## **SIEMENS**

Data sheet US2:30FUFF32A2HA



2-speed 3-phase motor starter Size 2 One winding consequent pole Constant horsepower Solid-state overload relays Low SPD OLR range 13-52a High SPD OLR range 13-52a 110-120/220-240VAC 60HZ coil Enclosure NEMA type (open) No enclosure

product brand name	Class 30
design of the product	Full-voltage two speed motor starter
special product feature	ESP200 overload relay; Dual voltage coil
General technical data	
weight [lb]	10 lb
Height x Width x Depth [in]	9.19 × 16.3 × 4.23 in
touch protection against electrical shock	Not finger-safe
installation altitude [ft] at height above sea level maximum	6560 ft
ambient temperature [°F]	
<ul> <li>during storage</li> </ul>	-22 +149 °F
during operation	-4 +104 °F
ambient temperature	
during storage	-30 +65 °C
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	7.5 hp
<ul><li>at 220/230 V rated value</li></ul>	10 hp
• at 460/480 V rated value	20 hp
• at 575/600 V rated value	20 hp
Contactor	
size of contactor	NEMA controller size 2
number of NO contacts for main contacts	6
operating voltage for main current circuit at AC at 60 Hz maximum	600 V
operational current at AC at 600 V rated value	45 A
mechanical service life (operating cycles) of the main contacts typical	10000000
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	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	
at AC at 60 Hz rated value	110 240 V
holding power at AC minimum	17.2 W
apparent pick-up power of magnet coil at AC	436 VA
apparent holding power of magnet coil at AC	50 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	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	No
reset function	Manual, automatic and remote
trip class	CLASS 5 / 10 / 20 (factory set) / 30
adjustable current response value current of overload relay	
<ul> <li>for low rotational speed</li> </ul>	13 52 A
for high rotational speed	13 52 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 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	5A@600VAC (B600), 1A@250VDC (R300)
UL insulation valtage (Lii)	
insulation voltage (Ui)	
<ul> <li>with single-phase operation at AC rated value</li> </ul>	600 V
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with multi-phase operation at AC rated value	300 V
Enclosure	
Enclosure degree of protection NEMA rating	Open device (no enclosure)
Enclosure degree of protection NEMA rating Mounting/wiring	Open device (no enclosure)
Enclosure degree of protection NEMA rating Mounting/wiring mounting position	Open device (no enclosure)  Vertical
Enclosure  degree of protection NEMA rating  Mounting/wiring  mounting position  fastening method	Open device (no enclosure)  Vertical  Surface mounting and installation
Enclosure  degree of protection NEMA rating  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side	Open device (no enclosure)  Vertical Surface mounting and installation Box lug
Enclosure  degree of protection NEMA rating  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply	Open device (no enclosure)  Vertical Surface mounting and installation Box lug 45 45 lbf·in
Enclosure  degree of protection NEMA rating  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	Open device (no enclosure)  Vertical Surface mounting and installation Box lug 45 45 lbf·in 1x (14 2 AWG)
Enclosure  degree of protection NEMA rating  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	Open device (no enclosure)  Vertical Surface mounting and installation Box lug 45 45 lbf·in 1x (14 2 AWG)  75 °C
Enclosure  degree of protection NEMA rating  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  material of the conductor for supply	Open device (no enclosure)  Vertical Surface mounting and installation Box lug 45 45 lbf-in 1x (14 2 AWG)  75 °C AL or CU
Enclosure  degree of protection NEMA rating  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 material of the conductor for supply type of electrical connection for load-side outgoing feeder	Open device (no enclosure)  Vertical Surface mounting and installation Box lug 45 45 lbf·in 1x (14 2 AWG)  75 °C AL or CU Box lug
degree of protection NEMA rating  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 material of the conductor for supply 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 45 45 lbf·in 1x (14 2 AWG) 75 °C AL or CU Box lug 45 45 lbf·in
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Enclosure  degree of protection NEMA rating  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  material of the conductor for supply  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	Vertical Surface mounting and installation Box lug 45 45 lbf·in 1x (14 2 AWG) 75 °C AL or CU Box lug 45 45 lbf·in 1x (14 2 AWG)  Absolute the surface of th
Enclosure  degree of protection NEMA rating  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  material of the conductor for supply  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	Open device (no enclosure)  Vertical Surface mounting and installation Box lug 45 45 lbf-in 1x (14 2 AWG)  75 °C AL or CU Box lug 45 45 lbf-in 1x (14 2 AWG)  At 45 lbf-in At (14 2 AWG)  75 °C  AL or CU Screw-type terminals
degree of protection NEMA rating  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 material of the conductor for supply 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	Open device (no enclosure)  Vertical Surface mounting and installation Box lug 45 45 lbf-in 1x (14 2 AWG)  75 °C AL or CU Box lug 45 45 lbf-in 1x (14 2 AWG)  75 °C AL or CU Screw-type terminals 5 12 lbf-in
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degree of protection NEMA rating  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 material of the conductor for supply 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 material of the conductor at magnet coil maximum permissible	Vertical Surface mounting and installation Box lug 45 45 lbf·in 1x (14 2 AWG) 75 °C AL or CU Box lug 45 45 lbf·in 1x (14 2 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf·in 2x (16 12 AWG) 75 °C CU Screw-type terminals
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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 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	
	101 1 00001 (01 11 10 1001 1 00001 (01 10 10
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)
	10kA@600V (Class H or K); 100kA@600V (Class R or J)  Thermal magnetic circuit breaker
circuit required	
circuit required  design of the short-circuit trip	
circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)	Thermal magnetic circuit breaker
circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)  • at 240 V	Thermal magnetic circuit breaker  14 kA
circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V	Thermal magnetic circuit breaker  14 kA 10 kA

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

www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

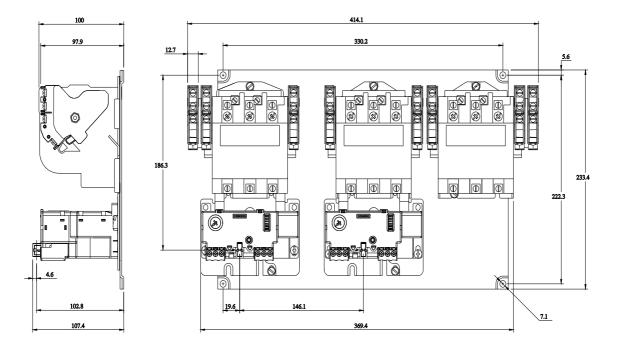
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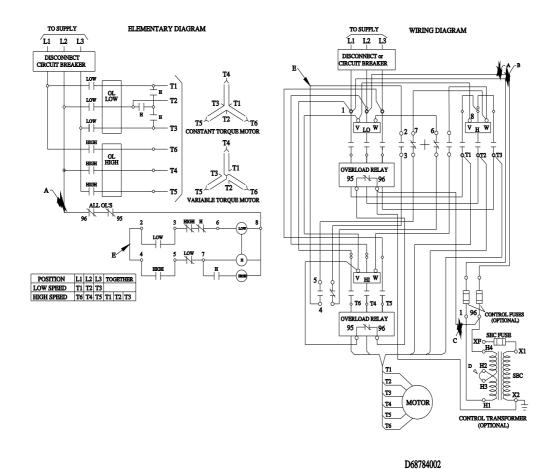
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

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Certificates/approvals

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