

MPC 450 D4 TI 40

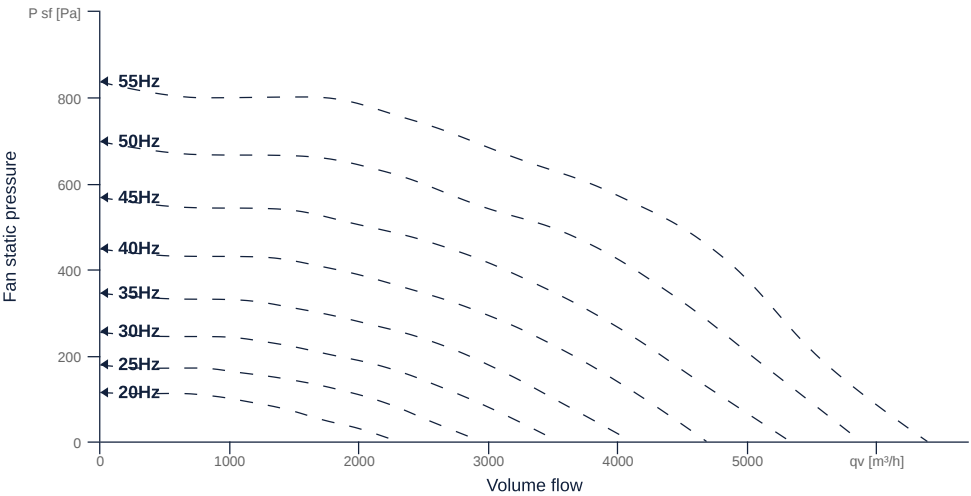
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- Backward curved radial impeller
- Removable side walls, variable discharge direction
- Sheet steel housing double-walled, 30 mm mineral wool
- AC motor outside the airflow, controllable
- Conveyed medium temperature up to 120 °C in continuous operation
- Housing bottom designed with integrated drain



MAP

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



to the product detail page

MPC 450 D4 TI 40

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GENERAL DATA

Name	Value	Unit	Formula symbol
Labeling	CE, UKCA		
Duct size	-		WxH _{duct}
Pipe connection size (DN)	-		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	82.5	kg	m
Nominal air flow rate, nominal point m³/h	2703.6	m³/h	q _{v,nom}
Nominal external pressure, static	720.6	Pa	p _{s,nom}
Fan type	Radial		F _{antype}
Category / Installation situation	A		cat

ERP DATA (LOT 6)

Name	Value	Unit	Formula symbol
Nominal air flow rate, nominal point m³/s	0.75	m³/s	q _{v,nom}
Actual electrical input power, nominal point	1.01	kW	P _{e,nom}
Face velocity, nominal point	4.8	m/s	v _{nom}
Nominal external pressure, static	720.6	Pa	p _{s,nom}
supply air fan static efficiency, nominal point	63.4	%	η _{es,SUP}
Highest external air leakage rate	0.08	%	
Enclosure sound level, nominal point	75	dB(A)	L _{WA2}
Rating	Product is compliant 2018		

MAXIMAL DATA

Name	Value	Unit	Formula symbol
Max. power consumption (device)	945	W	P _{ed, max}
Max. operating current (device)	2.4	A	I _{ed, max}
Max. speed	1635	1/min	n _{max}
Max. stat. efficiency	50.5	%	η _{es}
Max. fan efficiency	51.5	%	η _e
Max. flowrate	6390	m³/h	q _{v, max}
Max. stat pressure	840	Pa	p _{sf, max}
Max. medium temperature	120	°C	T _{m, max}
Max. environment temperature	60	°C	T _{amb, max}
Min. environment temperature	-20	°C	T _{amb, min}



to the product detail page

MPC 450 D4 TI 40

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MOTOR DATA

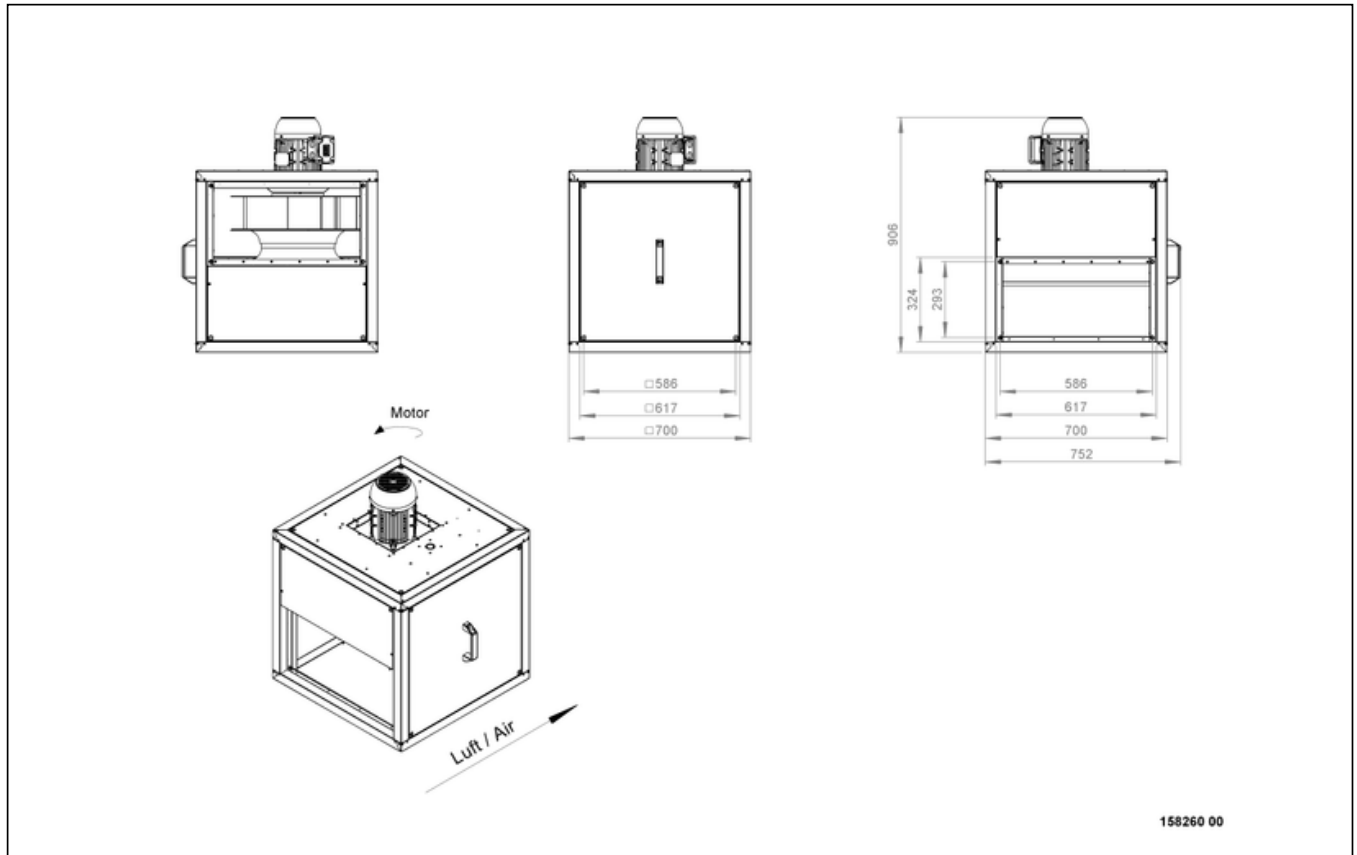
Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Rated frequency (device)		50		f
Motor type		AC 3~		phase
Control type		frequency-controlled		ctrltype
Installation type		IRM (In)		install
Rotation direction		right		rotation
Isolation class		ISO F		ISOclass
Protection class		IP55		IPmotor
Is pole-changeable		No		polexch
Type of power supply		AC 3~		pwrsupmotor
Number of poles (1)		4.000000		num polesw1
Connection	Δ	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	4.17	2.1	A	I _{rated, f1}
Rated current (wiring 2)	2.4		A	I _{rated, f2}
Shaft power	1100	1100	W	P _{out, f1}
Shaft power (wiring 2)	1100		W	P _{out, f2}
Speed	1455	1760	1/min	n _{f1}
Speed (wiring 2)	1455		1/min	n _{f2}
Starting current	31.7	17.9	A	I _{start, f1}
Starting current (wiring 2)	18.2		A	I _{start, f2}
Efficiency	84.8	86.5	%	$\eta_m, f1$
Efficiency (wiring 2)	84.8		%	$\eta_m, f2$
Efficiency class	IE3	IE3		IE _{motor}
Min. temperature	-20		°C	T _{motor, min}
Cos Phi	0.780000	0.760000		cos φ
UL-Certification motor		UL recognized		ULcert



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CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS

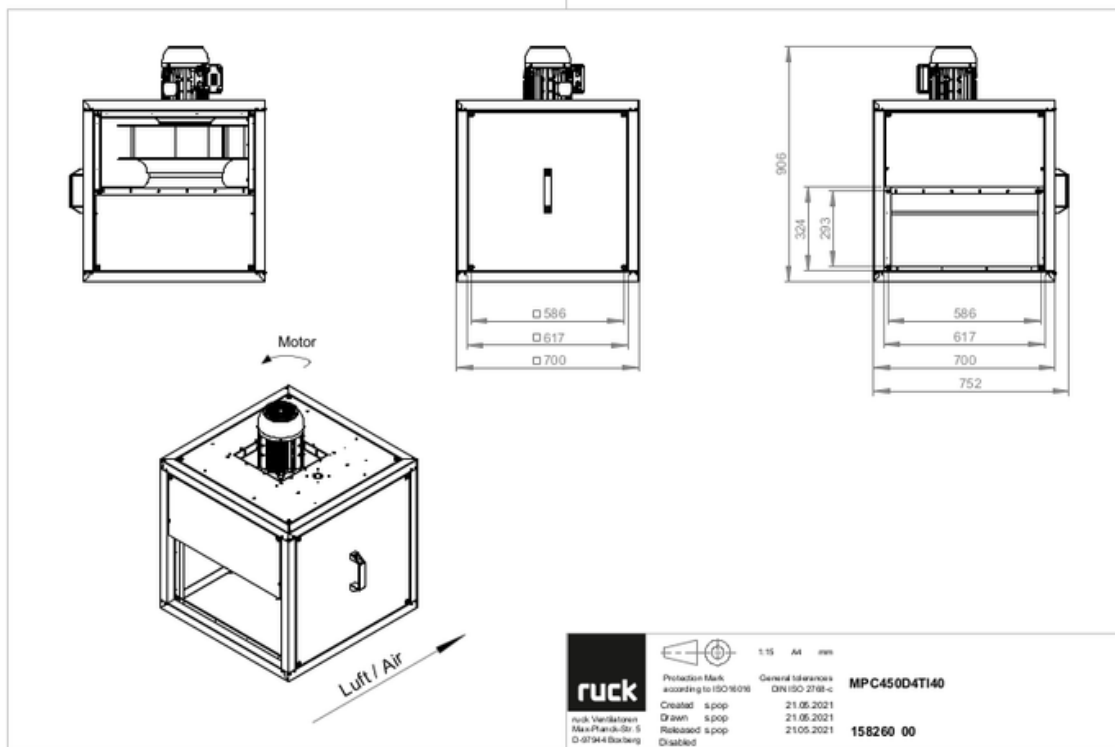


to the product detail page

MPC 450 D4 TI 40

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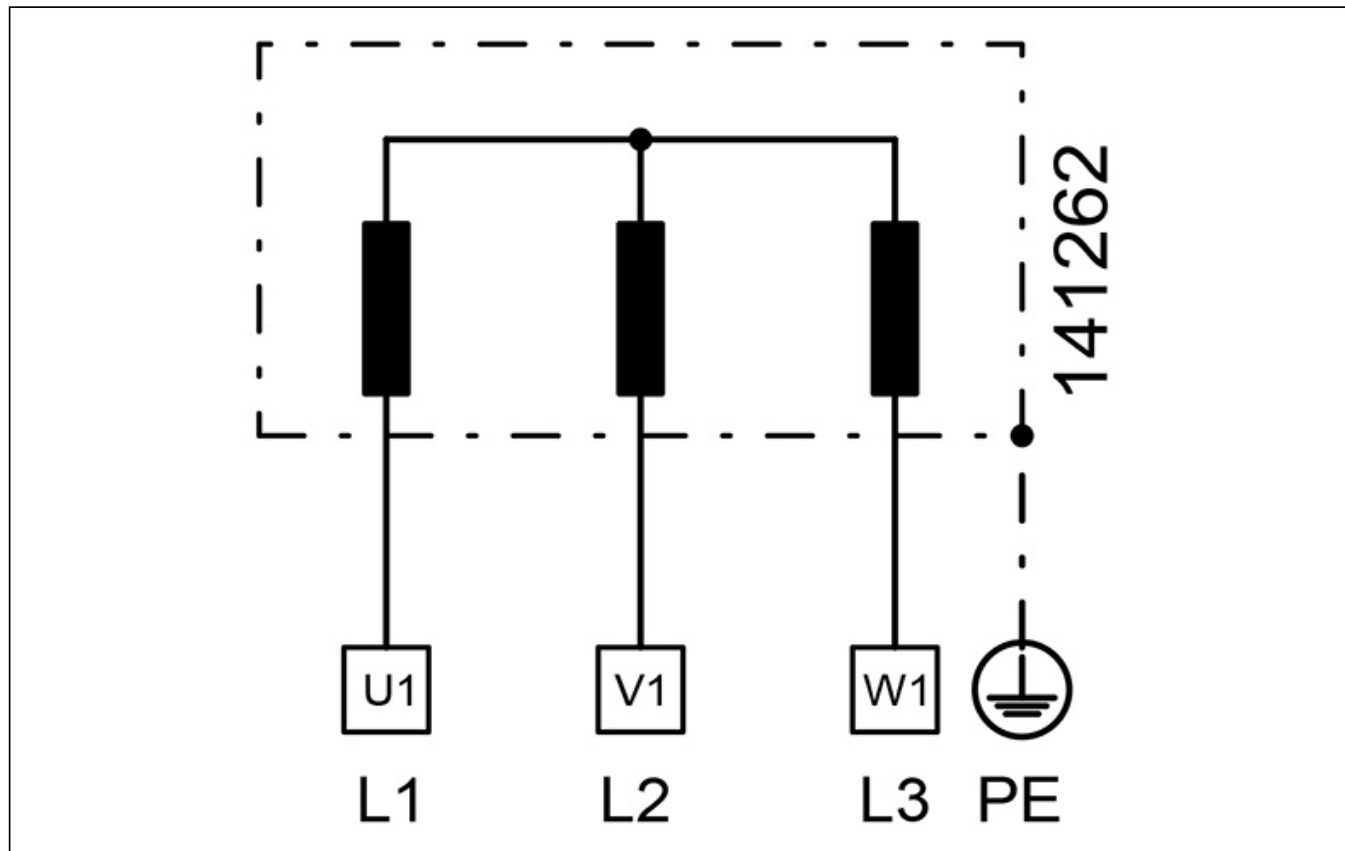
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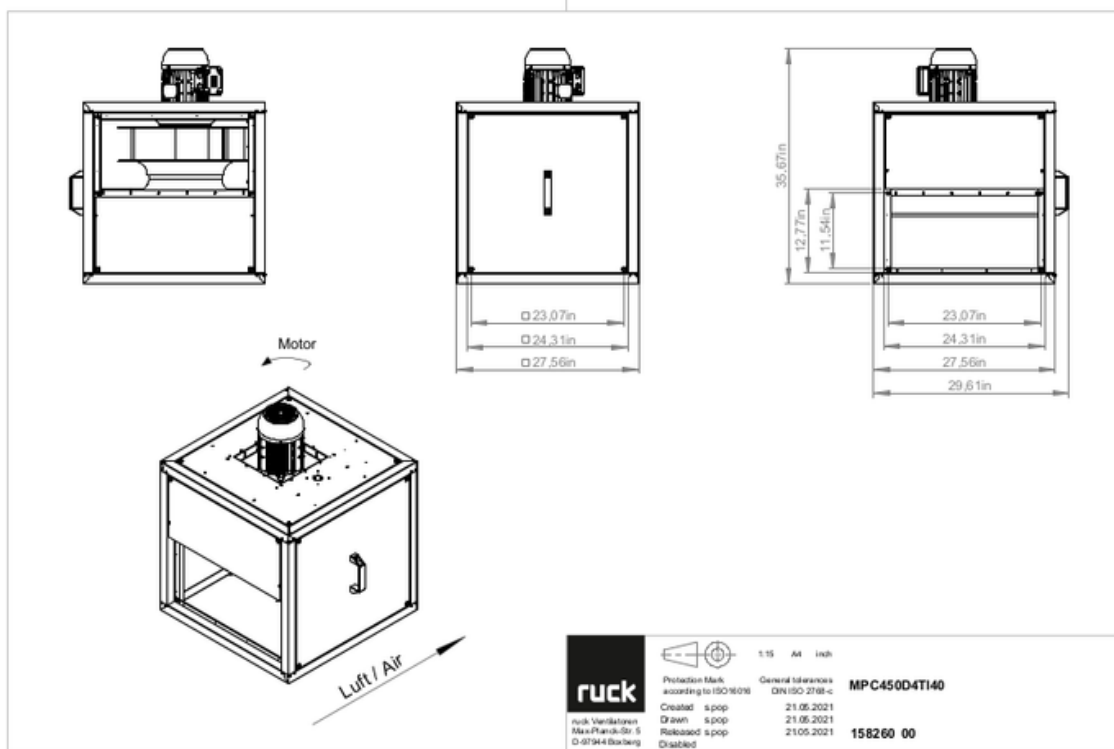
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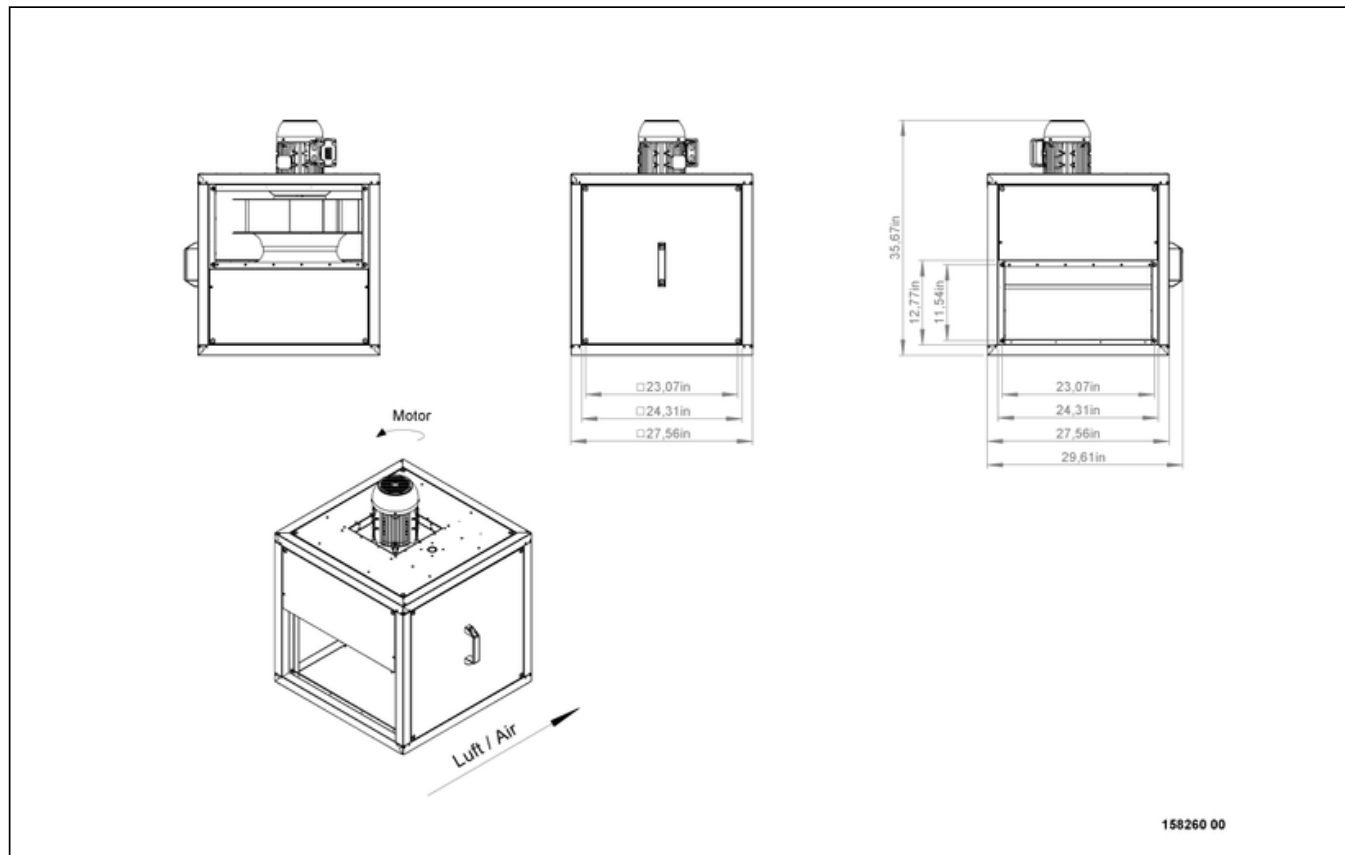
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MECHANICAL ACCESSORIES

RSK 250D | 113488



- Back draught shutter for tube fitting
- Galvanized steel sheet housing
- Aluminum flaps
- Integrated gasket

UCPD 700 | 146790



- Panel
- With condensate drain
- Galvanized steel sheet

VS 58 30 | 160065



- Duct connector, flexible
- Standard profile flange P20
- Galvanized steel sheet, plastic band (PVC)
- Temperature resistant up to 70 °C

UKR 5830 11 | 160076



- Transition duct / tube
- Steel sheet, galvanized
- 580 x 300 mm / NW 250 mm with seal lips

VM 250 | 102651



- Fast clamps for sound decoupling and sealing
- Galvanized steel sheet, 5 mm
- Neopren gasket
- 1 Pack = 2 pieces

RSK 250 | 102686



- Back draught shutter for tube fitting
- Galvanized steel sheet housing
- Aluminum flaps



to the product detail page

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

MS 02 | 140409



- Motor protection switch with Isolator switchfunktion
- $I_{max} = 400\text{ V}$, 50/60 Hz
- Max. 1.5 kW
- Protection class IP 55

MTP 20 | 128146



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

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

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 15 09 | 141843



- Frequency converter
- Supply voltage 230 V 1~ 50/60 Hz
- Output voltage 0 - 230 V 3~
- Protection class IP 20, for switch cabinet

FU 15 15 | 141865



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

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 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

