

PRESTO W58x Process system

The water-cooled PRESTO W58x is able to quickly and efficiently control the temperature in applications requiring a great deal of power. This model features has an impressive cooling capacity of 33 kW at 20°C, thus ensuring that it maintains large power reserves over its entire working temperature range, especially at temperatures around -30°C to -40°C, which are often necessary for automotive testing.

The PRESTO W58x process system is equipped with a gear pump. As a result, bath fluids with a high viscosity, such as water-glycol mixtures at low temperatures of up to -45 °C, can also be used .

The magnetically coupled pump allows the user to optimally adjust pump capacity to suit the application, even over large distances and height differences, as well as for pressure-sensitive applications. Use of the latest thermodynamic technologies means that the cooling capacity is automatically adjusted to the current power requirements. Combined with further optimizations, the PRESTO W58x is both incredibly economical and energy-efficient.



Water-glycol up to +150 °C

The PRESTO W56 contains a technical innovation: Connection of an expansion kit (accessorie) allows pressurized temperature control with water-glycol up to a working temperature of +150 °C.



Product features

- External Pt100 sensor connection
- Analog connections, RS485, Profibus DP (accessory)
- Second external Pt100 sensor connection (accessory)
- Heating capacity up to 27 kW
- Temperature stability ± 0.05 °C ... ± 0.1 °C
- Alarm output
- Built-in 5.7" industrial color touchscreen
- Pump pressure up to 5.5 bar, max. flow rate 70 l/min

Performance values

480V/3P(N)PE/60Hz (Without Plug)	
Heating capacity kW	27
Viscosity max. cSt	280
Pump capacity flow rate l/min	0 ... 70
Pump capacity flow pressure psi	1.5 ... 79.8
Power consumption A	47

Order No.	9421583.S1.17						
Cooling capacity 1 (Ethanol)							
°C	20	0	-10	-20	-30	-40	-50
kW	33	32	28	19	12	7	1.4
* Performance specifications measured in accordance with DIN 12876. Cooling capacities up to 20 °C measured with ethanol; over 20 °C with thermal oil unless otherwise specified. Performance specifications apply at an ambient temperature of 20 °C. Performance values may differ with other bath fluids.							
Cooling capacity 2 (Water Glycol 40:60)							
°C	20	0	-10	-20	-30	-40	
kW	33	32	25	16	10	5.5	
* Performance specifications measured in accordance with DIN 12876. Cooling capacities up to 20 °C measured with ethanol; over 20 °C with thermal oil unless otherwise specified. Performance specifications apply at an ambient temperature of 20 °C. Performance values may differ with other bath fluids.							
Refrigerant stage 1							
Refrigerant	R449A						
Filling weight g	2550						
Global Warming Potential for R449A	1397						
Carbon dioxide equivalent t	3.56235						

Technical data

Available voltage versions		Cooling	
Order No.	9 421 583	Cooling of compressor	1-stage Water
Available voltage versions:		Max. heat dissipated by unit into cooling water kW	56
9421583.S1.07	400V/3PPE/50Hz (Plug 63A CEE) (R449A)	Cooling water temperature range °C	10 ... 15
9421583.S1.17	480V/3P(N)PE/60Hz (Without Plug) (R449A)	Cooling water temperature range °C	5 ... 35
		Cooling water pressure max. psi	87
		Cooling water difference pressure psi	43.5 ... 87
		Cooling water difference pressure psi	21.8 ... 87
		Cooling water consumption l/min	21 ... 28
Other		Electronics	
Sound pressure level dbA	72	Interfaces	Alarm output, Ethernet, Modbus, Profibus optional, REG/EPROG optional, RS232, RS485 optional, SD memory card, Standby-Input optional, USB
Classification	Classification III (FL)	External pt100 sensor connection	integrated
IP Code	IP 20	2nd external Pt100 sensor connection	accessory
Pump type	Gear Pump	Integrated programmer	8x60 steps
		Temperature control	ICC
		Absolute temperature calibration	3 Point Calibration
		Temperature display	5.7" TFT Touchscreen
		Temperature setting	Touchscreen

Dimensions and volumes		Temperature values	
Internal usable expansion volume l	17.5	Setting the resolution of the temperature display °C	0.01
Minimal process volume l	13	Working temperature range °C	-50 ... +250
Active heat exchanger volume l	12	Temperature stability °C	±0.05 ... ±0.1
Weight lbs	1071.4	Ambient temperature °C	+5 ... +40
Cooling Water Connection in	G $\frac{3}{4}$	Temperature display resolution °C	0.01
Dimensions in. (W × L × H)	27.6 x 42.5 x 68.5		
Pump connections	M38x1.5 male		