

## **PRESTO A85t**

#### 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
- · Removable venting grid for simplified removal of dust

### **Technical Data**

Order No.	9420852.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 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
Pump connections	M30x1.5
Refrigerant	R23, R507
External Pt100 sensor connection	integrated
Digital interface	RS232, SD memory card, USB, Ethernet, Modbus, Alarm-out Optional: RS485, Profibus

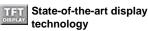




Ambient temperature	5 40 °C
Dimensions W x L x H (cm)	61 x 108 x 125
Weight (kg)	365
Sound pressure level (distance 1 m) max. (dBA)	69
Viscosity max. (cSt)	50
Process volume min. (active heat exchanger volume) liters	9.5 (5)
Internal usable expansion vol. (liters)	7
Classification according to DIN12876-1	Classification III (FL)
Analog connection input / output	Optional
Cooling of compressor	2-stage Air
Available voltage versions	3 x 400V / 50Hz (+/- 10%) / 31A / Plug 32A CEE 3 x 230V / 50Hz (+/- 10%) / 52A / Plug 63A CEE 3 x 208-230V / 60Hz (+/- 5%) / 52A @ 208V, 55A @ 230V / w/o Plug

## Characteristics

#### Display



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

#### Operation

#### Optimal ease of use

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**

#### ICC For perfect results '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 application External Pt100 sensor connection

for precise measurement and control directly in the external application

Highest measuring accuracy TRS 'Absolute Temperature Calibration' for manual compensation of a temperature difference, 3-point calibration

#### **Refrigeration Technology**



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



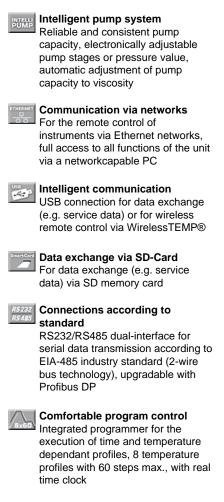
#### ACC 100 % Cooling capacity 'Active Cooling Control' for cooling available throughout the entire working temperature range, fast cool-down even at higher temperatures



#### Energy saving cooling 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**







#### Quiet as a whisper

Efficient components produce only a minimal sound decibel level

BLACK Quick support

team

If an error occurs, the integrated

Black-Box function permits fast diagnosis by the JULABO service



# 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

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



#### EASY Easy transport by one person Ergonomic design facilitates moving and positioning by one person

Filling level at a glance Backlit indicator for selected pump stages and filling volume

#### Warning & Safety Functions

Early warning system for high/low temperature limits Maximum safety for applications, optical and audible signal when limits are exceeded.



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

### For flammable bath fluid

Classification III (FL) according to DIN 12876-1





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