SIEMENS

Data sheet

US2:14GP82WJ81



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, Encl. type 4X 304 S. Steel, Water/dust tight noncorrosive

Figure	simi	lar

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]	19 lb	
Height x Width x Depth [in]	16 × 13 × 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]		
 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	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		

	0411
• 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 valueof 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	
 overload protection 	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	
	4X, 304 stainless steel
degree of protection NEMA rating design of the housing	Extra-wide
design of the housing	dustproof, waterproof & resistant to corrosion
design of the flocising	
Mounting/wiring	
Mounting/wiring	Vertical
mounting position	Vertical
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 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 tightening torque [lbf·in] at magnet coil tightening torque [lbf·in] at magnet coil tightening torque [lbf·in] at magnet coil 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
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	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 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 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
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 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 10 15 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 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 electrical connection for auxiliary contacts type of connectable conductor cross-sections at contactor at AWG cables for auxiliary contacts 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) 75 °C 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 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 magnet coil 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-	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 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 magnet coil 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 cross-sections at contactor at AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary	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)
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 at contactor for auxiliary contacts tof connectable conductor at contactor for a	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 positionfastening methodtype of electrical connection for supply voltage line-sidetightening torque [lbf·in] for supplytemperature of the conductor for supply maximumpermissiblematerial of the conductor for supplytype of electrical connection for load-side outgoing feedertightening torque [lbf·in] for load-side outgoing feedertightening torque [lbf·in] at magnet coiltightening torque [lbf·in] at magnet coiltype of connectable conductor at magnet coiltemperature of the conductor at magnet coiltype of electrical connection for auxiliary contactstightening torque [lbf·in] at contactor for auxiliary contactstype of connectable conductor cross-sections at contactorat AWG cables for auxiliary contactstype of connectable conductor at contactor for auxiliary contactstype of connectable conductor cross-sections at contactorat AWG cables for auxiliary contactstype of connectable conductor at contactor for auxiliary contactstype of the conductor at contactor for auxiliary contactstype of clectrical connection at contactor for auxiliary contactstype of electrical connection at contactor for auxiliary contactstype of electrical connection at contactor for auxiliary contacts	Surface mounting and installation Box lug $45 \dots 45$ lbf-in $75 ^{\circ}C$ AL or CU Screw-type terminals $35 \dots 50$ lbf-in Screw-type terminals $5 \dots 12$ lbf-in $2x (16 \dots 12$ AWG) $75 ^{\circ}C$ CU Screw-type terminals $10 \dots 15$ lbf-in $1x (12$ AWG), $2x (16 \dots 14$ AWG), $2x (18 \dots 16$ AWG) $75 ^{\circ}C$ CU

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

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=US2:14GP82WJ81

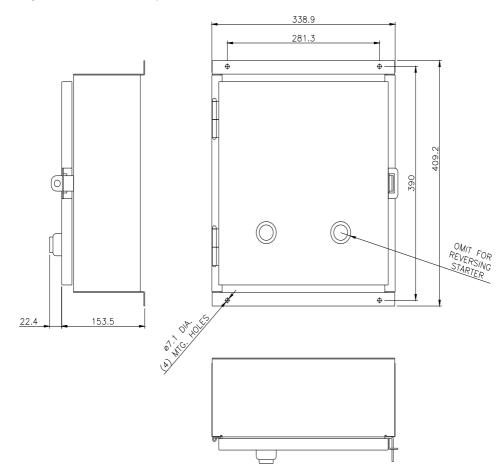
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:14GP82WJ81

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14GP82WJ81&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14GP82WJ81/certificate



last modified:

1/25/2022 🖸

7/6/2022