



Figure similar

Reversing motor starter, Size 3 1/2, Three phase full voltage, Amb. compensate bimetal OLR, Contactor amp rating 115A, Non-combination type, Enclosure type 4X fiberglass, Water/dust tight noncorrosive

product brand name	Class 14 & 22
design of the product	Full-voltage reversing motor starter
special product feature	Half-size starter
<b>General technical data</b>	
weight [lb]	47 lb
Height x Width x Depth [in]	24 × 24 × 7 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
<b>Horsepower ratings</b>	
yielded mechanical performance [hp] for 3-phase AC motor	
• at 200/208 V rated value	30 hp
• at 220/230 V rated value	40 hp
• at 460/480 V rated value	75 hp
• at 575/600 V rated value	75 hp
<b>Contactor</b>	
size of contactor	Controller half size 3 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	115 A
mechanical service life (switching 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), 5A@600VDC (P600)
<b>Coil</b>	
type of voltage of the control supply voltage	AC
control supply voltage	

<ul style="list-style-type: none"> <li>• at AC at 50 Hz rated value</li> <li>• at AC at 60 Hz rated value</li> </ul>	190 ... 220 V
holding power at AC minimum	220 ... 240 V
apparent pick-up power of magnet coil at AC	14 W
apparent holding power of magnet coil at AC	310 VA
operating range factor control supply voltage rated value of magnet coil	26 VA
percental drop-out voltage of magnet coil related to the input voltage	0.85 ... 1.1
ON-delay time	50 %
OFF-delay time	26 ... 41 ms
	14 ... 19 ms
<b>Overload relay</b>	
product function	
<ul style="list-style-type: none"> <li>• overload protection</li> <li>• test function</li> <li>• external reset</li> </ul>	Yes
	Yes
	Yes
reset function	Manual and automatic
adjustment range of thermal overload trip unit	0.85 ... 1.15
number of NC contacts of auxiliary contacts of overload relay	3
number of NO contacts of auxiliary contacts of overload relay	0
operational 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
	5 A
contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 5A@250VDC (P300)
<b>Enclosure</b>	
degree of protection NEMA rating	4X, fiber glass
design of the housing	dustproof, waterproof & resistant to corrosion
<b>Mounting/wiring</b>	
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	Screw-type terminals
tightening torque [lbf-in] for load-side outgoing feeder	35 ... 50 lbf-in
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	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	5 ... 12 lbf-in
type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded	2x (16 ... 12 AWG)
temperature of the conductor at overload relay for auxiliary	75 °C

contacts maximum permissible	
material of the conductor at overload relay for auxiliary contacts	CU
<b>Short-circuit current rating</b>	
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	Thermal magnetic circuit breaker
breaking capacity maximum short-circuit current (Icu)	
<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

**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=US2:22IP32FG81>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:22IP32FG81>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:22IP32FG81&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:22IP32FG81&lang=en)

**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:22IP32FG81/certificate>

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