

Local add on manual

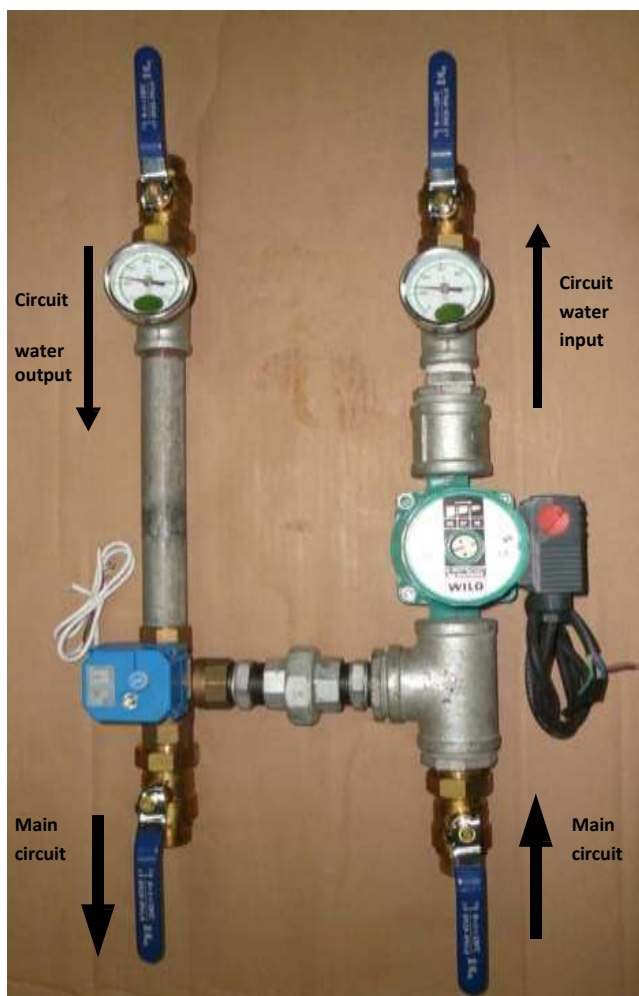
**Two-way Mixing Group
Working Principle**

Code No. 87-19-9529

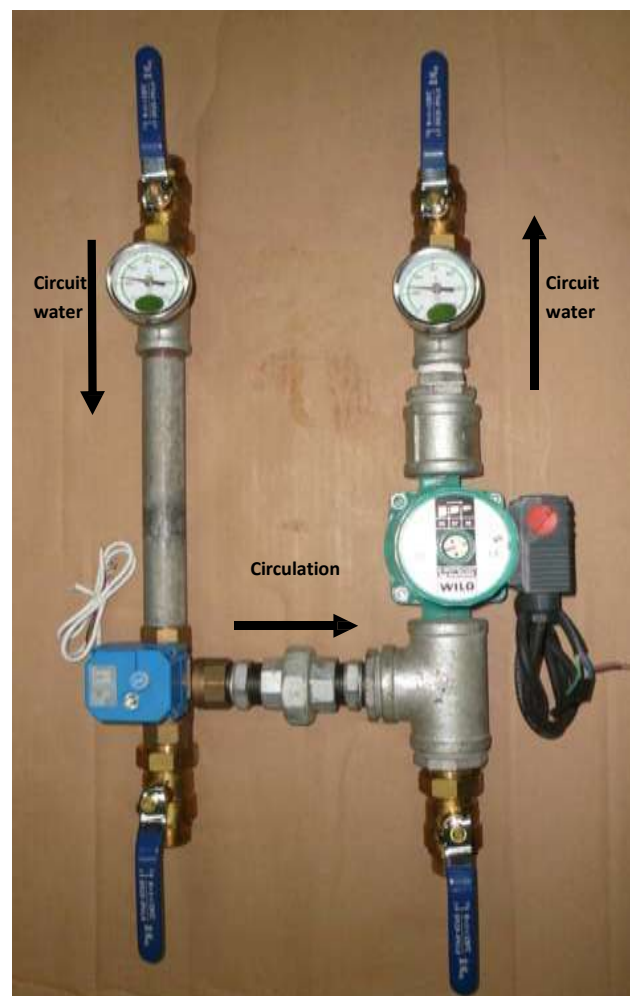
Edition: 10/2012 EN

Working Principle of Two-way Mixing Group

1. When the indoor temperature is lower than the set temperature, the control line of the micro electric actuator is power on (220V). Then the micro electric actuator switch on the heating circuit and the flow direction of warm water is shown as picture 1.
2. When the indoor temperature rises above the set temperature, the control line of the micro electric actuator is power off. The electric actuator will switch on the circulation circuit and switch off the heating circuit. Then the warm water flows in the indoor circulation, see picture 2.



Pic.1

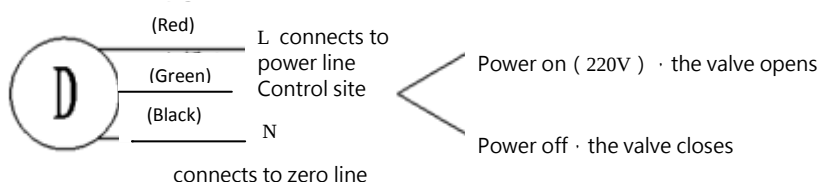


Pic.2

BD3DN25 Micro Electric Actuator Instructions

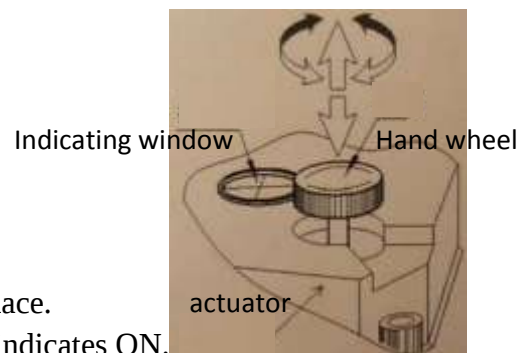
1. BD3DN25 micro electric actuator (3 leads) wiring instructions :

- z working voltage 220V
- z 3-leads control
 - black : connects to zero line N
 - red : connects to power line L
 - green : connects to control line (thermostat or computer 220V heating supply output)
 - when the control line is power on (220V) · an electric valve opens the heat supply circuit
 - when the control line is power off, the electric valve closes the heat supply circuit



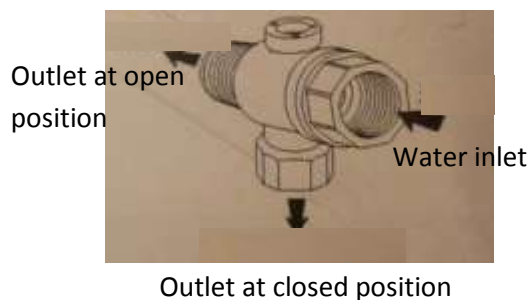
2. Manual Function :

- z The manual function shall only be used while power off.
- z The valve ball is 2-direction turnable.
- z Lift the hand wheel, turn left or right until the valve is in place.
- z As to the indicating window, vertical indicates OFF, level indicates ON.
- z The hand wheel shall be pressed down after the manual control to ensure its normal function while electrically operated.



3. Note :

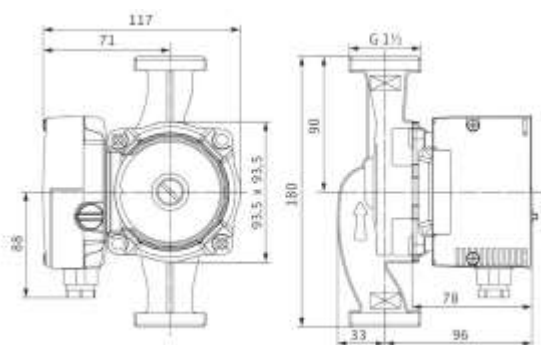
- z Always obey the wiring diagram, and pay attention to the working voltage.
- z If the water quality is not good, the filter shall be installed to prevent the foreign matters in the water damaging the sealing material.
- z As to the standards IP67, do not impose the installation under over-moist or water soaking occasions.
- z flow direction of the medium · see the picture below.
- z When the valve is completely open or closed, the power supply of the valve's inner motor will be automatically cut off.



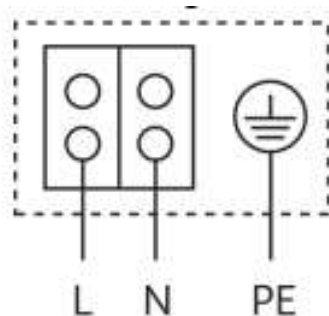
4. Technical Data Sheet

Code No. : 87-00-0326			
Description: 2-way mixing group 1.5" up to 30/40 kw			
Specified fluid (other fluids on request)	Heating water (in accordance with VDI		.
	Max. ambient temperature	T	40°C
Permitted field of application	Maximum permissible operating pressure	P _{max}	10bar
Pipe connections	Threaded pipe union		Rp 1
	Thread		G 1½
	Overall length	L0	180mm
Motor/electronics	Protection class		IP 42
	Insulation class		F
	Mains connection		1~230V , 50Hz
	Rotate speed	n	1250-2800rpm
	Power consumption	P ₁	30-72 W
	Current consumption	I	0.14-0.31A
	Motor protection		Not required (blocking-current protection)

5. Dimension drawing



6. Terminal connection diagram



Blocking current-proof motor

Single-phase motor (EM) 2pole 1~230 V, 50 Hz

With built-in capacitor