WELCO
ENGINEERING

MICRO - STAT
PRECISION MICROCOMPUTER CONTROLLED THERMOSTAT

PLEASE READ IMPORTANT INFORMATION

25.6

ADJUST

Actual Temperature

Set Low Temperature

Set High Temperature

Minimum Temperature

Maximum Temperature

Reset Max / Min

Security Password

SELECT

MICRO - STAT
DIGITAL 2 LEVEL THERMOSTAT
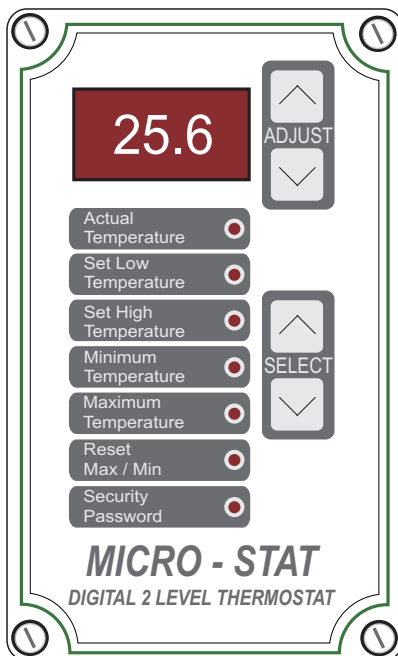
Welco Engineering Ltd

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HEALTH AND SAFETY AT WORK

MICRO-STAT SPECIFICATIONS

Supply ....230v 50hz -6% +10% 10va.
Setting Parameters ....Front Panel Touch Buttons.
Temperature Range ....0-40°C.
Resolution ....0.1°C.
Output Relay (High Temperature) ....Double Pole Changeover.
Output Relay (Low Temperature) ....Single Pole Changeover.
Relay Contact Rating ....8A 30v d.c. / 230v a.c.
Sensor ...."Welco"

SETTING TEMPERATURES

In order to make any adjustments to the high and low temperatures, the *MICRO-STAT* initially requires a security password number to be entered.

Your **security password number** for the *MICRO-STAT* is **222** and should remain confidential to prevent unauthorized adjustments.

ENTERING SECURITY PASSWORD NUMBER

1) Select the Security Password parameters by operating the lower touch pads marked **SELECT** until the appropriate LED indicator is illuminated.

2) Using the upper **ADJUST** touch pad, set the security password number to **222**.Having set the correct password number the Set Low Temperature and Set High Temperature parameters may be determined.

ENTERING SET LOW AND HIGH TEMPERATURES

3) Select the Set Low Temperature Parameter using the **SELECT** lower touch pads.
Note:- The Set Low Temperature LED is now illuminated.

4) Using the upper **ADJUST** touch pads, set the Low Temperature parameter value required. The Set High Temperature Parameter is set using the method but selecting the Set High Temperature Parameter, again using the **SELECT** lower touch pads.

MINIMUM AND MAXIMUM RECORDED TEMPERATURES

The **MICRO-STAT** memory stores the minimum and maximum recorded temperatures over an unlimited length of time until reset.

5) Using the **SELECT** touch buttons, select the Minimum Temperature Parameter for a given period.
Note:- The adjacent LED will be illuminated.

6) Again using the **SELECT** touch buttons, select the Maximum Temperature Parameter for a given period. **Note:-** The adjacent LED will be illuminated.

MINIMUM AND MAXIMUM RECORDED TEMPERATURES

7) To **RESET** the Max. / Min. recorded temperatures, using the lower **SELECT** touch buttons to select the Reset Max./MIn. function. Press the upper **ADJUST** button and the memory will automatically reset. The unit then returns to record the environment ambient temperature or Actual Temperature.

INDICATION OF OUTPUT RELAY STATUS

The **STATUS** of the two output relays is indicated by the flashing LED's.If either the high or low temperature relays become de-energised, the corresponding Set High Temperature or Set Low Temperature LED will flash.

CALIBRATION

The **MICRO-STAT** is factory calibrated and should not require further adjustment. If however re-calibration is necessary, set the sensor temperature to approximately 25^{0}C using a good quality mercury thermometer as reference. Adjust resistor marked **VR1(TCAL)** until digital display of **MICRO-STAT** records the identical value to that indicated by the mercury thermometer. Once this is achieved the unit is calibrated for the full range of operating temperatures. On **NO** account should any other variable resistor be adjusted, since **Welco Engineering Ltd.** Will not accept responsibility for any damage caused.

SENSOR

The sensor input cable can be extended up to 100m without appreciable effect on the unit's performance, but it is strongly advised, particularly where the electrical environment tends to be noisy to use a screened cable that is earthed at the controller end.

Welco Engineering Ltd.

For over 40 year's Welco EngineeringLtd. have specialised in the design, manufacture and installation of state of the art electrical and electronic control systems and equipment for agriculture and industry.
The company offers large comprehensive range of standard manufactured products to satisfy the majority of environmental control requirements, and a service to build to customers specific requirements.
Welco Engineering Ltd., also offer a consultancy service, based on engineers considerable knowledge and expertise in resolving the many environmental problems associated with intensive livestock production units.

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