

MPS 280 D2 F4 30

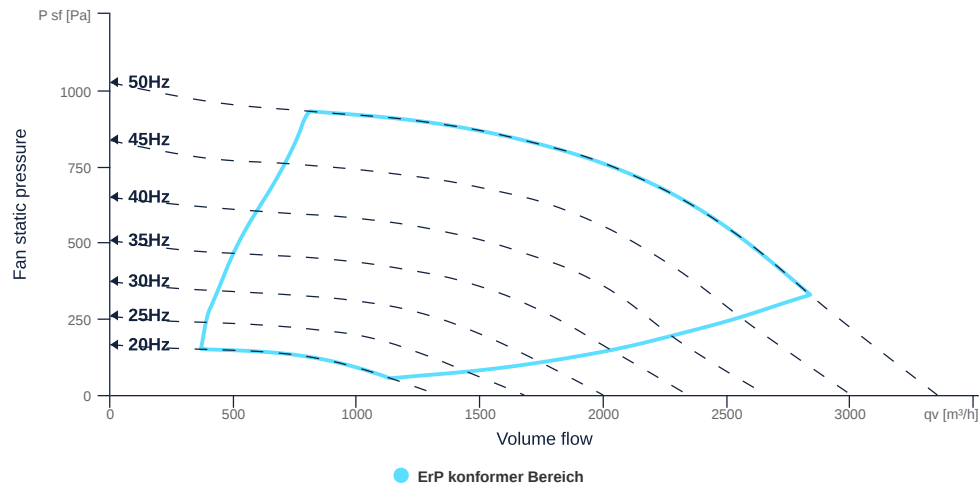
145832

- Backward curved radial impeller
- Swing out fan unit
- Sheet steel housing double-walled, 40 mm mineral wool
- Efficient IE3 motor, outside the airflow
- Smoke extract fan F400, 200 °C continuous operation
- With condensate and grease drain



MAP

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



to the product detail page

MPS 280 D2 F4 30

145832

ruck

GENERAL DATA

Name	Value	Unit	Formula symbol
Labeling	CE, UKCA		
Duct size	-		WxH _{duct}
Pipe connection size (DN)	DN315		DN
Rated voltage (entire device)	400	V	U _{rated}
Phases (entire device)	3~		phase
Electrical protection (entire device)	6 A		fuse
Housing material	Galvanized steel		mat _{casing}
Impeller material	Steel		mat _{impeller}
Weight	39.65	kg	m
Nominal air flow rate, nominal point m³/h	2782.8	m³/h	q _{v,nom}
Nominal external pressure, static	367	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	0.77	m³/s	q _{v,nom}
Actual electrical input power, nominal point	0.67	kW	P _{e,nom}
Face velocity, nominal point	9.9	m/s	v _{nom}
Nominal external pressure, static	367	Pa	p _{s,nom}
supply air fan static efficiency, nominal point	51.6	%	η _{es,SUP}
Highest external air leakage rate	0.01	%	
Enclosure sound level, nominal point	77	dB(A)	L _{WA2}
Rating	Product is compliant 2018		

MAXIMAL DATA

Name	Value	Unit	Formula symbol
Max. power consumption (device)	759	W	P _{ed, max}
Max. operating current (device)	1.34	A	I _{ed, max}
Max. speed	2920	1/min	n _{max}
Max. stat. efficiency	52.4	%	η _{es}
Max. fan efficiency	54.8	%	η _e
Max. flowrate	3350	m³/h	q _{v, max}
Max. stat pressure	1025	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}



to the product detail page

MPS 280 D2 F4 30

145832

ruck

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	-		SL _{class}



to the product detail page

MPS 280 D2 F4 30

145832

CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS











MECHANICAL ACCESSORIES

WSH MPS | 103661



- Weather protection hood for motor
- Galvanized steel sheet

WK MPS 07 | 127953



- Wall mounting bracket for box fan
- Galvanized steel sheet
- 1 Pack = 2 pieces

ELECTRICAL ACCESSORIES

GS 03 | 107633



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

CON P1000 | 115259



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

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 $50\text{ }^{\circ}\text{C}$
- VDE

MS 01 | 140407



- Motor protection switch with Isolator switchfunction
- $I_{max} = 400\text{ V}$, $50/60\text{ Hz}$
- Max. $0,55\text{ kW}$
- Protection class IP 55

FU 075 16 | 141849



- Frequency converter IP66
- Supply voltage $230\text{ V } 1\sim 50/60\text{ Hz}$
- Output voltage $0 - 230\text{ V } 3\sim$
- Fire mode function (smoke extract fans)

FU 075 28 | 141871



- Frequency converter
- Supply voltage $400\text{ V } 3\sim 50/60\text{ Hz}$
- Output voltage $0 - 400\text{ V } 3\sim$
- Fire mode function (smoke extract fans)

MTP 30 | 143289



- Stepped potentiometer $10\text{ k}\Omega$
- Step 1 + 2 settable $10\% - 100\% \text{ Vdc}$
- Step 3 $100\% \text{ Vdc}$
- Supply voltage $+10\text{ Vdc}$

MTP 40 | 147359



- Potentiometer $10\text{ k}\Omega$
- Connection in terminal box
- Max. ambient temperature $50\text{ }^{\circ}\text{C}$
- PU: 20 pieces

SEN AIR | 148641



- Airflow and temperature transducer
- Measuring range temperature $0\text{...}+50\text{ }^{\circ}\text{C}$
- With adjustable switching threshold (air speed)
- Measuring range air velocity up to 20 m/s

MTP 50 | 153133



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



to the product detail page