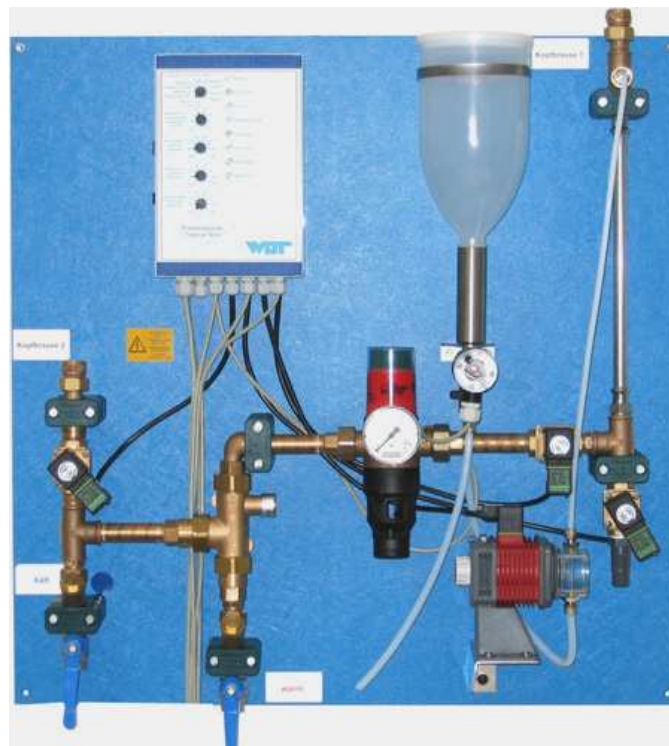


# Operation manual Action Shower „Tropica“

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## 1. Function-programmes

The Action shower „ Tropica “ is a control unit for 2 shower cycles. The programmes can be started by a 2-fold push-button from the shower cabinet.

Head sprinkler 1: warm, aromatized Tropical Rain  
 Head sprinkler 2: cold water fog  
 Caribbean Storm: Caribbean Storm programm between head sprinkler 1  
 head sprinkler 2

The single adjustment are handled by rotary knobs at the control housing:

**programme and test switch**

<p>operation with emptying 10 sec.</p> <p>operation with emptying 5 sec.</p> <p>operation without emptying</p>		<p>operation</p> <p>fragrance empty</p> <p>fragrance pump</p>
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**dosing performance in ml/min at adjustment stroke 75%**

<p>off</p>		<p>room illumination</p>
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**operation time head sprinkler 1 (in seconds)**

<p>off</p>		<p>emptying</p> <p>head sprinkler 1</p>
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**operation time head sprinkler 2 (in seconds)**

<p>off</p>		<p>head sprinkler 2</p>
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**follow-up time sprinkler 2 (in seconds)**

<p>off</p>		
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## Action Shower " Tropica "

**programme and test switch**

This rotary knob is to test every function of the action shower. Each function is indicated by a burning of the yellow LED on the right side of the control housing. The fragrance pump can only be operated if the fragrance canister is filled or if the pressure switch below the pump is bridged.

Before the test of the functions the unit has to be switched on by the *main switch* at the right side of the housing!!

After the test of the functions the operation mode has to be chosen by the switch position: **operation with 10 (5) sec. emptying**

This mode has to be adjusted at all shower techniques that include emptying valves. The emptying time (5 or 10 seconds) is according to the length of the tubing that has to be emptied.

**dosing performance in ml/min at adjustment stroke 75%**

This rotary knob is to adjust the fragrance dosing performance. Pump stroke 75% is adjustment ex works.

**operation time head sprinkler 1 in seconds:**

Adjustment of the operation time for the warm aromatized shower from 20 – 100 seconds.

**operation time head sprinkler 2 in seconds:**

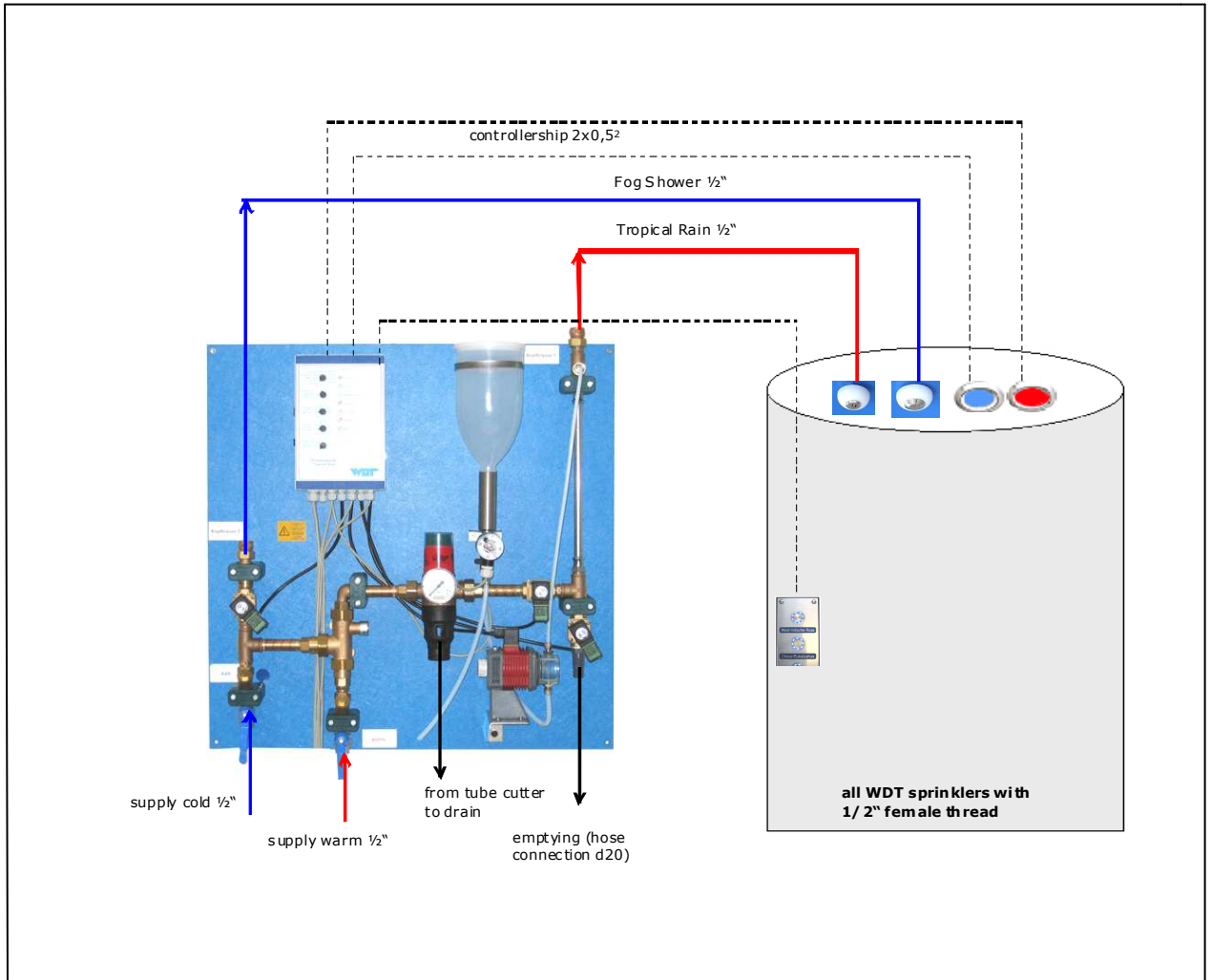
Adjustment of the operation time for the cold shower from 20 – 100 seconds.

**follow-up time head sprinkler 2 in seconds:**

Adjustment of the follow-up time for the cold shower from 20 – 100 seconds.

## 2. Installation

The control unit „Tropica“ has to be installed at a capable place next to the shower. The water tubing has to be installed according to the following schema. Electrical supply with power plug 230V/AC. Ensure that the nozzles are not blocked by residues that have been in the tubing if you take the unit into operation for the first time!



- Installation only by authorised staff!!!
- Before taking the unit into operation we recommend to flush all the tubings without nozzles to guarantee that no residues will block the nozzles.
- We recommend to install a fine in-line strainer before the shower techniques!
- We recommend to use (softened) water with a low hardness to prevent residues of calcium!

### **3. Taking the unit into operation**

If the whole tubings and the electrical supply are connected the unit is ready for taking it into operation. Put the „Selector switch 1“ on „0“ and switch-on the unit by the main switch on the left side of the controller housing. The main switch shines red and the operation-LED green. Afterwards all functions can be tested like described above (see page 4). Now the single programme functions can be adjusted according the demanded needs.

If you fill the fragrance canister for the first time, air is getting into the pump head. To ensure a reliable function of the pump it has to be aired. For this reason the pump hose has to be pulled off the dosing valve (see picture). This procedure is only necessary if you take the unit into operation.



### **4. Programme flow**

The characteristics of the programmes are describes on page 3. The **3 functions** „Tropical Rain“, „Polar Fog“ and „Side Nozzles“ are started by the user by a push button from the cabinet. If one programme runs the others are locked.

Example:

The operator of the unit sets the time for the Tropical Rain on 30 seconds. If the user in the cabinet presses the according push-button a smooth and warm aromatized rain patters down on him for 30 seconds. After the 30 seocnds the emptying valve opens and the water tubing is emptied to prevent bacterial impact and bad smell due to stagnant water.

## 6. Temperature adjustment

**Cross section**

- ▶ Warm
- ▶ Cold
- ▶ Mix / blend
- ▶ Circulation
- A Thermostat
- B Valve slide
- C Pin

1 Standard temperature  
2 Limits of the blended water setting range

**Function**

The blended water temperature is transmitted to the thermostat A. This compares it with the setpoint value. If the blended water temperature does not correspond to the setpoint value, then a volume change takes place in thermostat A. This leads to the valve slide B being regulated by the pin C until the blended water temperature corresponds to the setpoint value.

Classification of the thermal blending valves 3400 in accordance with their noise characteristics:

GN	½	¾ - 1 ¼
DN	15	20 - 32
Fittings group	I	II

The warm water temperature has to be at least 5 K higher than the blended water temperature.

Standard temperature set by the factory °C	Limits of the blended water setting ranges °C	Change of the blended water temperature with 1 rotation of the key		
		GN ½- 1	GN 1¼-2	DN 65 u. 80
25	20-30			
40	30-45	ca.	ca.	ca.
48	36-53			
55	45-65	8 K	4 K	2 K



## 7. Maintenance

If the unit will be out of operation for a longer period of time we recommend to empty the whole tubing and to switch the unit off by the main switch. If the pressure should fall down immediately the filter inserts in the supply have to be cleaned.

		↓ <u>to be done!</u>	
<b>1. <u>Water part</u></b>	↓		
		↓	
<u>1.1</u>	<u>check solenoid valves in test function</u>	<u>OK</u>	<u>[ ] exchange [ ]</u>
<u>1.2</u>	<u>solenoid valve diaphragms all every two years</u>	<u>OK</u>	<u>[ ] exchange [ ]</u>
<u>1.3</u>	<u>clean pre-filter</u>	<u>OK</u>	<u>[ ] clean [ ]</u>
<u>1.4</u>	<u>filter pressure gauge</u>	<u>OK</u>	<u>[ ] clean [ ]</u>
<u>1.5</u>	<u>check tube cutter</u>	<u>OK</u>	
<u>1.6</u>	<u>check function of thermo mixer</u>	<u>OK</u>	
<b>2. <u>Fragrance pump</u></b>			
<u>2.1</u>	<u>function</u>	<u>OK</u>	<u>[ ] exchange [ ]</u>
<u>2.2</u>	<u>valve inserts of the pump every two years</u>	<u>OK</u>	<u>[ ] exchange [ ]</u>
<u>2.3</u>	<u>diaphragms of the pump every two years</u>	<u>OK</u>	<u>[ ] exchange [ ]</u>
<u>2.4</u>	<u>function of the dosing valve 3/8"</u>	<u>OK</u>	<u>[ ] clean [ ]</u>
<u>2.5</u>	<u>check dosing tubes</u>	<u>OK</u>	<u>[ ] exchange [ ]</u>
<u>2.6</u>	<u>function empty switch</u>	<u>OK</u>	<u>[ ] exchange [ ]</u>
<b>3. <u>Nozzles</u></b>			
<u>3.1</u>	<u>spraying pattern in test function</u>	<u>OK</u>	<u>[ ] clean [ ]</u>
<u>3.2</u>	<u>view of the nozzles</u>	<u>OK</u>	<u>[ ] clean [ ]</u>
<b>4. <u>Controller</u></b>			
<u>4.1</u>	<u>Test all functions</u>	<u>OK</u>	<u>[ ]</u>
<u>4.2</u>	<u>All knobs present?</u>	<u>OK</u>	<u>[ ]</u>
<b>4. <u>Miscellaneous</u></b>			
<u>4.1</u>	<u>Clean the whole unit</u>		<u>[ ]</u>

**8. Spare part list**

13080	fragrance pump MPD complete
10726	diaphragm EH0066
19723	pump head ES-B11 complete
12836	pump head without valves
10433	dosing tube PTFE 6 x 1
10432	dosing tube PTFE 4x1mm
10424	ball valve G 3/4" i-a, PN25
12887	filter Ms 3/4"
15955	thermo mixer 3/4"JRG
14871	tube cutter 1/2"
14761	solenoid valve Ms 3/4"
14680	solenoid valve Ms 1/2" M24K
15108	dosing valve 3/8" VA
13082	plug for solenoid valve 230VAC LED 1,5m
15967	controller ED-SeD complete
10959	hosuing 240/160/90
14840	control board ED-V2-11x230V
12985	rotary knob 6mm



## 9. Wiring diagramme

