SIEMENS

Data sheet US2:18GUG82NF



Non-reversing motor starter, Size 2 1/2, Three phase full voltage, Solid-state overload relay, OLR amp range 25-100A, 110V 50Hz / 120V 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	
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
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	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 50 Hz rated value	110 V
at AC at 60 Hz rated value	120 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	0.85 1.1

magnet coil	
magnet coil percental drop-out voltage of magnet coil related to the input	50 %
voltage	00 /0
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
· ·	3 s
make time with automatic start after power failure maximum	1%
relative repeat accuracy	Yes
product feature protective coating on printed-circuit board	Yes 1
number of NC contacts of auxiliary contacts of overload relay number of NO contacts of auxiliary contacts of overload relay	1
	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	5A@600VAC (B600), 1A@250VDC (R300)
UL	3A@000VAC (B000), IA@230VDC (K300)
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
degree of protection NEMA rating design of the housing	4, 12 dustproof, waterproof & weatherproof
degree of protection NEMA rating	dustproof, waterproof & weatherproof
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection	dustproof, waterproof & weatherproof Motor circuit protector (magnetic trip only)
degree of protection NEMA rating design of the housing Circuit Breaker	dustproof, waterproof & weatherproof Motor circuit protector (magnetic trip only) 100 A
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degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit	dustproof, waterproof & weatherproof Motor circuit protector (magnetic trip only) 100 A
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring	Motor circuit protector (magnetic trip only) 100 A 315 1000 A
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position	Motor circuit protector (magnetic trip only) 100 A 315 1000 A
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AWG cables for auxiliary contacts single or multi-stranded	
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,...)

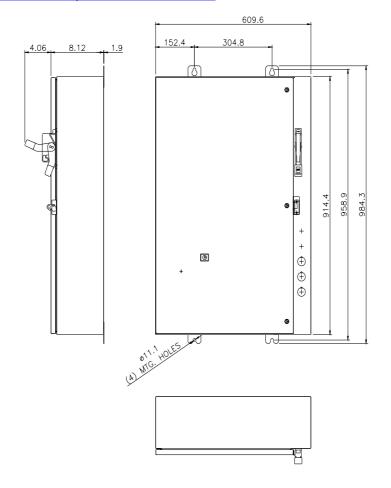
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:18GUG82NF

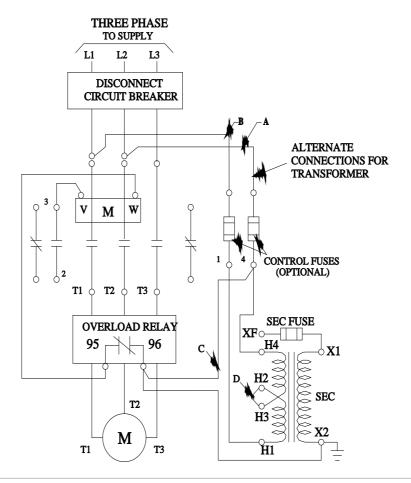
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:18GUG82NF

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:18GUG82NF&lang=en

Certificates/approvals
https://support.industry.siemens.com/cs/US/en/ps/US2:18GUG82NF/certificate





last modified: 1/25/2022 🖸