## **SIEMENS**

Data sheet US2:14FUF82BH

Non-reversing motor starter Size 2 Three phase full voltage Solid-state overload relay OLRelay amp range 13-52a 380-440/440-480V 50/60HZ coil Combination type Indoor general purpose use





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]	21 lb		
Height x Width x Depth [in]	20 × 12 × 8 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			
<ul> <li>during storage</li> </ul>	-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	10000000		
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), 2.5A@300VDC (Q300)		
Coil			
type of voltage of the control supply voltage	AC		
control supply voltage			
• at AC at 50 Hz rated value	380 440 V		
at AC at 60 Hz rated value	440 480 V		
holding power at AC minimum	8.6 W		
apparent pick-up power of magnet coil at AC	218 VA		

apparent helding payor of magnet sail at AC	25 VA		
apparent holding power of magnet coil at AC 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			
<ul> <li>overload protection</li> </ul>	Yes		
phase failure detection	Yes		
<ul> <li>asymmetry detection</li> </ul>	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			
• 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)			
<ul> <li>with single-phase operation at AC rated value</li> </ul>	600 V		
<ul> <li>with multi-phase operation at AC rated value</li> </ul>	300 V		
Enclosure			
design of the housing	Extra-wide		
assign of the nearing	Extra wide		
degree of protection NEMA rating of the enclosure	Extra-wide NEMA Type 1		
degree of protection NEMA rating of the enclosure	Extra-wide NEMA Type 1		
degree of protection NEMA rating of the enclosure design of the housing	Extra-wide NEMA Type 1		
degree of protection NEMA rating of the enclosure design of the housing Mounting/wiring	Extra-wide NEMA Type 1 Indoor general purpose use		
degree of protection NEMA rating of the enclosure design of the housing Mounting/wiring mounting position	Extra-wide NEMA Type 1 Indoor general purpose use  Vertical		
degree of protection NEMA rating of the enclosure design of the housing  Mounting/wiring mounting position fastening method	Extra-wide NEMA Type 1 Indoor general purpose use  Vertical Surface mounting and installation		
degree of protection NEMA rating of the enclosure design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side	Extra-wide NEMA Type 1 Indoor general purpose use  Vertical Surface mounting and installation Box lug		
degree of protection NEMA rating of the enclosure 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	Extra-wide NEMA Type 1 Indoor general purpose use  Vertical Surface mounting and installation Box lug 45 45 lbf·in		
degree of protection NEMA rating of the enclosure 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	Extra-wide NEMA Type 1 Indoor general purpose use  Vertical Surface mounting and installation Box lug 45 45 lbf-in 1x(14 - 2 AWG)		
degree of protection NEMA rating of the enclosure 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	Extra-wide NEMA Type 1 Indoor general purpose use  Vertical Surface mounting and installation Box lug 45 45 lbf·in 1x(14 - 2 AWG)  75 °C		
degree of protection NEMA rating of the enclosure 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	Extra-wide NEMA Type 1 Indoor general purpose use  Vertical Surface mounting and installation Box lug 45 45 lbf·in 1x(14 - 2 AWG)  75 °C AL or CU		
degree of protection NEMA rating of the enclosure 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	Extra-wide NEMA Type 1 Indoor general purpose use  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 of the enclosure 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	Extra-wide NEMA Type 1 Indoor general purpose use  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		
degree of protection NEMA rating of the enclosure 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 single or multi-stranded temperature of the conductor for load-side outgoing feeder	Extra-wide NEMA Type 1 Indoor general purpose use  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)		
degree of protection NEMA rating of the enclosure 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 single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible	Extra-wide NEMA Type 1 Indoor general purpose use  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)		
degree of protection NEMA rating of the enclosure 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 single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder	Extra-wide NEMA Type 1 Indoor general purpose use  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)		
degree of protection NEMA rating of the enclosure 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 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	Extra-wide NEMA Type 1 Indoor general purpose use  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  Sorew-type terminals		
degree of protection NEMA rating of the enclosure 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 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	Extra-wide NEMA Type 1 Indoor general purpose use  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  Sorew-type terminals  5 12 lbf-in		
degree of protection NEMA rating of the enclosure 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 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	Extra-wide NEMA Type 1 Indoor general purpose use  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 Sorew-type terminals 5 12 lbf-in 2 x (16 - 12 AWG)		
degree of protection NEMA rating of the enclosure 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 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	Extra-wide NEMA Type 1 Indoor general purpose use  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  Sorew-type terminals  5 12 lbf-in  2 x (16 - 12 AWG)  75 °C		
degree of protection NEMA rating of the enclosure 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 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	Extra-wide NEMA Type 1 Indoor general purpose use  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  2 x (16 - 12 AWG)  75 °C  CU		
degree of protection NEMA rating of the enclosure 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 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	Extra-wide NEMA Type 1 Indoor general purpose use  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 2 x (16 - 12 AWG)		

maximum permissible				
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			
Approvals Certificates				
Test Certificates				



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

www.usa.siemens.com/iccatalog

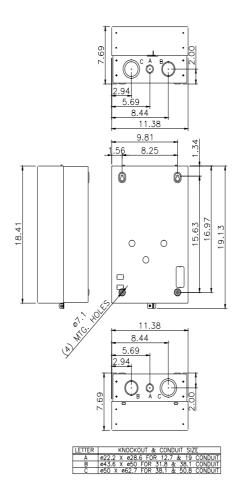
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14FUF82BH

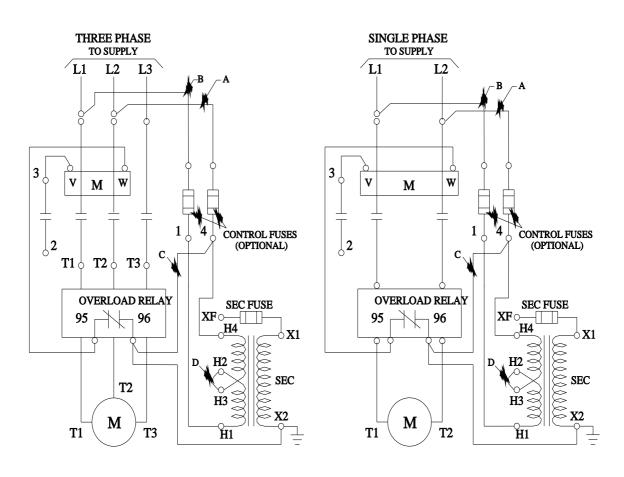
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:14FUF82BH

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14FUF82BH&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14FUF82BH&lang=en</a>

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14FUF82BH/certificate





last modified: 12/7/2023 🖸

US2:14FUF82BH Page 5/5		