

EM 160L EC 01

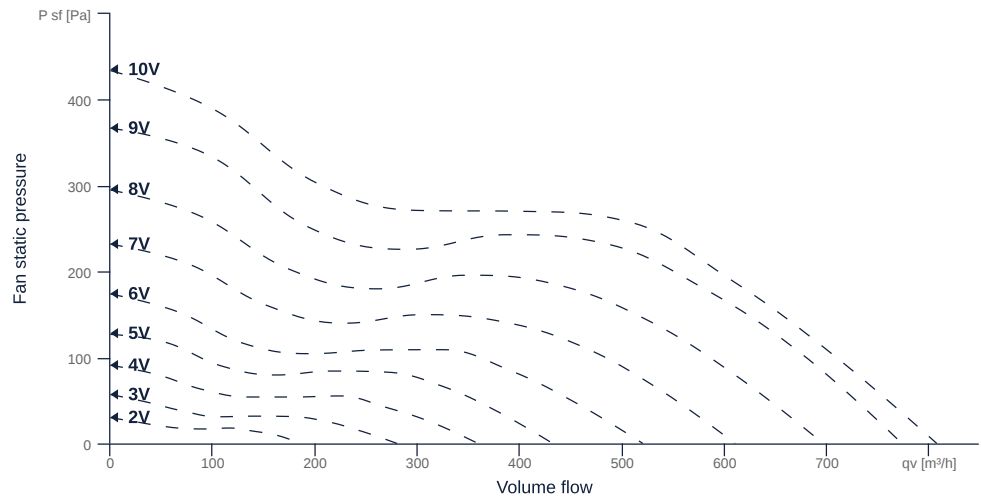
128586

- 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



FAN CURVES

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



to the product detail page

EM 160L EC 01

128586

ruck

GENERAL DATA

Name	Value	Unit	Formula symbol
Labeling	CE, UKCA		
Duct size	-		WxH _{duct}
Pipe connection size (DN)	DN160		DN
Rated voltage (entire device)	230	V	U _{rated}
Phases (entire device)	1~		phase
Electrical protection (entire device)	6 A		fuse
Housing material	Plastic		mat _{casing}
Impeller material	Plastic		mat _{impeller}
IP-protection class (entire device)	IPX4		IP _{compl}
IP-Protection class (terminal box)	IP44		IP _{ebox}
Weight	2.6	kg	m
Fan type	Diagonal		Fan _{type}
Category / Installation situation	A		cat

MAXIMAL DATA

Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Max. power consumption (device)	73	73	W	P _{ed, max}
Max. operating current (device)	0.65	0.65	A	I _{ed, max}
Max. speed	3730	3730	1/min	n _{max}
Max. stat. efficiency	47.7	47.7	%	η _{es}
Max. fan efficiency	52.8	52.8	%	η _e
Max. flowrate	810	810	m³/h	Q _{v, max}
Max. stat pressure	430	430	Pa	p _{st, max}
Max. medium temperature	45	45	°C	T _{m, max}
Max. environment temperature	45	45	°C	T _{amb, max}
Min. environment temperature	-30	-30	°C	T _{amb, min}



to the product detail page

EM 160L EC 01

128586

ruck

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		IP54		IPmotor
Is pole-changeable		No		polexch
Type of power supply		AC 1~		pwrsupmotor
Rated voltage	230		V	U _{rated, f1}
Rated current	0.56		A	I _{rated, f1}
Shaft power	70		W	P _{out, f1}
Speed	3655		1/min	n _{f1}
Min. temperature	-30		°C	T _{motor, min}
UL-Certification motor		None		ULcert

ERP DATA (LOT11)

Name	Value	Unit	Formula symbol
Speed at the energy efficiency optimum	3605	1/min	n _{opt}
Efficiency level	55.9	%	N
Efficiency category	statisch		catefficiency
Input power of the motor at the energy efficiency optimum	0.07	kW	P _{e, opt}
Overall efficiency	78.6	%	η _{ges}
Measurement category	A		meas cat
Fan pressure at energy efficiency optimum	260	Pa	p _{f, opt}
Flowrate at energy efficiency optimum	502	m³/h	Q _{v, opt}

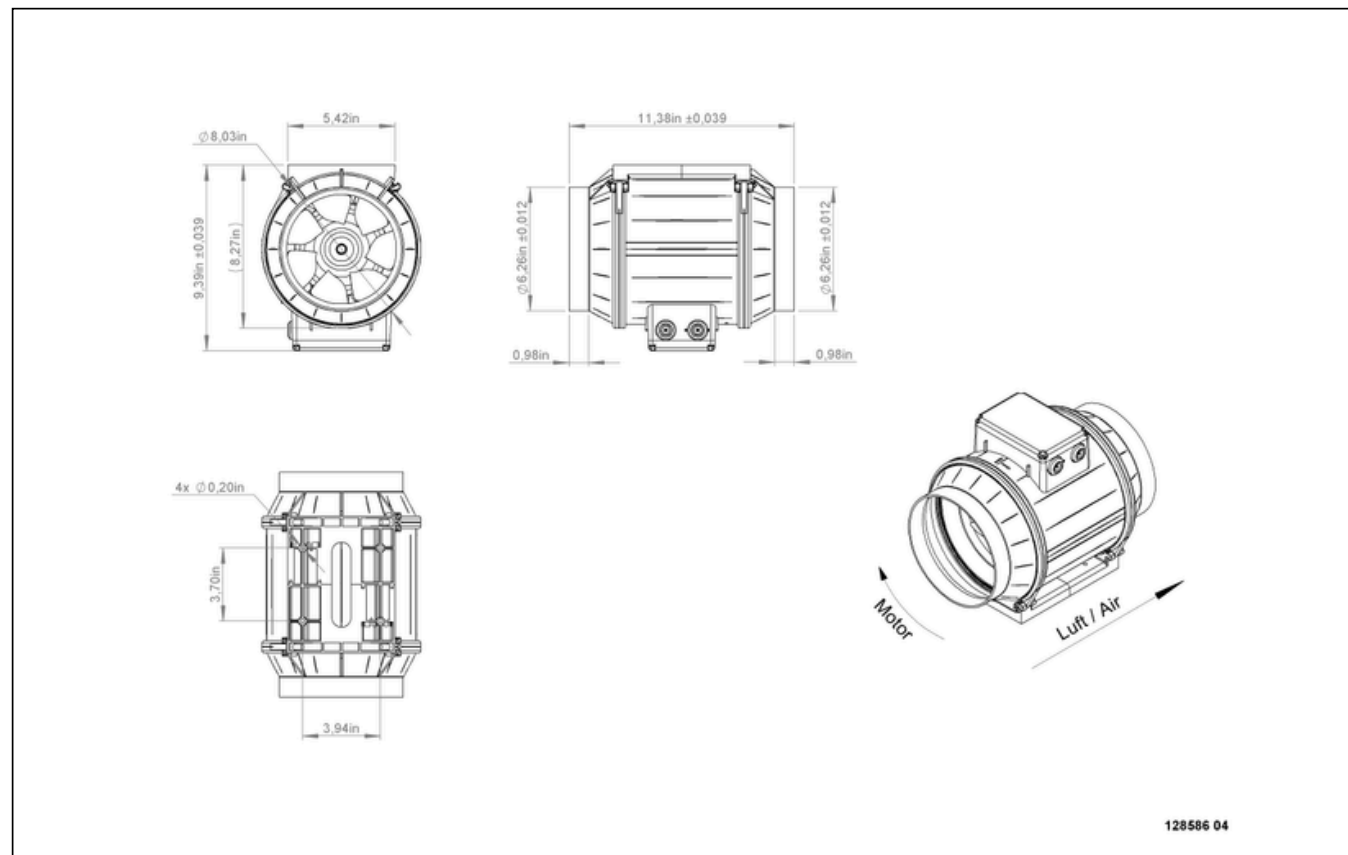
SMOKE EXTRACT DATA

Name	Value	Unit	Formula symbol
Fire resistance class	None		Fclass



to the product detail page

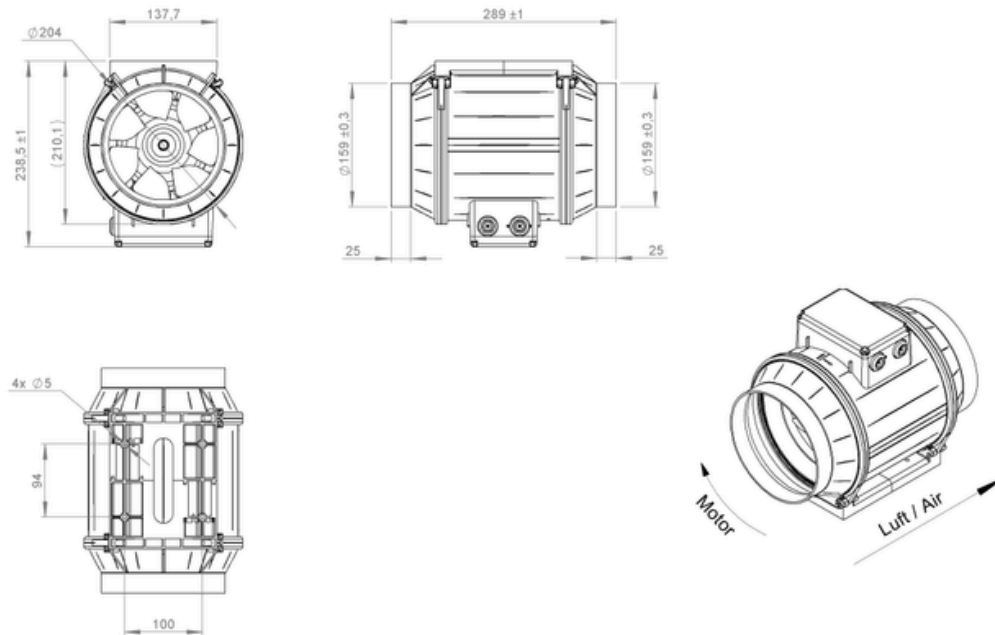
CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS



EM 160L EC 01

128586

ruck



128586 04

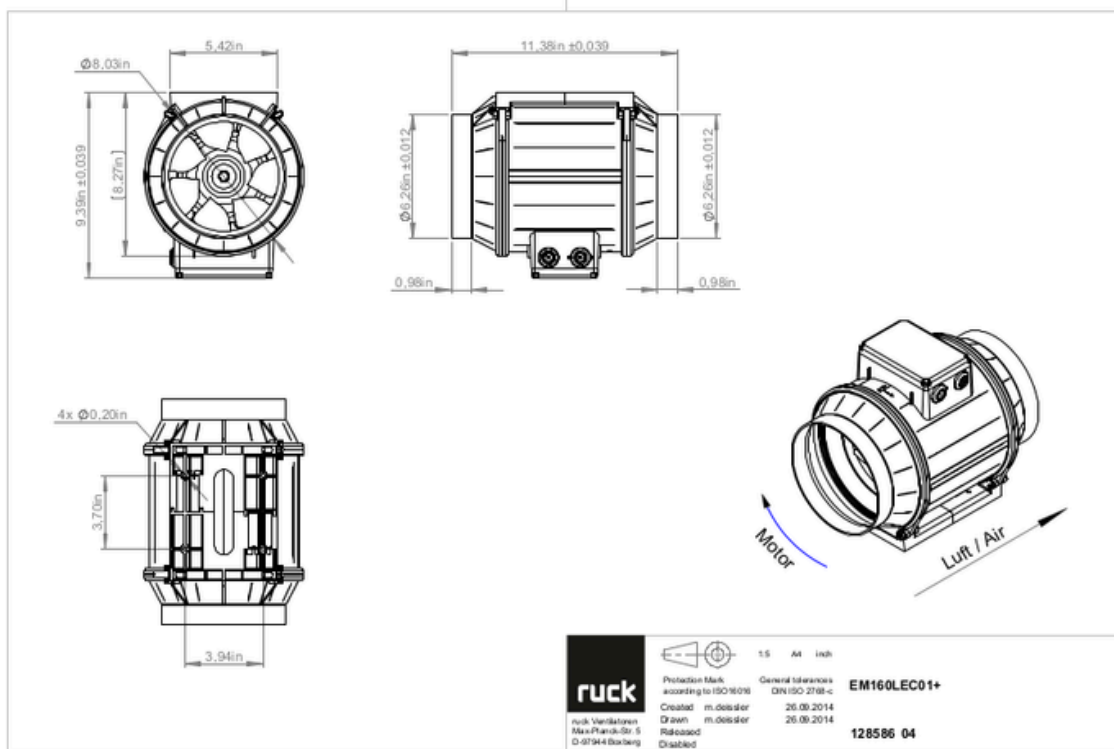


to the product detail page

EM 160L EC 01

128586

ruck

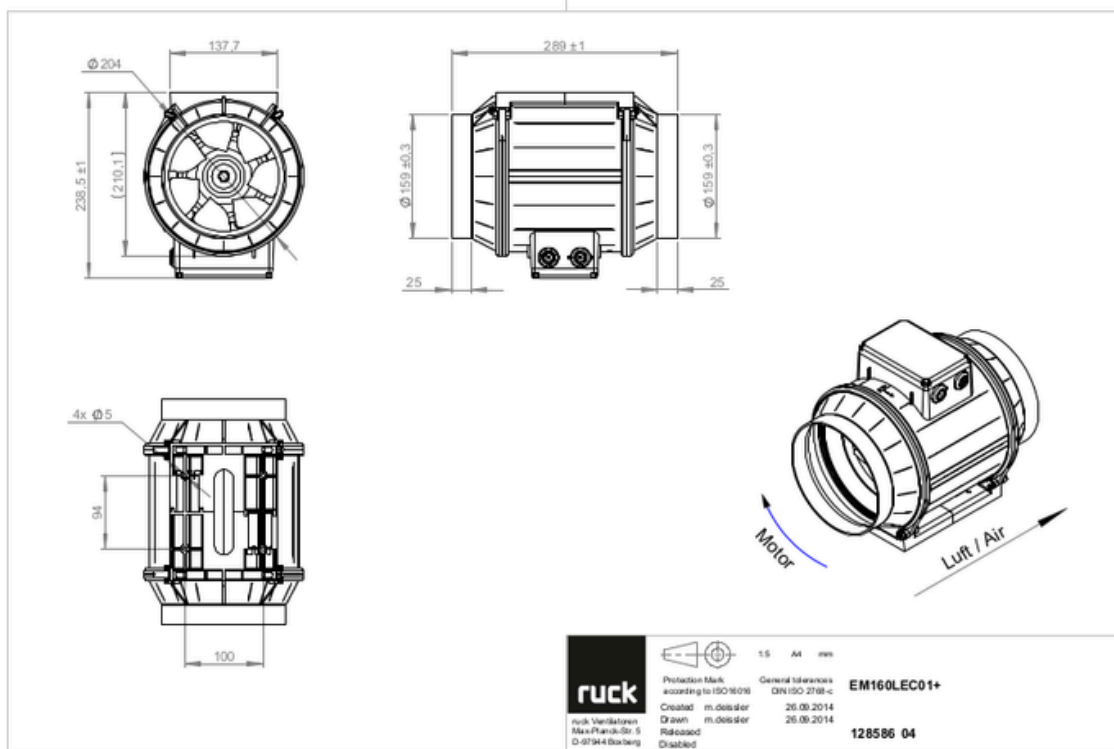


to the product detail page

EM 160L EC 01

128586

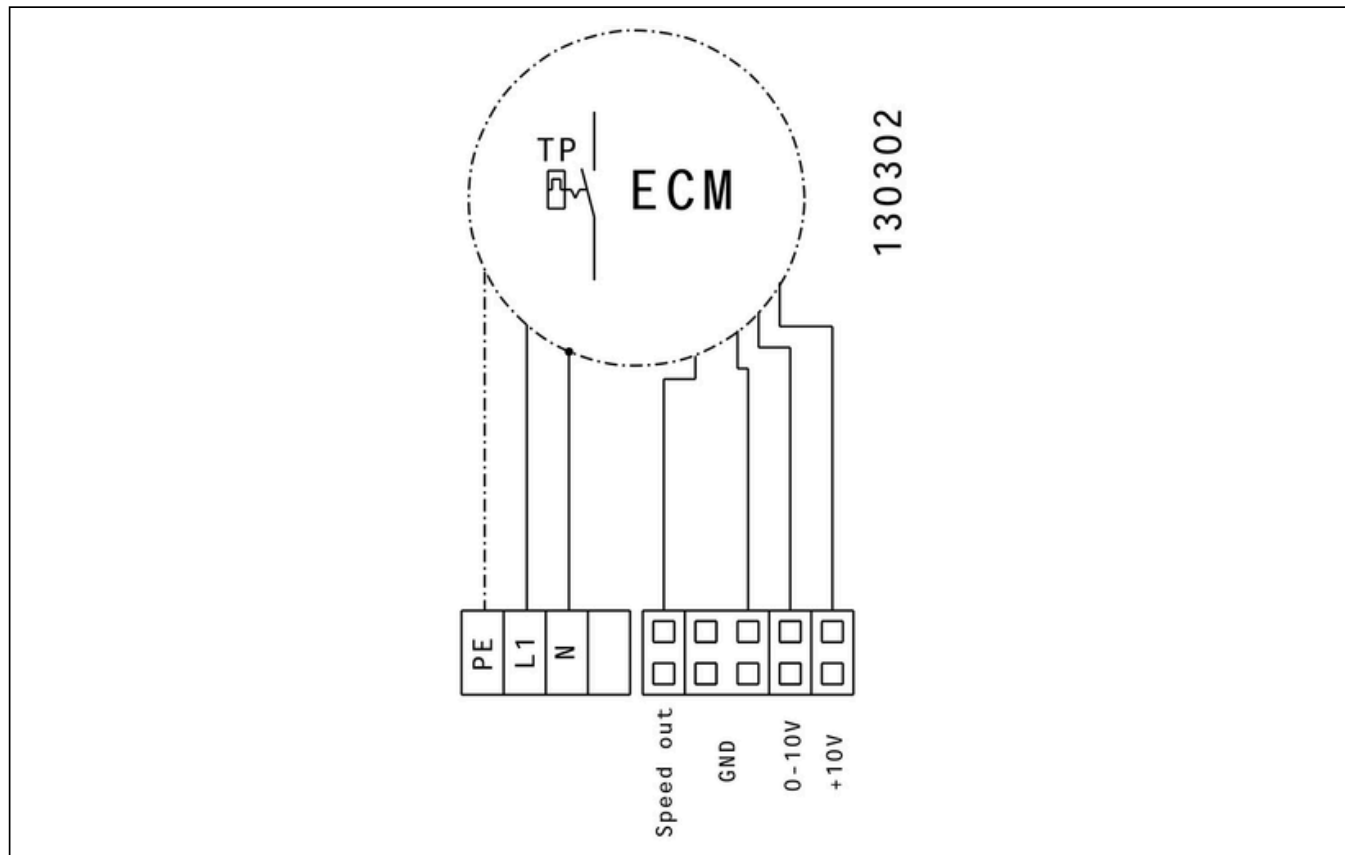
ruck



to the product detail page

EM 160L EC 01

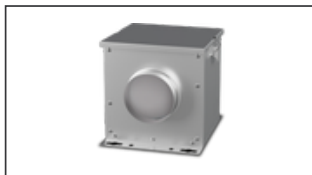
128586



[to the product detail page](#)

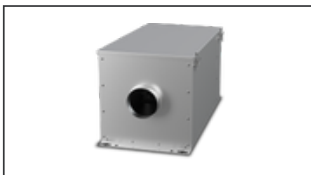
MECHANICAL ACCESSORIES

FV 160 | 112831



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

FT 160 | 112841



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

FTW 160 | 112852



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

RSK 160 | 102661



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

RSK 160D | 113485



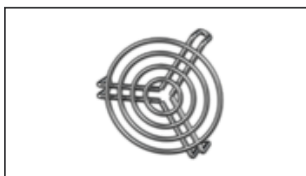
- Back draught shutter for tube fitting
- Galvanized steel sheet housing
- Aluminum flaps
- Integrated gasket

VM 160 | 102649



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

SG 160 01 | 169591



- Protection grille for tube connection
- Galvanized wire

SDS 160 | 169605



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

SDF 160 | 169642



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



ELECTRICAL ACCESSORIES

GS 03 | 107633



- Device switch
- $U_{max} = 400 \text{ V}$, $I_{max} = 25 \text{ A}$
- Switching capacity $400 \text{ V } 3\sim = 7,5 \text{ kW}$
- 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°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 $0...+50^\circ\text{C}$
- With adjustable switching threshold (air speed)
- Measuring range air velocity up to 20 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 | 168752



- 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



to the product detail page