MPS 400 D4 F4 30

145864

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



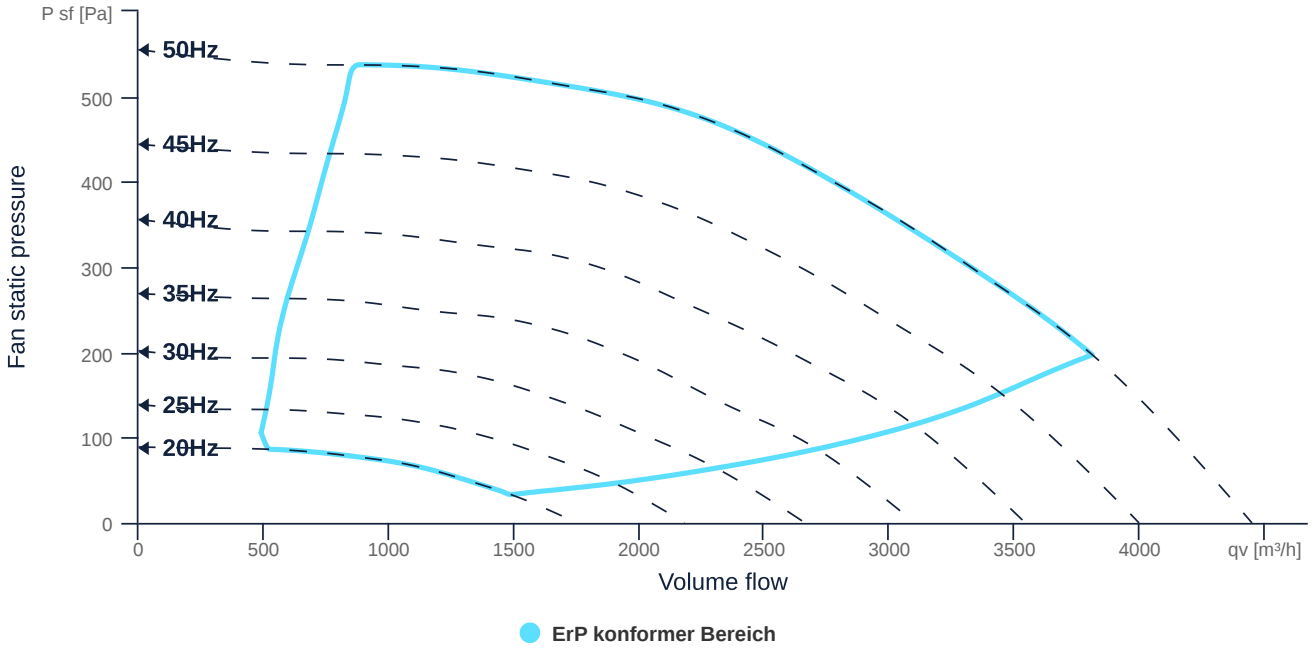
to the product detail page

MPS 400 D4 F4 30

145864

FAN CURVES

Name	Value	Unit
Volume flow	1966.33	m³/h
Pressure	-173.17	Pa



ruck Ventilatoren GmbH certifies that the fan range MPS shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program. / July 2026

F400

to the product detail page

MPS 400 D4 F4 30

145864

TECHNICAL SPECIFICATIONS

Name	Value	Unit	Formula symbol
Volume flow	1966	m³/h	q_{vcalc}
Pressure	-174	Pa	psf_{calc}
Fan pressure	18	Pa	pf
Fan static pressure	-174	Pa	psf
Current consumption Motor	0.5	A	Ie
Current consumption Electric	0	A	Ied
Electrical power consumption	67	W	P_{EK}
Electrical power consumption	114	W	Ped_K
Frequency	22	Hz	frq
Rotation speed	656	1/min	N
Total static efficiency	-140	%	etaFaPeK
Total speed controlled static efficiency	-83	%	etaFaPedK
Total efficiency	14	%	etatPeK
Total speed controlled efficiency	8	%	etatPedK
SFP (entire device)	124	W/(m³/s)	sfp_{device}
Sound power level inlet	61	dB(A)	LwA5
Sound power level outlet	61	dB(A)	LwA6
Sound power level housing radiation	59	dB(A)	LwA2

SOUND DATA

Sound power	mid-frequency tape										Unit	Formula symbol
	∑	63	125	250	500	1000	2000	4000	8000	16000		
suction	62	38	48	52	55	53	49	52	56	41	dB(A)	LwA5
blowout	61	39	46	49	51	56	49	54	56	41	dB(A)	LwA6
Casing break out	59	41	49	46	47	42	35	35	58	43	dB(A)	LwA2

SOUND PRESSURE LEVEL CALCULATOR

Name	Value	Unit
Enveloping surface	Halphsphere	
Distance	3	m

Sound pressure	NR	mid-frequency tape										Unit	Formula symbol
		∑	63	125	250	500	1000	2000	4000	8000	16000		
suction	46	44	20	30	34	38	35	31	35	39	24	dB(A)	LwA5
blowout	45	44	21	29	32	34	39	32	36	38	23	dB(A)	LwA6
Casing break out	47	42	24	31	29	29	25	17	17	40	25	dB(A)	LwA2

to the product detail page

MPS 400 D4 F4 30

145864

GENERAL DATA

Name	Value	Unit	Formula symbol
Labeling	CE, UKCA, AMCA		
Duct size	-		WxH_{duct}
Pipe connection size (DN)	DN355		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	Coated steel		$mat_{impeller}$
Weight	72.1	kg	m
Nominal air flow rate, nominal point m³/h	3736.8	m³/h	qv_{nom}
Nominal external pressure, static	214	Pa	$p_{s,nom}$
Fan type	Radial		Fan_{type}
Category / Installation situation	A		cat
Length	365	mm	
Width	832	mm	
Height	917	mm	

MAXIMAL DATA

Name	Value	Unit	Formula symbol
Max. power consumption (device)	564	w	$P_{ed,\ max}$
Max. operating current (device)	1.12	A	$I_{ed,\ max}$
Max. speed	1480	rpm	n_{max}
Max. stat. efficiency	53	p	η_{es}
Max. fan efficiency	56.7	p	η_{e}
Max. flowrate	4450	m³/h	$q_{v,\ max}$
Max. stat pressure	555	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 400 D4 F4 30

145864

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		$ctrl_{type}$
Installation type		IRM (In)		install
Isolation class		ISO F		ISO_{class}
Protection class		IP55		IP_{motor}
Is pole-changeable		No		polexch
Type of power supply		AC 3~		$pwrsup_{motor}$
Number of poles (1)		4.000000		$num\ poles_{w1}$
Connection	Δ	Y		$wiring_{w1}$
Connection (wiring 2)	Y			$wiring_{w2}$
Rated voltage	230	460	v	$U_{rated,\ f1}$
Rated voltage (wiring 2)	400		v	$U_{rated,\ f2}$
Rated current	2.14	1.09	A	$I_{rated,\ f1}$
Rated current (wiring 2)	1.23		A	$I_{rated,\ f2}$
Nominal power	550	550	w	P_a
Nominal power (wiring 2)	550		w	$P_{out,\ f2}$
Speed	1420	1720	rpm	n_{f1}
Speed (wiring 2)	1420		rpm	n_{f2}
Starting current	14.1	7.96	A	$I_{start,\ f1}$
Starting current (wiring 2)	8.12		A	$I_{start,\ f2}$
Efficiency	80.8	81.1	p	$\eta_{m,\ f1}$
Efficiency (wiring 2)	80.8		p	$\eta_{m,\ f2}$
Efficiency class	IE3	IE3		IE_{motor}
Min. temperature	-20	-20	°C	$T_{motor,\ min}$
Cos Phi	0.800000	0.780000		cos φ
UL-Certification motor		UL recognized		UL_{cert}

SMOKE EXTRACT DATA

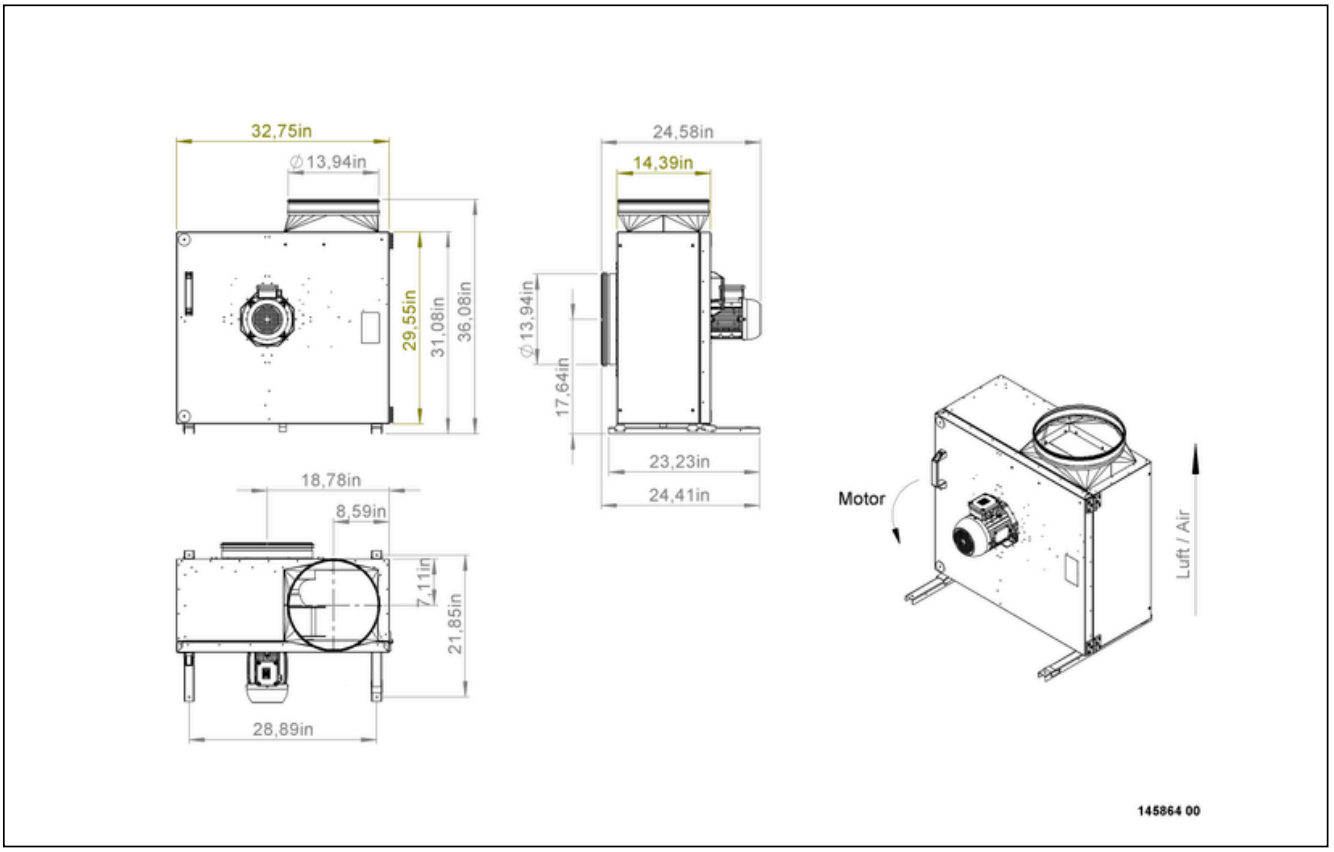
Name	Value	Unit	Formula symbol
Maximum resistance temperature	400	°C	T_{fire}
Maximum resistance time	120.000000		t_{fire}
Fire resistance class	F 400 (120)		F_{class}
Snow load class	-		SL_{class}

to the product detail page

MPS 400 D4 F4 30

145864

CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS

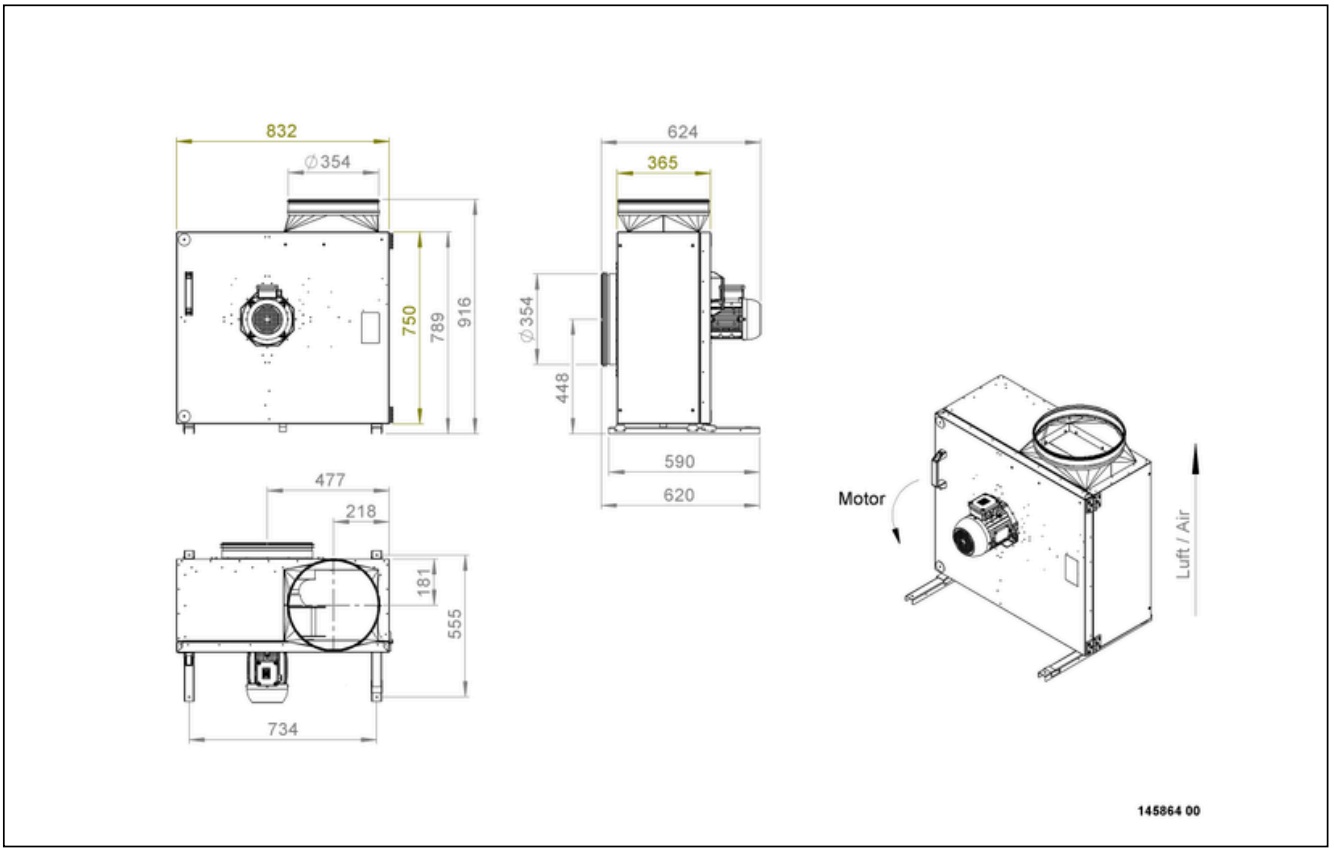


to the product detail page

MPS 400 D4 F4 30

145864

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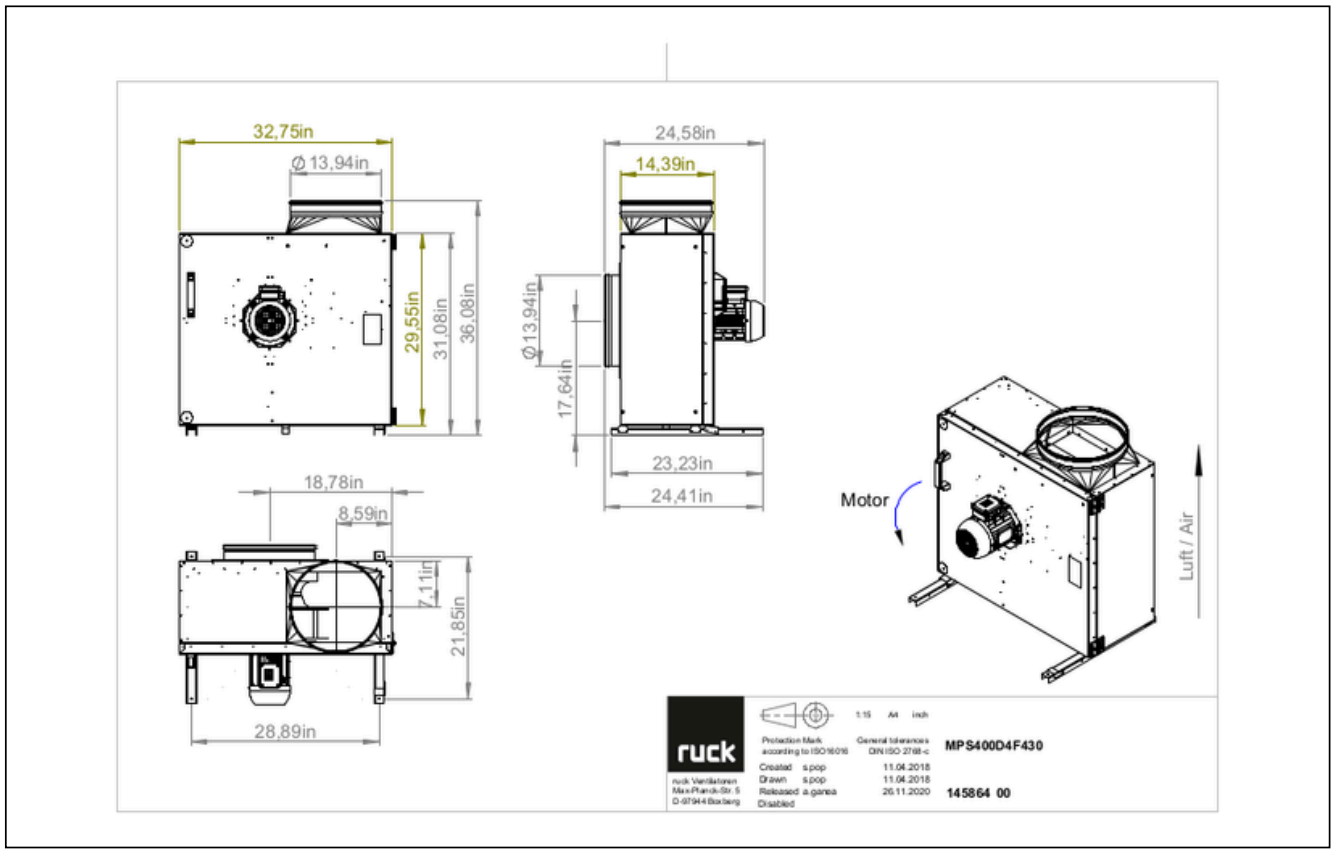


to the product detail page

MPS 400 D4 F4 30

145864

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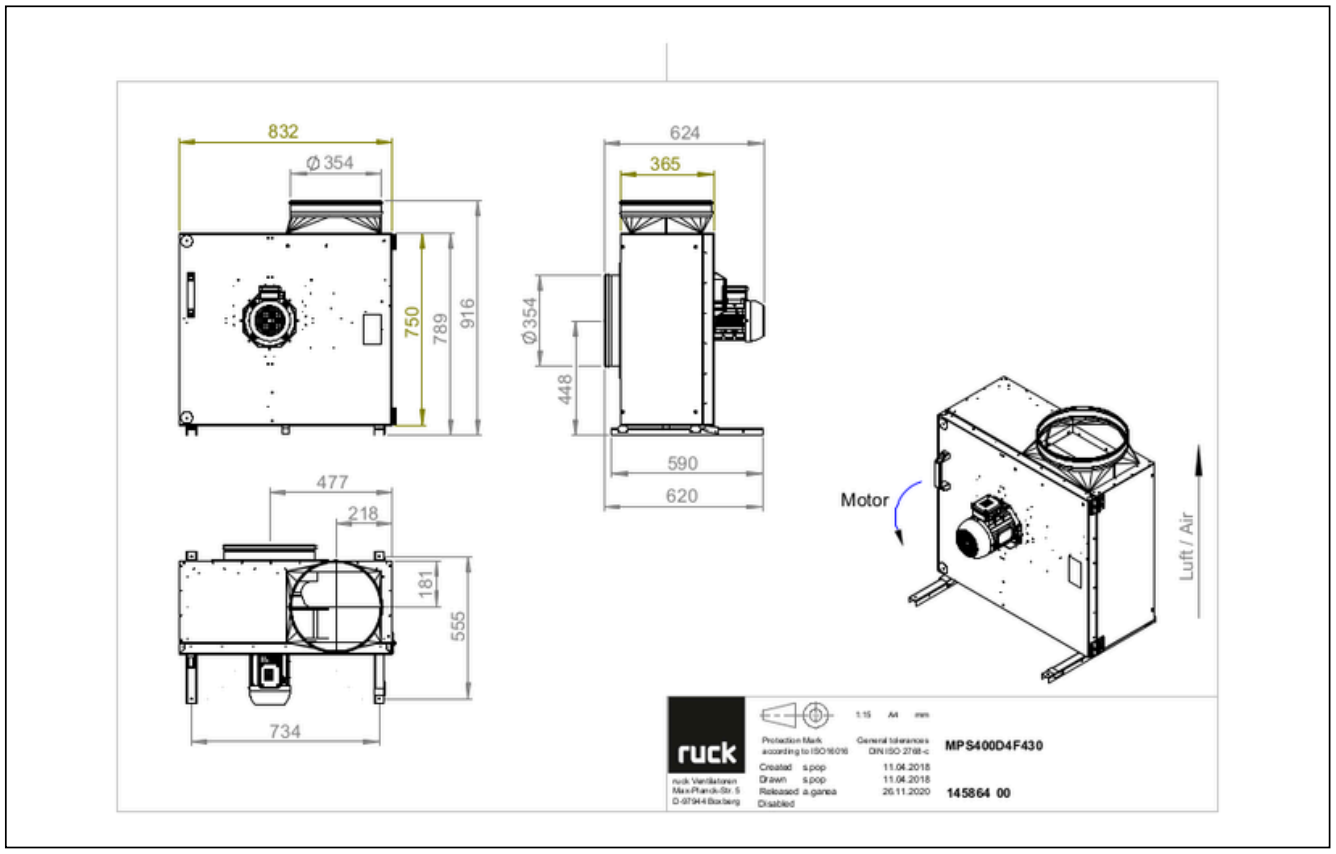


to the product detail page

MPS 400 D4 F4 30

145864

CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS

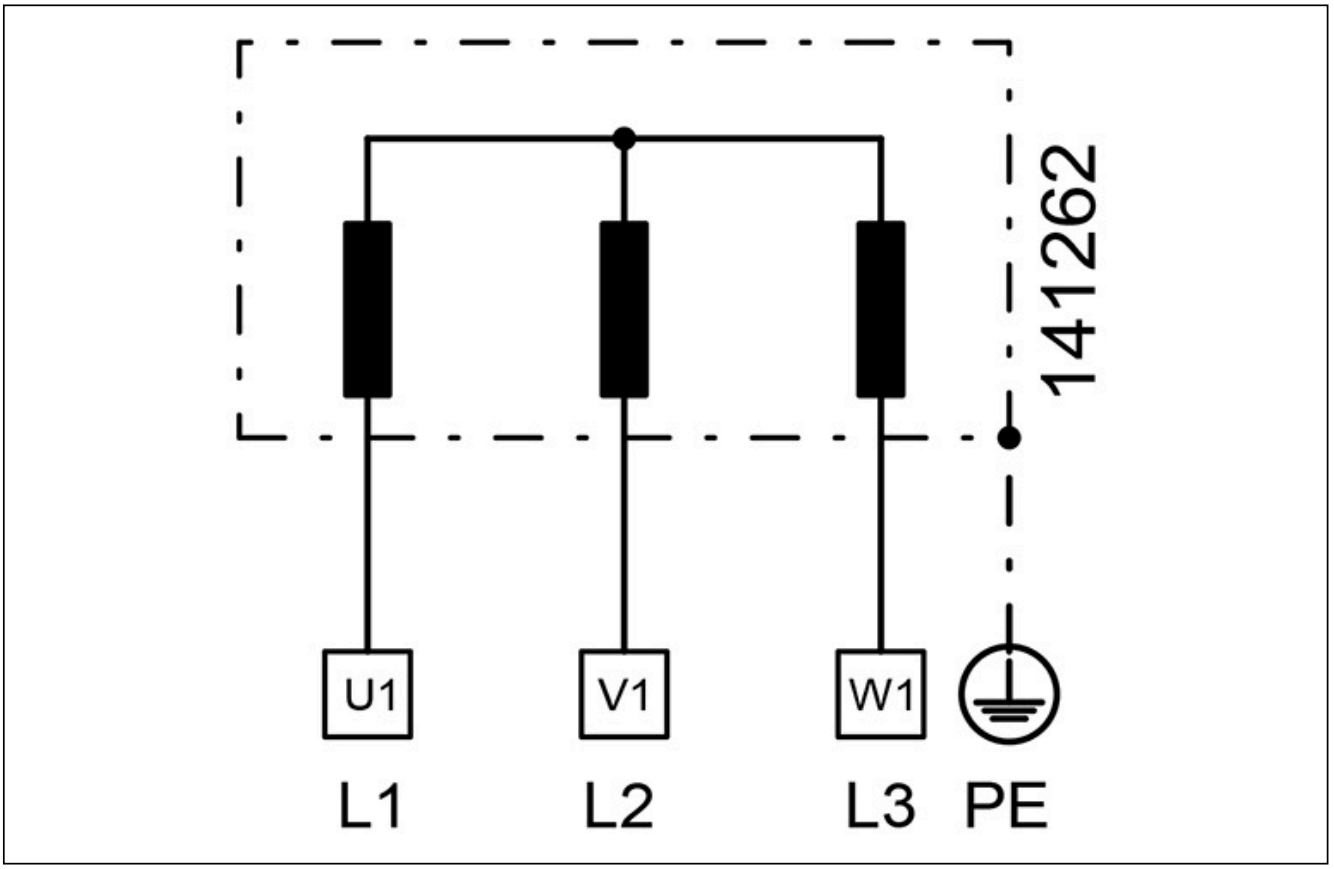


to the product detail page

MPS 400 D4 F4 30

145864

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

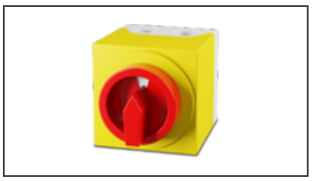
to the product detail page

MPS 400 D4 F4 30

145864

ELECTRICAL ACCESSORIES

GS 03 | 107633



- Device switch
- Umax = 400 V, Imax = 25 A
- Switching capacity 400 V 3~ = 7,5 kW
- Protection class IP 55

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

MS 01 | 140407



- Motor protection switch with Isolator switchfunktion
- Imax = 400 V, 50/60 Hz
- Max. 0.55 kW
- Protection class IP 55

FU 075 19 | 141853



- 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 31 | 141875



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

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 | 168752



- 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

MTP 30 | 177381



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

to the product detail page