Surface mounting room sensor for relative humidity
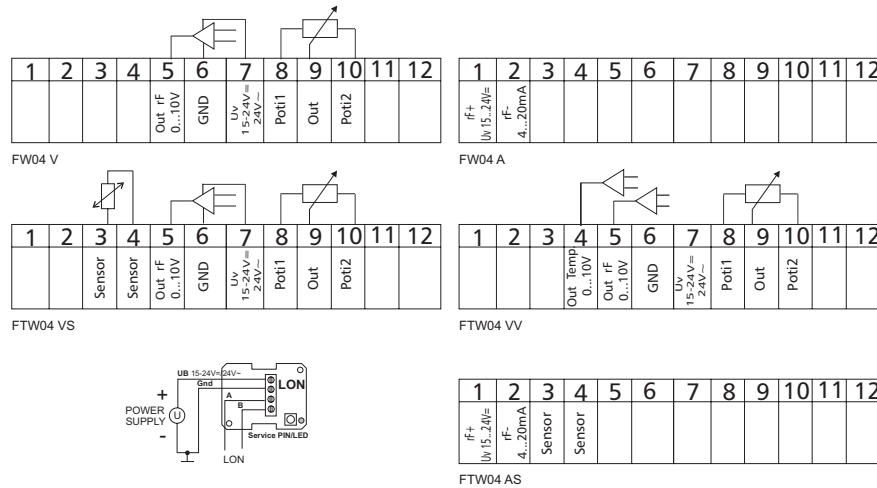### FW04... FTW04...

CYLON

Mounting Advice

For wiring, the housing bottom can be mounted independently of the housing cover. An installation on standard flush boxes is possible. *Please note the general remarks in our INFORMATION SHEET THK.*
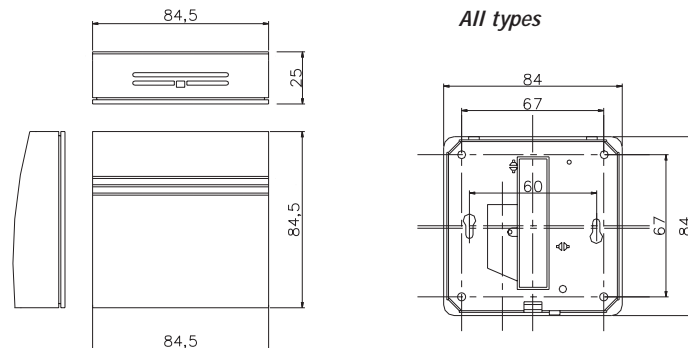
Optional Accessories

(BS100) Ball stroke protection
(D+S) 1 set (each 2 pcs.) raw plugs and scews

Terminal Connection Plan

1	2	3	4	5	6	7	8	9	10	11	12
				Out rF 0...10V	GND	Uv 15-24V= 24V~	Poti1	Out	Poti2		

FW04 V

1	2	3	4	5	6	7	8	9	10	11	12
rF+ Uv 15..24V=	rF- 4...20mA										

FW04 A

1	2	3	4	5	6	7	8	9	10	11	12
	Sensor	Sensor		Out rF 0...10V	GND	Uv 15-24V= 24V~	Poti1	Out	Poti2		

FTW04 VS

1	2	3	4	5	6	7	8	9	10	11	12
		Out Temp 0...10V	Out rF 0...10V	GND	Uv 15-24V= 24V~	Poti1	Out	Poti2			

FTW04 VV

UB 15-24V= 24V~
Gnd
LON
+
A
B
POWER SUPPLY
-
Service PIN/LED
LON

1	2	3	4	5	6	7	8	9	10	11	12
rF+ Uv 15..24V=	rF- 4...20mA	Sensor	Sensor								

FTW04 AS

Dimensions (mm)

84,5
25
84,5
84,5

All types

84
67
60
67
84

FW04/FTW04

Surface mounting room sensor for relative humidity
FW04... FTW04...

CE

Application

Sensor for measuring relative humidity (model FW04, FW04P) respectively for measuring relative humidity and temperature (model FTW04, FTW04P) in rooms, offices etc.. Designed for locking-on control and display systems.

Types Available

Model	Type	Method of measurement (output)
FW04/ FW04P	A	active, 4...20mA
	V	active, 0...10V
	LON	active, FTT10
FTW04/ FTW04P	AS	rel. H.: active, 4...20mA Temp.: passive, resistance
	VS	rel. F.: active, 0...10V Temp.: passive, resistance
	VV	active, 0...10V
	LON	active, FTT10

Norms and Standards

Product safety:	EN60730-1 Automatic electr. control devices for domestic use and similar applications
EMV:	EN60730-1 (2000) Interference resistance
	EN60730-1 (2000) Emitted interference
CE-Conformity:	89/336/EWG Electromagnetic compatibility

Technical Data

Type AS:

Measuring element:	Rel. humidity: capacitive; Temperature: sensor according to customer's request e.g. PTC, NTC...
Measuring range:	Rel. humidity: 5...95% (working range 0...100%)
	Temperature: Depending on sensor used
Accuracy[1]:	Rel. humidity: Typ. +/-2% in the range 35%rF...75%rF
	Temperature: Depending on sensor used e.g. DIN KL.B+
Measuring current:	Temperature: Typ. <1mA
Operating voltage:	15-24V=
Power consumption:	max. 20mA/24V=
Load:	<800 Ohm
Clamps:	Multi-conductor connection, terminal screw max 1,5mm²
Housing:	ABS, colour white similar to RAL9010
Tmax[2]:	<60°C
Protection:	Connection head IP20

Type VS:

Measuring element:	Rel. humidity: capacitive; Temperature: sensor according to customer's request e.g. PTC, NTC...
Measuring range:	Rel.humidity: 5...95% (working range 0...100%)
	Temperature:depending on sensor used
Accuracy[1]:	Rel. humidity: Typ. +/-2% in the range 35%rF...75%rF
	Temperature: depending on sensor used e.g. DIN KL.B+
Measuring current:	Temperature: Typ. <1mA
Operating voltage:	15-24V=/24V~
Power consumption:	max. 6mA/24V=
Load:	min. 10kOhm
Clamps:	Multi-conductor connection, terminal screw max 1,5mm²
Housing:	ABS, colour white similar to RAL9010
Potentiometer P:	Operating element: Potentiometer for setpoint adjustment: 1kOhm/5kOhm/10kOhm, other values on request, Tolerance +/-5%; load:max. 0,25W, 3-wire connection
Tmax[2]:	<60°C
Protection:	Connection head IP20

Type A:

Measuring element:	Rel. humidity: capacitive
Measuring range:	Rel. humidity: 5...95% (working range 0...100%)
Accuracy[1]:	Rel. humidity:Typ. +/-2% in the range 35%rF...75%rF
Operating voltage:	15-24V=
Power consumption:	max. 40mA/24V=
Load:	<800 Ohm
Clamps:	Multi-conductor connection, terminal screw max 1,5mm²
Housing:	ABS, colour white similar to RAL9010
Tmax[2]:	<60°C
Protection:	Connection head IP20

Type V, VV:

Measuring element:	Rel. humidity: capacitive; Temperature (only model FTW04): PTC
Measuring range:	Rel. humidity: 5...95% (working range 0...100%)
	Temperature (only model FTW04): 0°C...+50°C
Accuracy[1]:	Rel.humidity: Typ. +/-2% in the range of 35%rF...75%rF
	Temperature (only model FTW04): Typ. +/-0,3% of measuring range
Operating voltage:	15-24V=/24V~
Power consumption:	max. 12mA/24V=
Load:	min. 5kOhm
Clamps:	Multi-conductor connection, terminal screw max 1,5mm²
Housing:	ABS, colour white similar to RAL9010
Potentiometer P:	Operating element: Potentiometer for setpoint adjustment: 1kOhm/5kOhm/10kOhm, other values on request, Tolerance +/-5%; load:max. 0,25W, 3-wire connection
Tmax[2]:	<60°C
Protection:	Connection head IP20

Type LON:

Measuring element:	Rel. humidity: capacitive; Temperature (only model FTW04): PTC
Measuring range:	Rel. humidity: 5...95% (working range 0...100%)
	Temperature (only model FTW04): 0°C...+50°C
Accuracy[1]:	Rel. humidity: Typ. +/-2% of measuring range 35%rF...75%rF
	Temperature (only model FTW04): Typ. +/-1% of measuring range
Operating voltage:	15-24V=/24V~
Power consumption:	max. 40mA/24V=
Clamps:	4pole (four-wire), terminal screw max 1,5mm²
Housing:	ABS, colour white similar to RAL9010
Tmax[2]:	<60°C
Protection:	Connection head IP20

[1] Operating voltage 24V= and 21°C (+/-5K) ambient temperature. Please take care, that the transducer should generally be operated in the measuring range centre, as increased deviations could occur on the measuring range end points. In addition, the ambient temperature of the transducer electronics should be kept constant.

[2] Maximum permissible ambient temperature housing, humidity (without dew permeation) <80%r.F.