140H

Tecal S and H range Dri-Block Calibrator

This range of temperature calibrators is ideal for calibrating temperature sensors used in the food and pharmaceutical industries in addition to calibrating any sensors used in the temperature range outlined in the specifications below.

S Version: Set required Temperature and Calibrate

H Version: Set required Temperature and Calibrate; also programmable for switch test and ramp rate etc.

Tecal 140S/H

The Tecal 140S provides a complete system for calibrating most types of thermal sensors used in the temperature range of -40°C to 140°C which includes "K" type thermocouples commonly used in the food industries, cold storage rooms and environmental monitoring systems.

Where automation in both the field and laboratory are required, the combination of the Tecal 140H with the UPI (see page 13) saves time and money. The user can set the program and leave the unit to calibrate the probes, automatically storing the results in memory. This allows the user to attend to other tasks and when convenient download the results to a computer to print the calibration certificate.

Using advanced peltier technology and state-of-the-art mechanical and electrical components, these calibrators can rapidly cover the complete temperature range where speed is of the essence without loss of accuracy or stability. The heater block with a defined measuring zone of 50mm from the bottom of the block allows for different length/active area sensors. Although the quoted accuracy and stability is ±0 .2°C & ±0.05°C respectively, one can often achieve an accuracy of ±0.1°C and a stability of ±0.02°C with high class RTDs and thermocouples.

Technical Specification – Note improved Specification 2011

Minimum temperature	45°C below ambient[1] (-60°C cooling)
Maximum temperature	140°C
Temperature accuracy in measuring zone.	±0.2°C
Temperature uniformity in measuring zone	±0.2°C[2]
Measuring zone	0 to 50mm from base of well
Temperature stability after 10min	±0.05°C
Display resolution	0.1°C
Heating rate, 20°C to 100°C	5 minutes
Cooling rate, 100°C to 0°C	9 minutes
Programmable ramp rate, °C/min	0.1 to 10, on H version
Switch test	on H version
Comms port, 9 way D type	Full bi-directional RS-232
Weight	14.0(S), 14.4(H) kg
Dimensions H x W x D, mm	285 x 190 x 426

[1] In a maximum ambient temperature of 20°C and when using the CH-5 Chiller a temperature of -40°C can be achieved.

[2] At 100°C

See page 9 for full range of inserts available.

Ordering Information

Product Code	Model	Voltage	Hz	Watts	Net Weight (kg)
FDB140SD	TECAL 140S	230V	50/60	400	13.5
FDB140SP	TECAL 140S	120V	50/60	400	13.5
FDB140SY	TECAL 140S	100V	50/60	400	13.5
FDB140HD	TECAL 140H	230V	50/60	400	14.0
FDB140HP	TECAL 140H	120V	50/60	400	14.0
FDB140HY	TECAL 140H	100V	50/60	400	14.0

Accessories

FCALCASE	Hard Carry case for Tecal H and S models	8.6kg

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