



Figure similar

Non-reversing motor starter, Size 2 1/2, Three phase full voltage, Solid-state overload relay, OLRelay amp range 25-100A, 24VAC 50-60HZ coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors, Extra-wide enclosure

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]	19 lb
Height x Width x Depth [in]	16 × 13 × 6 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

Contactors

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	10000000

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	24 V
• at AC at 60 Hz rated value	24 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 coil at AC	25 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	19 ... 29 ms
OFF-delay time	10 ... 24 ms

Overload relay

product function	
• overload protection • phase failure detection • asymmetry detection • ground fault detection • test function • external reset	Yes Yes Yes Yes Yes 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 • at DC at 250 V	5 A 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 • with multi-phase operation at AC rated value	600 V 300 V

Enclosure

degree of protection NEMA rating	12
design of the housing	Extra-wide
design of the housing	Dust tight and drip proof for indoors

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	45 ... 45 lbf·in
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded	1x(14 - 2 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	45 ... 45 lbf·in
type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-stranded	1x(14 - 2 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 coil at 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-type terminals

tightening torque [lbf-in] at contactor for auxiliary contacts
 type of connectable conductor cross-sections at contactor at AWG cables for auxiliary contacts single or multi-stranded
 temperature of the conductor at contactor for auxiliary contacts maximum permissible
 material of the conductor at contactor for auxiliary contacts
 type of electrical connection at overload relay for auxiliary contacts
 tightening torque [lbf-in] at overload relay for auxiliary contacts
 type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded
 temperature of the conductor at overload relay for auxiliary contacts maximum permissible
 material of the conductor at overload relay for auxiliary contacts

10 ... 15 lbf-in
 1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (18 - 16 AWG)

 75 °C

 CU
 screw-type terminals

 7 ... 10 lbf-in

 2 x (20 - 14 AWG)

 75 °C

 CU

Short-circuit current rating

design of the fuse link for short-circuit protection of the main circuit required
 design of the short-circuit trip
 maximum short-circuit current breaking capacity (Icu)

- at 240 V
- at 480 V
- at 600 V

 certificate of suitability

10kA@600V (Class H or K); 100kA@600V (Class R or J)

 Thermal magnetic circuit breaker

 14 kA
 10 kA
 10 kA
 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=US2:14GUG820J>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:14GUG820J>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14GUG820J&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:14GUG820J/certificate>

