## **SIEMENS**

Data sheet US2:18GUG82ND



Non-reversing motor starter, Size 2 1/2, Three phase full voltage, Solid-state overload relay, OLR amp range 25-100A, 208VAC 60Hz coil, Combination type, 100A circuit breaker, Enclosure NEMA type 4/12, Water/dust tight for outdoors, Extra-wide enclosure

product brand name	Class 18 & 26
design of the product	Full-voltage non-reversing motor starter with motor circuit protector
special product feature	ESP200 overload relay; Half-size controller
General technical data	Edi 200 Overload relay, Frant-Size controller
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]	0000 it
during storage	-22 +149 °F
during storage     during operation	-4 +104 °F
ambient temperature	
during storage	-30 +65 °C
during storage     during operation	-20 +40 °C
Horsepower ratings	-20 140 0
yielded mechanical performance [hp] for 3-phase AC motor  • at 200/208 V rated value	15 hp
at 220/230 V rated value     at 220/230 V rated value	·
	20 hp
<ul><li>at 460/480 V rated value</li><li>at 575/600 V rated value</li></ul>	30 hp 30 hp
Contactor	30 lip
	Controller half size 2 1/2
size of contactor number of NO contacts for main contacts	3
operating voltage for main current circuit at AC at 60 Hz	600 V
maximum	000 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 contests at contests for smillion contests	
number of NC contacts at contactor for auxiliary contacts	0
number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts	1
number of NO contacts at contactor for auxiliary contacts	1
number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum	1 7
number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL	1 7
number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil	1 7 10A@600VAC (A600), 5A@600VDC (P600)
number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil type of voltage of the control supply voltage	1 7 10A@600VAC (A600), 5A@600VDC (P600)
number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil type of voltage of the control supply voltage control supply voltage	1 7 10A@600VAC (A600), 5A@600VDC (P600) AC
number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage control supply voltage  • at AC at 60 Hz rated value	1 7 10A@600VAC (A600), 5A@600VDC (P600) AC 208 V
number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil type of voltage of the control supply voltage control supply voltage  • at AC at 60 Hz rated value holding power at AC minimum	1 7 10A@600VAC (A600), 5A@600VDC (P600) AC 208 V 8.6 W

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
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-	25 100 A
dependent overload release	
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	5.4
• 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)	
with single-phase operation at AC rated value	600 V
with multi-phase operation at AC rated value	300 V
Enclosure	
degree of protection NEMA rating	4, 12
design of the housing	dustproof, waterproof & weatherproof
Circuit Breaker	
type of the motor protection	Motor circuit protector (magnetic trip only)
operational current of motor circuit breaker rated value	100 A
adjustable current response value current of instantaneous short-circuit trip unit	315 1000 A
Mounting/wiring	
mounting position	Vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Box lug
type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	1x (10 AWG 1/0 AWG)
temperature of the conductor for supply maximum permissible	75 °C
material of the conductor for supply	AL or CU
type of electrical connection for load-side outgoing feeder	Box lug
tightening torque [lbf·in] for load-side outgoing feeder	45 45 lbf·in
tune of connectable conductor cross sections for AMC cables	1x (14 2 AWG)
type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded	1A (14 2 AVVO)
**	75 °C
for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder	
for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C
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	75 °C  AL or CU
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	75 °C  AL or CU  Screw-type terminals
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	75 °C  AL or CU  Screw-type terminals  5 12 lbf-in
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	75 °C  AL or CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)
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	75 °C  AL or CU Screw-type terminals 5 12 lbf·in 2x (16 12 AWG)  75 °C
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	75 °C  AL or CU  Screw-type terminals  5 12 lbf·in  2x (16 12 AWG)  75 °C  CU

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 short-circuit trip	Instantaneous trip circuit breaker
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	100 kA
• at 480 V	100 kA
• at 600 V	25 kA
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=US2:18GUG82ND

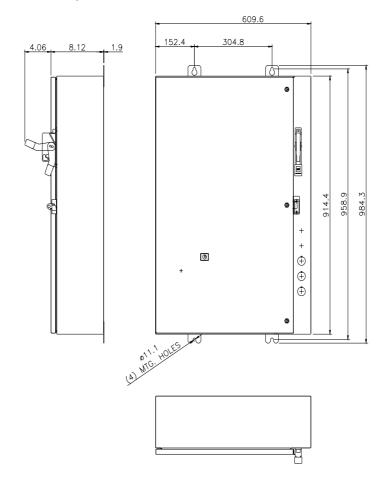
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

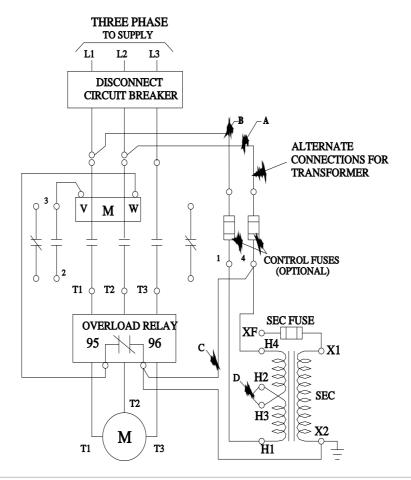
https://support.industry.siemens.com/cs/US/en/ps/US2:18GUG82ND

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:18GUG82ND&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:18GUG82ND&lang=en</a>

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:18GUG82ND/certificate





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