

AL 900 D4 02

162702

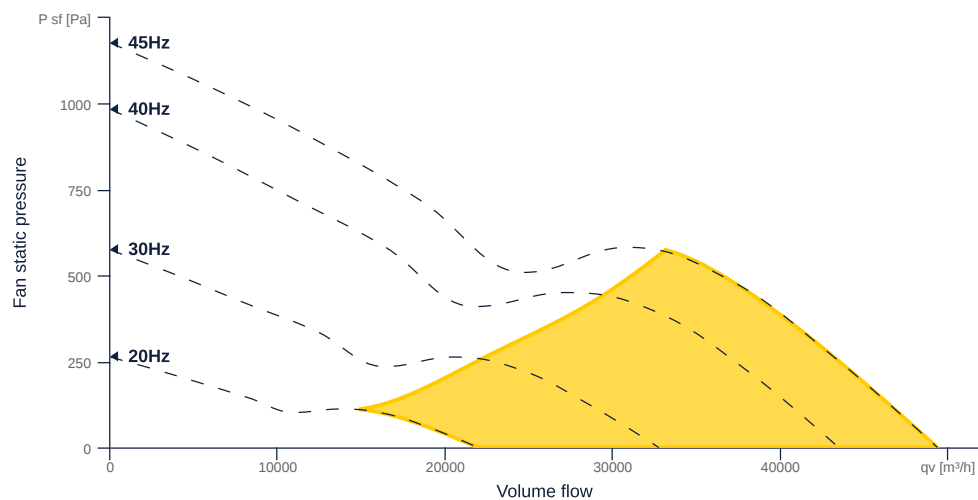
ruck

- Innovative, high-efficiency axial fan
- Optimally tuned, CFD-optimized aerodynamics
- Housing weight optimized, powder coated
- Efficient IE3 motor, frequency controllable
- Conveyed medium temperature up to 60 °C in continuous operation
- Exceeds current ErP regulation by 15 - 20%



FAN CURVES

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



to the product detail page

AL 900 D4 02

162702

ruck

GENERAL DATA

Name	Value	Unit	Formula symbol
Labeling	CE, UKCA		
Duct size	-		$W \times H_{duct}$
Pipe connection size (DN)	DN900		DN
Rated voltage (entire device)	400	V	U_{rated}
Phases (entire device)	3~		phase
Electrical protection (entire device)	20 A		fuse
Housing material	Steel		matcasing
Impeller material	Steel		matimpeller
IP-protection class (entire device)	IPX4		IPcompl
IP-Protection class (terminal box)	IP66		IPebox
Weight	169.2	kg	m
Fan type	Axial		Fan _{type}
Category / Installation situation	B		cat

MAXIMAL DATA

Name	Value	Unit	Formula symbol
Max. operating current (device)	18.3	A	$I_{ed, max}$
Max. speed	1320	1/min	n_{max}
Max. stat. efficiency	53	%	η_{es}
Max. fan efficiency	68.4	%	η_e
Max. flowrate	49365	m ³ /h	q_v, max
Max. stat pressure	580	Pa	$p_{sf, max}$
Max. medium temperature	60	°C	$T_{m, max}$
Max. environment temperature	60	°C	$T_{amb, max}$
Min. environment temperature	-20	°C	$T_{amb, min}$



MOTOR DATA

Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Rated frequency (device)		50		f
Motor type		AC 3~		phase
Control type		frequency-controlled		ctrltype
Installation type		IRM (In)		install
Rotation direction		right		rotation
Isolation class		ISO F		ISOclass
Protection class		IP55		IPmotor
Is pole-changeable		No		polexch
Type of power supply		AC 3~		pwrsupmotor
Number of poles (1)		4.000000		num polesw1
Connection	Δ	Δ		wiringw1
Connection (wiring 2)	Y			wiringw2
Rated voltage	400	460	V	U _{rated, f1}
Rated voltage (wiring 2)	690		V	U _{rated, f2}
Rated current	14.2	12.4	A	I _{rated, f1}
Rated current (wiring 2)	8.23		A	I _{rated, f2}
Shaft power	7500	7500	W	P _{out, f1}
Shaft power (wiring 2)	7500		W	P _{out, f2}
Speed	1465	1770	1/min	n _{f1}
Speed (wiring 2)	1465		1/min	n _{f2}
Starting current	121	112	A	I _{start, f1}
Starting current (wiring 2)	70		A	I _{start, f2}
Efficiency	90.6	91.7	%	$\eta_m, f1$
Efficiency (wiring 2)	90.6		%	$\eta_m, f2$
Efficiency class	IE3	IE3		IE _{motor}
Min. temperature	-20	-20	°C	T _{motor, min}
Cos Phi	0.840000	0.830000		cos φ
UL-Certification motor		UL recognized		ULcert


[to the product detail page](#)

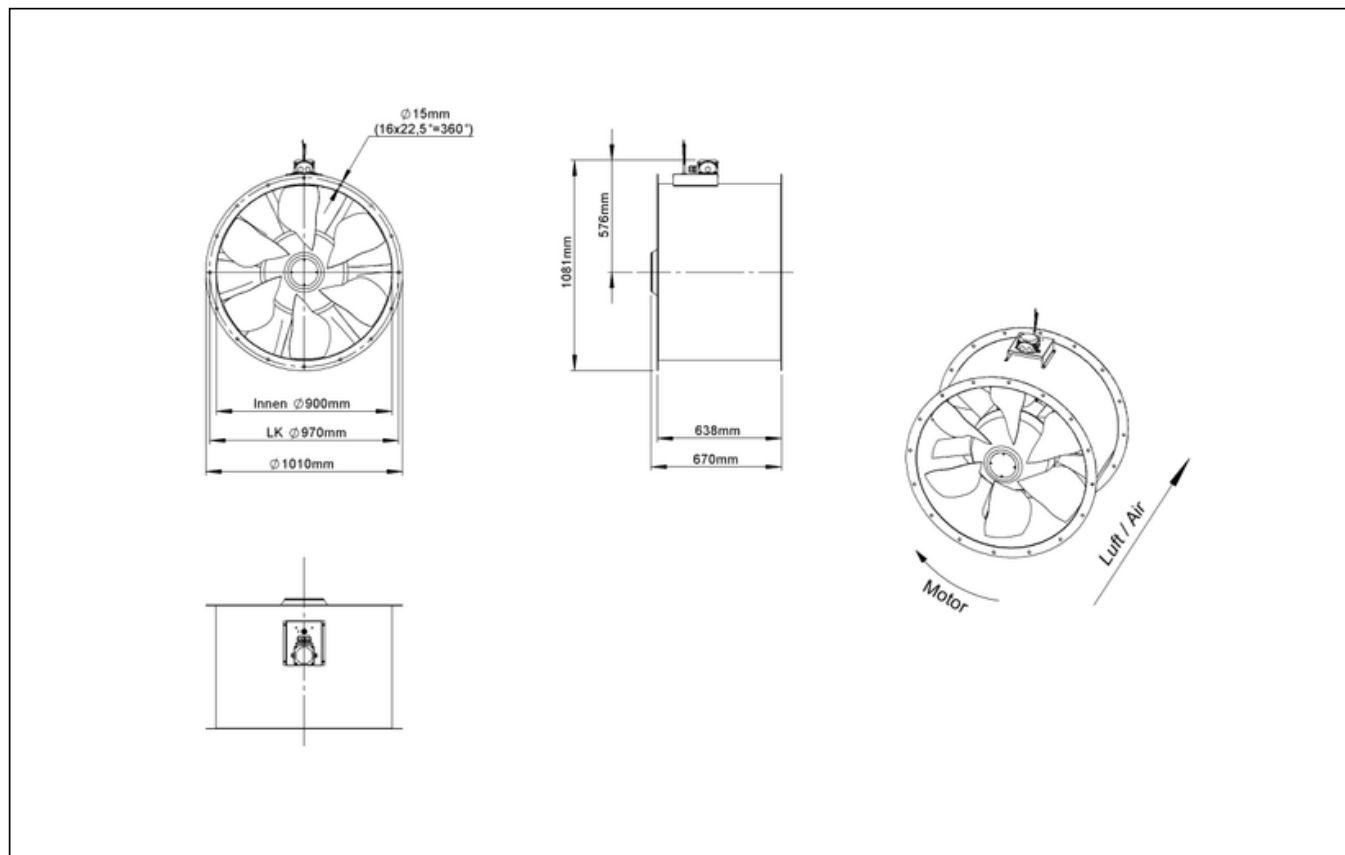
ERP DATA (LOT11)

Name	Value	Unit	Formula symbol
Speed at the energy efficiency optimum	1311	1/min	n_{opt}
Efficiency level	71.4	%	N
Efficiency category	total		$\eta_{efficiency}$
Input power of the motor at the energy efficiency optimum	9.46	kW	$P_{e, opt}$
Overall efficiency	71.6	%	η_{ges}
Measurement category	B		meas cat
Fan pressure at energy efficiency optimum	607	Pa	p_f, opt
Flowrate at energy efficiency optimum	38547	m³/h	Q_v, opt



to the product detail page

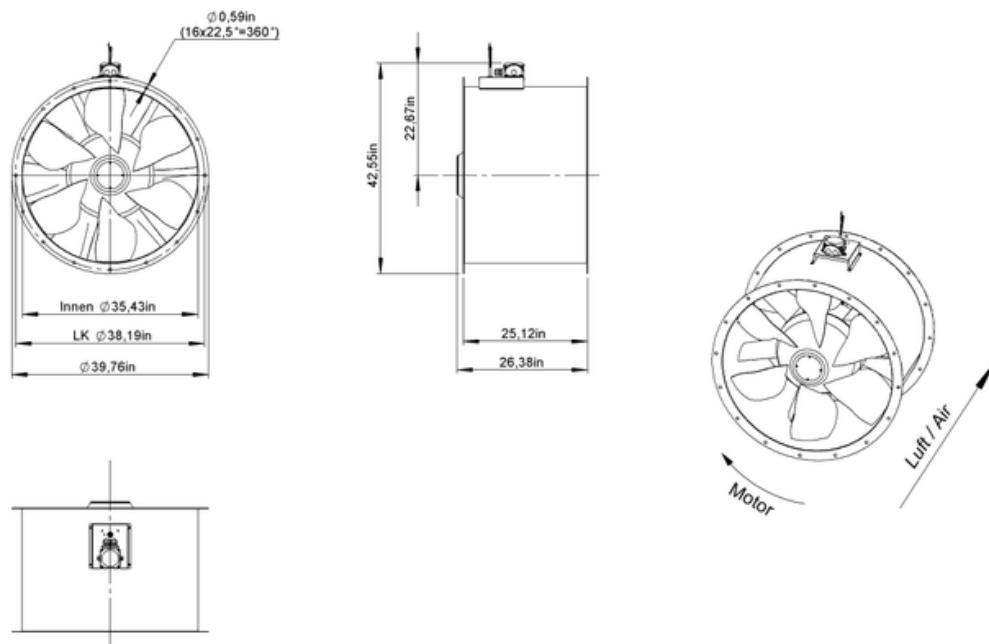
CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS



AL 900 D4 02

162702

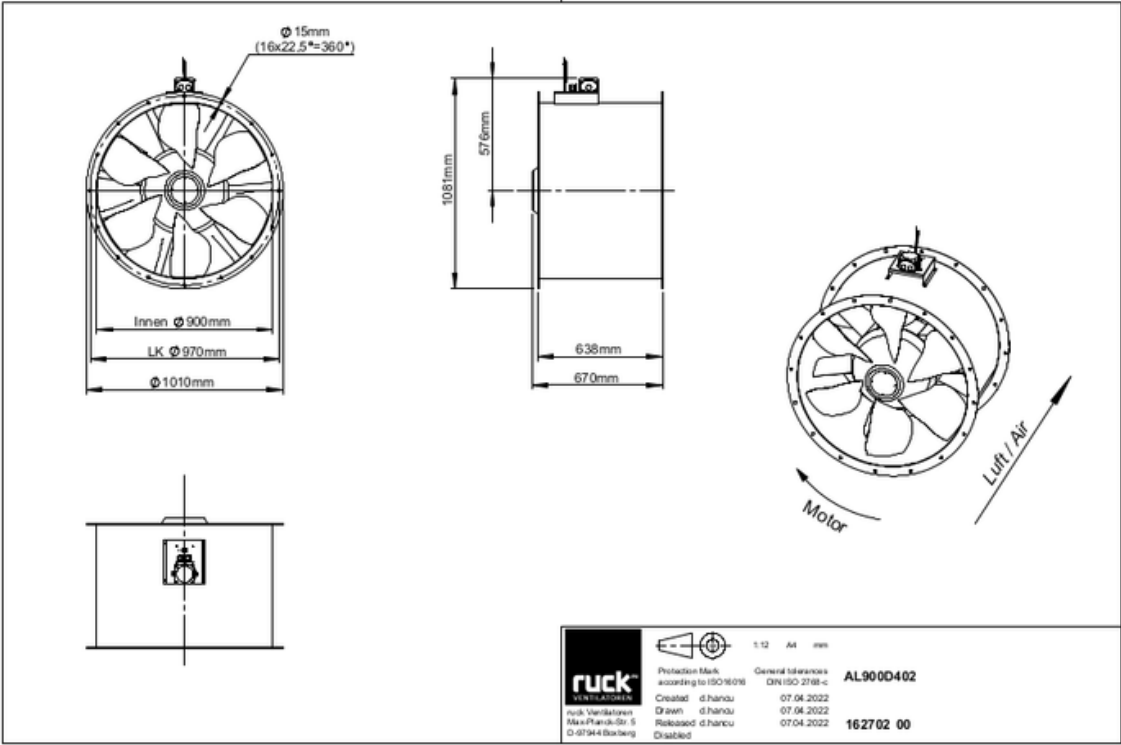
ruck



to the product detail page

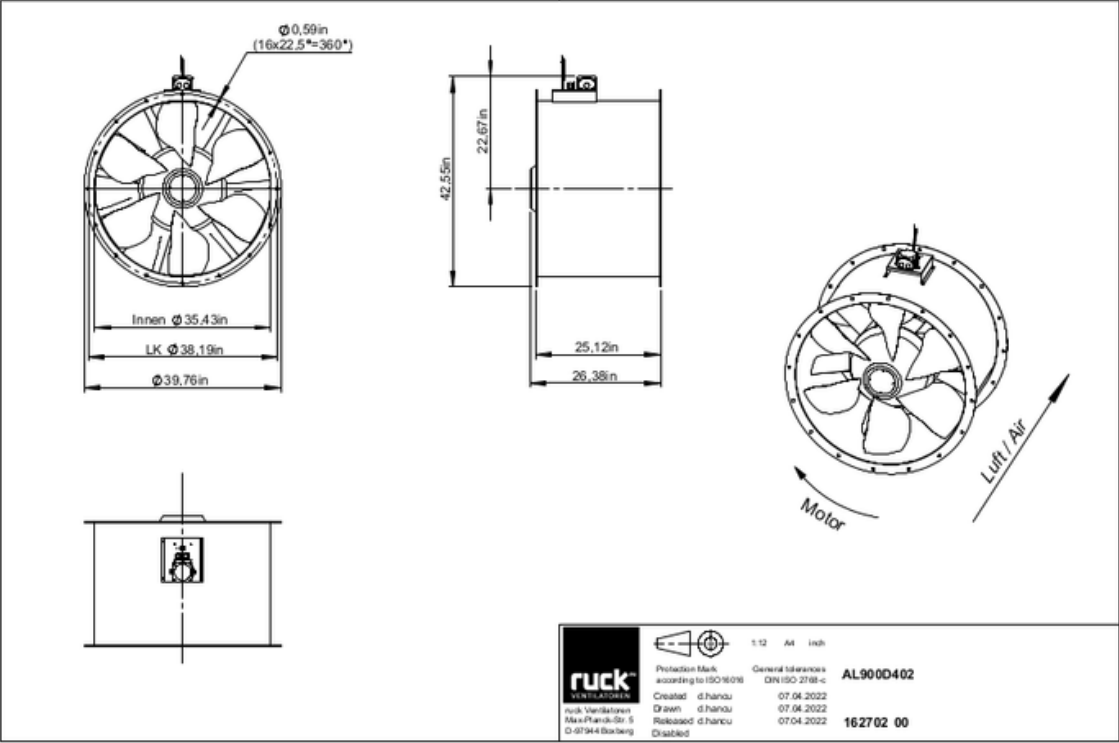
AL 900 D4 02

162702



AL 900 D4 02

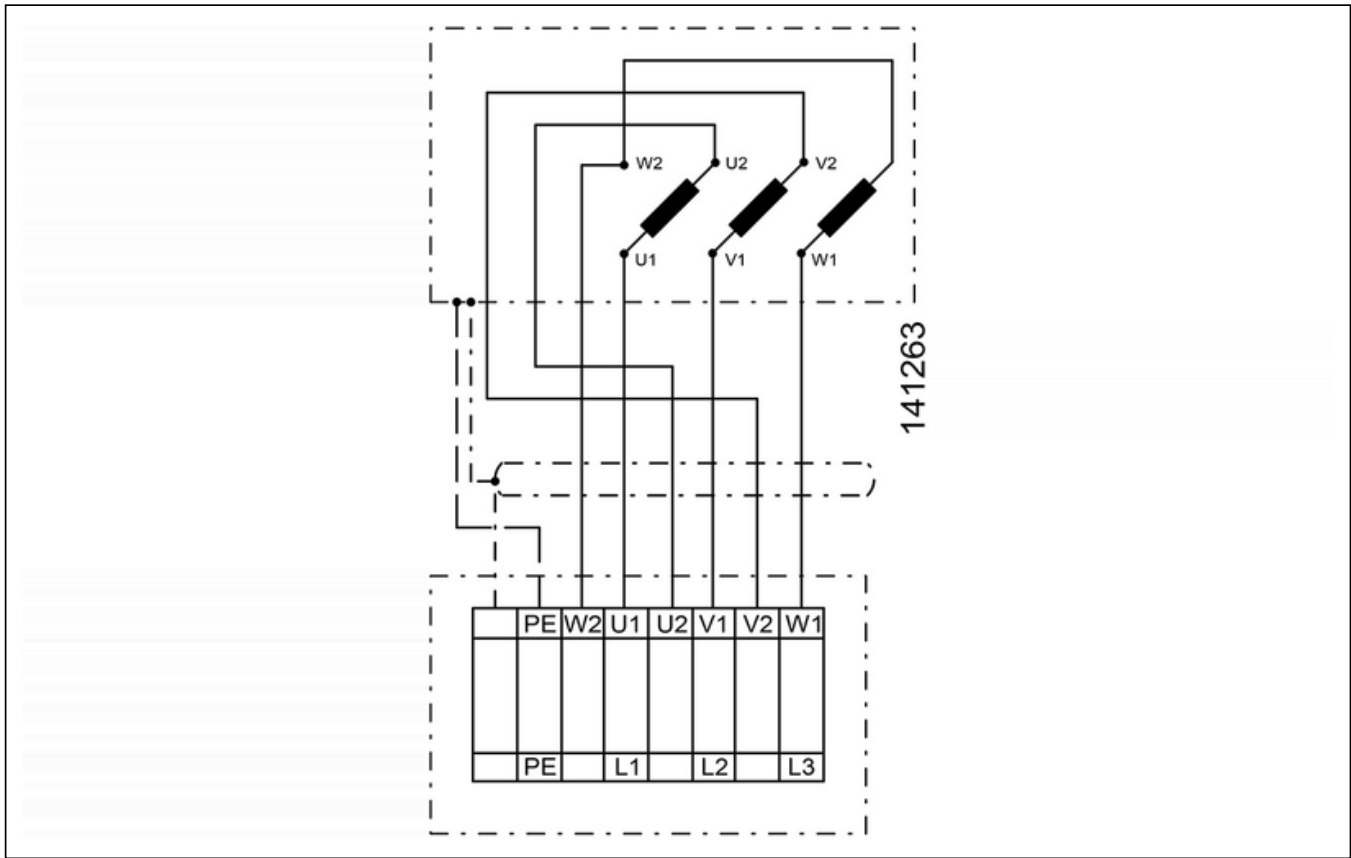
162702



to the product detail page

AL 900 D4 02

162702



to the product detail page

MECHANICAL ACCESSORIES

RVK 900 | 157755



- Automatic tube shutter
- Sheet steel, powder coated
- For vertical installation
- Flange mounting

RAF 900 | 157406



- Round flange
- Sheet steel, powder coated

RVS 900-01 | 157479



- Tube connection spigot
- Sheet steel, powder coated
- Suitable for outdoor installation
- Flange mounting

RAS 900 | 157616



- Round spigot, flexible
- Galvanized steel sheet, plastic band (PES)
- Temperature resistant up to 75 °C
- Flange mounting

ESD 900 | 157543



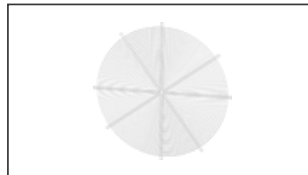
- Inlet cone
- Steel sheet, powder coated
- Flange mounting

FAL 900 | 157898



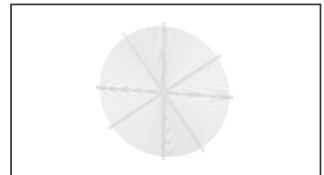
- Mounting foot
- Sheet steel, powder coated
- Flange mounting

SGW 900 | 159541



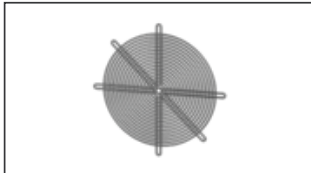
- Protection grille, wide meshed
- Steel sheet, galvanized
- Flange mounting

SGW 1000 | 159542



- Protection grille, wide meshed
- Steel sheet, galvanized
- Flange mounting

SGE 900 | 159517



- Protection grille, narrow meshed
- Steel sheet, galvanized
- Flange mounting

FSD 08 | 162473



- Set of 4 vibration dampers
- Made of natural rubber, hardness 55 Shore A

FSD10 | 162484



- Set of 4 vibration dampers
- All metal design, galvanized

RVK H 900 | 159463



- Automatic tube shutter
- Sheet steel, powder coated
- For horizontal installation
- Flange mounting

MR 900 | 166015



- Mounting ring
- For vertical mounting
- Powder-coated sheet steel
- Flange mounting DN 900



to the product detail page

ELECTRICAL ACCESSORIES

MS 06 | 160184



- Motor protection switch with device switch function
- For three phase motors
- I_{max} = 16 A

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 % V_{dc}
- Step 3 100 % V_{dc}
- Supply voltage +10 V_{dc}

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

FU 75 09 | 161400



- Frequency converter
- Supply voltage 400 V 3~ 50/60 Hz
- Output voltage 0 - 400 V 3~
- Fire mode function (smoke extract fans)

FU 75 08 | 161399



- Frequency converter
- Supply voltage 400 V 3~ 50/60 Hz
- Output voltage 0 - 400 V 3~
- Protection class IP 20, for switch cabinet

