

MEDIUM VOLTAGE CONTACTOR

7.2kV Models
Latching and Non-Latching
BIL 60kV



Motortronics 7.2kV Class, 'Non-Latching' (C) and 'Latching' (CJ) Series of medium voltage three-phase indoor vacuum contactors can be used in power systems with a rated voltage of up to 7.2 kV and can be used for continuous AC operating currents of up to 400, 630 or 800 amperes. Control power for the design is 120VAC, with an external interposing relay consisting of DC-rated contacts required to operate the closing and opening circuits of the contactor (Latching models CJ).



Non-Latching (C) - uses constant-on electromagnetic coils to close, and hold closed the vacuum bottle contacts. When the power to the electromagnetic coil is removed, the vacuum chamber contacts spring open (termed as; electrically held contacts or non-latching contacts).

Latching (CJ) - uses separate coils and mechanisms to both close and open the vacuum bottle contacts (termed as; mechanically held or latching, contacts).

RATED CURRENT	RATED VOLTAGE	PART NUMBER NON-LATCHING (C)	PART NUMBER LATCHING (CJ)
400A	7.2kV	34-400-3-7200C	34-400-7200-CJ
630A	7.2kV	34-630-3-7200C	34-630-7200-CJ
800A	7.2kV	34-800-3-7200C	34-800-7200-CJ

Environmental Conditions for Normal Service Conditions of the Contactor:

Temperature range: -25°C (-13°F) to +40°C (104°F)
 Altitude: ≤2000 m (6562 Ft) above sea level
 Relative humidity: <95% daily, <90% monthly (mean value)
 Water Vapor Pressure: <2.2×10⁻³ Pa (3.19 μPSI) daily (mean value)
 <1.8×10⁻³ Pa (2.61 μPSI) monthly (mean value)
 Ambient Air: Should not have corrosive, flammable gases or conductive particles, etc.
 Mounting: The slope angle between the contactor mounting plane and its mounting surface should be less than or equal to 5° when the contactor is operating.

Contactors Ratings

Rated Current	400A	630A	800A
Rated Voltage	7.2kV RMS	7.2kV RMS	7.2kV RMS
Rated Max Closing Current	4000A	6300A	8000A
Rated Max Breaking Current	3200A	5040A	6400A
Interruption - Sym Unfused Amps	4.8kA	4.8kA	4.8kA
Interruption - Sym Fused Amps	36.7kA	36.7kA	36.7kA
Rated Operating Voltage	110~120 VAC	110~120 VAC	110~120 VAC
Maximum Capacitive Current	230A	230A	230A
Closing Current - (Non Latching and Latching Models)	≤DC 6 A	≤DC 6 A	≤DC 6 A
Holding Current - (Non Latching models)	DC 0.32 A	DC 0.32 A	DC 0.32 A
Latch Release Current - (Latching Models)	DC 2.5 A	DC 2.5 A	DC 2.5 A
Max Control Circuit Hi-Pot Level	2.0kV	2.0kV	2.0kV
Max Hi-Pot Voltage (@ 1min)	32kV	32kV	32kV

Ratings Continued

Rated Current	400A	630A	800A
Basic Impulse Level (BIL)	60kV	60kV	60kV
MV Contact Resistance (20°C)	≤ 150μΩ	≤ 150μΩ	≤ 150μΩ
VCB Contact Closure Synch	≤ 2.0ms	≤ 2.0ms	≤ 2.0ms
Switch-On Time	≤ 150ms	≤ 150ms	≤ 150ms
Switch-Off Time	≤ 50ms	≤ 50ms	≤ 50ms
Rated Operating Frequency	300 times/h	300 times/h	300 times/h
Mechanical life	30×10 ⁴ times	30×10 ⁴ times	30×10 ⁴ times
Rated Operating Frequency	1800 CPH (Non-Latching Models), 300 CPH (Latching Models)		
Electrical Life - AC-3 Condition	25×10 ⁴ cycles	25×10 ⁴ cycles	25×10 ⁴ cycles
Electrical Life - AC-4 Conditions	10×10 ⁴ cycles	10×10 ⁴ cycles	10×10 ⁴ cycles
Weight	28 kg / 62 Lbs	28 kg / 62 Lbs	28 kg / 62 Lbs

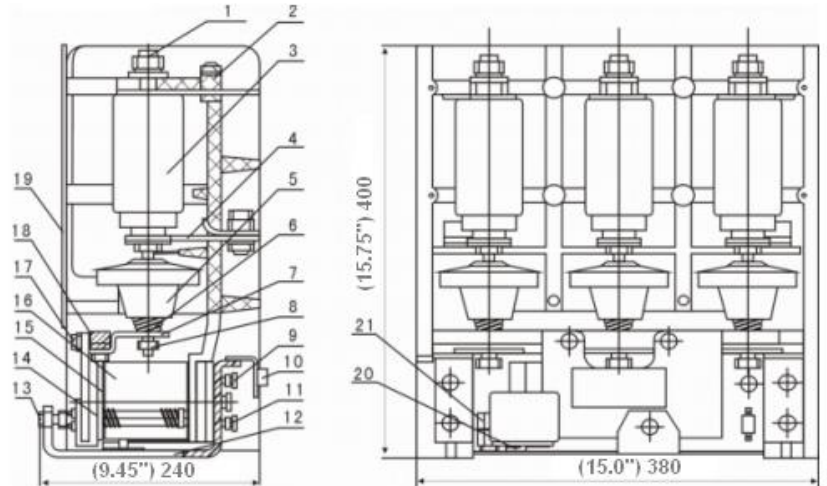
Contactors Drawings

For contactor component identification, see Figures (1a, 1b).

For mounting dimensions and hole sizes, see Figure (2).

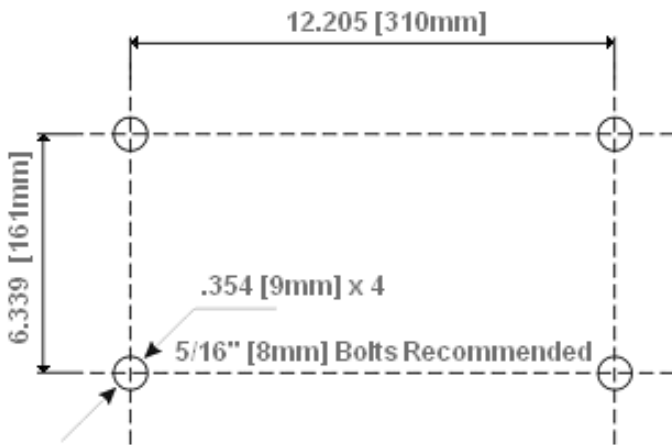
For power terminal sizing, see Figure (3).

1.	Nut	15.	Iron Core
2.	Insulating Frame	16.	Magnetic Coil
3.	Vacuum Bottle	17.	Armature
4.	Flex Connector	18.	Square Shaft
5.	Bushing Insulator	19.	Cover Panel
6.	Contact Spring	20.	Latching Device (CJ model)
7.	Inflection Arm	21.	Auxiliary Switch
8.	Adjusting Nut		
9.	Magnetic Yoke		
10.	Terminal Block Mount		
11.	Screw		
12.	Base Plate		
13.	Limit Bolt		
14.	Switch-Off Spring		

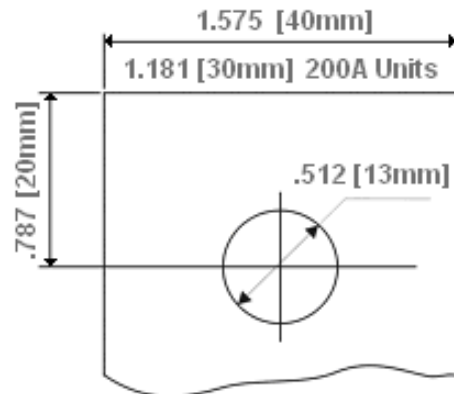


1a

1b



(2) Mounting Points and Hole Size



(3) Power Terminal Dimensions

Contact us for additional information or see product information document.

REV MT-CTCR7P2KV-031810