

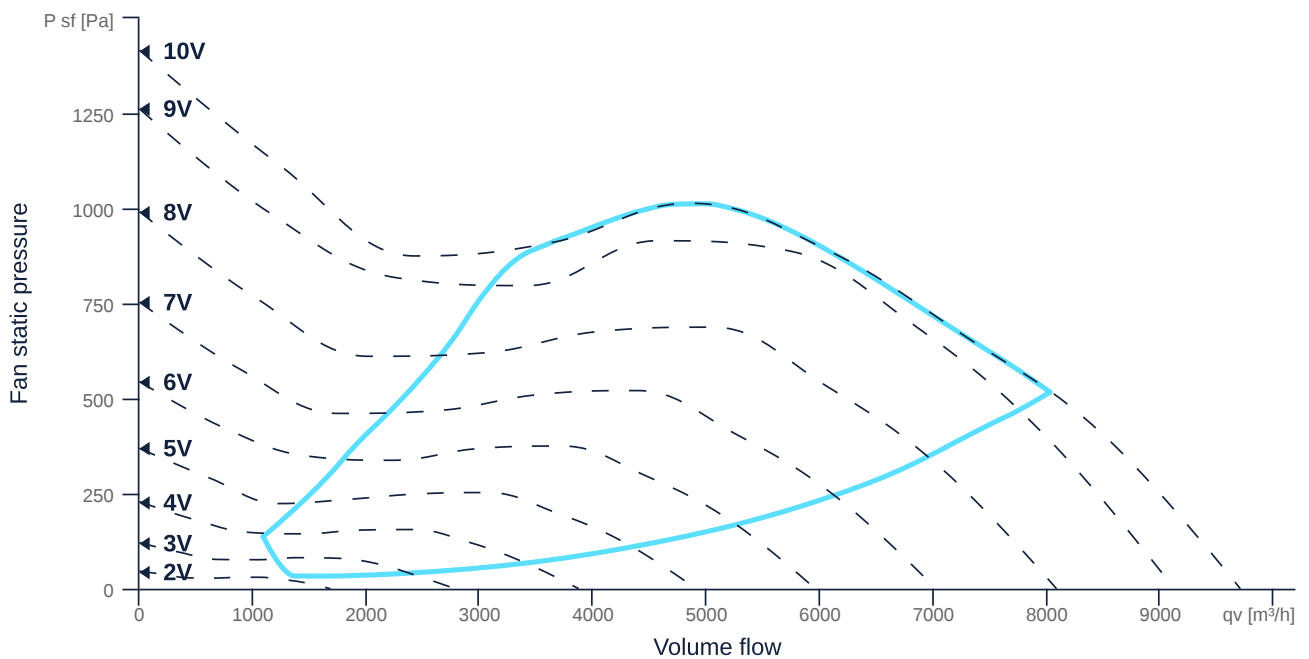
# EL 450 EC O 01

164261

- Innovative, high-efficiency diagonal fan
- Optimally tuned, CFD-optimized aerodynamics
- The benchmark for efficiency since 2007
- High efficiency EC motor, steplessly controllable
- Conveyed medium temperature up to 60 °C in continuous operation
- Housing made of aluminum



## MAP



## GENERAL DATA

Name	Value	Unit	Formula symbol
Duct size	-		WxH <sub>duct</sub>
Pipe connection size (DN)	DN450		DN
Electrical protection (entire device)	20 A		fuse
Housing material	Aluminium		mat <sub>casing</sub>
Impeller material	Aluminium		mat <sub>impeller</sub>
Weight	16.8	kg	m
Fan type	Diagonal		Fan <sub>type</sub>
Category / Installation situation	B		cat
Sound insulation	No		snd <sub>ins</sub>
Rated voltage (entire device)	400.000000		U <sub>rated</sub>
Phases (entire device)	3~		phase



zur Produktseite

# EL 450 EC O 01

164261

ruck

## MAXIMAL DATA

Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Max. power consumption (device)	2320	2320	W	$P_{ed, max}$
Max. operating current (device)	3.56	3.56	A	$I_{ed, max}$
Max. speed	2740	2740	1/min	$n_{max}$
Max. stat. efficiency	64.3	64.3	%	$\eta_{es}$
Max. fan efficiency	68.6	68.6	%	$\eta_e$
Max. flowrate	9700	9700	m <sup>3</sup> /h	$Q_{v, max}$
Max. stat pressure	1420	1420	Pa	$p_{st, max}$
Max. medium temperature	60	60	°C	$T_{m, max}$
Max. environment temperature	60	60	°C	$T_{amb, max}$
Min. environment temperature	-20	-20	°C	$T_{amb, min}$

## MOTOR DATA

Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Rated frequency (device)	50.000000			f
Motor type	EC			phase
Control type	stepless-controlled			ctrltype
Installation	IRM (In)			install
Rotation direction	right			rotation
Isolation class	ISO F			ISOclass
Motor-protection	TEC			protectmotor
Protection class	IP55			IPmotor
Is pole-changeable	No			polexch
Type of power supply	AC 3~			pwrsupmotor
Rated voltage	400		V	$U_{rated, f1}$
Rated current	5		A	$I_{rated, f1}$
Shaft power	2200		W	$P_{out, f1}$
Speed	3000		1/min	$n_{f1}$
Efficiency	88.9		%	$\eta_{m, f1}$
Cos Phi	0.000000	0.000000		cos $\varphi$

## PRODUCT INFORMATION

Name	Value	Unit	Formula symbol
Category / Installation situation	B		cat
Fan type	Diagonal		Fan <sub>type</sub>



zur Produktseite

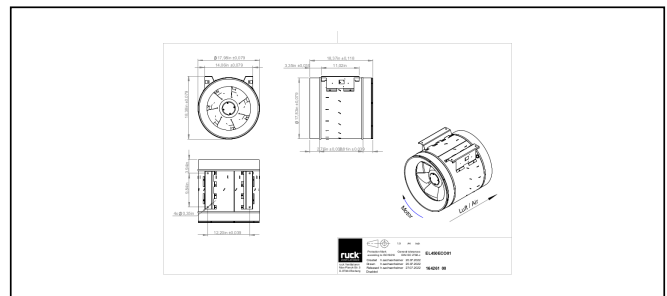
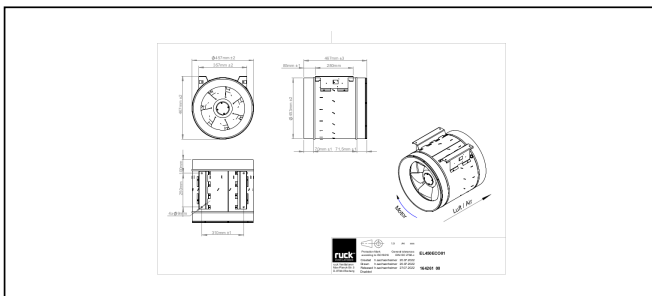
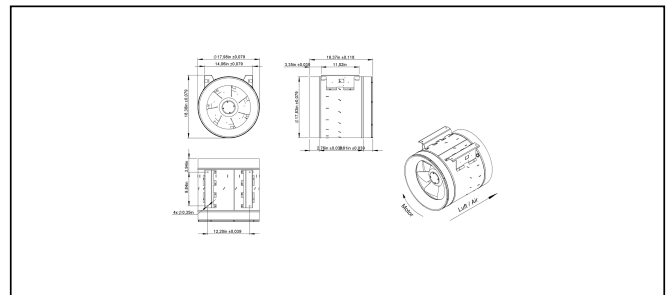
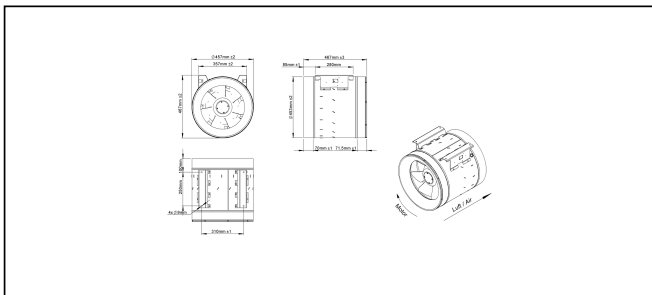
# EL 450 EC O 01

164261

## ERP DATA

Name	Value	Unit	Formula symbol
Speed at the energy efficiency optimum	2584	1/min	$n_{opt}$
Efficiency level	73.1	%	N
Efficiency category	total		$\eta_{ges}$
Input power of the motor at the energy efficiency optimum	2.19	kW	$P_{e, opt}$
Overall efficiency	80.1	%	$\eta_{ges}$
Measurement category	B		meas cat
Fan pressure at optimum energy efficiency point	879	Pa	$p_{f, opt}$
Flowrate at energy efficiency optimum	6120	m <sup>3</sup> /h	$q_{v, opt}$

## SCHALTPLÄNE / MASSZEICHNUNGEN



zur Produktseite

# EL 450 EC O 01

164261

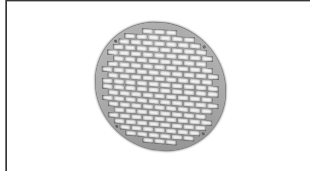
## MECHANICAL ACCESSORIES

VM 450 | 119495



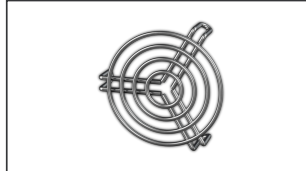
- Fast clamps for sound decoupling and sealing
- Galvanized steel sheet, 5 mm
- Neopren gasket
- 1 Pack = 2 pieces

SG 450 02 | 119411



- Inlet protection grille for Etaline
- Galvanized steel sheet

SG 450 01 | 134285



- Protection grille for tube connection
- Galvanized wire

SDS 450 | 124179



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

CLIMASET 01 | 111314



- Climaset
- For differential pressure measurement

## ELECTRICAL ACCESSORIES

GS 03 | 107633



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

MTP 20 | 128146



- Potentiometer 10 kΩ
- Switching contact 1A/250V AC - 2,5A/12V DC
- Max. ambient temperature 50 °C
- VDE

MTP 30 | 143289



- Stepped potentiometer 10 kΩ
- Step 1 + 2 settable 10 % - 100 % Vdc
- Step 3 100 % Vdc
- Supply voltage +10 Vdc

MTP 40 | 147359



- Potentiometer 10 kΩ
- Connection in terminal box
- Max. ambient temperature 50 °C
- PU: 20 pieces

SEN AIR | 148641



- Airflow and temperature transducer
- Measuring range temperature 0...+50 °C
- With adjustable switching threshold (air speed)
- Measuring range air velocity up to 20 m/s

CON P1000 | 115259



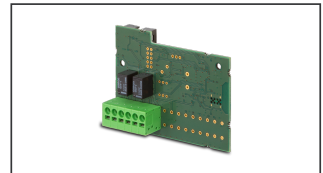
- Constant pressure control
- Actual value display possible via optional control unit
- Output 0-10 V DC + FC enable + setpoint reached
- Pressure setting by means of decade switch

SEN CO2 | 126586



- Sensor for variable volume flow control in meeting rooms
- Long-term stable 2-beam infrared cell
- 24 V AC  $\pm 20 \%$ , 15 - 35 V DC
- Protection class IP 30

OJ RM 02 | 141890



- Extension board Relais Modul
- For EC controller for alarm and operating message
- Electrical connection through 6 spring terminals (max. 2.5 mm<sup>2</sup>)
- Digital relay outputs: 2 potential-free changeover relays, max. 1 A, 30 V DC / 24 V AC



zur Produktseite