## SIEMENS

## Data sheet

## US2:17GUG82NG



Non-reversing motor starter, Size 2 1/2, Three phase full voltage, Solid-state overload relay, OLR amp range 25-100A, Combination type, 100A non-fusible disconnect, Enclosure NEMA type 4/12, Water/dust tight for outdoors, Extra-wide enclosure

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]	
during storage	-22 +149 °F
during operation	-4 +104 °F
ambient temperature	
during storage	-30 +65 °C
<ul> <li>during operation</li> </ul>	-20 +40 °C
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
operational current at AC at 600 V rated value	60 A
mechanical service life (operating 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), 2.5A@300VDC (Q300)
Coil	
type of voltage of the control supply voltage	AC
control supply voltage	
• 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 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	50 %

voltage	
ON-delay time	19 29 ms
OFF-delay time	10 24 ms
Overload relay	
product function	
overload protection	Yes
phase failure detection	Yes
asymmetry detection	Yes
ground fault detection	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	1A
contact rating of auxiliary contacts of overload relay according to UL	5
insulation voltage (Ui)	
• with single-phase operation at AC rated value	600 V
with multi-phase operation at AC rated value	300 V
Disconnect Switch	100
response value of switch disconnector	
design of fuse holder	non-fusible
anarating alage of the fune link	non fueible
operating class of the fuse link Enclosure	non-fusible
	non-fusible Extra-wide
Enclosure	
Enclosure design of the housing	Extra-wide
Enclosure design of the housing design of the housing	Extra-wide
Enclosure design of the housing design of the housing Mounting/wiring	Extra-wide dustproof, waterproof & weatherproof
Enclosure design of the housing design of the housing Mounting/wiring mounting position	Extra-wide dustproof, waterproof & weatherproof vertical
Enclosure design of the housing design of the housing Mounting/wiring mounting position fastening method	Extra-wide dustproof, waterproof & weatherproof vertical Surface mounting and installation
Enclosure design of the housing design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side	Extra-wide dustproof, waterproof & weatherproof vertical Surface mounting and installation Box lug
Enclosure 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	Extra-wide dustproof, waterproof & weatherproof vertical Surface mounting and installation Box lug 120 120 lbf-in
Enclosure 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	Extra-wide dustproof, waterproof & weatherproof vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C
Enclosure 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 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	Extra-wide dustproof, waterproof & weatherproof vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in
Enclosure         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         material of the conductor for supply         type of electrical connection for load-side outgoing feeder	Extra-wide dustproof, waterproof & weatherproof vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in 1
Enclosure 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 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 connectable conductor cross-sections for AWG cables	Extra-wide dustproof, waterproof & weatherproof vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in
Enclosure         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         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 connectable conductor cross-sections for AWG cables         for load-side outgoing feeder single or multi-stranded         temperature of the conductor for load-side outgoing feeder	Extra-wide dustproof, waterproof & weatherproof vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in 1
Enclosure         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         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 connectable conductor cross-sections for AWG cables         for load-side outgoing feeder single or multi-stranded         temperature of the conductor for load-side outgoing feeder         maximum permissible	Extra-wide dustproof, waterproof & weatherproof vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals
Enclosure 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 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 connectable conductor cross-sections for AWG cables for load-side outgoing feeder material of the conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder temperature of the conductor for load-side outgoing feeder material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf·in] at magnet coil	Extra-wide dustproof, waterproof & weatherproof vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in
Enclosure         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         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 connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded         temperature of the conductor for load-side outgoing feeder         maximum permissible         material of the conductor for load-side outgoing feeder         type of electrical connection of magnet coil	Extra-wide dustproof, waterproof & weatherproof vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2
Enclosure         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         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 connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded         temperature of the conductor for load-side outgoing feeder         maximum permissible         material of the conductor for load-side outgoing feeder         type of electrical connection of magnet coil         tightening torque [lbf-in] at magnet coil         tightening torque [lbf-in] at magnet coil         type of connectable conductor cross-sections of magnet coil for	Extra-wide dustproof, waterproof & weatherproof vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2
Enclosure         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         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 connectable conductor cross-sections for AWG cables         for load-side outgoing feeder single or multi-stranded         temperature of the conductor for load-side outgoing feeder         maximum permissible         material of the conductor 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 for         AWG cables single or multi-stranded         temperature of the conductor at magnet coil maximum         permissible         material of the conductor at magnet coil	Extra-wide dustproof, waterproof & weatherproof vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2
Enclosure         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         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 connectable conductor cross-sections for AWG cables         for load-side outgoing feeder single or multi-stranded         temperature of the conductor for load-side outgoing feeder         maximum permissible         material of the conductor 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 for         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	Extra-wide dustproof, waterproof & weatherproof Vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2 75 °C CU Screw-type terminals
Enclosure         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         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 connectable conductor rorss-sections for AWG cables         for load-side outgoing feeder single or multi-stranded         temperature of the conductor for load-side outgoing feeder         maximum permissible         material of the conductor 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 for         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	Extra-wide dustproof, waterproof & weatherproof Vertical Surface mounting and installation Box lug 120 120 lbf·in 75 °C AL or CU Box lug 45 45 lbf·in 1 75 °C AL or CU Screw-type terminals 5 12 lbf·in 2 75 °C CU Screw-type terminals 10 15 lbf·in
Enclosure         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         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 connectable conductor cross-sections for AWG cables         for load-side outgoing feeder single or multi-stranded         temperature of the conductor for load-side outgoing feeder         maximum permissible         material of the conductor 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 for         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 electrical connection for auxiliary contacts         type of electrical connect	Extra-wide dustproof, waterproof & weatherproof Vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2 75 °C CU Screw-type terminals 10 15 lbf-in 1
Enclosure         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         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 connectable conductor cross-sections for AWG cables         for load-side outgoing feeder single or multi-stranded         temperature of the conductor for load-side outgoing feeder         maximum permissible         material of the conductor 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         type of electrical connection for auxiliary contacts         type of electrical connection for auxiliary contacts	Extra-wide dustproof, waterproof & weatherproof Vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2 75 °C CU Screw-type terminals 10 15 lbf-in

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 for AWG cables for auxiliary contacts single or multi-stranded	2
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	10
certificate of suitability	NEMA ICS 2; UL 508; CSA 22.2, No.14
Further information	

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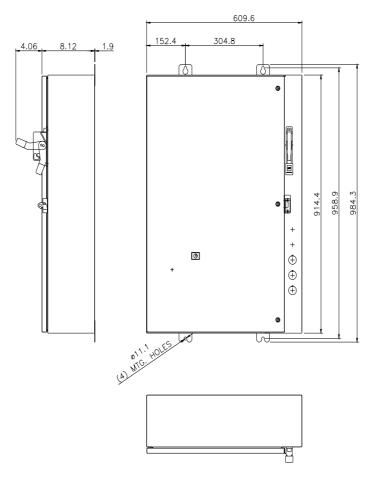
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