SIEMENS

Data sheet

US2:14GUG82BH

Non-reversing motor starter Size 2 1/2 Three phase full voltage Solid-state overload relay OLRelay amp range 25-100A 380-440/440-480V 50/60HZ coil Combination type Indoor general purpose use



Figure similar

product brand name	Class 14
design of the product	Full-voltage non-reversing motor starter
special product feature	ESP200 overload relay; Half-size starter
General technical data	
weight [lb]	21 lb
Height x Width x Depth [in]	20 × 12 × 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
country of origin	USA
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	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	380 440 V
• at AC at 60 Hz rated value	440 480 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 coll at AC	25 VA
operating range factor control supply voltage rated value of	0.85 1.1
magnet coil	0.00 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
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
tripping time at phase-loss 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	1A
contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 1A@250VDC (R300)
insulation voltage (Ui)	
	600.1/
with single-phase operation at AC rated value	
 with single-phase operation at AC rated value with 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 Enclosure	300 V
with multi-phase operation at AC rated value	
with multi-phase operation at AC rated value Enclosure	300 V
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating	300 V 1
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing	300 V 1 Extra-wide
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing design of the housing	300 V 1 Extra-wide
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing design of the housing Mounting/wiring	300 V 1 Extra-wide Indoor general purpose use
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing design of the housing Mounting/wiring mounting position	300 V 1 Extra-wide Indoor general purpose use Vertical
with multi-phase operation at AC rated value Enclosure degree of protection NEMA rating design of the housing design of the housing Mounting/wiring mounting position fastening method	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation
with multi-phase operation at AC rated value 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 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug
with multi-phase operation at AC rated value 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 type of connectable conductor cross-sections at line-side at	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf-in
with multi-phase operation at AC rated value 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 type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf-in 1x(14 - 2 AWG)
with multi-phase operation at AC rated value 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 type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf-in 1x(14 - 2 AWG) 75 °C
with multi-phase operation at AC rated value 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 type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor for supply	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU
with multi-phase operation at AC rated value 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 type of connectable conductor cross-sections at line-side at 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	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Box lug
with multi-phase operation at AC rated value 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 type of connectable conductor for supply maximum permissible material of the conductor for supply type of electrical connection for supply type of electrical connection 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 at AWG cables for	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf in 1x(14 - 2 AWG) 75 °C AL or CU Box lug 45 45 lbf in
with multi-phase operation at AC rated value 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 type of connectable conductor cross-sections at line-side at 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 at AWG cables for load-side outgoing feeder type of connectable conductor for supply	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf in 1x(14 - 2 AWG) 75 °C AL or CU Box lug 45 45 lbf in 1x(14 - 2 AWG)
with multi-phase operation at AC rated value 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 type of connectable conductor cross-sections at line-side at 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 for supply type of electrical connection for load-side outgoing feeder type of connectable conductor for supply type of electrical connection for load-side outgoing feeder type of connectable conductor for supply type of connectable 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 for supply type of connectable conductor for supply type of connectable conductor for supply type of connectable conductor for load-side outgoing feeder	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf in 1x(14 - 2 AWG) 75 °C AL or CU Box lug 45 45 lbf in 1x(14 - 2 AWG) 75 °C
with multi-phase operation at AC rated value 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 type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor cross-sections at AWG cables for load-side outgoing feeder type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of the conductor for load-side outgoing feeder type of the conductor for load-side outgoing feeder temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder maximum permissible	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Box lug 45 45 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Box Lug 45 45 lbf-in 1x(14 - 2 AWG)
with multi-phase operation at AC rated value 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 type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded 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 type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of electrical connection for load-side outgoing feeder type of the conductor for load-side outgoing feeder type of the conductor for load-side outgoing feeder type of the conductor for load-side outgoing feeder type of electrical connection of magnet coil	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Box lug 45 45 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Box lug 45 45 lbf-in 1x(14 - 2 AWG)
with multi-phase operation at AC rated value 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 type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor for supply type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor for supply type of electrical connection for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of the conductor for load-side outgoing feeder type of electrical connection of magnet coil type of electrical connection of magnet coil type of electrical connection of magnet coil type of electrical connection of magnet coil at	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU Box lug 45 45 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU Box lug 45 45 lbf·in 1x(14 - 2 AWG) 75 °C
with multi-phase operation at AC rated value 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 type of connectable conductor cross-sections at line-side at 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 at AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of electrical connection of magnet coil type of electrical connection of magnet coil type of electrical connection of magnet coil type of electrical connection at magnet coil type of electrical connection of magnet coil at AWG cables single or multi-stranded	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf in 1x(14 - 2 AWG) 75 °C AL or CU Box lug 45 45 lbf in 1x(14 - 2 AWG) 75 °C AL or CU Sorew-type terminals 5 12 lbf in 2 x (16 - 12 AWG)
with multi-phase operation at AC rated value 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 type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded 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 type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of electrical connection of magnet coil temperature of the conductor for load-side outgoing feeder type of electrical connection of magnet coil type of electrical connection of magnet coil type of electrical connection at magnet coil type of electrical connection of magnet coil type of connectable conductor at magnet coil maximum permissible	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf in 1x(14 - 2 AWG) 75 °C AL or CU Box lug 45 45 lbf in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf in 2 x (16 - 12 AWG) 75 °C CU
with multi-phase operation at AC rated value 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 voltage line-side at AWG cables single or multi-stranded 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 tightening torque [lbf-in] for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor for supply maximum permissible material of the conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of electrical connection of magnet coil type of electrical connection of magnet coil type of connectable conductor cross-sections of magnet coil at AWG cables single or multi-stranded temperature of the conductor at magnet coil type of electrical connection for auxiliary contacts	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU Box lug 45 45 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU Box lug 45 45 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 5 12 lbf·in 2 x (16 - 12 AWG) 75 °C
with multi-phase operation at AC rated value 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 type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded 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 type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of electrical connection of magnet coil temperature of the conductor for load-side outgoing feeder type of electrical connection of magnet coil type of electrical connection of magnet coil type of electrical connection at magnet coil type of electrical connection of magnet coil type of connectable conductor at magnet coil maximum permissible	300 V 1 Extra-wide Indoor general purpose use Vertical Surface mounting and installation Box lug 45 45 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU Box lug 45 45 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU screw-type terminals 5 12 lbf·in 2 x (16 - 12 AWG) 75 °C CU screw-type terminals

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	2 x (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)
design of the short-circuit trip	Thermal magnetic circuit breaker
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	14 kA
• at 480 V	10 kA
• at 600 V	10 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=US2:14GUG82BH

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

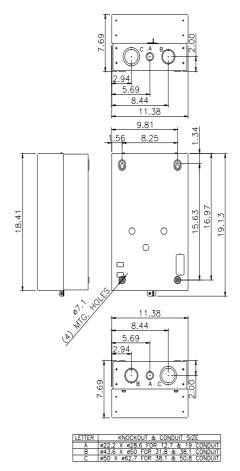
https://support.industry.siemens.com/cs/US/en/ps/US2:14GUG82BH

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14GUG82BH&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14GUG82BH/certificate





last modified:

11/29/2021 🖸