

RS 80-50 L3 sileo

Centrifugal rectangular duct fan

Item number: 39634

Variant: 400V 3~ 50Hz



Swing out function of the motor for easy maintenance

Speed-controllable

Integral thermal contacts

Can be installed in any position

Maintenance-free and reliable

The RS models have impellers with backward-curved blades and external rotor motors. The motor and impeller are mounted on the access cover to facilitate easy maintenance. To protect the motor from overheating the RS has integral thermal contacts with external leads for connection to a motor protection device. The fan can be installed in any position and is easy to connect using the DS flexible connections. The casing is manufactured from galvanised sheet steel.



Technical parameters

Nominal data		
Voltage (nominal)	400	V
Frequency	50	Hz
Phase(s)	3~	
Input power	1,379	W
Input current	3.16	A
Impeller speed	1,420	r.p.m.
Air flow	max 8,446	m ³ /h
Temperature of transported air	max 70	°C
Max temperature of transported air, when speed controlled	70	°C

Sound data

Sound pressure level at 3m (20m ² Sabin)	67	dB(A)
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Protection/Classification

Enclosure class, motor	IP54
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Insulation class	F
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Data according to ErP

ErP ready	ErP 2018
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Dimensions and weights

Duct dimension, inlet (height x width)	500 x 800	mm
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Duct dimension, outlet (height x width)	500 x 800	mm
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Weight	67.4	kg
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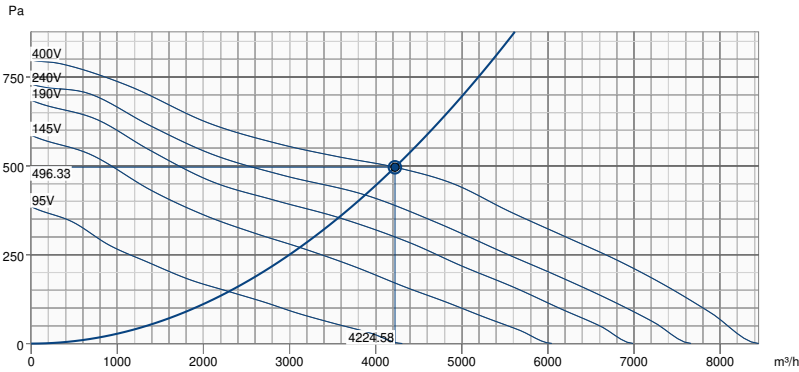
Others

Duct connection type	Rectangular
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Motor type	AC
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Performance

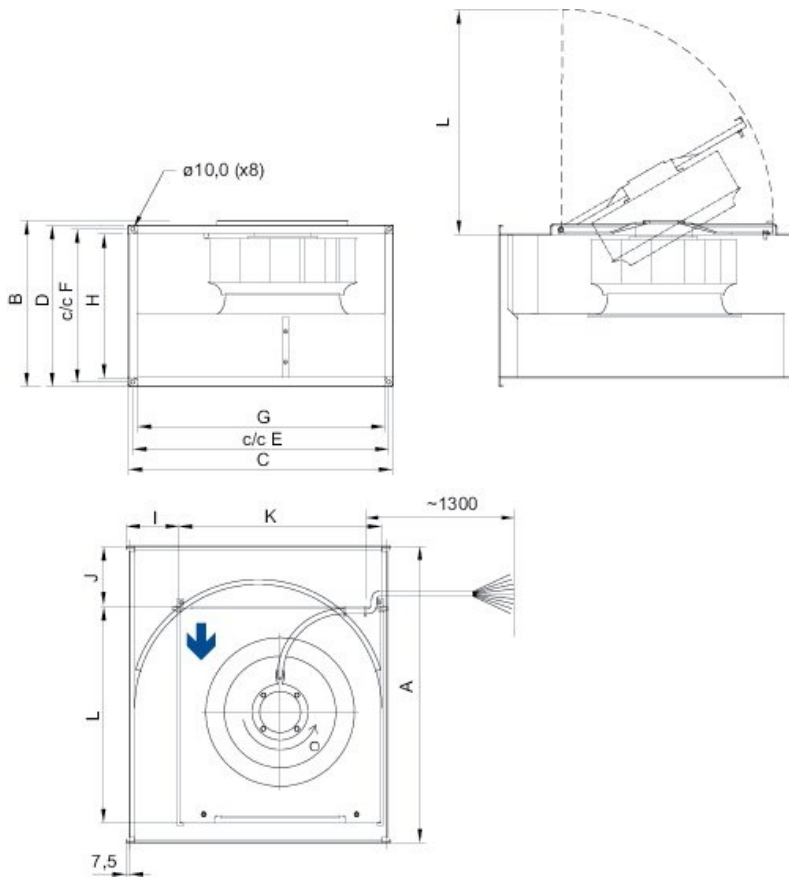
Performance curve



Hydraulic data	
Required air flow	4223 m³/h
Required static pressure	496 Pa
Working air flow	4225 m³/h
Working static pressure	496 Pa
Air density	1.204 kg/m³
Power	1194.8 W
Fan control - RPM	1431 rpm
Current	2.98 A
SFP	1.018 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	64	75	74	76	74	74	69	62	82
Outlet	dB(A)	69	78	79	80	82	78	73	64	87
Surrounding	dB(A)	47	70	67	65	64	63	57	46	74
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	67
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	53

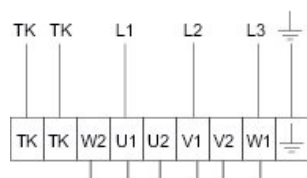
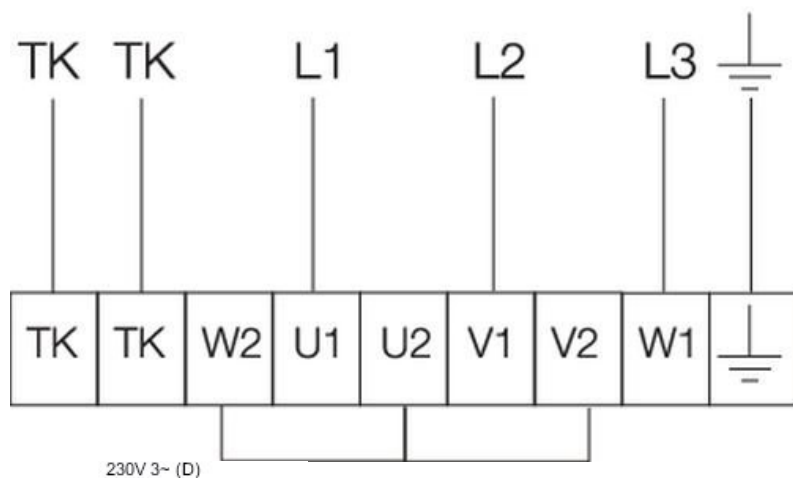
Dimension



RS	A	B	C	D	E	F	G	H	I	J	K	L
80-50	882	573	840	541	820	520	798	498	182,5	190	614	644

Wiring

400V 3~



Ecodesign

Product	
Trade name	Systemair
Product name	RS 80-50 L3 V-wheel rec. fan
Ecodesign	
ErP compliance	2018
Unit category	NRVU
Drive	External MSD or VSD
Unit type	UVU
Heat recovery type	None
Temperature ratio (UVU)	Not applicable
qv nom	1.182 m ³ /s
P nom	1.199 kW
Ps nom	495 Pa
Fan efficiency	47 %
External Leakage	5 %
Sound power level LWA	73 dB(A)

Accessories

- GFL 80-50 Counter flange (2711)
- RTRD 7 speed control Systemair (5943)
- S-DT 16 Motor Protection (161206)
- STDT 16E Motor Protection (5153)
- DTV500A (96807)
- Presence detector/IR24-P (6995)
- Safety switch 3-pole grey (210680)
- DS 80-50 Flexible connection (1553)
- FFK 80-50 filter cassette (30236)
- PGK 80-50-3-2,0 Duct cooler (6619)
- RB 80-50/68-4 400V/3 Duct heat (9648)
- VBR 80-50-3 Water heating batt (5477)
- RK-SYS-800x500-S (43658)
- TUNE-S-800x500-M0 (421365)
- TUNE-S-800x500-M5 (421370)
- REV-5POL/07-7,5kW R/Y (33980)
- RTRDU 7 Speed contr. Systemair (5947)
- S-DT 16E Motor Protection (161207)
- CO2RT-R-D Transmitter (6993)
- HR1 Room Humidistat (215150)
- RT 0-30 Room Thermostat (5151)
- T 120 Timer (5165)
- DXRE 80-50-3-2,5 Duct cooler (7958)
- LDR 80-50 Silencer (5075)
- RB 80-50/45-3 400V/3 Duct heat (9647)
- VBR 80-50-2 Water heating batt (5469)
- RK-SYS-800x500-R (43649)
- Room hygrostat HR-S (286251)
- TUNE-S-800x500-M4 (421369)

Documents

- Fans_Operating and Maintenance_instr_202341_CE_multilingual.pdf

Specification

Rectangular duct fan for easy and direct installation in ducts. Galvanized sheet steel housing. Service cover. The fan unit is mounted on the service cover for easy cleaning and maintenance. Free-running, backward curved circular impeller made composite material. Impeller acc. to VDI 2060, balancing quality G 6.3, dynamically balanced in two planes. Voltage controllable external rotor motor (IP44), maintenance-free, the motor is placed inside the air flow for cooling. Integral thermal contacts acc. to EN 60335-2-80 with leads to a motor protection device. Speed-controlled by voltage reduction via transformer or thyristor. For extract and supply air. Installation in any mounting position. For indoor installation.