

RS 100 EC K 01

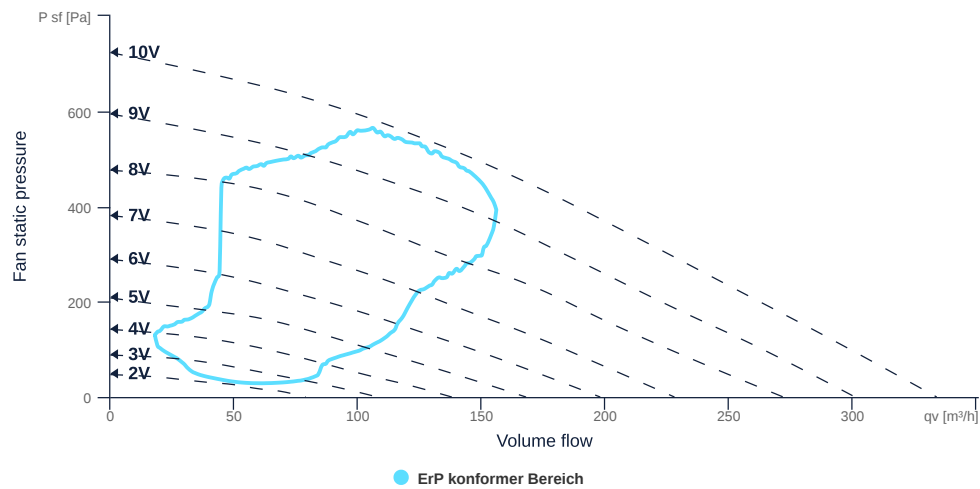
154597

- Compact centrifugal fan
- Backward curved impeller
- Sheet steel housing, RAL 7035, powder coated
- High efficiency EC motor, steplessly controllable
- Conveying medium temperature up to 50 °C in continuous operation
- Internal electronic temperature monitoring



FAN CURVES

Name	Value	Unit
Volume flow	15097	m³/h
Pressure	4	Pa



to the product detail page

TECHNICAL SPECIFICATIONS

Name	Value	Unit	Formula symbol
Volume flow	334	m³/h	QV _{calc}
Fan pressure	13	Pa	pf
Current consumption Motor	0	A	I _e
Electrical power consumption	110	W	PeK
Control voltage	10	V	U _{ctrl}
Rotation speed	3923	1/min	N
Total efficiency	1	%	etatPeK
SFP (entire device)	1185	W/(m³/s)	sfp _{device}
Sound power level inlet	81	dB(A)	LwA5
Sound power level outlet	80	dB(A)	LwA6
Sound power level housing radiation	65	dB(A)	LwA2

SOUND DATA

Sound power	mid-frequency tape										Unit	Formula symbol
	Σ	63	125	250	500	1000	2000	4000	8000	16000		
suction	82	50	60	75	76	74	76	71	61	40	dB(A)	LwA5
blowout	80	49	61	75	69	72	75	70	60	39	dB(A)	LwA6
Casing break out	65	53	48	49	50	59	60	60	54	35	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
		Σ	63	125	250	500	1000	2000	4000	8000	16000		
suction	59	64	33	43	58	58	57	58	53	43	22	dB(A)	LwA5
blowout	59	63	31	44	58	51	55	58	53	42	21	dB(A)	LwA6
Casing break out	46	48	35	31	31	33	41	42	43	37	18	dB(A)	LwA2



to the product detail page

RS 100 EC K 01

154597

ruck

GENERAL DATA

Name	Value	Unit	Formula symbol
Labeling	CE, UKCA		
Duct size	-		WxH _{duct}
Pipe connection size (DN)	DN100		DN
Rated voltage (entire device)	230	V	U _{rated}
Phases (entire device)	1~		phase
Electrical protection (entire device)	6 A		fuse
Housing material	Steel		mat _{casing}
Impeller material	Plastic		mat _{impeller}
Weight	2.66	kg	m
Nominal air flow rate, nominal point m ³ /h	122.4	m ³ /h	q _{v,nom}
Nominal external pressure, static	455	Pa	p _{s,nom}
Fan type	Radial		Fan _{type}
Category / Installation situation	B		cat

ERP DATA (LOT 6)

Name	Value	Unit	Formula symbol
Nominal air flow rate, nominal point m ³ /s	0.03	m ³ /s	q _{v,nom}
Actual electrical input power, nominal point	0.06	kW	P _{e,nom}
Face velocity, nominal point	4.3	m/s	v _{nom}
Nominal external pressure, static	455	Pa	p _{s,nom}
supply air fan static efficiency, nominal point	35.3	%	η _{es,SUP}
Highest external air leakage rate	2.02	%	
Rating	Product is compliant 2018		

MAXIMAL DATA

Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Max. power consumption (device)	113	113	W	P _{ed,max}
Max. operating current (device)	0.95	0.95	A	I _{ed,max}
Max. speed	3970	3970	1/min	n _{max}
Max. stat. efficiency	20.2	20.2	%	η _{es}
Max. fan efficiency	20.5	20.5	%	η _e
Max. flowrate	350	350	m ³ /h	q _{v,max}
Max. stat pressure	740	740	Pa	p _{st,max}
Max. medium temperature	50	50	°C	T _{m,max}
Max. environment temperature	50	50	°C	T _{amb,max}
Min. environment temperature	-30	-30	°C	T _{amb,min}



to the product detail page

RS 100 EC K 01

154597

ruck

MOTOR DATA

Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Rated frequency (device)		50		f
Motor type		EC		phase
Control type		stepless-controlled		ctrltype
Installation type		ORM (Out)		install
Rotation direction		right		rotation
Isolation class		ISO F		ISOclass
Motor-protection		TEC		protectmotor
Protection class		IP54		IPmotor
Is pole-changeable		No		polexch
Type of power supply		AC 1~		pwrsupmotor
Min. temperature	-30		°C	Tmotor, min
Cos Phi	0.560000	0.000000		cos φ
UL-Certification motor		None		ULcert

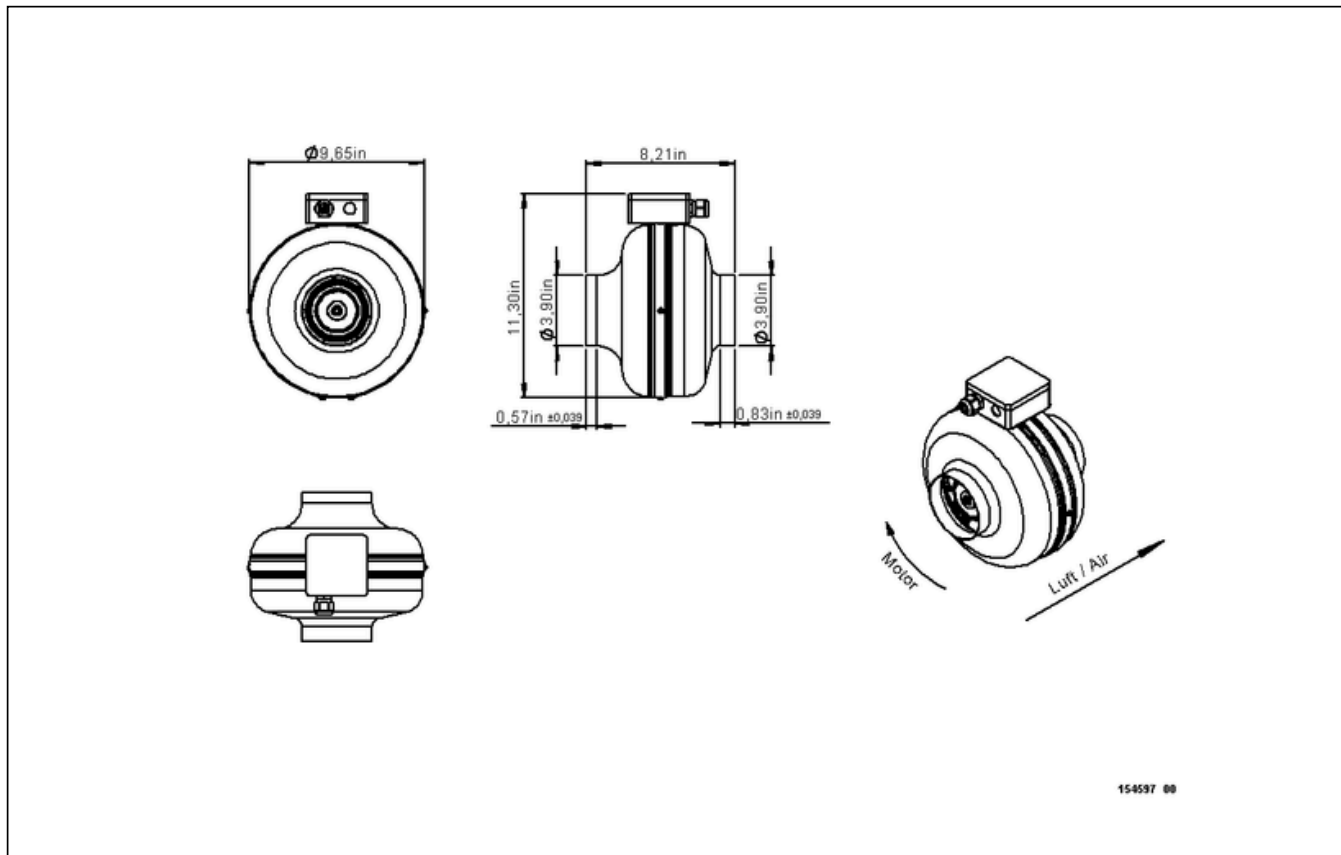


to the product detail page

RS 100 EC K 01

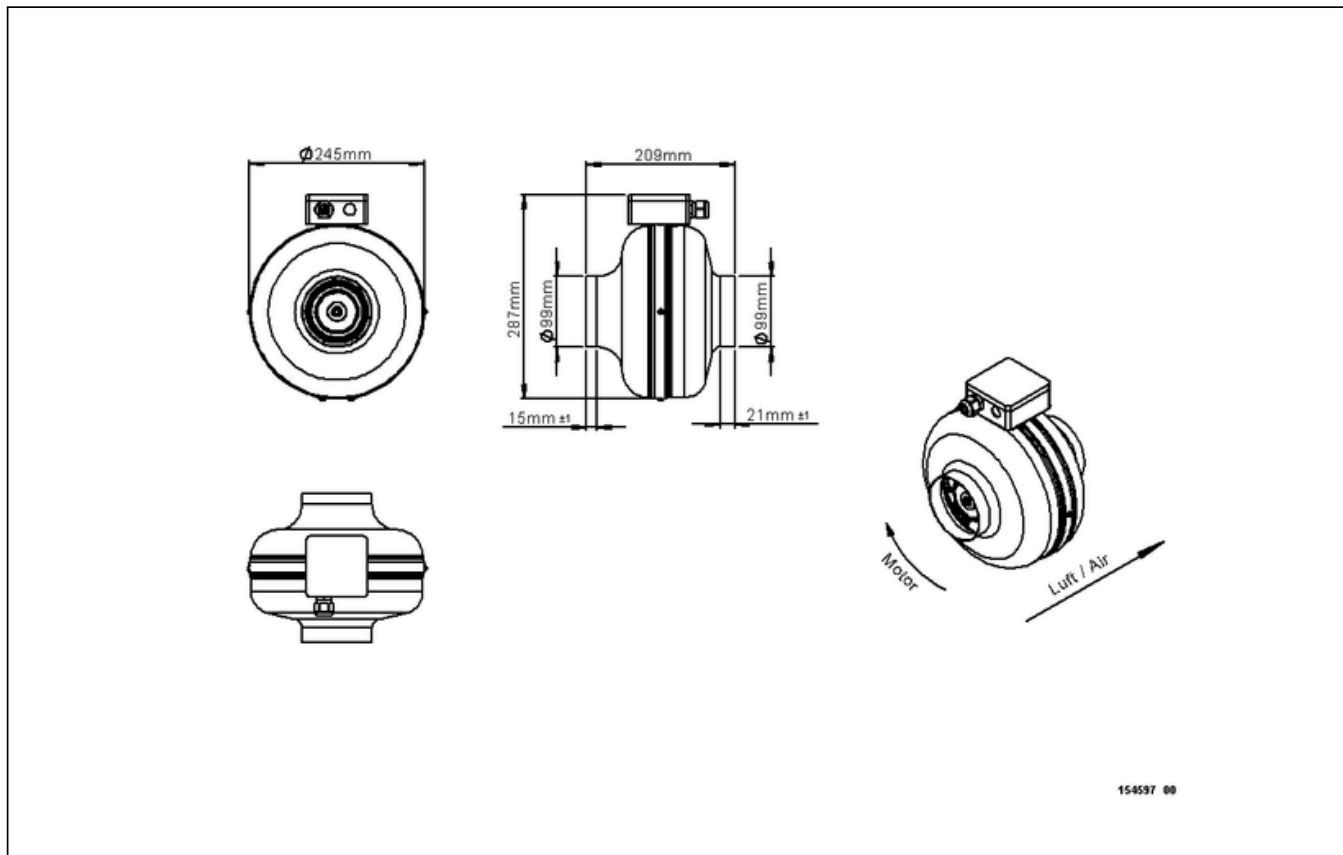
154597

CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS



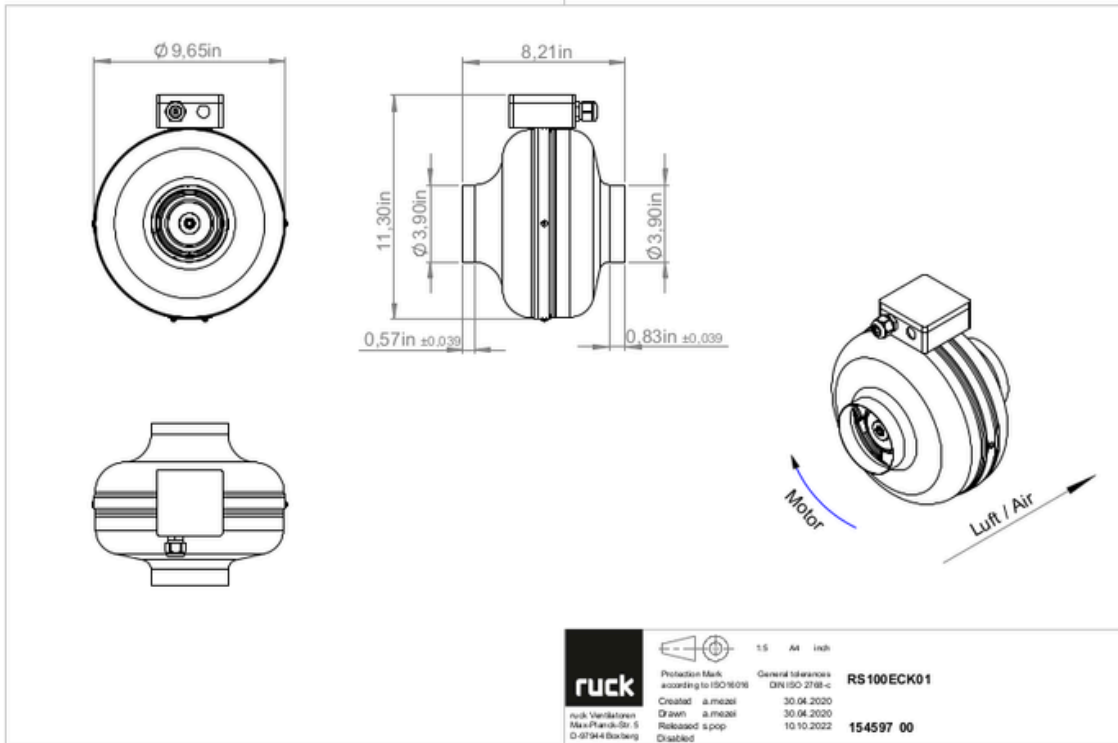
RS 100 EC K 01

154597



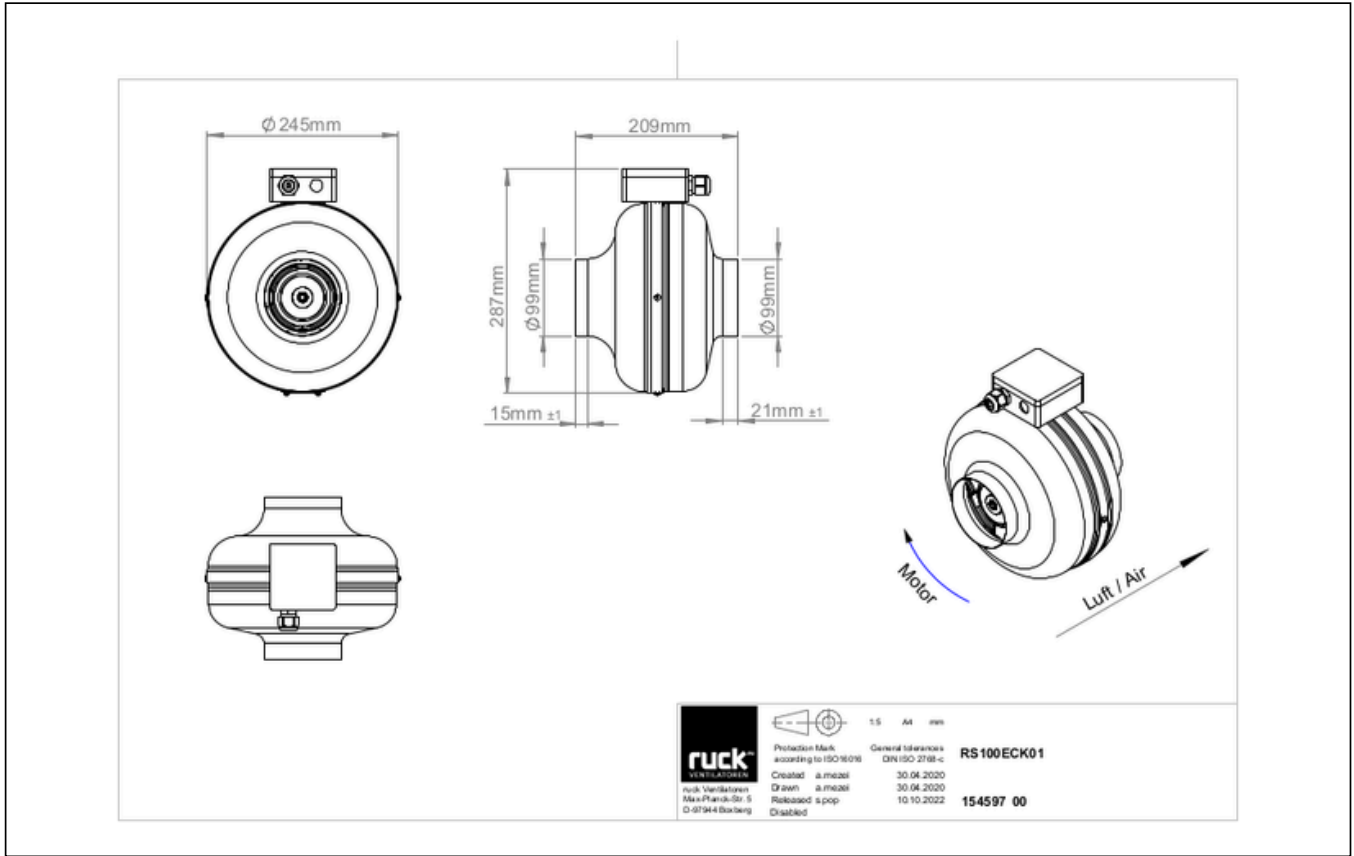
RS 100 EC K 01

154597



RS 100 EC K 01

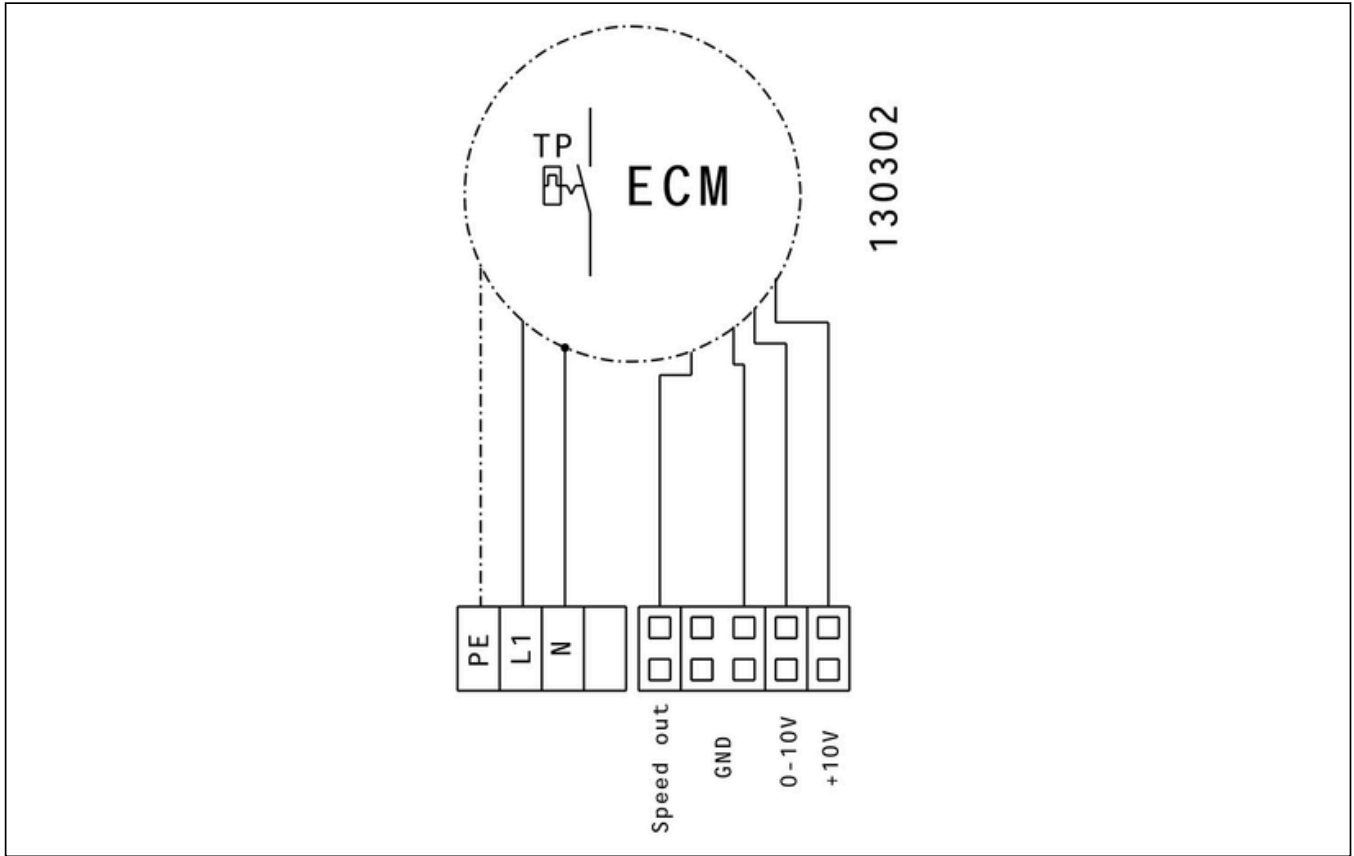
154597



to the product detail page

RS 100 EC K 01

154597

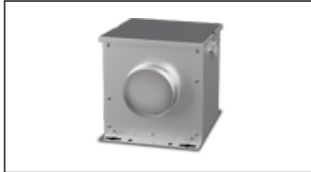


RS 100 EC K 01

154597

MECHANICAL ACCESSORIES

FV 100 | 112678



- Air filter box with mat filter ISO Coarse 45 % (G3)
- Toggle-type fastener

FT 100 | 112844



- Air filter box for pocket filter
- Toggle-type fastener
- Galvanized steel sheet housing
- Without filter

FTW 100 | 112849



- Air filter box with pocket filter M5
- Integrated warm water heating coil
- Galvanized steel sheet housing
- Toggle-type fastener

RSK 100 | 102658



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

RSK 100D | 116061



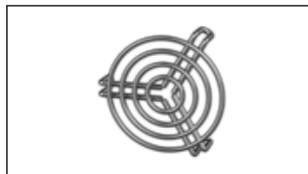
- Back draught shutter for tube fitting
- Galvanized steel sheet housing
- Aluminum flaps
- Integrated gasket

VM 100 | 102643



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

SG 100 01 | 102894



- Protection grille for tube connection
- Galvanized wire

MRS 1 | 110094



- Mounting bracket
- Galvanized steel sheet
- Includes: Mounting bracket and 2 Phillips screws (6 x 45 mm), 2 dowels (8 x 40 mm)

SDS 100 | 169602



- Rigid tube silencer
- Galvanized steel sheet
- Sound insulation packing 50 mm (mineral wool)

SDF100 | 169639



- Flexible tube silencer
- Galvanized steel sheet
- Sound insulation packing 50 mm



to the product detail page

RS 100 EC K 01

154597

ELECTRICAL ACCESSORIES

GS 03 | 107633



- Device switch
- $U_{max} = 400\text{ V}$, $I_{max} = 25\text{ A}$
- Switching capacity $400\text{ V } 3\sim = 7,5\text{ kW}$
- Protection class IP 55

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

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 $0...+50\text{ }^\circ\text{C}$
- 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 $0-10\text{ V DC}$ + FC enable + setpoint reached
- Pressure setting by means of decade switch

MTP 50 | 168752



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



to the product detail page