# **Micro Control Systems**

APPLICATION NOTE APP-005 5400-1 Division Drive Ft. Myers, FL 33905 USA (941)-694-0089 Fax (941) 694-0031

## OEM INSTALLATION HARDWARE REVISION 1.4 & HIGHER

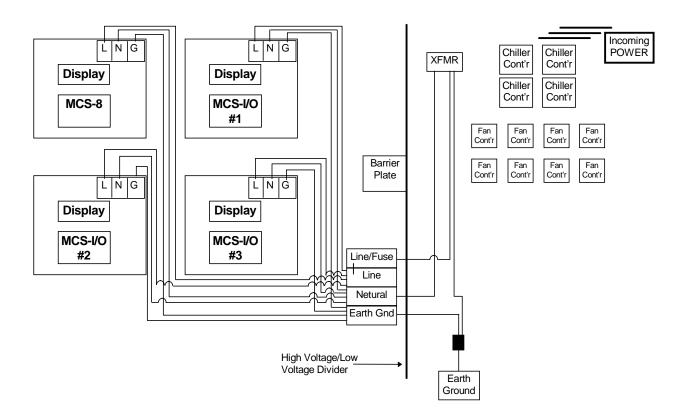
### **Revision History**

Date	Author	Description	
06/18/97	John Walterick	Created Application Note.	

This Application Note describes the installation of the MCS-8 and MCS-I/O microprocessor controller.

### MCS-8 & MCS-I/O Installation

You may have one MCS-8 and up to three MCS-I/O units on and installation. Figure 1 indicates the preferred mounting when installed within a Chiller control panel.



#### What are the Objectives

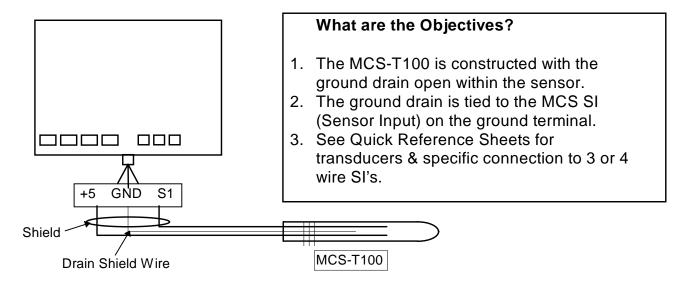
- 1. MCS units located away from high voltage. Barrier plate between high voltage and MCS units.
- 2. Earth ground located away from high voltage.
- 3. Line, neutral and ground to MCS units follow same path and not intermixed with high voltage.
- 4. Incoming power located away from MCS units.
- 5. No connection between neutral and earth ground.
- 6. The MCS-8 display is at, or slightly above eye level. (6 o'clock viewing angle)
- 7. Transformer must be tied to earth ground.
- 8. Transformer must be sized to provide 115 Vac to 125 Vac (care must be taken for 208 Vac or 377 Vac systems.

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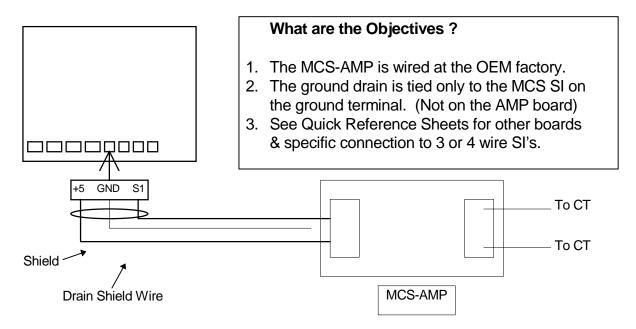
#### MCS Sensor Installation

Sensors can be divided into three categories as follows:

A. Temperature and Pressure sensors, purchased from MCS, which have a shielded cable correctly wired at the sensor end. They can be purchased with different lengths of cable to eliminate splicing during field installation. Figure 2 below shows and MCS-T100 temperature sensor with the correct wiring of the cable to the MCS controller.

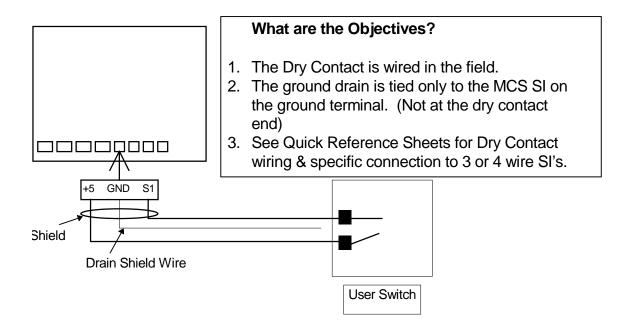


B. Printed circuit board sensors, purchased from MCS, which require field wiring using shielded cable. These would include the MCS-AMP, MCS-FREQ, MCS-AOHC, MCS-HUMD, MCS-ZONE, MCS-AMP-CT, MCS-STAT, etc..



APP-005 OEM Installation 3

C. Dry contact inputs which are supplied from another source. (Inputs from Building Management Systems, Emergency Stop, etc.)



APP-005 OEM Installation 4