



Figure similar

Non-reversing motor starter Size 3 Three phase full voltage Solid-state overload relay OLRelay amp range 25-100A 208VAC 60HZ coil Combination type 125Amp circuit breaker Enclosure NEMA type 1 Indoor general purpose use Standard width enclosure

product brand name
design of the product
special product feature

Class 18 & 26
Full-voltage non-reversing motor starter with motor circuit protector
ESP200 overload relay

General technical data

Height x Width x Depth [in]	24 × 20 × 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

Horsepower ratings

yielded mechanical performance [hp] for 3-phase AC motor	
• at 200/208 V rated value	25 hp
• at 220/230 V rated value	30 hp
• at 460/480 V rated value	50 hp
• at 575/600 V rated value	50 hp

Contactors

size of contactor	NEMA controller size 3
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	90 A
mechanical service life (operating 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	
• at AC at 60 Hz rated value	208 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

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

Enclosure

degree of protection NEMA rating	1
design of the housing	indoors, usable on a general basis

Circuit Breaker

type of the motor protection	Motor circuit protector (magnetic trip only)
operational current of motor circuit breaker rated value	125 A
adjustable current response value current of instantaneous short-circuit trip unit	500 ... 1250 A

Mounting/wiring

mounting position	Vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Box lug
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded	1x (10 AWG ... 1/0 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 ... 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 coil at AWG cables single or multi-stranded	2x (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
 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

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

 75 °C

 CU
 Screw-type terminals
 7 ... 10 lbf·in
 2x (20 ... 14 AWG)

 75 °C

 CU

Short-circuit current rating

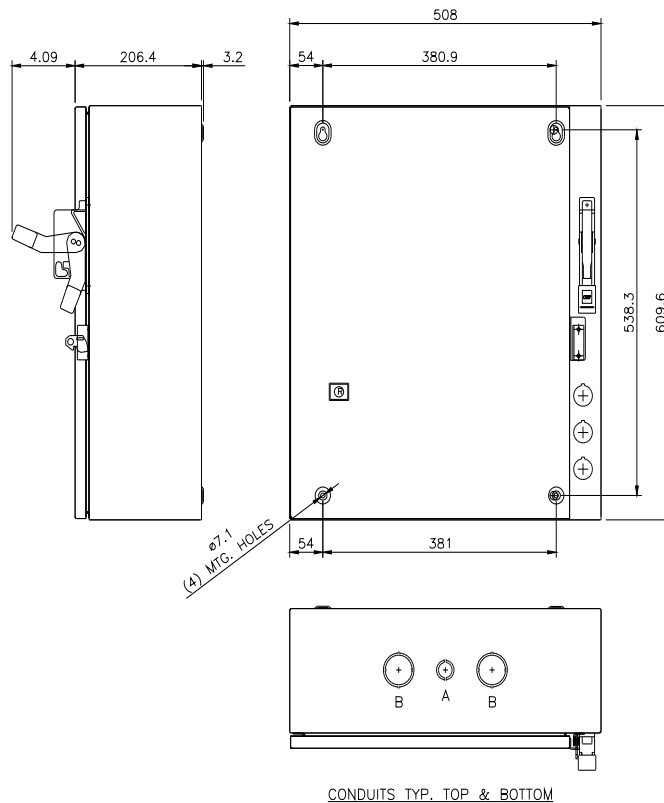
design of the short-circuit trip
 maximum short-circuit current breaking capacity (Icu)
 • at 240 V
 • at 480 V
 • at 600 V
 certificate of suitability

Instantaneous trip circuit breaker

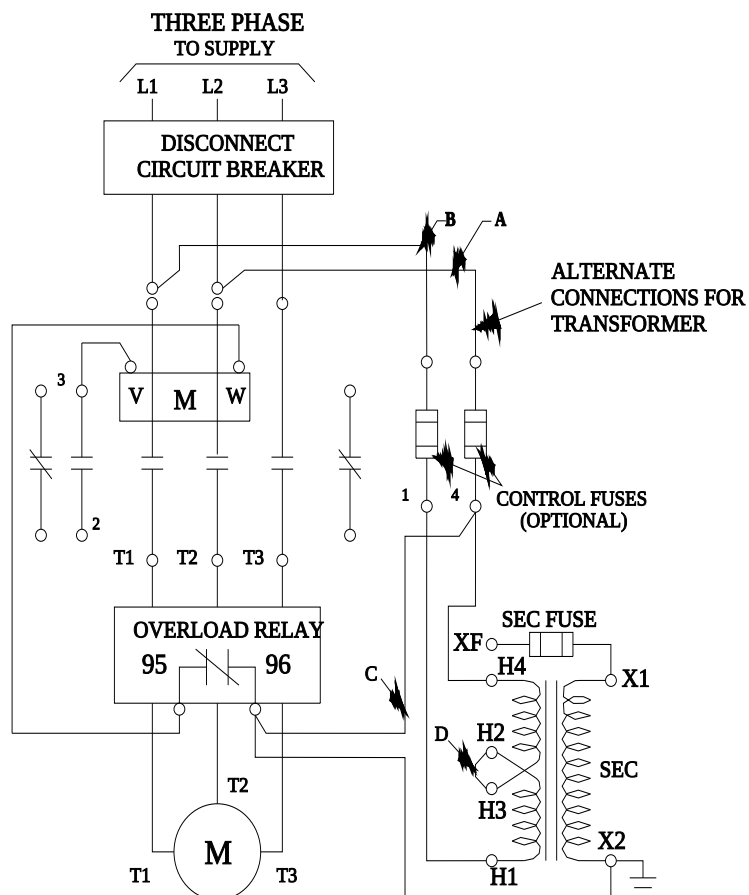
 100 kA
 100 kA
 25 kA
 NEMA ICS 2; UL 508; CSA 22.2, No.14

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=US2:18HUG92BD>
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/US/en/ps/US2:18HUG92BD>
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:18HUG92BD&lang=en
Certificates/approvals
<https://support.industry.siemens.com/cs/US/en/ps/US2:18HUG92BD/certificate>



LETTER	CONDUIT SIZE
A	ø12.7 & ø19 CONDUIT
B	ø31.8 & ø38.1 CONDUIT



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