## **SIEMENS**

Data sheet US2:18HUG92NJ



Non-reversing motor starter Size 3 Three phase full voltage Solid-state overload relay OLRelay amp range 25-100A 24VAC 50-60HZ coil Combination type 125Amp circuit breaker Enclosure NEMA type 4/12 Water/dust tight for outdoors Standard width 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
General technical data	
Height x Width x Depth [in]	24 × 20 × 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
<ul> <li>during operation</li> </ul>	-20 +40 °C
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
<ul><li>at 200/208 V rated value</li></ul>	25 hp
• at 220/230 V rated value	30 hp
• at 460/480 V rated value	50 hp
• at 575/600 V rated value	50 hp
Contactor	
size of contactor	NEMA controller size 3
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	90 A
mechanical service life (operating cycles) of the main contacts typical	5000000
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	
<ul> <li>at AC at 50 Hz rated value</li> </ul>	24 V
at AC at 60 Hz rated value	24 V
holding power at AC minimum	14 W
apparent pick-up power of magnet coil at AC	310 VA
apparent holding power of magnet coil at AC	26 VA
operating range factor control supply voltage rated value of	0.85 1.1

magnet coil	
percental drop-out voltage of magnet coil related to the input	50 %
voltage	
ON-delay time	26 41 ms
OFF-delay time	14 19 ms
Overload relay	
product function	
<ul> <li>overload protection</li> </ul>	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 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 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
design of the housing	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)
design of the housing  Circuit Breaker  type of the motor protection operational current of motor circuit breaker rated value	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A
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)
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	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A
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)  125 A
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)  125 A  500 1250 A
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) 125 A 500 1250 A  Vertical
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  fastening method  type of electrical connection for supply voltage line-side  type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical  Surface mounting and installation  Box lug  1x (10 AWG 1/0 AWG)
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 fastening method type of electrical connection for supply voltage line-side type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical  Surface mounting and installation  Box lug  1x (10 AWG 1/0 AWG)  75 °C
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  fastening method  type of electrical connection for supply voltage line-side  type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical  Surface mounting and installation  Box lug  1x (10 AWG 1/0 AWG)
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 fastening method type of electrical connection for supply voltage line-side type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible	Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical Surface mounting and installation Box lug  1x (10 AWG 1/0 AWG)  75 °C  AL or CU Box lug
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  fastening method  type of electrical connection for supply voltage line-side  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	Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical Surface mounting and installation Box lug  1x (10 AWG 1/0 AWG)  75 °C AL or CU
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 fastening method type of electrical connection for supply voltage line-side 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	Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical Surface mounting and installation Box lug  1x (10 AWG 1/0 AWG)  75 °C  AL or CU Box lug
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 fastening method type of electrical connection for supply voltage line-side 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 type of connectable conductor cross-sections for AWG cables	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical  Surface mounting and installation  Box lug  1x (10 AWG 1/0 AWG)  75 °C  AL or CU  Box lug  120 120 lbf-in
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 fastening method type of electrical connection for supply voltage line-side 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 type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG)  75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)
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  fastening method  type of electrical connection for supply voltage line-side  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  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 maximum permissible	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical  Surface mounting and installation  Box lug  1x (10 AWG 1/0 AWG)  75 °C  AL or CU  Box lug  120 120 lbf·in  1x (14 2/0 AWG)
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  fastening method  type of electrical connection for supply voltage line-side 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 type of connectable conductor cross-sections for AWG cables 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 maximum permissible material of the conductor for load-side outgoing feeder	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical  Surface mounting and installation  Box lug  1x (10 AWG 1/0 AWG)  75 °C  AL or CU  Box lug  120 120 lbf-in  1x (14 2/0 AWG)  75 °C  AL or CU
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  fastening method  type of electrical connection for supply voltage line-side  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  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 maximum permissible  material of the conductor for load-side outgoing feeder  type of electrical connection of magnet coil	Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG)  75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)  75 °C AL or CU Screw-type terminals
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 fastening method type of electrical connection for supply voltage line-side 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 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 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	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical  Surface mounting and installation  Box lug  1x (10 AWG 1/0 AWG)  75 °C  AL or CU  Box lug  120 120 lbf-in  1x (14 2/0 AWG)  75 °C  AL or CU  Screw-type terminals  5 12 lbf-in
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 fastening method type of electrical connection for supply voltage line-side 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 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 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	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical  Surface mounting and installation  Box lug  1x (10 AWG 1/0 AWG)  75 °C  AL or CU  Box lug  120 120 lbf-in  1x (14 2/0 AWG)  75 °C  AL or CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)
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 fastening method type of electrical connection for supply voltage line-side 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 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 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	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical  Surface mounting and installation  Box lug  1x (10 AWG 1/0 AWG)  75 °C  AL or CU  Box lug  120 120 lbf-in  1x (14 2/0 AWG)  75 °C  AL or CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)  75 °C
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  fastening method  type of electrical connection for supply voltage line-side  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  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 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 maximum permissible  material of the conductor at magnet coil	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical  Surface mounting and installation  Box lug  1x (10 AWG 1/0 AWG)  75 °C  AL or CU  Box lug  120 120 lbf-in  1x (14 2/0 AWG)  75 °C  AL or CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)  75 °C  CU
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 fastening method type of electrical connection for supply voltage line-side 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 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 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 type of connectable conductor at magnet coil maximum permissible material of the conductor at magnet coil maximum permissible material of the conductor at magnet coil	dustproof, waterproof & weatherproof  Motor circuit protector (magnetic trip only)  125 A  500 1250 A  Vertical  Surface mounting and installation  Box lug  1x (10 AWG 1/0 AWG)  75 °C  AL or CU  Box lug  120 120 lbf-in  1x (14 2/0 AWG)  75 °C  AL or CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)  75 °C  CU  Screw-type terminals

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,...)

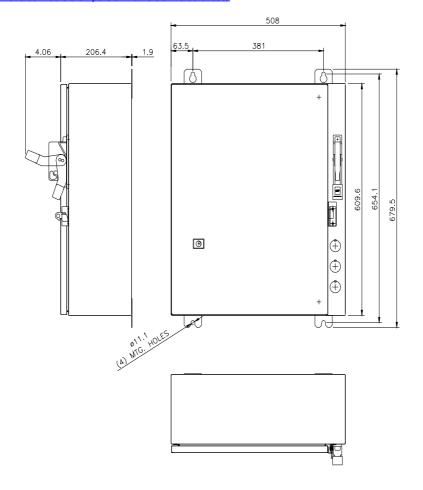
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:18HUG92NJ

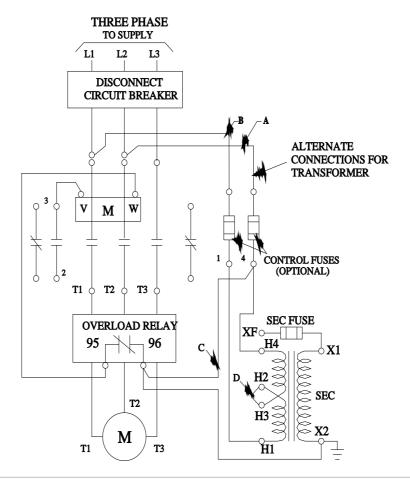
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:18HUG92NJ

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=US2:18HUG92NJ&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:18HUG92NJ&lang=en</a>

Certificates/approvals
https://support.industry.siemens.com/cs/US/en/ps/US2:18HUG92NJ/certificate





last modified: 1/25/2022 🖸