

PRESTO W85t 1/3

PRESTO W85t

temperature control system / process system

Reactor temperature control, tests for all kinds of substances or temperature simulation - the new PRESTO are made for highly precise temperature control and rapid temperature changes. Highly efficient components allow extremely fast compensation of exothermic and endothermic reactions. Lab users benefit from high flow rates, constant pressure, and a controlled build-up of pump pressure. Permanent internal monitoring and self-lubricating pumps contribute to the new PRESTO®'s long service life. The integrated 5.7" industrial touch screen displays all important information clearly and concisely enhancing ease of use considerably.

Your advantages

- · For highly precise, external temperature applications
- Rapid heating and cooling
- Wide working temperature ranges without changing fluids
- · Highest performance with small footprint
- · Space-saving design optimizes space utilization in your lab
- NEW 5,7" industrial color TFT touch screen
- NEW USB (Host und Device)
- NEW Ethernet
- NEW SD-Card slot
- RS232 / optional RS485 / optional Profibus DP
- · Stand-by input

Technical Data

Order No.	9421852.T
Category	Temperature Control PRESTO
Working temperature range (°C)	-85 +250
Temperature control	ICC
Temperature stability (°C)	±0.05 ±0.1
Setting / display resolution	±0.01 °C
Integrated programmer	8x60 steps
Temperature Display	TFT Touchscreen
Heating capacity (kW)	15 @ 400V; 15 @ 230V; 12.5 @ 208V
Cooling capacity (Medium: JULABO Thermal Ethanol)	°C 200 20 0 -20 -40 -60 -80 kW 2.8 2.5 2.4 2.4 2.4 2.2 0.4
Pump capacity flow rate (I/min)	35 80
Pump capacity flow pressure (bar)	0.48 3.2 @ 400V; 0.48 3.2 @ 230V; 0.48 3 @ 208V
Viscosity max. (cSt)	50
Pump connections	M30x1.5
Refrigerant stage 1	R507
Filling volume refrigerant stage 1 (g)	700
Global Warming Potential for R507	3985





Carbon dioxide equivalent stage 1 (t)2.79Refrigerant stage 2 (g)Re3Filling volume refrigerant stage 2 (g)680Global Warming Potential for R2314800Carbon dioxide equivalent stage 2 (t)10.64External P1100 sensor connectionintegratedDigital interfaceRS232, SD memory card, USB, Ethernet, Modbus, Alarm-out Optional: RS485, ProfibusAnalog connection input / outputOptional: RS485, ProfibusAnalog connection input / output0ptional: RS485, ProfibusMobient temperature540 °CDimensions W x L x H (cm)61 x 84.5 x 125Veight (kg)35Sound pressure level (distance 1 m) max. (dBA)69Internal usable expansion vol. (liters)7Calsification according to DIN12876-1Clasification III (FL)Cooling vater consumption (Imin)26Cooling water consumption (Imin)3.Cooling water consumption (Imin)0.5Cooling water differential pressure (bar)0.5Analog water generature (°C)3.Available voltage versions3.Xi20N250HZ (+/- 10%) / SZA/ Plug GAA CEE 3. ×400V/S0HZ (+/- 10%) / SZA/ Plug GAA CEE 3. ×400V/S0HZ (+/- 10%) / SZA/ Plug GAA CEE 3. ×400V/S0HZ (+/- 10%) / SZA/ Plug GAA CEE		
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Cooling water temperature (°C) <30	Cooling water connection	G $\frac{3}{4}$ " male with barbed fittings for tubing $\frac{1}{2}$ " ID
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Tip: Counter-cooling your PRESTO with a Recirculating Cooler

If there is no cooling water, the PRESTO W85t can be cooled down with a recirculating cooler with a cooling capacity of 7 kW at a flow temperature of 15°C. The required circulating pump has to ensure a flow rate of 6 l/min at a counter-pressure of 0.5 bar. The recommended minimum tank volume is 30 liters.



Characteristics

Display

State-of-the-art display

technology TFT Display for comfortable user guidance, colored display of measurement values, graphs and control options, user-defined views

Operation

Optimal ease of use 1

Touch screen for direct operation via display



Instructions inside

Help menus and explanations in plain text for all control options, help messages and warning messages

Multilingual user guidance

Language selection for display of control options, notifications and warning messages via touchscreen

Convenience for several users Administrator level for customizing instrument settings, user levels with limited permissions for fast and safe defined access, password protection, all levels adjustable

Temperature Control

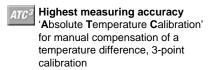
66	For perfect results 'Intelligent Cascade Control',
00	'Intelligent Cascade Control',
	automatic & self optimizing
	adjustment of PID control
	parameters, temperature stability
	±0.01 °C <±0.2 °C

Full control

'Temperature Control Features', for individual optimization, access to all important control parameters, additional settings for band limit. limits, co-speedfactor etc.

Control from the external Pt 100

application External Pt100 sensor connection for precise measurement and control directly in the external application



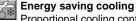
Refrigeration Technology



Consistent cooling capacity Easily removable venting grid for quick and easy cleaning



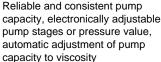
100 % Cooling capacity 'Active Cooling Control' for cooling available throughout the entire working temperature range, fast cool-down even at higher temperatures



Proportional cooling control for automatic adjustment of cooling power or temporary switch-off of compressor as needed to save up to 90 % energy in comparison to unregulated cooling machines

Technical Features

Intelligent pump system



Communication via networks For the remote control of instruments via Ethernet networks, full access to all functions of the unit via a networkcapable PC



Intelligent communication USB connection for data exchange (e.g. service data) or for wireless remote control via WirelessTEMP®



Data exchange via SD-Card For data exchange (e.g. service data) via SD memory card



Connections according to standard RS232/RS485 dual-interface for serial data transmission according to EIA-485 industry standard (2-wire bus technology), upgradable with

Comfortable program control

Profibus DP

Integrated programmer for the execution of time and temperature dependant profiles, 8 temperature profiles with 60 steps max., with real time clock



Quiet as a whisper

Efficient components produce only a minimal sound decibel level

Space-saving footprint

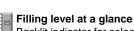
All connections as well supply and exhaust air are located at the front or rear, no venting grids on the sides, units can be placed close to each other or the application



Continuous operation up to +40 °C

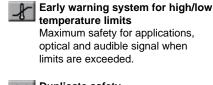
Robust temperature control instrument, continuous operation even at ambient temperatures of up to +40 °C





Backlit indicator for selected pump stages and filling volume

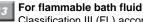
Warning & Safety Functions



optical and audible signal when limits are exceeded.

Duplicate safety

Adjustable high temperature cut-off for internal tank and for integrated expansion vessel



Classification III (FL) according to DIN 12876-1

BLACK Quick support

If an error occurs, the integrated Black-Box function permits fast diagnosis by the JULABO service team