



MCS-MAGNUM-7

Description & Specifications



Part # MCS-MAGNUM-7

Description



The **MCS-MAGNUM-7** consists of a MCS-MAGNUM controller along with a Touchscreen 7in display. The **MCS-TOUCH-7** is a new touchscreen interface designed to simplify user access with the **MCS-MAGNUM** utilizing **MCS-CONNECT** to provide both graphics and service mode access to technicians. Information and graphics on the TOUCH-7 are shown on a 7" high resolution (1280x800) LCD display with LED backlighting, which will guarantee long-life operation.

The **MCS-TOUCH-7** can connect up to 60 MCS controllers and supports RS485 or Ethernet networking. The MCS-TOUCH-7 makes it easy for the user to manage more complex installation diagrams, without losing the overall view of the installation, as well as ensuring that the pages can be browsed in a fast and straight forward manner.

The MCS-MAGNUM is a durable microprocessor based controller designed for the hostile environments in the HVAC/R industry. It is designed to be the primary manager of the package it is controlling. The Magnum provides flexibility with setpoints and control options that can be selected prior to commissioning a system or when the unit is live and functioning. Displays, alarms and other interfaces are accomplished in a clear and simple language that informs the user as to the status of the controller.

Complementing the Magnum micro controller are a variety of MCS expansion boards.

Kit Content

50W Single Output Power Supply
115-230 VAC input (+-15%)
12VDC output regulated
Resistant to short circuiting, overloading,
and over voltage. Operating
temperature up to 70 °C



7ft CAT 5e Crossover Patch Cord,
Orange

Specifications

Controller

Dimensions.....12.0"w, 8.0"h, 2.0"d
Mounting Holes.....Mounts on a backplane utilizing
8 through-hole studs
Operating Temperature.....-40°F to +158°F (-40°C to +70°C)
Operating Humidity.....0-95% Non-Condensing
Storage Temperature.....-40°F to +158°F (-40°C to +70°C)
Microprocessor.....Zilog eZ80 Acclaim! @ 50mhz
Sensor Inputs (SI).....12 inputs 0-5vdc (10-bit A/D)
Digital Inputs.....4 inputs 0 or 5vdc only
Relay Outputs (RO).....10 outputs 6.3amps @ 230vac
Analog Outputs (AO).....4 outputs 0-10vdc
Printed Circuit Board.....Six layer with separate power
and ground planes
Input Power (Standard).....115 or 230vac ±10% 50/60Hz @
77°F (25°C) ambient, 20VA max
(Voltage is field selectable)
MCS-I/O Comm Port.....1 @ 38,400 baud
RS-485 Comm Port.....1 @ 19,200 baud
Ethernet.....10/100 Mbps Ethernet
Real Time Clock.....Battery backup
Power Detection.....Automatic power fail reset

Magnum Controller Option

-24.....24vac input power ±10%
50/60Hz @ 77oF (25oC) ambient

Touch Screen 7

Dimensions.....9.35"L x 7.125"Wx2"H
Mounting.....Door Mount
8.1875"L x 5.875"W Cutout
Mounts utilizing 8 through-hole studs
Gasket Material.....HT-800 Medium Cellular Silicone
NEMA 4
LCD Screen.....7.0" (16:10 Diagonal)
262,000 Colors
1280x800 Resolution
View Angle 80° x 80° x 80° x 80°
(Up, Down, Left, Right)
4-Wire resistive touch w/Stylus pen
White LED Backlight (Min Life
10,000 Hrs) Luminance
Min. 300 cd/m²
Surface Treatment.....Glare/Anti-Reflection ≤1.5%
Hard Coating (3H)
Operating Temperature.....-4°F to 158°F (-20°C to 70°C)
Operating Humidity.....0-95% Non-Condensing
Storage Temperature.....-22°F to 176°F (-30°C to 80°C)
Power Input 115-230 VAC input
(+15%)
Power Output.....12VDC output regulated
Motherboard.....Freescale i.MX6 Solo 800mhz
1Gb of 512mhz DDR3 RAM Mem.
4Gb of eMMC Flash memory
1Gb Ethernet (100Mb/10Mb comp.)
1 Micro-SD Slots
1 USB On-The-Go (OTG)
2 USB Host 2.0
Real Time Clock (RTC) w/ Battery
LVDS for 7" LCD w/4-wire
resistive touch screen
3 RS485 communication ports
(max. baud rate 115k)

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