SIEMENS

Data sheet

US2:22IUH32FL



Reversing motor starter, Size 3 1/2, Three phase full voltage, Solid-state overload relay, OLR amp range 50-200A, 240V 50Hz / 277V 60Hz coil, Non-combination type, Enclosure type 4X fiberglass, Water/dust tight noncorrosive, Standard width enclosure

product brand name	Class 22
design of the product	Full-voltage reversing motor starter
special product feature	ESP200 overload relay; Half-size starter
General technical data	
weight [lb]	47 lb
Height x Width x Depth [in]	24 × 24 × 7 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	30 hp
• at 220/230 V rated value	40 hp
• at 460/480 V rated value	75 hp
• at 575/600 V rated value	75 hp
Contactor	
size of contactor	Controller half size 3 1/2
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	115 A
mechanical service life (switching cycles) of the main contacts typical	500000
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	

	0.001
• at AC at 50 Hz rated value	240 V
at AC at 60 Hz rated value	277 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 0.85 1.1
operating range factor control supply voltage rated value of 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	
 overload protection 	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	50 200 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	1
relay number of NO contacts of auxiliary contacts of overload	1
relay	
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	4X, fiber glass
design of the housing	dustproof, waterproof & resistant to corrosion
Mounting/wiring	
mounting position	Vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Box lug
tightening torque [lbf·in] for supply	120 120 lbf·in
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded	1x (14 2/0 AWG)
temperature of the conductor for supply maximum permissible	75 °C
material of the conductor for supply	AL or CU
type of electrical connection for load-side outgoing feeder	Box lug
tightening torque [lbf·in] for load-side outgoing feeder	120 120 lbf·in
type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi- stranded	1x (14 2/0 AWG)
temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C
material of the conductor for load-side outgoing feeder	AL or CU
type of electrical connection of magnet coil	Screw-type terminals
tightening torque [lbf·in] at magnet coil	5 12 lbf·in
type of connectable conductor cross-sections of magnet	2x (16 12 AWG)

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coil at AWG cables single or multi-stranded		
temperature of the conductor at magnet coil maximum permissible	75 °C	
material of the conductor at magnet coil	CU	
type of electrical connection for auxiliary contacts	Screw-type terminals	
tightening torque [lbf·in] at contactor for auxiliary contacts	10 15 lbf·in	
type of connectable conductor cross-sections at contactor at AWG cables for auxiliary contacts single or multi- stranded	1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)	
temperature of the conductor at contactor for auxiliary contacts maximum permissible	75 °C	
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	10kA@600V (Class H or K); 100kA@600V (Class R or J)	
design of the short-circuit trip	Thermal magnetic circuit breaker	
breaking capacity maximum short-circuit current (Icu)		
● at 240 V	14 kA	
● at 480 V	10 kA	
• at 600 V	10 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=US2:22IUH32FL		
Service&Support (Manuals, Certificates, Characteristics, FAQs,)		
https://support.industry.siemens.com/cs/US/en/ps/US2:22IUH32FL		
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:22IUH32FL⟨=en		
Certificates/approvals https://support.industry.siemens.com/cs/US/en/ps/US2:22IUH32FL/certificate		

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