ETM PLUS

Electronic Thermostat Module

Remote-Mount Series

ETM PLUS dedicated digital controllers manage rooftop or unitary HVAC equipment. They are remote-mounted and provide fully distributed digital control.

LOGIC ONE® – technology you can rely on

Novar's LOGIC ONE Advanced Building Control System delivers better reliability, greater versatility and more standard features than any other building control system on the market. LOGIC ONE technology is designed to maximize the operational efficiency of any HVAC or lighting system. The result: lower energy costs, increased comfort, and reduced equipment maintenance.

Bottom Line: With Novar You Know It Performs

LOGIC ONE

NOVAR® CONTROLS

With Novar, you know.

Lingo
Savvy

IOM/2

Hawki

ETC

ETM

HPC+

UVC

VAV

Specifications

ETM PLUS

The Novar ETM Plus Series features indoor-style enclosures for maximum location flexibility. The modules can be mounted inside the building or installed inside the rooftop HVAC enclosure. ETM Plus Series modules are also available with outdoor weatherproof enclosures.

Features

Electrical

Power: See each model below.

Analog Inputs: 4 to 20mA.

Digital Inputs: Contact closure only.

Digital Outputs: 24V.
Triac - 1 ampere (pilot duty). AC only.
Relay - 1 ampere (pilot duty). AC or DC.

Special Circuits/Diagnostics

Low Voltage Detect: Senses proper operating voltage.

Temperature Sensor Monitor: Verifies operation of temperature sensors.

Watch Dog: Monitors and ensures ETM Plus timing and operation.

Fail Safe: Programmed setpoints held in nonvolatile PROM.

Surge Suppression: All inputs/outputs protected against lightning-induced surge or voltage transients.

Network Communications

Method: RS-485.

Cable (network): 2-wire, shielded cable. Belden 8761 or equivalent.

ETM-2010, ETM-2020, ETM-2020R, ETM-2024

Physical Characteristics

Height: 8 inches.

Width: 11 inches.

Depth: 2.5 inches.

Weight: 4.5 lbs.

Mounting: Four base-slotted mounting holes allow fastening to an interior wall or rooftop HVAC compartment wall. Provides enclosed terminal strips for I/O and power connections and knockouts for 1/2-inch conduit. Outdoor weatherproof enclosure is also available for ETM-2020, ETM-2020R, ETM-2024.

Status Indication: Schedule-status indicator LED and output status LEDs.

Operating Environment

Temperature: -40˚ to 158˚ F (-40˚ to 70˚ C).

Humidity: 0 to 95% relative, noncondensing.

ETM-2010

For general purpose, staged HVAC units requiring remote indoor mounting.

Voltage: 24VAC or 24VDC (field selectable).

Consumption: 8VA (24 VAC) or 150mA (24 VDC).

Inputs: **Total - 3.**
Zone temperature (analog), Airflow detection (digital), Timed override (digital).

Digital Outputs: **Total - 6.**
Heat stage 1, Heat stage 2, Cool stage 1, Cool stage 2, Fan, Damper (or third heat).

Output Type: Triac.

Options: Remote indoor enclosure.
Remote Temperature Sensor: 20˚ to 120˚ F (-7˚ to 49˚ C).

ETM-2020, ETM-2020R, ETM-2024

For staged HVAC system applications requiring a second temperature sensor (typically discharge air or second zone), dirty filter indication, outside damper enthalpy lockout, remote mounting indoors or outdoors. ETM-2024 includes a night damper relay to close an OSA damper during unoccupied periods.

Voltage: 24VAC.

Consumption: 8VA.

Inputs: **Total - 9.**
Zone temperature (analog), Airflow detection (digital). Discharge air temperature (analog), Dirty filter indication (digital), Timed override (digital), Two confirmation inputs for heat stages (digital), Two confirmation inputs for cool stages (digital).

Digital Outputs: **Total - 6 (ETM-2020/2020R), 7 (ETM-2024).**
Heat stage 1, Heat stage 2, Cool stage 1, Cool stage 2, Fan damper (or third heat).
Night damper (ETM-2024 only).

Output Type: ETM-2020 is Triac. ETM-2020R is Relay.
ETM-2024 is Triac except night damper relay.

Options: Remote indoor enclosure. Remote outdoor enclosure. Remote Temperature Sensors: Zone 1 requires 20˚ to 120˚ F (-7˚ to 49˚ C). Second sensor: 20˚ to 120˚ F (-7˚ to 49˚ C) or 20˚ to 170˚ F (-7˚ to 77˚ C).

ETM-3010

For packaged HVAC units, makeup-air heaters, staged single-zone fan coil units, etc.

Physical Characteristics

Height: 6 inches.

Width: 8.25 inches.

Depth: 2 inches.

Weight: 1.88 lbs.

Mounting: Four base-slotted mounting holes allows fastening to an interior wall. Can be installed remotely from the space being controlled but is not intended for outdoor installation.

Status Indication: One schedule-status indicator LED and five output status LEDs.

Operating Environment

Temperature: 32˚ to 122˚ F (0˚ to 50˚ C).

Humidity: 0 to 95% relative, noncondensing.

Electrical

Voltage: 24VAC.

Consumption: 6VA.

Inputs: **Total - 3.**
Zone temperature (analog), Zone setpoint adjustment (analog), Timed override (digital).

Digital Outputs: **Total - 5.**
Heat stage 1, Heat stage 2, Cool stage 1, Cool stage 2, Fan.

Output Type: Triac.

Options: WTS-VAV - Standard wall-mount, nonadjustable.
FTS-2 - Futura wall-mount, nonadjustable.
FTS-2A - Futura wall-mount, with integral setpoint adjustment dial.

Specifications subject to change without prior notification.

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