SIEMENS

Data sheet

US2:14FP12FS81

Non-reversing motor starter Size 2 Single phase, 2-pole Amb compensate bimetal OLrelay Contactor amp rating 45Amp 24Vdc coil Non-combination type Encl NEMA type 4X Fiberglass Water/dust tight non-corrosive Standard width enclosure



Figure similar

General technical data	
Weight [lb]	15 lb
Height x Width x Depth [in]	15 × 12 × 7 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 single- phase AC motor	
• at 115 V rated value	3 hp
• at 200/208 V rated value	7.5 hp
• at 220/230 V rated value	7.5 hp

Contactor	
Number of NO contacts for main contacts	2
Operating voltage for main current circuit at AC at 60	240 V
Hz maximum	
Operating current at AC at 600 V rated value	45 A
Mechanical service life (switching cycles) of the main	1000000
contacts typical	
Auxiliary contact	
Number of NC contacts at contactor for auxiliary	0
contacts	
Number of NO contacts at contactor for auxiliary	1
contacts	
Number of total auxiliary contacts maximum	7
Contact rating of auxiliary contacts of contactor	10A@600VAC (A600), 5A@600VDC (P600)
according to UL	
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	163 V·A
Apparent holding power of magnet coil at AC	5.5 V·A
Operating range factor control supply voltage rated	0.85 1.1
value of magnet coil	
Percental drop-out voltage of magnet coil related to	25 %
the input voltage	
Switch-on delay time	21 21 ms
Off-delay time	11 11 ms
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	1
overload relay	
Number of NO contacts of auxiliary contacts of	0
overload relay	
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 fiberglass 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-	Box lug	
side		
Tightening torque [lbf·in] for supply	45 45 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	10kA@600V (Class H or K); 100kA@600V (Class R or J)
the main circuit required	
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)

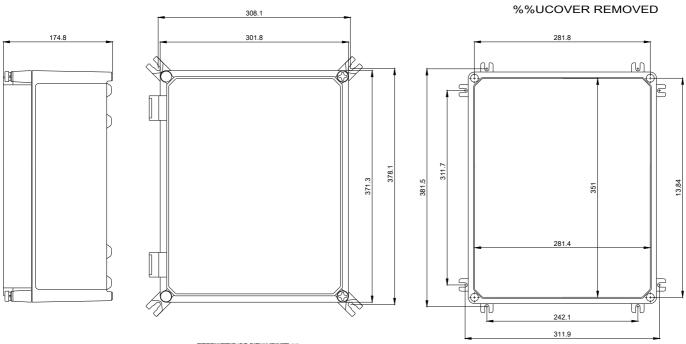
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14FP12FS81

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:14FP12FS81

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14FP12FS81&lang=en

Certificates/approvals

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