



The MCS-6-HP Specifications & Description

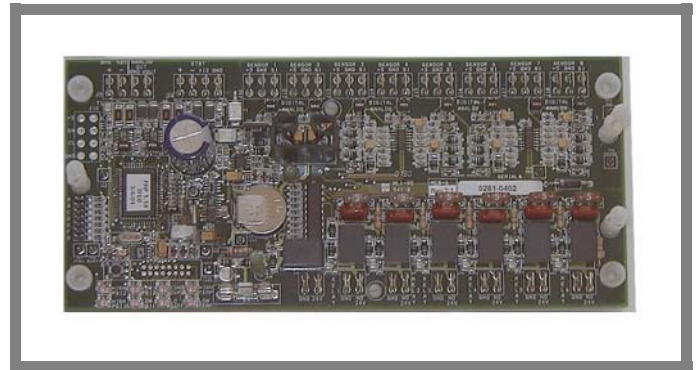
Physical Characteristics

Package Specifications

Dimensions 8.87"l, 4.00"w, 2.50"h
Mounting Holes 4 holes using #6 screws through
nylon collars at corners of board
Cover Lexan with standoffs
Operating Temperature..... -40°F to +175°F (-40°C to +80°C)
Storage Temperature..... -40°F to +175°F (-40°C to +80°C)

Control Specifications

Microprocessor Toshiba TMP88PS49F @ 16mhz
Sensor Inputs (SI) 8 inputs 0-5vdc (10-bit A/D)
Relay Outputs (RO) 6 outputs 5amps @ 24vac
Analog Output (AO) (1) 0-10vdc
Printed Circuit Board..... Four layer with separate power
and ground planes
Input Power..... 24vac \pm 10% 50/60Hz @ 77°F
(25°C) ambient
RS-485 Comm Port..... 1 @ 19,200 baud
STAT Comm Port..... 1 @ 4800 baud
Power Detection..... Automatic power fail reset
Primary Control..... Built in safeties
Alarm LEDs..... 8 independent LEDs
Real Time Clock..... Battery backup



Part # **MCS-6-HP**

Product Description

The MCS-6-HP is a dedicated stand-alone unitary direct digital controller that provides total control for geothermal or water cooled heat pumps.

The MCS-6-HP micro controller is mounted on the heat pump unit. A MCS-STAT (communicating thermostat) or a MCS-T100 temperature sensor is field installed in the room or zone that the heat pump is conditioning. A field installed four wire shielded cable connects the MCS-6-HP micro controller to the MCS-STAT.

Optional selections can be easily specified with jumper settings or via PC-Connect, a Windows-based communication software package designed by MCS. Common inputs such as compressor suction and discharge pressure, supply air temperature and water in/out temperature are supported. Optional selections include an additional compressor, auxiliary heat, emergency heat, economizer, water valve, hot gas reheat, heat reclaim pump and an outside damper.

The MCS-6-HP has the ability to generate and store alarms for the unit, system information and safeties.

The unique ability of the MCS-6-HP to control your building location comes from the sophisticated control logic sequence. The system is designed to be extremely cost effective allowing installation in small applications.

The MCS-6-HP is designed to be the primary manager for the unit it is controlling with the ability to communicate to a personal computer running PC-Connect or to a building management system.

There are three input and seven output options plus the ability to uniquely configure the system thus providing additional flexibility and added value to the MCS-6-HP micro controller.