



- Regulators with LED display, 3 digits, 7 segments and decimal point with relay intervention signalling LED
- Display range: 0 ÷ +100 RH
- Display resolution: 0.1 RH
- Precision: ± 0.5% of the full scale value ± 1 digit
- Parameter setting with digital mode:
  - Set-point
  - Differential
  - Neutral zone
  - Output triggering timing
  - Digital input delay time and function
  - Alarm delay time / Buzzer enabling
  - Probe gauging OFFSET
  - Resolution displayed
  - Measurement display filter (updating speed)
  - Probe input type
  - Password

#### Operating modes (regulation):

- Direct and/or Reverse ON/OFF action with or without Neutral Zone
- Direct, Reverse PWM action with or without Neutral Zone
- ALARMS
- 2 independent set-points
- Digital input: 1 (excluding versions HR-..P7A) with configurable function: external alarm, ON/OFF regulator, Set-point switching, Direct/Reverse switching
- Visual and acoustic alarm signalling for: external alarm (from digital input), probe alarm (fault), minimum or maximum alarm
- Infrared receiver with RC-5 protocol for remote control unit (accessory available separately for remote programming)

## TECHNICAL INFORMATION

### GENERAL CHARACTERISTICS

Model		HR - P7A	HR - P3A	HR - P3D	HR - ..DA
Dimensions		Rear-panel 72x72 mm	Rear-panel 33x75 mm	Rear-panel 33x75 mm	4 DIN Modular
Power supply voltage in AC	A 50/60 Hz V	24 / 230	100 ÷ 230	12 ÷ 24	24 / 230
Power supply voltage in DC	V		140 ÷ 300	12 ÷ 24	
Power supply voltage tolerance	%	± 10	± 15	± 10	± 10
Power consumption	VA	4.5	3	3	4.5
Relay outputs (change-over contact) capacity	at 250 V AC1 A	8	8	8	8
maximum breakaway starting current	A	10	10	10	10
maximum switchable power in AC	VA	2000	2000	2000	2000
maximum switchable resistive load	at 230 V W	1760	1760	1760	1760
single-phase motor capacity	HP	1/4	1/4	1/4	1/4
maximum switchable voltage	V	250	250	250	250
Precision	at ambient temperature = 23 °C	± 0.5% of the full scale value ± 1 digit	± 0.5% of the full scale value ± 1 digit	± 0.5% of the full scale value ± 1 digit	± 0.5% of the full scale value ± 1 digit
Display range		0 ÷ 100 RH	0 ÷ 100 RH	0 ÷ 100 RH	0 ÷ 100 RH
Display resolution		0.1 RH (0 ÷ +99.9) 1 RH (<-9.9 and > +99.9)	0.1 RH (0 ÷ +99.9) 1 RH (<-9.9 and > +99.9)	0.1 RH (0 ÷ +99.9) 1 RH (<-9.9 and > +99.9)	0.1 RH (0 ÷ +99.9) 1 RH (<-9.9 and > +99.9)



## HEAT REGULATION

### TECHNICAL INFORMATION

#### GENERAL CHARACTERISTICS

Model		HR - P7A	HR - P3A	HR - P3D	HR - ..DA
Sampling time	s	0.5	0.5	0.5	0.5
Front protection degree		IP54	IP54	IP54	IP40
Terminal protection degree		IP20	IP20	IP20	IP20
Display		3 digits LED 7 segments and dec. point	3 digits LED 7 segments and dec. point	3 digits LED 7 segments and dec. point	3 digits LED 7 segments and dec. point
Active probe power supply	in DC V	9 (max 30 mA)	9 (max 30 mA)	9 (max 30 mA)	9 (max 30 mA)
Probe alarm signalling buzzer		■	■	■	■
Infrared receiver for remote control unit		■	■	■	■
Digital input			■	■	■
Operating temperature	°C	0 ÷ +50	0 ÷ +50	0 ÷ +50	0 ÷ +50
Operating humidity	RH	< 80%	< 80%	< 80%	< 80%
Storage temperature	°C	-10 ÷ +70	-10 ÷ +70	-10 ÷ +70	-10 ÷ +70

#### REFERENCE STANDARDS

Compliance with Community Directives: 73/23/EEC mod. from 93/68/EEC (Low Voltage) 89/336/EEC mod. from 92/31/EEC and 93/68/EEC (E.M.C.) is declared with reference to the following standards: • For safety: EN 60730-2-9 • For E.M. compatibility: EN 55014-1 / EN 55014-2 / EN 61000-6-2 / EN 61000-6-4

- Connectable probes:
  - Linear sensors (0-20 mA, 4-20 mA, 0-1 V)



To complement the product the suitable probes must be ordered separately.



## DIGITAL HUMIDITY REGULATORS

Code	Model	Version	Power supply	no. of relays
VM646700	HR-1P7A	Rear-panel 72x72 *	24/230 V AC	1
VM647500	HR-2P7A	Rear-panel 72x72 *	24/230 V AC	2
VM653300	HR-1P3D	Rear-panel 33x75	12 ÷ 24 V AC/DC	1
VM654100	HR-1P3A	Rear-panel 33x75	100 ÷ 230 V AC 140 ÷ 300 V DC	1
VM655800	HR-2P3D	Rear-panel 33x75	12 ÷ 24 V AC/DC	2
VM661600	HR-1DA	4 DIN Modular	24/230 V AC	1
VM662400	HR-2DA	4 DIN Modular	24/230 V AC	2

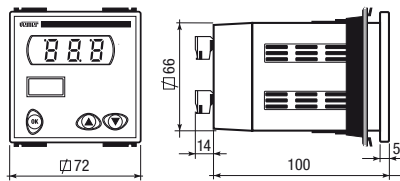
\* This version does not have a digital input

## DIMENSIONS (mm)

## CONNECTION DIAGRAM

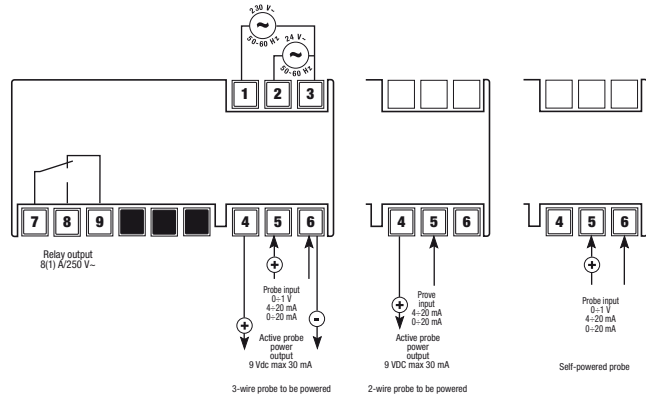
### Front view / Side view

HR-1P7A  
HR-2P7A

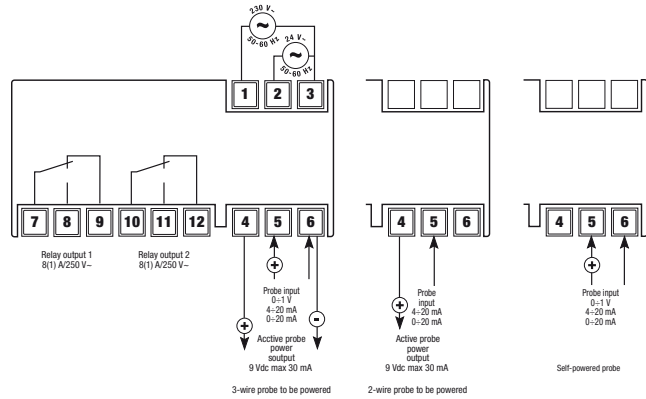


### Diagram

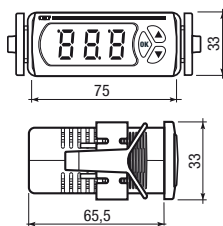
HR-1P7A



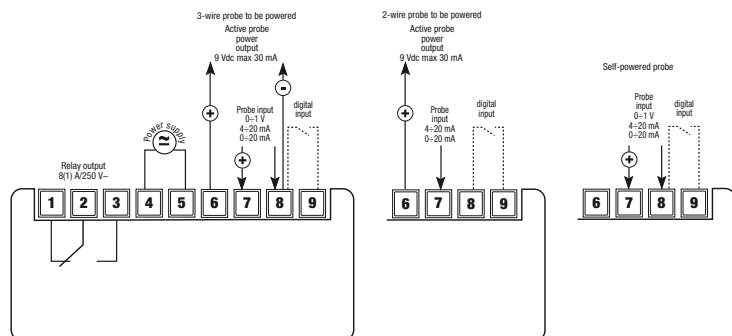
HR-2P7A



HR-1P3D



HR-1P3D

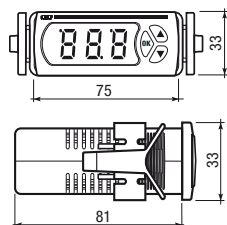


## DIMENSIONS (mm)

## CONNECTION DIAGRAM

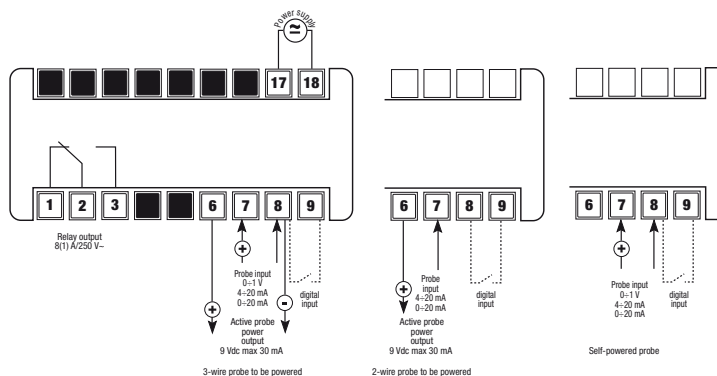
### Front view / Side view

HR-1P3A  
HR-2P3D

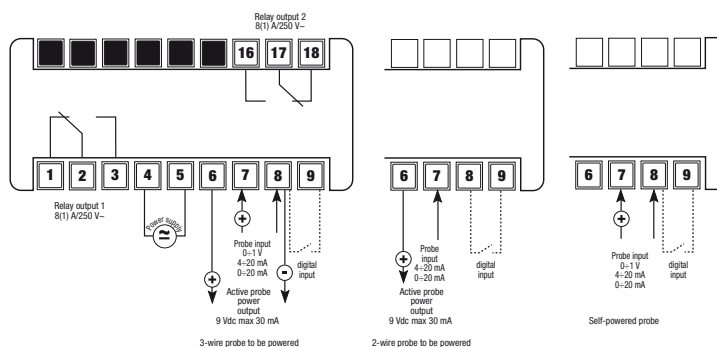


### Diagram

HR-1P3A



HR-2P3D

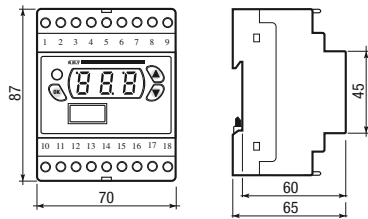


## DIMENSIONS (mm)

## CONNECTION DIAGRAM

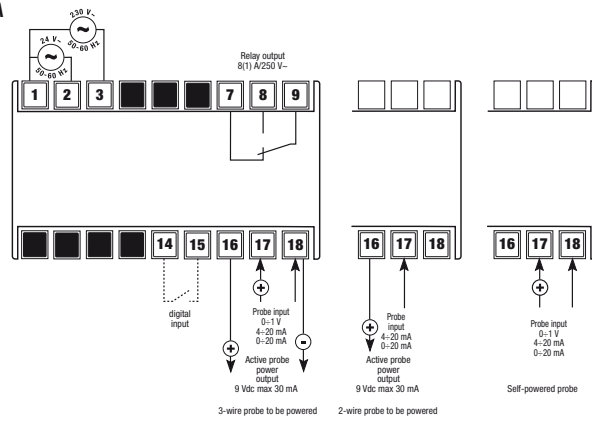
### Front view / Side view

HR-1DA  
HR-2DA



### Diagram

HR-1DA



HR-2DA

