## SIEMENS

## Data sheet

## US2:17HUG82XA



Non-reversing motor starter Size 3 Three phase full voltage Solid-state overload relay OLRelay amp range 25-100A Combination type 100A non-fusible disconnect Encl NEMA type 4X 316 S-steel Water/dust tight non-corrosive Extra-wide enclosure

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; 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
<ul> <li>during operation</li> </ul>	-20 +40 °C
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
• at 200/208 V rated value	20 hp
• at 220/230 V rated value	25 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
operational current at AC at 600 V rated value	90 A
mechanical service life (operating cycles) of the main contacts typical	500000
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), 2.5A@300VDC (Q300)
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	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 magnet coil	0.85 1.1
percental drop-out voltage of magnet coil related to the input voltage	50 %



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	5
insulation voltage (Ui)	
• with single-phase operation at AC rated value	600 V
with multi-phase operation at AC rated value	300 V
Disconnect Switch	
response value of switch disconnector	100
design of fuse holder	non-fusible
operating class of the fuse link Enclosure	non-fusible
Enclosure	
Enclosure degree of protection NEMA rating	4, 316 Extra-wide
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Enclosure degree of protection NEMA rating design of the housing design of the housing Mounting/wiring	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion
Enclosure degree of protection NEMA rating design of the housing design of the housing Mounting/wiring mounting position	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion vertical
Enclosure degree of protection NEMA rating design of the housing design of the housing Mounting/wiring mounting position fastening method	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation
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	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug
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	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in
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	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C
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	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU
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 type of electrical connection for load-side outgoing feeder	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug
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 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	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf·in 75 °C AL or CU Box lug 120 120 lbf·in
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         type of electrical connection 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 cross-sections for AWG cables         for load-side outgoing feeder single or multi-stranded         temperature of the conductor for load-side outgoing feeder	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 120 120 lbf-in 1
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 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	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 120 120 lbf-in 1 75 °C AL or CU Screw-type terminals
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         type of electrical connection 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 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	4, 316         Extra-wide         dustproof, waterproof & resistant to corrosion         vertical         Surface mounting and installation         Box lug         120 120 lbf-in         75 °C         AL or CU         Box lug         120 120 lbf-in         1         75 °C         AL or CU         Screw-type terminals         5 12 lbf-in
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 tightening torque [lbf-in] 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 connectable conductor for load-side outgoing feeder 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 tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded	4, 316         Extra-wide         dustproof, waterproof & resistant to corrosion         vertical         Surface mounting and installation         Box lug         120 120 lbf-in         75 °C         AL or CU         Box lug         120 120 lbf-in         1         75 °C         AL or CU         Screw-type terminals         5 12 lbf-in         2
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         tightening torque [lbf-in] 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 electrical connection of magnet coil         temperature of the 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         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	4, 316         Extra-wide         dustproof, waterproof & resistant to corrosion         vertical         Surface mounting and installation         Box lug         120 120 lbf-in         75 °C         AL or CU         Box lug         120 120 lbf-in         1         75 °C         AL or CU         Screw-type terminals         5 12 lbf-in         2         75 °C
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         tightening torque [lbf-in] 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 electrical connection of magnet coil         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	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 120 120 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2 75 °C CU
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         tightening torque [lbf-in] 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         type of electrical connection for auxiliary contacts	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 120 120 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2 75 °C CU Screw-type terminals
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         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 rorss-sections for AWG cables 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         type of electrical connection for auxiliary contacts         tightening torque [lbf-in] at contactor for auxiliary contacts	4, 316         Extra-wide         dustproof, waterproof & resistant to corrosion         vertical         Surface mounting and installation         Box lug         120 120 lbf-in         75 °C         AL or CU         Box lug         120 120 lbf-in         1         75 °C         AL or CU         Screw-type terminals         5 12 lbf-in         2         75 °C         Question         1         75 °C         Question         Screw-type terminals         5 12 lbf-in         2         75 °C         CU         Screw-type terminals         10 15 lbf-in
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 type of electrical connection 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 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 nor 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 type of electrical connection of magnet coil type of connectable conductor at magnet coil type of connectable conductor at magnet coil type of electrical connection for auxiliary contacts type of electrical connection for auxiliary contacts type of connectable conductor at magnet coil type of electrical connection for auxiliary contacts type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded	4, 316 Extra-wide dustproof, waterproof & resistant to corrosion vertical Surface mounting and installation Box lug 120 120 lbf-in 75 °C AL or CU Box lug 120 120 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2 75 °C CU Screw-type terminals 10 15 lbf-in 1
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         tightening torque [lbf-in] 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         type of electrical connection for auxiliary contacts         tightening torque [lbf-in] at contactor for auxiliar	4, 316         Extra-wide         dustproof, waterproof & resistant to corrosion         vertical         Surface mounting and installation         Box lug         120 120 lbf in         75 °C         AL or CU         Box lug         120 120 lbf in         1         75 °C         AL or CU         Screw-type terminals         5 12 lbf in         2         75 °C         CU         Screw-type terminals         10 15 lbf in

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	2
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	10
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)

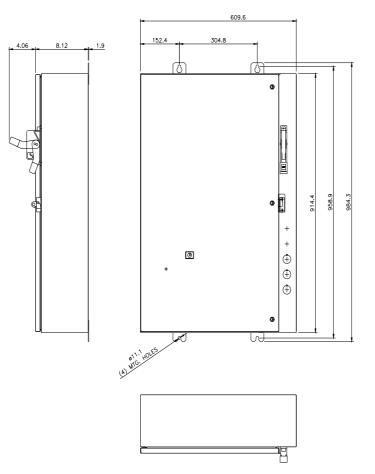
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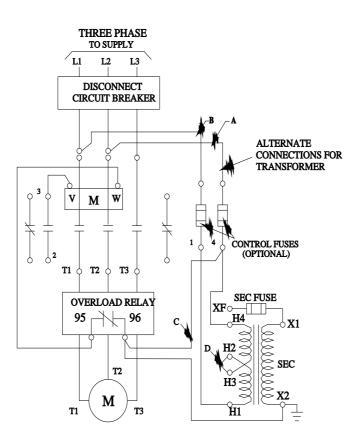
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:17HUG82XA&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:17HUG82XA/certificate





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