

# EM 315 EC 01

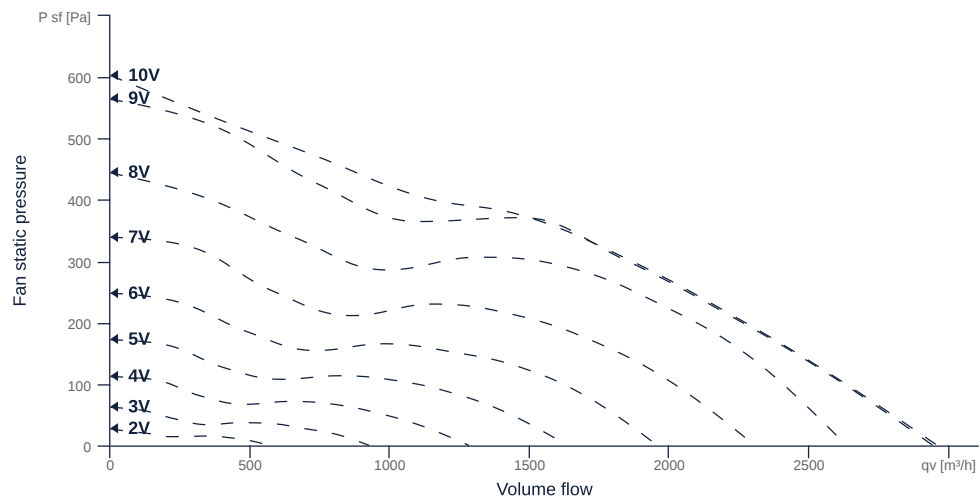
130708

- Innovative, high-efficiency diagonal fan
- Optimally tuned, CFD-optimized aerodynamics
- Housing made of impact-resistant, reinforced polypropylene
- High efficiency IE5 EC motor, steplessly controllable
- Incl. 1x potentiometer for connection in terminal box
- Conveyed medium temperature up to 45 °C in continuous operation
- The benchmark for efficiency since 2012



## MAP

Name	Value	Unit
Volume flow	0	m³/h
Pressure	0	Pa



zur Produktseite

## GENERAL DATA

Name	Value	Unit	Formula symbol
ERP conformity	Yes		
Certifications	CE, UKCA		
Duct size	-		WxH <sub>duct</sub>
Pipe connection size (DN)	DN315		DN
Rated voltage (entire device)	230	V	U <sub>rated</sub>
Phases (entire device)	1~		phase
Electrical protection (entire device)	6 A		fuse
Housing material	Plastic		mat <sub>casing</sub>
Impeller material	Plastic		mat <sub>impeller</sub>
IP-protection class (entire device)	IPX4		IP <sub>compl</sub>
IP-Protection class (terminal box)	IP44		IP <sub>ebox</sub>
Weight	6.9	kg	m
Fan type	Diagonal		Fan <sub>type</sub>
Category / Installation situation	A		cat

## MAXIMAL DATA

Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Max. power consumption (device)	282	282	W	P <sub>ed, max</sub>
Max. operating current (device)	1.96	1.96	A	I <sub>ed, max</sub>
Max. speed	2800	2800	1/min	n <sub>max</sub>
Max. stat. efficiency	53.2	53.2	%	η <sub>es</sub>
Max. fan efficiency	56.7	56.7	%	η <sub>e</sub>
Max. flowrate	2960	2960	m <sup>3</sup> /h	Q <sub>v, max</sub>
Max. stat pressure	600	600	Pa	p <sub>sf, max</sub>
Max. medium temperature	45	45	°C	T <sub>m, max</sub>
Max. environment temperature	45	45	°C	T <sub>amb, max</sub>
Min. environment temperature	-30	-30	°C	T <sub>amb, min</sub>



zur Produktseite

## MOTOR DATA

Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Rated frequency (device)		50		f
Motor type		EC		phase
Control type		stepless-controlled		ctrltype
Installation type		ORM (Out)		install
Rotation direction		right		rotation
Isolation class		ISO F		ISOclass
Motor-protection		TEC		protectmotor
Protection class		IP33		IPmotor
Is pole-changeable		No		polexch
Type of power supply		AC 1~		pwrsupmotor
Rated voltage	230	230	V	U <sub>rated, f1</sub>
Rated current	1.83	1.83	A	I <sub>rated, f1</sub>
Shaft power	280	280	W	P <sub>out, f1</sub>
Speed	2500	2500	1/min	n <sub>f1</sub>
Min. temperature	-30	-30	°C	T <sub>motor, min</sub>
UL-Certification motor		None		ULcert

## ERP DATA (LOT11)

Name	Value	Unit	Formula symbol
Speed at the energy efficiency optimum	2453	1/min	n <sub>opt</sub>
Efficiency level	60.6	%	N
Efficiency category	statisch		catefficiency
Input power of the motor at the energy efficiency optimum	0.28	kW	P <sub>e, opt</sub>
Overall efficiency	76.9	%	η <sub>ges</sub>
Measurement category	A		meas cat
Fan pressure at energy efficiency optimum	335	Pa	p <sub>f, opt</sub>
Flowrate at energy efficiency optimum	1741	m³/h	Q <sub>v, opt</sub>

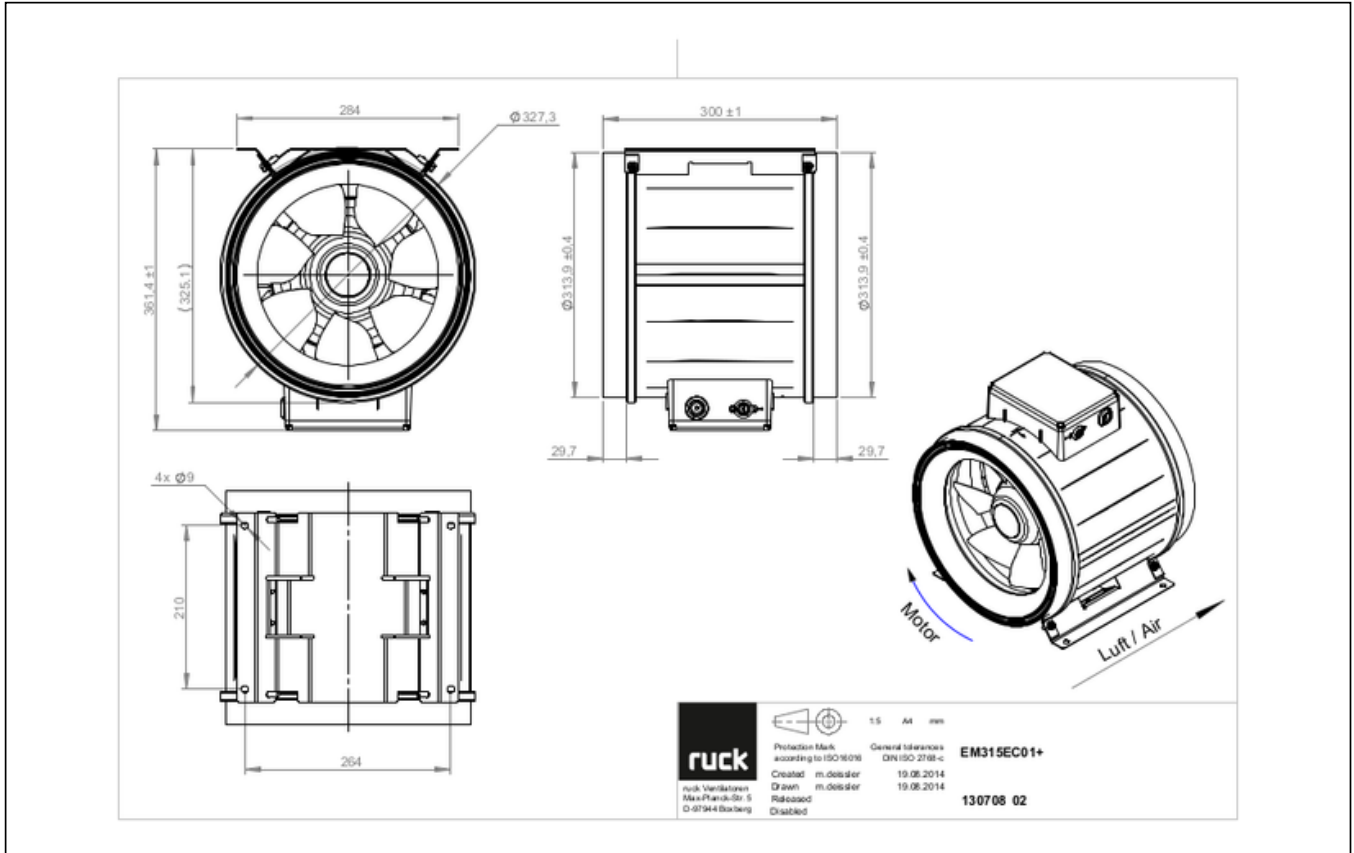


zur Produktseite

# EM 315 EC 01

130708

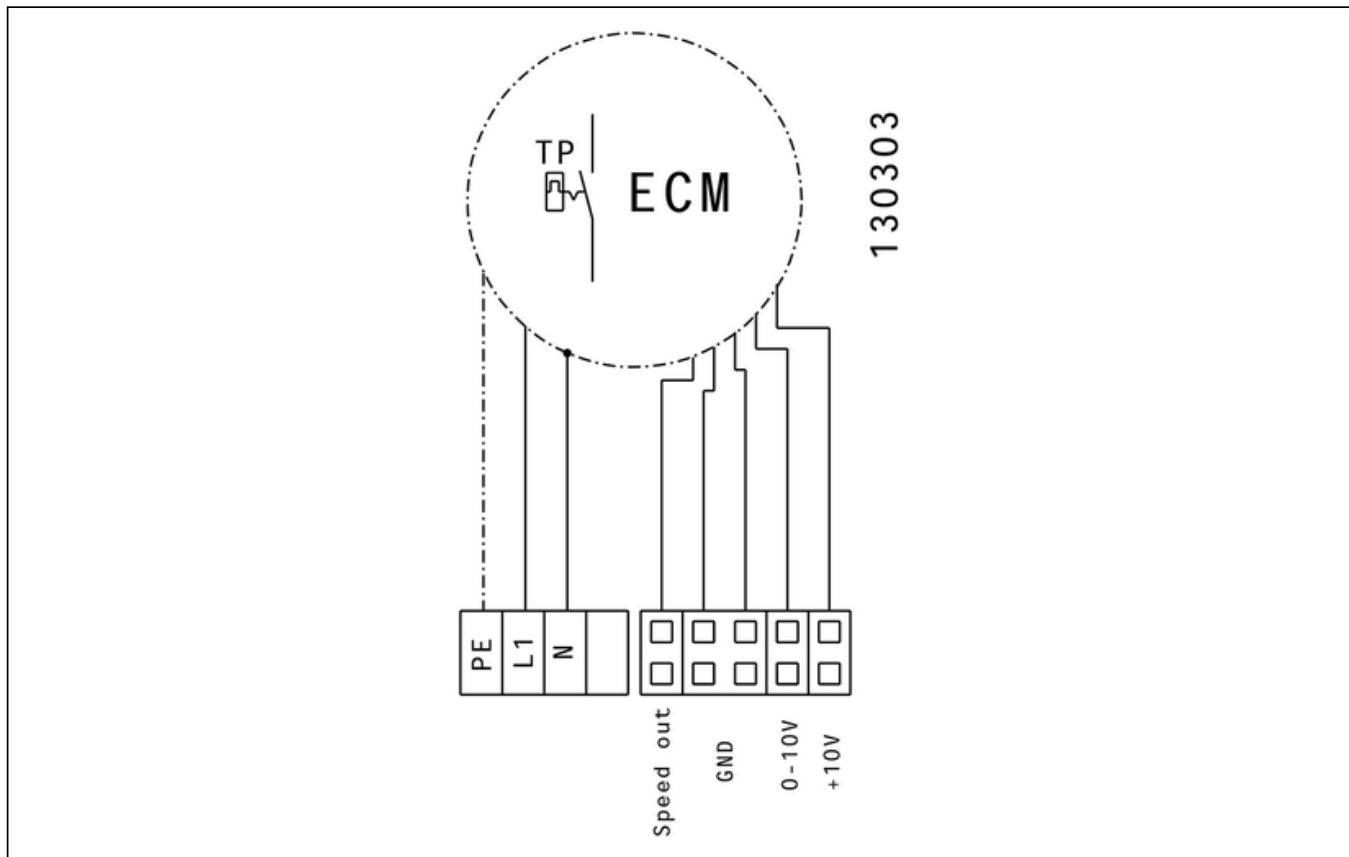
## SCHALTPLÄNE / MASSZEICHNUNGEN



zur Produktseite

# EM 315 EC 01

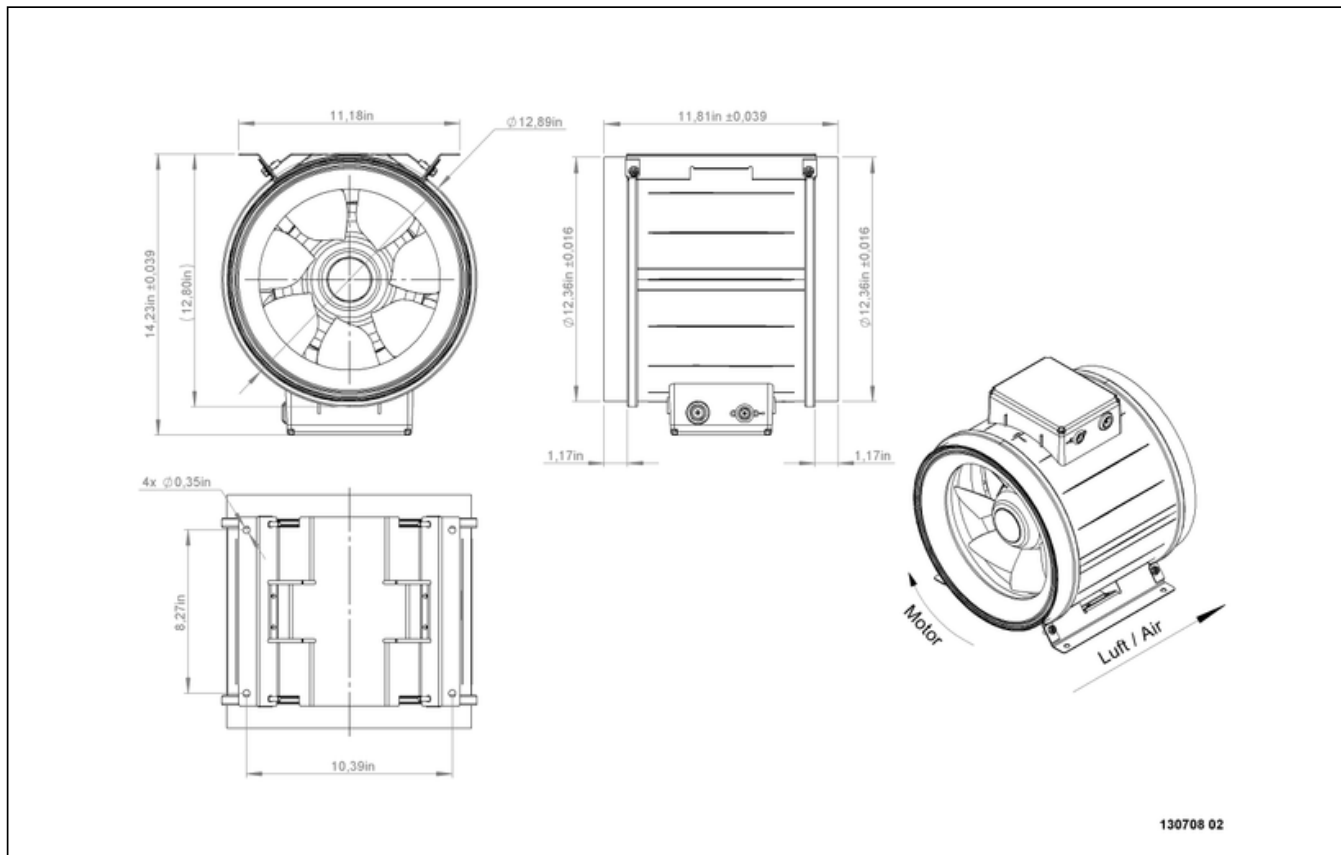
130708



zur Produktseite

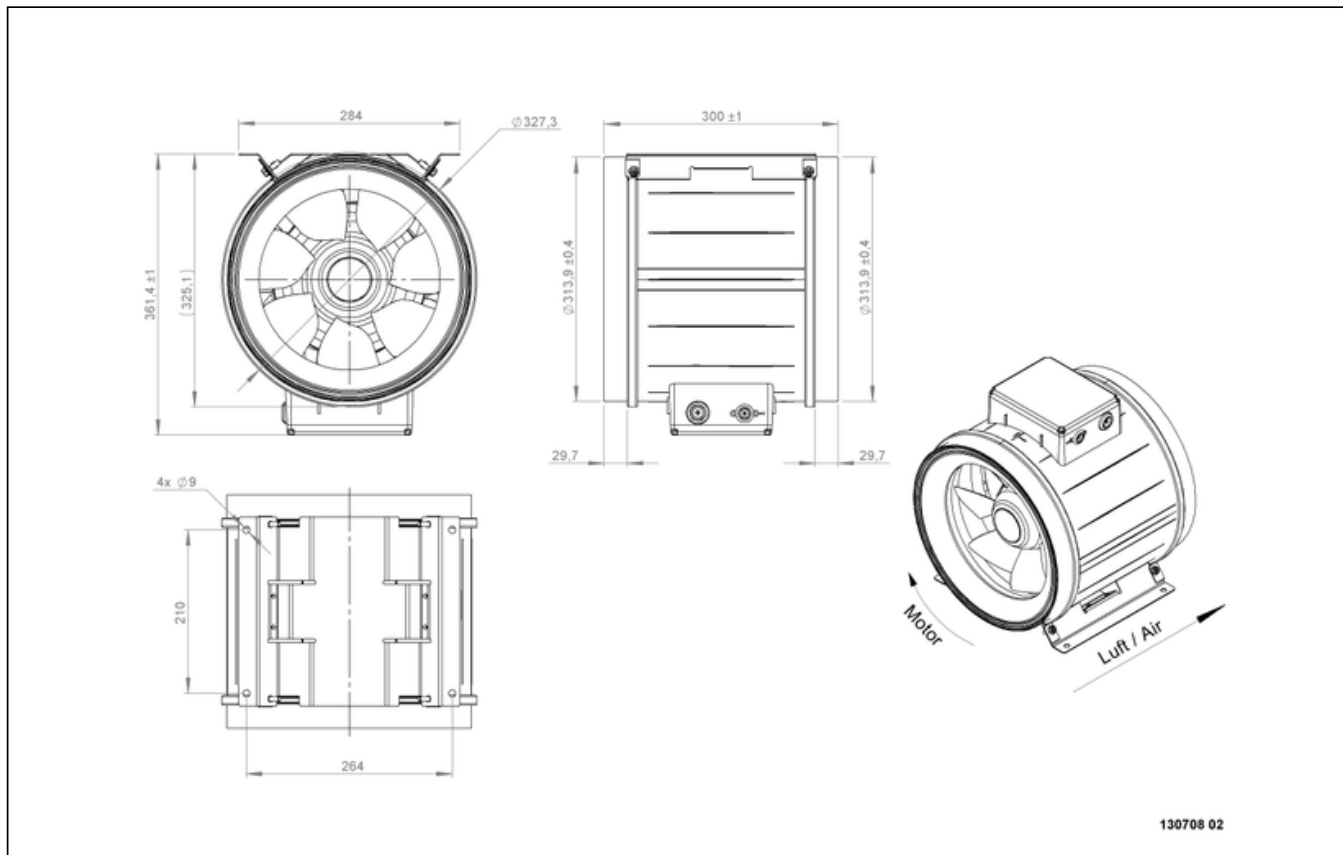
# EM 315 EC 01

130708



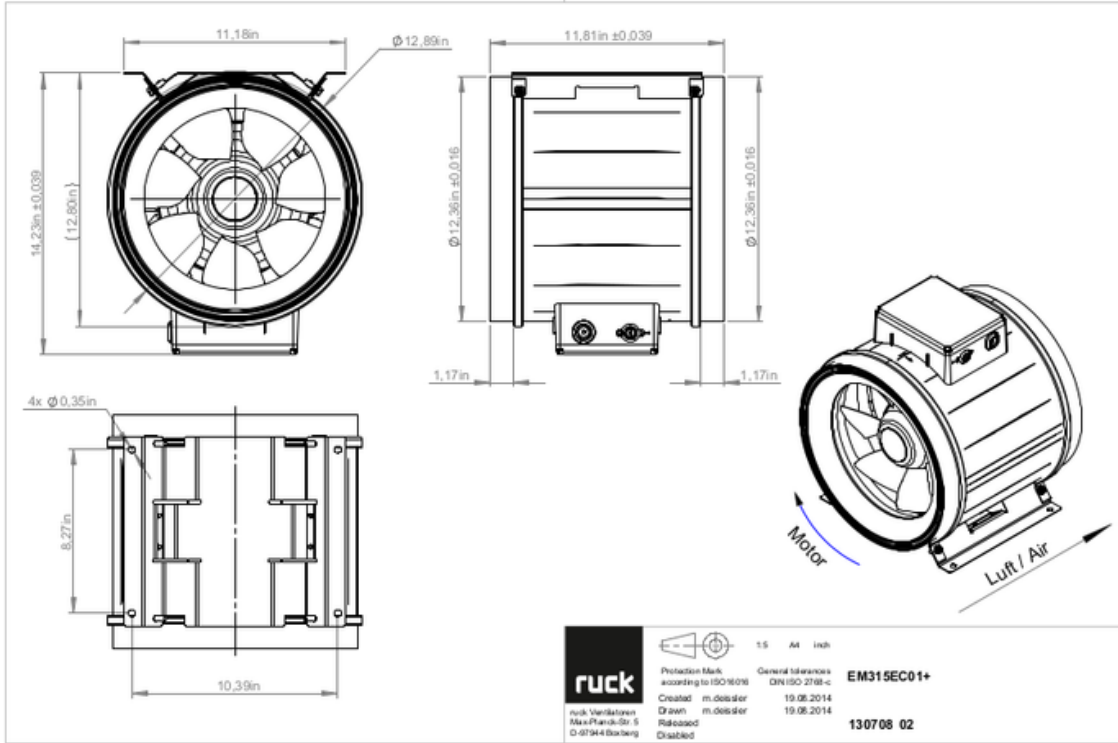
# EM 315 EC 01

130708



# EM 315 EC 01

130708



zur Produktseite

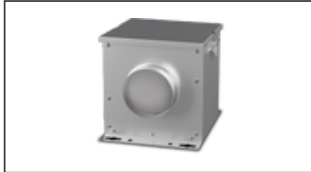


# EM 315 EC 01

130708

## MECHANICAL ACCESSORIES

**FV 315 | 112834**



- Air filter box with mat filter ISO Coarse 45 % (G3)
- Toggle-type fastener

**FT 315 | 112846**



- Air filter box for pocket filter
- Toggle-type fastener
- Galvanized steel sheet housing
- Without filter

**FTW 315 | 112855**



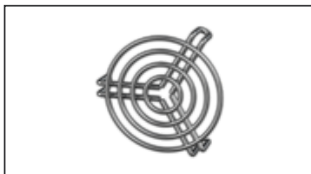
- Air filter box with pocket filter M5
- Integrated warm water heating coil
- Galvanized steel sheet housing
- Toggle-type fastener

**RSK 315 | 102664**



- Back draught shutter for tube fitting
- Galvanized steel sheet housing
- Aluminum flaps

**SG 315 01 | 102900**



- Protection grille for tube connection
- Galvanized wire

**SDF 315 | 102706**



- Flexible tube silencer
- Galvanized steel sheet
- Sound insulation packing 50 mm

**SDS 315 | 102723**



- Rigid tube silencer
- Galvanized steel sheet
- Sound insulation packing 50 mm (mineral wool)

**RSK 315D | 113489**



- Back draught shutter for tube fitting
- Galvanized steel sheet housing
- Aluminum flaps
- Integrated gasket

**VM 315 | 102652**



- Fast clamps for sound decoupling and sealing
- Galvanized steel sheet, 5 mm
- Neopren gasket
- 1 Pack = 2 pieces



zur Produktseite

# EM 315 EC 01

130708

## ELECTRICAL ACCESSORIES

**GS 03 | 107633**



- Device switch
- $U_{max} = 400\text{ V}$ ,  $I_{max} = 25\text{ A}$
- Switching capacity  $400\text{ V } 3\sim = 5,5\text{ kW}$
- Protection class IP 55

**MTP 20 | 128146**



- Potentiometer  $10\text{ k}\Omega$
- Switching contact  $1\text{ A}/250\text{ V AC}$  -  $2,5\text{ A}/12\text{ V DC}$
- Max. ambient temperature  $50\text{ }^\circ\text{C}$
- VDE

**MTP 30 | 143289**



- Stepped potentiometer  $10\text{ k}\Omega$
- Step 1 + 2 settable  $10\% - 100\% \text{ Vdc}$
- Step 3  $100\% \text{ Vdc}$
- Supply voltage  $+10\text{ Vdc}$

**SEN AIR | 148641**



- Airflow and temperature transducer
- Measuring range temperature  $0\dots+50\text{ }^\circ\text{C}$
- With adjustable switching threshold (air speed)
- Measuring range air velocity up to  $20\text{ m/s}$

**CON P1000 | 115259**



- Constant pressure control
- Actual value display possible via optional control unit
- Output  $0-10\text{ V DC}$  + FC enable + setpoint reached
- Pressure setting by means of decade switch

**MTP 50 | 153133**



- Potentiometer with multifunction output
- $230\text{ VAC } \pm 10\% / 50-60\text{ Hz}$
- Selectable output:  $1-10\text{ VDC}$  /  $2-20\text{ mA}$  /  $10-100\% \text{ PWM}$
- Min. and max. output value adjustable



zur Produktseite