

Phasefale TACmv9M **Cooling & Heating Control** with Advanced Alarm & Logging Functions

The TACm looks after your refrigeration or heating while you get on with business. The **TACm** maintains your system at the correct temperature, continually monitors

The TACm brings a new precision to the control of all types of systems. The temperature is maintained within 0.5°C so stock is always at optimum temperature and running costs reduced.

The TACm/medium is feature packed; it incorporates

- Digital display of temperature.
- Precision temperature control.
- Dual stage control function.
- Compressor Anti-short cycle timer. •
- Complete alarm function. •
- Strong splash proof enclosure. •
- Hourly logging of temperatures. •
- Self test function to check installation. .
- Digital output for remote communications.
- Touch programming with permanent memory.

#### CONTROL OPTIONS

The control has 4 operating modes;

Stages	Туре	Outputs	PCB Rod
1	1 Heat	via C1	No
1	1 Cool	via C1	No
2	1 Cool +1 Heat	via C1 + H1	Yes
2	2 Heat	via C1 + H1	Yes

The option board is required when 2 stages are used. The temperature setpoint and differential are programmable. The setpoint may be varied by an optional connection to potentiometers, switches or time clocks. An off-timer prevents damage to compressor motors and an indicator shows when the control is on.

## LOGGING

Each hour the highest and lowest temperatures reached are stored. The previous four days logs can be viewed at any time. Complog allows a computer to log the operation of the TACm.

#### ALARM

The alarm function has programmable high and low temperature limits. A time delay can be used to prevent false alarms. A wide range of devices can signal the alarm including flashing lights, sirens, security systems and telephone diallers. The alarm outputs may be suppressed by staff but will re-occur if the alarm conditions remain. A memory display indicates an alarm has occurred after conditions have returned to normal. A distress switch may be wired which will activate the alarm outputs immediately. Alarms may be isolated for maintenance etc.

## **OPTIONS**

TACm/PCB option allows control of a second stage of heating.

**PSB30** Battery backup allows operation and logging to continue during mains power failure.

Complog allows a computer to monitor and log the operation of the TACm & TACmv9M 256 TACm's may be logged by the one computor. Temperature ranges between -80.0°C and +140.0°C are available as are various power supply voltages down to 12 V AC or DC.

## **TACM VARIATIONS**

This model has the following differences from the regular TACmv9 1. No defrost functions are included. 2. Temp Range 0-80°C. 3. The Heater output (mdPCB option) is a general heater output which will come on at setpoint minus two differentials and cut out at setpoint minus one differential. The Control output operates normally as cooling or heating. 4. Anti-short cycle time is 2 minutes for cooling and 10 seconds for heating. 5. Fan output (TACm/PCB option) is not used.

# **SPECIFICATIONS**

Supply voltage Control outputs

Temperature range Accuracy Dimensions Sensor

240VAC 240V 10A resistive (0.25Hp) 0.0°C~+80.0°C 0.3°C (10°C to +60 200 x 150 x 82 mm Immersion proof. May be extended to 100m.

