



## Sound-insulated centrifugal fan

# Iso-V

Air capacity – up to 16870 m<sup>3</sup>/h

### ■ Use

- Supply and exhaust ventilation systems installed in premises with high requirements to the noise level.
- Various application possibilities due to a special transformable casing design.
- Suitable for use as separate components of air handling systems.
- Compatible with Ø355 up to 710 mm round or 500x500 up to 1000x1000 mm rectangular air ducts.

### ■ Design

- Casing made of aluminium frame and removable aluzinc thermal- and sound-insulated double-skinned sandwich panels.
- Casing internally filled with 20 mm non-flammable mineral wool.
- Position of the removable panels can be adjusted to inline air flow or 90° angle air flow.
- Due to corrosion-resistant casing and thermal insulation the fan is suitable for external mounting.
- Square to square vibration absorbing connectors (**AKV** series) or square to round connector-reducers (**ARV** series) may be connected to the fan (available upon separate order).
- The round spigot of the **ARV** connector-reducer is rubber sealed for air tight connection.

### ■ Motor

- Two-, four- or six-pole asynchronous motor with external rotor and centrifugal impeller with backward curved blades.
- Single-phase (**E**) or three-phase (**D**) motor modifications.
- Equipped with ball bearings for longer service life.
- Overheating protection by built-in thermal switches with leaded outside terminals for connection to external protecting controls.
- The thermal switch terminal leads are designed for connection to respective circuit of the overload relay or respective terminals of the autotransformer or thyristor speed controller.

- The model **Iso-V 355 4E** incorporates thermal switches with automatic restart.
- Dynamically balanced turbine.

### ■ Speed control

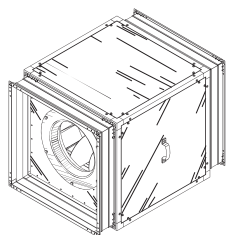
- Smooth speed control with an external thyristor controller or step speed control with an external auto transformer (both available upon separate order).

### ■ Mounting

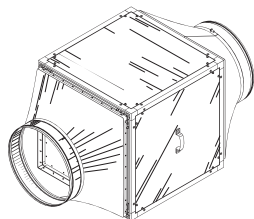
- The fan is mounted with rectangular or round air ducts.
- Connected to air ducts with flexible vibration-absorbing connectors or connecting reducers of respective diameters.
- Power is supplied to the fan through an external terminal box.
- The fans can be installed in any mounting position with respect to air flow direction in the system. While mounting provide enough servicing space.
- In case of outdoor mounting the fan may be equipped with the upper protecting cover (**RSD-IV** series) or the outer hood (**AH-IV** series) to be installed at air inlet/outlet.

### ■ Modifications and options

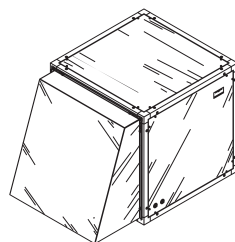
- **max** – high-powered motor.



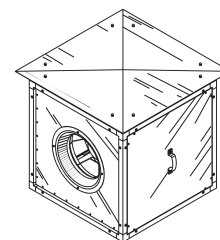
**Iso-V** fan with vibration-absorbing flexible connectors **AKV** series



**Iso-V** fan with connecting reducers **ARV** series



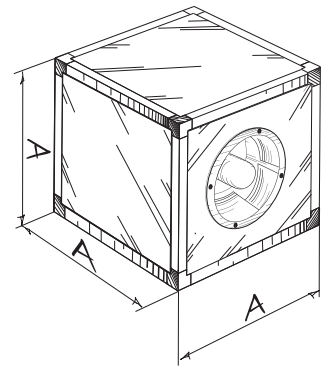
**Iso-V** fans with **AH-IV** outer hood



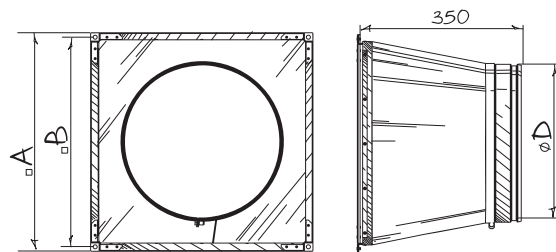
**Iso-V** fans with **RSD-IV** protecting cover

**Fan and accessories overall dimensions**

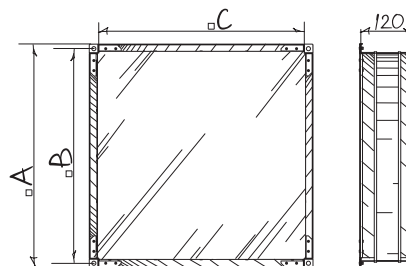
Type	Dimensions [mm]	Weight [kg]	Options			
	A		ARV connector-reducer	AKV vibration absorbing connector	RSD-IV protecting cover	AH-V outer hood
Iso-V 355 4E	500	25	ARV 355	AKV 500	RSD-IV 315-355	AH-IV 315-355
Iso-V 355 4D	500	25				
Iso-V 400 4E	670	39	ARV 400	AKV 670	RSD-IV 400-500	AH-IV 400-500
Iso-V 400 4D	670	39				
Iso-V 450 4E	670	43	ARV 450			
Iso-V 450 4D	670	43				
Iso-V 500 4E	670	52	ARV 500			
Iso-V 500 4D	670	56				
Iso-V 560 4D	800	99	ARV 560	AKV 800	RSD-IV 560-630	AH-IV 560-530
Iso-V 560 6D	800	86				
Iso-V 630 4D	800	102	ARV 630			
Iso-V 630 4D max	800	100				
Iso-V 630 6D	800	98				
Iso-V 710 6D	1000	136	ARV 710			


**Iso-V**

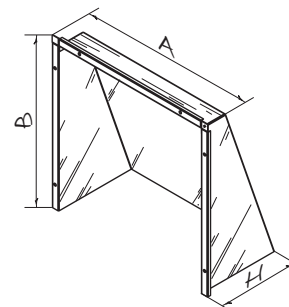
Type	Dimensions [mm]		
	A	B	∅D
ARV 355	490	470	355
ARV 400	660	640	400
ARV 450			450
ARV 500			500
ARV 560	790	770	560
ARV 630			630
ARV 710	990	970	710


**ARV**

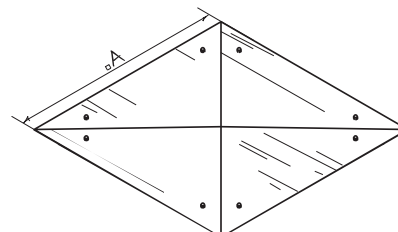
Type	Dimensions [mm]		
	A	B	C
AKV 500	490	470	445
AKV 670	660	640	615
AKV 800	790	770	745
AKV 1000	990	970	945


**AKV**

Type	Dimensions [mm]			Weight [kg]
	A	B	H	
AH-IV 315-355	478	458	225	3,2
AH-IV 400-500	648	628	321	6
AH-IV 560-630	778	758	421	9,1
AH-IV 710	978	958	421	12,0

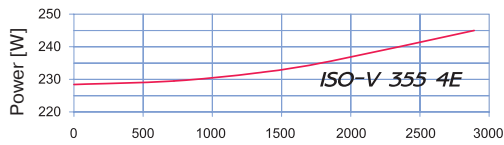
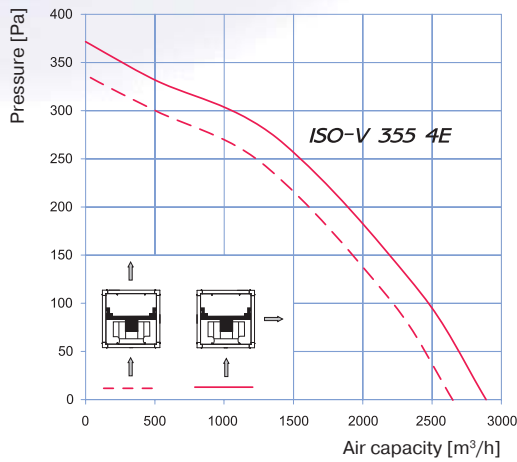

**AH-IV**

Type	Dimensions [mm]	Weight [kg]
	A	
RSD-IV 315-355	600	2,3
RSD-IV 400-500	770	4,65
RSD-IV 560-630	900	7,65
RSD-IV 710	1100	11,4

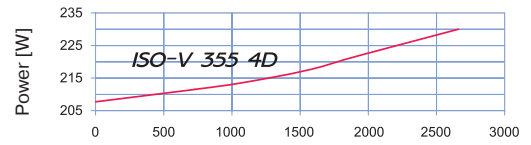
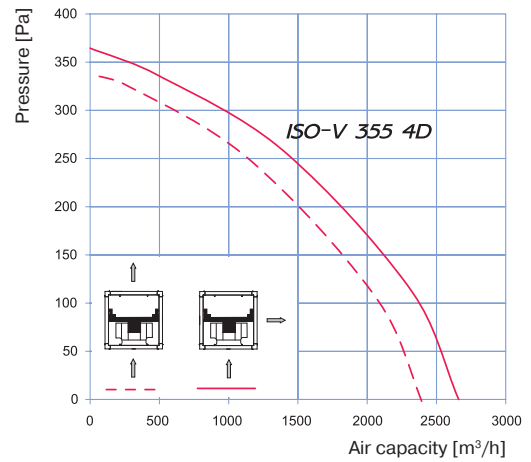

**RSD-IV**

## Specifications

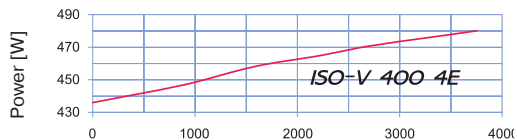
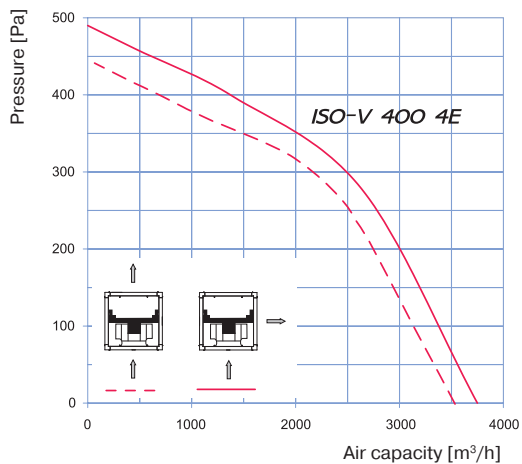
Parameters	Iso-V 355 4E	Iso-V 355 4D	Iso-V 400 4E	Iso-V 400 4D	
Voltage [V / 50 / 60 Hz]	1~ 230	3~ 400	1~ 230	3~ 400 Δ	3~ 400 Y
Power [W]	245	230	480	515	385
Current [A]	1,12	0,52	2,40	1,41	0,70
Max. air flow at air flow direction [m <sup>3</sup> /h]:					
– perpendicular air flow	2890	2660	3750	3950	3340
– direct air flow	2650	2380	3535	3740	3110
RPM [min <sup>-1</sup> ]	1420	1400	1370	1415	1235
Sound pressure level at 3 m distance [dBA]	54	53	51	51	47
Max. operating temperature [°C]	-25 +50	-25 +70	-40 +80	-40 +60	-40 +80
Ingress protection rating	IP X4	IP X4	IP X4	IP X4	



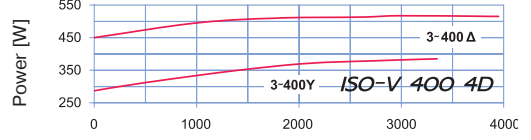
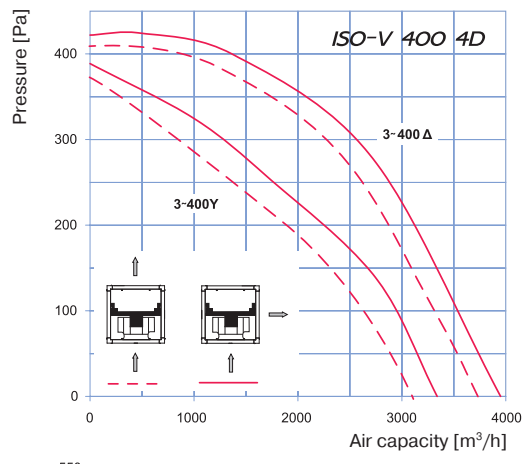
Sound-power level	Gen	Octave-frequency band [Hz]							
		63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	70	55	58	61	63	62	60	52	47
L <sub>WA</sub> to outlet, [dBA]	68	57	59	62	65	63	62	55	47
L <sub>WA</sub> to environment, [dBA]	62	51	51	54	58	55	55	48	40



Sound-power level	Gen	Octave-frequency band [Hz]							
		63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	68	54	57	61	63	62	59	52	46
L <sub>WA</sub> to outlet, [dBA]	70	55	61	61	65	66	59	54	47
L <sub>WA</sub> to environment, [dBA]	64	49	50	55	59	56	52	49	39



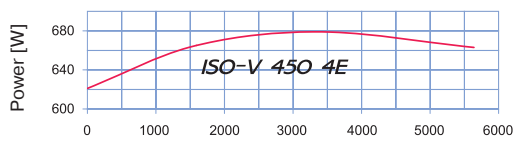
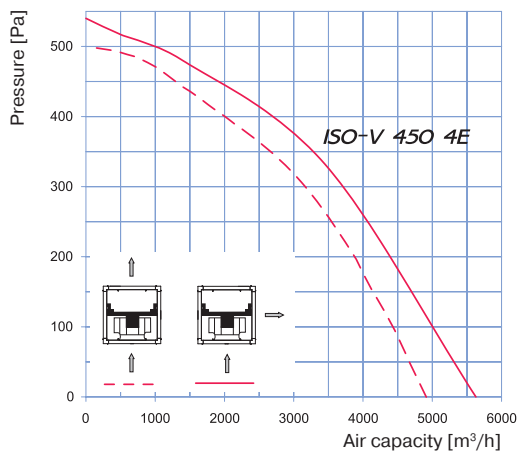
Sound-power level	Gen	Octave-frequency band [Hz]							
		63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	72	60	62	66	66	64	65	58	51
L <sub>WA</sub> to outlet, [dBA]	74	61	63	68	71	68	67	58	53
L <sub>WA</sub> to environment, [dBA]	56	43	47	47	52	49	48	42	33



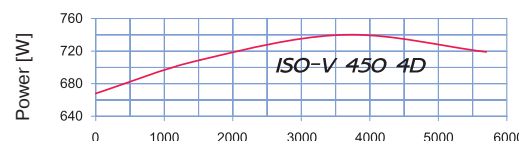
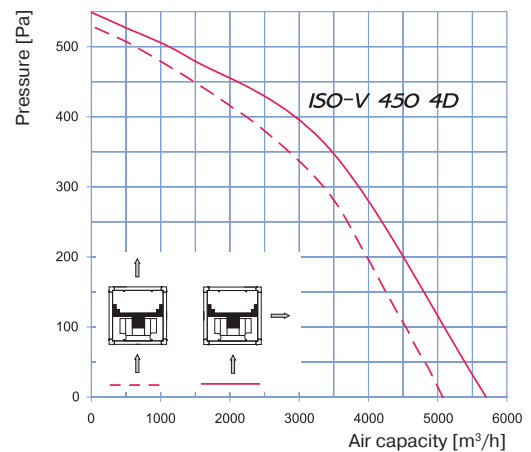
Sound-power level	Gen	Octave-frequency band [Hz]							
		63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	73	57	63	64	67	68	62	59	52
L <sub>WA</sub> to outlet, [dBA]	74	60	63	65	69	66	67	61	51
L <sub>WA</sub> to environment, [dBA]	54	43	44	49	50	51	47	42	36

## Specifications

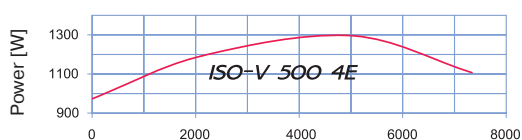
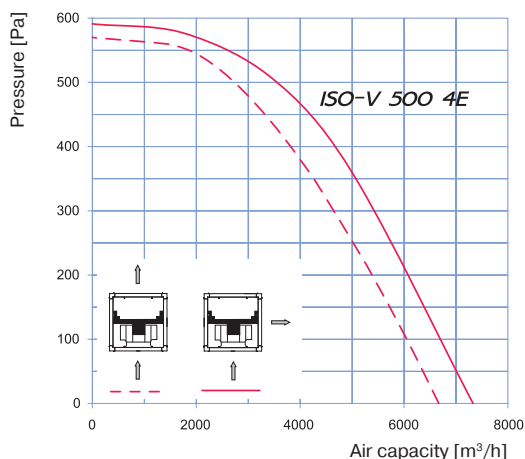
Parameters	Iso-V 450 4E	Iso-V 450 4D	Iso-V 500 4E	Iso-V 500 4D
Voltage [V / 50 / 60 Hz]	1~ 230	3~ 400	1~ 230	3~ 400
Power [W]	680	740	1300	1430
Current [A]	3,00	1,50	5,70	3,00
Max. air flow at air flow direction [m <sup>3</sup> /h]:				
– perpendicular air flow	5630	5700	7330	7940
– direct air flow	4930	5080	6680	7200
RPM [min <sup>-1</sup> ]	1250	1350	1320	1375
Sound pressure level at 3 m distance [dBA]	53	54	55	58
Max. operating temperature [°C]	-40 +70	-40 +80	-20 +50	-40 +80
Ingress protection rating	IP X4	IP X4	IP X4	IP X4



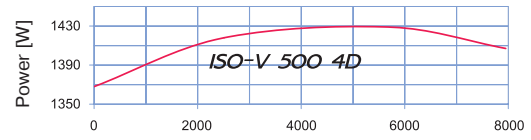
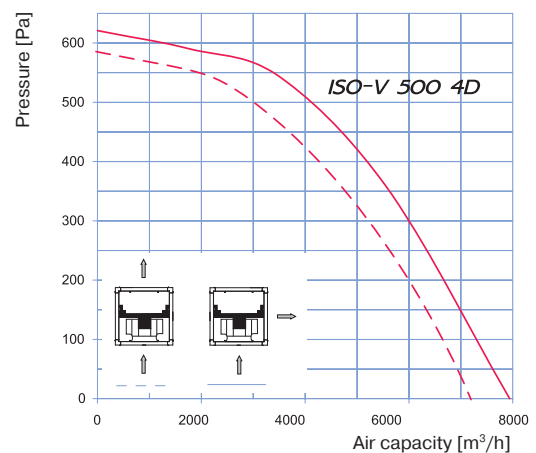
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	76	62	64	67	68	69	66	63	53
L <sub>WA</sub> to outlet, [dBA]	76	63	66	70	71	69	66	63	57
L <sub>WA</sub> to environment, [dBA]	57	44	48	52	56	53	50	47	38



Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	76	61	65	67	68	68	66	50	55
L <sub>WA</sub> to outlet, [dBA]	75	63	67	69	70	72	68	63	54
L <sub>WA</sub> to environment, [dBA]	61	46	47	52	52	51	51	44	36



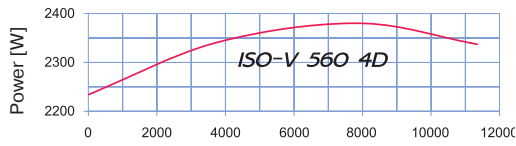
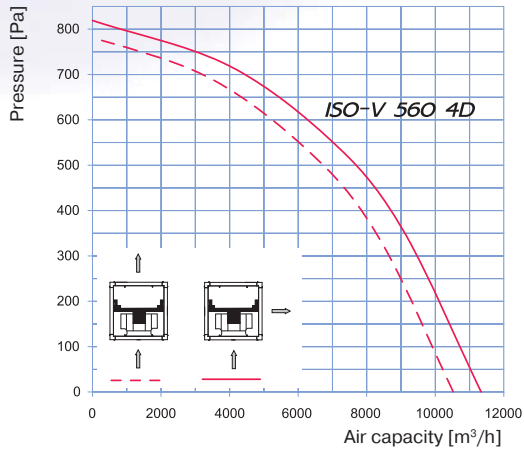
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	81	65	70	73	74	75	69	65	57
L <sub>WA</sub> to outlet, [dBA]	81	68	72	74	76	75	71	69	61
L <sub>WA</sub> to environment, [dBA]	65	52	53	56	57	56	55	51	40



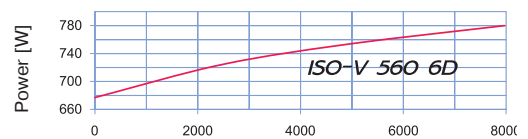
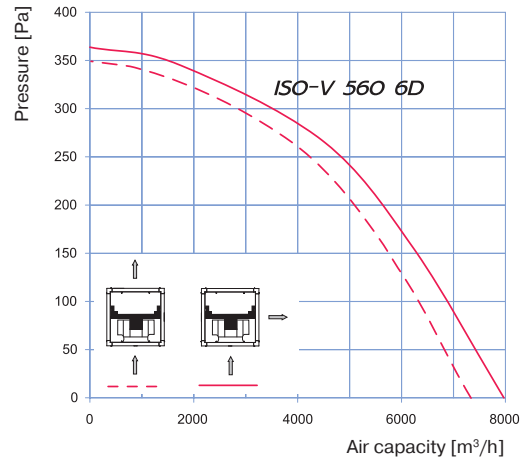
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	77	66	67	71	71	74	71	65	55
L <sub>WA</sub> to outlet, [dBA]	79	69	67	73	76	74	73	68	59
L <sub>WA</sub> to environment, [dBA]	61	52	54	54	56	55	54	51	44

## Specifications

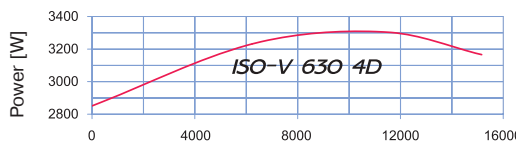
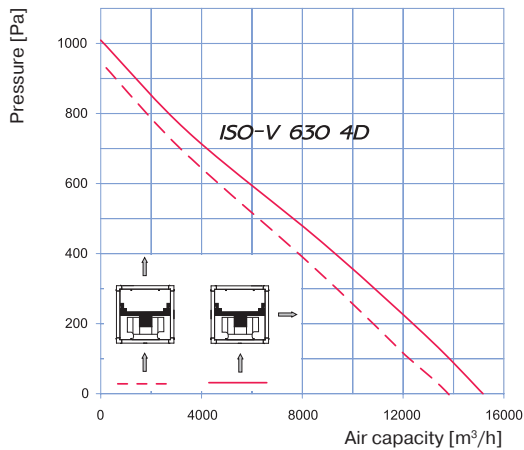
Parameters	Iso-V 560 4D	Iso-V 560 6D	Iso-V 630 4D	Iso-V 630 4D max
Voltage [V / 50 / 60 Hz]	3~ 400	3~ 400	3~ 400	3~ 400
Power [W]	2380	780	3310	4250
Current [A]	5,00	1,70	6,20	7,55
Max. air flow at air flow direction [m <sup>3</sup> /h]:				
– perpendicular air flow	11340	7970	15170	16870
– direct air flow	10490	7330	13740	14930
RPM [min <sup>-1</sup> ]	1365	885	1170	1300
Sound pressure level at 3 m distance [dBA]	56	49	67	69
Max. operating temperature [°C]	-40 +60	-40 +55	-40 +35	-40 +60
Ingress protection rating	IP X4	IP X4	IP X4	IP X4



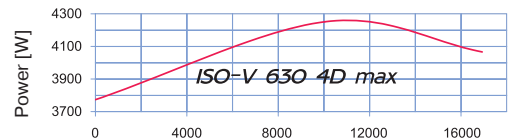
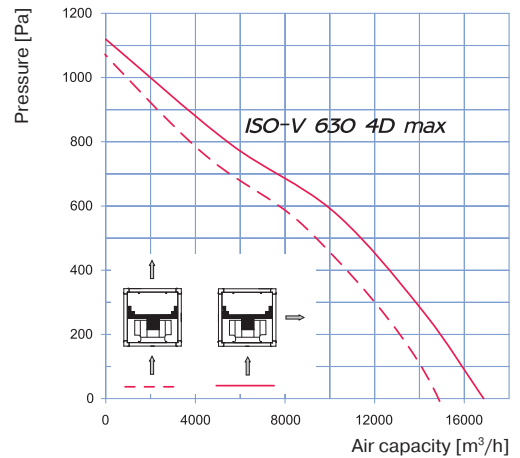
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	80	66	67	73	75	73	69	67	58
L <sub>WA</sub> to outlet, [dBA]	80	67	71	73	77	74	73	65	61
L <sub>WA</sub> to environment, [dBA]	63	53	55	59	57	60	53	49	41



Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	72	59	57	64	67	67	62	56	49
L <sub>WA</sub> to outlet, [dBA]	70	58	61	66	68	65	65	60	51
L <sub>WA</sub> to environment, [dBA]	56	44	43	48	52	50	46	41	33



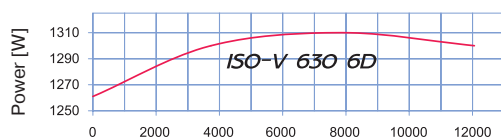
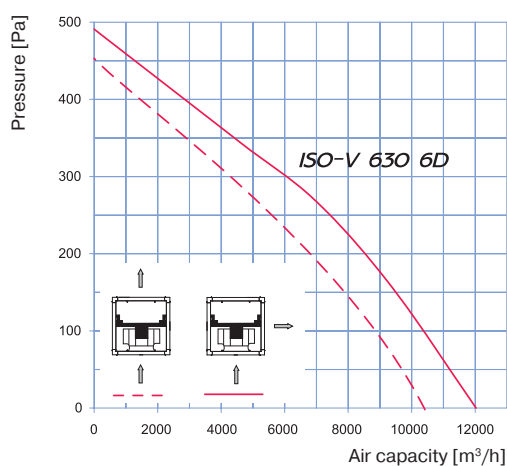
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	85	76	78	80	80	83	78	75	68
L <sub>WA</sub> to outlet, [dBA]	88	76	76	84	86	82	78	77	67
L <sub>WA</sub> to environment, [dBA]	76	64	65	67	73	68	69	62	53



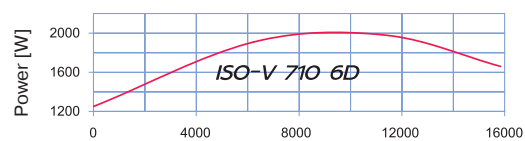
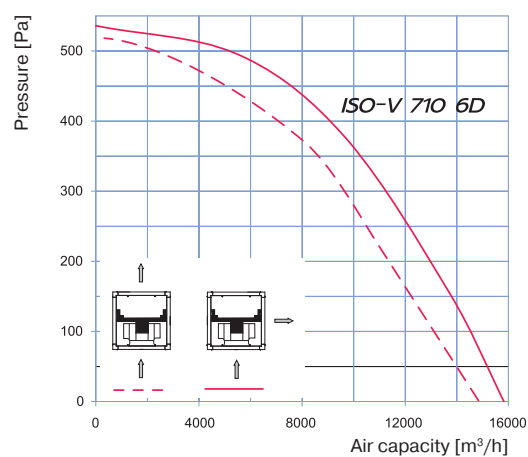
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	85	76	77	81	83	82	77	72	68
L <sub>WA</sub> to outlet, [dBA]	89	77	78	81	85	84	80	73	68
L <sub>WA</sub> to environment, [dBA]	78	65	65	70	71	70	69	62	54

## Specifications

Parameters	Iso-V 630 6D	Iso-V 710 6D
Voltage [V / 50 / 60 Hz]	3~ 400	3~ 400
Power [W]	1310	2000
Current [A]	2,80	3,90
Max. air flow at air flow direction [m <sup>3</sup> /h]: – perpendicular air flow – direct air flow	12030 10440	15830 14880
RPM [min <sup>-1</sup> ]	880	890
Sound pressure level at 3 m distance [dBA]	55	59
Max. operating temperature [°C]	-40 +60	-20 +40
Ingress protection rating	IP X4	IP X4



Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	74	61	63	70	70	69	64	60	50
L <sub>WA</sub> to outlet, [dBA]	76	65	64	71	73	69	68	60	54
L <sub>WA</sub> to environment, [dBA]	61	50	51	53	56	56	52	47	40



Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	79	64	66	71	74	72	71	67	58
L <sub>WA</sub> to outlet, [dBA]	80	67	70	76	74	76	72	67	57
L <sub>WA</sub> to environment, [dBA]	68	53	58	61	64	62	56	53	47