## SIEMENS

## Data sheet

## US2:14GP120G81



Non-reversing motor starter, Size 2 1/2, Single phase, 2-pole, Amb compensate bimetal OLrelay Contactor amp rating 60Amp 190 220/220 240V 50/60HZ coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors

Figure s	similar
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product brand name	Class 14 & 22
design of the product	Full-voltage non-reversing motor starter
special product feature	Half-size starter
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]	
<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 single-phase AC motor	
<ul> <li>at 115 V rated value</li> </ul>	5 hp
<ul> <li>at 200/208 V rated value</li> </ul>	10 hp
<ul> <li>at 220/230 V rated value</li> </ul>	10 hp
Contactor	
size of contactor	Controller half size 2 1/2
number of NO contacts for main contacts	2
operating voltage for main current circuit at AC at 60 Hz maximum	240 V
operational 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	100 000 1/
• at AC at 50 Hz rated value	190 220 V
at AC at 60 Hz rated value	220 240 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
test function	Yes
external reset	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	5 A
● at DC at 250 V	5 A
contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 5A@250VDC (P300)
Enclosure	
degree of protection NEMA rating	12
	Duch field and dain mar of few indexes
design of the nousing	Dust tight and drip proof for indoors
design of the housing Mounting/wiring	Dust tight and drip proof for indoors
Mounting/wiring	
Mounting/wiring mounting position	Vertical
Mounting/wiring mounting position fastening method	Vertical Surface mounting and installation
Mounting/wiring         mounting position         fastening method         type of electrical connection for supply voltage line-side	Vertical Surface mounting and installation Box lug
Mounting/wiring         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	Vertical Surface mounting and installation
Mounting/wiring         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	Vertical Surface mounting and installation Box lug 45 45 lbf·in 75 °C
Mounting/wiring         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	Vertical Surface mounting and installation Box lug 45 45 lbf·in 75 °C AL or CU
Mounting/wiring         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	Vertical Surface mounting and installation Box lug 45 45 lbf·in 75 °C AL or CU Screw-type terminals
Mounting/wiring         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	Vertical Surface mounting and installation Box lug 45 45 lbf·in 75 °C AL or CU Screw-type terminals 35 50 lbf·in
Mounting/wiring         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	Vertical 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/wiring         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	Vertical 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/wiring         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	Vertical 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/wiring         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	Vertical 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/wiring         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] or 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	Vertical 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/wiring         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] or 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	VerticalSurface mounting and installationBox lug $45 \dots 45$ lbf·in $75 °C$ AL or CUScrew-type terminals $35 \dots 50$ lbf·inScrew-type terminals $5 \dots 12$ lbf·in $2x$ (16 12 AWG) $75 °C$
Mounting/wiring         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	Vertical 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/wiring         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         type of electrical connection for auxiliary contacts	Vertical         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
Mounting/wiring         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 at magnet coil maximum         permissible         material of the conductor at magnet coil         type of electrical connection for auxiliary contacts         tightening torque [lbf·in] at contactor for auxiliary contacts         type of electrical connection for auxiliary contacts         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-	Vertical         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
Mounting/wiring           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] at 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           tightening torque [lbf·in] at contactor for auxiliary contacts           tightening torque [lbf·in] at contactor for auxiliary contacts           type of electrical connection for auxiliary contacts           type of electrical connection for auxiliary contacts           tightening torque [lbf·in] at contactor for auxiliary contacts           type of connectable conductor cross-sections at contactor           tat AWG cables for auxiliary contacts single or multi-stranded           temperature of the conductor at contactor for auxiliary	Vertical Surface mounting and installation Box lug $45 \dots 45 \text{ lbf} \cdot \text{in}$ $75 ^{\circ}\text{C}$ AL or CU Screw-type terminals $35 \dots 50 \text{ lbf} \cdot \text{in}$ Screw-type terminals $5 \dots 12 \text{ lbf} \cdot \text{in}$ $2x (16 \dots 12 \text{ AWG})$ $75 ^{\circ}\text{C}$ CU Screw-type terminals $10 \dots 15 \text{ lbf} \cdot \text{in}$ $1x (12 \text{ AWG}), 2x (16 \dots 14 \text{ AWG}), 2x (18 \dots 16 \text{ AWG})$
Mounting/wiring         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] at 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         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 at contactor for auxiliary contacts         type of connectable conductor cross-sections at contactor         te	Vertical 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
Mounting/wiring           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] at 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           tightening torque [lbf·in] at contactor for auxiliary contacts           type of connectable conductor at contactor for auxiliary contacts           type of connectable conductor at contactor for auxiliary contacts           type of connectable conductor at contactor for auxiliary contacts           type of connectable conductor at contactor for auxiliary contacts           type of connectable conductor at conta	VerticalSurface mounting and installationBox lug45 45 lbf in75 °CAL or CUScrew-type terminals35 50 lbf inScrew-type terminals5 12 lbf in2x (16 12 AWG)75 °CCUScrew-type terminals10 15 lbf in1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)75 °CCU
Mounting/wiring           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] at magnet coil           tightening torque [lbf·in] at 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           tightening torque [lbf·in] at contactor for auxiliary contacts           tightening torque [lbf·in] at contactor for auxiliary contacts           tightening torque [lbf·in] at contactor for auxiliary contacts           type of connectable conductor at contactor for auxiliary contacts           type of connectable conductor at contactor for auxiliary contacts           type of connectable conductor at contactor for auxiliary contacts           type of connectable conductor at contactor for auxiliary contacts           type of connectable conductor at contactor for auxiliary contacts           type of connectable conductor	Vertical         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         CU         Screw-type terminals         10 15 lbf·in         1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)         75 °C         CU         Screw-type terminals

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relay at AWG cables for auxiliary contacts single or multi- stranded	
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
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	

Further Information

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

www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

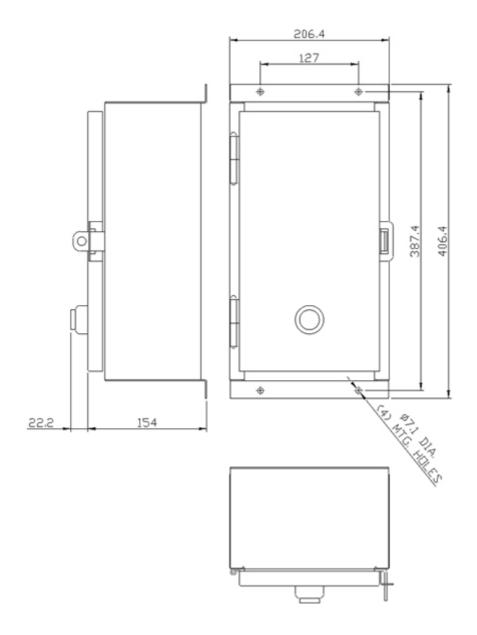
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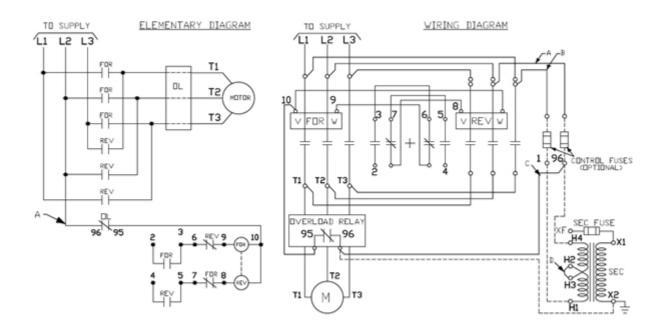
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:14GP120G81

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14GP120G81&lang=en

Certificates/approvals

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