

# **PRESTO W50t**

### 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.	9421502.T	
Category	Temperature Control PRESTO	
Working temperature range (°C)	-50 +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)	12 @ 400V; 12 @ 230V; 10 @ 208V	
Cooling capacity (Medium Ethanol)	°C 200 20 0 -10 -20 -30 -40 kW 7 7.5 6.5 5 3 1.8 0.6	
Pump capacity flow rate (I/min)	35 76	
Pump capacity flow pressure (bar)	0.48 3.2 @ 400V; 0.48 3.2 @ 230V; 0.48 3 @ 208V	
Pump connections	M30x1.5	
Refrigerant	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)	53 x 66.5 x 126
Weight (kg)	210
Sound pressure level (distance 1 m) max. (dBA)	65
Viscosity max. (cSt)	50
Process volume min. (active heat exchanger volume) liters	7.5 (3.5)
Internal usable expansion vol. (liters)	7.5
Classification according to DIN12876-1	Classification III (FL)
Analog connection input / output	Optional
Cooling of compressor	1-stage Water
Cooling water connection	G $\frac{3}{4}$ male with barbed fittings for tubing $\frac{1}{2}$ ID
Cooling water consumption (I/min)	812
Cooling water differential pressure (bar)	0.5
Available voltage versions	3 x 208-230V / 60Hz (+/- 5%) / 36A @ 208V, 39A @ 230V / w/o Plug 3 x 230V / 50Hz (+/- 10%) / 39A / Plug 64A CEE 3 x 400V / 50Hz (+/- 10%) / 25A / Plug 32A CEE

### Characteristics

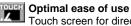
#### Display



# 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



Touch screen for direct operation via display

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# 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**



For perfect results

'Intelligent Cascade Control', automatic & self optimizing adjustment of PID control parameters, temperature stability ±0.01 °C ... <±0.2 °C



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

# Pt 100 Control from the external application

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

Highest measuring accuracy '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**

Intelligent pump system Reliable and consistent pump capacity, electronically adjustable pump stages or pressure value, automatic adjustment of pump capacity to viscosity



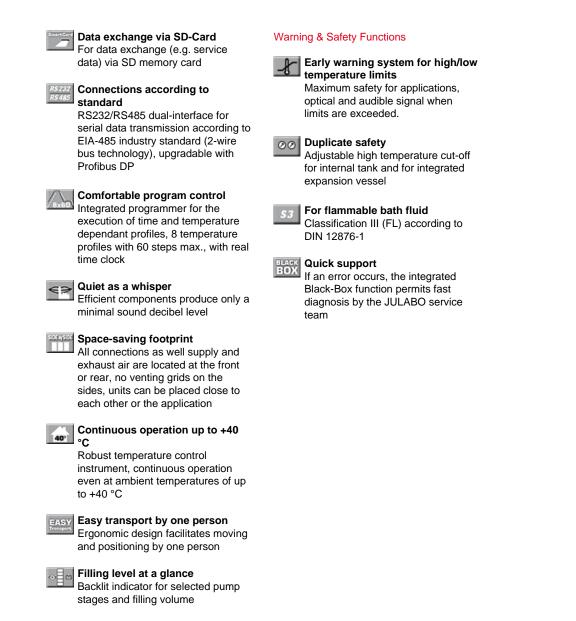
**Communication via networks** For the remote control of instruments via Ethernet networks, full access to all functions of the unit via a networkcapable PC



## Intelligent communication

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





# Distributed by:



**Tallaght Business Park** Whitestown, Dublin 24, Ireland **D24 RFK3** 

Tel: (01) 4523432 Fax: (01) 4523967 Web: www.labunlimited.com

Quatro House, Frimley Road, Camberley, **United Kingdom GU16 7ER** 

Tel: 08452 30 40 30 Fax: 08452 30 50 30 E-mail: info@labunlimited.com E-mail: info@labunlimited.co.uk Web: www.labunlimited.co.uk