



Sound-insulated centrifugal fans

Iso-V

Air capacity – up to 16870 m³/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 \varnothing 355 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

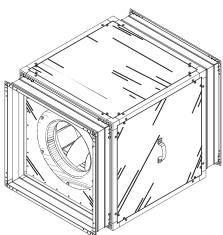
- Smooth speed control with an external thyristor controller or step speed control with an external auto transformer (both available upon separate order).

Mounting

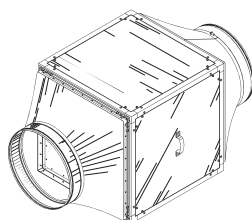
- The fan is mounted with rectangular or round air ducts.
- Connected to air ducts with flexible vibration-absorbing connectors or connecting reducers of respective diameters.
- Power is supplied to the fan through an external terminal box.
- The fans can be installed in any mounting position with respect 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

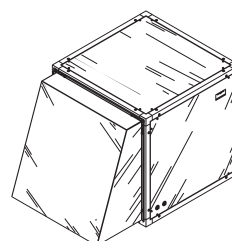
- max** – high-powered motor.



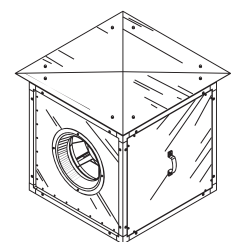
Iso-V fan with vibration-absorbing flexible connectors **AKV** series



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



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

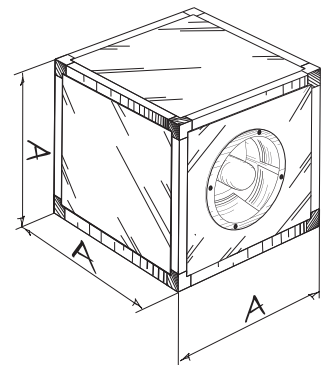


Iso-V fans with **RSD-IV** protecting cover

ErP data	
Overall efficiency	η , (%)
Measurement category	MC
Efficiency category	EC
Efficiency grade	N
Variable speed drive	VSD
Power	[kW]
Current	[A]
Air flow	[m ³ /h]
Static pressure	[Pa]
Speed	[n/min ⁻¹]
Specific ratio	SR

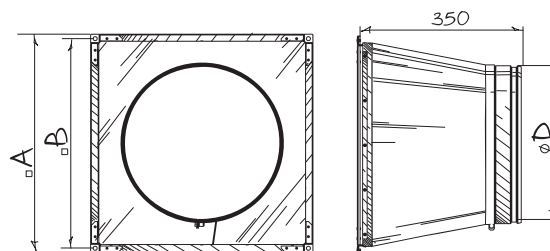
Fan and accessories overall dimensions

Type	Dimensions [mm] A	Weight [kg]	Options			
			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	AKV 670	RSD-IV 400-500	AH-IV 400-500
Iso-V 450 4D	670	43				
Iso-V 500 4E	670	52	ARV 500	AKV 670	RSD-IV 400-500	AH-IV 400-500
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	AKV 800	RSD-IV 560-630	AH-IV 560-530
Iso-V 630 4D max	800	100				
Iso-V 630 6D	800	98	ARV 630	AKV 800	RSD-IV 560-630	AH-IV 560-530
Iso-V 710 6D	1000	136				



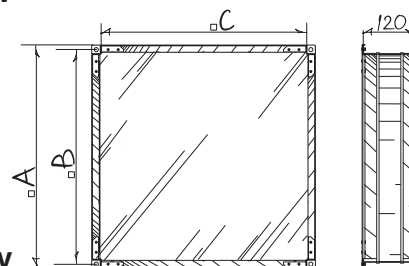
Iso-V

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

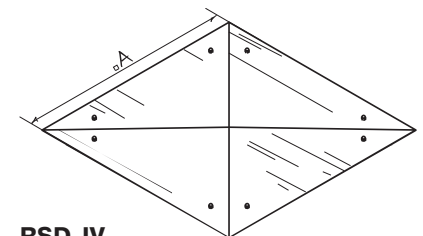


ARV

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

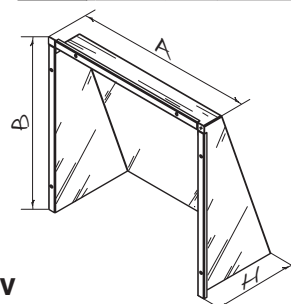


AKV



RSD-IV





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

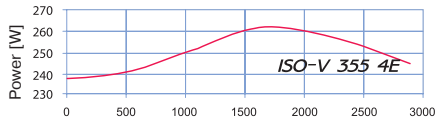
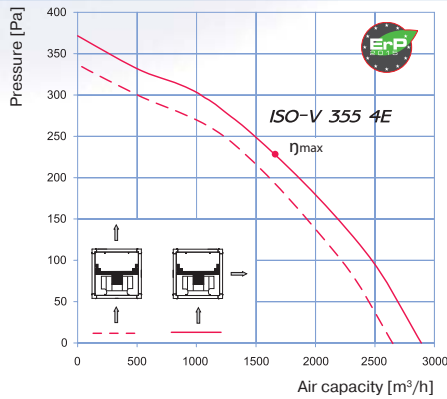


AH-IV

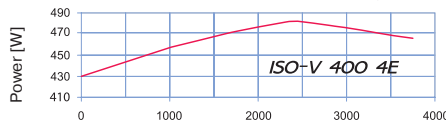
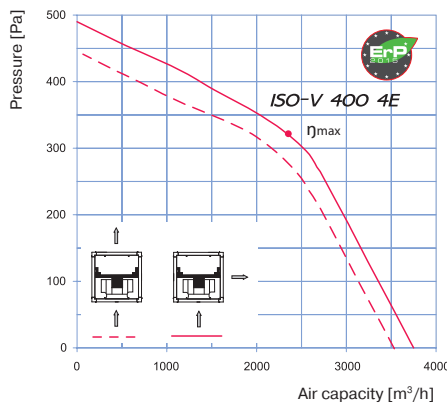
Type	Dimensions [mm]		Weight [kg]
	A		
RSD-IV 315-355	600		2.3
RSD-IV 400-500	770		4.65
RSD-IV 560-630	900		7.65
RSD-IV 710	1100		11.4

Specifications

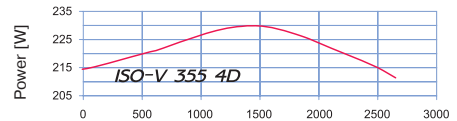
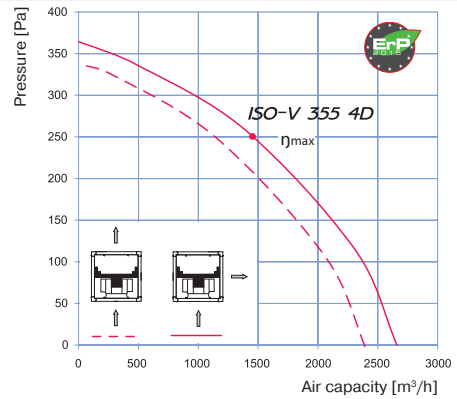
Parameters	Iso-V 355 4E 	Iso-V 355 4D 	Iso-V 400 4E 	Iso-V 400 4D 	
Voltage [V / 50 / 60 Hz]	1 ~ 230	3 ~ 400	1 ~ 230	3 ~ 400 Δ	3 ~ 400 Y
Power [W]	245	230	480	515	385
Current [A]	1.12	0.52	2.40	1.41	0.70
Max. air flow at air flow direction [m ³ /h]:					
– perpendicular air flow	2890	2660	3750	3950	3340
– direct air flow	2650	2380	3535	3740	3110
RPM [min ⁻¹]	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	IPX4	IPX4	IPX4	IPX4	



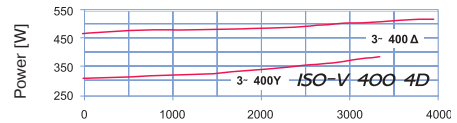
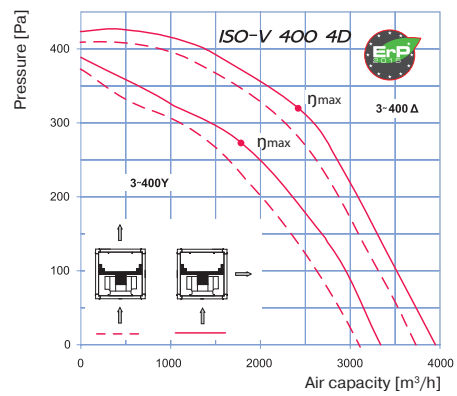
Sound-power level	Gen	Octave-frequency band [Hz]								
		63	125	250	500	1000	2000	4000	8000	
L _{WA} to inlet, [dBA]	70	55	58	61	63	62	60	52	47	
L _{WA} to outlet, [dBA]	68	57	59	62	65	63	62	55	47	
L _{WA} to environment, [dBA]	62	51	51	54	58	55	55	48	40	
η _v (%)	MC	EC	N	VSD	[kW]	[A]	[m ³ /h]	[Pa]	[RPM]	SR
40.8	A	Static	57.4	No	0.262	1.19	1670	226	1365	1



Sound-power level	Gen	Octave-frequency band [Hz]								
		63	125	250	500	1000	2000	4000	8000	
L _{WA} to inlet, [dBA]	72	60	62	66	66	64	65	58	51	
L _{WA} to outlet, [dBA]	74	61	63	68	71	68	67	58	53	
L _{WA} to environment, [dBA]	56	43	47	47	52	49	48	42	33	
η _v (%)	MC	EC	N	VSD	[kW]	[A]	[m ³ /h]	[Pa]	[RPM]	SR
44.4	A	Static	58.3	No	0.480	2.4	2350	320	1370	1





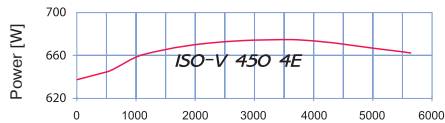
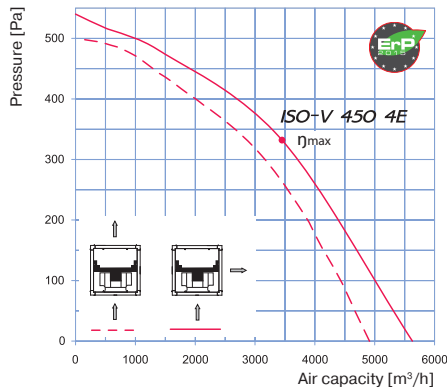
Sound-power level	Gen	Octave-frequency band [Hz]								
		63	125	250	500	1000	2000	4000	8000	
L _{WA} to inlet, [dBA]	68	54	57	61	63	62	59	52	46	
L _{WA} to outlet, [dBA]	70	55	61	61	65	66	59	54	47	
L _{WA} to environment, [dBA]	64	49	50	55	59	56	52	49	39	
η _v (%)	MC	EC	N	VSD	[kW]	[A]	[m ³ /h]	[Pa]	[RPM]	SR
44.7	A	Static	61.9	No	0.230	0.52	1445	251	1350	1



Sound-power level	Gen	Octave-frequency band [Hz]								
		63	125	250	500	1000	2000	4000	8000	
L _{WA} to inlet, [dBA]	73	57	63	64	67	68	62	59	52	
L _{WA} to outlet, [dBA]	74	60	63	65	69	66	67	61	51	
L _{WA} to environment, [dBA]	54	43	44	49	50	51	47	42	36	
η _v (%)	MC	EC	N	VSD	[kW]	[A]	[m ³ /h]	[Pa]	[RPM]	SR
44.8	A	Static	58.6	No	0.488	1.22	2425	318	1420	1
3 ~ 400Δ - delta connection										
3 ~ 400Y - star connection										
41.0	A	Static	56.5	No	0.335	0.56	1789	271	1390	1

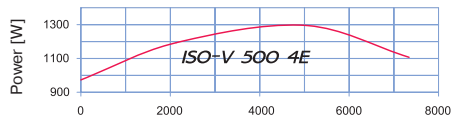
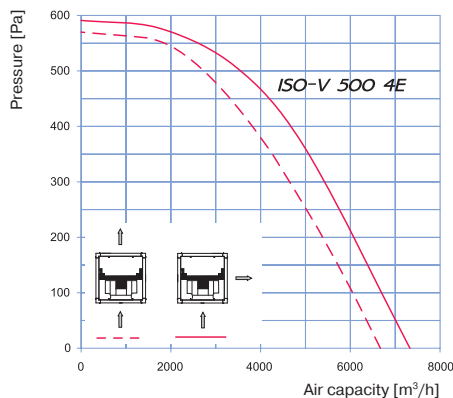
Specifications

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 ³ /h]:				
– perpendicular air flow	5630	5700	7330	7940
– direct air flow	4930	5080	6680	7200
RPM [min ⁻¹]	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	IPX4	IPX4	IPX4	IPX4

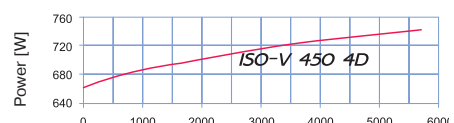
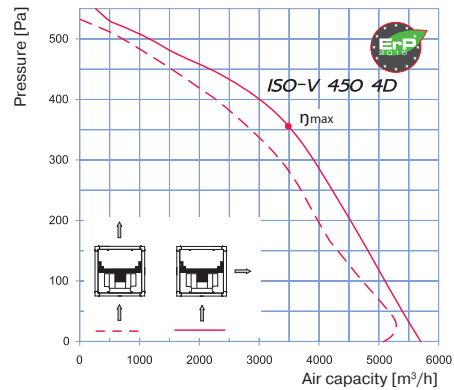


Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet, [dBA]	76	62	64	67	68	69	66	63	53
L _{WA} to outlet, [dBA]	76	63	66	70	71	69	66	63	57
L _{WA} to environment, [dBA]	57	44	48	52	56	53	50	47	38

η _v (%)	MC	EC	N	VSD	[kW]	[A]	[m ³ /h]	[Pa]	[RPM]	SR
44.7	A	Static	61.9	No	0.230	0.52	1445	251	1350	1

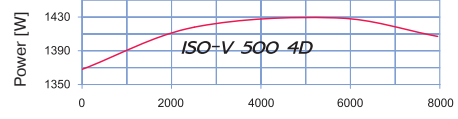
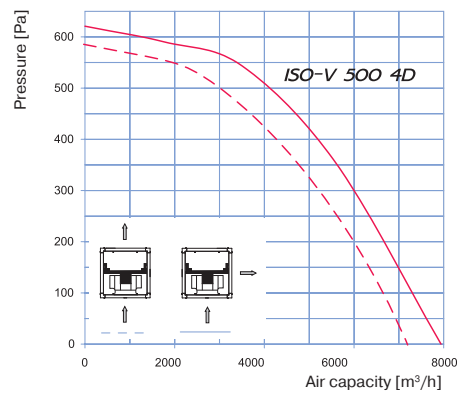


Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet, [dBA]	81	65	70	73	74	75	69	65	57
L _{WA} to outlet, [dBA]	81	68	72	74	76	75	71	69	61
L _{WA} to environment, [dBA]	65	52	53	56	57	56	55	51	40



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

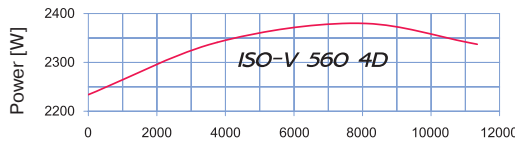
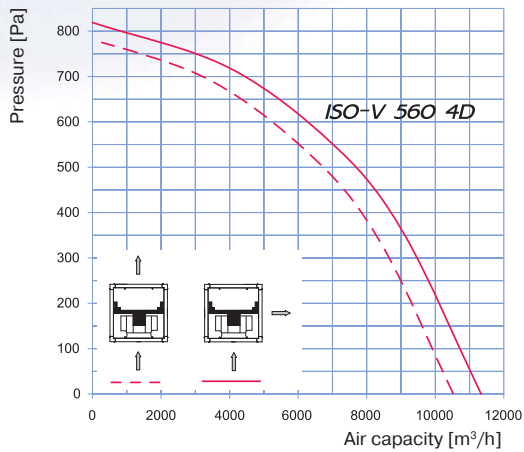
η _v (%)	MC	EC	N	VSD	[kW]	[A]	[m ³ /h]	[Pa]	[RPM]	SR
48.5	A	Static	60.5	No	0.720	1.4	3490	353	1350	1



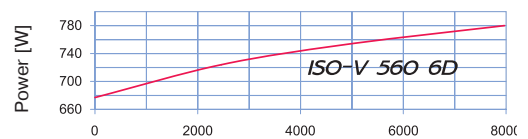
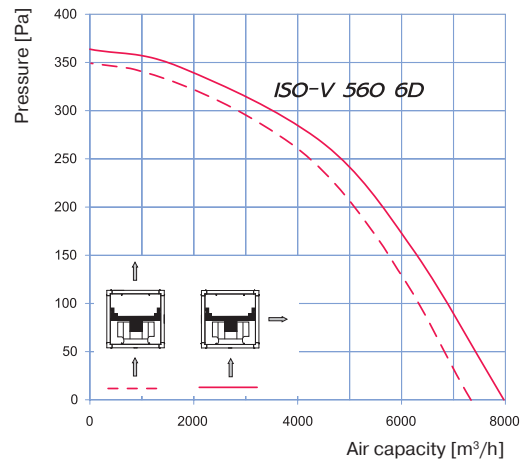
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet, [dBA]	77	66	67	71	71	74	71	65	55
L _{WA} to outlet, [dBA]	79	69	67	73	76	74	73	68	59
L _{WA} to environment, [dBA]	61	52	54	54	56	55	54	51	44

Specifications

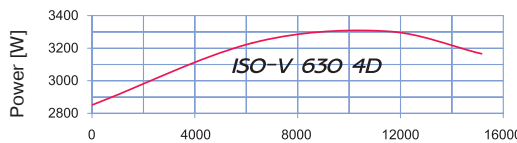
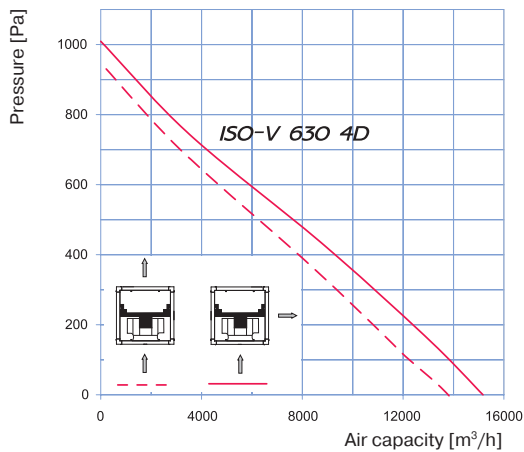
Parameters	Iso-V 560 4D	Iso-V 560 6D	Iso-V 630 4D	Iso-V 630 4D max
Voltage [V / 50 / 60 Hz]	3 ~ 400	3 ~ 400	3 ~ 400	3 ~ 400
Power [W]	2380	780	3310	4250
Current [A]	5.00	1.70	6.20	7.55
Max. air flow at air flow direction [m ³ /h]:				
– perpendicular air flow	11340	7970	15170	16870
– direct air flow	10490	7330	13740	14930
RPM [min ⁻¹]	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	IPX4	IPX4	IPX4	IPX4



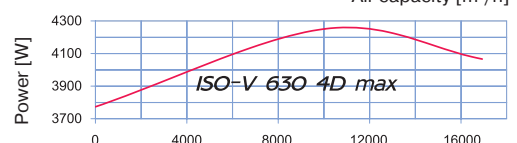
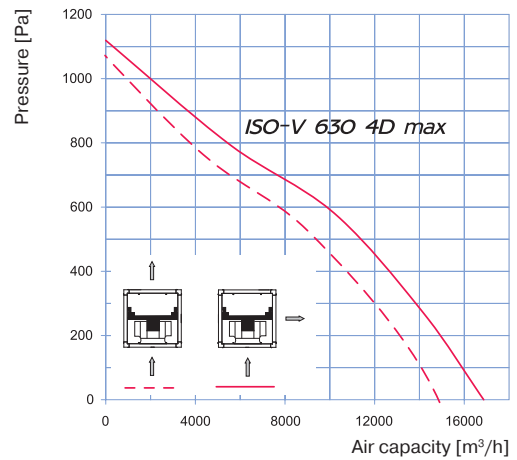
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet, [dBA]	80	66	67	73	75	73	69	67	58
L _{WA} to outlet, [dBA]	80	67	71	73	77	74	73	65	61
L _{WA} to environment, [dBA]	63	53	55	59	57	60	53	49	41



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




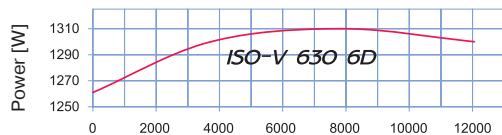
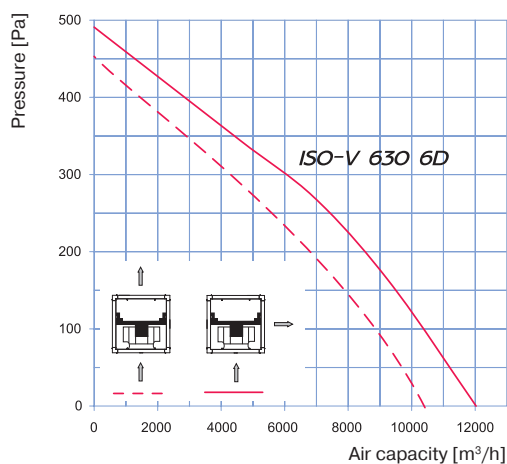
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet, [dBA]	85	76	78	80	80	83	78	75	68
L _{WA} to outlet, [dBA]	88	76	76	84	86	82	78	77	67
L _{WA} to environment, [dBA]	76	64	65	67	73	68	69	62	53



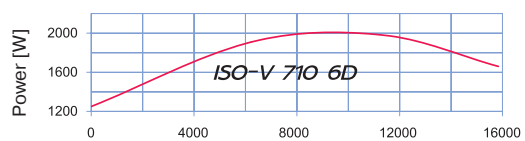
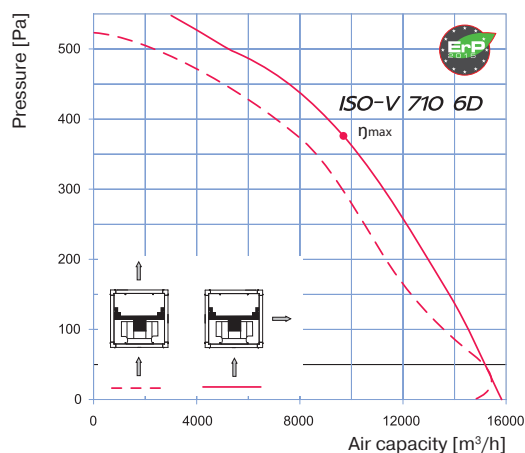
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet, [dBA]	85	76	77	81	83	82	77	72	68
L _{WA} to outlet, [dBA]	89	77	78	81	85	84	80	73	68
L _{WA} to environment, [dBA]	78	65	65	70	71	70	69	62	54

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 ³ /h]:		
– perpendicular air flow	12030	15830
– direct air flow	10440	14880
RPM [min ⁻¹]	880	890
Sound pressure level at 3 m distance [dBA]	55	59
Max. operating temperature [°C]	-40 +60	-20 +40
Ingress protection rating	IPX4	IPX4



Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L _{wA} to inlet, [dBA]	74	61	63	70	70	69	64	60	50
L _{wA} to outlet, [dBA]	76	65	64	71	73	69	68	60	54
L _{wA} 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 _{wA} to inlet, [dBA]	79	64	66	71	74	72	71	67	58
L _{wA} to outlet, [dBA]	80	67	70	76	74	76	72	67	57
L _{wA} to environment, [dBA]	68	53	58	61	64	62	56	53	47

η _v (%)	MC	EC	Octave-frequency band [Hz]							
			Gen	63	125	250	500	1000	2000	4000
48.5	A	Static	60.5	No	0.720	1.4	3490	353	1350	1