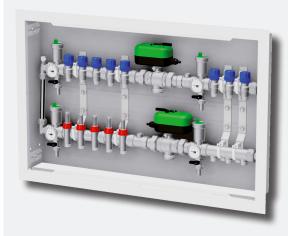


# PRE-ASSEMBLED UNIT FOR MIXED HEATING AND COOLING SYSTEMS

# ART.3572



Pre-assembled unit for heating and cooling systems, to distribute flow to fan coils or to floor, wall and ceiling, in case of underfloor heating systems, complete with:

- Metal inspection box, with painted steel frame and cover
- 3-way zone valve with 230V actuator, 40s opening time
- Main connection with 2-piece fitting, 1"M

#### UNDERFLOOR HEATING SYSTEMS SIDE

- Supply manifold with interchangeable connections for copper, plastic and multilayer pipes, with 0-5 l/min flowmeters
- Return manifold with interchangeable connections for copper, plastic and multilayer pipes, with balancing lockshield valves
- Temperature gauge for supply and return, by-pass kit
- · Automatic air vent valves, filling/ drain cocks

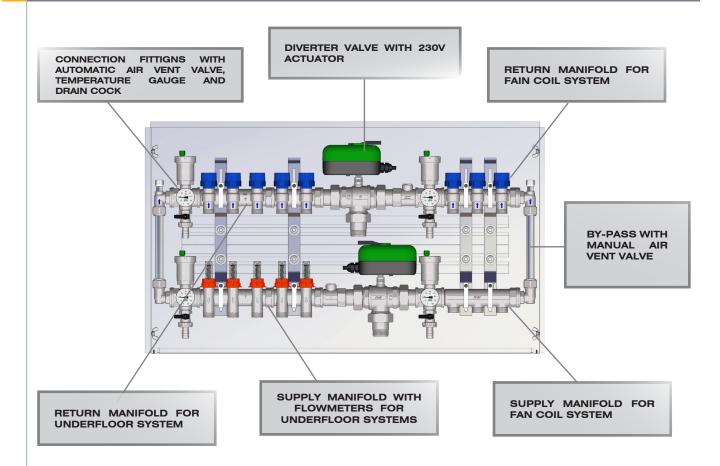
#### **FAN COIL SYSTEMS SIDE**

- Supply manifold with interchangeable connections for copper, plastic and multilayer pipes
- Return manifold with interchangeable connections for copper, plastic and multilayer pipes, with balancing lockshield valves
- Temperature gauge for supply and return, by-pass kit
- · Automatic air vent valves, filling/ drain cocks

#### 1 DESCRITPION

The pre-assembled unit for mixed systems (hot/cold) is composed of two groups of manifolds (manifold for underfloor system and manifold for fan coil system), divided by two diverter zone valves that control the passage of water according to the system requirements. In winter configuration, the system is heated through the radiant floor, while in summer configuration the system provides cooling through fan coils.

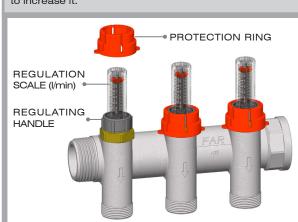
## 2 CONSTRUCTION DETAILS





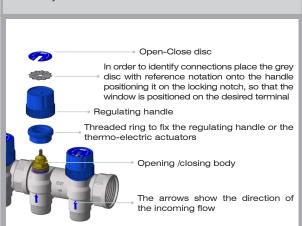
#### MANIFOLDS WITH BALANCING FLOWMETERS

To complete open and then balance the flowmeters, remove the anti-tampering device and turn the regulating valve clockwise to decrease the flow, or counterclockwise to increase it.



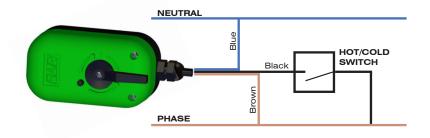
#### **RETURN MANIFOLDS**

On the return manifolds it is possible to install the thermoelectric actuators, for the outlets opening and closing control by means of a thermostat or control unit.



#### **DIVERTER VALVE**

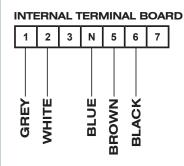
## 3-WIRING CONNECTIONS - hot/cold switch



The brown wire must be connected directly to phase, the blue to neutral and the black to the hot/cold switch.



For proper operation it is essential that the brown cable is always live



N°	COLOUR	CONNECTION	DESCRIPTION			
1	Grey Microswitch common contact		Connected to the common contact of the micro.			
2	White	White N.O. of the microswitch Connected to the normally open contact of				
3	- Signal indicator  Blue Neutral		With open valve presence of phase on terminal			
N			Connection to the neutral of system			
5	Brown	Phase	Connection to the phase of system			
6	Black	Open	With phase on the black the valve feeds the cooling system			
8	Black	Closed	In absence of phase on the black, the valve feeds the heating system			
7	-	Signal indicator	With close valve presence of phase on terminal			



To use the manual release simply press the release key and rotate the level, as indicated in the illustration.

#### TECHNICAL FEATURES

• Connection cable length: 1 mt

Rotation angle: 90°Voltage: 50Hz

Protection degree: IP54
Working temperature: from -10°C to +50°C



#### ACCESSORIES

#### **THERMO-ELECTRIC ACTUATORS**

The function of the thermo-electric actuators is the automatic opening and closing of all units to which it is interconnected in response to an electrical signal. When the thermostat or control unit - to which the thermoelectric actuator is connected - transmits a signal, the inner element is electrically heated, thus fully opening (NO) or closing (NC) the valve.

- If the actuator is of the Normally Closed (NC) type, without an electrical supply the valve will remain shut.
- If the actuator is of the Normally Open (NO) type, without an electrical supply the valve will remain open.



ART.	VOLTAGE	TYPE	TIME	
1909	24V	N.C.	180 s	
1919	230V	N.C.	180 s	
1929	24V	N.O.	180 s	
1939	230V	N.O.	180 s	



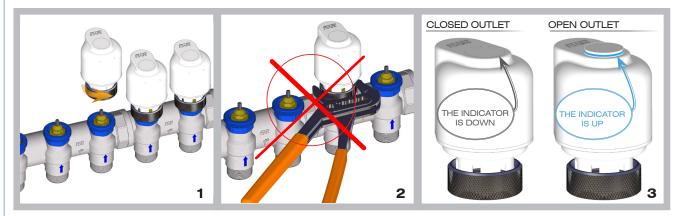
#### 4 wired thermos-electric actuator with auxiliary micro-switch

ART.	VOLTAGE	TYPE	TIME
1913	24V	N.C.	90 s
1914	230V	N.C.	180 s
1923	24V	N.C.	90 s
1924	230V	N.C.	180 s

No adapter is required to install the actuator. Simply unscrew the blue handle from the manifold and then screw the actuator on the ring (Fig.1).

The actuator must be lightly hand-tightened. Do not use any wrenches, which could damage the actuator itself (Fig.2).

Open and closed positions can be easily established with the aid of a blue strip located on the indicator (Fig.3).

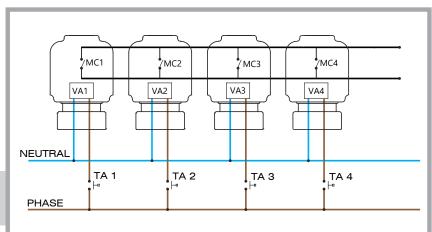


The illustration shows an example of installation for connection of some 4-wired thermo-electric actuators equipped with auxiliary micro-switch.

The 2-wired thermo-electric actuators (Art.1909-1919-1929-1939) are not equipped with the 2 black wires of the auxiliary micro-switch.

> VA thermo-electric actuator MC micro-switch inside actuator

TA room thermostat



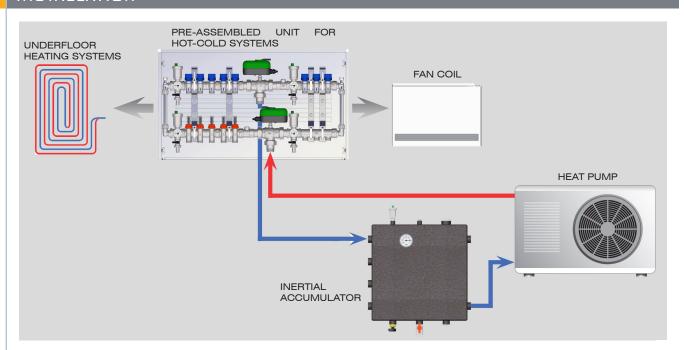
For further information about thermo-electric actuators view the technical sheet ST.04.05







# INSTALLATION



# 5 DIMENSIONAL FEATURES

# B C C Ø2 Ø1 Ø1 ART. 3572

CODICE	DEV. P.	DEV. F.	Ø1	Ø2	Α	В	С
3572 10502	5	2	1"	24x19	450	800	110
3572 10602	6	2	1"	24x19	450	800	110
3572 10702	7	2	1"	24x19	450	1000	110
3572 10802	8	2	1"	24x19	450	1000	110
3572 10902	9	2	1"	24x19	450	1000	110
3572 11002	10	2	1"	24x19	450	1000	110
3572 11102	11	2	1"	24x19	450	1200	110
3572 10503	5	3	1"	24x19	450	800	110
3572 10603	6	3	1"	24x19	450	1000	110
3572 10703	7	3	1"	24x19	450	1000	110
3572 10803	8	3	1"	24x19	450	1000	110
3572 10903	9	3	1"	24x19	450	1000	110
3572 11003	10	3	1"	24x19	450	1200	110
3572 11103	11	3	1"	24x19	450	1200	110
3572 10604	6	4	1"	24x19	450	1000	110
3572 10704	7	4	1"	24x19	450	1000	110
3572 10804	8	4	1"	24x19	450	1000	110
3572 10904	9	4	1"	24x19	450	1200	110
3572 11004	10	4	1"	24x19	450	1200	110
3572 11104	11	4	1"	24x19	450	1200	110
3572 10805	8	5	1"	24x19	450	1200	110
3572 10905	9	5	1"	24x19	450	1200	110
3572 11005	10	5	1"	24x19	450	1200	110
3572 11105	11	5	1"	24x19	450	1200	110

# 6 TECHNICAL FEATURES

Flow temperature: from -10°C to +70°C

Max working pressure: 6 bar

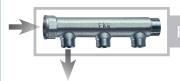
Compatible fluids: water, water with glycole



 $Kv = 2,74 \text{ m}^3/\text{h}$ 



 $Kv = 1,13 \text{ m}^3/\text{h}$ 



 $V = 5.5 \text{ m}^3/\text{n}$ 

