## SIEMENS

## Data sheet

## US2:17GUG82XL



Non-reversing motor starter Size 2 1/2 Three phase full voltage Solid-state overload relay OLRelay amp range 25-100A 240VAC 50HZ / 277VAC 60HZ coil Combination type 100A non-fusible disconnect Encl NEMA type 4X 316 S-steel Water/dust tight non-corrosive Extra-wide enclosure

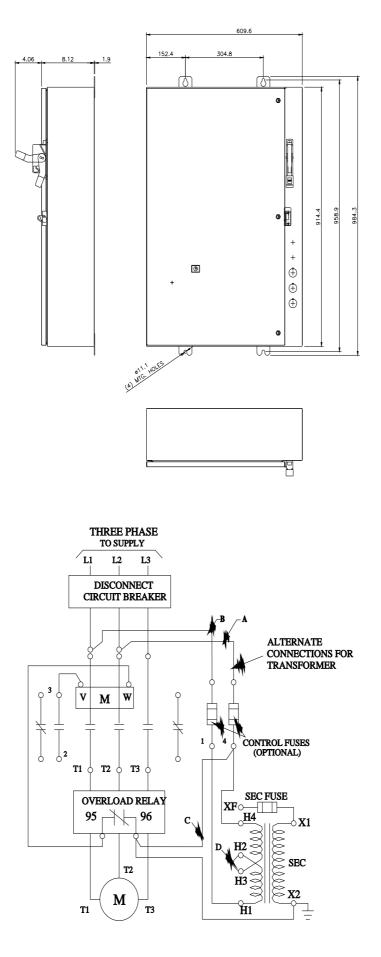
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product brand name	Class 17 & 25		
design of the product	Full-voltage non-reversing motor starter with non-fusible disconnect		
special product feature	ESP200 overload relay; Half-size controller		
General technical data			
Height x Width x Depth [in]	36 × 24 × 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		
during operation	-4 +104 °F		
ambient temperature			
<ul> <li>during storage</li> </ul>	-30 +65 °C		
<ul> <li>during operation</li> </ul>	-20 +40 °C		
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		
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			
<ul> <li>at AC at 50 Hz rated value</li> </ul>	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 names of recorded to 14.4.4.4	
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
phase failure detection	Yes
<ul> <li>asymmetry detection</li> </ul>	Yes
<ul> <li>ground fault detection</li> </ul>	Yes
test function	Yes
external reset	Yes
reset function	Manual, automatic and remote
trip class	CLASS 5 / 10 / 20 (factory set) / 30
adjustable current response value current of the current- dependent overload release	25 100 A
make time with automatic start after power failure maximum	3 s
relative repeat accuracy	1 %
product feature protective coating on printed-circuit board	Yes
number of NC contacts of auxiliary contacts of overload relay	1
number of NO contacts of auxiliary contacts of overload relay	1
operational current of auxiliary contacts of overload relay	
• at AC at 600 V	5 A
• at DC at 250 V	1 A
contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 1A@250VDC (R300)
insulation voltage (Ui)	
insulation voltage (OI)	
with single-phase operation at AC rated value	600 V
	600 V 300 V
• with single-phase operation at AC rated value	
<ul><li>with single-phase operation at AC rated value</li><li>with multi-phase operation at AC rated value</li></ul>	
<ul> <li>with single-phase operation at AC rated value</li> <li>with multi-phase operation at AC rated value</li> <li>Disconnect Switch</li> </ul>	300 V
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector	300 V 100A / 600V
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder	300 V 100A / 600V non-fusible
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder     operating class of the fuse link	300 V 100A / 600V non-fusible
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder     operating class of the fuse link     Enclosure	300 V 100A / 600V non-fusible non-fusible
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder     operating class of the fuse link     Enclosure     degree of protection NEMA rating	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder     operating class of the fuse link     Enclosure     degree of protection NEMA rating     design of the housing	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel Extra-wide
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder     operating class of the fuse link     Enclosure     degree of protection NEMA rating     design of the housing     design of the housing	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel Extra-wide
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder     operating class of the fuse link     Enclosure     degree of protection NEMA rating     design of the housing     design of the housing     Mounting/wiring	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel Extra-wide dustproof, waterproof & resistant to corrosion
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder     operating class of the fuse link     Enclosure     degree of protection NEMA rating     design of the housing     design of the housing     Mounting/wiring     mounting position	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel Extra-wide dustproof, waterproof & resistant to corrosion vertical
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder     operating class of the fuse link     Enclosure     degree of protection NEMA rating     design of the housing     design of the housing     Mounting/wiring     mounting position     fastening method	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder     operating class of the fuse link     Enclosure     degree of protection NEMA rating     design of the housing     design of the housing     Mounting/wiring     mounting position     fastening method     type of electrical connection for supply voltage line-side	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder     operating class of the fuse link     Enclosure     degree of protection NEMA rating     design of the housing     design of the housing     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	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder     operating class of the fuse link     Enclosure     degree of protection NEMA rating     design of the housing     design of the housing     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	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf·in 75 °C
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder     operating class of the fuse link     Enclosure     degree of protection NEMA rating     design of the housing     design of the housing     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     material of the conductor for supply	300 V 100A / 600V non-fusible 4X, 316 stainless steel Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch     response value of switch disconnector     design of fuse holder     operating class of the fuse link     Enclosure     degree of protection NEMA rating     design of the housing     design of the housing     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     type of electrical connection for supply     type of electrical connection for supply	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch      response value of switch disconnector      design of fuse holder     operating class of the fuse link      Enclosure      degree of protection NEMA rating      design of the housing      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      type of electrical connection for load-side outgoing feeder      tightening torque [lbf-in] for load-side outgoing feeder      type of connectable conductor cross-sections at AWG     cables for load-side outgoing feeder single or multi-	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in
with single-phase operation at AC rated value     with multi-phase operation at AC rated value     Disconnect Switch      response value of switch disconnector      design of fuse holder     operating class of the fuse link      Enclosure      degree of protection NEMA rating     design of the housing      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      type of electrical connection for load-side outgoing feeder      tightening torque [lbf-in] for load-side outgoing feeder      type of connectable conductor cross-sections at AWG     cables for load-side outgoing feeder      type of the conductor for load-side outgoing feeder      type of connectable conductor for load-side outgoing feeder     t	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in 1x (14 2 AWG)
<ul> <li>with single-phase operation at AC rated value</li> <li>with multi-phase operation at AC rated value</li> </ul> Disconnect Switch response value of switch disconnector design of fuse holder <ul> <li>operating class of the fuse link</li> </ul> Enclosure <ul> <li>degree of protection NEMA rating</li> <li>design of the housing</li> </ul> Mounting/wiring mounting position <ul> <li>fastening method</li> <li>type of electrical connection for supply voltage line-side</li> <li>tightening torque [lbf·in] for supply</li> <li>temperature of the conductor for supply</li> <li>type of electrical connection for load-side outgoing feeder</li> <li>tightening torque [lbf·in] for load-side outgoing feeder</li> <li>tightening torque [lbf·in] for load-side outgoing feeder</li> <li>type of connectable conductor for load-side outgoing feeder</li> </ul>	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in 1x (14 2 AWG) 75 °C
<ul> <li>with single-phase operation at AC rated value</li> <li>with multi-phase operation at AC rated value</li> </ul> Disconnect Switch <ul> <li>response value of switch disconnector</li> <li>design of fuse holder</li> <li>operating class of the fuse link</li> </ul> Enclosure <ul> <li>degree of protection NEMA rating</li> <li>design of the housing</li> <li>design of the housing</li> </ul> Mounting/wiring <ul> <li>mounting position</li> <li>fastening method</li> </ul> type of electrical connection for supply voltage line-side <ul> <li>tightening torque [lbf·in] for supply</li> </ul> temperature of the conductor for supply maximum <ul> <li>permissible</li> </ul> material of the conductor for supply <ul> <li>type of electrical connection for load-side outgoing feeder</li> </ul> tightening torque [lbf·in] for load-side outgoing feeder <ul> <li>tightening torque [lbf·in] for load-side outgoing feeder</li> </ul> tightening torque [lbf·in] for load-side outgoing feeder <ul> <li>tightening torque [lbf·in] for load-side outgoing feeder</li> </ul> tightening torque [lbf·in] for load-side outgoing feeder <ul> <li>tightening torque [lbf·in] for load-side outgoing feeder</li> </ul> tightening torque [lbf·in] for load-side outgoing feeder <ul> <li>temperature of the conductor for load-side outgoing feeder</li> </ul>	300 V 100A / 600V non-fusible non-fusible 4X, 316 stainless steel Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf·in 75 °C AL or CU Box lug 45 45 lbf·in 1x (14 2 AWG) 75 °C

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coil at AWG cables single or multi-stranded					
temperature of the conductor at magnet coil maximum permissible	75 °C				
material of the conductor at magnet coil	CU				
type of electrical connection for auxiliary contacts	Screw-type terminals				
tightening torque [lbf·in] at contactor for auxiliary contacts	10 15 lbf·in				
type of connectable conductor cross-sections at contactor at AWG cables for auxiliary contacts single or multi- stranded	1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)				
temperature of the conductor at contactor for auxiliary contacts maximum permissible	75 °C				
material of the conductor at contactor for auxiliary contacts	CU				
type of electrical connection at overload relay for auxiliary contacts	Screw-type terminals				
tightening torque [lbf·in] at overload relay for auxiliary contacts	7 10 lbf·in				
type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi- stranded	2x (20 14 AWG)				
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)				
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=US2:17GUG82XL Service&Support (Manuals, Certificates, Characteristics, FAQs,)					
https://support.industry.siemens.com/cs/US/en/ps/US2:17GL Image database (product images, 2D dimension drawing	Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,)				

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