SIEMENS

Data sheet

US2:14FUF320J



Non-reversing motor starter, Size 2, Three phase full voltage, Solid-state overload relay, OLR amp range 13-52A, 24VAC 50-60Hz coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors, Standard width enclosure

product brand name	Class 14	
design of the product	Full-voltage non-reversing motor starter	
special product feature	ESP200 overload relay	
General technical data		
weight [lb]	13 lb	
Height x Width x Depth [in]	16 × 8 × 6 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 	10 hp	
 at 220/230 V rated value 	15 hp	
• at 460/480 V rated value	25 hp	
• at 575/600 V rated value	25 hp	
Contactor		
size of contactor	NEMA controller size 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	45 A	
mechanical service life (operating cycles) of the main contacts typical	1000000	
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		
• at AC at 50 Hz rated value	24 V	
• at AC at 60 Hz rated value	24 V	
holding power at AC minimum	8.6 W	
apparent pick-up power of magnet coil at AC	218 VA	

apparent holding power of magnet coil at AC	25 VA
operating range factor control supply voltage rated value of	0.85 1.1
magnet coil	
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	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	13 52 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	F.A.
• 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
	300 V
• with multi-phase operation at AC rated value	300 V 12
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing	
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating	12
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing Mounting/wiring mounting position	12 Dust tight and drip proof for indoors Vertical
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method	12 Dust tight and drip proof for indoors
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side	12 Dust tight and drip proof for indoors Vertical Surface mounting and installation Box lug
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply	12 Dust tight and drip proof for indoors Vertical Surface mounting and installation Box lug 45 45 lbf-in
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side	12 Dust tight and drip proof for indoors Vertical Surface mounting and installation Box lug 45 45 lbf-in 1x(14 - 2 AWG)
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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	12 Dust tight and drip proof for indoors Vertical Surface mounting and installation Box lug 45 45 lbf-in 1x(14 - 2 AWG) 75 °C
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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	12 Dust tight and drip proof for indoors Vertical Surface mounting and installation Box lug 45 45 lbf in 1x(14 - 2 AWG) 75 °C AL or CU
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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	12 Dust tight and drip proof for indoors Vertical Surface mounting and installation Box lug 45 45 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Box lug
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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	12 Dust tight and drip proof for indoors 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
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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	12 Dust tight and drip proof for indoors 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)
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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	12 Dust tight and drip proof for indoors 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
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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 tightening torque [lbf·in] for load-side outgoing feeder type of connectable conductor for supply type of connectable conductor for load-side outgoing feeder tightening torque [lbf·in] for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type at the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder temperature of the conductor for load-side outgoing feeder temperature of the conductor for load-side outgoing feeder type at the conductor for load-side outgoing feeder temperature of the conductor for load	12 Dust tight and drip proof for indoors 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 Box lug 45 45 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU At or CU Box lug 45 45 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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 cross-sections for AWG cables for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of the conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of the conductor for load-side outgoing feeder type of the conductor for load-side outgoing feeder type of electrical connection of magnet coil	12 Dust tight and drip proof for indoors 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 Box lug 45 45 lbf in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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 cross-sections for AWG cables for load-side outgoing feeder tightening torque [lbf·in] for load-side outgoing feeder tightening torque [lbf·in] for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf·in] at magnet coil	12 Dust tight and drip proof for indoors 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 Box lug 45 42 lbf in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 5 12 lbf in
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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 cross-sections for AWG cables for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of the conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of the conductor for load-side outgoing feeder type of the conductor for load-side outgoing feeder type of electrical connection of magnet coil	12 Dust tight and drip proof for indoors 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 Box lug 45 45 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 5 12 lbf·in 2 x (16 - 12 AWG)
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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 connectable conductor cross-sections for AWG cables for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of electrical connection of magnet coil type of electrical connection of magnet coil type of connectable conductor cross-sections of magnet coil for	12 Dust tight and drip proof for indoors 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 Box lug 45 42 lbf in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 5 12 lbf in
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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 load-side outgoing feeder tightening torque [lbf·in] for load-side outgoing feeder type of connectable 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 for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf·in] at magnet coil type of connectable conductor at magnet coil maximum	12 Dust tight and drip proof for indoors 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 Box lug 45 45 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 5 12 lbf·in 2 x (16 - 12 AWG)
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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 load-side outgoing feeder tightening torque [lbf·in] for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of electrical connection of magnet coil type of electrical connection of magnet coil tightening torque [lbf·in] at magnet coil type of connectable conductor cross-sections of magnet coil type of connectable conductor at magnet coil maximum permissible	12 Dust tight and drip proof for indoors 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 Box lug 45 45 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 5 12 lbf-in 2 x (16 - 12 AWG) 75 °C
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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 connectable conductor cross-sections for AWG cables for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor at magnet coil material of the conductor at magnet coil	12 Dust tight and drip proof for indoors 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 Box lug 45 45 lbf in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 5 12 lbf in 2 x (16 - 12 AWG) 75 °C CU
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing 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 connectable conductor cross-sections for AWG cables for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection for auxiliary contacts	12 Dust tight and drip proof for indoors 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 Box rug 45 45 lbf in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 5 12 lbf in 2 x (16 - 12 AWG) 75 °C CU screw-type terminals

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 for AWG cables for auxiliary contacts single or multi-stranded	2 x (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
maximum short-circuit current breaking capacity (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	

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=US2:14FUF320J

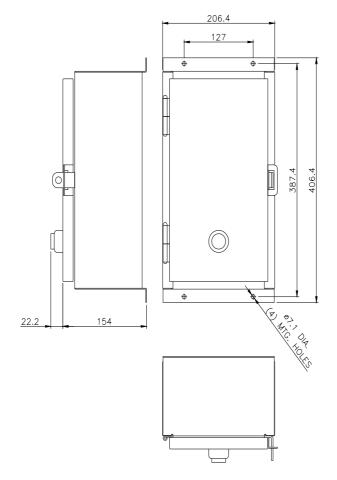
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:14FUF320J

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14FUF320J&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14FUF320J/certificate





last modified:

11/29/2021 🖸