# **SIEMENS**

# Data sheet

# US2:14GUG820L

Non-reversing motor starter, Size 2 1/2, Three phase full voltage, Solid-state overload relay, OLRelay amp range 25-100A, 240V 50HZ / 277V 60HZ coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors, Extra-wide enclosure



Figure similar

General technical data	
Weight [lb]	19 lb
Height x Width x Depth [in]	16 × 13 × 6 in
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
Ambient temperature [°F] during operation	-4 +104 °F
Ambient temperature during storage	-30 +65 °C
Ambient temperature during operation	-20 +40 °C
Country of origin	USA
Horsepower ratings	
Yielded mechanical performance [hp] for three-phase	
AC motor	
• at 200/208 V rated value	15 hp
• at 220/230 V rated value	20 hp
• at 460/480 V rated value	30 hp

• at 575/600 V r	ated value
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30 hp

• at 575/600 V rated value	30 np
Contactor	
Number of NO contacts for main contacts	3
Operating voltage for main current circuit at AC at 60 Hz maximum	600 V
Operating current at AC at 600 V rated value	60 A
Mechanical service life (switching 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 DC rated value	0 0 V
• at AC at 60 Hz rated value	277 277 V
• at AC at 50 Hz rated value	240 240 V
Holding power at AC minimum	8.6 W
Apparent pick-up power of magnet coil at AC	218 V·A
Apparent holding power of magnet coil at AC	25 V·A
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 %
Switch-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
Phase unbalance	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 pick-up value current of the current- dependent overload release	25 100 A
Trip 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
Operating 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	
<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	
Degree of protection NEMA rating of the enclosure	NEMA Type 12
Design of the housing	Dust tight and drip proof for indoors
Mounting/wiring Mounting position	Vertical
(mounting type)	Surface mounting and installation
Type of electrical connection for supply voltage line-	Box lug
side	
side Tightening torque [lbf·in] for supply	45 45 lbf·in
	45 45 lbf·in 1x(14 - 2 AWG)
Tightening torque [lbf·in] for supply Type of connectable conductor cross-sections at line-	
Tightening torque [lbf·in] for supply Type of connectable conductor cross-sections at line- side at AWG conductors single or multi-stranded Temperature of the conductor for supply maximum	1x(14 - 2 AWG)
Tightening torque [lbf·in] for supply Type of connectable conductor cross-sections at line- side at AWG conductors single or multi-stranded Temperature of the conductor for supply maximum permissible	1x(14 - 2 AWG) 75 °C
Tightening torque [lbf·in] for supplyType of connectable conductor cross-sections at line- side at AWG conductors single or multi-strandedTemperature of the conductor for supply maximum permissibleMaterial of the conductor for supplyType of electrical connection for load-side outgoing	1x(14 - 2 AWG) 75 °C AL or CU
Tightening torque [lbf·in] for supplyType of connectable conductor cross-sections at line- side at AWG conductors single or multi-strandedTemperature of the conductor for supply maximum permissibleMaterial of the conductor for supplyType of electrical connection for load-side outgoing feederTightening torque [lbf·in] for load-side outgoing	1x(14 - 2 AWG) 75 °C AL or CU Box lug
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Tightening termus [][hf in] at meanst sail	
Tightening torque [lbf·in] at magnet coil	5 12 lbf in
Type of connectable conductor cross-sections of magnet coil at AWG conductors single or multi- stranded	2 x (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 conductors for auxiliary contacts single or multi-stranded	1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (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 conductors 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

### Further information

Industrial Controls - Product Overview (Catalogs, Brochures,...) www.usa.siemens.com/iccatalog

## Industry Mall (Online ordering system)

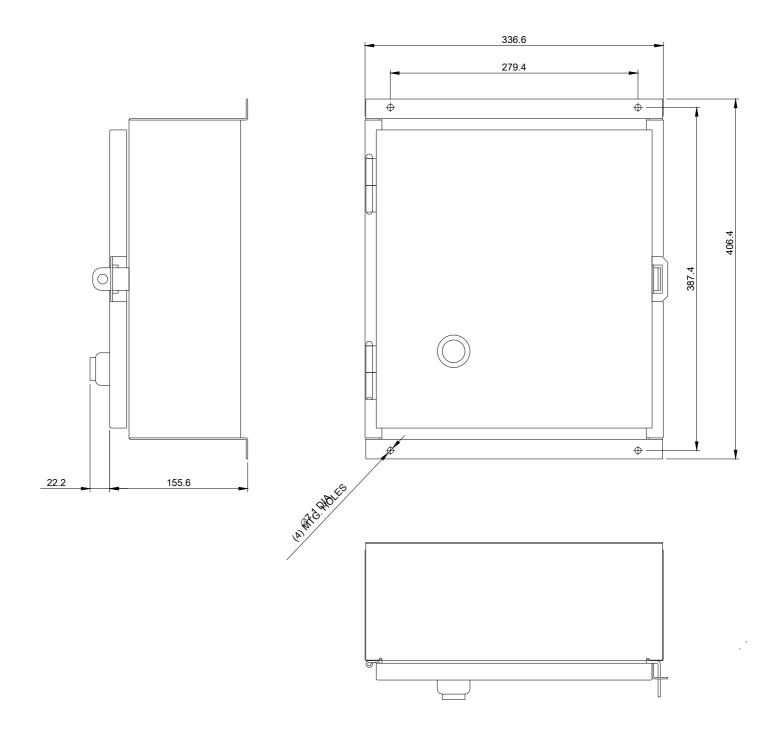
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14GUG820L

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:14GUG820L

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14GUG820L&lang=en

#### Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14GUG820L/certificate





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