

# TFSR 125 M Red

Centrifugal roof fan, <125W

Item Number: 1354

Variant: 230V 1~ 50Hz



- Swing-out
- Speed-controllable
- Easy to install
- Reliable

The TFSR range consists of roof fans with a circular base plate and are fitted with a single-inlet centrifugal fan with backward-curved blades and external rotor motors. The motors can be tilted outwards to facilitate inspection and service. They have integral on/off switch and are supplied with 1 m cable for fast connection to the mains e.g. via the connection box on the roof curb TOB or TOS.

These fans are suitable for exhaust-air ventilation systems, e.g. single and multiple dwellings, offices and day nurseries. To protect the motors from overheating, all motors have an integral thermal contact with automatic reset. The casings are manufactured from galvanized steel, with powder-coating in black colour.

TFSR 125-160 are delivered with a Ø 160 spigot and TFSR 200-315 with a Ø 200.

For cold climates we recommend that the fan runs continuously to avoid problems with ice.



## Technical parameters

Nominal data		
Voltage (nominal)	230	V
Frequency	50	Hz
Phase(s)	1~	
Input power	25	W
Input current	0.13	A
Impeller speed	1,965	rpm
Air flow	max 0.0862	m³/s
Capacitance of capacitor	1.5	µF
Temperature of transported air	max 70	°C
Max temperature of transported air, when speed controlled	70	°C
Sound data		
Sound pressure level at 10m (free field)	23	dB(A)

**Protection/Classification**

Enclosure class, motor	IP44
Insulation class	B

**Data according to ErP**

Energy class, Basic unit	E
Energy class, Local demand	B
ErP ready	ErP 2016; ErP 2018

**Dimensions and weights**

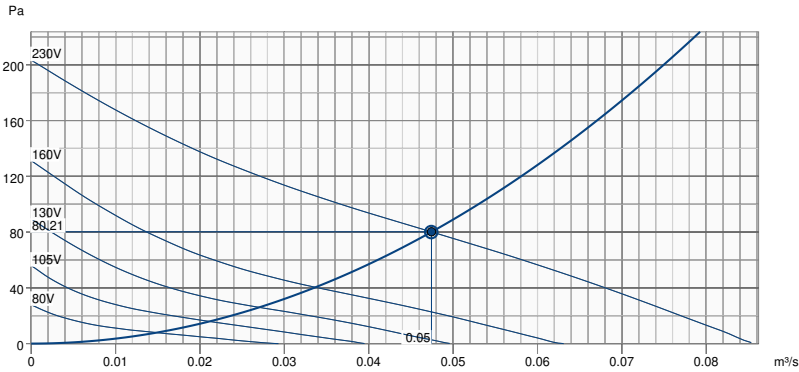
Duct dimension; Circular, inlet	125	mm
Weight	2.8	kg

**Others**

Duct connection type	Circular
Color name, casing	Brick red
Color casing, RAL	RAL 8004
Motor type	AC

# Performance

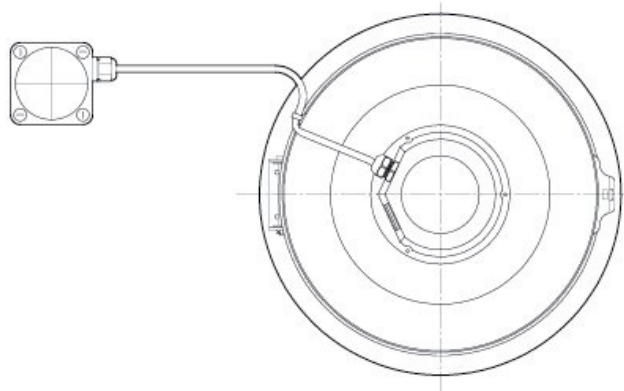
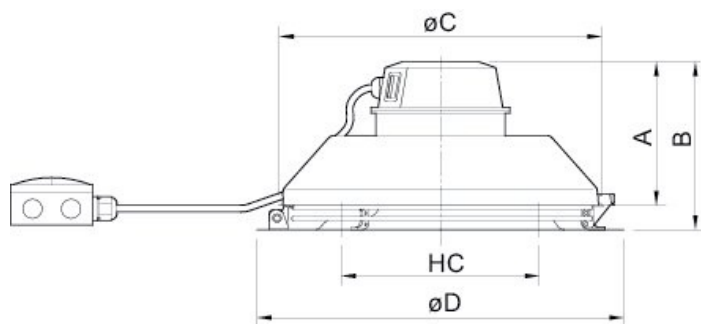
## Performance curve



Hydraulic data	
Required air flow	0.05 m³/s
Required static pressure	80 Pa
Working air flow	0.05 m³/s
Working static pressure	80 Pa
Air density	1.204 kg/m³
Power	25.0 W
Fan control - RPM	1888 rpm
Current	0.10 A
SFP	0.527 kW/m³/s
Control voltage	230.0 V
Supply voltage	230 V

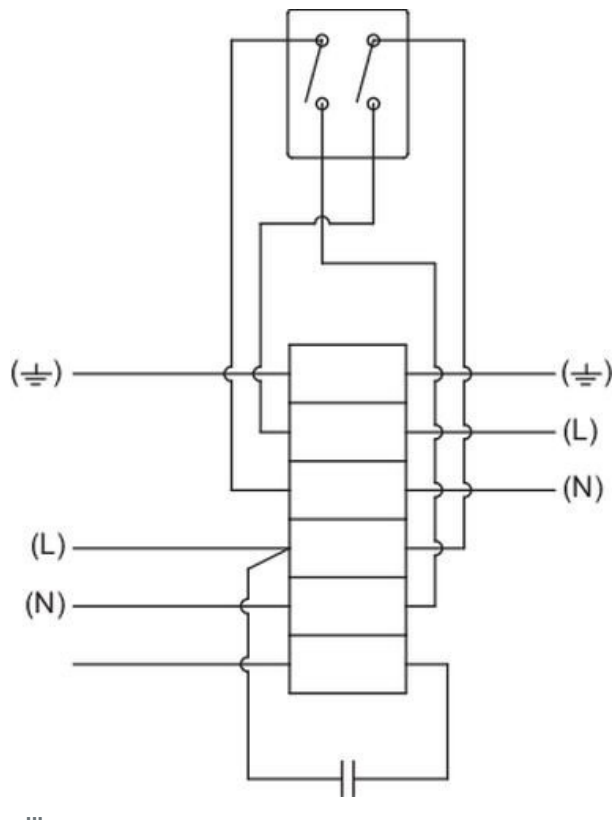
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	40	51	53	52	49	49	32	23	58
Outlet	dB(A)	20	40	45	47	50	49	37	26	54

## Dimension



TFSR	A	B	øC	øD	HC
125M/XL	119	144	284	315	205

## Wiring



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## Ecodesign

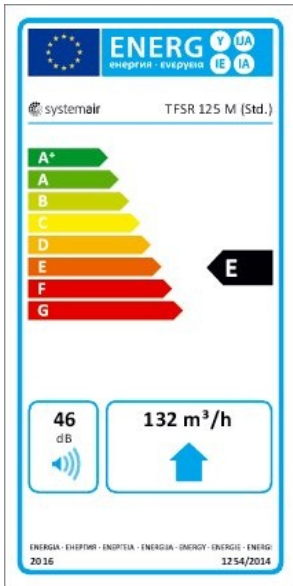
Product		
Trade name	Systemair	
Product name	TFSR 125 M Roof fan Black	
Basic unit		
ErP compliance	2018	
SEC Average	-13.1	kWh/(m <sup>2</sup> .a)
SEC Cold	-29.5	kWh/(m <sup>2</sup> .a)
SEC Warm	-3.7	kWh/(m <sup>2</sup> .a)
SEC Class	E	
Unit category	RVU	
Unit type	UVU	
Drive	External MSD or VSD	
Heat recovery type	None	
Temperature ratio (UVU)	Not applicable	
qv max	133	m <sup>3</sup> /h
P max	25	W
Sound power level LWA	46	dB(A)
qv ref	0.026	m <sup>3</sup> /s
Ps ref	50	Pa
SPI	0.129	W/(m <sup>3</sup> /h)
CTRL	1	
MISC	1.1	
x-value	1.5	
External Leakage	0	%
External Leakage	Not applicable	
AEC average	161	kWh
AHS Cold	161.9	kWh
AEC warm	161	kWh
AHS Average	1,715	kWh/a
AHS Cold	3,355.3	kWh/a
AHS Warm	776	kWh/a

**Units with local demand control**

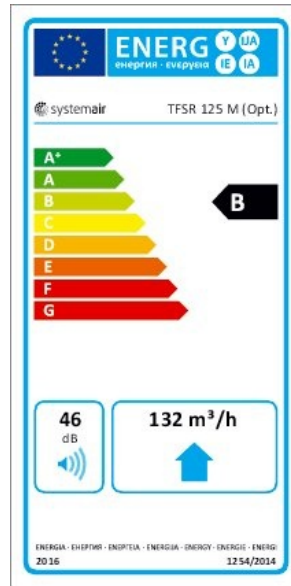
ErP compliance	2018
SEC Average	-26.2 kWh/(m <sup>2</sup> .a)
SEC Cold	-53.2 kWh/(m <sup>2</sup> .a)
SEC Warm	-10.7 kWh/(m <sup>2</sup> .a)
SEC Class	B
Unit category	RVU
Unit type	UVU
Drive	External MSD or VSD
Heat recovery type	None
Temperature ratio (UVU)	Not applicable
qv max	132 m <sup>3</sup> /h
P max	25 W
Sound power level LWA	46 dB(A)
qv ref	0.0257 m <sup>3</sup> /s
Ps ref	50 Pa
SPI	0.129 W/(m <sup>3</sup> /h)
CTRL	0.65
MISC	1.1
x-value	1.5
External Leakage	0 %
External Leakage	Not applicable
AEC average	84 kWh
AEC cold	84.9 kWh
AEC warm	84 kWh
AHS Average	2,830 kWh/a
AHS Cold	5,536.2 kWh/a
AHS Warm	1,280 kWh/a

# Energy class label

## Energy class, Basic unit



## Energy class, Local demand





## Accessories

- RE 1,5 Speed control (5000)
- REU 1.5 Speed control (5004)
- DTV500A (96807)
- MicroREX D21 Plus Time Switch (17822)
- RT 0-30 Room Thermostat (5151)
- LDC 160-900 Silencer (5193)
- TOB 125-160 Roof curb Red (1415)
- F251-16-60 Cookerhood transf (5931)
- REE 1 Speed control (5314)
- CO2RT-R-D Transmitter (6993)
- HR1 Room Humidistat (215150)
- Presence detector/IR24-P (6995)
- LDC 160-600 Silencer (5192)
- RSK-160 Back draft damper (5601)
- TOS 125-160 Roof curb Red (1580)

## Documents

- TFSR MOUNTING INSTRUCTION\_205504\_A001.PDF
- Certificate S-mark TFSK\_R 1309486\_EN.pdf