



T-35NLL / T-300PLL

Portable Stirred Liquid Bath and Dry Block Calibrator with Large Calibration Volume

- ✓ The T-35NLL generates temperatures from -35 °C to 140 °C, and the T-300PLL from ambient temperature to 300 °C.
- ✓ Stirred Liquid or Dry Block.
- ✓ Black Body or Superficie insert available
- ✓ Extra large calibration volume: 59 mm diameter x 200 mm height (for T-300PLL) and 170 mm (for T-35NLL).
- ✓ High Stability, Uniformity and Accuracy.
- ✓ Temperature measurement and control by external probe with Callendar-Van Dusen coefficients.
- ✓ Resolution of 0.01 °C.
- ✓ Stability better than ± 0.01 °C.
- ✓ Have input for thermocouples, resistance thermometers and thermostats.
- ✓ Internal regulated 24 Vdc power supply and mA input for 2-wire transmitters.
- ✓ Completely automatic calibration with or without the use of a computer.
- ✓ Documenting capabilities: connection with computer and ISOPLAN® calibration software.
- ✓ Remote Control via Bluetooth and Android application.

Technical Specifications

	T-35NLL	T-300PLL
Operating Range ambient temperature: 23 °C	-35 °C to 140 °C	from ambient temperature to 300 °C
Display Accuracy:	± 0.1 °C	±(0.1 °C + 0.1% of reading)
Resolution:	0.01 °C	0.01 °C
Stability (in relation to external probe):	better than ± 0.01 °C	better than ± 0.01 °C
Axial Uniformity (homogeneity): (40 mm)	< 0.008 °C (Stirred Liquid)	< 0.01 °C (Stirred Liquid at 180 °C)
Radial Uniformity (homogeneity):	< 0.007 °C (Stirred Liquid)	< 0.008 °C (Stirred Liquid at 180 °C)
Heating Time:	60 min (25 °C to 140 °C)	25 min (25 °C to 300 °C)
Cooling Time:	70 min (25 °C to -35 °C)	100 min (300 °C to 100 °C)
Well Diameter x Depth:	Ø 59 mm x 170 mm	Ø 59 mm x 200 mm
Units / Temperature Scale:	°C or °F / ITS-90 or IPTS-68, user selectable	
Display:	Graphic vacuum fluorescent with contrast adjustment	
Dimension (HxWxD):	380 x 200 x 270 mm	
Weight:	14.4 kg	11.0 kg
Electric Power:	450 W	1000 W
Environmental Operating Conditions:	0 to 50 °C / 0 to 90% UR	

Note: The times shown refer exclusively to the use of the metallic insert. For use with agitated liquid insert the time may vary depending on the fluid used and its viscosity.

Electrical Input Specifications

Input Ranges		Resolution	Accuracy	Remarks
milivolt	-150 to 150 mV	0.001 mV	± 0.01 % FS*	R _{input} > 10 MΩ
	150 to 2450 mV	0.01 mV	± 0.02 % FS	auto-range
mA	-1 to 24.5 mA	0.0001 mA	± 0.01 % FS	R _{entrada} < 160 Ω
	0 to 400 Ω	0.01 Ω	± 0.01 % FS	Excitation Current 0.9 mA
resistance	400 to 2500 Ω	0.01 Ω	± 0.03 % FS	auto-range
Pt-100	-200 to 850 °C	0.01 °C	± 0.1 °C	IEC-60751
Pt-1000	-200 to 400 °C	0.1 °C	± 0.1 °C	IEC-60751
Cu-10	-200 to 260 °C	0.1 °C	± 2.0 °C	MINCO 16-9
Ni-100	-60 to 250 °C	0.1 °C	± 0.2 °C	DIN-43760
TC-J	-210 to 1200 °C	0.1 °C	± 0.2 °C	IEC-60584
TC-K	-150 to 1370 °C	0.1 °C	± 0.2 °C	IEC-60584
TC-T	-75 to 400 °C	0.1 °C	± 0.2 °C	IEC-60584
TC-E	-150 to 1000 °C	0.1 °C	± 0.1 °C	IEC-60584
TC-N	-20 to 1300 °C	0.1 °C	± 0.2 °C	IEC-60584
TC-L	-200 to 900 °C	0.1 °C	± 0.2 °C	DIN-43710

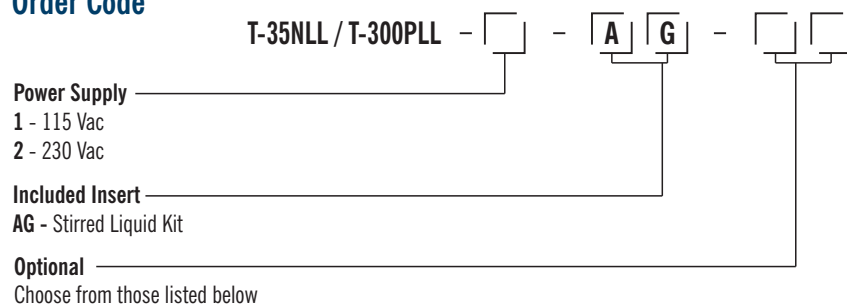
(*) FS = Full Scale.

Accuracy values are valid within one year and temperature range of 20 to 26 °C.

For thermocouples, using the internal cold junction compensation add a cold junction compensation error of ± 0.2 °C or ± 0.4 °F.

All specifications are valid for one year.

Order Code



Accessories

Inserts	Holes	T-35NLL	T-300PLL
IN01	7x 6.0 mm and 1x 1/4"	06.04.0189-00	06.04.0137-00
IN02	8x 1/4"	06.04.0190-00	06.04.0138-00
IN03	2x 3.0 mm, 2x 6.0 mm, 2x 1/4" and 2x 8.0 mm	06.04.0191-00	06.04.0098-00
IN04	2x 6.0 mm, 2x 8.0 mm, 2x 3/8" and 1x 1/4"	06.04.0192-00	06.04.0139-00
IN10	Others, under ordering		06.04.0140-00

Serial Communication: Modbus® RTU Protocol (RS-232/RS-485).

Included Items: carrying case, strap, insert (selectable), insert extractor tool, test leads, manual, power cord and Bluetooth interface.

Optional Accessories:

1/5 DIN R Probe - Order Code: 04.06.0001-00;

Communication Interface - Order Code: 06.02.0002-00.