SIEMENS

Data sheet US2:17GUG82BA



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 1, Indoor general purpose use, Extra-wide enclosure

Figure similar

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; Dual voltage coil
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	10000000
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 60 Hz rated value	110 240 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 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
	Yes
asymmetry detection	
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 according to UL	5A@600VAC (B600), 1A@250VDC (R300)
insulation voltage (Ui)	
3 (,	
 with single-phase operation at AC rated value 	600 V
 with single-phase operation at AC rated value with multi-phase operation at AC rated value 	600 V 300 V
with multi-phase operation at AC rated value	
with multi-phase operation at AC rated value Disconnect Switch	300 V
with multi-phase operation at AC rated value Disconnect Switch response value of switch disconnector	300 V 100A / 600V
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 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 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 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
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 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
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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	100A / 600V non-fusible non-fusible 1 Extra-wide indoors, usable on a general basis
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 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	100A / 600V non-fusible non-fusible 1 Extra-wide indoors, usable on a general basis vertical Surface mounting and installation
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	100A / 600V non-fusible non-fusible 1 Extra-wide indoors, usable on a general basis vertical Surface mounting and installation Box lug
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 1 Extra-wide indoors, usable on a general basis vertical Surface mounting and installation Box lug 120 120 lbf·in
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 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
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	300 V 100A / 600V 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
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 material of the conductor for supply	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 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 maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder temperature of the conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder	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)
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 maximum permissible material of the conductor for load-side outgoing feeder type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder maximum permissible temperature 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 maximum permissible	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)
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 material of the conductor for load-side outgoing feeder type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder stranded temperature of the conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil	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) 75 °C AL or CU
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 material of the conductor for load-side outgoing feeder type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder	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) 75 °C AL or CU Screw-type terminals

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,...)

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Industry Mall (Online ordering system)

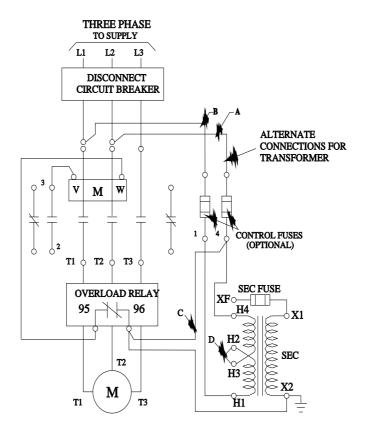
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:17GUG82BA&lang=en

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