

DHN 225 D2 F4 30

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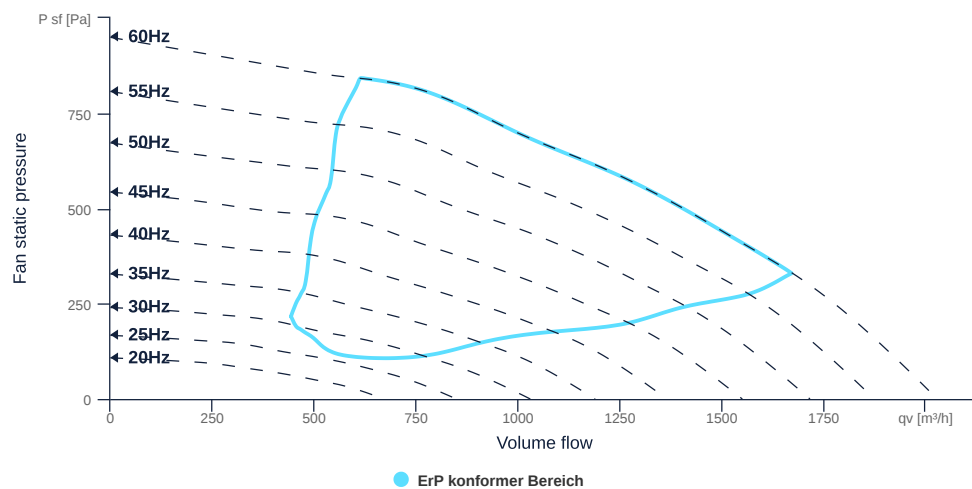
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- Backward curved radial impeller
- Horizontal discharge
- Housing made of aluminum and galvanized sheet steel
- Efficient IE3 motor, frequency controllable
- Smoke extract fan F400, 200 °C continuous operation
- Integrated device switch



MAP

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)	DN180		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	25.9	kg	m
Nominal air flow rate, nominal point m³/h	1645.2	m³/h	q _{v,nom}
Nominal external pressure, static	351	Pa	p _{s,nom}
Fan type	Radial		Fan _{type}
Category / Installation situation	A		cat

ERP DATA (LOT 6)

Name	Value	Unit	Formula symbol
Nominal air flow rate, nominal point m³/s	0.46	m³/s	q _{v,nom}
Actual electrical input power, nominal point	0.42	kW	P _{e,nom}
Face velocity, nominal point	4.1	m/s	v _{nom}
Nominal external pressure, static	351	Pa	p _{s,nom}
supply air fan static efficiency, nominal point	53.1	%	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)	293	W	P _{ed, max}
Max. operating current (device)	0.84	A	I _{ed, max}
Max. speed	3530	1/min	n _{max}
Max. stat. efficiency	41.3	%	η _{es}
Max. fan efficiency	41.7	%	η _e
Max. flowrate	2030	m³/h	q _{v, max}
Max. stat pressure	950	Pa	p _{sf, max}
Max. medium temperature	200	°C	T _{m, max}
Max. environment temperature	60	°C	T _{amb, max}
Min. environment temperature	-20	°C	T _{amb, min}



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MOTOR DATA

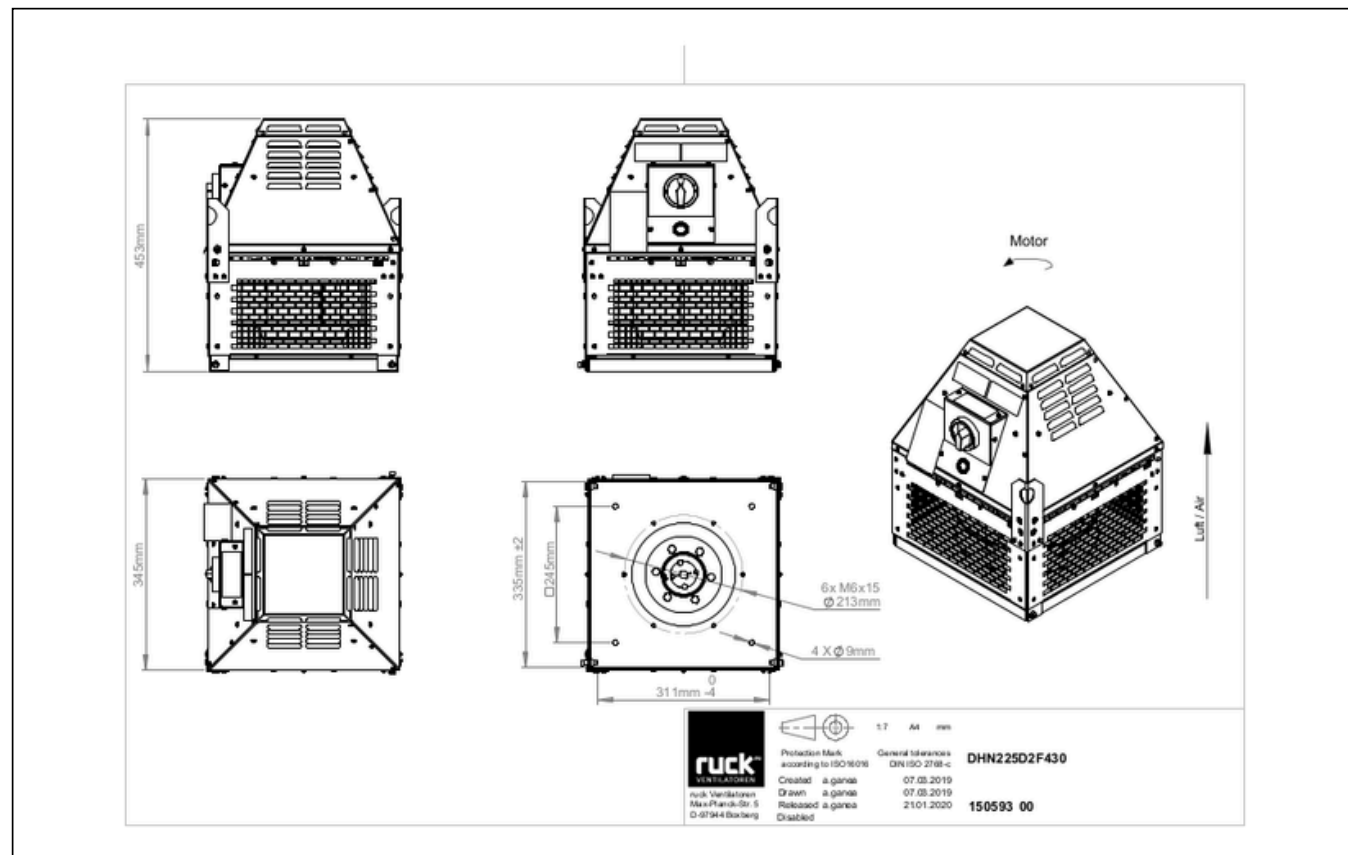
Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Rated frequency (device)		50		f
Motor type		AC 3~		phase
Control type		frequency-controlled		ctrltype
Installation type		IRM (In)		install
Rotation direction		right		rotation
Isolation class		ISO F		ISOclass
Protection class		IP55		IPmotor
Is pole-changeable		No		polexch
Type of power supply		AC 3~		pwrsupmotor
Number of poles (1)		2.000000		num polesw1
Connection	Δ	Y		wiringw1
Connection (wiring 2)	Y			wiringw2
Rated voltage	230	460	V	U _{rated, f1}
Rated voltage (wiring 2)	400		V	U _{rated, f2}
Rated current	2.07	1.07	A	I _{rated, f1}
Rated current (wiring 2)	1.19		A	I _{rated, f2}
Shaft power	550	550	W	P _{out, f1}
Shaft power (wiring 2)	550		W	P _{out, f2}
Speed	2770	3415	1/min	n _{f1}
Speed (wiring 2)	2770		1/min	n _{f2}
Starting current	12.2	7.81	A	I _{start, f1}
Starting current (wiring 2)	7.02		A	I _{start, f2}
Efficiency	77.8	76.8	%	η _{m, f1}
Efficiency (wiring 2)	77.8		%	η _{m, f2}
Efficiency class	IE3	IE3		IE _{motor}
Min. temperature	-20	-20	°C	T _{motor, min}
Cos Phi	0.860000	0.840000		cos φ
UL-Certification motor		UL recognized		ULcert

SMOKE EXTRACT DATA

Name	Value	Unit	Formula symbol
Maximum resistance temperature	400	°C	T _{fire}
Maximum resistance time	120.000000		t _{fire}
Fire resistance class	F 400 (120)		F _{class}
Snow load class	SL0		SL _{class}



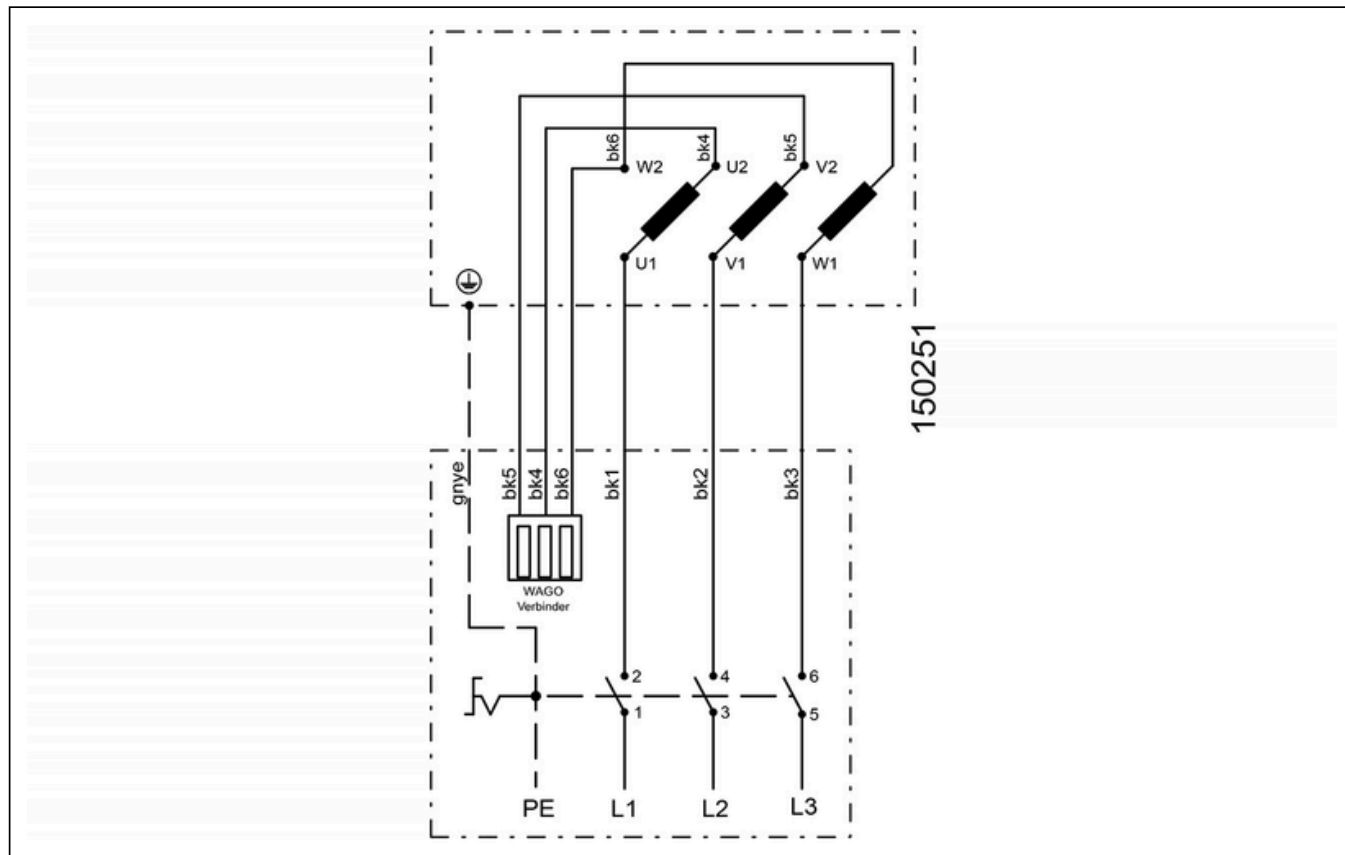
CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS



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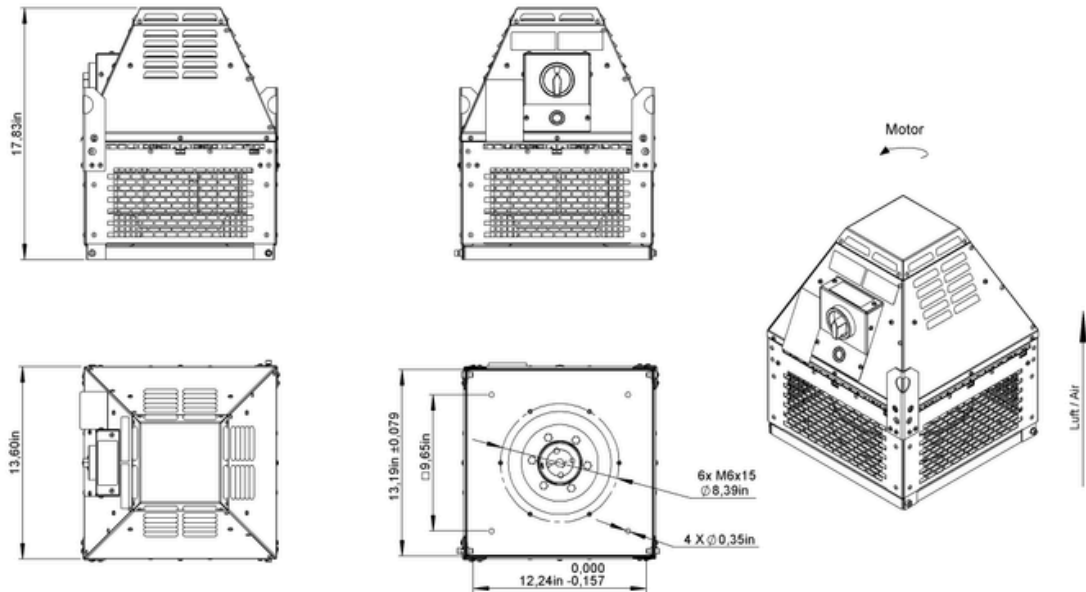
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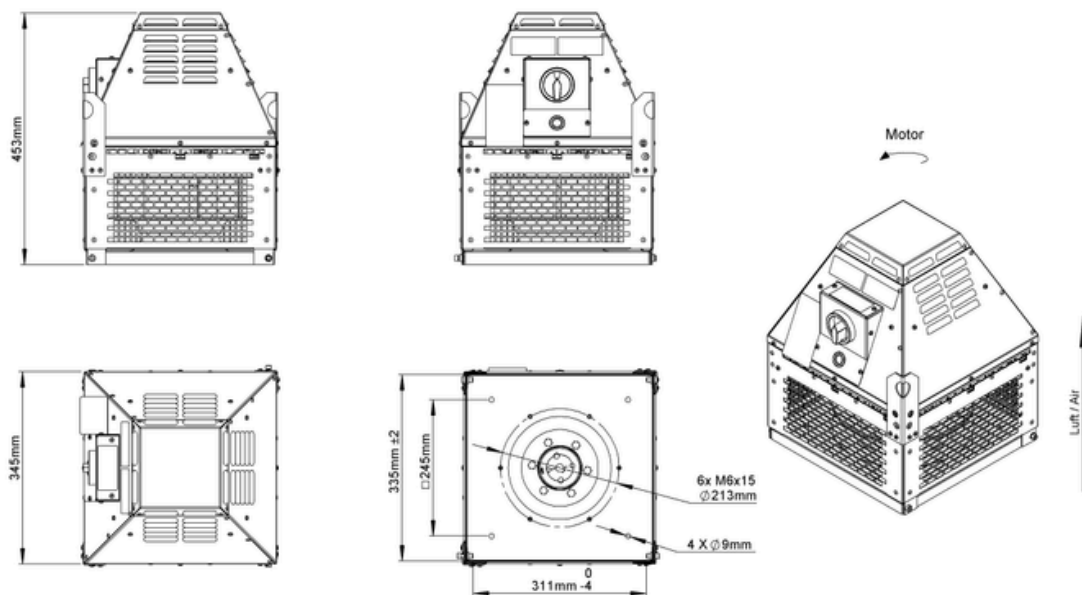
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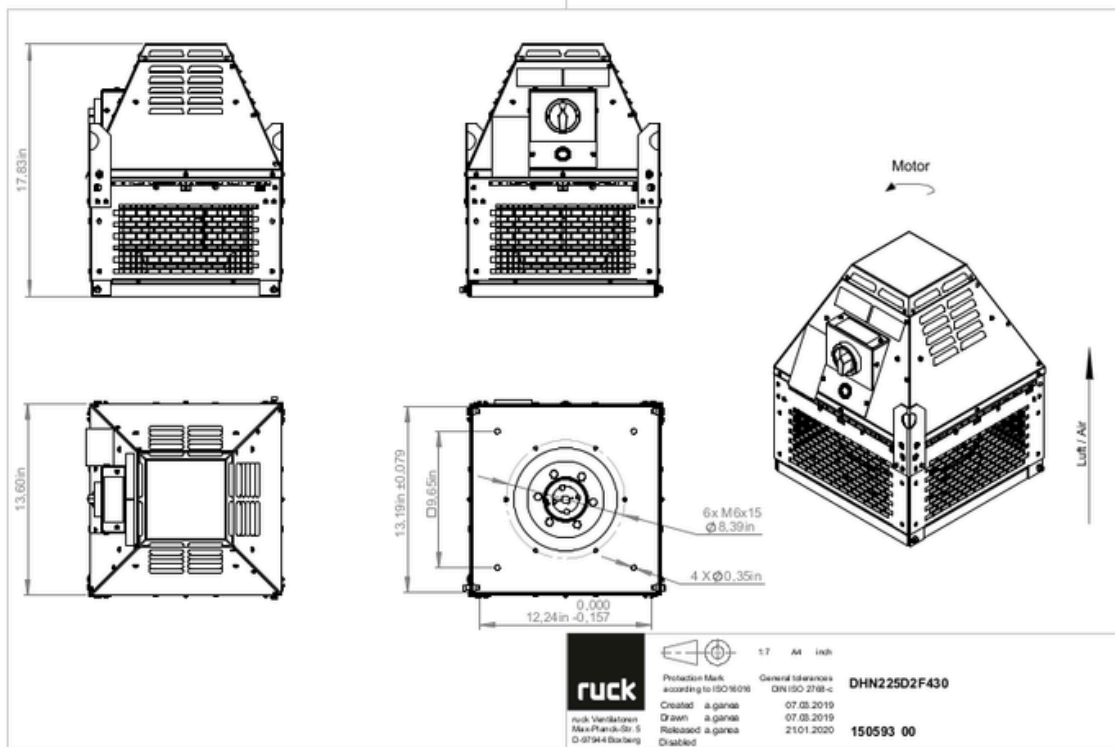
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MECHANICAL ACCESSORIES

DAF 150 | 110735



- Roof inlet flange
- Galvanized steel sheet

DAF 180 | 110744



- Roof inlet flange
- Galvanized steel sheet

DSF 220-10 | 126170



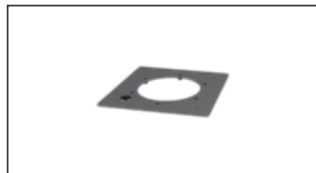
- Flat roof socket
- Made of aluminum AlMg3
- Sound and heat insulation

DSF 220-12 | 133709



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

DAP 220 | 133946



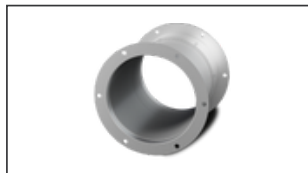
- Adapter plate for roof mounting of roof fans
- Galvanized steel sheet

DAF 160 | 137396



- Roof inlet flange
- Galvanized steel sheet

DAS 180 F4 | 145422



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

DVK 180 10 F4 | 153008



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

FU 075 14 | 141847



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

FU 075 26 | 141869



- 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 k Ω
- Step 1 + 2 settable 10 % - 100 % Vdc
- Step 3 100 % Vdc
- Supply voltage +10 Vdc

MTP 40 | 147359



- Potentiometer 10 k Ω
- 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 $\pm$ 10 % / 50-60 Hz
- Selectable output: 1-10 VDC / 2-20 mA / 10-100 % PWM
- Min. and max. output value adjustable

