# THERMOSTATIC CONTROL UNITS

# SOLAR KIT SERIES VMD300

The ESBE thermic solar kit series VMD300 offers dual functionality for tap water applications: It diverts incoming water when additional heating is needed and makes outgoing water scald safe\*, all in an easy-to-install solar kit. The series includes the possibility to fully adjust the diverting temperature in order to optimize the system in favor of solar energy.

# OPERATION

ESBE solar kit VMD300 offers optimized energy usage, scald protection and comfort in a compact and efficient way. Using only thermostatic components (non-electrical) the unit is completely independent and provides very easy installation.

This series have an adjustable diverting temperature between 42 to 52 degress which gives the possibility to minimize the usage of added gas energy.

To further minimize energy losses in the system the product is equipped with an insulation shell.

# FUNCTION

If the incoming water from the solar collector is not hot enough, it is diverted to an additional heat source, such as a gas boiler, and once it is heated it is mixed to a suitable temperature for domestic hot water applications. If the incoming water from the solar collector is already hot enough, it will be mixed directly for domestic hot water use, efficiently utilizing the solar energy and hereby reducing the energy cost for the house-owner.

\*) Scald safe means that in the case of a cold water failure, the hot water supply shuts off automatically.



External thread

## VALVE VMD300 DESIGNED FOR

- Heating
  Comfort Cooling
  Potable water
  Floor heating
- Solar heating
- ng
  - O District Hot Water District Heating

Zone

O District Cooling

Ventilation

# **TECHNICAL DATA**

Pressure class:	PN 10
Max. flow from collector:	0.7 l/s (42 l/min)
Temperature of water from collector:	max 95°C
	min 0°C
Temperature from additional heat source:	max. 95°C
Temperature range, diverting valve:	42-52°C
Temperature range, mixing valve:	35-60°C
Temperature stability of outgoing water:	±2°C*
Connection: External three	ad (R), EN 10226-1

 $\star$  Valid at unchanged hot/cold water pressure, minimum flow rate 4 l/min. Minimum temperature difference between hot water inlet and mixed water outlet 10°C.

#### Material

Valve housing and other metal parts with fluid contact: \_\_\_\_\_\_ Dezincification resistant brass, DZR

### PED 97/23/EC, article 3.3

Pressure Equipment in conformity with PED 97/23/EC, article 3.3 (sound engineering practice). According to the directive the equipment shall not carry any CE-mark.

# FLOW PATTERN









# **SERIES VMD300**

Art. No.	Reference	Change- over point	Kvs*	Connection G	Dimension						Nete	Weight	
					А	в	С	D	E	F	н	Note	[kg]
3152 50 00	VMD322	42-52°C	1.4	R 3⁄4"	max 293	154	95	163	70	77	90		2.21
3152 50 00	VMD322	42-52°C	1.4	R <sup>3</sup> ⁄4"	max 293	154	95	163	70	77	90		

 $^{\star}$  Kvs-value in m³/h at a pressure drop of 1 bar.

# **INSTALLATION EXAMPLES**



