SIEMENS

Data sheet US2:14HP32WS81

Non-reversing motor starter Size 3 Three phase full voltage Amb compensate bimetal OLrelay Contactor amp rating 90 AMP 24Vdc coil Non-combination type Encl NEMA type 4X 304 S-steel Water/dust tight non-corrosive Standard width enclosure

Figure similar

General technical data	
Weight [lb]	36 lb
Height x Width x Depth [in]	26 × 13 × 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
Country of origin	USA

Horsepower ratings	
Yielded mechanical performance [hp] for three-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

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	90 A
Mechanical service life (switching 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	DC
Control supply voltage	
• at DC rated value	24 ... 24 V
• at AC at 60 Hz rated value	0 ... 0 V
• at AC at 50 Hz rated value	0 ... 0 V
Holding power at AC minimum	0 W
Apparent pick-up power of magnet coil at AC	0 V·A
Apparent holding power of magnet coil at AC	0 V·A
Operating range factor control supply voltage rated value of magnet coil	0.85 ... 1.1

Overload relay	
Product function	
• Overload protection	Yes
• Test function	Yes
• External reset	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
Operating current of auxiliary contacts of overload relay	
• at AC at 600 V	5 A
• at DC at 250 V	5 A

Contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 5A@250VDC (P300)

Enclosure	
Degree of protection NEMA rating of the enclosure	NEMA 4X 304 stainless steel enclosure
Design of the housing	Dust-tight, watertight & corrosion resistant

Mounting/wiring	
Mounting position	Vertical
(mounting type)	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 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	5 ... 12 lbf·in
Type of connectable conductor cross-sections at overload relay at AWG conductors for auxiliary contacts single or multi-stranded	2x (16 ... 12 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	Thermal magnetic circuit breaker
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V	14 kA
• at 480 V	10 kA
• at 600 V	10 kA

Further information

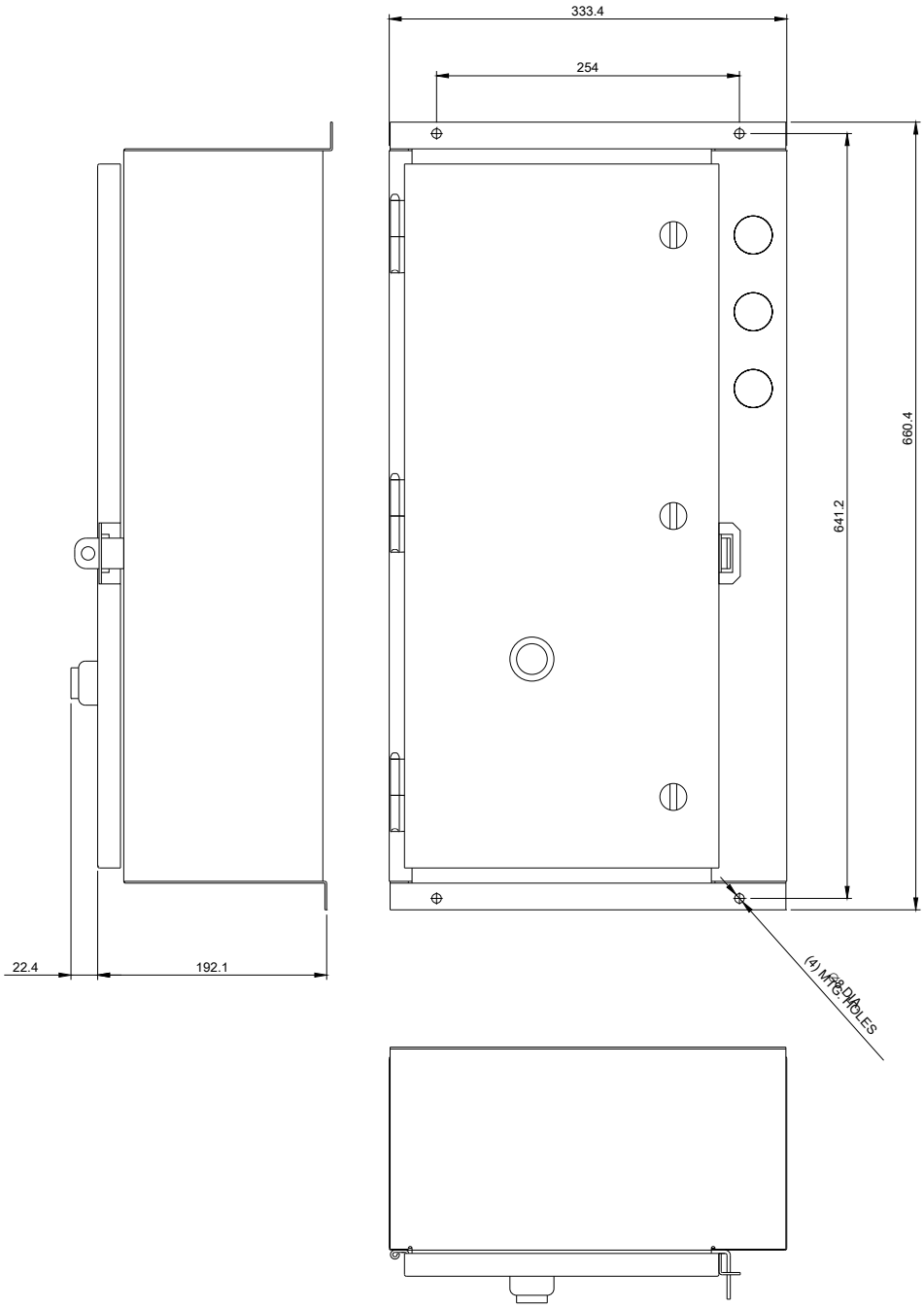
Industrial Controls - Product Overview (Catalogs, Brochures,…)
www.usa.siemens.com/iccatalog

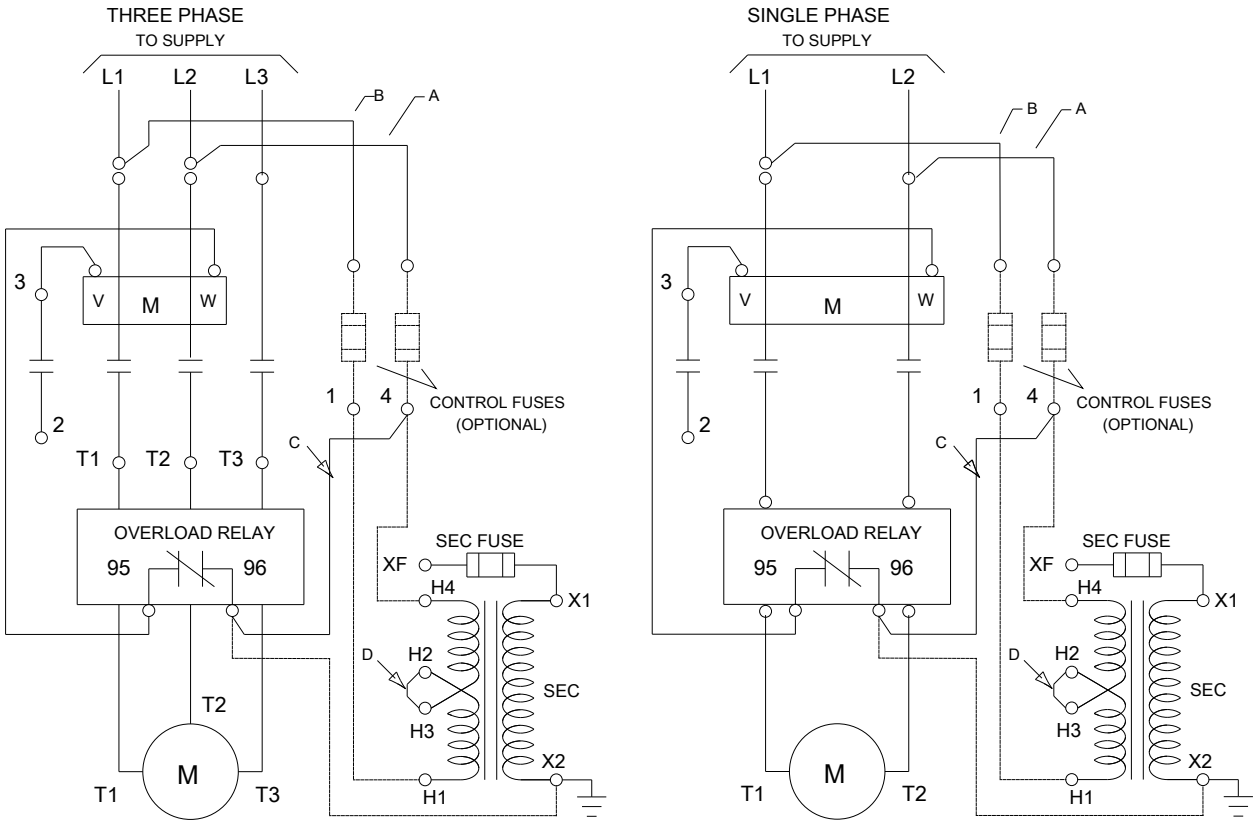
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14HP32WS81

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/US/en/ps/US2:14HP32WS81

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14HP32WS81&lang=en

Certificates/approvals
https://support.industry.siemens.com/cs/US/en/ps/US2:14HP32WS81/certificate





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