

AL 1120 D6 03

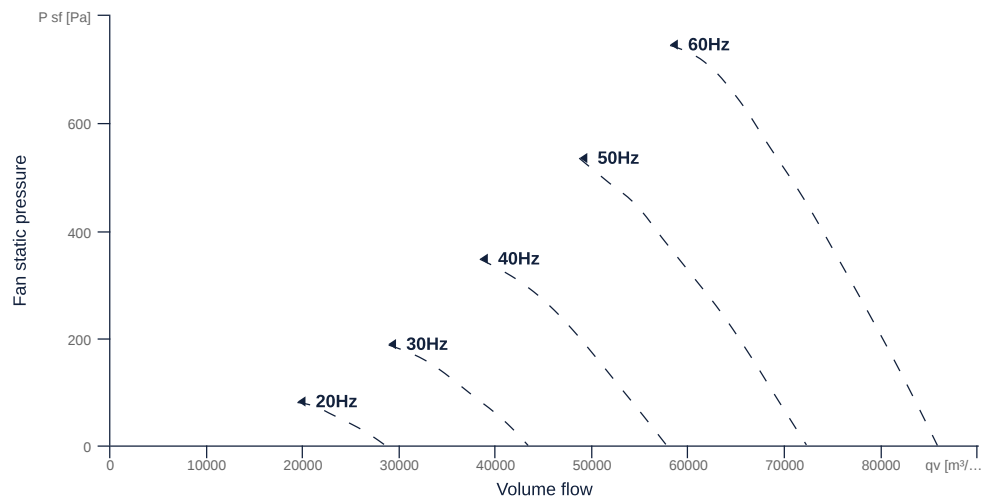
162711

- Innovative, high-efficiency axial fan
- Optimally tuned, CFD-optimized aerodynamics
- Housing weight optimized, powder coated
- Efficient IE3 motor, frequency controllable
- Conveyed medium temperature up to 60 °C in continuous operation
- Exceeds current ErP regulation by 15 - 20%



FAN CURVES

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



to the product detail page

GENERAL DATA

Name	Value	Unit	Formula symbol
Labeling	CE, UKCA		
Duct size	-		$W \times H_{\text{duct}}$
Pipe connection size (DN)	DN1120		DN
Rated voltage (entire device)	400	V	U_{rated}
Phases (entire device)	3~		phase
Electrical protection (entire device)	50 A		fuse
Housing material	Coated steel		matcasing
Impeller material	Coated steel		matimpeller
IP-protection class (entire device)	IPX4		IP_{compl}
IP-Protection class (terminal box)	IP55		IP_{ebox}
Weight	345	kg	m
Fan type	Axial		Fan _{type}
Category / Installation situation	B		cat

MAXIMAL DATA

Name	Value	Unit	Formula symbol
Max. power consumption (device)	20147	W	$P_{\text{ed, max}}$
Max. operating current (device)	37.8	A	$I_{\text{ed, max}}$
Max. speed	1190	1/min	n_{max}
Max. stat. efficiency	55.8	%	η_{es}
Max. fan efficiency	71.7	%	η_{e}
Max. flowrate	85820	m ³ /h	$q_{\text{v, max}}$
Max. stat pressure	765	Pa	$p_{\text{sf, max}}$
Max. medium temperature	60	°C	$T_{\text{m, max}}$
Max. environment temperature	60	°C	$T_{\text{amb, max}}$
Min. environment temperature	-20	°C	$T_{\text{amb, min}}$



to the product detail page

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
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)		6.000000		num polesw1
Connection	Δ			wiringw1
Connection (wiring 2)	Y			wiringw2
Rated voltage	400		V	U _{rated, f1}
Rated voltage (wiring 2)	690		V	U _{rated, f2}
Rated current	35.4		A	I _{rated, f1}
Rated current (wiring 2)	20.5		A	I _{rated, f2}
Shaft power	18500		W	P _{out, f1}
Shaft power (wiring 2)	18500		W	P _{out, f2}
Speed	975		1/min	n _{f1}
Speed (wiring 2)	975		1/min	n _{f2}
Starting current	223		A	I _{start, f1}
Starting current (wiring 2)	129		A	I _{start, f2}
Efficiency	92		%	η _{m, f1}
Efficiency (wiring 2)	92		%	η _{m, f2}
Efficiency class	IE3			IE _{motor}
Min. temperature	-20		°C	T _{motor, min}
Cos Phi	0.820000	0.000000		cos φ
UL-Certification motor		UL recognized		ULcert

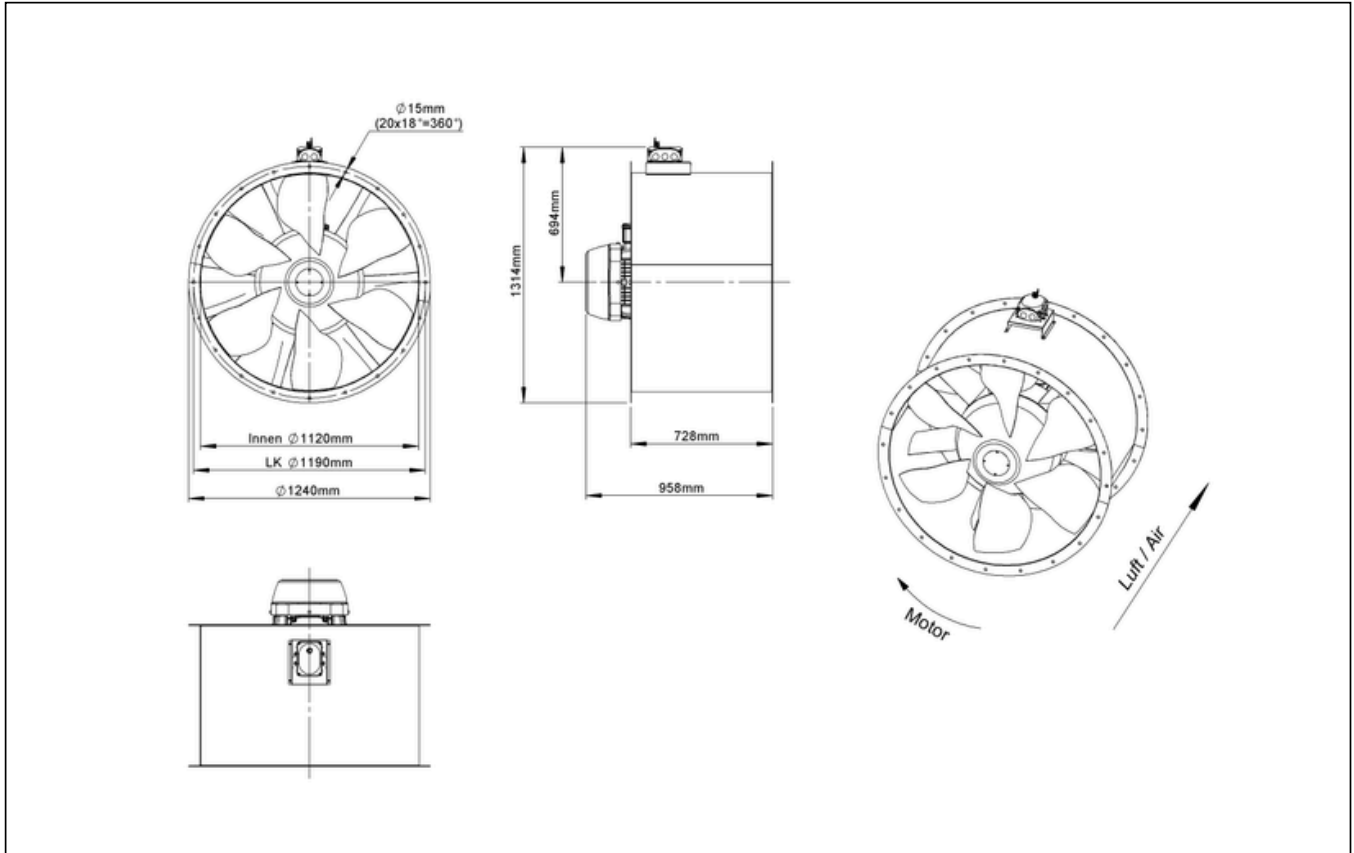
ERP DATA (LOT11)

Name	Value	Unit	Formula symbol
Speed at the energy efficiency optimum	1179	1/min	n _{opt}
Efficiency level	73.3	%	N
Efficiency category	total		cat _{efficiency}
Input power of the motor at the energy efficiency optimum	20.7	kW	P _{e, opt}
Overall efficiency	72.8	%	η _{ges}
Measurement category	B		meas cat
Fan pressure at energy efficiency optimum	813	Pa	p _{f, opt}
Flowrate at energy efficiency optimum	67226	m ³ /h	Q _{v, opt}



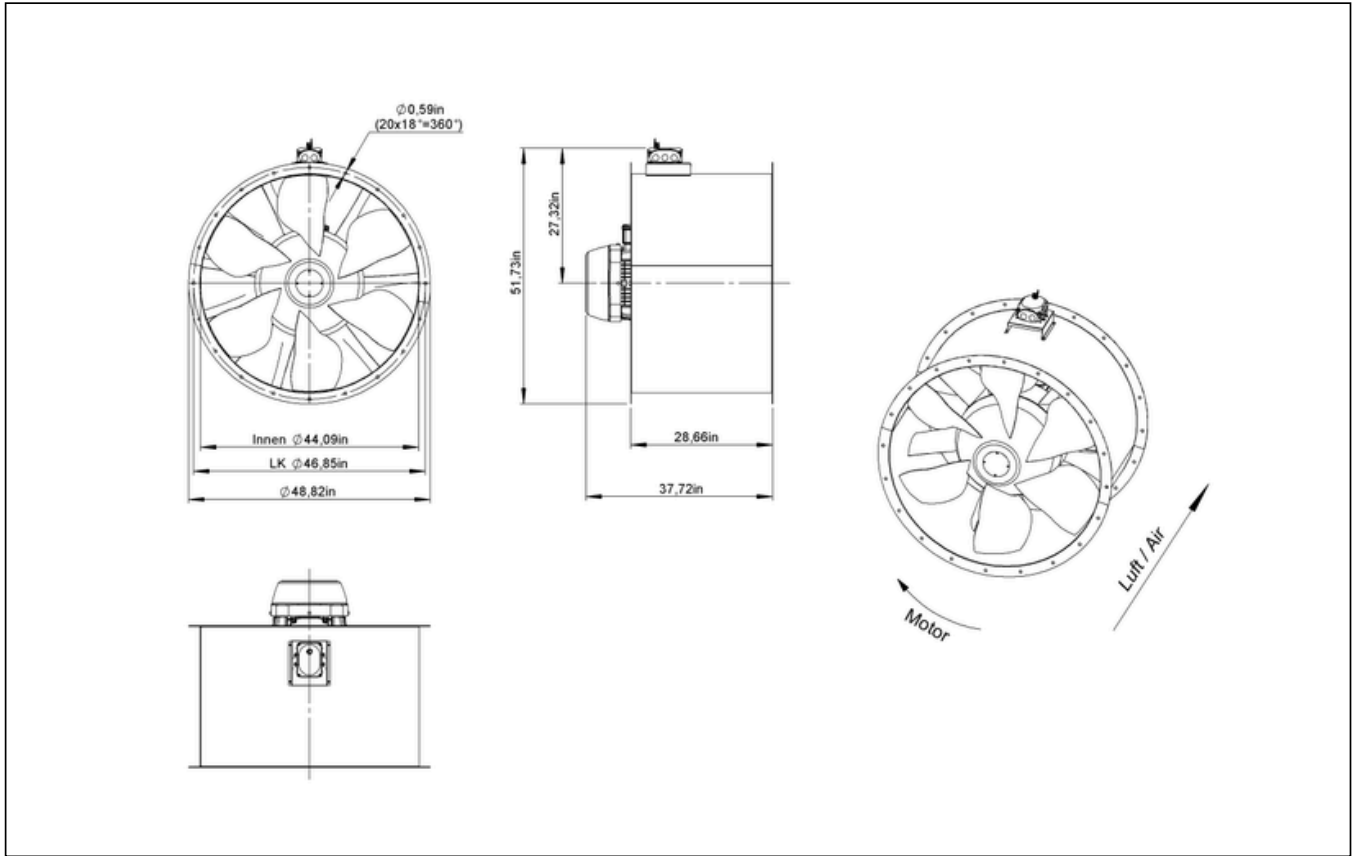
to the product detail page

CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS



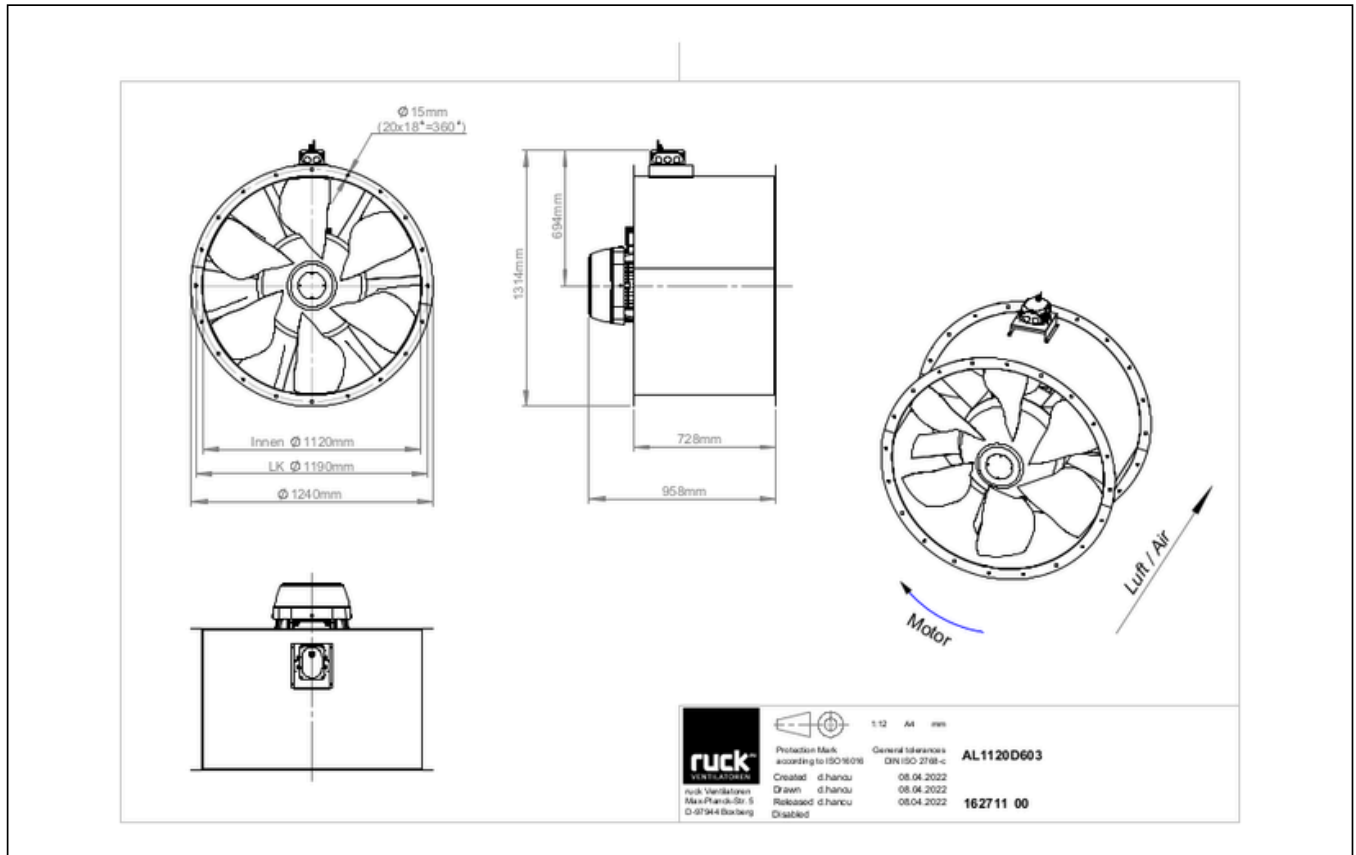
AL 1120 D6 03

162711



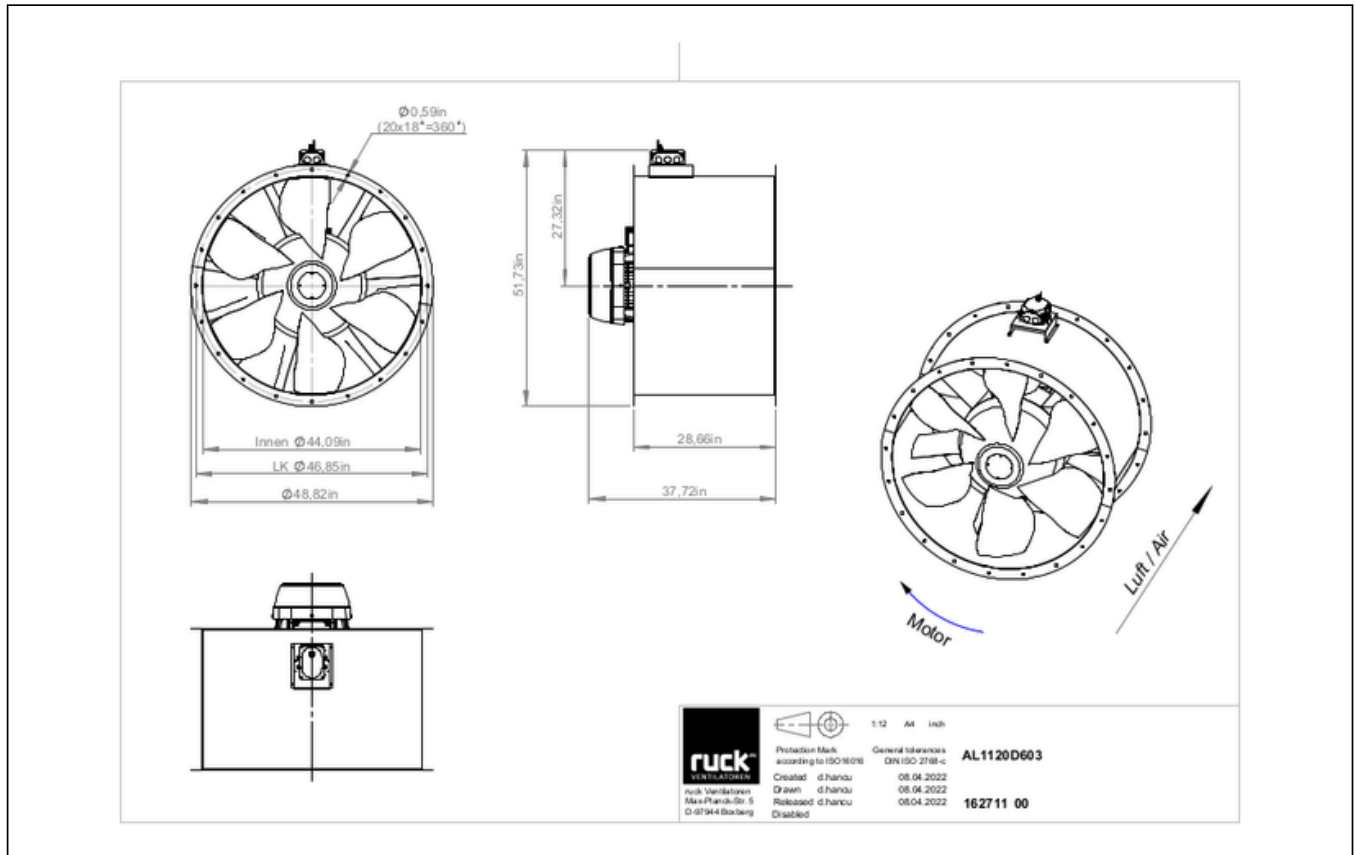
AL 1120 D6 03

162711



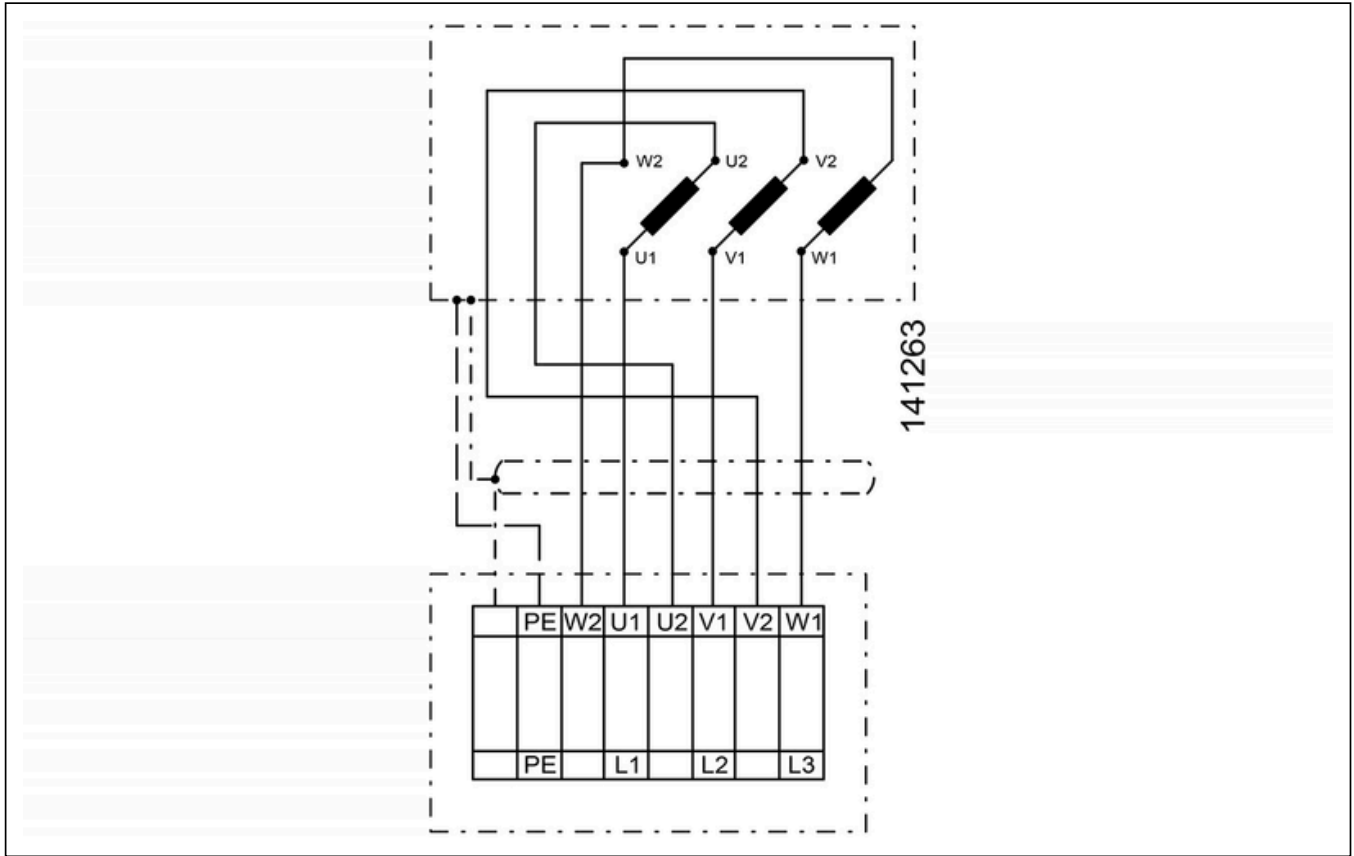
AL 1120 D6 03

162711



AL 1120 D6 03

162711



to the product detail page

MECHANICAL ACCESSORIES

RVS 1120-01 | 157481



- Tube connection spigot
- Sheet steel, powder coated
- Suitable for outdoor installation
- Flange mounting

ESD 1120 | 159333



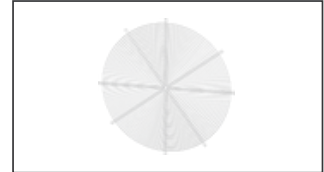
- Inlet cone
- Steel sheet, powder coated
- Flange mounting

SGW 1120 | 159543



- Protection grille, wide meshed
- Steel sheet, galvanized
- Flange mounting

SGW 1250 | 159544



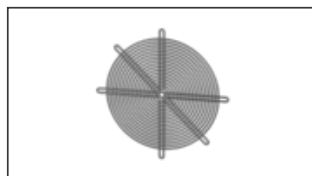
- Protection grille, wide meshed
- Steel sheet, galvanized
- Flange mounting

RVK H 1120 | 163911



- Automatic tube shutter
- Sheet steel, powder coated
- For horizontal installation
- Flange mounting

SGE 1120 | 159519



- Protection grille, narrow meshed
- Steel sheet, galvanized
- Flange mounting

FSD 09 | 162478



- Set of 4 vibration dampers
- Made of natural rubber, hardness 55 Shore A

RAF 1120 | 157497



- Round flange
- Sheet steel, powder coated

RAS 1120 | 157638



- Round spigot, flexible
- Galvanized steel sheet, plastic band (PES)
- Temperature resistant up to 75 °C
- Flange mounting

FAL 1120 | 157900



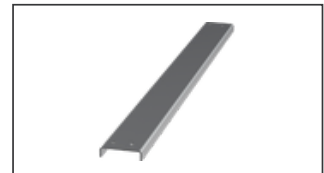
- Mounting foot
- Sheet steel, powder coated
- Flange mounting

FSD 11 | 162489



- Set of 4 vibration dampers
- All metal design, galvanized

TRA 1120-1250 | 163013



- Crossbeam
- Connection between mounting feet
- Galvanized steel sheet

RVK 1120 | 157837



- Automatic tube shutter
- Sheet steel, powder coated
- For vertical installation
- Flange mounting

MR 1120 | 166085



- Mounting ring
- For vertical mounting
- Powder-coated sheet steel
- Flange mounting DN 1120



ELECTRICAL ACCESSORIES

MS 09 | 160187



- Motor protection switch with device switch function
- For three phase motors
- $I_{max} = 40 \text{ A}$

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

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 185 11 | 161424



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

FU 185 12 | 161425



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

