

DHN 450 D4 F4 30

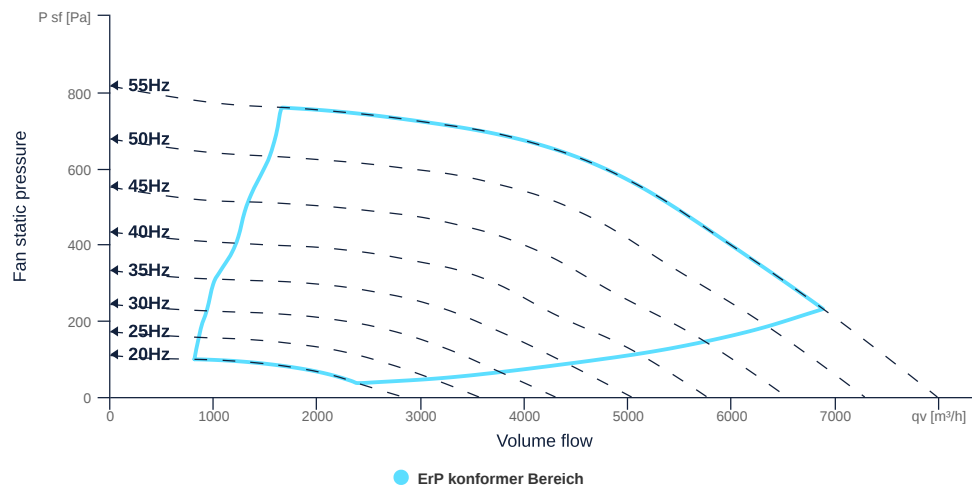
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- Backward curved radial impeller
- Horizontal discharge
- Housing made of aluminum and galvanized sheet steel
- Efficient IE3 motor, frequency controllable
- Smoke extract fan F400, 200 °C continuous operation
- Integrated device switch



FAN CURVES

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



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GENERAL DATA

Name	Value	Unit	Formula symbol
Labeling	CE, UKCA		
Duct size	-		WxH _{duct}
Pipe connection size (DN)	DN400		DN
Rated voltage (entire device)	400	V	U _{rated}
Phases (entire device)	3~		phase
Electrical protection (entire device)	6 A		fuse
Housing material	Aluminium		mat _{casing}
Impeller material	Steel		mat _{impeller}
Weight	57	kg	m
Nominal air flow rate, nominal point m³/h	6778.8	m³/h	q _{v,nom}
Nominal external pressure, static	252	Pa	p _{s,nom}
Fan type	Radial		F _{an} type
Category / Installation situation	A		cat

ERP DATA (LOT 6)

Name	Value	Unit	Formula symbol
Nominal air flow rate, nominal point m³/s	1.88	m³/s	q _{v,nom}
Actual electrical input power, nominal point	1.06	kW	P _{e,nom}
Face velocity, nominal point	4.9	m/s	v _{nom}
Nominal external pressure, static	252	Pa	p _{s,nom}
supply air fan static efficiency, nominal point	63.4	%	η _{es,SUP}
Enclosure sound level, nominal point	90	dB(A)	L _{WA2}
Rating	Product is compliant 2018		

MAXIMAL DATA

Name	Value	Unit	Formula symbol
Max. power consumption (device)	977	W	P _{ed, max}
Max. operating current (device)	2.53	A	I _{ed, max}
Max. speed	1635	1/min	n _{max}
Max. stat. efficiency	59.6	%	η _{es}
Max. fan efficiency	60.3	%	η _e
Max. flowrate	7980	m³/h	q _{v, max}
Max. stat pressure	820	Pa	p _{sf, max}
Max. medium temperature	200	°C	T _{m, max}
Max. environment temperature	50	°C	T _{amb, max}
Min. environment temperature	-20	°C	T _{amb, min}



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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		wiringw1
Connection (wiring 2)		Y		wiringw2
Rated voltage	230		V	Urated, f1
Rated voltage (wiring 2)	400		V	Urated, f2
Rated current	4.23		A	Irated, f1
Rated current (wiring 2)	2.45		A	Irated, f2
Shaft power	1100		W	Pout, f1
Shaft power (wiring 2)	1100		W	Pout, f2
Speed	1450		1/min	n1
Speed (wiring 2)	1450		1/min	n2
Starting current	7.6		A	Istart, f1
Starting current (wiring 2)	7.6		A	Istart, f2
Efficiency class	IE3			IEmotor
Min. temperature	-20		°C	Tmotor, min
UL-Certification motor		UL recognized		ULcert

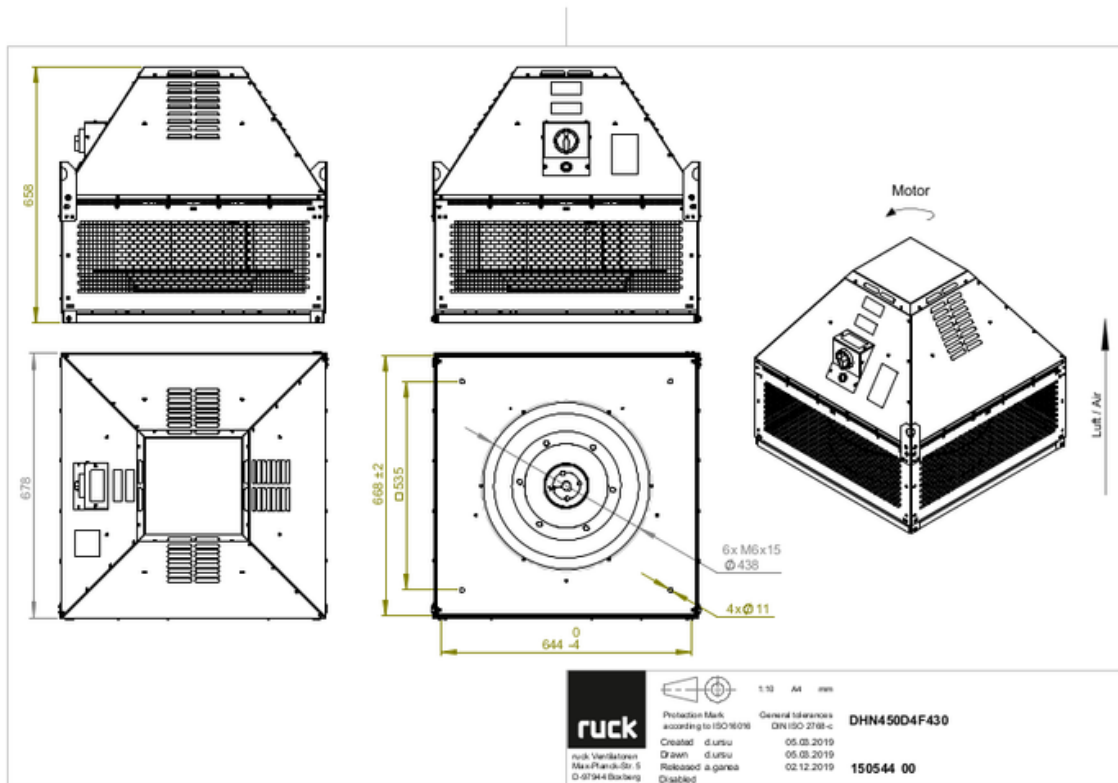
SMOKE EXTRACT DATA

Name	Value	Unit	Formula symbol
Maximum resistance temperature	400	°C	Tfire
Maximum resistance time	120.000000		tfire
Fire resistance class	F 400 (120)		Fclass
Snow load class	SL0		SLclass



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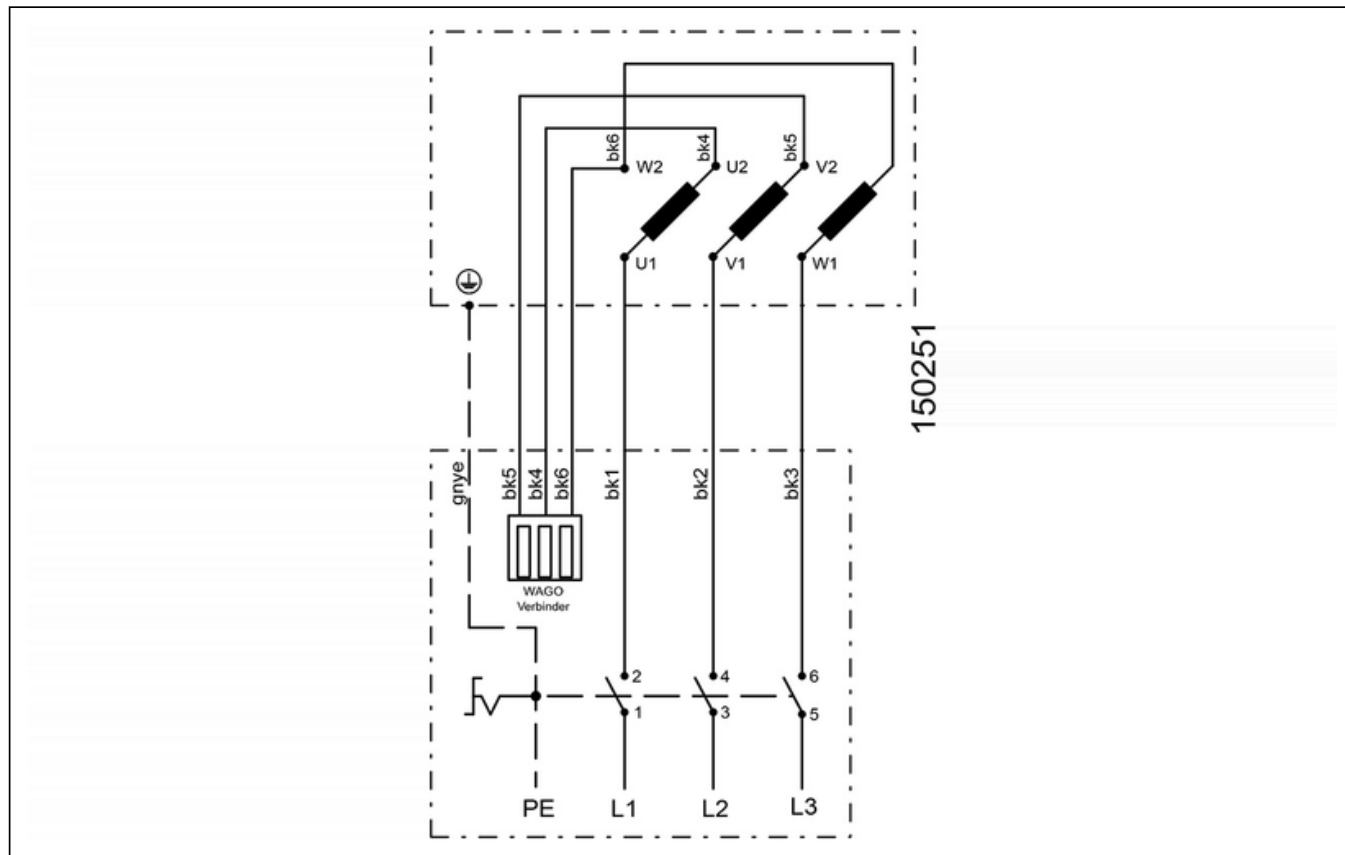
CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS



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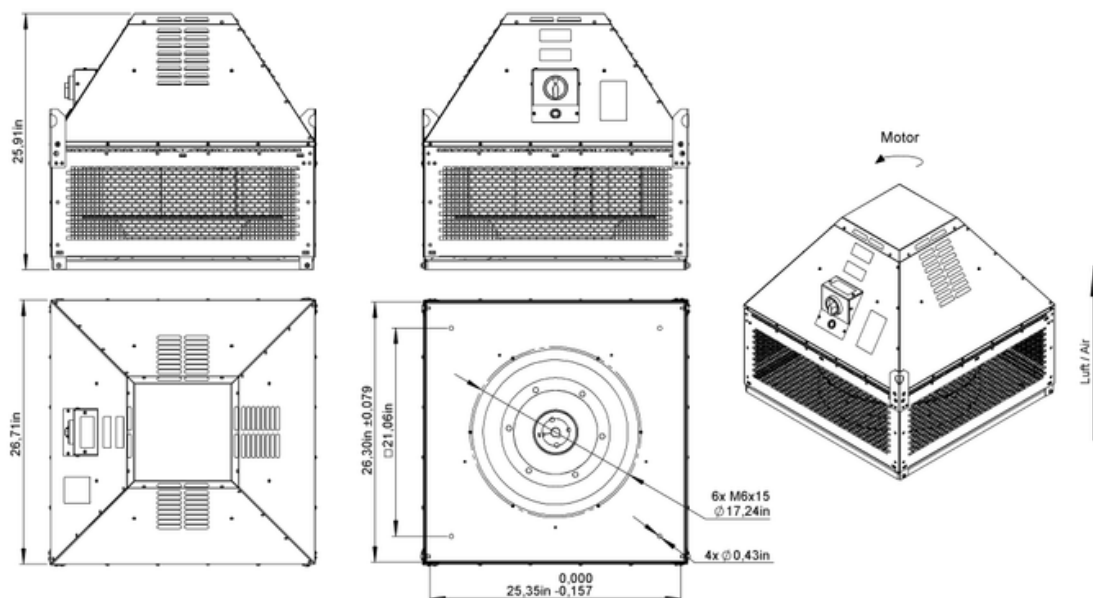


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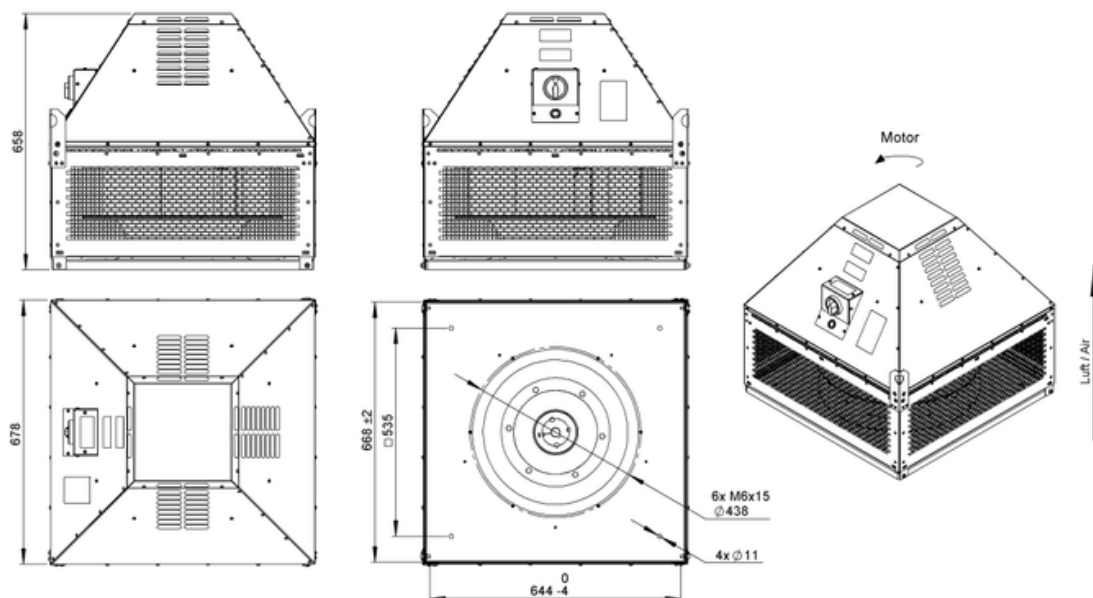


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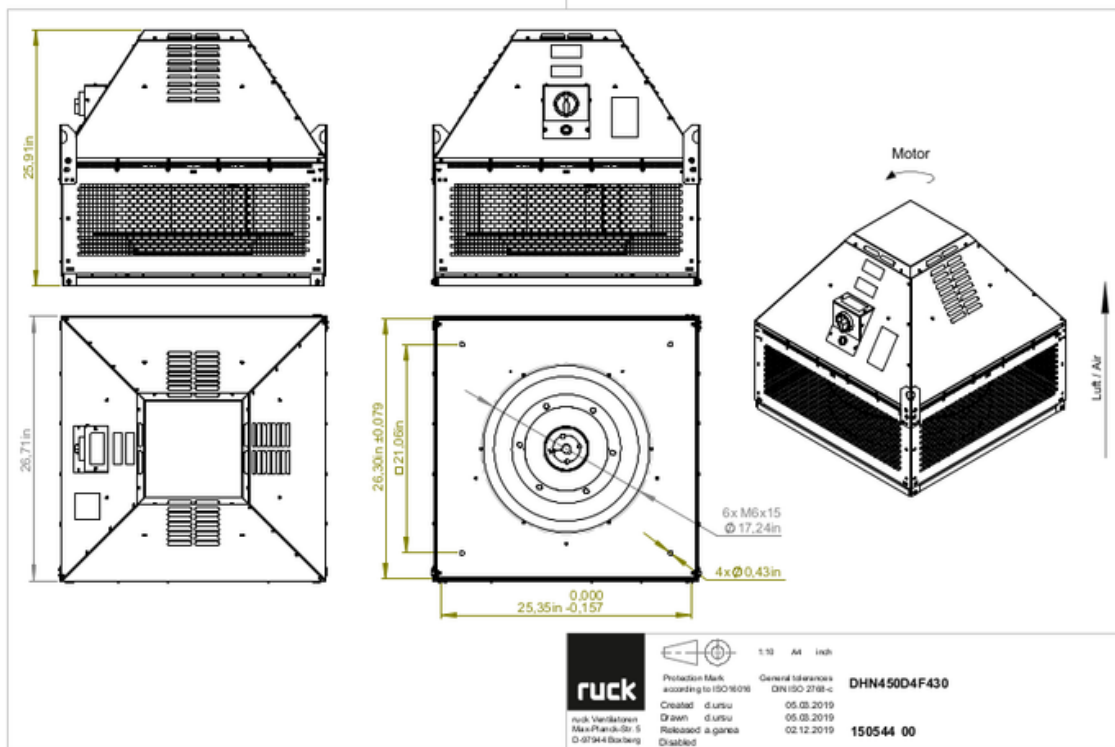
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MECHANICAL ACCESSORIES

DAF 400 | 109826



- Roof inlet flange
- Galvanized steel sheet

DSF 450-10 | 126193



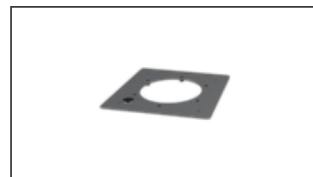
- Flat roof socket
- Made of aluminum AlMg3
- Sound and heat insulation

DSF 450-12 | 133850



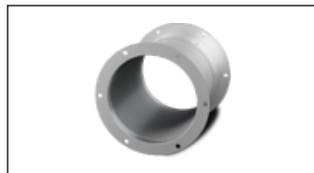
- Sloped roof socket
- Made of aluminum AlMg3
- Sound and heat insulation
- For roof slope 3°

DAP 450 | 133976



- Adapter plate for roof mounting of roof fans
- Galvanized steel sheet

DAS 400 F4 | 150093



- Flexible roof inlet spigot F4
- Temperature resistant up to 400 °C

DVK 400 10 F4 | 153010



- Automatic roof shutter
- Temperature resistant up to 400 °C



ELECTRICAL ACCESSORIES

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

MTP 20 | 128146



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

FU 15 12 | 141854



- Frequency converter IP66
- Supply voltage 230 V 1~ 50/60 Hz
- Output voltage 0 - 230 V 3~
- Fire mode function (smoke extract fans)

FU 15 18 | 141876



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

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

MTP 50 | 153133



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

