SIEMENS

Data sheet

US2:17GUG82BL



Non-reversing motor starter, Size 2 1/2, Three phase full voltage, Solidstate overload relay, OLR amp range 25-100A, 240V 50Hz / 277V 60Hz coil, Combination type, 100A non-fusible disconnect, Enclosure NEMA type 1, Indoor general purpose use, 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]	
 during storage 	-22 +149 °F
during operation	-4 +104 °F
ambient temperature	
 during storage 	-30 +65 °C
 during operation 	-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 (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	
 at AC at 50 Hz rated value 	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 power 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 theinput voltage	50 %
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	1 A
contact rating of auxiliary contacts of overload relay	5A@600VAC (B600), 1A@250VDC (R300)
according to UL	
inculation voltage (Lli)	
insulation voltage (Ui)	
• with single-phase operation at AC rated value	600 V
with single-phase operation at AC rated valuewith multi-phase operation at AC rated value	600 V 300 V
 with single-phase operation at AC rated value with multi-phase operation at AC rated value Disconnect Switch 	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
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 1
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 1 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	300 V 100A / 600V non-fusible non-fusible 1
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 1 Extra-wide indoors, usable on a general basis
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 1 Extra-wide indoors, usable on a general basis 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 Mounting/wiring mounting position fastening method	300 V 100A / 600V non-fusible non-fusible 1 Extra-wide indoors, usable on a general basis 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 1 Extra-wide indoors, usable on a general basis 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	300 V 100A / 600V non-fusible non-fusible 1 1 Extra-wide indoors, usable on a general basis 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 1 Extra-wide indoors, usable on a general basis 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 non-fusible 1 Extra-wide indoors, usable on a general basis vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU
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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 supply type of electrical connection for supply	300 V 100A / 600V non-fusible non-fusible 1 Extra-wide indoors, usable on a general basis vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug
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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 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 type o	300 V 100A / 600V non-fusible non-fusible 1 Extra-wide indoors, usable on a general basis 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)
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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=US2:17GUG82BL Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/US/en/ps/US2:17GUG82BL Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:17GUG82BL⟨=en				
Certificates/approvals	D-052. IT GOG02DL&Idity-Eli			

Certificates/approvals https://support.industry.siemens.com/cs/US/en/ps/US2:17GUG82BL/certificate

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