

prio 400 EC

Axial circular duct fan, EC motor

Item Number: 87979

Variant: 230V 1~ 50/60Hz



- Circular duct fan
- Compact design
- High efficiency and low SFP in a real working point
- Low sound level
- Air tight design
- Potentiometer included, possible to speed control 0-100%
- Simple to install, mounting brackets included
- Integrated motor protection

The prio fans is designed for installation in ducts. The casing is manufactured from sheet metal. The fans are delivered with a pre-wired potentiometer (0-10V) that allows you to easily find the desired working point.

Outdoor mounting and wet room applications are possible due to the fans air tight casing and the IP 55 rated terminal box.

Motor protection is integrated in the electronics of the motor.

The FK mounting clamp (accessory) facilitates easy installation and removal, and prevents the transfer of vibration to the duct.



Technical parameters

Nominal data		
Voltage (Nominal)	230	V
Frequency	50; 60	Hz
Phase(s)	1~	
Input power	748	W
Input current	3.26	A
Impeller speed	1,767	r.p.m.
Air flow	max 1.747	m ³ /s
Temperature of transported air	max 55	°C
Max temperature of transported air, when speed controlled	55	°C
Sound data		
Sound pressure level at 3m (20m ² Sabin)	58	dB(A)
Protection/Classification		
Enclosure class, motor	IP44	
Insulation class	F	

Data according to ErP

ErP ready

ErP 2018

Dimensions and weights

Duct dimension; Circular, inlet

400 mm

Duct dimension; Circular, outlet

400 mm

Weight

13.36 kg

Others

Duct connection type

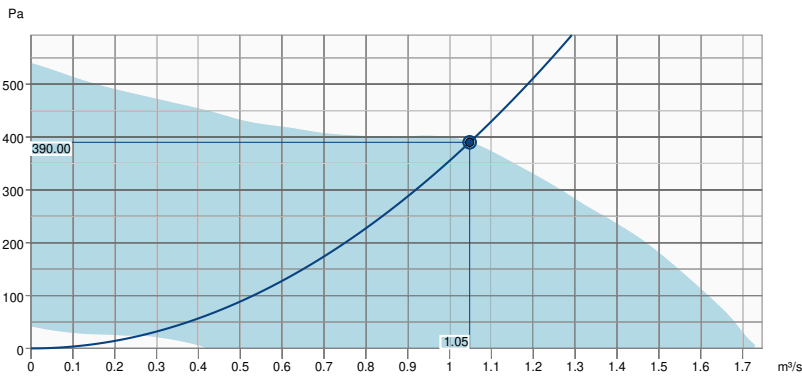
Circular

Motor type

EC

Performance

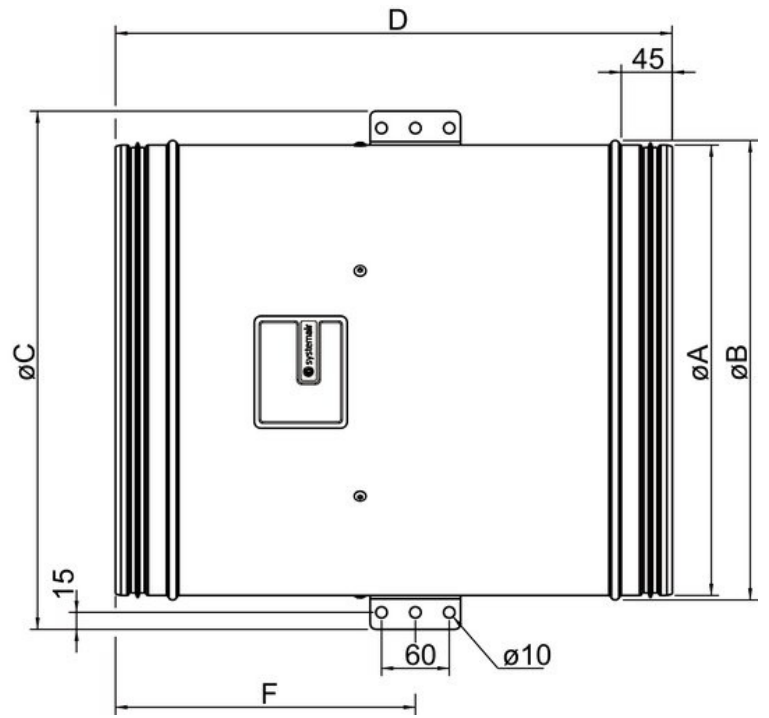
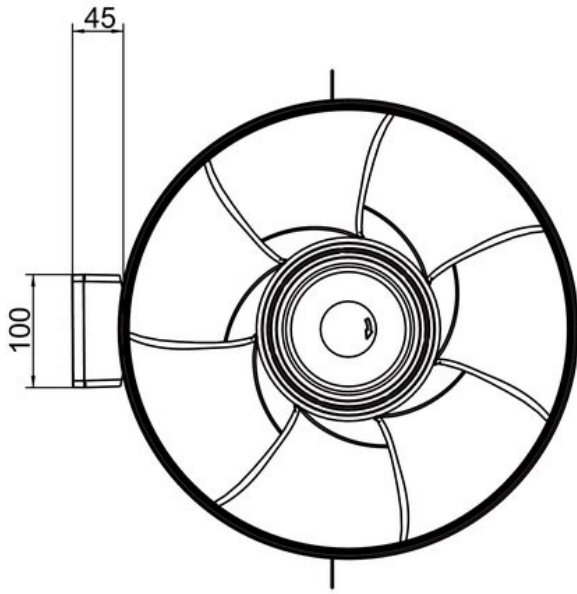
Performance curve



Hydraulic data	
Required air flow	1.05 m³/s
Required static pressure	390 Pa
Working air flow	1.05 m³/s
Working static pressure	390 Pa
Air density	1.204 kg/m³
Power	694.6 W
Fan control - RPM	1917 rpm
Current	3.01 A
SFP	0.663 kW/m³/s
Control voltage	10.0 V
Supply voltage	230 V

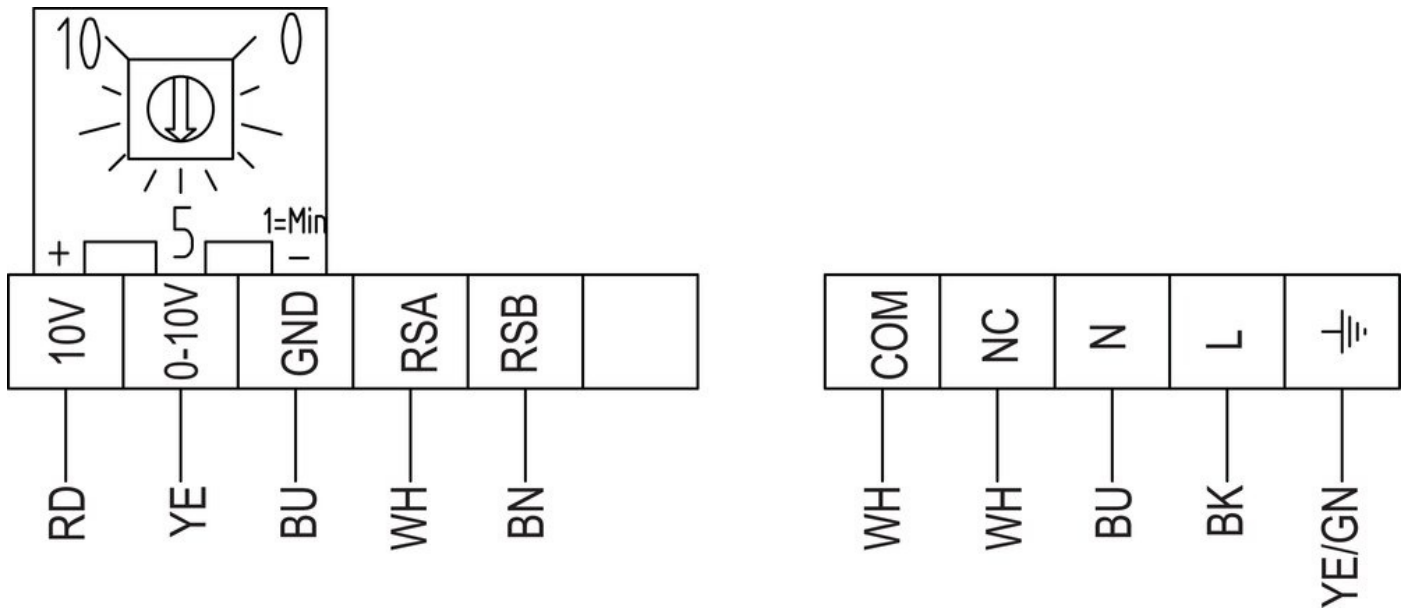
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	53	75	74	78	79	76	70	61	84
Outlet	dB(A)	69	73	83	81	81	76	69	60	87
Surrounding	dB(A)	29	45	60	62	58	55	52	35	65
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	58
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	44

Dimension



	øA	øB	øC	D	F
prio 315 EC	314	322	375	407	205
prio 400 AC/EC	399	407	459	493	266

Wiring



- RD Red
- YE Yellow
- BU Blue
- WH White
- GN Green
- BN Brown
- BK Black

Ecodesign

Product	
Trade name	Systemair
Product name	prio 400 EC
Ecodesign 327	
Manufacturer	Systemair Sweden AB, Industrivägen 3, Skinnskätteberg, Sweden
Type	prio 400 EC
Year of manufacture	See name plate of the fan
Air flow qv	1.0481 m ³ /s
Efficiency category	total
Efficiency grade N	75
Efficiency grade target N	58
Speed (rpm) n	1,916 r.p.m.
Pressure increase total psf	432 Pa
Power consumption Ped	695 W
Overall efficiency	67.7 %
Overall efficiency target	50.7 %
Variable speed drive	Yes
Additional components	Components used to calculate the energy efficiency that are not apparent from the measurement category are detailed in the CE declaration.
Maintenance	Information on installation, operation and maintenance is provided in the operating instructions.
Recycling / disposal	Information on recycling and disposal is provided in the operating instructions.

Accessories

- CXE/AVC Modbus (37256)
- EC-Basic-CO2 and temperature (24808)
- EC-Basic-T temperature (24805)
- EC-Selector (9908)
- EC-Vent Room Unit (3018)
- MTP 20, on/off, 3-step (310220)
- PCA 1000D2 Pressure controller (76739)
- SG 400 Protection guard (5613)
- CO2RT-R-D Transmitter (6993)
- Presence detector/IR24-P (6995)
- CB 400-12,0 400V/3 Duct heater (5393)
- CB 400-9,0 400V/3 Duct heater (5392)
- CBMF 400-9,0 400V/3 Duct heater (12511)
- FFR 400 Filter cassette (1783)
- FK 400 Fast clamp (1615)
- RSK-400 Back draft dmp. (9973)
- VBC 400-3 Water heating batt (9845)
- VK-40 Louvre shutter (5643)
- DMD-C Pressure controller (15793)
- EC-Basic-H humidity (24807)
- EC-Basic-U universal 0-10V (24806)
- EC-Vent control board (3115)
- MTP 10, 10K, Speed control (32731)
- MTV-1/010 Controller 0..10V+ (30650)
- S-5EC/FRQ (76738)
- VKK-400 Back draft damper (1629)
- HR1 Room Humidistat (215150)
- RT 0-30 Room Thermostat (5151)
- CB 400-6,0 400V/2 Duct heater (5391)
- CBM 400-9,0 400V/3 Duct heater (5487)
- CWK 400-3-2,5 Duct cooler,circ (30026)
- FGR 400 Filter cassette (1823)
- LDC 400-900 Silencer (5198)
- VBC 400-2 Water heating batt (5462)
- VBF 400 Water heating battery (1736)

Documents

- MODBUS LITE V5.01 parameter specification.pdf
- PRIO_OPERATING_MAINTENANCE_145903_CE_A003_EN.PDF