## WALL-MOUNTED HUMICAP® HUMIDITY AND TEMPERATURE TRANSMITTER
### HMW90 SERIES

### DESCRIPTION

The **Wall-Mounted Vaisala HMW90 Series HUMICAP® Humidity and Temperature Transmitters** measure the relative humidity and temperature of indoor environments, where high accuracy, stability, and reliable operation are required. The **HMW90 Series** includes models for both current and voltage output. These flexible transmitters offer a variety of options and features. Transmitters are available with an optional display.  The **HMW90 Series** humidity transmitters are quick and easy to install. The wiring is connected secured to the wall through the back plate and the electronics with the sensors can then be easily snapped on. Dip switches for transmitter configuration can be accessed when the enclosure is open.

**HMW90 Series**

**VAISALA**

CE

### FEATURES

- **Easy installation, configuration and field adjustment**
- **±1.7% accuracy**
- **Optional relay (HMW93 only)**
- **NIST calibration certificate included**
- **Long term stability with HUMICAP® 180R sensor**

### APPLICATION

- **Museums and archive facilities**
- **Production and warehouse**
- **facilities**
- **Data centers**
- **Laboratories**
- **Testing environments**

### SPECIFICATIONS

| | | | |
|---|---|---|---|
| **Accuracy** | ±1.7% RH @ 50° to 104°F (10° to 40°C) from 0 to 90% RH | **Relay Output (93 model only)** | 50 VAC/VDC @ 0.5 A |
| **Stability** | ±0.5% RH/year | **Display** | 4 line w/Temp & Humidity indication |
| **Supply Voltage** | | **Sensing Technology** | HUMICAP® 180R |
| HMW92 | 10 to 28 VDC | **Operating Temperature** | 23° to 131°F (-5° to 55°C) |
| HMW93 | 18 to 35 VDC, 24 VAC ±20%, 50/60 Hz | **Enclosure Rating** | NEMA 1, IP30, UL-V0, ABS/PC |
| **Signal Output** | | **Wiring Terminations** | Screw terminals |
| HMW92 | 4-20 mA @ 700Ω | **Dimensions** | 5.22"H  X 3.19"W X 1.18"D (13.27 X 8.1 X 3.0 cm) |
| HMW93 | 0 to 5/10 VDC (dipswitch selectable) | **Approvals** | CE |
| **Measurement Range** | | **Weight** | 0.34 lb (0.16 Kg) |
| RH | 0 to 100% | **Warranty** | 2 years |
| **Relay Type (93 model only)** | SPST | | |
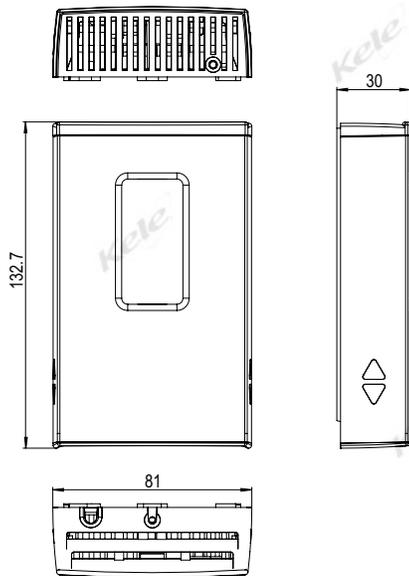
### DIMENSIONS



**HMW90 Series Dimensions**
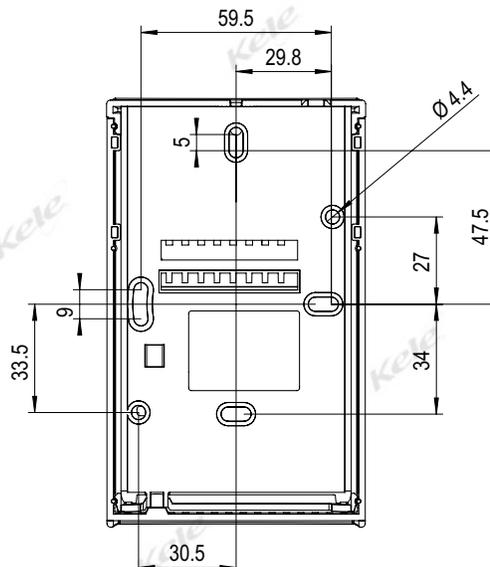


**HMW90 Series Mounting Base Dimensions**

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HUMIDITY

## WIRING

### HMW92 Wiring (2 Power Supplies)



-T  +T  -RH  +RH

mA

+ Power supply
- 10 ... 28 VDC
$R_L = 0 ... 600\ \Omega$

mA

+ Power supply
- 10 ... 28 VDC
$R_L = 0 ... 600\ \Omega$

### HMW92 (Three-wire connection)



-T  +T  -RH  +RH

mA

mA

+ Power supply
- 10 ... 28 VDC
$R_L = 0 ... 600\ \Omega$

### HMW93 Wiring



Relay  -RH  +RH  -T  +T  -Vs  +Vs

max. 50 VDC
500 mA

V    V

+ Power supply
18 ... 35 VDC
- or 24 VAC ±20%
$R_L = 10\ k\Omega$ min.

### HMW93 (Three-wire connection)



Relay  -RH  +RH  -T  +T  -Vs  +Vs

V    V
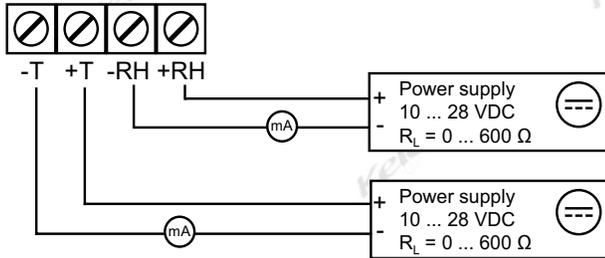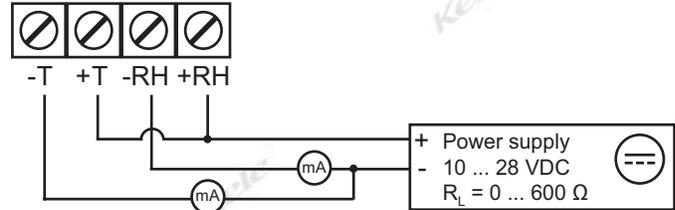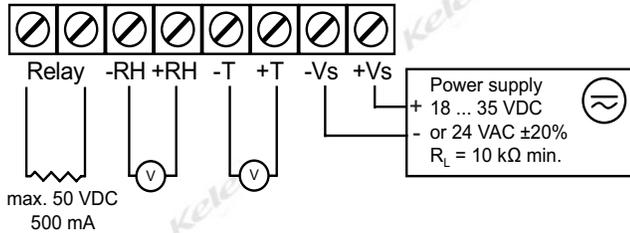
+ Power supply
18 ... 35 VDC
or 24 VAC ±20%
- $R_L = 10\ k\Omega$ min.
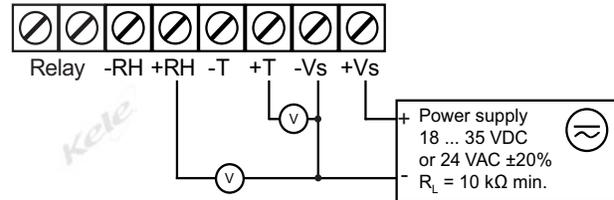
## ORDERING INFORMATION

| MODEL | DESCRIPTION |
|---|---|
| HMW92 | Humidity and Temperature transmitters with two current outputs, w/hidden display |
| HMW92D | Humidity and Temperature transmitters with two current outputs, with visible display |
| HMW93 | Humidity and Temperature transmitters with two voltage outputs, relay, w/hidden display |
| HMW93D | Humidity and Temperature transmitters with two voltage outputs, with visible display, relay |

### RELATED PRODUCTS

| | |
|---|---|
| HTM10 | HMW90 series replacement sensor element |
| DCPA-1.2 | Power supply, 120 VAC IN to 24 VAC/24 VDC OUT |
| 691-K0A | Control transformer, 120:24 VAC, 40 VA, Class 2 |
| DCP-1.5-W | Power supply, 24 VAC IN to 24 VDC OUT |