## SIEMENS

## Data sheet

## US2:14GP82BL81



Non-reversing motor starter, Size 2 1/2, Three phase full voltage, Amb. compensate bimetal OLR, Contactor amp rating 60A, 240V 50Hz / 277V 60Hz coil, Non-combination type, Enclosure type 1, Indoor general purpose use

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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]	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]	
<ul> <li>during storage</li> </ul>	-22 +149 °F
<ul> <li>during operation</li> </ul>	-4 +104 °F
ambient temperature	
<ul> <li>during storage</li> </ul>	-30 +65 °C
<ul> <li>during operation</li> </ul>	-20 +40 °C
country of origin	USA
Horsepower ratings	
yielded mechanical performance [hp] for 3-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 rated value	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
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	

	04014
at AC at 50 Hz rated value	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
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
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	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	1
design of the housing	Extra-wide
design of the housing	indoors, usable on a general basis
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	Surface mounting and installation Box lug 45 45 lbf·in
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 Box lug 45 45 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	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         type of connectable conductor cross-sections of magnet	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         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)
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         permissible	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
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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] at 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         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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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)

https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14GP82BL81

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

https://support.industry.siemens.com/cs/US/en/ps/US2:14GP82BL81

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=US2:14GP82BL81&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14GP82BL81&lang=en</a>

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14GP82BL81/certificate

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