

VACUUM CONTACTORS

MINI VACUUM CONTACTORS

We understand that vacuum contactors are used on applications that are crucial to your production. That's why our vacuum contactors have been designed to provide years of troublefree service.

In the early 60's, The General Electric Company p.l.c. of England installed the first vacuum contactors for motor starting duty. Since then, vacuum technology has continuously improved through the development of new metal alloys and sealing techniques. Many of the first vacuum contactors installed are still performing satisfactorily, and today, vacuum contactors are being specified for most industrial applications.

Compact design

The MINI 1.5kV, 320A vacuum contactor is designed to meet the requirements for a rugged, compact, three phase switching device. It is directly interchangeable with the DPC-250 definite purpose contactor without modification. It has dimensions (8 "H x 8 1/2 "W x 6 1/2 "D) that allows it to be mounted in the smallest spaces.

Applications

The MINI vacuum contactor can be used for motor starting duty, transformer, capacitor, furnace, transmission, grounding and load control applications.

No maintenance

The vacuum switches mounted in the contactor are held open by a spring loaded armature. The armature is closed electromagnetically by DC or full wave rectified AC. Energizing the coil attracts the armature, which compresses the springs and allows the vacuum switches to close under atmospheric pressure acting on the end of the flexible bellows. A predetermined amount of over travel is built into the armature to allow for contact wear over the operating life of the vacuum switches. The switches are self adjusting

throughout the life cycle. A check for contact wear is accomplished by a simple wear gauge "go - no go" check. Field adjustments should not be attempted.

The MINI vacuum contactor is ideal for applications where severe switching duties or hostile environments require excessive maintenance on existing contactors. The metal vapor, which forms when current is interrupted by separation of the contacts, condenses back on the contact surface and is available for subsequent switching. In addition, the contacts are sealed in a vacuum better than 10⁻⁶ Torr and dielectric strength is maintained through the use of a "getter" which absorbs any gasses emitted by the contact materials. The long life and maintenance free operation which results are the solution to your maintenance problems.

Low transients

Control of the arc is achieved through the selection of low melting point contact materials and extremely small mechanical movements to obtain low current chop levels. This provides safe switching characteristics with a mechanical life of three million or more operations.

Operating coil

The operating coil is DC. Coil consumption figures are given in the technical data. Standard ratings of 120 and 240v, 50/60 Hz., with full wave rectifiers can be supplied. AC connections are provided on the front mounted terminal block.

Auxiliary switches

Two normally open and two normally closed dustproof auxiliary contacts are wired to a front mounted terminal block. The contacts are double break, silver faced and have a self cleaning wiping effect to improve reliability. The contacts are nominally rated IOA continuous.

TECHNICAL DATA

Contactor	MP/V2035/G01
Vacuum Switch Type Rated	VSM4
Insulation Voltage Rated	1.5kV
Operational Voltage Rated	1.2kV
Current, Amps	320
Max Interrupting Current	3.2kA
Max Interrupting Capacity, MVA Max	6.6 9 kA
Peak Making Current	
Short Time Thermal Ratings	
Amps - 1 Second	7000
Amps - 6 Seconds	5000
Amps - 35 Seconds	2300 3
Mechanical Life (Operations)	$\times 10^6$ 1
Electrical Life (Operations)	$\times 10^6$
Average Chopping Current	0.5A 0.9A
Maximum Chopping Current	80-120ms
Closing Time (AC switched)	30-40ms
Opening Time (DC switched) DC	200W
Coil Consumption (Close)	25W
(Hold)	1200

Operations per hour

Altitude without derating 2000 m (6600 ft)

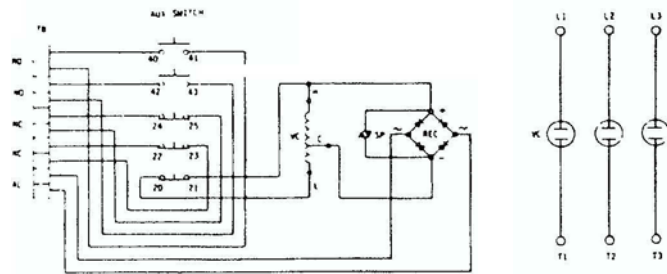
Ambient air temperature -10 to + 65 C

Relative humidity, , , 10 to 95%

UL Recognition,, No

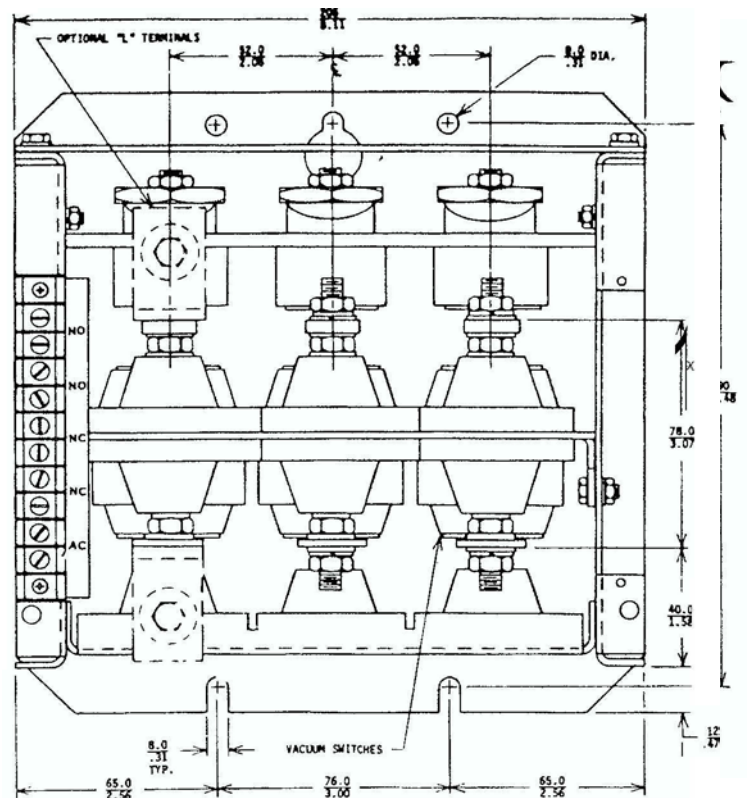
CSA Certification ..,, No

Weight. 16.5 lbs

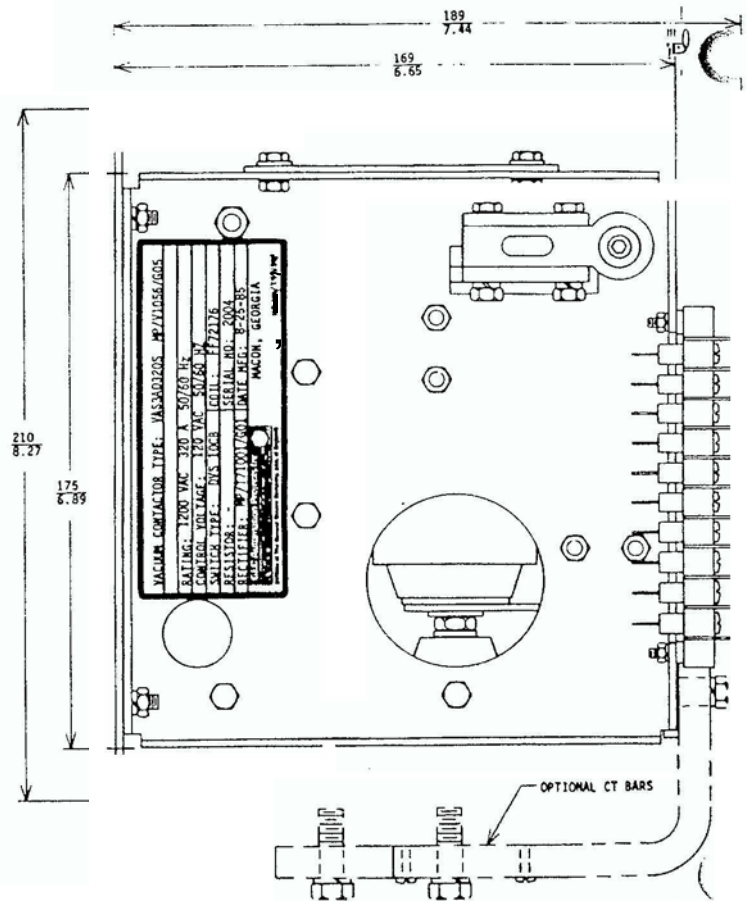


Typical wiring diagram

The information contained herein is general in nature and is not intended for specific application purposes. EMICC reserves the right to make changes in specifications shown herein or add improvements at any time without notice or obligation.



Front View



Side View

Weight - 16.5 lbs

