

MOD. POWER SUPPLY

RT 222 230 V~

APPLICATION AND USE

Controller for air-conditioning systems with two-pipes fan coils. The temperature control is performed by step-driving the fan speed and by controlling the opening/closing of the on/off valve on the heating/cooling battery.

OPERATION

The controller can be preset to operate with fan-coils with 2 or 3 speeds fan. It can drive valves both NO and NC. It features a summer compensation input for automatic change of set point. Set point value adjustment is done through an external potentiometer RM 222. Also heating/cooling changeover can be removed.

Operating conditions

2 SPEEDS FAN COIL

SET POINT	Increase °C	Cooling	FAN SPEED	FLOW DIRECTION
			Max	VD
Decrease °C			Min	VD
			Min	VA
			Stop	VD
			Min	VD
			Max	VD

3 SPEEDS FAN COIL

SET POINT	Increase °C	Cooling	FAN SPEED	FLOW DIRECTION
			Max	VD
Decrease °C			Med	VD
			Min	VA
			Min	VD
			Med	VD
			Max	VD

VD Flow through the coil
VA Bypass flow



CONSTRUCTION CHARACTERISTICS

The PC Board is encased in a shockproof thermoplastic box which makes possible to install it inside the fan coil on a normalised track.

TECHNICAL CHARACTERISTICS

Power supply	230 V ~ ±10%
Protection	two fuses (2A)
Consumption	5 VA
Frequency	50/60 Hz
Set point range	5T35°C (through selector)
Dead zone between 2 steps	0.4 K
Step differential	0.3 K
Compensation signal	0.5 V/°C beginning from 7,5V
Temperature	
Operating temperature	T50
Storage temper.	-25T65
Terminal board	with screw for wires 2.5 mm ² max.
Outputs for fan control	contacts 3(1) A 230 V~
Outputs for valve control	SPDT 3(1)A 230 V~ Microdisconnection type 1B according to IEC 730-1(93)/6.4.3.2
Protection degree	IP20 For normally polluted environment according to IEC 730-1(93)/6.5.3
Protection class	II (CEI 107-10)

The product is in compliance with EMC 89/336 according to directives: for emission EN 50081-1 for immunity EN50082-1

POSSIBLE COMBINATIONS AND CONNECTIONS

The controller is to be used with the following Controlli products:

- Return air sensor STR71
- remote adjustment RM222
- valves for terminal units VSZ, VMZ, VTZ with actuator mod. MVA2
- compensation module WT755 + sensor SBE

To replace the sensor STR71 and the remote adjustment RM222 the room sensor with remote set point ST-A42 can be used.

The controller can be connected to any type of valve and actuators corresponding to what indicated in the paragraph "TECHNICAL CHARACTERISTICS".

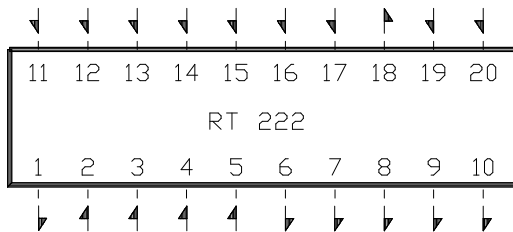
INSTALLATION

RT222 controller is designed for quick plug-in assembly on a 35x27x7,5 track.

The connections are to be in compliance with existing directives.

To operate with 2 speeds fan put a jumper between terminals 11 and 12, do not connect terminal 10. To operate with 3 speeds fan put a jumper between terminals 11 and 12.

TERMINAL BOARD

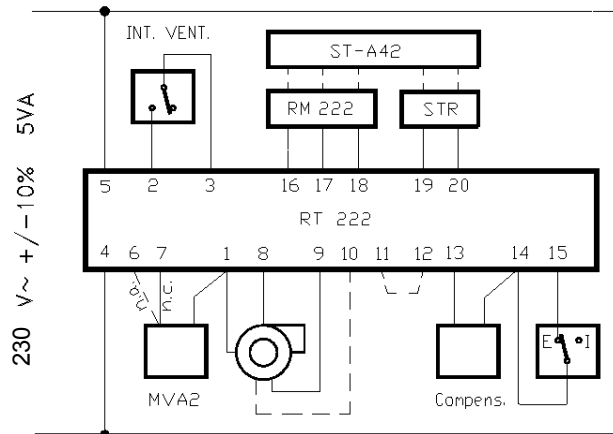


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LEGEND

1	Common	
2		FAN COIL SWITCH
3		
4		230 V ~ ± 10
5		
6	NO valve control	
7	NC valve control	
8	Max speed	FAN CONTROL
9	Med speed	
10	Min speed	
11	Input	2 TO 3 SPEEDS CHANGE
12	Input	
13	Compensation signal	
14	Common	
15	Heating/Cooling Changeover input	
16	Common	RM 222
17	Control input	
18	Power supply	
19	Signal	SENSOR STR 71
20	Common	

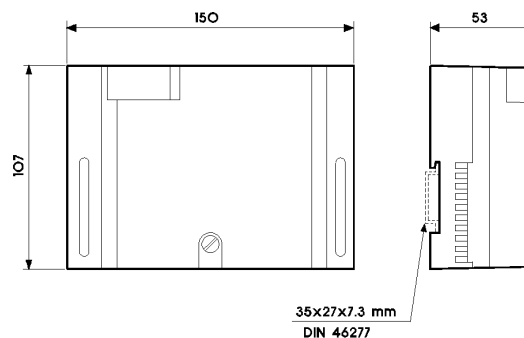
EXTERNAL CONNECTIONS DIAGRAM



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Note: n.a. and n.c. indicate respectively valves normally open and normally closed with reference to the straight way

OVERALL DIMENSIONS (mm)



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The performances stated on this sheet can be modified without any prior notice due to design improvement.