

Non-reversing motor starter Size 2 1/2 Three phase full voltage  
 Solid-state overload relay OLRelay amp range 25-100A 110-  
 120/220-240VAC 60HZ coil Combination type 100A circuit breaker  
 Enclosure NEMA type 1 Indoor general purpose use Extra-wide  
 enclosure



Figure similar

General technical data	
Height x Width x Depth [in]	36 × 24 × 8 in
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
Ambient temperature [°F] during operation	-4 ... +104 °F
Ambient temperature during storage	-30 ... +65 °C
Ambient temperature during operation	-20 ... +40 °C
Horsepower ratings	
Yielded mechanical performance [hp] for three-phase AC motor	
<ul style="list-style-type: none"> <li>• at 200/208 V rated value</li> </ul>	15 hp
<ul style="list-style-type: none"> <li>• at 220/230 V rated value</li> </ul>	20 hp
<ul style="list-style-type: none"> <li>• at 460/480 V rated value</li> </ul>	30 hp
<ul style="list-style-type: none"> <li>• at 575/600 V rated value</li> </ul>	30 hp
Contactor	

Number of NO contacts for main contacts	3
Operating voltage for main current circuit at AC at 60 Hz maximum	600 V
Operating current at AC at 600 V rated value	60 A
Mechanical service life (switching 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 DC rated value	0 ... 0 V
• at AC at 60 Hz rated value	110 ... 240 V
• at AC at 50 Hz rated value	0 ... 0 V
Holding power at AC minimum	8.6 W
Apparent pick-up power of magnet coil at AC	218 V·A
Apparent holding power of magnet coil at AC	25 V·A
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 %
Switch-on delay time	19 ... 29 ms
Off-delay time	10 ... 24 ms

#### Overload relay

Product function	
• Overload protection	Yes
• Phase failure detection	Yes
• Phase unbalance	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 pick-up 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
Operating current of auxiliary contacts of overload relay <ul style="list-style-type: none"> <li>• at AC at 600 V</li> <li>• at DC at 250 V</li> </ul>	5 A 1 A
Contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 1A@250VDC (R300)
Insulation voltage <ul style="list-style-type: none"> <li>• with single-phase operation at AC rated value</li> <li>• with multi-phase operation at AC rated value</li> </ul>	600 V 300 V

#### Enclosure

Degree of protection NEMA rating of the enclosure	NEMA Type 1
Design of the housing	Indoor general purpose use

#### Motor Circuit Protector (magnetic trip only)

Operating current of motor circuit breaker rated value	100 A
Adjustable pick-up value current of instantaneous short-circuit trip unit	315 ... 1000 A

#### Mounting/wiring

Mounting position (mounting type)	Vertical 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 conductors 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	45 ... 45 lbf·in
Type of connectable conductor cross-sections at AWG conductors 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 conductors 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	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 conductors 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 conductors 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 short-circuit trip	Instantaneous trip circuit breaker
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>	100 kA 100 kA 25 kA

#### 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=US2:18GUG82BA>

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

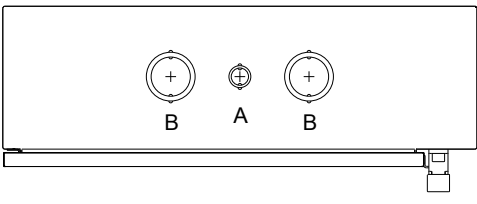
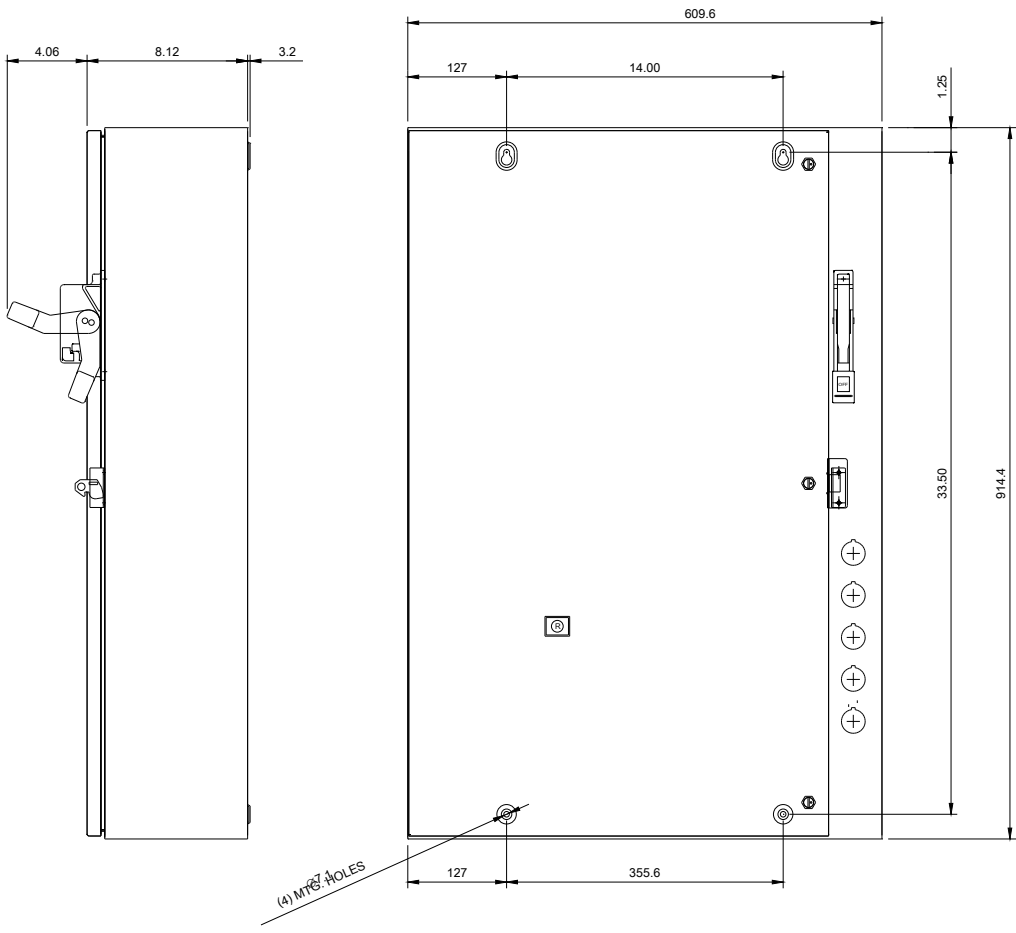
<https://support.industry.siemens.com/cs/US/en/ps/US2:18GUG82BA>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:18GUG82BA&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:18GUG82BA&lang=en)

**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:18GUG82BA/certificate>



LCONDUITS TYP. TOP & BOTTOM

LETTER	CONDUIT SIZE
A	%%C12.7 & %%C19 CONDUIT
B	%%C31.8 & %%C38.1 CONDUIT



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