SIEMENS

Data sheet US2:30HUGF32A1VF



Figure similar

2-speed 3-phase motor starter Size 3 Two separate windings Constant or variable torque Solid-state overload relays Low SPD OLR range 13-52a High SPD OLR range 25-100A 110V 50HZ / 120V 60HZ coil Enclosure NEMA type (open) No enclosure

design of the product starture ESP200 overload relay General technical data weight [ib]	product brand name	Class 30
weight [Ib] 16 Ib Height x Width x Depth [in] 11.44 × 12.75 × 5.65 in touch protection against electrical shock Not finger-safe installation altitude [ft] at height above sea level maximum ambient temperature ["F] 4 uning storage 22 +149 "F 4 uning storage 5 uning operation 4 uning storage 5 uning operation 5 units of single business of single business operation 6 uning operation 7 units of single business operation 9 units of single business of singl	design of the product	Full-voltage two speed motor starter
weight [lb] Height x Width x Depth [in] 11.44 × 12.75 × 5.65 in Not finger-safe installation altitude [ft] at height above sea level maximum ambient temperature ["F] • during storage • during operation ambient temperature • during operation • at 200.7208 V rated value • at 220.7208 V rated value • at 220.7208 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 • operational current at AC at 60 Hz maximum operational current at AC at 600 V rated value operational cur	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 storage • during operation -20 +40 °C country of origin Mexico Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 450/480 V rated value • at 450/480 V rated value • at 575/600 V rated value • at 575/600 V rated value size of contactor size of contactor size of 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 vC contacts at contactor for auxiliary contacts number of vC contacts at contactor for auxiliary contacts number of vC contacts at contactor for auxiliary contacts number of vC contacts at contactor for auxiliary contacts number of vC contacts at contactor for auxiliary contacts number of vC contacts at contactor for auxiliary contacts number of vC contacts at contactor for auxiliary contacts number of vC contacts at contactor for auxiliary	General technical data	
touch protection against electrical shock installation altitude [ft] at height above sea level maximum ambient temperature [°F] • during storage • during operation abient temperature • during storage • during storage • during operation -2 +149 °F -3 +65 °C -20 +40 °C -20 +40 °C country of origin Mexico 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 460/480 V rated value • at 575/600 V rated value • at 575/600 V rated value • at 576/60 V rated value • at 60 National countacts 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 Auxillary contact number of NC contacts at contactor for auxiliary contacts 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 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 total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL type of voltage of the control supply voltage AC	weight [lb]	16 lb
installation altitude [ft] at height above sea level maximum ambient temperature [°F] • during storage • during operation -4+104 °F ambient temperature • during storage • during operation -20+40 °C 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 460/480 V rated value • at 575/600 V rated value operating voltage for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V v rated value operating voltage (ife (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 contacts of contactor number of NC contacts at contact or for auxiliary contacts number of NC contacts at contacts of contacts number of NC contacts at contactor of contacts number of NC contacts	Height x Width x Depth [in]	11.44 × 12.75 × 5.65 in
ambient temperature [°F] • during storage • during operation ambient temperature • during storage • during operation -30 +65 °C -20 +40 °C country of origin Mexico 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 • at 575/600 V rated value • at 0 contactor size of 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 contacts typical Auxillary contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of voltage of the control supply voltage AC	touch protection against electrical shock	Not finger-safe
 during storage during operation during storage during storage during operation during operation during operation 20 +65 °C during operation 20 +40 °C during operation during operation during operation 40 +40 °C during operation during operation during operation during operation during operations during operations<	installation altitude [ft] at height above sea level maximum	6560 ft
 during operation during storage during operation 20 +40 °C country of origin Mexico Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor at 220/208 V rated value at 220/230 V rated value at 460/480 V rated value at 50 hp at 575/600 V rated value 50 hp at 575/600 V rated value 50 hp 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 90 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 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 total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL coil type of voltage of the control supply voltage AC 	ambient temperature [°F]	
ambient temperature • during storage • during operation country of origin Horsepowor 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 • at 775/600 V rated value • at 775/600 V rated value • at 60 v rated value • at 60 v rated value • at 775/600 V rated value 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 2 number of NO contacts at contactor for auxiliary contacts 2 number of total auxiliary contacts of contactor according to UL total value of NO contacts of the control supply voltage AC	 during storage 	-22 +149 °F
 during storage during operation 20 +40 °C country of origin Mexico 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 50 hp On tat 575/600 V rated value by 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 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 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 total auxiliary contacts maximum contact rating of auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC	during operation	-4 +104 °F
during operation country of origin Mexico Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor	ambient temperature	
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 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 contacts of contactor according to UL Cotil type of voltage of the control supply voltage AC	during storage	-30 +65 °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 50 hp • at 575/600 V rated value 50 hp 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 total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC	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 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value • 50 hp • at 575/600 V rated value 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 NC 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 AC	country of origin	Mexico
motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 460/480 V rated value • at 460/480 V rated value • at 575/600 V rated value 50 hp 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 NC 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 AC	Horsepower ratings	
at 220/230 V rated value at 460/480 V rated value 50 hp 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 NC contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum 7 contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC		
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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 poperational 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 total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage	• at 220/230 V rated value	30 hp
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 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 total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage NEMA controller size 3 600 V 600 V 600 V 7 5000000 5000000 5000000 5000000 5000000	at 460/480 V rated value	50 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 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 NEMA controller size 3 600 V 600 V 7 5000000 5000000 5000000 5000000 5000000	• at 575/600 V rated value	50 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 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 600 V	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 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 600 V	size of contactor	NEMA controller size 3
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 total auxiliary 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 90 A 5000000 5000000 5000000 5000000 5000000	number of NO contacts for main contacts	6
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 total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage 5000000 2 1000000 10000000000000000		600 V
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 AC	operational current at AC at 600 V rated value	90 A
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 2 10A@600VAC (A600), 5A@600VDC (P600)	,	5000000
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 2 10A@600VAC (A600), 5A@600VDC (P600) AC	Auxiliary contact	
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 7 10A@600VAC (A600), 5A@600VDC (P600) 10A@600VAC (A600), 5A@600VDC (P600)	number of NC contacts at contactor for auxiliary contacts	2
contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage 10A@600VAC (A600), 5A@600VDC (P600) AC	number of NO contacts at contactor for auxiliary contacts	2
to UL Coil type of voltage of the control supply voltage AC	number of total auxiliary contacts maximum	7
type of voltage of the control supply voltage AC		10A@600VAC (A600), 5A@600VDC (P600)
	Coil	
control supply voltage	type of voltage of the control supply voltage	AC
	control supply voltage	

at AC at 50 Hz rated value	110 V
at AC at 50 Hz rated value at AC at 60 Hz rated value	110 V 120 V
holding power at AC minimum	12 V
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 magnet coil	0.85 1.1
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	No
reset function	Manual, automatic and remote
trip class	CLASS 5 / 10 / 20 (factory set) / 30
adjustable current response value current of overload relay	
for low rotational speed	13 52 A
for high rotational speed	25 100 A
tripping time at phase-loss 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	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	Open device (no enclosure)
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 coil at AWG cables single or multi-stranded	2x (16 12 AWG)
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=US2:30HUGF32A1VF

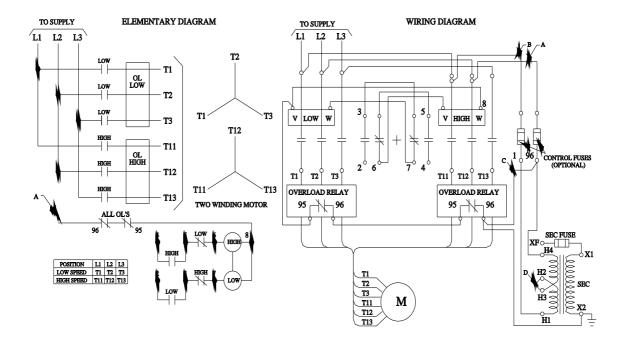
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https://support.industry.siemens.com/cs/US/en/ps/US2:30HUGF32A1VF

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http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:30HUGF32A1VF&lang=en

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