SIEMENS

Data sheet US2:22FUF32FJ



Reversing motor starter, Size 2, Three phase full voltage, Solid-state overload relay, OLR amp range 13-52A, 24VAC 50-60Hz coil, Noncombination type, Enclosure type 4X fiberglass, Water/dust tight noncorrosive, Standard width enclosure

Figure similar

design of the product special product feature General technical data weight [lb] Height x Width x Depth [in] touch protection against electrical shock installation altitude (ft) at height above sea level maximum ambient temperature ("F") • during storage • during storage • during operation ambient temperature • during storage • during operation ambient temperature • during storage • during operation ambient temperature • during storage • during operation ambient temperature • during storage • during operation arbient temperature • during storage • during operation arbient temperature • during storage • during storage • during torage • during variations yielded mechanical performance [hp] for 3-phase AC motor • at 220/208 V rated value • at 220/208 V rated value • at 460/480 V rated value • at 460/480 V rated value • at 55/600 V rated value • at 575/600 V rated value • at 575/600 V rated value • 45 hp Contactor size of contactor 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 (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts n	product brand name	Class 22
weight [lb] Height x Width x Depth [in] 19 lb 24 × 15 × 7 in 10uch protection against electrical shock installation altitude [tt] at height above sea level maximum ambient temperature [°F] • during storage • during operation ambient temperature • during storage • during storage • during storage • during operation ambient temperature • during storage • during operation country of origin Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor • at 220/230 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value • at 575/600 V rated value • at 575/600 V rated value • at 600 V rated value operational current at AC at 600 V rated value operational service life (switching cycles) of the main contacts typical Auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts	design of the product	Full-voltage reversing motor starter
Height x Width x Depth [in] 24 × 15 × 7 in touch protection against electrical shock NA for enclosed products installation altitude [ft] at height above sea level maximum ambient temperature [Ft] • 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	special product feature	ESP200 overload relay
Height x Width x Depth [in] touch protection against electrical shock installation altitude [ft] at height above sea level maximum ambient temperature [°F] • during storage • during operation ambient temperature • during storage • during operation ambient temperature • during operation during operation country of origin Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value • at 575/600 V rated value contactor size of contactor number of NO contacts for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (switching cycles) of the main cortacts typical number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts 1	General technical data	
touch protection against electrical shock installation altitude [ft] at height above sea level maximum ambient temperature [°F] • during storage • during operation ambient temperature • during storage • during storage • during storage • during operation	weight [lb]	19 lb
installation altitude [ft] at height above sea level maximum ambient temperature [°F] • during storage • during operation ambient temperature • during storage • during operation • USA Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 675/600 V rated value • at 575/600 V rated value • at 575/600 V rated value Contactor size of contactor 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 (switching cycles) of the main contacts typical Auxiliary contact number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts	Height x Width x Depth [in]	24 × 15 × 7 in
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 during storage during operation country of origin USA Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value be at 460/480 V rated value at 575/600 V rated value be at 575/600 V rated value at 575/600 V rated value be at 575/600 V rated value be at 575/600 V rated value be at 575/600 V rated value contactor number of NO contacts for main contacts at 600 V de 600 V	during operation	-4 +104 °F
during operation country of origin Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value size of contactor size of contactor mumber of NO contacts for main current circuit at AC at 60 Hz maximum operating voltage for main current circuit at AC at 60 Hz mechanical service life (switching 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 NO contacts at contactor for auxiliary contacts 1	ambient temperature	
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yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value size of contactor size of contactor 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 45 A mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts 10 hp 10 hp 10 hp 10 hp 10 hp 15 hp 25 hp 25 hp Contactor NEMA controller size 2 600 V 600	during operation	-20 +40 °C
yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value 25 hp • at 575/600 V rated value 25 hp Contactor size of contactor number of NO contacts for main contacts 3 operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value 45 A mechanical service life (switching 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 1	country of origin	USA
motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value 25 hp Contactor size of contactor size of 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 45 A mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts 10 hp 15 hp 15 hp 25 hp Contactor NEMA controller size 2 8600 V 1000	Horsepower ratings	
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at 575/600 V rated value Contactor size of contactor 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 (switching 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 1	 at 220/230 V rated value 	15 hp
Size of contactor Size of contactor NEMA controller size 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 (switching 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 1	at 460/480 V rated value	25 hp
size of contactor 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 (switching 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 1	at 575/600 V rated value	25 hp
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 (switching 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 1	Contactor	
operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (switching 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 1	size of contactor	NEMA controller size 2
maximum operational current at AC at 600 V rated value mechanical service life (switching 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 1	number of NO contacts for main contacts	3
mechanical service life (switching 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 1		600 V
contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts 1	operational current at AC at 600 V rated value	45 A
number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts 1	· • • • • • • • • • • • • • • • • • • •	10000000
number of NO contacts at contactor for auxiliary contacts 1	Auxiliary contact	
	number of NC contacts at contactor for auxiliary contacts	0
number of total auxiliary contacts maximum 7	number of NO contacts at contactor for auxiliary contacts	1
named of total advinary contacto maximum	number of total auxiliary contacts maximum	7
contact rating of auxiliary contacts of contactor according to UL 10A@600VAC (A600), 5A@600VDC (P600)		10A@600VAC (A600), 5A@600VDC (P600)
Coil	Coil	
type of voltage of the control supply voltage AC	type of voltage of the control supply voltage	AC
control supply voltage	control supply voltage	

 at AC at 50 Hz rated value at AC at 60 Hz rated value holding power at AC minimum apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil 		
holding power at AC minimum apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value 8.6 W 218 VA 25 VA 0.85 1.1		
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apparent holding power of magnet coil at AC operating range factor control supply voltage rated value 0.85 1.1		
operating range factor control supply voltage rated value 0.85 1.1		
·		
percental drop-out voltage of magnet coil related to the input voltage		
ON-delay time 19 29 ms		
OFF-delay time 10 24 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		
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		
number of NO contacts of auxiliary contacts of overload 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 45 45 lbf·in		
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded 1x (14 2 AWG)		
temperature of the conductor for supply maximum 75 °C permissible		
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 45 45 lbf·in		
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 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		
agriconing torque por injust magnet con		

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=US2:22FUF32FJ

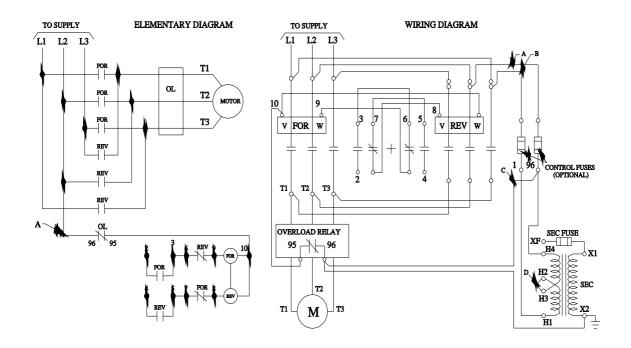
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:22FUF32FJ

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:22FUF32FJ&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:22FUF32FJ/certificate



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