



Non-reversing motor starter, Size 3, Single phase full voltage, Solid-state overload relay, OLRelay amp range 25-100A, 110V 50HZ / 120V 60HZ coil, Non-combination type, Enclosure type (open), No enclosure

product brand name	Class 14
design of the product	Full-voltage non-reversing motor starter
special product feature	ESP200 overload relay
<b>General technical data</b>	
weight [lb]	8 lb
Height x Width x Depth [in]	9.78 × 6.75 × 5.19 in
touch protection against electrical shock	Not finger-safe
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	Mexiko
<b>Horsepower ratings</b>	
yielded mechanical performance [hp] for single-phase AC motor	
• at 115 V rated value	8 hp
• at 200/208 V rated value	15 hp
• at 220/230 V rated value	15 hp
<b>Contactors</b>	
size of contactor	NEMA controller size 3
number of NO contacts for main contacts	2
operating voltage for main current circuit at AC at 60 Hz maximum	240 V
operational current at AC at 600 V rated value	90 A
mechanical service life (operating cycles) of the main contacts typical	5000000
<b>Auxiliary contact</b>	
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)
<b>Coil</b>	
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	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
percentual drop-out voltage of magnet coil related to the input voltage	50 %
ON-delay time	26 ... 41 ms
OFF-delay time	14 ... 19 ms
<b>Overload relay</b>	
product function	
• overload protection	Yes
• phase failure detection	Yes
• asymmetry detection	Yes
• ground fault detection	Yes
• test function	Yes
• external reset	No
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	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
<b>Enclosure</b>	
degree of protection NEMA rating of the enclosure	Open device (no enclosure)
design of the housing	NA
<b>Mounting/wiring</b>	
mounting position	vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	lug
tightening torque [lbf-in] for supply	120 lbf-in
type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	1x(14 - 2/0 AWG)
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 lbf-in
type of connectable conductor cross-sections for 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 terminal
tightening torque [lbf-in] at magnet coil	5 ... 12 lbf-in
type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded	2 x (16 - 12 AWG)
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 terminal
tightening torque [lbf-in] at contactor for auxiliary contacts	10 ... 15 lbf-in

type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded	1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (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 terminal
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 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	thermo magnetisch
maximum short-circuit current breaking capacity (I <sub>cu</sub> )	
<ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 V</li> </ul>	14 kA 10 kA 10 kA
certificate of suitability	NEMA ICS 2; UL 508; CSA 22.2, No.14

#### Approvals Certificates

#### Test Certificates



#### Further information

Industrial Controls - Product Overview (Catalogs, Brochures,...)

[www.usa.siemens.com/iccatalog](http://www.usa.siemens.com/iccatalog)

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14HUG12AF>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:14HUG12AF>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:14HUG12AF&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14HUG12AF&lang=en)

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:14HUG12AF/certificate>



