## **SIEMENS**

Data sheet US2:14FUF820L



Non-reversing motor starter, Size 2, Three phase full voltage, Solid-state overload relay, OLRelay amp range 13-52a, 240V 50HZ / 277V 60HZ coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors, Extra-wide 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]	19 lb
Height x Width x Depth [in]	16 × 13 × 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	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), 5A@600VDC (P600)
Coil	
type of voltage of the control supply voltage	AC
control supply voltage	
<ul> <li>at AC at 50 Hz rated value</li> </ul>	240 V
• at AC at 60 Hz rated value	277 V
holding power at AC minimum	8.6 W
apparent pick-up power of magnet coil at AC	218 VA

annaront holding nower of magnet soil at AC	25 VA
apparent holding power of magnet coil at AC 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	
<ul> <li>overload protection</li> </ul>	Yes
phase failure detection	Yes
<ul> <li>asymmetry detection</li> </ul>	Yes
<ul> <li>ground fault detection</li> </ul>	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
	Extra-wide
degree of protection NEMA rating of the enclosure	Extra-wide NEMA Type 12
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degree of protection NEMA rating of the enclosure design of the housing	Extra-wide NEMA Type 12
degree of protection NEMA rating of the enclosure design of the housing Mounting/wiring	Extra-wide NEMA Type 12  Dust tight and drip proof for indoors
degree of protection NEMA rating of the enclosure design of the housing Mounting/wiring mounting position	Extra-wide NEMA Type 12  Dust tight and drip proof for indoors  Vertical
degree of protection NEMA rating of the enclosure design of the housing  Mounting/wiring mounting position fastening method	Extra-wide NEMA Type 12  Dust tight and drip proof for indoors  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 12  Dust tight and drip proof for indoors  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 12  Dust tight and drip proof for indoors  Vertical  Surface mounting and installation  Box lug  45 45 lbf·in
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maximum permissible material of the conductor at contactor for auxiliary contacts  type of electrical connection at overload relay for auxiliary contacts  tightening torque [lbf-in] at overload relay for auxiliary contacts  type of connectable conductor cross-sections at overload relay for AWG cables for auxiliary contacts single or multi-stranded  temperature of the conductor at overload relay for auxiliary contacts maximum permissible material of the conductor at overload relay for auxiliary contacts  Short-circuit current rating  design of the fuse link for short-circuit protection of the main circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  • at 600 V  certificate of suitability  NEMA ICS 2; UL 508; CSA 22.2, No.14		
type of electrical connection at overload relay for auxiliary contacts  tightening torque [lbf-in] at overload relay for auxiliary contacts  type of connectable conductor cross-sections at overload relay for AWG cables for auxiliary contacts single or multi-stranded  temperature of the conductor at overload relay for auxiliary contacts maximum permissible  material of the conductor at overload relay for auxiliary contacts  Short-circuit current rating  design of the fuse link for short-circuit protection of the main circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  • at 600 V  screw-type terminals  crew-type terminals  crew type terminals  crew type terminals  crew type terminals  crew type termi	maximum permissible	
tightening torque [lbf-in] at overload relay for auxiliary contacts  type of connectable conductor cross-sections at overload relay for AWG cables for auxiliary contacts single or multi-stranded  temperature of the conductor at overload relay for auxiliary contacts maximum permissible  material of the conductor at overload relay for auxiliary contacts  Short-circuit current rating  design of the fuse link for short-circuit protection of the main circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  • at 600 V  10 kA	material of the conductor at contactor for auxiliary contacts	CU
type of connectable conductor cross-sections at overload relay for AWG cables for auxiliary contacts single or multi-stranded  temperature of the conductor at overload relay for auxiliary contacts maximum permissible  material of the conductor at overload relay for auxiliary contacts  Short-circuit current rating  design of the fuse link for short-circuit protection of the main circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  • at 600 V  10 kA	· ·	screw-type terminals
for AWG cables for auxiliary contacts single or multi-stranded  temperature of the conductor at overload relay for auxiliary contacts maximum permissible  material of the conductor at overload relay for auxiliary contacts  Short-circuit current rating  design of the fuse link for short-circuit protection of the main circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  • at 600 V  10 kA	tightening torque [lbf·in] at overload relay for auxiliary contacts	7 10 lbf-in
contacts maximum permissible material of the conductor at overload relay for auxiliary contacts  Short-circuit current rating  design of the fuse link for short-circuit protection of the main circuit required  design of the short-circuit trip  Thermal magnetic circuit breaker  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  • at 600 V  10 kA		2 x (20 - 14 AWG)
Short-circuit current rating  design of the fuse link for short-circuit protection of the main circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  • at 600 V  10 kA		75 °C
design of the fuse link for short-circuit protection of the main circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  • at 600 V  10 kA	material of the conductor at overload relay for auxiliary contacts	CU
circuit required  design of the short-circuit trip  maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  • at 600 V  10 kA	Short-circuit current rating	
maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V  • at 600 V  10 kA		10kA@600V (Class H or K); 100kA@600V (Class R or J)
<ul> <li>at 240 V</li> <li>at 480 V</li> <li>at 600 V</li> <li>14 kA</li> <li>10 kA</li> </ul>	design of the short-circuit trip	Thermal magnetic circuit breaker
• at 480 V         • at 600 V         10 kA         • at 600 V	maximum short-circuit current breaking capacity (Icu)	
• at 600 V 10 kA	• at 240 V	14 kA
	• at 480 V	10 kA
certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	• 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,...)

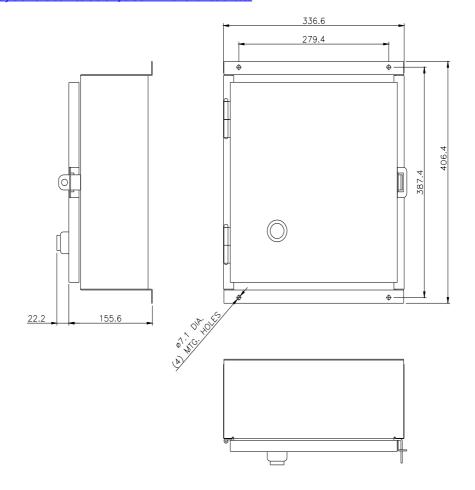
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14FUF820L

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

https://support.industry.siemens.com/cs/US/en/ps/US2:14FUF820L

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=US2:14FUF820L&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14FUF820L&lang=en</a>

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