

# VR SERIES

## VAV SMART ACTUATOR HMI

### Room Unit For VA Series Smart Actuators

## VR SERIES

Swisotec VR series Human Machine Interface, Compact with sensing + Controller + Communication. It has communication port (MODBUS RTU) provide with RJ11 connector. For direct communication with smart VAV actuator.



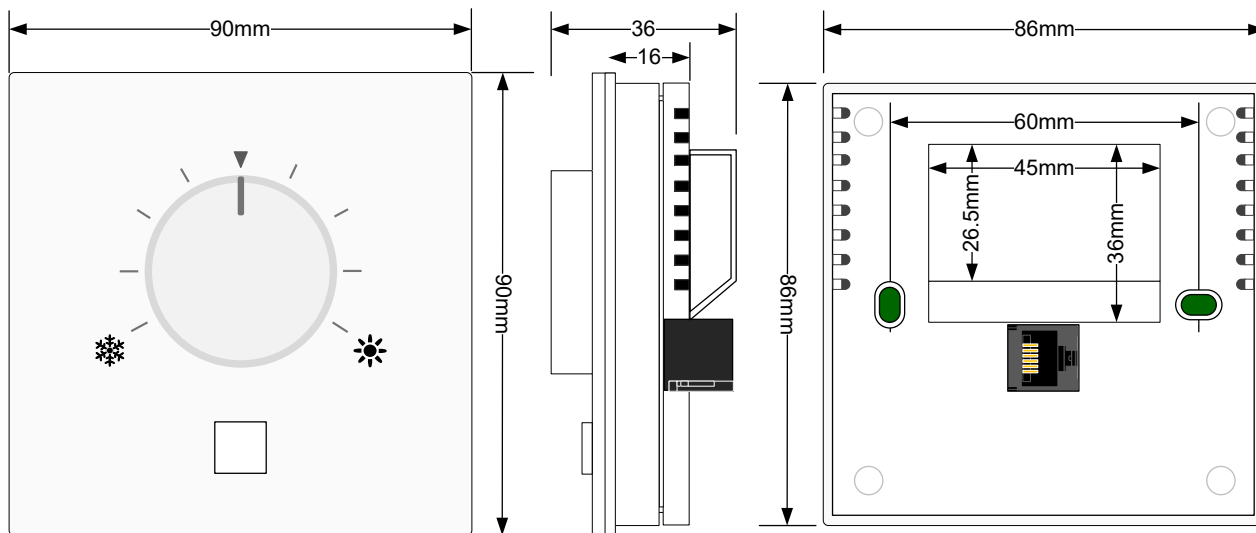
## PRODUCT FEATURE

- 32 bit (MCU) with memory
- Compact with Sensing + Controller + Communication
- MODBUS RTU for Communication
- Built in Temperature (T), Humidity (H), Carbon dioxide (CO2), IAQ sensor
- Auto Background calibration for CO2 sensor
- Background calibration by b-CAL plug for CO2 sensor in local
- High-precision for IAQ sensor
- Dedicated design for smart VAV actuator
- Quickly installation with Pluggable terminal & RJ11 connection

## MODEL SELECTION TABLE

MODEL / TYPE	TEMPERATURE	HUMIDITY	CARBON DIOXIDE	COMMUNICATION	ON/OFF
VR	Yes	-	-	-	Yes
VR-H	Yes	Yes	-	MODBUS RTU	Yes
VR-IAQ	Yes	Yes	Yes	MODBUS RTU	Yes

## DIMENSION (mm)



## TECHNICAL SPECIFICATION

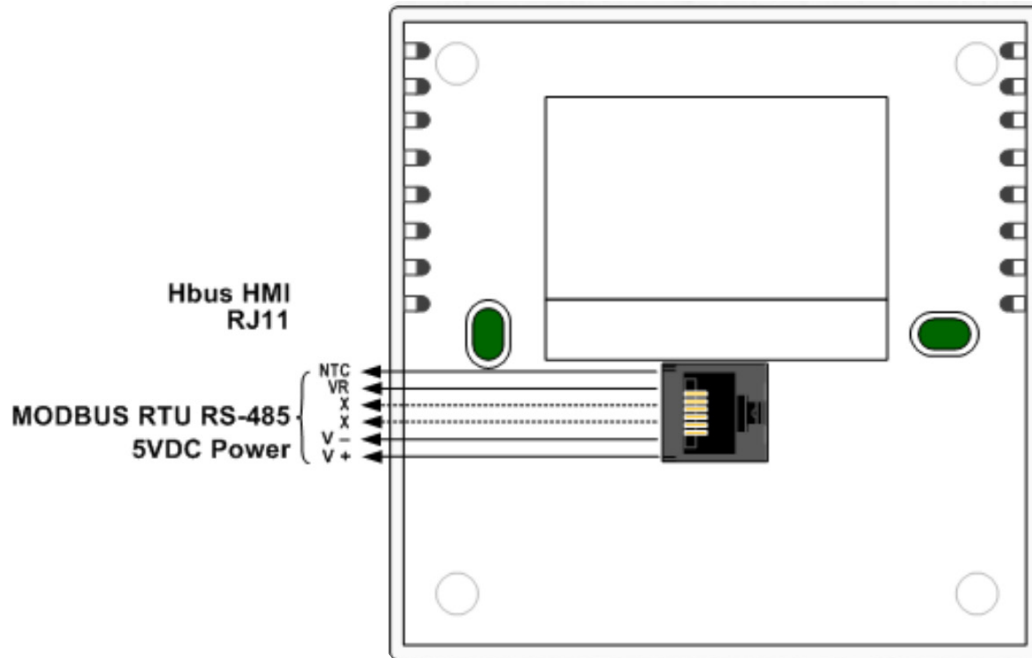
<b>MODEL NUMBER</b>	<b>VR</b>
<b>MCU</b>	32 bit CPU (MCU) with memory
<b>DIMENSION</b>	90mm(W)*90mm(H)*36mm(D)
<b>WEIGHT</b>	
● VR	122 g
● VR-H	122 g
● VR-IAQ	130 g
<b>BUTTON</b>	ON-OFF switch & UP Down setting
<b>COMMUNICATION</b>	MODBUS RTU RS-485 loop, speed to 9600 BPS, 30 m
<b>OPERATING</b>	0°C...50°C, 20...90%RH, non condensing
<b>POWER SUPPLY</b>	12 VDC, 1VA
<b>DISPLAY</b>	61.5*39.6mm LCD with backlight
<b>TEMPERATURE SENSOR</b>	
● VR	10KΩ @25°C (NTC) Thermistor, 0°C...50°C, ±0.3°C
● VR-H	10KΩ @25°C (NTC) Thermistor, 0°C...50°C, ±0.3°C
● VR-IAQ	CMOS, 0°C...50°C, ±0.2°C
<b>HUMIDITY SENSOR</b>	CMOS, 0...100%RH, ±2%RH
<b>CARBON DIOXIDE</b>	Non-dispersive infrared (NDIR), 400...2000ppm, ±30ppm+3% of reading ABC (Automatic Baseline Correction) & bCAL (background calibration)
<b>HOUSING</b>	ABS+PC, IP30
<b>CERTIFICATION</b>	CE(EMC Directive 2004/108/EC)

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### WIRING



### INSTALLATION

- VR series designed for signal connection.
- Use RJ11 dedicated connector, you can use RJ11 dedicated 6-wire cable for wiring.
- Please wire in accordance with the instructions of the junction diagram.
  - First, separate the panel of this product from the base.
  - After fixing the base, insert the RJ11 dedicated 6-wire cable and fasten it, and then cover
  - the panel to complete the installation.