## SIEMENS

## Data sheet

product brand name

design of the product

## US2:14GP32FJ81



Non-reversing motor starter, Size 2 1/2, Three phase full voltage, Amb. compensate bimetal OLR, Contactor amp rating 60A, 24VAC 50-60Hz coil, Non-combination type, Enclosure type 4X fiberglass, Water/dust tight noncorrosive

special product feature	Half-size starter
General technical data	
weight [lb]	15 lb
Height x Width x Depth [in]	15 × 12 × 7 in
touch protection against electrical shock	NA for enclosed products
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	
<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	
<ul> <li>at 200/208 V rated value</li> </ul>	15 hp
<ul> <li>at 220/230 V rated value</li> </ul>	20 hp
<ul> <li>at 460/480 V rated value</li> </ul>	30 hp
<ul> <li>at 575/600 V rated value</li> </ul>	30 hp
Contactor	
size of contactor	Controller half size 2 1/2
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	60 A
mechanical service life (switching cycles) of the main contacts typical	1000000

Class 14 & 22

Full-voltage non-reversing motor starter

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	

	0.01
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 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
• test function	Yes
<ul> <li>external reset</li> </ul>	Yes
reset function	Manual and automatic
adjustment range of thermal overload trip unit	0.85 1.15
number of NC contacts of auxiliary contacts of overload relay	1
number of NO contacts of auxiliary contacts of overload relay	0
operational current of auxiliary contacts of overload relay	
• at AC at 600 V	10 A
● at DC at 250 V	5 A
contact rating of auxiliary contacts of overload relay according to UL	10A@600VAC (A600), 5A@250VDC (P300)
Enclosure	
degree of protection NEMA rating	4X, fiber glass
design of the housing	dustproof, waterproof & resistant to corrosion
Mounting/wiring	
Mounting/wiring	Vertical
mounting position	Vertical Surface mounting and installation
mounting position fastening method	Surface mounting and installation
mounting position fastening method type of electrical connection for supply voltage line-side	Surface mounting and installation Box lug
mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [lbf·in] for supply         temperature of the conductor for supply maximum	Surface mounting and installation
mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [lbf·in] for supply         temperature of the conductor for supply maximum         permissible	Surface mounting and installation Box lug 45 45 lbf in 75 °C
mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [lbf·in] for supply         temperature of the conductor for supply maximum         permissible         material of the conductor for supply	Surface mounting and installation Box lug 45 45 lbf·in 75 °C AL or CU
mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [lbf·in] for supply         temperature of the conductor for supply maximum         permissible         material of the conductor for supply         type of electrical connection for load-side outgoing feeder	Surface mounting and installation Box lug 45 45 lbf·in 75 °C AL or CU Screw-type terminals
mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [lbf·in] for supply         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	Surface mounting and installation Box lug 45 45 lbf·in 75 °C AL or CU Screw-type terminals 35 50 lbf·in
mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [lbf·in] for supply         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 electrical connection of magnet coil	Surface mounting and installation Box lug 45 45 lbf·in 75 °C AL or CU Screw-type terminals 35 50 lbf·in Screw-type terminals
mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [lbf·in] for supply         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 electrical connection of magnet coil         tightening torque [lbf·in] at magnet coil	Surface mounting and installation Box lug 45 45 lbf·in 75 °C AL or CU Screw-type terminals 35 50 lbf·in Screw-type terminals 5 12 lbf·in
mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [lbf·in] for supply         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 electrical connection of magnet coil         tightening torque [lbf·in] at magnet coil         type of connectable conductor cross-sections of magnet         coil at AWG cables single or multi-stranded	Surface mounting and installation Box lug 45 45 lbf·in 75 °C AL or CU Screw-type terminals 35 50 lbf·in Screw-type terminals 5 12 lbf·in 2x (16 12 AWG)
mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [lbf·in] for supply         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 electrical connection of magnet coil         tightening torque [lbf·in] at magnet coil         type of connectable conductor cross-sections of magnet         coil at AWG cables single or multi-stranded         temperature of the conductor at magnet coil maximum	Surface mounting and installation Box lug 45 45 lbf·in 75 °C AL or CU Screw-type terminals 35 50 lbf·in Screw-type terminals 5 12 lbf·in 2x (16 12 AWG) 75 °C
mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [lbf·in] for supply         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 electrical connection of magnet coil         tightening torque [lbf·in] at magnet coil         type of connectable conductor cross-sections of magnet         coil at AWG cables single or multi-stranded         temperature of the conductor at magnet coil         material of the conductor at magnet coil	Surface mounting and installation Box lug 45 45 lbf·in 75 °C AL or CU Screw-type terminals 35 50 lbf·in Screw-type terminals 5 12 lbf·in 2x (16 12 AWG) 75 °C CU
mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [lbf·in] for supply         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         tightening torque [lbf·in] 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 at AWG cables single or multi-stranded         temperature of the conductor at magnet coil maximum         permissible         material of the conductor at magnet coil         type of electrical connection for auxiliary contacts	Surface mounting and installation Box lug 45 45 lbf·in 75 °C AL or CU Screw-type terminals 35 50 lbf·in Screw-type terminals 5 12 lbf·in 2x (16 12 AWG) 75 °C CU Screw-type terminals
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mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [lbf·in] for supply         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         tightening torque [lbf·in] 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 at AWG cables single or multi-stranded         temperature of the conductor at magnet coil maximum         permissible         material of the conductor at magnet coil         type of electrical connection for auxiliary contacts	Surface mounting and installation Box lug 45 45 lbf·in 75 °C AL or CU Screw-type terminals 35 50 lbf·in Screw-type terminals 5 12 lbf·in 2x (16 12 AWG) 75 °C CU Screw-type terminals
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mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [lbf·in] for supply         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 electrical connection of magnet coil         tightening torque [lbf·in] at magnet coil         type of connectable conductor at magnet coil         type of the conductor at magnet coil         type of electrical connection for auxiliary contacts         tightening torque [lbf·in] at contactor for auxiliary contacts         type of connectable conductor cross-sections at contactor at AWG cables for auxiliary contacts single or multi-stranded         temperature of the conductor cross-sections at contactor at AWG cables for auxiliary contacts single or multi-stranded         temperature of the conductor at contactor for auxiliary contacts         type of connectable conductor at contactor for auxiliary contacts         tope of connectable conductor at contactor for auxiliary contacts </td <td>Surface mounting and installation Box lug 45 45 lbf in 75 °C AL or CU Screw-type terminals 35 50 lbf in Screw-type terminals 5 12 lbf in 2x (16 12 AWG) 75 °C CU Screw-type terminals 10 15 lbf in 1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG) 75 °C</td>	Surface mounting and installation Box lug 45 45 lbf in 75 °C AL or CU Screw-type terminals 35 50 lbf in Screw-type terminals 5 12 lbf in 2x (16 12 AWG) 75 °C CU Screw-type terminals 10 15 lbf in 1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG) 75 °C
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contacts maximum permissible	
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
breaking capacity maximum short-circuit current (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	
Industrial Controls - Product Overview (Catalogs, Broch www.usa.siemens.com/iccatalog Industry Mall (Online ordering system)	ures,)

https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14GP32FJ81

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:14GP32FJ81

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14GP32FJ81&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14GP32FJ81/certificate

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