SIEMENS

Data sheet US2:14GP82BC81



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

Figure similar

product brand name	Class 14 & 22
design of the product	Full-voltage non-reversing motor starter
special product feature	Half-size starter; Dual voltage coil
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]	
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	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	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	

 at AC at 60 Hz rated value holding power at AC minimum apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil percental drop-out voltage of magnet coil related to the input voltage ON-delay time OFF-delay time Overload relay product function overload protection Yes 			
apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil percental drop-out voltage of magnet coil related to the input voltage ON-delay time OFF-delay time Overload relay product function overload protection overload protection 218 VA 25 VA 0.85 1.1 50 % 10 29 ms 10 29 ms Ves			
apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil percental drop-out voltage of magnet coil related to the input voltage ON-delay time OFF-delay time Overload relay product function overload protection overload protection 25 VA 0.85 1.1 50 % 10 29 ms 10 24 ms			
operating range factor control supply voltage rated value of magnet coil percental drop-out voltage of magnet coil related to the input voltage ON-delay time OFF-delay time Overload relay product function overload protection overload protection overload relay Yes			
percental drop-out voltage of magnet coil related to the input voltage ON-delay time OFF-delay time Overload relay product function o overload protection o verload protection 50 % 19 29 ms 10 24 ms Ves			
input voltage ON-delay time 19 29 ms OFF-delay time 10 24 ms Overload relay product function • overload protection Yes			
OFF-delay time 10 24 ms Overload relay product function • overload protection Yes			
Overload relay product function • overload protection Yes			
product function overload protection Yes			
• overload protection Yes	Overload relay		
11 f 1:			
• 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			
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 position Vertical			
fastening method Surface mounting and installation			
type of electrical connection for supply voltage line-side Box lug			
tightening torque [lbf-in] for supply 45 45 lbf-in			
temperature of the conductor for supply maximum 75 °C permissible			
material of the conductor for supply AL or CU			
material of the conductor for supply type of electrical connection for load-side outgoing feeder Screw-type terminals			
type of electrical connection for load-side outgoing feeder Screw-type terminals			
type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder 35 50 lbf-in			
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 Screw-type terminals Screw-type terminals			
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 screw-type terminals tightening torque [lbf·in] at magnet coil type of connectable conductor cross-sections of magnet 2x (16 12 AWG)			
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 Screw-type terminals 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 Screw-type terminals 5 12 lbf-in 2x (16 12 AWG) 75 °C			
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 Screw-type terminals 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 Screw-type terminals 5 50 lbf-in 2x (16 12 lbf-in 2x (16 12 AWG) 75 °C			
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 screw-type terminals tightening torque [lbf-in] at magnet coil screw-type terminals tightening torque [lbf-in] at magnet coil screw-type terminals tightening torque [lbf-in] at magnet coil screw-type terminals			
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 Screw-type terminals 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 Screw-type terminals 2x (16 12 AWG) CU CU Screw-type terminals			
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 screw-type terminals tightening torque [lbf-in] at magnet coil screw-type terminals tightening torque [lbf-in] at magnet coil screw-type terminals 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 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-			
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 tightening torque [lbf·in] at contactor 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 75 °C CU CU Screw-type terminals 75 °C CU 1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG) 1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)			
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 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 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 75 °C Tu 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 and the conductor conductor conductor conductor for auxiliary contacts and conductor cond			
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 screw-type terminals			
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 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 tightening torque [lbf·in] at contactor for auxiliary contacts type of connectable conductor at magnet coil type of connectable 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 at AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary contacts anaximum 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 tightening torque [lbf·in] at overload relay for auxiliary contacts tightening torque [lbf·in] at overload relay for auxiliary contacts tightening torque [lbf·in] at overload relay for auxiliary contacts tightening torque [lbf·in] at overload relay for auxiliary contacts tightening torque [lbf·in] at overload relay for auxiliary tightening torque [lbf·in] at overload relay for auxiliary tightening torque [lbf·in] at overload relay for auxiliary type of electrical connection at overload relay for auxiliary type of electrical connection at overload relay for auxiliary type of electrical connection at overload relay for auxiliary type of electrical connection at overload relay for auxiliary type of electrical connection at overload relay for auxiliary type of electrical connection at overload relay for auxiliary type of electrical connection of the conductor at contactor for auxiliary type of electrical connection of the conductor at contactor for auxiliary type of electrical connection of the conductor at contacto			

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, Brochures,...)

www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14GP82BC81

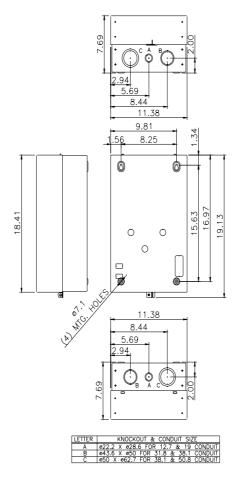
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:14GP82BC81

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14GP82BC81&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14GP82BC81/certificate



1/25/2022 last modified: