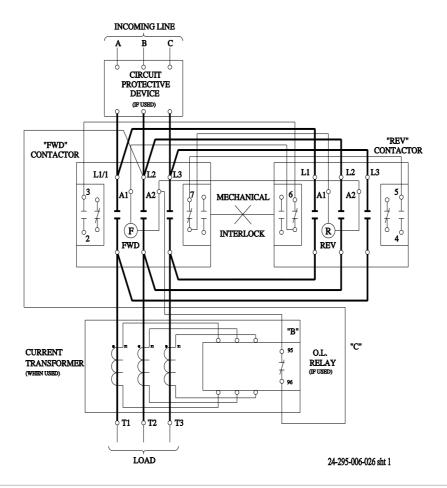
Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:22LPU32BD/certificate



CONDUITS TYP. TOP & BOTTOM

LETTER	CONDUIT SIZE
A	ø12.7 & ø19 CONDUIT
В	ø31.8 & ø38.1 CONDUIT
С	Ø50.8 & Ø76.2 CONDUIT



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