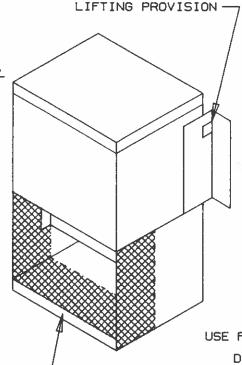
STYLE IA & IIA

WALL MOUNTED

MAY ALSO BE MOUNTED HORIZONTALLY

KNOCKOUT AREA

THREE SIDES OF WIRING
COMPARTMENT IN AREA
TO FRONT OF TERMINAL
BLOCK AS SHOWN. MAINTAIN
I" CLEARANCE FROM
GROUNDING TERMINAL.



MINIMUM WALL MOUNTING

FOR 1.0 KVA AND LESS

USE FOUR BOLTS WITH MINIMUM DIAMETER
OF 1/4 INCH.

FOR LARGER THAN
1.0 KVA UNITS

USE FOUR BOLTS WITH A MINIMUM DIAMETER OF 5/16 INCH.

-GROUNDING TERMINAL

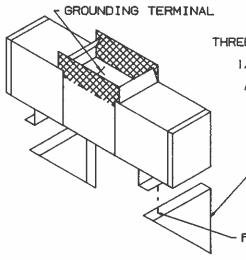
UNITS ARE SHOWN WITH ACCESS COVERS REMOVED

STYLE B

FREESTANDING FLOOR MODEL

KNOCKOUT AREA

ABOVE TERMINAL BLOCK AS SHOWN BY SHADED AREA.



WALL MOUNTING
USING OPTIONAL
PL-70725 BRACKETS:

USE A MINIMUM OF
THREE BOLTS HAVING AT LEAST
1/2 INCH DIAMETER FOR
ANCHORING EACH WALL
MOUNTING BRACKET
TO THE WALL.

PL-70725 BRACKET

BRACKET USING FOUR
BOLTS WITH MINIMUM DIAMETER
OF 3/8 INCH.

A-700301-C

NOTE: TO PROVIDE A SAFETY FACTOR, WALLS FOR WALL MOUNTED UNITS MUST BE ABLE TO SUPPORT A MINIMUM OF FOUR TIMES THE WEIGHT OF THE UNIT.

Installation, Operation and Maintenance of Acme Constant Voltage Regulator

BASIC FUNCTIONS

Your new Acme Constant Voltage Regulator is designed for special applications where "clean" power is vital to the performance of equipment. It will maintain output voltage fluctuates from -20% to +10% of nominal. Additionally, Acme Constant Voltage Regulators (abbreviated CVR's) attenuate troublesome transient line spikes which disrupt sensitive equipment. Acme CVR's are warranted for one year*. Proper installation and application will insure a long, trouble free life. Some recommendations follow. *RE: General Catalog for details.

INSPECTION

Acme CVR's are individually inspected, tested and packaged for shipment at the factory. The unit should be unpacked as soon as it is received and examined for possible damage during shipment. Should damage be found, a claim should be filed immediately with the transportation company.

OPERATING TEMPERATURE AND VENTILATION

All Constant Voltage Regulators operate with portions of the core in magnetic saturation. This is a necessary condition for producing a constant output voltage.

This results in the surface temperature being too warm for sustained contact. This is a natural condition. It meets or exceeds the temperature limitations of Underwriters Laboratories, Inc. Standard UL-1012. These temperatures are normal and necessary for your CVR to regulate properly.

Installing the CVR in a well ventilated area at normal room temperature will help assure its long service life. Confined areas restrict the natural convection cooling of the unit.

SOUND LEVEL

Voltage stabilizers and regulators are more audible than conventional distribution transformers because the core must operate in magnetic saturation to provide proper voltage regulation. This saturation causes vibrations in the core and surrounding components. To mitigate these vibrations, non-ferrous components have been designed into the Acme constant voltage regulator. Even with these special features, it may be more audible than a conventional distribution transformer of the same KVA size. A change in load will often noticeably change the sound level of the unit. This is normal for CVR's.

Proper installation will maximize the benefits of the sound suppressing design features of your Acme CVR. Some helpful tips include:

- 1. Mount the CVR on a heavy, solid surface to prevent structural transmission of vibrations. Thin surfaces such as plywood walls or curtain walls amplify sound.
- 2. Avoid a corner location since the audible sound will be reflected out into the room.
- Locating the unit in a remote area or adjacent room may be considered for especially sound-sensitive applications.

INSTALLATION

Mount Acme Electric's CVR indoors, away from moisture. It is very important that it be installed where the air is clean and away from areas where excess quantities of dust, corrosive fumes, heat or other adverse atmospheric conditions exist. The CVR is cooled by natural air convection. Space should be allowed around the device for free air flow. Restriction of the air flow may cause overheating and burnout.

All Acme CVR's should be installed according to national and local electrical codes. Overcurrent protection for the input side of the Acme CVR should be sized in accordance with Article 450-3, (b) (1) of the National Electrical Code utilizing the "maximum input amps" on the nameplate.

The enclosures of all CVR's are to be grounded at the time of installation. The output voltage of the CVR is not grounded at the time of manufacturing. Please refer to the N.E.C. (National Electrical Code) for information on how to ground the output (secondary) voltage. Article 250 of the N.E.C. also supplies information on enclosure grounding.

Several of the CVR's contain rubber vibration isolators to reduce the transmission of noise and vibrations. The bolts of these vibration isolators may appear to be loose when compared to conventional type of bolted devices. Do not alter these bolt settings. They are set at the factory for optimum performance.

LIFTING PROVISIONS

Smaller units are provided with lifting holes for the use of hooks or similar lifting devices. Larger units are equipped with an integral skid for use with a fork lift.

CONNECTIONS

Each Acme Electric CVR is equipped with an electrical connection diagram. Make connections only shown on diagram. Do not attempt to make any other connections. This may result in failure of the unit or safety hazards.

Input and output wiring is to be sized in accordance with the National Electrical Code. Do not attempt to reverse feed this CVR, that is, connect incoming power to the output terminals.

Many units are equipped with tap leads to increase their versatility. It is very important to insulate and isolate tap leads not used for a particular connection. An uninsulated live lead could be a safety hazard or could cause equipment damage.

MAINTENANCE

Practically no maintenance is required on an Acme CVR. It should be inspected one to three months after initial installation to determine how much dirt and dust can be removed by the use of vacuum cleaners or waterfree compressed air (below 25 pounds per square inch). After the first few inspections, a regular inspection schedule can be set up depending on the atmospheric conditions.



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