



Figure similar

Non-reversing motor starter, Size 3, Three phase full voltage, Solid-state overload relay, OLR amp range 25-100A, Combination type, 100A non-fusible disconnect, Encl NEMA type 4X 304 S-Steel, Water/dust tight noncorrosive, 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
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]	
<ul style="list-style-type: none"> during storage during operation 	-22 ... +149 °F -4 ... +104 °F
ambient temperature	
<ul style="list-style-type: none"> during storage during operation 	-30 ... +65 °C -20 ... +40 °C
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
<ul style="list-style-type: none"> at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value 	20 hp 25 hp 50 hp 50 hp
Contactors	
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 (switching 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 style="list-style-type: none"> at AC at 50 Hz rated value at AC at 60 Hz rated value 	380 ... 440 V 440 ... 480 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	
• 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
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)	
• 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 disconnecter	100A / 600V
design of fuse holder	non-fusible
operating class of the fuse link	non-fusible
Enclosure	
degree of protection NEMA rating	4X, 304 stainless steel
design of the housing	Extra-wide
design of the housing	dustproof, waterproof & resistant to corrosion
Mounting/wiring	
mounting position	vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Box lug
tightening torque [lbf-in] for supply	120 ... 120 lbf-in
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	120 ... 120 lbf-in
type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-stranded	1x (14 ... 2/0 AWG)
temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C
material of the conductor for load-side outgoing feeder	AL or CU
type of electrical connection of magnet coil	Screw-type terminals
tightening torque [lbf-in] at magnet coil	5 ... 12 lbf-in
type of connectable conductor cross-sections of magnet	2x (16 ... 12 AWG)

coil at AWG cables single or multi-stranded	
temperature of the conductor at magnet coil maximum permissible	75 °C
material of the conductor at magnet coil	CU
type of electrical connection for auxiliary contacts	Screw-type terminals
tightening torque [lbf-in] at contactor for auxiliary contacts	10 ... 15 lbf-in
type of connectable conductor cross-sections at contactor at AWG cables for auxiliary contacts single or multi-stranded	1x (12 AWG), 2x (16 ... 14 AWG), 2x (18 ... 16 AWG)
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	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 fuse link for short-circuit protection of the main circuit required	10kA@600V (Class H or K); 100kA@600V (Class R or J)
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=US2:17HUG82WH>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:17HUG82WH>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:17HUG82WH&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:17HUG82WH/certificate>

last modified:

1/25/2022 