

### **EE65**

# Air Velocity Transmitter for HVAC Applications

EE65 air velocity transmitters are ideal for accurate ventilation control applications. They are operating on an innovative hot film anemometer principle.

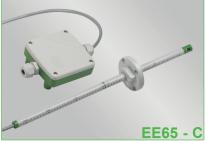
The E+E thin film sensor guarantees very good accuracy at low air velocity, which is not possible for conventional anemometers with commercial temperature sensors or NTC bead thermistors.

Moreover, the E+E sensor is much more insensitive to dust and dirt than all other anemometer principles. This means high reliability and low maintenance costs.

The EE65 are available with current or voltage output, the measuring range and the response time can be selected with jumpers by the user. Low angular dependence enables easy, cost-effective installation.

The configuration equipment allows air velocity adjustment of the sensor.





#### Typical Applications

#### **Features**

## HVAC process and environmental control

low angular dependence easy installation adjustable to application requirements

#### **Technical Data** Measuring values Working range<sup>1)</sup> 0...10m/s (0...2000ft/min) 0...15m/s (0...3000ft/min) 0...20m/s (0...4000ft/min) Output<sup>1)</sup> $-1mA < I_1 < 1mA$ 0 - 10V0...10m/s / 0...15m/s / 0...20m/s 4 - 20mA $R_{l}$ < 450 $\Omega$ Accuracy at 20°C (68°F) 0.2...10m/s (40...2000ft/min) $\pm (0.2 \text{m/s} / 40 \text{ft/min} + 3 \% \text{ of m. v.})$ 45 % RH and 1013hPa $\pm (0.2 \text{m/s} / 40 \text{ft/min} + 3 \% \text{ of m. v.})$ 0.2...15m/s (40...3000ft/min) 0.2...20m/s (40...4000ft/min) $\pm (0.2$ m/s / 40ft/min + 3 % of m. v.) Response time $\tau_{90}^{-1)}$ 2) typ. 4 sec. or typ. 0.7 sec. (at constant temperature) General 24V AC/DC ±20% Power supply Current consumption for AC supply max. 150 mA for DC supply max. 90 mA Angular dependence < 3% of measurement at $|\Delta\alpha|$ < 10° Electrical connection screw terminals max. 1.5 mm<sup>2</sup> (AWG 16)<sup>2</sup> Cable gland cable Ø 4.5 - 10 mm (0.18 - 0.39") M16x1,5 Electromagnetic compatibility EN61326-1 EN61326-2-3 Housing material Polycarbonate, UL94HB approved Protecting class Housing: IP65 remote Probe: IP20 -25 ... +50°C Temperature range working temperature probe working temperature electronic -10 ... +50°C storage temperature -30 ... +60°C Working range humidity 5...95 % RH (non-condensing)

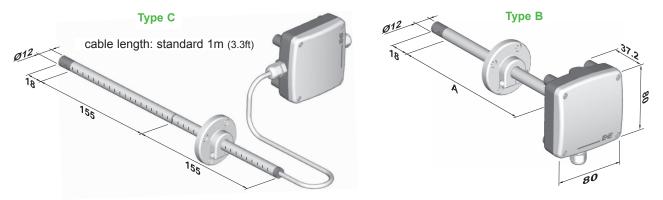
Selectable by jumper

<sup>2)</sup> Response time  $\tau_{\infty}$  is measured from the beginning of a step change of air velocity to the moment of reaching 90% of the step.

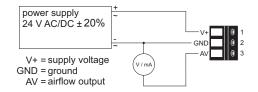


#### **Dimensions (mm)**

1 mm = 0.03937" / 1" = 25.4 mm



### **Connection Diagram**



#### **Ordering Guide**

MODEL		HOUSING		PROBE LENGTH (see Dimensions: Length "A", Type B only)		CABLE LENGTH (Type C only)	
velocity	(V)	duct mounting	(B)	100mm (3.9")	(3)	1m (3.3ft)	(no code)
		remote sensor probe	(C)	200mm (7.9")	(5)	2m (6.6ft)	(K200)
				others	(x)	5m (16.4ft)	(K500)
						10m (32.8ft)	(K1000)
EE65-							

#### Order Example \_

**EE65-VB5** 

model: velocity
housing: duct mounting
probe length: 200mm (7.9")

#### Scope of Supply \_

- EE65 Transmitter according ordering guide
- Cable gland
- Mounting flange
- Mounting kit
- Protection cap
- Operation manual
- Two self-adhesive labels for configuration changes<sup>1)</sup>
- Test report according to DIN EN10204 2.2

1) see user guide at www.epluse.com/configuration-change

#### **Accessories**

Snap in - mounting flange for duct mounting Product configuration adapter

Product configuration software

Power supply adapter

HA010205

siehe Datenblatt EE-PCA

EE-PCS (free download: www.epluse.com/configurator)

V03 (see data sheet "Accessories")

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