## SIEMENS

## Data sheet

## US2:17GUG82BG15



Non-reversing motor starter, Size 2 1/2, Three phase full voltage, Solid-state overload relay, OLR amp range 25-100A, Combination type, 100A fusible disconnect, 100A/600V fuse clip, Enclosure NEMA type 1, Indoor general purpose use, Extra-wide enclosure

product brand name	Class 17
design of the product	Non-reversing motor starter with fusible disconnect
special product feature	ESP200 overload relay; Half-size controller
General technical data	
weight [lb]	78 lb
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
during operation	-20 +40 °C
country of origin	USA
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
<ul> <li>at 200/208 V rated value</li> </ul>	0 hp
<ul> <li>at 220/230 V rated value</li> </ul>	0 hp
• at 460/480 V rated value	30 hp
• at 575/600 V rated value	0 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 (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), 5A@600VDC (P600)
Coil	
type of voltage of the control supply voltage	AC
control supply voltage	
• at AC at 50 Hz rated value	190 220 V
<ul> <li>at AC at 60 Hz rated value</li> </ul>	220 240 V
holding power at AC minimum	8.6 W
apparent pick-up power of magnet coil at AC	218 VA

apparent helding newsr of magnet soil at AC	25 VA
apparent holding power of magnet coil at AC	
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
<ul> <li>phase failure detection</li> </ul>	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
tripping time at phase-loss 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)	
<ul> <li>with single-phase operation at AC rated value</li> </ul>	600 V
- with mould also a substitute of AQ - 1 - 1	200.1/
<ul> <li>with multi-phase operation at AC rated value</li> </ul>	300 V
with multi-phase operation at AC rated value Disconnect Switch	300 V
	100A / 600V
Disconnect Switch	
Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link	100A / 600V
Disconnect Switch response value of switch disconnector design of fuse holder	100A / 600V Class R fuse clips
Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link	100A / 600V Class R fuse clips
Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure	100A / 600V Class R fuse clips Class R
Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating	100A / 600V Class R fuse clips Class R 1
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	100A / 600V Class R fuse clips Class R 1
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	100A / 600V Class R fuse clips Class R 1 indoors, usable on a general basis
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	100A / 600V Class R fuse clips Class R 1 indoors, usable on a general basis vertical Surface mounting and installation Box lug
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	100A / 600V Class R fuse clips Class R 1 indoors, usable on a general basis vertical Surface mounting and installation Box lug 120 120 lbf-in
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         type of connectable conductor cross-sections at line-side for         AWG cables single or multi-stranded	100A / 600V Class R fuse clips Class R 1 indoors, usable on a general basis vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 1/0 AWG)
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         type of connectable conductor cross-sections at line-side for	100A / 600V Class R fuse clips Class R 1 indoors, usable on a general basis vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 1/0 AWG) 75 °C
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         type of connectable conductor cross-sections at line-side for         AWG cables single or multi-stranded	100A / 600V Class R fuse clips Class R 1 indoors, usable on a general basis vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 1/0 AWG)
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           type of connectable conductor cross-sections at line-side for           AWG cables single or multi-stranded           temperature of the conductor for supply maximum permissible           material of the conductor for supply           type of electrical connection for load-side outgoing feeder	100A / 600V Class R fuse clips Class R 1 indoors, usable on a general basis vertical Surface mounting and installation Box lug 120 120 lbf·in 1x (14 1/0 AWG) 75 °C AL or CU Box lug
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           type of connectable conductor cross-sections at line-side for           AWG cables single or multi-stranded           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	100A / 600V Class R fuse clips Class R 1 indoors, usable on a general basis vertical Surface mounting and installation Box lug 120 120 lbf·in 1x (14 1/0 AWG) 75 °C AL or CU Box lug 45 45 lbf·in
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           type of connectable conductor cross-sections at line-side for           AWG cables single or multi-stranded           temperature of the conductor for supply maximum permissible           material of the conductor for supply           type of electrical connection for load-side outgoing feeder	100A / 600V Class R fuse clips Class R 1 indoors, usable on a general basis vertical Surface mounting and installation Box lug 120 120 lbf·in 1x (14 1/0 AWG) 75 °C AL or CU Box lug 45 45 lbf·in 1x (14 2 AWG)
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           type of connectable conductor cross-sections at line-side for           AWG cables single or multi-stranded           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	100A / 600V Class R fuse clips Class R 1 indoors, usable on a general basis vertical Surface mounting and installation Box lug 120 120 lbf·in 1x (14 1/0 AWG) 75 °C AL or CU Box lug 45 45 lbf·in
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         type of connectable conductor cross-sections at line-side for         AWG cables single or multi-stranded         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-sid	100A / 600V Class R fuse clips Class R 1 indoors, usable on a general basis vertical Surface mounting and installation Box lug 120 120 lbf·in 1x (14 1/0 AWG) 75 °C AL or CU Box lug 45 45 lbf·in 1x (14 2 AWG)
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           type of connectable conductor cross-sections at line-side for           AWG cables single or multi-stranded           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	100A / 600V Class R fuse clips Class R 1 indoors, usable on a general basis vertical Surface mounting and installation Box lug 120 120 lbf-in 1x (14 1/0 AWG) 75 °C AL or CU Box lug 45 45 lbf-in 1x (14 2 AWG) 75 °C
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           type of connectable conductor cross-sections at line-side for           AWG cables single or multi-stranded           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           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           type of electrical connection of magnet coil           tightening torque [lbf-in] at magnet coil	100A / 600V         Class R fuse clips         Class R         1         indoors, usable on a general basis         vertical         Surface mounting and installation         Box lug         120 120 lbf-in         1x (14 1/0 AWG)         75 °C         AL or CU         Box lug         45 45 lbf-in         1x (14 2 AWG)         75 °C         AL or CU         Box lug         45 45 lbf-in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals         5 12 lbf-in
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           type of connectable conductor cross-sections at line-side for           AWG cables single or multi-stranded           temperature of the conductor for supply maximum permissible           material of the conductor for supply           type of connectable conductor cross-sections for AWG cables           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           type of connectable conductor for load-side outgoing feeder           type of electrical connection for load-side outgoing feeder           maximum permissible           material of the conductor for load-side outgoing feeder           type of electrical connection of magnet coil	100A / 600V         Class R fuse clips         Class R         1         indoors, usable on a general basis         vertical         Surface mounting and installation         Box lug         120 120 lbf·in         1x (14 1/0 AWG)         75 °C         AL or CU         Box lug         45 45 lbf·in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals
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           type of connectable conductor cross-sections at line-side for           AWG cables single or multi-stranded           temperature of the conductor for supply maximum permissible           material of the conductor for supply           type of connectable conductor cross-sections for AWG cables           for load-side outgoing feeder           tightening torque [lbf-in] for load-side outgoing feeder           type of connectable conductor for load-side outgoing feeder           type of connectable conductor for load-side outgoing feeder           type of electrical connection for load-side outgoing feeder           type of electrical connection 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	100A / 600V         Class R fuse clips         Class R         1         indoors, usable on a general basis         vertical         Surface mounting and installation         Box lug         120 120 lbf-in         1x (14 1/0 AWG)         75 °C         AL or CU         Box lug         45 45 lbf-in         1x (14 2 AWG)         75 °C         AL or CU         Box lug         45 45 lbf-in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals         5 12 lbf-in
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           type of connectable conductor cross-sections at line-side for           AWG cables single or multi-stranded           temperature of the conductor for supply maximum permissible           material of the conductor for supply           type of connectable conductor cross-sections for AWG cables           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           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           AWG cables single or multi-stranded	100A / 600V         Class R fuse clips         Class R         1         indoors, usable on a general basis         vertical         Surface mounting and installation         Box lug         120 120 lbf-in         1x (14 1/0 AWG)         75 °C         AL or CU         Box lug         45 45 lbf-in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals         5 12 lbf-in         2x (16 12 AWG)

tightening torque [lbf·in] at contactor for auxiliary contacts	10 15 lbf-in
type of connectable conductor cross-sections at contactor for 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 for 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=US2:17GUG82BG15

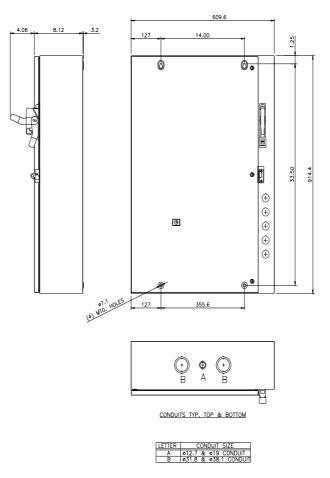
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:17GUG82BG15

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:17GUG82BG15&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:17GUG82BG15/certificate





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