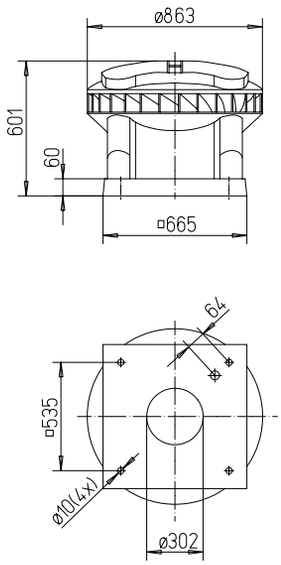
DV EC 400



EC

Dimensions DV EC 400



Dim. in mm

Extremely weather-resistant EC roof fan in plastic design for an extensive range of applications, diagonal outlet.

Common features DV EC Pro and DV EC Eco

Casing
Aerodynamically designed plastic casing made of grey polypropylene with diagonal air outlet direction. Air flow temperatures from –30 to +60 °C.

Impeller
Diagonal impeller made of aluminium, the motor impeller unit is dynamically balanced for low-noise operation.

Drive
Energy-efficient EC external rotor motor in protection category IP54. Optimised efficiency even with speed control for low operating costs. Continuously variable speed control. Maintenance-free and ball bearing mounted.

Motor protection
Integrated electronic temperature monitoring system for EC motor and electronics.

Electrical connection
Standard operating switch (protection category IP65) mounted on the outside of the casing. Connection voltage 1~, 230 V, 50 Hz.

Installation
Horizontal alignment on the roof. In case of sloping roofs, a corresponding base formation must be used to prevent water ingress. A range of accessories facilitates the installation of the fan in the building duct system.

Noise
The total level and range are specified above the performance diagram for:
- ▢ Inlet side sound power
- ▢ Outlet side sound power.

The case-radiated noise as sound pressure at 4 m (free field conditions) is also specified in the type table and the table below the performance curve.

PRO

Description DV EC Pro

Power control
- ▢ Ideal as a central exhaust air fan for multi-floor residential construction in accordance with DIN 18017-3.
- ▢ When combined with other components (accessories), a complete central ventilation system in accordance with DIN 18017-3 can be created with demand-driven ventilation.
- ▢ Integrated time control for weekly or daily programme.
- ▢ Integrated pressure sensor from 0 - 300 Pa for constant pressure maintenance in combined operation with other extract air fans, e.g. Helios ELS.
- ▢ Operating modes of the DV EC Pro can be easily set on site via a local web server.
- ▢ Integrated Ethernet interface (Modbus TCP) for connection to a building management system or for direct connection to the interface via PC/laptop (no accessories).

ECO

Description DV EC Eco

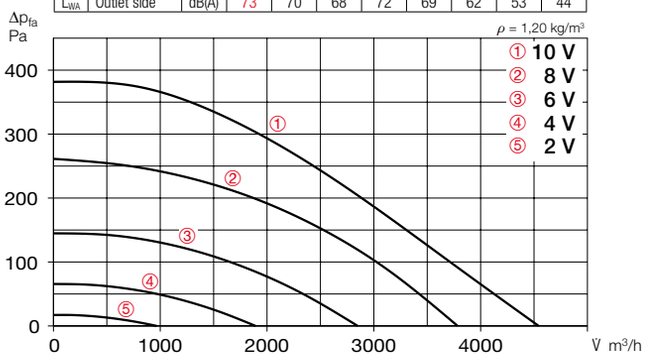
Power control
- ▢ Continuously variable speed control with speed potentiometer PU/PA 10 (accessories, see type table).
- ▢ When combined with the universal control system EUR EC or electronic pressure/temperature controllers EDR/ETR (accessories, see type table), the fan can be used for the continuously variable control of differential pressure, differential temperature or flow velocity. Performance levels are shown in the performance curve as an example.

Type	Ref. no.	Maximum speed approx.	Flow rate Free blowing	Noise sound press.	Power consumption at maximum speed		Wiring diagram	Max. air flow-temp.	Wgt net aprx.	Universal control system		Speed potentiometer Flush-mounted		Speed potentiometer Surf.-mounted	
		min⁻¹	V̇ m³/h	dB(A) in 4 m	kW	A	No.	+ °C	kg	Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
PRO **Type DV EC Pro, Single-phase alternating current, 230 V, 50/60 Hz, EC motor, IP54**															
DV EC 400 A Pro	08387	1150	4550	53	0.39	1.70	1529	60	32.0	–	–	–	–	–	–
DV EC 400 B Pro	08389	1440	5550	64	0.73	3.15	1529	60	35.0	–	–	–	–	–	–
ECO **Type DV EC Eco, Single-phase alternating current, 230 V, 50/60 Hz, EC motor, IP54**															
DV EC 400 A Eco	08324	1150	4550	53	0.39	1.70	1530	60	32.0	**EUR EC** [1)2)]	01347	**PU 10** [3)]	01734	**PA 10** [3)]	01735
DV EC 400 B Eco	08326	1440	5550	64	0.73	3.15	1530	60	35.0	**EUR EC** [1)2)]	01347	**PU 10** [3)]	01734	**PA 10** [3)]	01735

1) Multiple EC fans can normally be connected.
2) Alternative elec. pressure/temp. controller (EDR/ETR, no. 01437/01438) in combination with mains adapter NG 24, no. 01439, see accessories.
3) W/o LED supply.

Performance curves DV EC 400 A

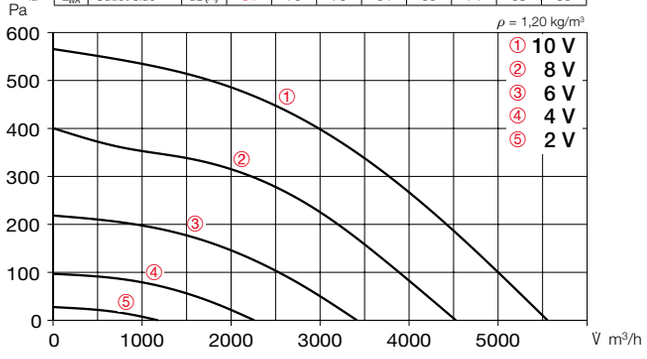
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Inlet side	dB(A)	70	69	69	67	66	60	52	45
L_{WA}	Outlet side	dB(A)	73	70	68	72	69	62	53	44



	Free blowing					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1150	4550	386	1,71	52	0,31
8	990	3800	228	1,03	47	0,22
6	750	2800	105	0,50	41	0,14
4	500	2000	38	0,24	32	0,07

Performance curves DV EC 400 B

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Inlet side	dB(A)	80	76	76	76	74	74	65	60
L_{WA}	Outlet side	dB(A)	84	79	78	84	80	74	65	58



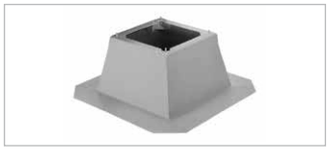
	Free blowing					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1450	5500	680	2,91	64	0,45
8	1180	4700	380	1,70	59	0,34
6	895	3400	176	0,82	53	0,19
4	600	2200	65	0,40	42	0,11

Accessories for all types

Base silencer
SSD 400 Ref. no. 05291
With hinge mechanism for easy inspection and cleaning.



Flange connection plate
FAP 400 Ref. no. 08384
Made of galvanised steel sheet. Allows the connection of the duct system and accessories to the roof fans DV EC if no base silencer SSD is used.



Flat roof base
FDS 400 Ref. no. 01380
With hinge mechanism for easy inspection and cleaning.



Counter flange
FR 400 Ref. no. 01206
Made of galvanised steel sheet, for inlet-side duct connection.



Flanged flexible connector
STS 400 Ref. no. 01223
For the prevention of structure-borne noise transmission to inlet-side ducts. Flanges made of galvanised steel sheet.



Duct shutter
RVS 400 Ref. no. 02596
Automatic, made of galvanised steel sheet, shutters made of aluminium. Prevents cold draughts when the fan is at a standstill. For vertical throughflow from bottom to top.



Five-step speed switch
SA-5 10 Ref. no. 40229
Five-step switch for surface mounting. For five-step control of EC fans or frequency inverters. Steps from 2 to 10 V can be set via offset. Protection class IP54.



Accessories for DV EC Eco

Universal control system
EUR EC Ref. no. 01347
For the continuously variable control or regulation of single and three-phase EC fans with a setpoint of 0–10 V DC.

Speed potentiometer
PU/PA 10 See type table
For the direct control/setpoint setting of EC fans with a potentiometer input.





Accessory details	Page
Roof install. accessories	560 f.
Ventilation grilles	562 ff.
Exhaust air elements	576 ff.
Intake air elements	588 ff.
Fire protection systems	592 ff.
Universal control systems, electronic controllers, speed potentiometer	615 ff.