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Installation and Operation Manual CSE TVMIX ZV G 3/4M Pump Station with anti-scald value

CSE TVMIX ZV G 3/4M

INTRODUCTION

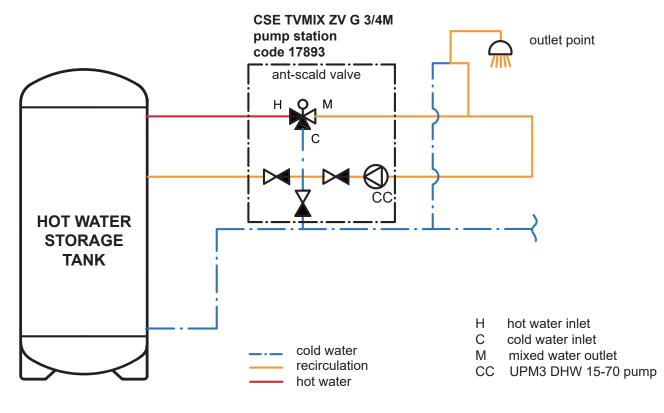
The CSE TVMIX ZV G 3 / 4M pump station is intended for installation in systems for DHW heating with circulation. It includes an anti-scald valve of the Tvmix type that ensures that cold water is mixed with hot water so that the outgoing water reaches a preset desired temperature. The check valves prevent backflow of water from the circulation and cold water systems.

PUMP STATION DESCRIPTION & PARAMETERS

Main Features	
Application	in systems for DHW heating with recirculation
Description	consists of UPM3 DHW 15-70 pump; Tvmix thermostatic mixing valve; housing of kit for recirculation connection; 3 check valves; connecting fittings and thermometer
Working fluid	drinking water
Installation	following the connection diagram below; the flow direction marked by arrows on the housing shall be respected
Code	17893

Data of CSE TVMIX ZV G 3/4M Pump Station	
Fluid working temperature	5 to 95 °C
Max. working pressure	10 bar
Min. working pressure	0.5 bar
Ambient temperature	5 - 40 °C
Max. rel. humidity	80 %, non condensing
Power supply	1 x 230 V, 50 Hz
Insulation material	EPP RG 60 g/l
Overall dimensions (L x W x H)	320 x 210 x 170 mm
Total weight	3 kg
Connections	5 x G 3/4"M

PUMP STATION CONNECTION DIAGRAM



PUMP STATION COMPONENTS

UPM3 DHW 15-70 PUMP		
Electric Data		
Power supply	1 x 230 V, 50 Hz	
Power input (min./max.)	2 / 52 W	
Current (min./max.)	0.04 / 0.52 A	
Max. speed	5766 rpm	
Weighted average power	≤ 23 W	
Energy Efficiency Index	≤ 0.20 dle EN 16 297/3	
IP rating	IP44	
Motor protection	not needed	
Operation Date		
Operating Data		
Fluid working temperature	5 - 95 °C	
Max. static pressure	10 bar	

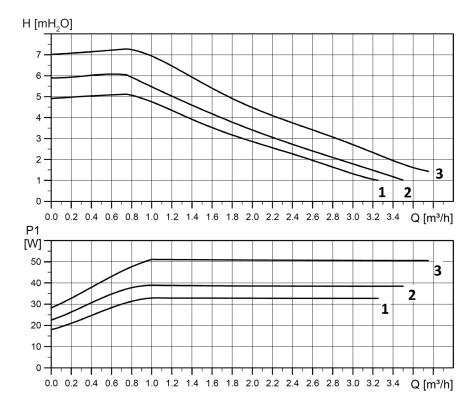
Pump control

The circulation pump can be controlled without a PWM signal by selecting a pump performance curve or by an external PWM signal (profile for use in heating systems). The cable with terminal for pump control using PWM is not included in supply. It can be purchased as an option (code 16792), the cable is 2 m long.

A maximum curve of a pump working range can be defined.

- ▶ without PWM signal the pump runs at the max. speed according to the selected curve
- with PWM signal the pump speed changes with the signal value up to the maximum of the selected curve

Performance curves



Curve	Max. H (upper graph)	Max. P ₁ (lower graph)
2	5 mH ₂ O	33 W
3	6 mH ₂ O	39 W
4	7 mH ₂ O	52 W

Performance display



The LED marking is further omitted for better clarity.

DISPLAY	PERFORMANCE CURVE	STATE	Max. H (upper graph)
	1	LOW PERFORMANCE	5 m
	2	MEDIUM PERFORMANCE	6 m
	3	HIGH PERFORMANCE	7 m

WARNING: LEDs may be mirrored, depending on the specific pump type.

GREEN LED FLASHING FREQUENCY	PWM SIGNAL RECEPTION
1 flash per second	NO
12 flashes per second	YES

When switched on, the pump runs at factory settings or the last setting. The display shows the current pump performance.

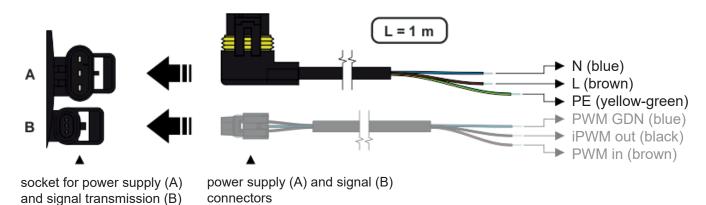
Setting selection for UPM3

To select your desired setting, press the button repeatedly until you find the setting you need (see the pic. above). If you pass the desired setting, you have to go one more round until it appears again.

Error display

DISPLAY	CONTROL MODE
$\bullet \bullet \bullet \bullet \bullet$	Seized pump
	Too low power supply voltage
	Electric fault

Pump wiring



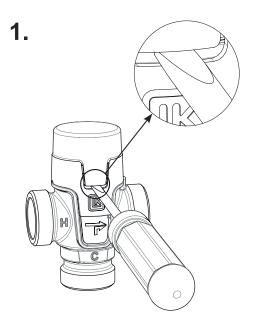
Connector (B) with 2m cable is not included in supply. It can be purchased as an optional accessory, code 16792. POWER CABLE IS INCLUDED IN SUPPLY.

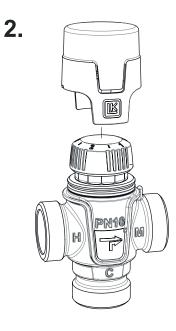
Accessory: PWM Control Cable, 2 m long

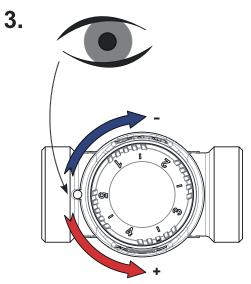
TVMIX ANTI-SCALD VALVE

Technical Data	
Working temperature range	5 to 95 °C
Adjustable temperature range	35 to 65 °C ± 3 °C
Max. working pressure	10 bar

SETTING THE MIXING TEMPERATURE







The adjustable measurement range is 35-65 °C with ±3 °C accuracy.

PUMP STATION INSTALLATION

In order to fit and remove the insulation, the minimum distance of the pipe axis from the wall shall be 100mm.



Prohibited Pump Station positions



Permitted Pump Station positions



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