

EE32/33 Series

Humidity / Temperature Transmitter for High Humidity and Chemical Applications

The highly accurate EE32/33 series are designed for fast and reliable measurement of relative humidity / dew point temperature / absolute humidity / ...under the most demanding conditions.

Neither condensation nor heavy chemical pollutions will affect prompt and reliable measurements. Process pressures as high as 100 bar (1450 psi) and continuous high humidity are also no problem for the EE32/33 series.

The core of the EE32/33 series is the new monolithic measurement cell type HMC1, manufactured in thin-film technology by E+E Elektronik.

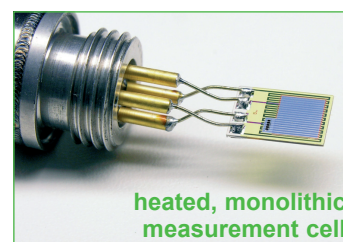
Chemical contamination and also condensation will actually evaporate due to the innovative design of the HMC1 measurement cell. The monolithic construction of the sensor allows a fast return to normal conditions and a continuation of the measurement.

Additionally, with the inimitable E+E sensor coating the HMC1 measurement cell is even better protected against corrosive and short-circuit-causing conductive soils.

Distinctive models and mounting versions allow the EE32/33 series to be utilized in numerous applications:

- **Measurement of relative humidity during temporary condensation:**
the measurement cell is briefly heated, but very intense
- **Measurement of dew point temperature at continuous high humidity (EE33 only):**
the measurement cell is controlled and heated continuously
- **Measurement of relative humidity at continuous high humidity:**
the measurement cell is controlled and heated continuously;
an additional temperature sensor is added
- **Measurement of relative humidity at high chemical exposure and average humidity:**
the measurement cell is briefly heated, but very intense
- **Measurement of relative humidity at process pressure up to 100bar (1450psi) and average humidity:**
the measurement cell is installed in a special high pressure probe

The configuration software included in the scope of supply allows user friendly setup of the operation / sensor heating mode as well as selection and adjustment of the electrical outputs.



Model

- A** - wall mounting
- B** - duct mounting
- C** - remote sensing probe up to 120°C (248°F)
- D** - remote sensing probe up to 180°C (356°F)
- E** - remote sensing probe, pressure tight up to 20bar (300psi)
- I** - remote sensing probe, pressure tight up to 100bar (1450psi)
- J** - 2 remote sensing probes (RH-measurement),
pressure tight up to 20bar (300psi)
- K** - remote sensing probe (Td-measurement)
pressure tight up to 20bar (300psi)

Environmental Conditions

- chemical pollution, temporary condensation
- chemical pollution, temporary condensation
- chemical pollution, temporary condensation
- chemical pollution, temporary condensation
- chemical pollution, temporary condensation
- chemical pollution, temporary condensation
- continuous high humidity and condensation
- continuous high humidity and condensation

Typical Applications

pharmaceutical and food industry
dryers for ceramics, wood, concrete, polyester, etc
mushroom farms
high-humidity storage rooms
climate, test and curing chambers
meteorology

Features

heated, monolithic measurement cell
working range 0...100% RH / -40...+180°C (-40...356°F)
measurement near condensation
fast recovery after condensation
chemical purge after chemical exposure
pressure tight up to 100bar (1450psi)
calculation of additional physical quantities
optional sensor coating
traceable calibration

Product Comparison EE32 - EE33

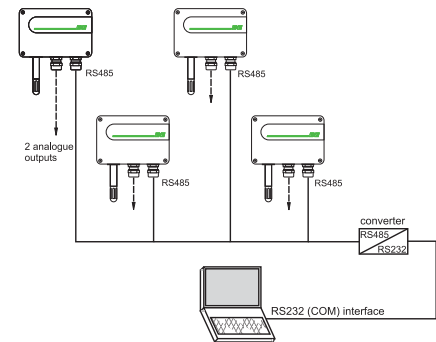
Functions	Comment	EE32	EE33
Measurement of humidity and temperature		✓	✓
Calculation h, r, dv, Tw, Td, Tf, e			✓
2 freely scaleable and configurable analogue outputs		✓	✓
Remote sensing probe up to 20m (65.6ft)		✓	✓
On-site adjustment for relative humidity and temperature		✓	✓
LED indication of transmitter status / error diagnosis of probes		✓	✓
RS232 for transmitter configuration via PC		✓	✓
Configuration software	standard supply	✓	✓
Alternating display with MIN/MAX indication	optional	✓	✓
2 freely configurable alarm outputs	optional	✓	✓
Removeable sensing probe	optional	✓	✓
Sensor protection with coating	optional	✓	✓
Pluggable electrical connections	optional	✓	✓
Data output via RS232 interface			✓
Data output via RS485 interface	optional		✓
Network for up to 32 transmitters via RS485 bus	optional		✓
Ethernet interface for networking and remote monitoring	optional		✓
Data logging and analysis PC software	optional		✓

Networkability / Ethernet Interface

The optional RS485 interface (order code N) allows for building a network of up to 32 transmitters.

The measurement data can be collected in a shared database and made available for all kinds of further processing.

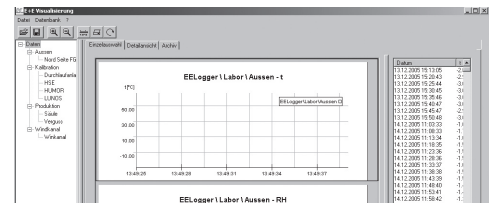
Additionally, the transmitters can be networked with an Ethernet module (order code E) for remote monitoring.



Software

Configuration Software: (included in the scope of supply)

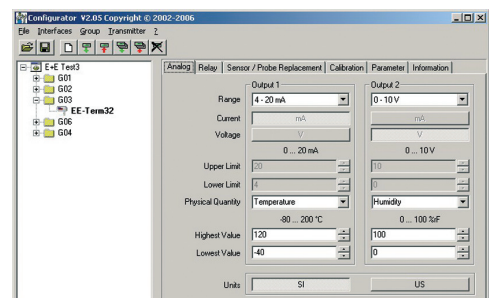
The configuration software allows flexible and simple adjustment of the analogue and alarm outputs in accordance with the requirements. The adjustment / calibration of the humidity and temperature outputs is possible as well. Furthermore the settings of the start and duration of the heating of the measurement cell can be defined.



Data Logging / Analysis Software: (EE33 only ordering code HA010602)

An additional software package enables data recording and management, including alerts by e-mail or text message when set points are triggered.

It is also possible to present the collected measurement data on a PC in graphs or tables. If the option N (RS485) or E (Ethernet) is selected in the ordering code, the data logging and analysis software will be included in the scope of supply.



Integrated Display

The actual measurement data and the corresponding Min/Max values can be indicated in an optional display (order code D05). The physical quantity to be displayed is selected by the push buttons next to the display.



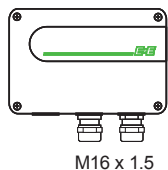
Alarm Outputs

An optional alarm module with 2 relay outputs is available for control and alarm purposes (order code SW). The selection of the physical quantity and the setting of threshold and hysteresis can be made with the configuration software included in the scope of supply.

EE32/33

Connection Versions

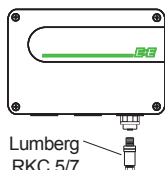
standard



M16 x 1.5

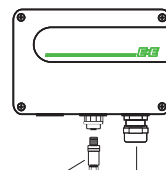
Transmitter: 2xM16
Transmitter incl.
alarm output: 3xM16

plug option C03



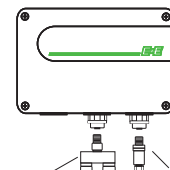
Lumberg
RKC 5/7
power supply+
analogue output

plug option C06



Lumberg
RSC 5/7
M16x1.5
RS232

plug option C08

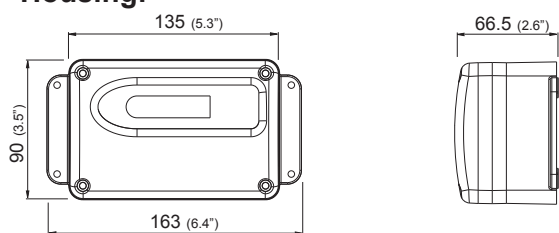


Y-splitter *
Lumberg
RSC 5/7
RS485
network
Lumberg
RKC 5/7
power supply+
analogue output

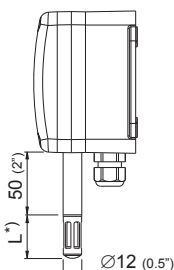
* Siemens 6ES7 194-1KA01-0XA0

Dimensions (mm)

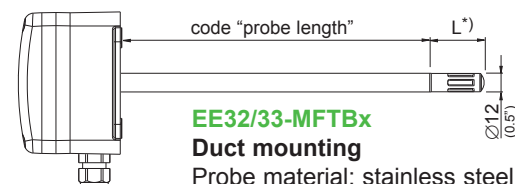
Housing:



Models:

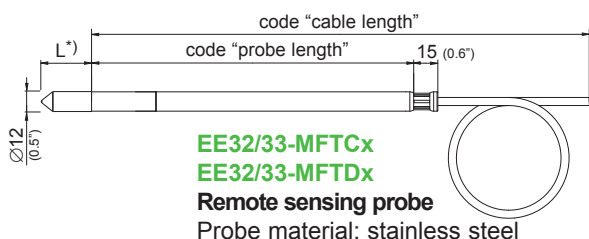


EE32/33-MFTAx
Wall mounting
Probe material: PC



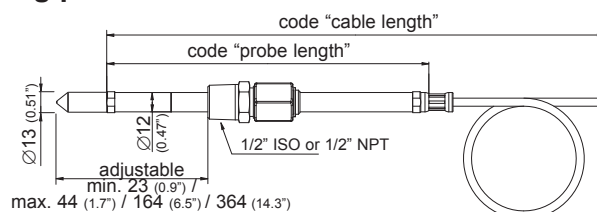
EE32/33-MFTBx
Duct mounting
Probe material: stainless steel

Sensing probes:

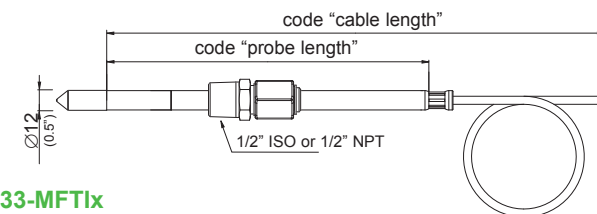


EE32/33-MFTCx
EE32/33-MFTDx
Remote sensing probe
Probe material: stainless steel

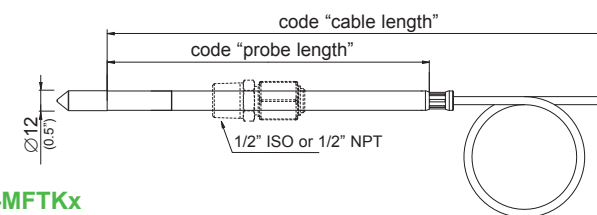
Sensing probes:



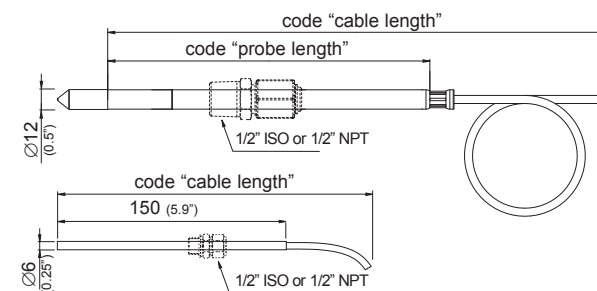
EE32/33-MFTEx
Pressure tight probe up to 20bar (300psi)
Probe material: stainless steel



EE32/33-MFTIx
Pressure tight probe up to 100bar (1450psi)
Probe material: stainless steel



EE33-MFTKx
Remote sensing probe,
pressure tight up to 20bar (300psi)
Probe material: stainless steel
screw connection: order code:
1/2" ISO \varnothing 12mm HA011102
1/2" NPT \varnothing 12mm HA011103



EE32/33-MFTJx
Two remote sensing probes,
pressure tight up to 20bar (300psi)
Probe material: stainless steel
screw connection: order code:
1/2" ISO \varnothing 12mm HA011102
1/2" NPT \varnothing 12mm HA011103
1/2" ISO \varnothing 6mm HA011104
1/2" NPT \varnothing 6mm HA011105

* L = Filter length: refer to data sheet "Accessories" page 138

Technical Data EE33

Measurement values

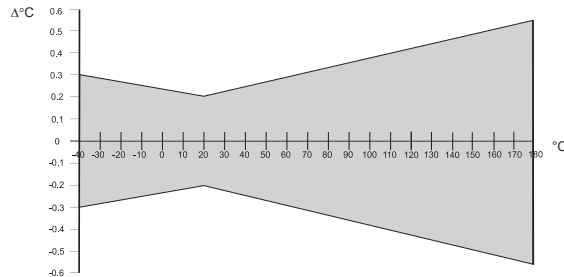
Relative humidity

Humidity sensor ¹⁾	heated, monolithic measurement cell HMC1	
Working range ¹⁾	0...100% RH	
Accuracy ³⁾ (including hysteresis, non-linearity and repeatability, traceable to intern. standards, administrated by NIST, PTB, BEV...)		
-15...40°C (5...104°F) ≤90% RH	± (1.3 + 0.3%*mv) % RH	
-15...40°C (5...104°F) >90% RH	± 2.3% RH	
-25...70°C (-13...158°F)	± (1.4 + 1%*mv) % RH	
-40...180°C (-40...356°F)	± (1.5 + 1.5%*mv) % RH	
Temperature dependence of electronics	typ. ± 0.01% RH/°C (0.0055% RH/°F)	
Response time with metal grid filter at 20°C (68°F) / t ₉₀	< 15s	

Temperature

Temperature sensor element	monolithic measurement cell HMC1	
Working range sensing head	EE33-MFTA: -40...60°C (-40...140°F)	EE33-MFTB: -40...80°C (-40...176°F)
	EE33-MFTC: -40...120°C (-40...248°F)	EE33-MFTD/E//J/K: -40...180°C (-40...356°F)

Accuracy



Temperature dependence of electronics	typ. ± 0.005°C/°C
External temperature probe	Pt1000 (DIN A)

Outputs²⁾

Two freely selectable and scaleable analogue outputs	0 - 1V	-1mA < I _L < 1mA
	0 - 5V	-1mA < I _L < 1mA
	0 - 10V	-1mA < I _L < 1mA
	4 - 20mA	R _L < 500 Ohm
	0 - 20mA	R _L < 500 Ohm
Digital interface	RS232	optional: RS485 or ethernet

Max. adjustable measurement range²⁾³⁾

	from	EE33-A	EE33-B	to	EE33-C	EE33-D/E//J	EE33-K	unit
Humidity	RH	0	100	100	100	100	/	% rF
Temperature	T	-40 (-40)	60 (140)	80 (176)	120 (248)	180 (356)	/	°C (°F)
Dew point temperature	Td	-40 (-40)	60 (140)	80 (176)	100 (212)	100 (212)	100 (212)	°C (°F)
Frost point temperature	Tf	-40 (-40)	0 (32)	0 (32)	0 (32)	0 (32)	0 (32)	°C (°F)
Wet bulb temperature	Tw	0 (32)	60 (140)	80 (176)	100 (212)	100 (212)	/	°C (°F)
Water vapour partial pressure	e	0 (0)	200 (3)	500 (7.5)	1100 (15)	1100 (15)	/	mbar (psi)
Mixture ratio	r	0 (0)	425 (2900)	999 (9999)	999 (9999)	999 (9999)	/	g/kg (gr/lb)
Absolute humidity	dv	0 (0)	150 (60)	300 (120)	700 (300)	700 (300)	/	g/m ³ (gr/ft ³)
Specific enthalpy	h	0 (0)	400 (50000)	1000 (375000)	2800 (999999)	2800 (999999)	/	kJ/kg (lbf/lb)

General

Supply voltage	8...35V DC 12...30V AC (optional 100...240V AC, 50/60Hz)
Current consumption - 2x voltage output - 2x current output	for 24V DC/AC: typ. 40mA / 80mA typ. 80mA / 160mA
Pressure range for pressure tight probe	EE33-MFTEx/Jx/Kx: 0.01...20bar (0.15...300psi) EE33-MFTIx: 0...100bar (0...1450psi)
System requirements for software	WINDOWS 2000 or later; serial interface
Housing / protection class	Al Si 9 Cu 3 / IP65; (Nema 4)
Cable gland	M16 x 1.5 cable Ø 4.5 - 10 mm (0.18 - 0.39")
Electrical connection	screw terminals up to max. 1.5mm ² (AWG 16)
Working and storage temperature range of electronics	-40...60°C (-40...140°F) -20...50°C (-4...122°F) - housing with display
Electromagnetic compatibility according to	EN61326-1 EN61326-2-3 ICES-003 ClassB Industrial Environment FCC Part15 ClassB

1) Refer to the working range of the humidity sensor.

2) Can be easily changed by software.

3) Refer to accuracies of calculated values (page 152)

*) The accuracy statement includes the uncertainty of the factory calibration with an enhancement factor k=2 (2-times standard deviation). The accuracy was calculated in accordance with EA-4/02 and with regard to GUM (Guide to the Expression of Uncertainty in Measurement).

Technical Data EE32

Measurement values

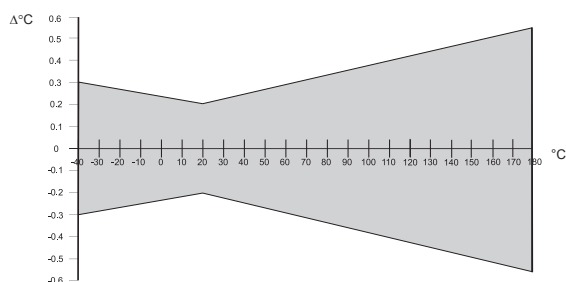
Relative humidity

Humidity sensor ¹⁾	heated, monolithic measurement cell HMC1	
Working range ¹⁾	0...100% RH	
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-15...40°C (5...104°F) ≤90% RH	± (1.3 + 0.3%*mv) % RH	
-15...40°C (5...104°F) >90% RH	± 2.3% RH	
-25...70°C (-13...158°F)	± (1.4 + 1%*mv) % RH	
-40...180°C (-40...356°F)	± (1.5 + 1.5%*mv) % RH	
Temperature dependence of electronics	typ. ± 0.01% RH/°C (0.0055% RH/°F)	
Response time with metal grid filter at 20°C (68°F) / t ₉₀	< 15s	

Temperature

Temperature sensor element	monolithic measurement cell HMC1		
Working range sensing head	EE32-MFTA: -40...60°C (-40...140°F)	EE32-MFTB: -40...80°C (-40...176°F)	EE32-MFTD/E/I/J: -40...180°C (-40...356°F)

Accuracy



Temperature dependence of electronics	typ. ± 0.005°C/°C
External temperature probe	Pt1000 (DIN A)

Outputs²⁾

Two freely selectable and scaleable analogue outputs	0 - 1V	-1mA < I _L < 1mA
	0 - 5V	-1mA < I _L < 1mA
	0 - 10V	-1mA < I _L < 1mA
	4 - 20mA	R _L < 500 Ohm
	0 - 20mA	R _L < 500 Ohm

Max. adjustable measurement range²⁾³⁾

		from			to		unit
Humidity	RH	0	EE32-A 100	EE32-B 100	EE32-C 100	EE32-D/E/I/J 100	% RH
Temperature	T	-40 (-40)	60 (140)	80	120 (248)	180 (356)	°C

General

Supply voltage	8...35V DC 12...30V AC (optional 100...240V AC, 50/60Hz)
Current consumption - 2x voltage output - 2x current output	for 24V DC/AC: typ. 40mA / 80mA typ. 80mA / 160mA
Pressure range for pressure tight probe	EE32-MFTEx/Jx: 0.01...20bar (0.15...300psi) EE32-MFTIx: 0...100bar (0...1450psi)
System requirements for software	WINDOWS 2000 or later; serial interface
Housing / protection class	Al Si 9 Cu 3 / IP65; (Nema 4)
Cable gland	M16 x 1.5 cable Ø 4.5 - 10 mm (0.18 - 0.39")
Electrical connection	screw terminals up to max. 1.5mm ² (AWG 16)
Working and storage temperature range of electronics	-40...60°C (-40...140°F) -20...50°C (-4...122°F) - housing with display
Electromagnetic compatibility according to	EN61326-1 EN61326-2-3 ICES-003 ClassB Industrial Environment FCC Part15 ClassB

1) Refer to the working range of the humidity sensor.

2) Can be easily changed by software.

3) Refer to accuracies of calculated values

*) The accuracy statement includes the uncertainty of the factory calibration with an enhancement factor k=2 (2-times standard deviation). The accuracy was calculated in accordance with EA-4/02 and with regard to GUM (Guide to the Expression of Uncertainty in Measurement).

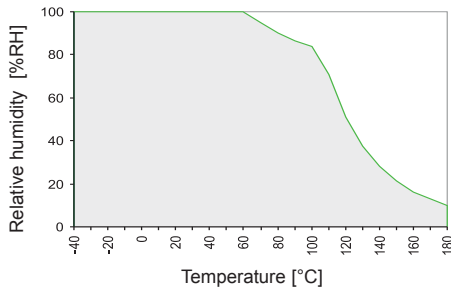
Technical Data for Options

Display graphical LC display (128x32 pixels), with integrated push-buttons for selecting parameters and MIN/MAX function

Alarm outputs 2 x 1 switch contact
 250V AC / 6A
 28V DC / 6A
 threshold + hysteresis: can be adjusted with configuration software
 switching parameters:

freely selectable between	EE32-MFTA/B/D/E//J	EE32-MFTK
RH Relative humidity	✓	
T Temperature	✓	
Td Dew point temperature	✓ (EE33 only)	✓
Tf Frost point temperature	✓ (EE33 only)	✓
Tw Wet bulb temperature	✓ (EE33 only)	
e Water vapour partial pressure	✓ (EE33 only)	
r Mixture ratio	✓ (EE33 only)	
dv Absolute humidity	✓ (EE33 only)	
h Specific enthalpy	✓ (EE33 only)	

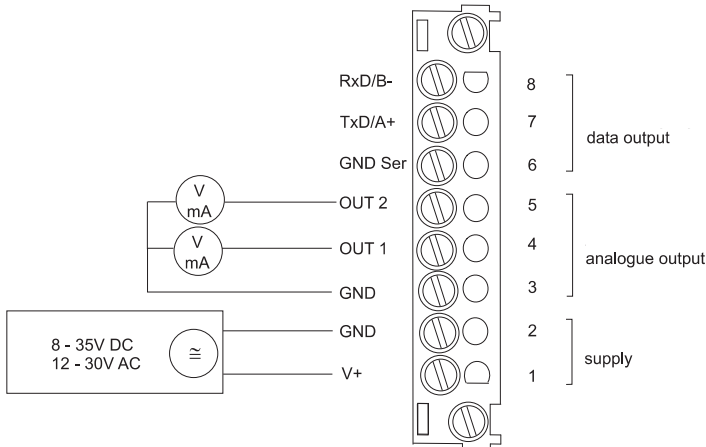
Working Range Humidity Sensor



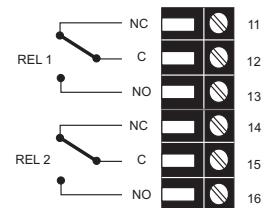
The grey area shows the allowed measurement range for the humidity sensor.

Operating points outside of this range do not lead to destruction of the sensor, but the specified measurement accuracy cannot be guaranteed.

Connection Diagram



Terminal configuration - Alarm output
 (order code SW)



Accessories / Replacement Parts

(For further information, see data sheet "Accessories", page 138)

- | | | | |
|--------------------------------------|------------|------------------------------------|------------|
| - Filter caps | (HA0101xx) | - Drip water protection | (HA010503) |
| - Display + housing cover | (D05M) | - 1% Calibration | (EE90/3H) |
| - Interface cable for PCB | (HA010304) | - Calibration set | (HA0104xx) |
| - Interface cable for plug C06 | (HA010311) | - Pressure tight screw connections | |
| - 1/2" NPT-adapter for configuration | (HA011101) | 1/2" ISO Ø12mm | (HA011102) |
| - Mounting flange 12mm (RH probe) | (HA010201) | 1/2" NPT Ø12mm | (HA011103) |
| - Mounting flange 6mm (T probe) | (HA010207) | 1/2" ISO Ø6mm | (HA011104) |
| - Adapter M16x1.5 to NPT 1/2" | (HA011101) | 1/2" NPT Ø6mm | (HA011105) |

EE33 only:

- RS485 Kit (HW + SW) for networking (HA010601)
- Data logging / analysis software (HA010602)

Ordering Guide EE33

		EE33-	EE33-	EE33-	EE33-	EE33-	EE33-	EE33-	EE33-
Hardware Configuration									
Housing	metal housing	M	M	M	M	M	M	M	M
Type	humidity + temperature	FT	FT	FT	FT	FT	FT	FT	FT
Model		A	B	C	D	E	I	J	K
Filter	PTFE stainless steel filter							2	
	stainless steel sintered filter	3	3	3	3	3	3		
	PTFE filter	5	5	5	5	5	5		
	stainless steel grid filter (up to 180°C / 356°F)	9	9	9	9	9	9	9	9
Cable length	2m (6.6ft)			02	02	02	02	02	02
(incl. probe length)	5m (16.4ft)			05	05	05	05	05	05
	10m (32.8ft)			10	10	10	10	10	10
	20m (65.6ft)			20	20	20	20	20	20
Probe length	65mm (2.6") (for model E: 80mm (3.1"))			2	2	2			2
	200mm (7.9")		5	5	5	5	5	5	5
	400mm (15.8")		6	6	6	6			6
Pressure tight feedthrough	1/2" male thread					HA03	HA03		
	1/2" NPT thread					HA07	HA07		
Interface	RS232								
	RS485	N	N	N	N	N	N	N	N
	ethernet interface ¹⁾	E	E	E	E	E	E	E	E
Display	without display								
	with display	D05	D05	D05	D05	D05	D05	D05	D05
Alarm output ²⁾	without relay								
	with relay	SW	SW	SW	SW	SW	SW	SW	SW
Plug	cable glands								
	1 plug for power supply and outputs	C03	C03	C03	C03	C03	C03	C03	C03
	1 cable gland / 1 plug for RS232	C06	C06	C06	C06	C06	C06	C06	C06
	2 plugs for power supply / outputs and RS485 network	C08	C08	C08	C08	C08	C08	C08	C08
Sensing probe	fixed								
	connectable in the housing			P03	P03	P03	P03	P03	P03
Coating sensor	no								
	yes	HC01	HC01	HC01	HC01	HC01	HC01	HC01	HC01
Supply voltage	8...35V DC / 12...30V AC								
	integrated power supply 100...240V AC, 50/60Hz ³⁾	V01	V01	V01	V01	V01	V01	V01	V01
Software Configuration									
Physical parameters of outputs	Relative humidity	RH [%]	(A)	Output 1	Select according to Ordering Guide (A - J)				C
	Temperature	T [°C]	(B)	Output 2	Select according to Ordering Guide (A - J)				D
	Dew point temperature	Td [°C]	(C)						
	Frost point temperature	Tf [°C]	(D)						
	Wet bulb temperature	Tw [°C]	(E)						
	Water vapour partial pres.	e [mbar]	(F)						
	Mixture ratio	r [g/kg]	(G)						
	Absolute humidity	dv [g/m ³]	(H)						
	Specific enthalpy	h [kJ/kg]	(J)						
Type of output signal	0-1V		1	1	1	1	1	1	1
	0-5V		2	2	2	2	2	2	2
	0-10V		3	3	3	3	3	3	3
	0-20mA		5	5	5	5	5	5	5
	4-20mA		6	6	6	6	6	6	6
Measured value units	metric / SI		E01	E01	E01	E01	E01	E01	E01
	non metric / US								
T-Scaling	-40...60 (T02)	-20...100 (T14)		Output T	Select according to Ordering Guide (Txx)				
Td-Scaling	-10...50 (T03)	+20...120 (T15)							
Tf-Scaling	0...50 (T04)	0...120 (T16)		Output Td	Select according to Ordering Guide (Tdx)				
Tw-Scaling	0...100 (T05)	0...80 (T21)							
(in °C or °F)	0...60 (T07)	-40...80 (T22)		Output Tf	Select according to Ordering Guide (Tfxx)				
	-30...70 (T08)	-20...80 (T24)							
	-30...120 (T09)	-40...160 (T33)		Output Tw	Select according to Ordering Guide (Twxx)				
	-20...120 (T10)	+20...180 (T40)							
	-40...120 (T12)	-40...180 (T52)			Other T/Td/Tf/Tw-scaling refer to page 146				

1) Combination ethernet and alarm output is not possible / combination ethernet and integrated power supply is not possible

2) Combination alarm output and plugs is not possible (with cable glands only) / combination alarm output and integrated power supply is not possible

3) Integrated power supply includes 2 plugs for power supply and outputs / further plug options are not possible

Order Example

EE33-MFTD5025ND05SW/BC3-T02-Td07

Hardware Configuration:

Housing:	metal	Display:	with display
Type:	humidity + temperature	Alarm output:	with relay
Model:	remote sensing probe	Plug:	cable glands
Filter:	PTFE filter	Sensing probe:	fixed
Cable length:	2m (6.6ft)	Coating sensor:	no
Probe length:	200mm (7.9")	Supply voltage:	8...35V DC / 12...30V AC
Interface:	RS485		

Software Configuration:

Output 1:	T
Output 2:	Td
Output signal:	0-10V
Measurand value unit:	metric / SI
T-Scaling:	-40...60°C
Td-Scaling:	0...60°C

Ordering Guide EE32

		EE32-	EE32-	EE32-	EE32-	EE32-	EE32-	EE32-
Hardware Configuration								
Housing	metal housing	M	M	M	M	M	M	M
Type	humidity + temperature	FT	FT	FT	FT	FT	FT	FT
Model		A	B	C	D	E	I	J
Filter	PTFE stainless steel filter							2
	stainless steel sintered filter	3	3	3	3	3	3	
	PTFE filter	5	5	5	5	5	5	
	stainless steel grid filter (up to 180°C / 356°F)	9	9	9	9	9	9	9
Cable length	2m (6.6ft)			02	02	02	02	02
(incl. probe length)	5m (16.4ft)			05	05	05	05	05
	10m (32.8ft)			10	10	10	10	10
	20m (65.6ft)			20	20	20	20	20
Probe length	65mm (2.6") (for model E: 80mm (3.1"))			2	2	2		
	200mm (7.9")		5	5	5	5	5	5
	400mm (15.8")		6	6	6	6		
Pressure tight feedthrough	1/2" male thread					HA03	HA03	
	1/2" NPT thread					HA07	HA07	
Display	without display							
	with display	D05	D05	D05	D05	D05	D05	D05
Alarm output ¹⁾	without relay							
	with relay	SW	SW	SW	SW	SW	SW	SW
Plug	cable glands							
	1 plug for power supply and outputs	C03	C03	C03	C03	C03	C03	C03
	1 cable gland / 1 plug for RS232	C06	C06	C06	C06	C06	C06	C06
Sensing probe	fixed							
	connectable in the housing			P03	P03	P03	P03	P03
Coating sensor	no	HC01	HC01	HC01	HC01	HC01	HC01	HC01
	yes							
Supply voltage	8...35V DC / 12...30V AC							
	integrated power supply 100...240V AC, 50/60Hz ²⁾	V01	V01	V01	V01	V01	V01	V01
Software Configuration								
Physical parameters	relative humidity	RH [%]	(A)	Output 1	Select according to Ordering Guide (A or B)			
of outputs	temperature	T [°C]	(B)	Output 2	Select according to Ordering Guide (A or B)			
Type of output signal	0-1V				1	1	1	1
	0-5V				2	2	2	2
	0-10V				3	3	3	3
	0-20mA				5	5	5	5
	4-20mA				6	6	6	6
Measured value units	metric / SI				E01	E01	E01	E01
	non metric / US							
T-Scaling	-40...60 (T02)	-20...100 (T14)		Output T	Select according to Ordering Guide (Txx)			
(in °C or °F)	-10...50 (T03)	+20...120 (T15)			Other T-scaling refer to page 146			
	0...50 (T04)	0...120 (T16)						
	0...100 (T05)	0...80 (T21)						
	0...60 (T07)	-40...80 (T22)						
	-30...70 (T08)	-20...80 (T24)						
	-30...120 (T09)	-40...160 (T33)						
	-20...120 (T10)	+20...180 (T40)						
	-40...120 (T12)	-40...180 (T52)						

1) Combination alarm output and plugs is not possible (with cable glands only) / combination alarm output and integrated supply voltage is not possible
 2) Integrated power supply includes 2 plugs for power supply and outputs / further plug options are not possible

Order Example

EE32-MFTJ9025D05SW/AB3-T02

Hardware Configuration:

Housing: metal
 Type: humidity + temperature
 Model: remote sensing probe
 Filter: stainless steel grid filter
 Cable length: 2m (6.6ft)
 Probe length: 200mm (7.9")

Display: with display
 Alarm output: with relay
 Plug: cable glands
 Sensing probe: fixed
 Coating sensor: no
 Supply voltage: 8...35V DC / 12...30V AC

Software Configuration:

Output 1: RH
 Output 2: T
 Output signal: 0-10V
 Measurand value unit: metric / SI
 T-Scaling: -40...60°C

Accessories:

Pressure tight screw connections: **HA011102** (1/2" ISO Ø12mm)
HA011104 (1/2" ISO Ø6mm)