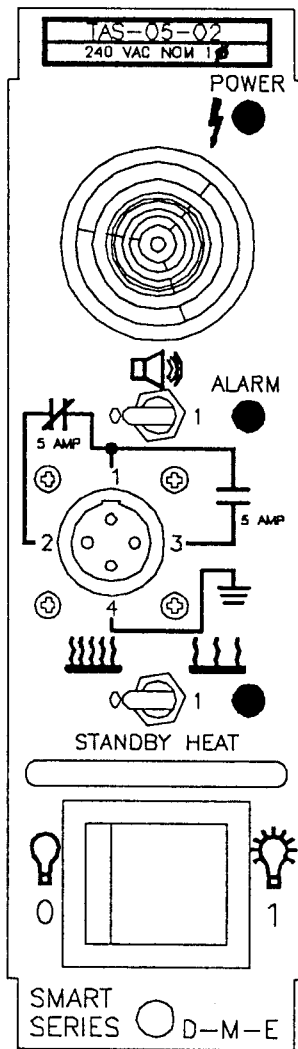


Smart Series® TAS-05-02



Temperature Alarm & Stand-by Heat Module

User's Manual

D-M-E Company

D-M-E Standard[®] Smart Series[®]

Temperature Alarm Module with Stand-by Heat

TAS-05-02

GENERAL DESCRIPTION

This new Temperature Alarm and Stand-by Heat module offers exciting avenues to D-M-E customers. With the new Stand-by Heat function a machine operator can set the unit in Stand-by Heat mode, close up shop for the night, and return the next morning to find the machine ready to go without waiting for the machine to warm up.

With the built in Temperature Alarm function, the unit can alert an operator to an over or under temperature condition. This alarm is visual and can be made audible with the flick of a switch. This module also offers a pair of relay contacts, through the front panel connector, that close or open upon temperature alarm condition.

The alarm features incorporated into this new D-M-E[®] module are compatible with D-M-E[®] SSM-15-G & SSM-30-G series temperature control modules, and D-M-E[®] mainframes that have a communications strip. The CSS and DSS[™] temperature controls will also be compatible with both the alarm and standby heat functions in the near future.

OPERATION:

To activate the Stand-by Heat mode, simply flip the Stand-by Heat switch, located just above the pull handle, to the "1" position. Note that the symbol above the "1" shows a partially heated heater (stand-by heat.) This optically coupled signal will communicate to compatible DSS[™] and CSS modules and set the temperature of the modules to 200 degrees Fahrenheit.

The Temperature Alarm is optically coupled to compatible SSM and compatible DSS[™] and CSS modules. When an SSM module reaches an alarm temperature condition the TAS module will alert the user with a lamp indicator on the front panel, open/close a relay contact, and if enabled, alarm the user with a sound emitting device. Note the symbol above the "Alarm" switch, it looks like a speaker; In the "1" position the audible device is enabled. In the "0" position the audible device is disabled. This does not affect the relay contacts.

FEATURES:

- Simple to use — requires no special training.
- It can set up to 63 DSS[™] or future CSS modules in Stand-by Heat mode.
- It can receive a temperature alarm signal from up to 63 SSM or future CSS and DSS[™] modules in a D-M-E[®] mainframe.

- Provide the user with a relay contact when a temperature alarm condition exists.

PERFORMANCE SPECIFICATIONS:

Advanced Diagnostics Indicators: LEDs and audible device.

Relay Contacts: One normally open contact, one normally closed contact. Contacts rated at 5 amps.

INPUT SPECIFICATIONS:

Alarm Temperature Input: 5 VDC required to activate temperature alarm.

Voltage/Power Capability: 240 VAC nominal, single phase. 120 VAC available.

Overload Protection: Fuses are provided on both sides of AC line

Transient Protection: dv/dt and transient pulse suppression included

Power Line Isolation: Optically and transformer isolated from AC lines. Isolation voltage is greater than 2500 volts

OUTPUT SPECIFICATIONS:

Relay Contacts: One form C (one normally open and one normally closed) relay contact rated to 5 amps, 240 VAC.

ELECTRICAL POWER SPECIFICATIONS:

Input Voltage: 240/120 VAC +10% -20%

Frequency: 50/60 Hz

DC Power Supplies: Internally generated, regulated and compensated

Module power usage: Less than 5 watts

Dimensions: 2"W x 7"H x 7 1/2"D (5.08 x 17.78 x 19.05cm)

NOTE: Standard (240 VAC) modules are compatible with main frames wired for either 240 VAC three phase (standard or 240 VAC single phase). Use TAS-05-01 for 120V operation.

FUSE REQUIREMENTS: (2) ABC-1 fuses (Note: (2) spare fuses included with module).

FRONT PANEL CONTROLS AND INDICATORS:

(See Figure 1)

1. POWER ON INDICATOR: LED is illuminated when power is applied to module.

2. AUDIO ALARM: Device emits loud sound when switch (6) is placed in the "1" position and a temperature alarm condition is sent by a compatible module.

3. ALARM INDICATOR: LED is illuminated when a temperature alarm condition is sent by a compatible module.

4. STANDBY HEAT INDICATOR: LED is illuminated when the Standby Heat switch (8) is placed in the "1" position.

5. POWER ON/OFF SWITCH: Controls AC power to module. 16 amp rocker switch, UL, CSA, VDE approved.

6. ALARM SWITCH: This switch turns the audio alarm (2) on or off.

7. ALARM RELAY CONNECTOR: Provides the user one 5 amp normally open contact, and one 5 amp normally closed contact for temperature alarm conditions. Note: D-M-E provides the mating connector for this relay output.

8. STANDBY HEAT SWITCH: This switch controls the signal that turns on the Standby Heat mode in the modules. When it is in the "1" position the Standby Heat mode is selected.

COMMUNICATION CONNECTOR COMPATIBILITY:

The Communication Connector strip in your mainframe communicates to all the other modules in the rack. If the communications connector in your mainframe has pins 3 & 4 missing, you must order a new communication strip from D-M-E to allow the alarm feature in this module to function properly. It will not work without these pins installed.

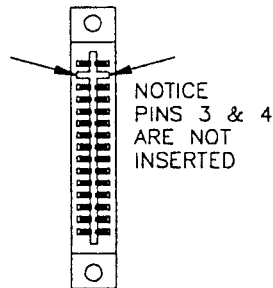


Figure 2. -
Communication
Connector Not
Compatible

RETURN POLICY:

The D-M-E[®] TAS-05-02 modules are warranted for 90 days parts and labor, excluding fuses.

Contact D-M-E Customer Service for return authorization for repairs or warranties. Replacement parts are also available through the Customer Service Department.

D-M-E Customer Service

In U.S., West Coast: 1-213-263-9261
Elsewhere in U.S.: 1-800-626-6653
In Canada: 1-416-677-6370

SERVICE CENTER U.S.A

D-M-E WORLD HEADQUARTERS
29111 STEPHENSON HIGHWAY
MADISON HEIGHTS, MICHIGAN 48071
TELEFAX (313) 398-6174

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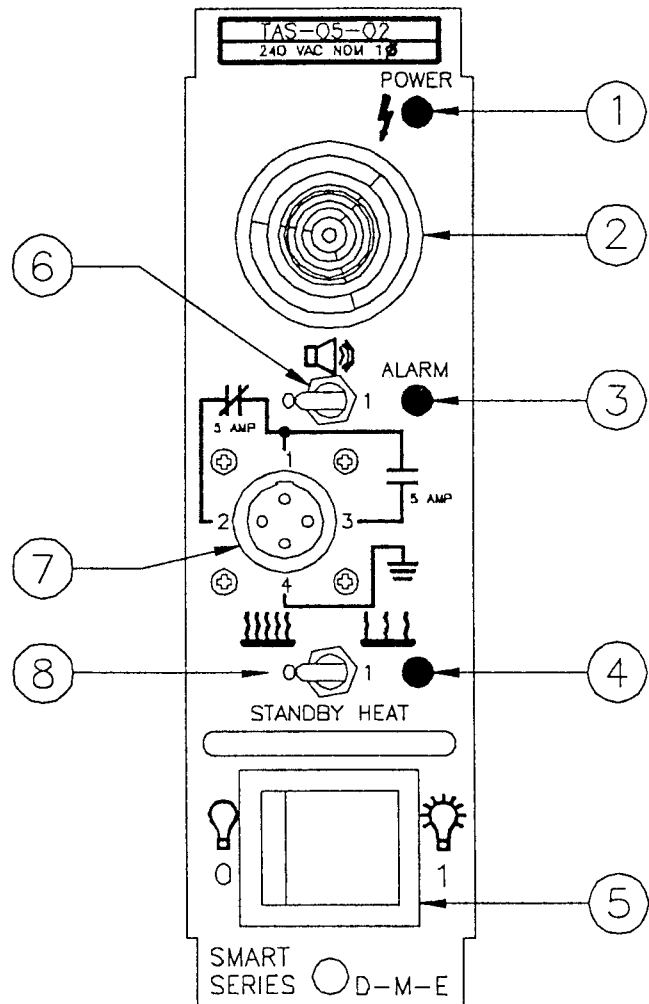
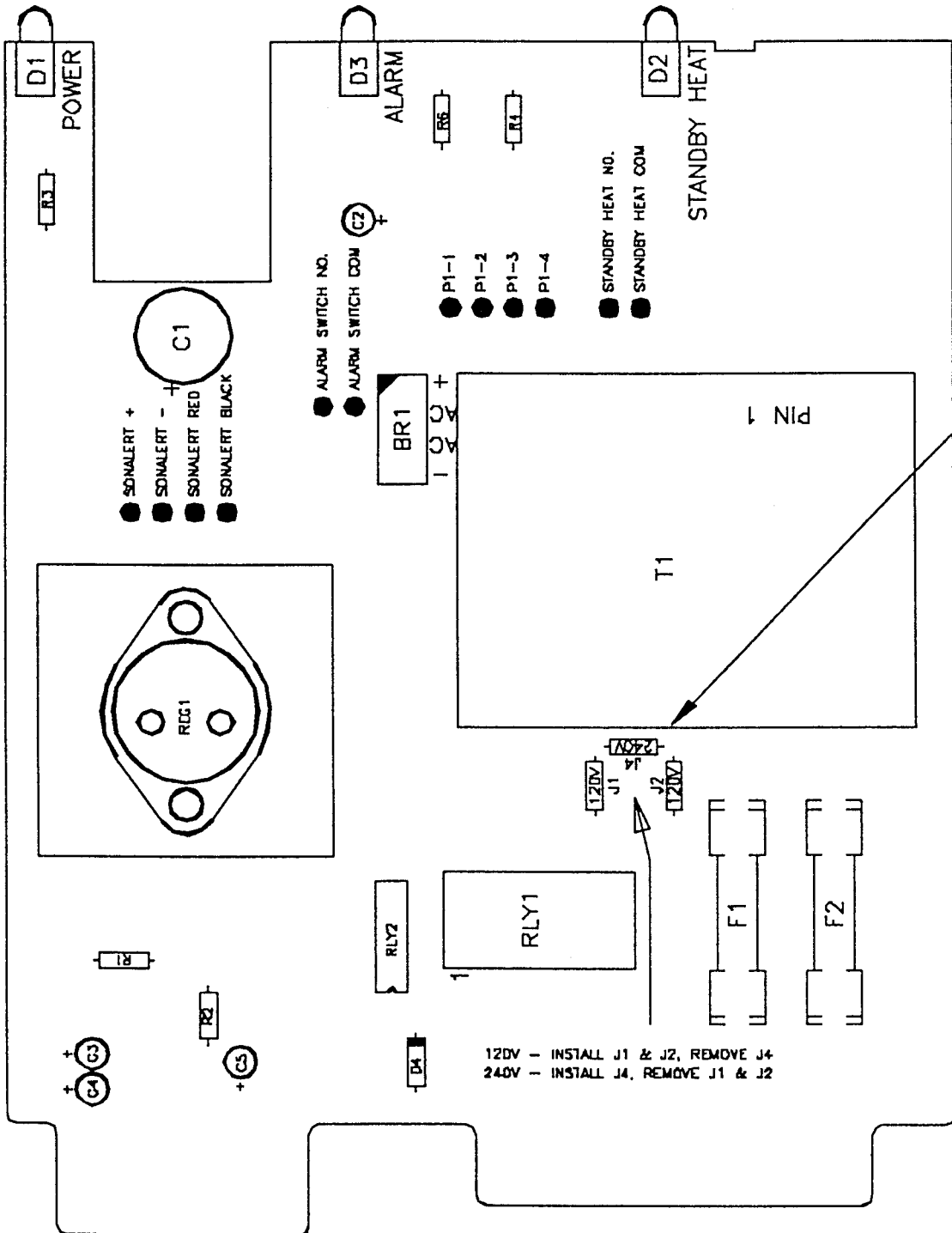


Figure 1. - TAS-05-02 Module

REPLACEMENT PARTS LIST

To meet warranty requirements, use only DME[®] parts.

F1, F2, Fuse, 1 Amp, 250 VAC	ABC 1
SW3, Power Rocker Switch, 16 Amp, 250 VAC	RPM0008
SA1, Beeper	RPM0025
T1, Transformer 240/120 VAC	RPM0026
Handle	RPM0027
SW1, SW2, Toggle switch	RPM0028
P1, Connector, receptacle	RPM0029
P1, Connector, plug	RPM0030
P1, Sockets for receptacle	RPM0031
P1, Pins for plug	RPM0032
RLY1, Relay	RPM0033
RLY2, Relay	RPM0034
D1, LED, green	RPM0035
D2, LED, yellow	RPM0036
D3, LED, red	RPM0037



120V - INSTALL J1 & J2, REMOVE J4
 240V - INSTALL J4, REMOVE J1 & J2

Figure 3. - Component layout, TAS main board