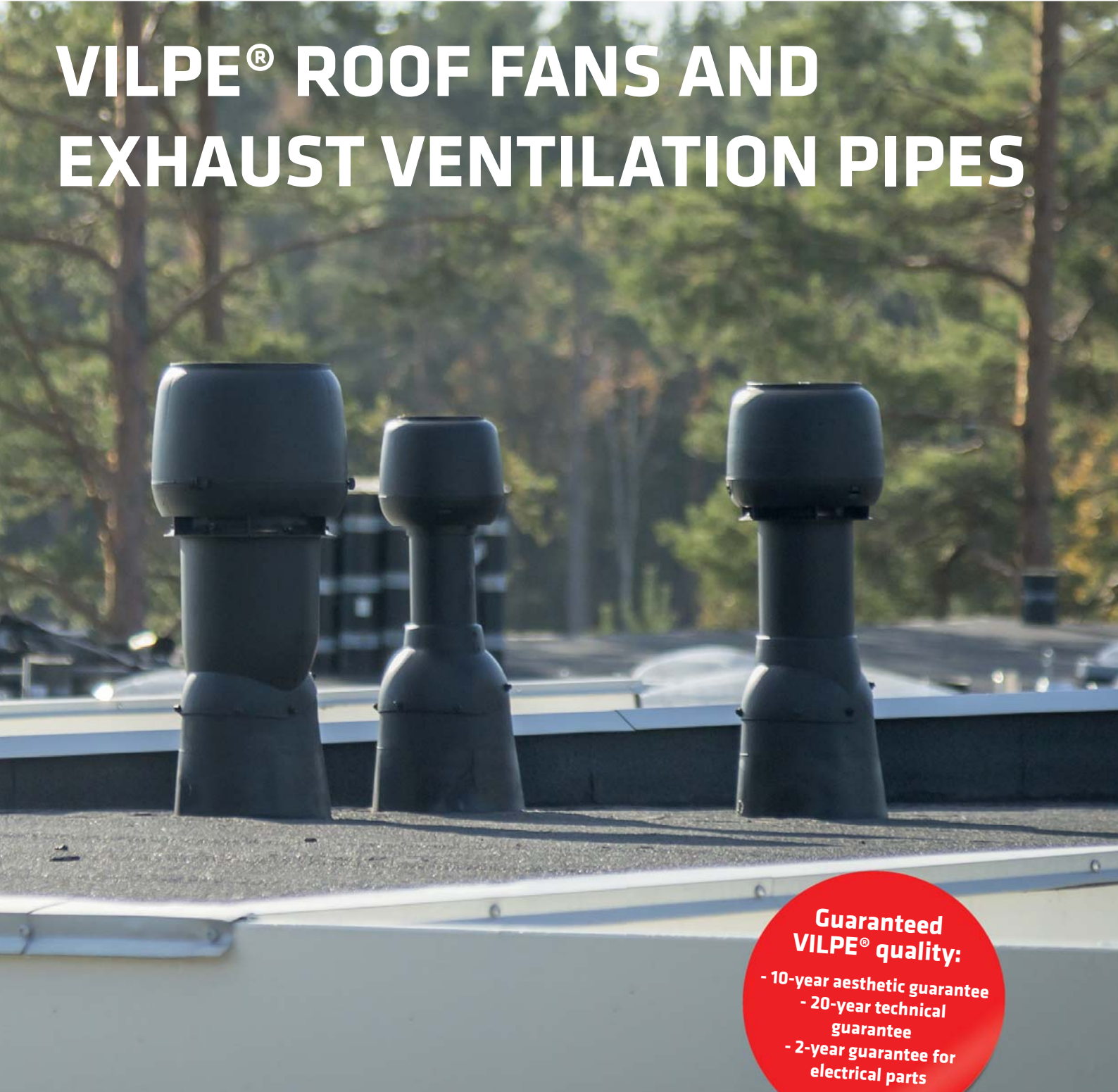


# VILPE® ROOF FANS AND EXHAUST VENTILATION PIPES



**Guaranteed  
VILPE® quality:**

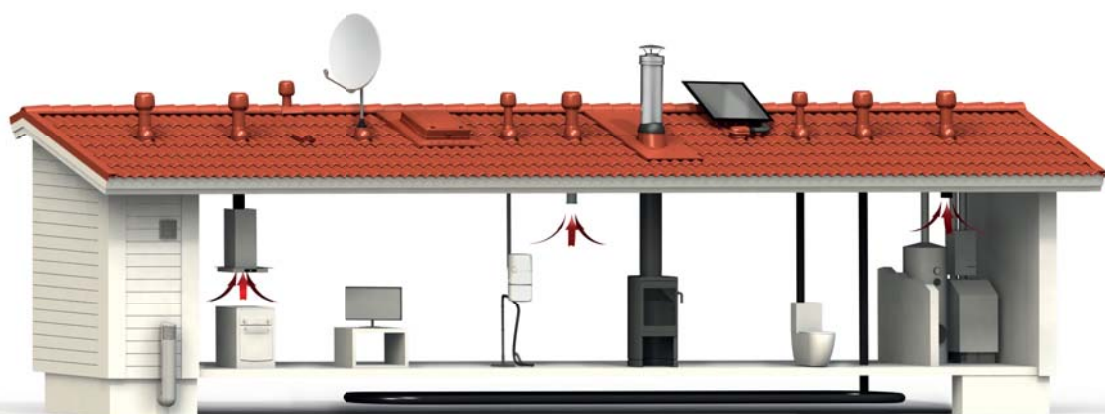
- 10-year aesthetic guarantee
- 20-year technical guarantee
- 2-year guarantee for electrical parts

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- Roof fans, ECo roof fans
- Exhaust ventilation pipes
- Sewer ventilation pipes
- Roof vents
- Aerial sleeves
- Radon fans
- Ross ventilation poles
- Ventilation grilles
- Roof hatches
- Solar pass-throughs
- Chimney pass-throughs

## VILPE® raw materials

- polypropylene plastic (PP)
  - non-corrosive
  - weather and shockproof
  - recyclable
  - body-tinted
  - UV-protected
  - chemically neutral
  - withstands continuously temperatures of -30°C ... +80°C, temporarily -40°C ... +120°C
- The P-series and C-series roof fans and exhaust ventilation pipes are pre-insulated
  - Polyurethane insulation in E120 roof fans and exhaust ventilation pipe Ø 125.
  - Mineral wool insulation in E190 and ECo190 roof fans.
  - Expanded polystyrene insulation in E220, ECo220 and all XL roof fans as well as exhaust ventilation pipe 160 and all XL exhaust ventilation pipes.

## Guaranteed VILPE® quality:

- 10-year aesthetic guarantee
- 20-year technical guarantee
- 2-year guarantee for electrical parts

## VILPE® standard colours

- black – reference RAL 9005
- brown – reference RAL 8017
- green – reference RAL 6020
- grey – reference RAL 7015
- red – reference RAL 3009
- brick red – reference RAL 8004
- light grey – reference RAL 7040

Due to the printing techniques, the colours of the products displayed in the catalogue may differ from the colour of the real products.

## VILPE® installation

Please refer to the VILPE® Installation, Operating and Maintenance instructions for more detailed information on the installation of the VILPE® systems.

## Product certification



## Roof fan and exhaust vent series

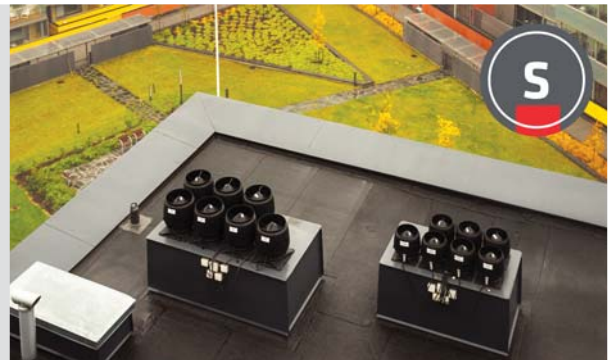
### P-series for pitched roofs

The P-series roof fans and exhaust ventilation pipes can be led watertightly with a pass-through set through a roof. VILPE® pass-through sets can be installed on any roofs with the most common pitches (less than 50 degrees). The pass-through set is always selected according to the roofing material. All the roof fans and exhaust ventilation pipes in the P-series are compatible with all pass-through set types. Using P-series XL roof fans and XL exhaust ventilation pipes requires an XL pass-through.



### S-series for flat surface installation

The S-series roof fans and exhaust vents are designed to be installed in the ventilation shaft, onto a silencer or in or other horizontal surface. Thus, they are also suitable for gently sloping roofs. The S-roof fans and S-exhaust vents are used, for example, in blocks of flats and terraced houses, when flat-specific ventilation is required. The S-series roof fan can also be used for modifying an old natural ventilation system into a mechanical one during renovation.



### C-series for handmade/pre-bent steel cones

The C-series roof fans and exhaust ventilation pipes are used in the same way as P-series products in solutions where the pipe is led through a roof and a cone. The difference is that the C-series fans and exhaust ventilation pipes are installed on top of the sheet metal cone made by a sheet metal worker on the roof. The diameter of the upper part of the sheet metal cone has to be either Ø 170 mm or 315, according to the size of the roof fan or ventilation pipe.



### Products for low-pitched roofs

The VILPE® product family includes a wide selection of fasteners, sealings and underpressure vents for the needs of various roofings. The Felt pass-throughs (tall) enable installing all the roof fans and exhaust ventilation pipes with a diameter of 100–250 mm on low-pitched roofs. The backwater height of pass-throughs are all according to regulations.



## Pass-throughs for P-series

### Pass-throughs for tile roofing



**Tile 2K**  
• tile width up to 330 mm and wave height of 27-40 mm



**Universal 2K**  
• all tile roofings



**Vittinge 2K**  
• 1- and 2- waved Vittinge clay tile roofings



**XL Tile**  
• tile width up to 330 mm and wave height of 27-40 mm



**XL Universal**  
• all tile roofings

### Pass-throughs for steel roofing



**Steel**  
• low profiled steel roofings



**Classic Vino 2K**  
• standing seam roofings



**Profiled Steel 2K**  
• round profiled steel roofings



**Nera**  
• steel roofings (e.g. Finnera & Finnera Plus)



**Decra**  
• Decra roofing



**Eternit B9**  
• fibre-cement roofings



**Aalto 2K**  
• Adamante roofing



**Armor 2K**  
• Armorium roofing



**XL Classic**  
• standing seam roofings



**XL Universal**  
• profiled steel roofings



**XL Universal MK1**  
• profiled steel roofing with wave distance 183.3 mm, wave length 350 mm and wave height 39 mm

### Pass-throughs for felt roofing



**HS Shingle/Slate**  
• felt, shingle and slate roofings



**Classic Vino 2K**  
• retrofitting on felt roofings



**Felt tall**  
• roof with a pitch less than 1:5 (11.5°)



**XL Felt**  
• felt roofings



**XL Classic**  
• retrofitting on felt roofings



**XL Felt tall**  
• roof with a pitch less than 1:5 (11.5°)

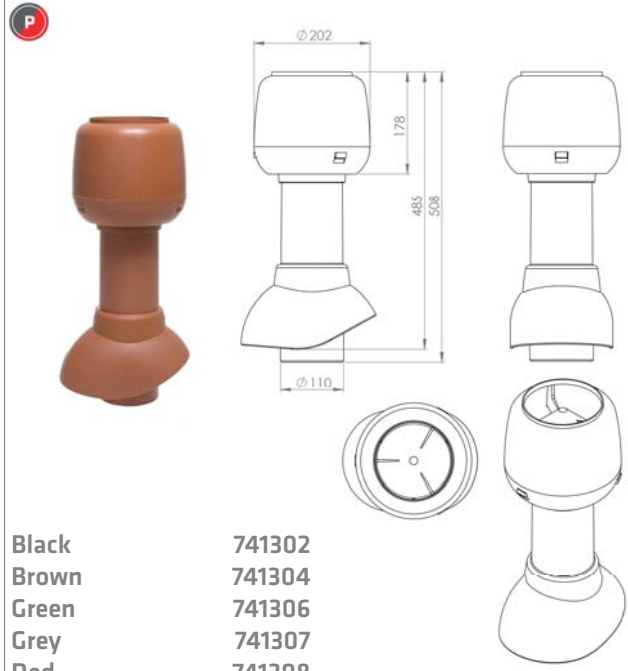
## Exhaust ventilation pipes Ø 75 mm and Ø 110 mm

### 75P/IS/300 Central vacuum cleaner exhaust pipe



Black	74232
Brown	74234
Green	74236
Grey	74237
Red	74238
Brick red	74239

### 110P/300 Ventilation pipe + cowl



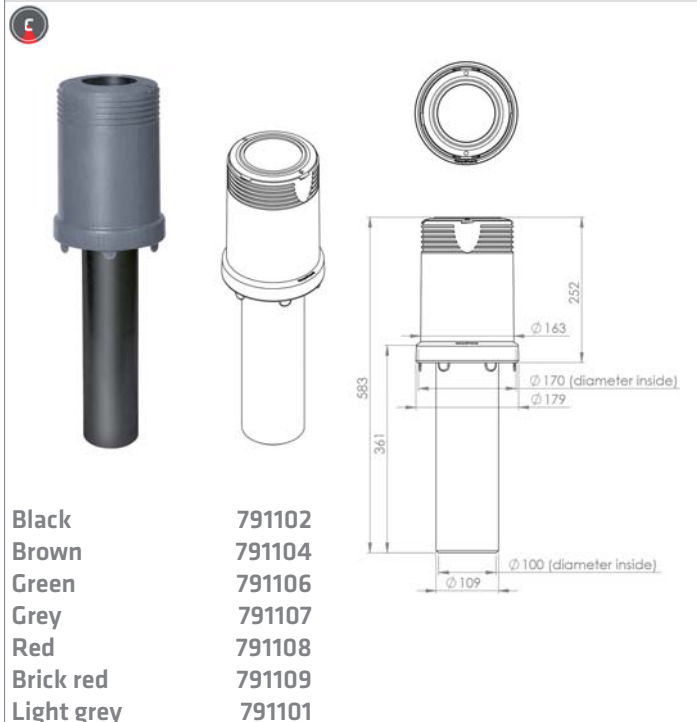
Black	741302
Brown	741304
Green	741306
Grey	741307
Red	741308
Brick red	741309

### 110P/IS/350 Ventilation pipe + cowl



Black	741402
Brown	741404
Green	741406
Grey	741407
Red	741408
Brick red	741409

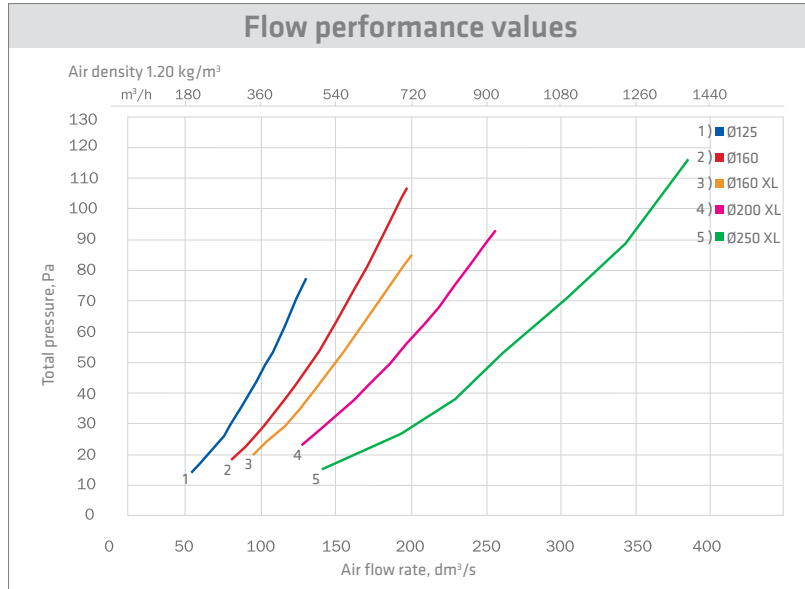
### 110C/IS/250 Ventilation pipe



Black	791102
Brown	791104
Green	791106
Grey	791107
Red	791108
Brick red	791109
Light grey	791101



# Exhaust ventilation pipes Ø 125 mm



### 125S 250x250 Exhaust vent

Black	741802
Brown	741804
Green	741806
Grey	741807
Red	741808
Brick red	741809

### 125P/IS/500 Exhaust ventilation pipe

Black	734402
Brown	734404
Green	734406
Grey	734407
Red	734408
Brick red	734409
Light grey	734401

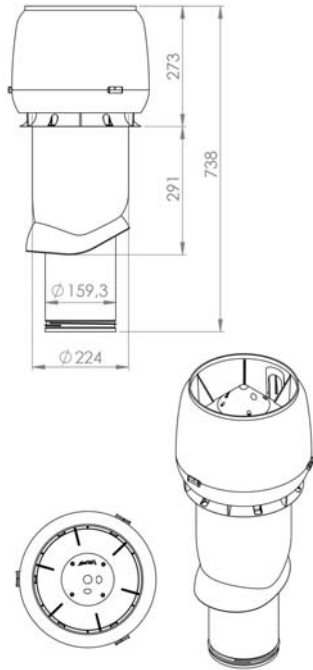
### 125C/IS/400 Exhaust ventilation pipe

Black	791202
Brown	791204
Green	791206
Grey	791207
Red	791208
Brick red	791209
Light grey	791201

## Exhaust ventilation pipes Ø 160 mm

### 160P/IS/500 Exhaust ventilation pipe

P

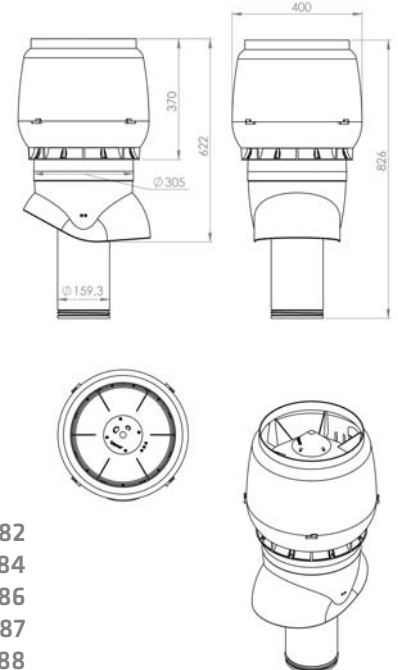


Black	741692
Brown	741694
Green	741696
Grey	741697
Red	741698
Brick red	741699
Light grey	741691

### XL 160P/IS/500 Exhaust ventilation pipe

P

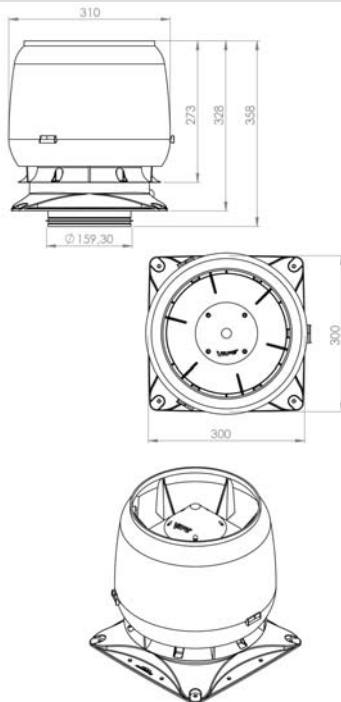
XL



Black	741782
Brown	741784
Green	741786
Grey	741787
Red	741788
Brick red	741789

### 160S 300x300 Exhaust vent

S

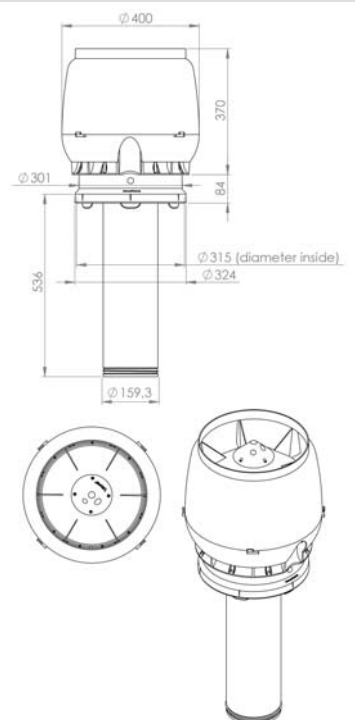


Black	741822
Brown	741824
Green	741826
Grey	741827
Red	741828
Brick red	741829

### XL 160C/IS/450 Exhaust ventilation pipe

C

XL



Black	791212
Brown	791214
Green	791216
Grey	791217
Red	791218
Brick red	791219
Light grey	791211

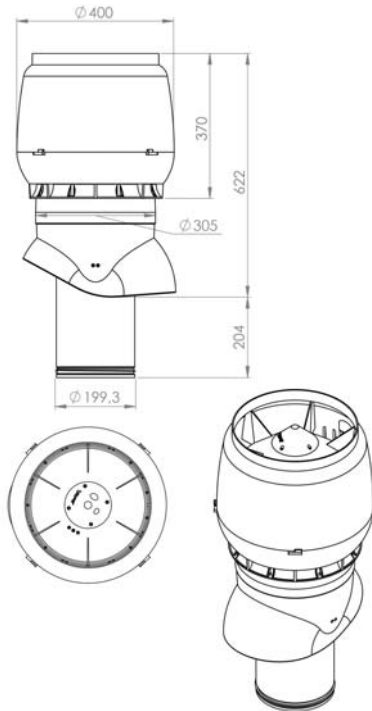




## Exhaust ventilation pipes Ø 200 mm

### XL 200P/IS/500 Exhaust ventilation pipe

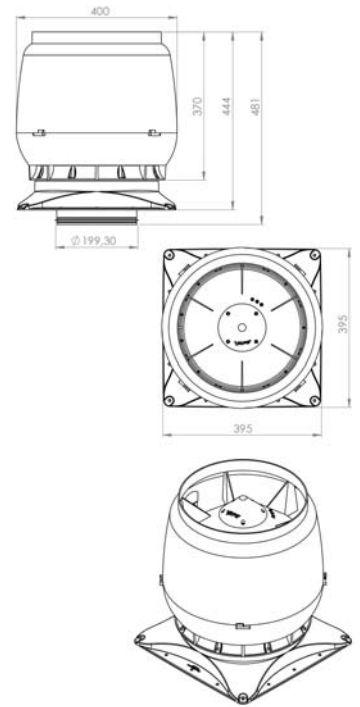
P XL



Black	741712
Brown	741714
Green	741716
Grey	741717
Red	741718
Brick red	741719

### 200S 400x400 Exhaust vent

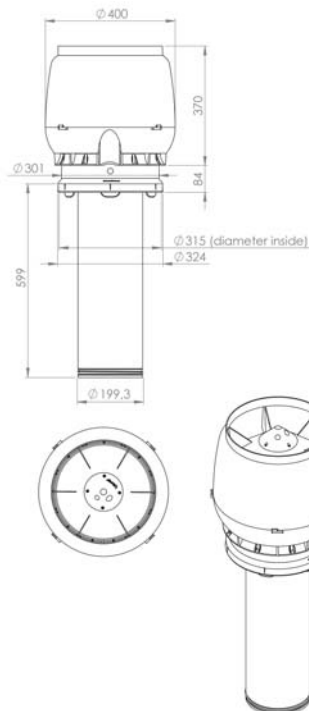
S XL



Black	741842
Brown	741844
Green	741846
Grey	741847
Red	741848
Brick red	741849

### XL 200C/IS/450 Exhaust ventilation pipe

C XL

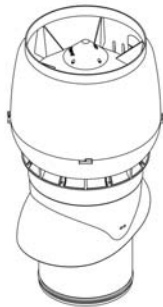
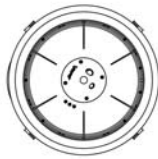
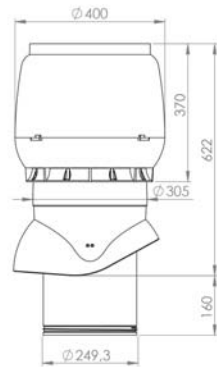


Black	791222
Brown	791224
Green	791226
Grey	791227
Red	791228
Brick red	791229

## Exhaust ventilation pipes Ø 250 mm

### XL 250P/IS/500 Exhaust ventilation pipe

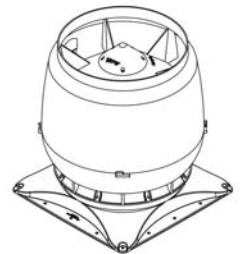
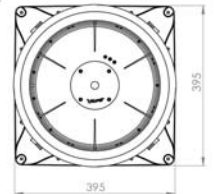
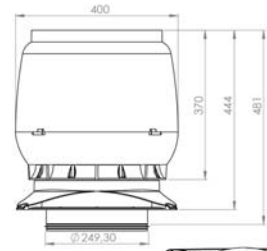
P XL



Black	741762
Brown	741764
Green	741766
Grey	741767
Red	741768
Brick red	741769

### 250S 400x400 Exhaust vent

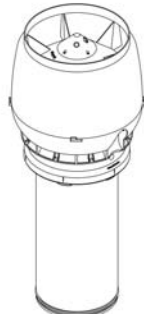
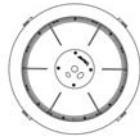
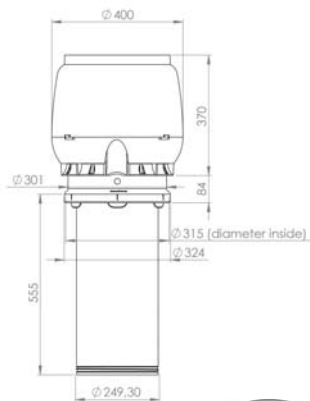
S XL



Black	741862
Brown	741864
Green	741866
Grey	741867
Red	741868
Brick red	741869

### XL 250C/IS/450 Exhaust ventilation pipe

C XL

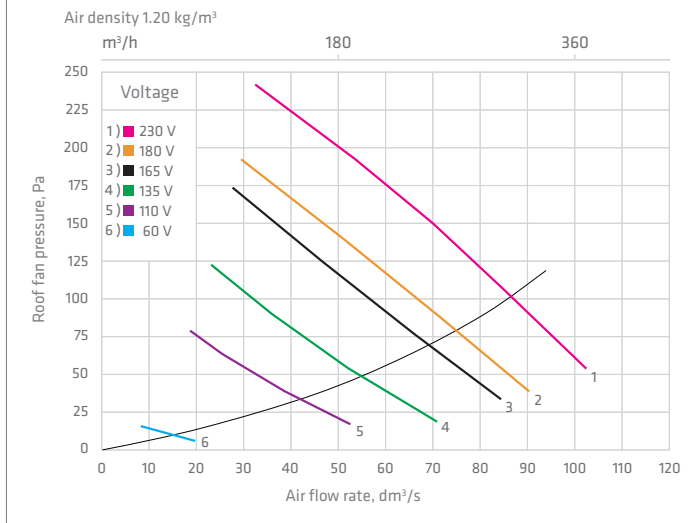


Black	791232
Brown	791234
Green	791236
Grey	791237
Red	791238
Brick red	791239



# Roof fans E120

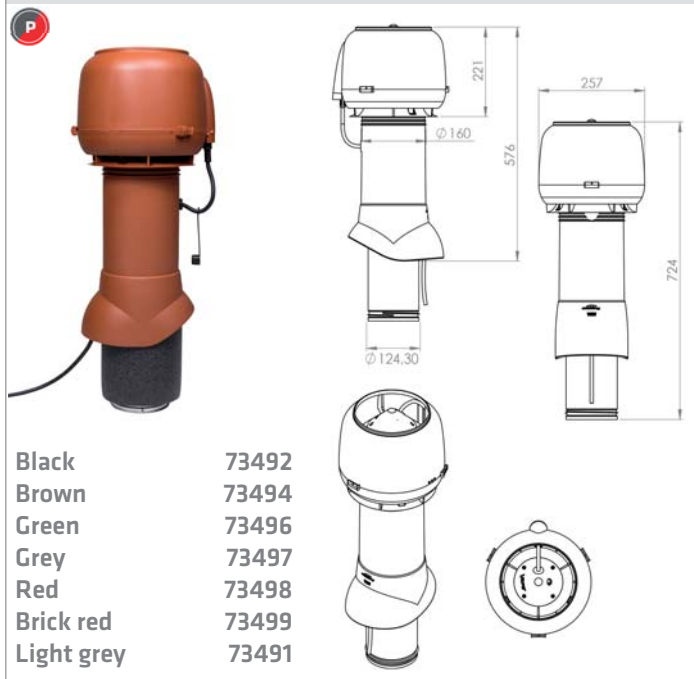
## Flow performance values



## Flow and noise performance values

E120P / 125		60 V	110 V	135 V	165 V	180 V	230 V
q V1	dm <sup>3</sup> /s	8.5	38.8	52.0	65.7	71.6	85.2
p tF	Pa	16	38	53	75	85	104
PE	W	9	27.0	37.7	51.0	57.3	82.7
ηtE	-	0.015	0.054	0.073	0.097	0.106	0.107
n	1/min	643	1237	1552	1901	2044	2355
Duct							
L W63	dB	47.6	54.9	57.4	60.8	61.9	65.4
L W125	dB	53.9	67.2	71.2	73.1	73.4	76.0
L W250	dB	52.0	64.4	70.3	72.9	73.2	75.0
L W500	dB	38.6	52.8	57.6	61.5	62.8	67.2
L W1000	dB	32.6	52.4	56.3	60.9	62.2	66.9
L W2000	dB	15.3	45.3	53.6	58.3	59.6	62.3
L W4000	dB	*	28.2	37.1	46.5	49.4	55.7
L W8000	dB	*	*	21.1	31.8	34.7	40.5
L W	dB	56.7	69.4	74.1	76.5	76.9	79.4
L WA	dB (A)	44.8	59.0	64.0	67.4	68.3	71.7

## E120P/125/IS/500



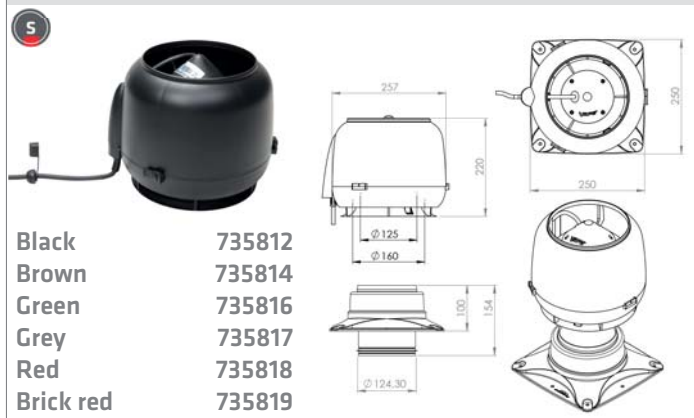
## Electrical details

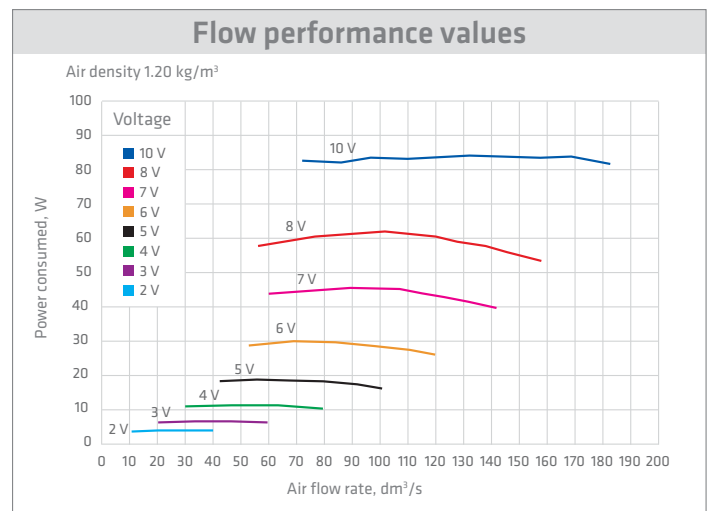
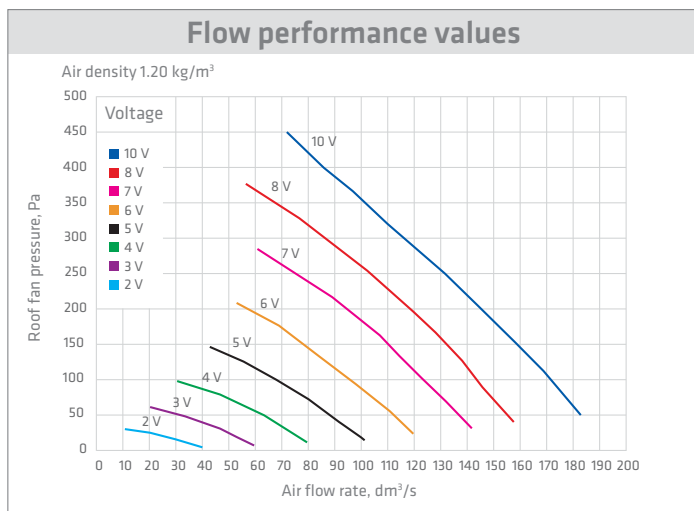
Fan type	E120
Power Input	52 W
Current	0.23 A
Nominal Voltage	230 V / 50 Hz
Speed	2350 r/min
Capacitor	1.5 μF
Speed Controller	Thyristor or transformer

## E120C/125/IS/400



## E120S





### ECo190P/125/IS/500

Black 737342  
 Brown 737344  
 Green 737346  
 Grey 737347  
 Red 737348  
 Brick red 737349  
 Light grey 737341

### ECo190S

Black 737312  
 Brown 737314  
 Green 737316  
 Grey 737317  
 Red 737318  
 Brick red 737319  
 Light grey 737311

### Flow and noise performance values

U	V	2	3	4	5	6	7	8	10
qv	dm <sup>3</sup> /s	10.8	20.5	46.8	67.6	84	107	120	132
pF	Pa	30.6	61.2	79.7	102	135	164	196	251
Pe	W	4	6.6	11.6	19	29.6	45	60.6	84.2
N	1/min	807	1155	1474	1818	2161	2536	2810	3122
Duct									
LW63	dB	*	55.5	54.6	58.6	61.6	63.9	78.9	67
LW125	dB	40.5	53.5	53.5	58.1	62.1	65.9	67.1	68.4
LW250	dB	37.2	43.5	48.1	57	59.5	64.7	65.3	66.9
LW500	dB	21.4	30.8	37.5	44.8	50	54.4	56.7	59.8
LW1000	dB	*	16.9	24.4	33.8	41.7	47.1	49.7	52.4
LW2000	dB	*	*	13.9	25.5	33.5	41.6	44.9	49.5
LW4000	dB	*	*	*	15	27.7	36.6	40.3	44.2
LW8000	dB	*	*	*	*	21	28.9	33.8	38
LW	dB	42.2	57.8	57.6	62.8	66.1	69.8	79.4	72.6
LWA	dB(A)	29.6	39	42.1	49.2	53.2	58.9	60.1	61.7

### Electrical details

Fan type	ECo190
Power Input	83 W
Current	0.75 A
Nominal Voltage	230 V / 50 Hz
Speed	3200 r/min
Speed Controller	ECo Controller

### Flow and noise performance values

U	V	2	3	4	5	6	7	8	10
qv	dm <sup>3</sup> /s	10.8	16.3	44.8	68.7	85.6	114	128	145
pF	Pa	37.1	71.8	99.0	117	161	168	201	164
Pe	W	4.1	6.7	13.5	22.5	36.8	54.5	74.3	82.8
N	1/min	886	1232	1608	1953	2338	2721	3020	3158
Environment									
LW63	dB	42.2	43.4	47.7	50.1	50.8	55.1	56.7	59.7
LW125	dB	36.5	44.2	47.8	50.1	53.7	57.9	60.3	60.5
LW250	dB	35.0	40.1	47.4	52.6	56.1	62.2	64.6	65.1
LW500	dB	37.9	44.6	51.4	54.8	58.8	64.1	67.7	69.7
LW1000	dB	34.9	42.6	50.1	53.2	57.6	62.8	65.5	67.9
LW2000	dB	30.8	41.6	52.1	55.3	59.8	65.1	67.9	70.2
LW4000	dB	22.7	30.7	41.7	47.4	53.1	58.7	61.8	64.2
LW8000	dB	29.4	28.4	29.8	35.7	43.5	49.2	53.4	55.2
LW	dB	45.5	50.8	57.7	61.1	65.2	70.5	73.4	75.3
LWA	dB(A)	39.6	47.4	56.2	59.5	64.1	69.4	72.3	74.5



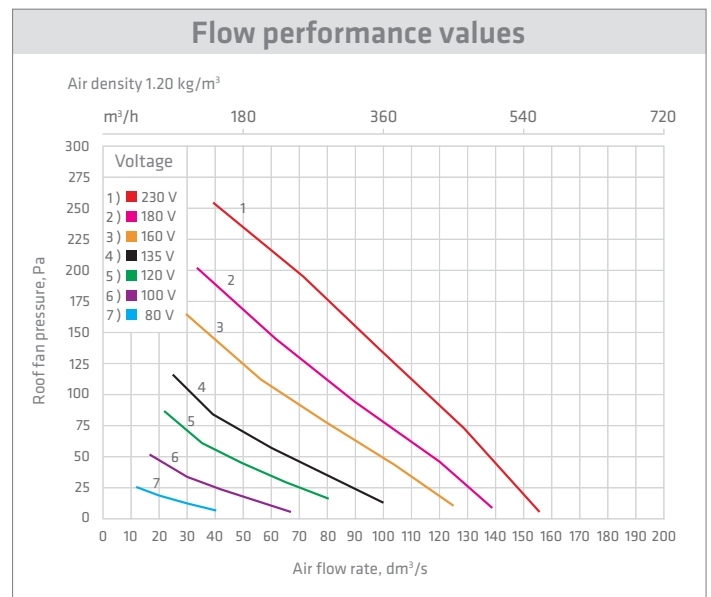
## Roof fans E190

**E190P/125/IS/500**

**Black** 73592  
**Brown** 73594  
**Green** 73596  
**Grey** 73597  
**Red** 73598  
**Brick red** 73599

**E190S**

**Black** 73582  
**Brown** 73584  
**Green** 73586  
**Grey** 73587  
**Red** 73588  
**Brick red** 73589

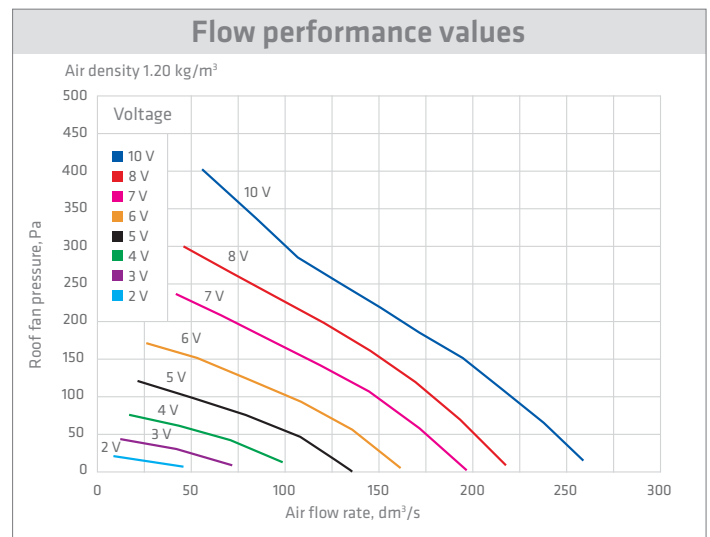
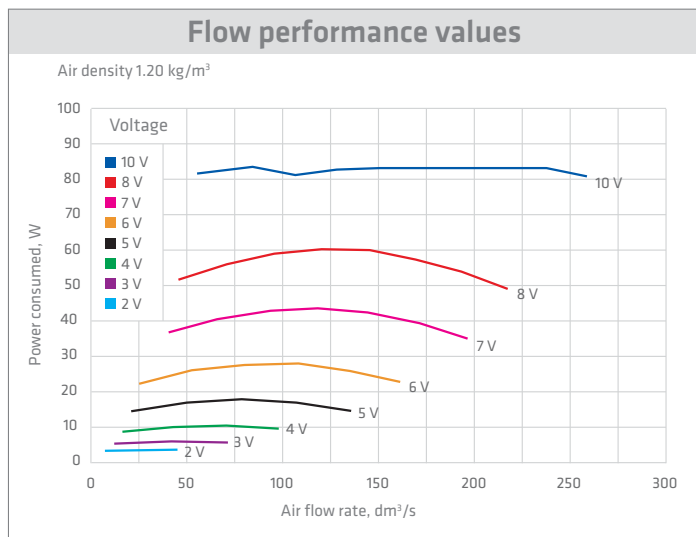


**Electrical details**

Fan type	E190
Power Input	52 W
Current	0,23 A
Nominal Voltage	230 V / 50 Hz
Speed	2350 r/min
Capacitor	1.5 µF
Speed Controller	Thyristor or transformer

**Flow and noise performance values**

E190P / 125		60 V	110 V	135 V	165 V	180 V	230 V
q V1	dm <sup>3</sup> / s	21.6	35.4	52.1	59.9	64.7	79.5
p tF	Pa	7	55	73	121	137	174
PE	W	8.0	25.0	35.7	49.0	54.7	80.0
ηtE	-	0.019	0.077	0.107	0.148	0.162	0.173
n	1/min	532	1226	1510	1874	2002	2322
<b>Duct</b>							
L W63	dB	43.4	52.7	56.1	59.2	60.1	63.3
L W125	dB	52.6	69.5	75.0	76.9	76.8	78.3
L W250	dB	42.6	61.0	68.2	73.1	73.6	75.4
L W500	dB	0.0	47.7	53.9	58.3	60.0	64.4
L W1000	dB	18.8	46.2	52.1	59.2	61.1	63.4
L W2000	dB	*	36.4	44.4	49.6	50.7	54.4
L W4000	dB	*	26.0	34.1	42.2	43.5	47.5
L W8000	dB	*	*	19.4	31.3	34.0	38.9
L W	dB	53.5	70.2	75.9	78.6	78.7	80.4
L WA	dB (A)	39.4	57.6	63.7	67.3	68.1	70.4



### ECo220P/160/IS/500

- Black 737382
- Brown 737384
- Green 737386
- Grey 737387
- Red 737388
- Brick red 737389
- Light grey 737381

### ECo220S

- Black 737392
- Brown 737394
- Green 737396
- Grey 737397
- Red 737398
- Brick red 737399

### Electrical details

Fan type	ECo220
Power Input	85 W
Current	0.7 A
Nominal Voltage	230 V / 50 Hz
Speed	2580 r/min
Speed Controller	ECo Controller

### Flow and noise performance values

U	V	2	3	4	5	6	7	8	10
qv	dm³/s	8.7	42.4	71	79.2	108.9	119	146	172
pF	Pa	21.6	30.7	42.8	77	94.7	142	162	186
Pe	W	3.6	6.2	10.6	17.9	28.2	43.7	60.2	83.2
N	1/min	630	868	1144	1429	1698	1994	2225	2489
Duct									
LW63	dB	64.2	62.9	66.5	66.6	66.6	72.0	72.7	74.5
LW125	dB	54.5	60.9	61.4	68.8	68.2	70.5	71.3	72.9
LW250	dB	44.1	48.7	53.9	59.7	69.9	71.6	82.0	73.5
LW500	dB	35.7	40.5	47.7	51.9	57.1	60.3	63.4	67.3
LW1000	dB	31.5	38.1	44.8	48.7	53.3	56.5	59.6	62.2
LW2000	dB	17.9	25.7	38.3	43.0	48.5	51.7	54.5	57.5
LW4000	dB	17.6	18.7	25.6	33.3	41.9	46.4	50.3	53.6
LW8000	dB	21.8	22.1	22.6	25.4	30.6	36.3	41.4	45.9
LW	dB	64.7	65.1	67.9	71.3	73.4	76.3	82.9	78.9
LWA	dB(A)	41.6	46.1	51.2	57.4	62.0	65.1	74.0	70.0

### Flow and noise performance values

U	V	2	3	4	5	6	7	8	10
qv	dm³/s	7.6	-	71.9	77.7	105	120	145	170
pF	Pa	22.4	-	45.9	81.7	103	147	169	191
Pe	W	3.6	-	11.0	18.4	29.1	44.8	61.8	83.6
N	1/min	636	-	1173	1451	1730	2027	2269	2513
Environment									
LW63	dB	45.6	-	44.1	48.0	49.4	53.7	54.5	56.2
LW125	dB	37.0	-	55.0	50.5	51.3	54.3	56.9	58.1
LW250	dB	36.8	-	46.7	51.4	62.0	60.2	67.0	70.9
LW500	dB	35.9	-	47.9	52.5	57.3	60.9	63.6	66.2
LW1000	dB	32.5	-	48.4	52.4	57.2	61.2	63.8	66.5
LW2000	dB	23.8	-	42.6	49.1	54.9	59.0	61.5	65.2
LW4000	dB	19.1	-	30.1	38.4	46.5	51.6	54.6	61.0
LW8000	dB	23.4	-	24.9	28.3	36.1	43.2	47.2	53.9
LW	dB	47.2	-	55.6	58.8	65.1	67.1	72.0	76.3
LWA	dB(A)	37.0	-	49.9	55.9	61.4	65.1	67.9	73.3



## Roof fans E220

### E220P/160/IS/500

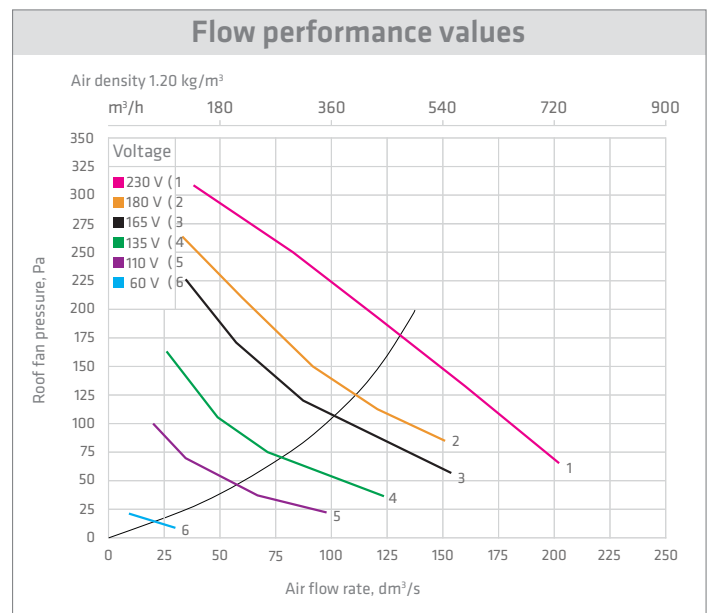
**P**

Black	73472
Brown	73474
Green	73476
Grey	73477
Red	73478
Brick red	73479
Light grey	73471

### E220S

**S**

Black	735912
Brown	735914
Green	735916
Grey	735917
Red	735918
Brick red	735919



### Electrical details

Fan type	E220
Power Input	85 W
Current	0.38 A
Nominal Voltage	230 V / 50 Hz
Speed	2600 r/min
Capacitor	2 µF
Speed Controller	Thyristor or transformer

### Flow and noise performance values

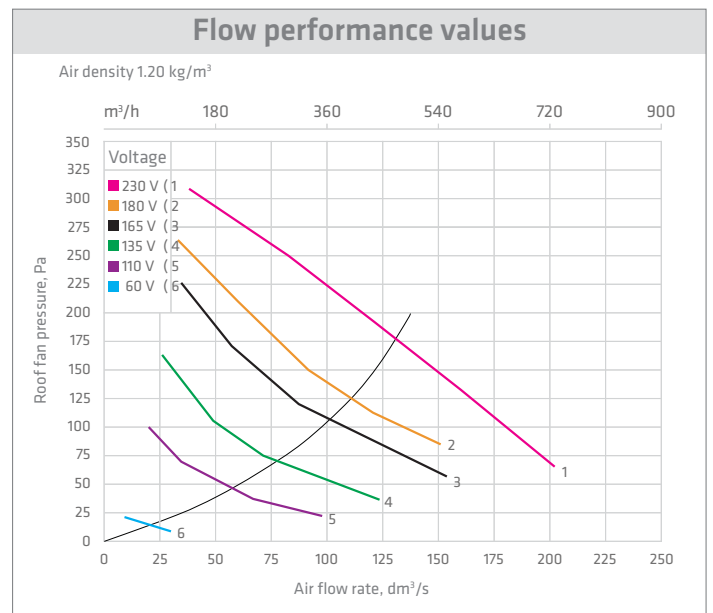
E220P / 160		60 V	110 V	135 V	165 V	180 V	230 V
q V1	dm <sup>3</sup> / s	30.4	67.8	72.7	88.5	121.6	160.6
p tF	Pa	9	37	74	118	110	130
PE	W	10.0	30.0	43.0	60.7	69.0	99.0
ηtE	-	0.028	0.083	0.125	0.172	0.194	0.211
n	1/min	518	1077	1386	1727	1892	2266
Duct							
L W63	dB	45.6	52.9	61.7	64.6	60.1	62.2
L W125	dB	50.0	66.0	71.5	76.3	72.2	74.3
L W250	dB	42.8	59.4	64.8	70.4	67.9	70.5
L W500	dB	26.2	48.5	52.7	58.1	61.1	65.0
L W1000	dB	35.0	49.6	53.5	57.8	60.7	64.6
L W2000	dB	21.0	40.4	47.0	52.5	56.2	60.8
L W4000	dB	*	30.4	39.1	45.9	49.0	56.6
L W8000	dB	*	*	24.8	34.0	38.0	44.3
L W	dB	52.0	67.2	72.8	77.7	74.3	76.8
L WA	dB (A)	39.6	56.0	61.2	66.4	66.1	69.7

# Roof fans XL E220

### XL E220P/160/IS/500

**P** **XL**

**Black** 734502  
**Brown** 734504  
**Green** 734506  
**Grey** 734507  
**Red** 734508  
**Brick red** 734509



### Electrical details

Fan type	E220
Power Input	85 W
Current	0.38 A
Nominal Voltage	230 V / 50 Hz
Speed	2600 r/min
Capacitor	2 µF
Speed Controller	Thyristor or transformer

### XL E220C/160/IS/450

**C** **XL**

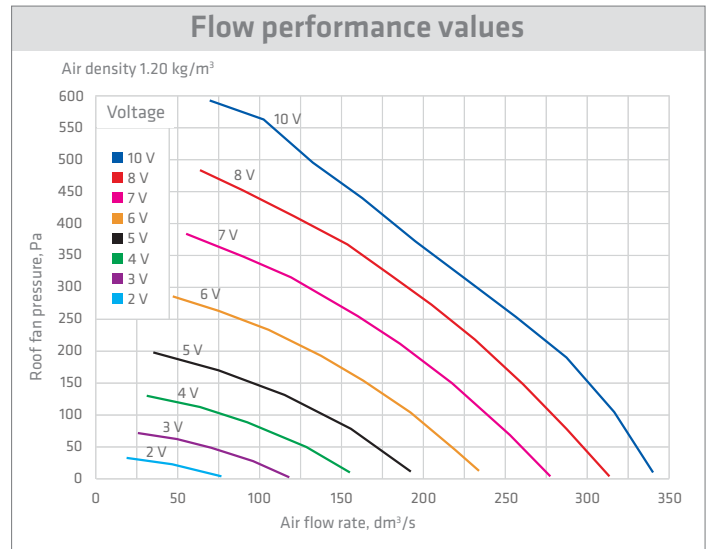
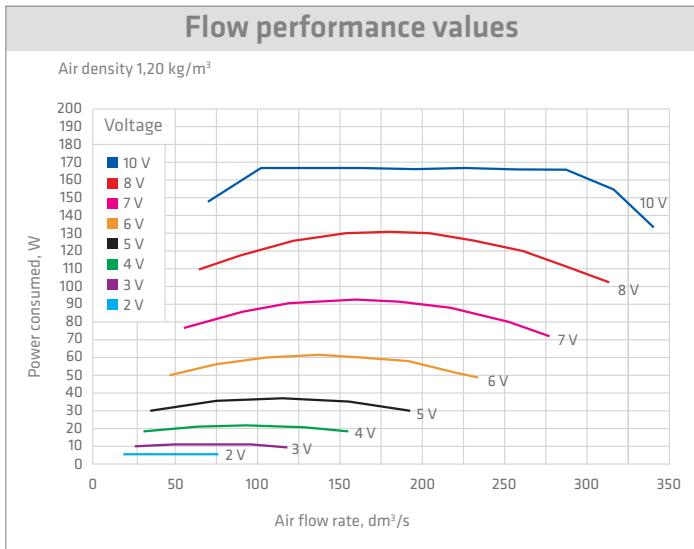
**Black** 791352  
**Brown** 791354  
**Green** 791356  
**Grey** 791357  
**Red** 791358  
**Brick red** 791359

### Flow and noise performance values

E220P / 160		60 V	110 V	135 V	165 V	180 V	230 V
q V1	dm <sup>3</sup> / s	30.4	67.8	72.7	88.5	121.6	160.6
p tF	Pa	9	37	74	118	110	130
PE	W	10.0	30.0	43.0	60.7	69.0	99.0
ηtE	-	0.028	0.083	0.125	0.172	0.194	0.211
n	1/min	518	1077	1386	1727	1892	2266
Duct							
L W63	dB	45.6	52.9	61.7	64.6	60.1	62.2
L W125	dB	50.0	66.0	71.5	76.3	72.2	74.3
L W250	dB	42.8	59.4	64.8	70.4	67.9	70.5
L W500	dB	26.2	48.5	52.7	58.1	61.1	65.0
L W1000	dB	35.0	49.6	53.5	57.8	60.7	64.6
L W2000	dB	21.0	40.4	47.0	52.5	56.2	60.8
L W4000	dB	*	30.4	39.1	45.9	49.0	56.6
L W8000	dB	*	*	24.8	34.0	38.0	44.3
L W	dB	52.0	67.2	72.8	77.7	74.3	76.8
L WA	dB (A)	39.6	56.0	61.2	66.4	66.1	69.7







### ECo250P/200/IS/500

- Black 737442
- Brown 737444
- Green 737446
- Grey 737447
- Red 737448
- Brick red 737449

### Electrical details

Fan type	ECo250
Power Input	165 W
Current	1.4 A
Nominal Voltage	230 V / 50 Hz
Speed	2560 r/min
Speed Controller	ECo Controller

### ECo250S

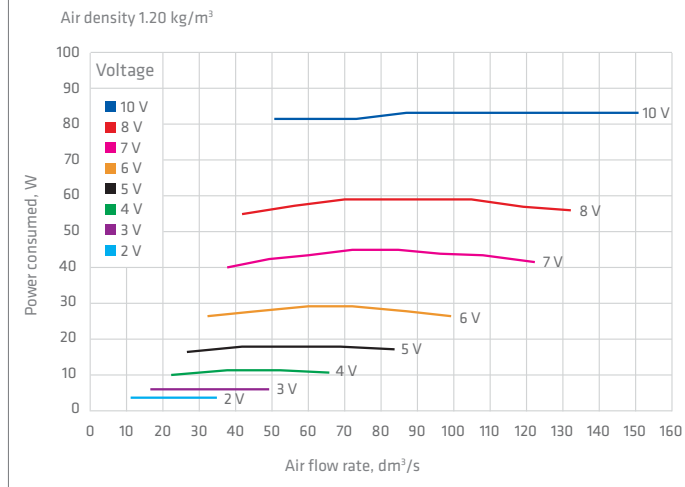
- Black 737452
- Brown 737454
- Green 737456
- Grey 737457
- Red 737458
- Brick red 737459

### Flow and noise performance values

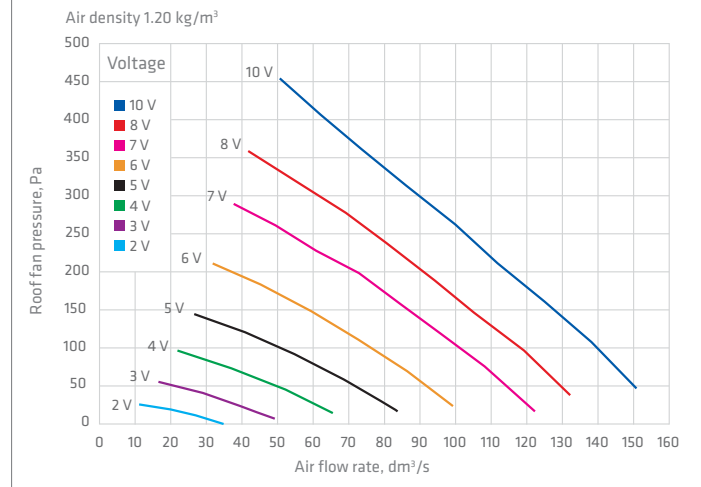
U	V	2	3	4	5	6	7	8	10
qv	dm³/s	46.4	70.3	92.3	115	163	186	205	226
pF	Pa	22.8	48.7	89.2	131.5	154	212	273	312
Pe	W	5.6	11.3	21.8	37	60.8	91.8	130	166
N	1/min	620	912	1219	1492	1794	2071	2320	2513
Duct									
LW63	dB	52.4	55.6	61.7	65.4	70.2	72.4	75.5	76.9
LW125	dB	50	58.7	63.0	66.4	70.2	73.9	76.4	77.9
LW250	dB	39.7	49.2	56.2	61	66.1	69.0	71.8	73.7
LW500	dB	42.9	45.7	52.7	57.3	62.3	64.5	67.0	69.1
LW1000	dB	33.2	43.2	48.1	51.6	55.7	58.7	61.2	63.2
LW2000	dB	19	28.3	39.3	46.2	54.7	57.8	59.8	61.1
LW4000	dB	19.6	22.9	29.5	36.7	44.5	49.0	53.1	56.6
LW8000	dB	21.9	24.2	23.4	26.4	32.8	38.3	42.6	45.6
LW	dB	54.8	60.9	66.2	69.9	74.4	77.3	80.1	81.5
LWA	dB(A)	41.9	48	54.2	58.6	63.7	66.5	69.1	71.0
Environment									
LW63	dB	37.7	43.4	48.4	53.3	58.2	60.4	62.3	64.3
LW125	dB	36.7	45.5	50.9	55	59.1	61.3	63.5	65.2
LW250	dB	37.8	45.9	52.2	57.4	63.5	66.7	69.1	71.1
LW500	dB	42.7	45.1	51.2	55.9	61	64.4	67.3	69.1
LW1000	dB	35.6	43.9	50.2	54.4	58.7	62.1	64.3	66.3
LW2000	dB	27.4	38.7	49.1	56.2	63.6	66.2	68.2	69.8
LW4000	dB	22.6	22.8	32.5	40.1	48.3	53.5	57.7	61.1
LW8000	dB	25.9	23.7	29.2	34.1	42.6	49	53.7	57.2
LW	dB	46	51.1	58.3	69.9	69.1	72	74.4	76.3
LWA	dB(A)	41.6	47.3	54.8	58.6	66.7	69.7	72	73.9

# Roof fans ECo110, for radon ventilation

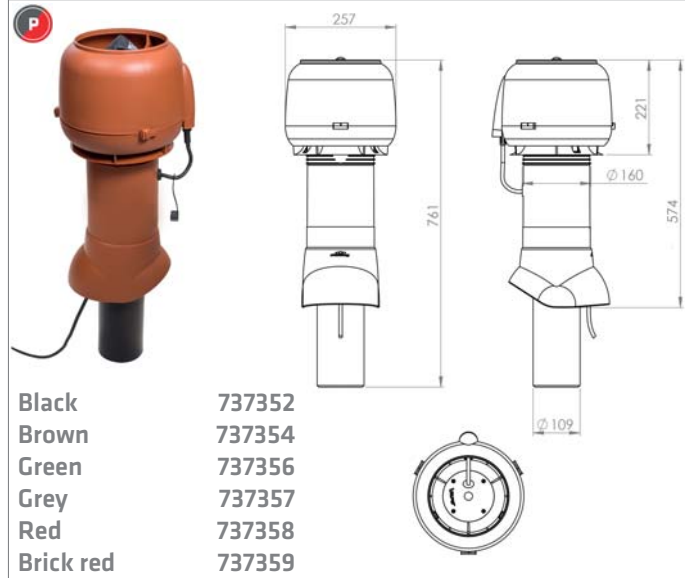
## Flow performance values



## Flow performance values



## ECo110P/110/IS/500



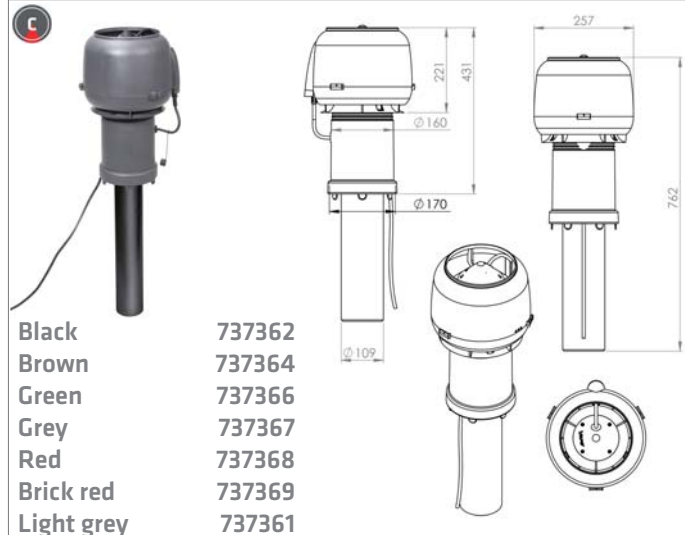
## ECo110S



## Electrical details

Fan type	ECo110
Power Input	83 W
Current	0.75 A
Nominal Voltage	230 V / 50 Hz
Speed	3200 r/min
Speed Controller	ECo Controller

## ECo110C/110/IS/400



# Controllers

E120, E190, E220

## Thyristor, flush-mount



Code 735024

## Thyristor, surface-mount



Code 735022

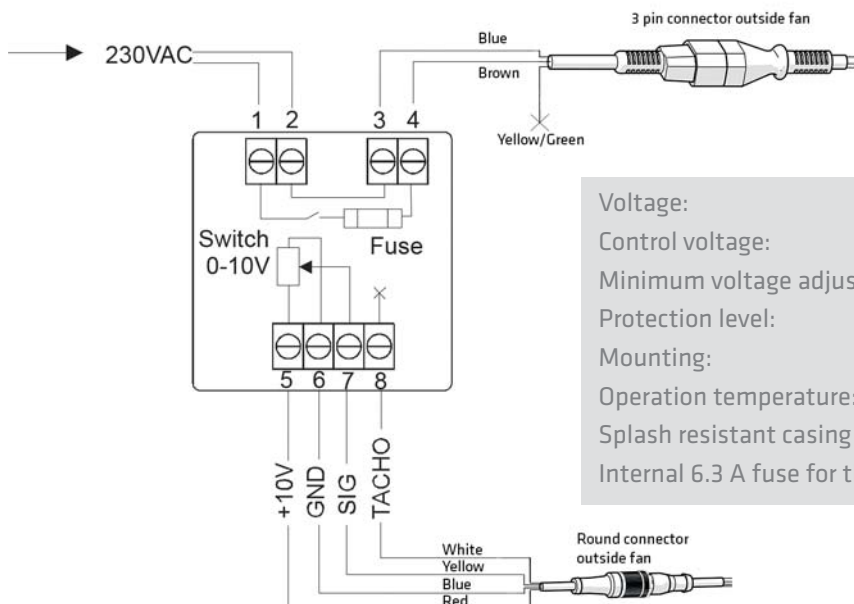
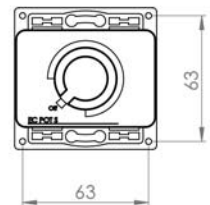
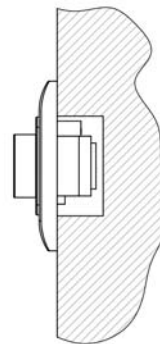
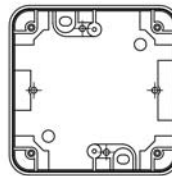
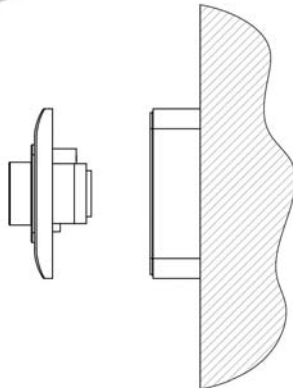
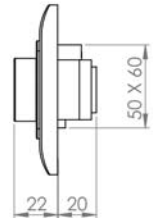
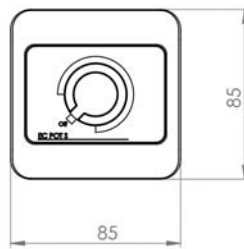


ECo 190, ECo 220, ECo 250

## ECo Controller



Code 735028



## Properties

Voltage:	230 VAC
Control voltage:	0-10 V
Minimum voltage adjustable by internal trimmer:	0-1.6 VDC
Protection level:	IP40/54
Mounting:	Surface and flush
Operation temperature:	0...40 °C
Splash resistant casing	
Internal 6.3 A fuse for the 230 V input of the roof fan	

## Maximal roof pitches for the VILPE® P-series pass-throughs

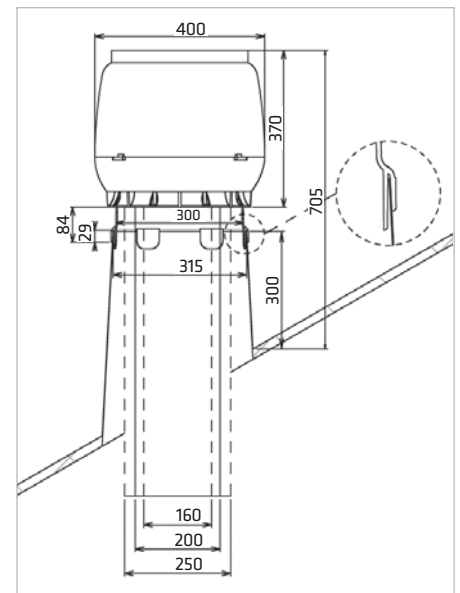
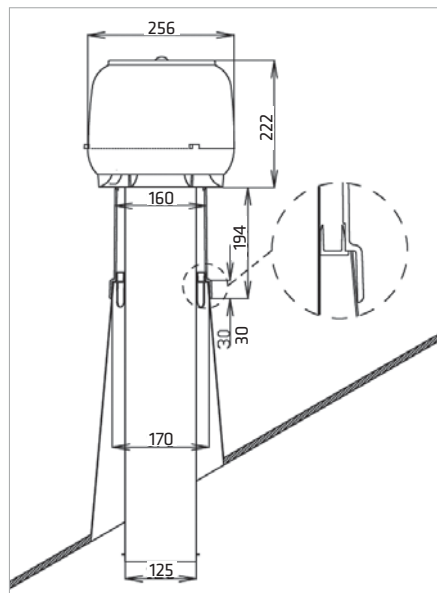
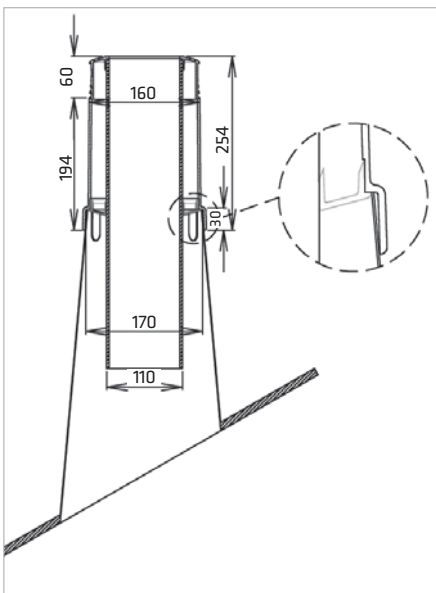
Pass-through	Pipe XL Pass-through	Ø 110 mm	Ø 125 mm	Ø 160 mm	Ø 160 mm XL	Ø 200 mm XL	Ø 250 mm XL
Tile	XL Tile	48°	48°	37°	47°	45°	43°
Universal	-	55°	55°	45°	-	-	-
Vittinge 1-w	-	45°	40°	30°	-	-	-
Vittinge 2-w	-	55°	50°	35°	-	-	-
Profiled steel	XL Universal MK1	50°	45°	40°	47°	47°	47°
Steel	XL Universal	45°	40°	27°	47°	47°	47°
Classic	XL Classic	55° <sup>(1)</sup>	55° <sup>(1)</sup>	48° <sup>(1)</sup>	47°	47°	47°
Classic Vino	-	57°	57°	52°	-	-	-
HS Huopa/Slate	XL Felt	59°	57°	52°	47°	48°	45°
Felt Tall	XL Felt Tall	*	*	*	*	*	*
Decra	-	45°	45°	45°	-	-	-
Eternit B9	-	45°	45°	45°	-	-	-
Nera	-	57°	57°	50°	-	-	-
Aalto	-	55°	50°	45°	-	-	-

\* The Felt pass-through Tall is designed for installation on roofs with a pitch less than 1:5 (11.5 degrees). For steeper roofs the normal Felt pass-through is recommended.

1) On maximal roof pitches make sure that the roof structure does not prevent the installation.

Note! The roof pitches in the table are suggestive values. In extreme situations, the height of the roofing profile or the installation point of the underlay seals affects the values.

## C-series schematics



## Quick selection for the VILPE® roof fans

### Selecting a roof fan for residential ventilation

A general recommendation is that the indoor air should be substituted completely every other hour. The exhaust air, removed by the roof fan, is replaced with fresh air coming in through ventilators in various rooms.

A rule of thumb is that a ducting system of a 120–150 m<sup>2</sup> house has a loss of compression of ca 100 Pa. A fast way to calculate the accurate loss of compression in pascals is to calculate 5 Pa per meter of ducting (including terminal equipment of ducting, bends, etc.).



m<sup>2</sup> maximum size

Roof fan	Duct	50 Pa	100 Pa	150 Pa
E120	125 mm	220 m <sup>2</sup>	180 m <sup>2</sup>	135 m <sup>2</sup>
E190	125 mm	270 m <sup>2</sup>	230 m <sup>2</sup>	180 m <sup>2</sup>
ECo190	125 mm	360 m <sup>2</sup>	340 m <sup>2</sup>	310 m <sup>2</sup>
E220	160 mm	410 m <sup>2</sup>	360 m <sup>2</sup>	300 m <sup>2</sup>
ECo220	160 mm	490 m <sup>2</sup>	440 m <sup>2</sup>	390 m <sup>2</sup>
ECo250	200 mm	660 m <sup>2</sup>	630 m <sup>2</sup>	600 m <sup>2</sup>

The loss of compression (Pa) depends on the length and diameter of piping but also on the number of corners and the speed of airflow. Recommended ventilation is achieved with the roof fan functioning at 70% of maximum capacity.

The table is indicative only.



### Selecting a roof fan for a cooker hood

Indoor air and ventilation recommendations (in Finland) state a cooker hood should work 25 litres of air per second. The noise level in the kitchen should not exceed 33 dB (or 43 dB if heightened).

Accurate data on loss of compression in the cooker hood (and its ducts) should be available from the manufacturer. A rule of thumb is ca 30 Pa plus 5 Pa per meter of ducting.

The table below is calculated with 70% of the fan capacity in use.



Roof fan	Duct	50 Pa	100 Pa	
E120	125 mm	75 l/s	60 l/s	Wall mounting
E190	125 mm	95 l/s	80 l/s	Wall mounting (bigger)
ECo190	125 mm	128 l/s	120 l/s	Wall mounting (bigger)
E220	160 mm	140 l/s	120 l/s	Wall/Island
ECo220	160 mm	171 l/s	155 l/s	Wall/Island
ECo250	200 mm	230 l/s	221 l/s	Island cooker hood (XL)

If the requirement is given in m<sup>3</sup>/h you can divide the number by 3.6.  
540 m<sup>3</sup>/h / 3.6 = 150 litre / second

The table is indicative only.



## Safety instructions

---

### Receiving inspection

Check if there are damages due to transportation. If so, please contact the carrier without delay. Make sure that the delivery is complete and identical with the order.

The speed controller has to be bought separately and it should be recommended by the fan producer.

### Speed controller

The fan can be speed-controlled by voltage variation. Normally, the speed is controlled by a step transformer or a stepless thyristor regulator. Please note, that an unfit thyristor may cause jamming and noise especially in low-speed use.

### Safety direction

The fan has to be installed on the roof so that maintenance and service can be safely done. The fan must be installed in such a way that no moving parts can be touched.

### The fan may only be installed by a qualified electrician.

The fan is not designed for transporting hot, explosive or erosive gases, grinding dust or similar. The main power must always be switched off before the fan hood is opened for service or repair. The special plug has to be plugged out and the shelter put on the plug. Be sure that the impeller is fully stopped before opening the fan hood.

Handle the motor unit with extra care. Note that after disconnecting the special plug and opening the slide locks the motor unit is loose. Always use original spare parts.

### Electrical installation

A coupling box has to be used between the rubber cable and the fixed coupling. There must be a contact breaker in the coupling box. The rubber cable must be safely fixed in the box, meaning that a fitting cable clamp is installed within the coupling box. The fan has a built-in thermocontact and the switch on function is operating automatically.

### Before use

The electrical installation must be wholly complete, and the connections earthed. There must not be any foreign objects in the fan hood or impeller. Check that the electrical conduit is properly installed.

### When taking in use - check

The measured electrical results must not be higher than those shown on the fan. Rated current must not be higher than 5% with rated voltage. Voltage should be in accordance with DIN IEC38, with tolerance range of -10%...+6%.

No strange noises should be audible from the fan.

### Service - Repair - Guarantee

The main power must always be switched off before the fan hood is opened. We recommend inspection of the impeller and removal of possible foreign objects at least once a year. Failing to do so can result in damage in the bearings. The bearings are capsuled, lubricated and completely maintenance-free. Always use original spare parts. The rubber cable must be safely fixed after mounting the spare part. If the impeller is broken, an entirely new fan-engine has to be installed.

The cover on top of the hood has to be opened if the fan, cable or capacitor has to be disconnected. When closing the cover be sure that the rubber gasket under the cover is properly in place. The guarantee is valid one (1) year accordingly to the clauses of the producer or importer of the fan.

## Troubleshooting

---

The main power must always be switched off before the fan hood is opened.

### The fan is not running - check:

- That the electrical installation is correct.
- That the impeller runs easily.
- That there is no ice or foreign objects in the fan.

### The fan is designed for continuous use!

The capacitor may be damaged (inspection is to be done only by a qualified electrician)

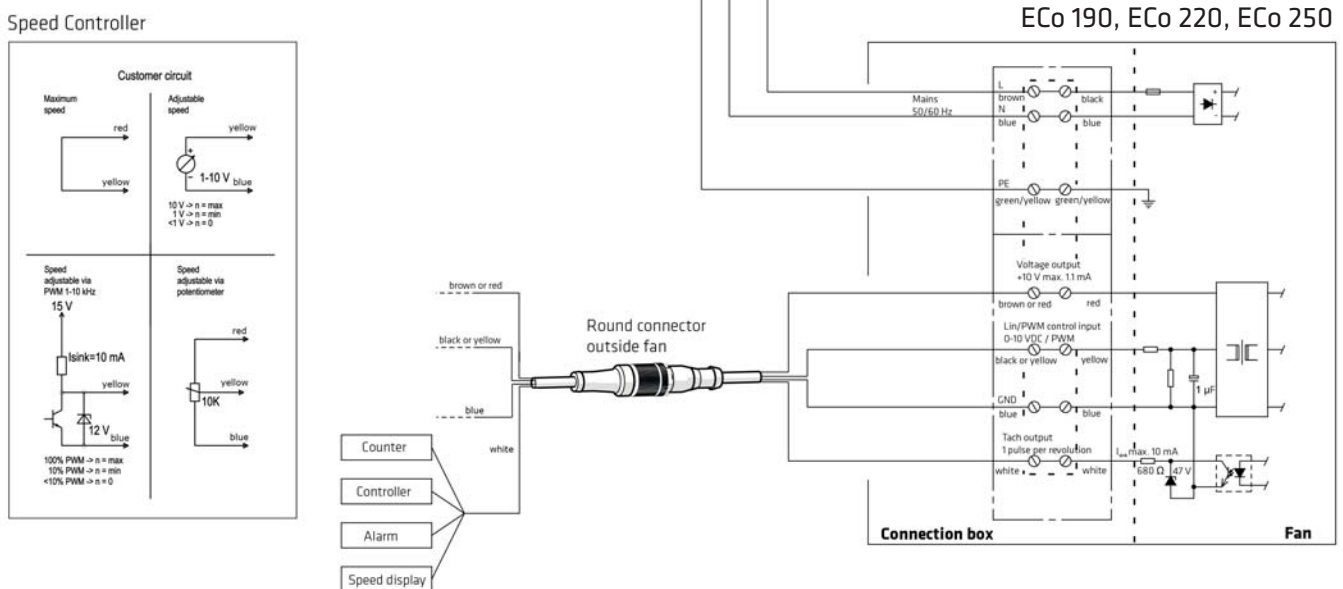
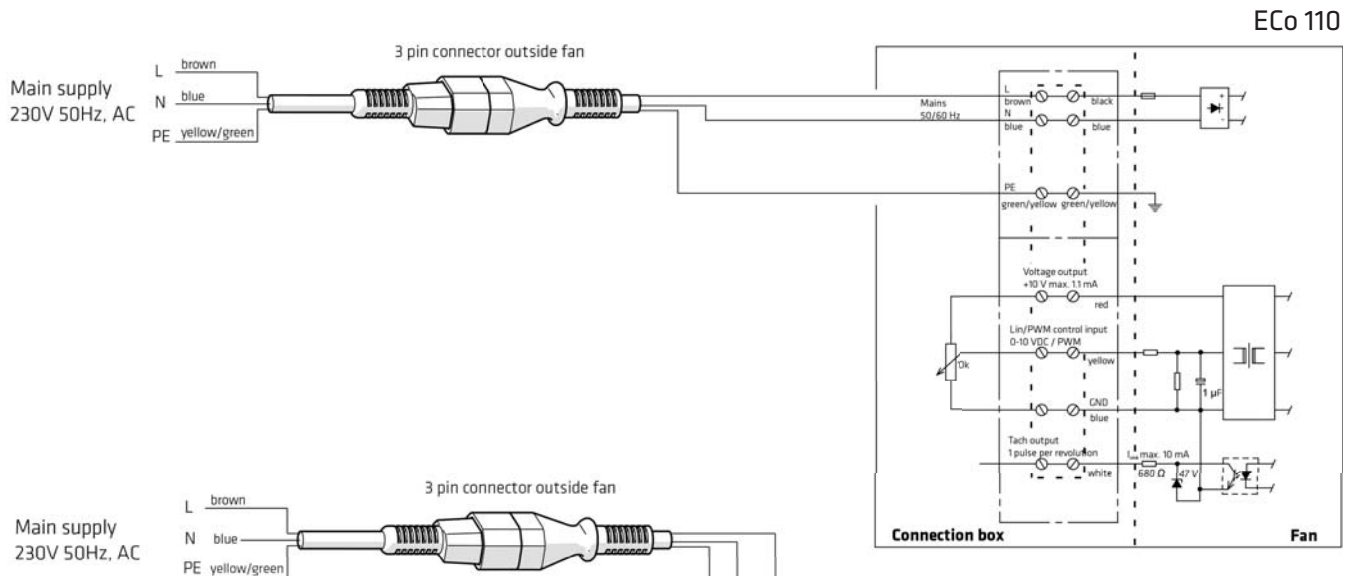
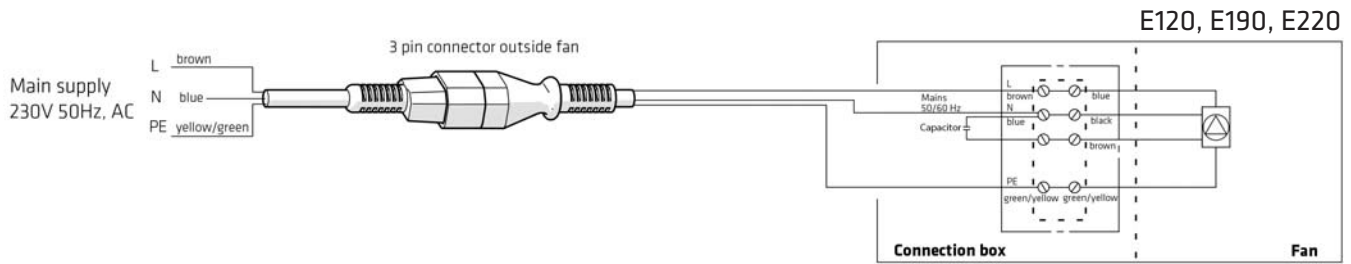
### The fan is noisy

The impeller must be intact and clean. Imbalance may cause vibrations. There may be foreign materials in the impeller, e.g. pieces of insulation.

### Water in the ventilation system

Pipe must be completely insulated in cold areas with minimum of 5 + 5 cm insulation boards. No moisture barrier may be installed on the insulation. The fan is designed for continuous use. Condensation in the pipes may occur if the fan has been switched off.

# Electrotechnical information



VILPE® model	Power input	Current	Voltage	Capacitor	Rotation speed
E120	52 W	0.23 A	230 V, 50 Hz	1.5 µF	2350 rpm
E190	52 W	0.23 A	230 V, 50 Hz	1.5 µF	2350 rpm
E220	85 W	0.38 A	230 V, 50 Hz	2 µF	2600 rpm
ECo 110	83 W	0.75 A	230 V, 50 Hz	-	3200 rpm
ECo 190	83 W	0.75 A	230 V, 50 Hz	-	3200 rpm
ECo 220	85 W	0.70 A	230 V, 50 Hz	-	2580 rpm
ECo 250	165 W	1.40 A	230 V, 50 Hz	-	2560 rpm



## SK Tuote Oy

Founded on 1975, SK Tuote Oy is the leading company developing and manufacturing ventilation equipment and speciality roof products in Finland, the Baltic countries, Russia and the Nordic countries. SK Tuote is a reliable, stable and a determined partner. Its products are known for the VILPE® brand.

VILPE® products improve the quality of housing and living, ensure fresh indoor air, reduce health risks and prolong the lifespan of the structure. VILPE® products are innovative and high-quality as well as responsibly designed, manufactured and certified solutions.

Continual improvement of our operations and products is central to SK Tuote; after all, it means safety and long-lasting comfort for end users. VILPE® is a brand of safe building and living.

## Quality and the Environment

SK Tuote Oy is most devoted on the quality of company products as well as its operations. The management system of SK Tuote has been granted both the ISO 9001:2008 quality certificate and the ISO 14001:2004 environmental certificate. These certifications cover the product development, manufacturing and sales of VILPE® products.

The primary objective of the quality system of SK Tuote Oy is to provide quality fulfilling our customers' needs. Environmental objectives include developing energy-efficient products and production methods, decreasing the amount of waste and increasing recyclability of plastic materials in the entire product lifespan.

