

# Iso-V

## Sound-insulated inline centrifugal fans

### Use

- Supply and extract 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.



**Air flow:**  
up to 16870 m<sup>3</sup>/h  
4686 l/s



**Power:**  
from 230 W



**Noise level:**  
from 47 dBA



### 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

- 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 impeller.


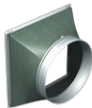
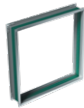


### Speed control

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

#### Designation key

Series	Spigot diameter [mm]	Motor Number of poles	Phase		Motor modifications
			E: single-phase	D: three-phase	
Iso-V	355; 400; 450; 500; 560; 630; 710	4, 6	E: single-phase	D: three-phase	max: high-powered motor

#### Accessories

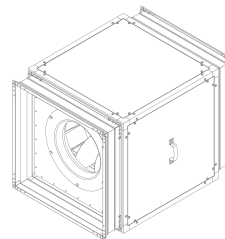
Speed controllers	Connecting reducers	Flexible connectors	Outer hoods	Protecting cover
 CDT E1.8 / CDTE E1.8	 ARV	 AKV	 AH-IV	 RSD-IV

### Mounting

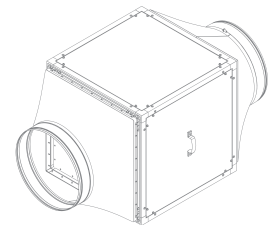
- The fan is mounted with rectangular or round air ducts.
- Connected to air ducts with flexible vibration-absorbing connectors or connecting reducers of respective diameters.
- Power is supplied to the fan through an external terminal box.
- The fans can be installed in any mounting position with respect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

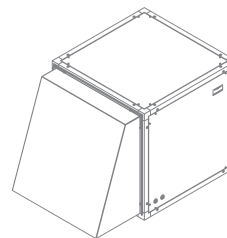
- max: high-powered motor.



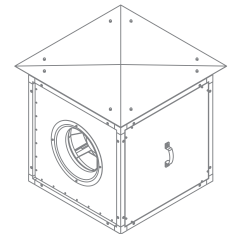
Iso-V fan with vibration-absorbing flexible connectors AKV series



Iso-V fan with connecting reducers ARV series



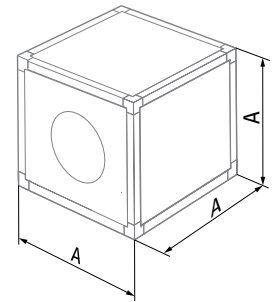
Iso-V fans with AH-IV outer hood



Iso-V fans with RSD-IV protecting cover

### Fan and accessories overall dimensions

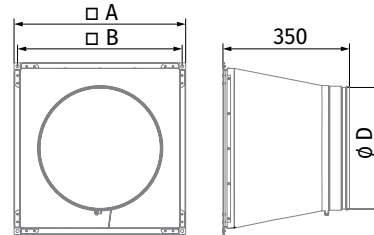
Type	Dimensions [mm]		Weight [kg]	Options			
	A			ARV connector-reducer	AKV vibration absorbing connector	RSD-IV protecting cover	AH-V outer hood
Iso-V 355 4E	500		25	ARV 355	AKV 500	RSD-IV 315-355	AH-IV 315-355
Iso-V 355 4D	500		25	ARV 355	AKV 500	RSD-IV 315-355	AH-IV 315-355
Iso-V 400 4E	670		39	ARV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



Iso-V

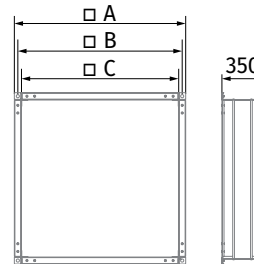
#### ARV

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



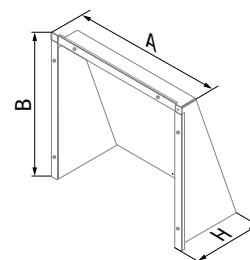
#### AKV

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



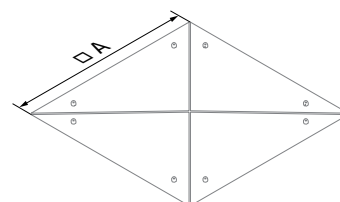
#### AH-IV

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



#### RSD-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

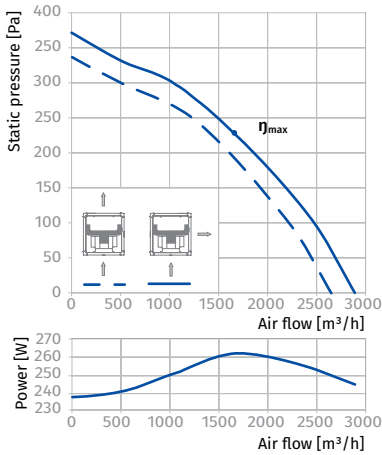


**Technical data**

Parameters	Iso-V 355 4E	Iso-V 355 4D			Iso-V 400 4E		Iso-V 400 4D			
Voltage [V]	1 ~ 230	3 ~ 400			1 ~ 230		3 ~ 230 Δ		3 ~ 400 Y	
Frequency [Hz]	50	50	60	50	60	50	60	50	60	
Power [W]	245	230	235	480	700	515	750	385	515	
Current [A]	1.12	0.52	0.53	2.4	3.15	1.41	1.44	0.7	0.93	
Max. air flow at air flow direction [m³/h (l/s)]:										
- perpendicular air flow	2890 (803)	2660 (739)	2815 (782)	3750 (1042)	4310 (1197)	3950 (1097)	4310 (1197)	3340 (928)	3525 (979)	
- direct air flow	2650 (736)	2380 (661)	2580 (717)	3535 (982)	4015 (1115)	3740 (1039)	4055 (1126)	3110 (864)	3290 (914)	
RPM [min <sup>-1</sup> ]	1420	1400	1600	1370	1460	1415	1610	1235	1220	
Sound pressure level at 3 m [dBA]	54	53	55	51	52	51	53	47	49	
Transported air temperature [°C]	-25...+50	-25...+70	-25...+65	-40...+80	-40...+55	-40...+60	-40...+60	-40...+80	-40...+40	
IP rating	IPX4	IPX4			IPX4	IPX4		IPX4		
Motor IP rating	IP44	IP44			IP44	IP44		IP44		
ErP	2018	2018			2018	2018		2018		

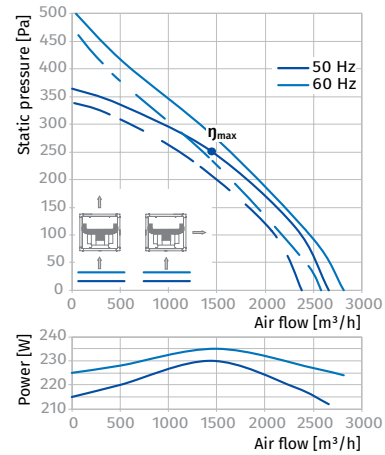
**ISO-V 355 4E**

Sound power level, A-weighted	Total	Octave frequency bands [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



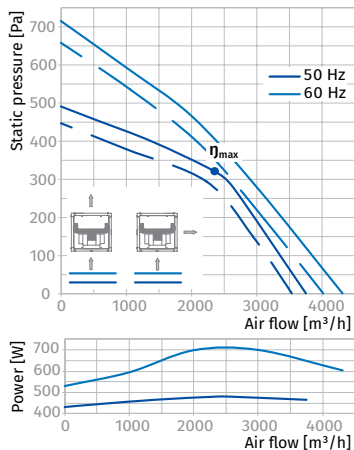
**ISO-V 355 4D**

Sound power level, A-weighted	Total	Octave frequency bands [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



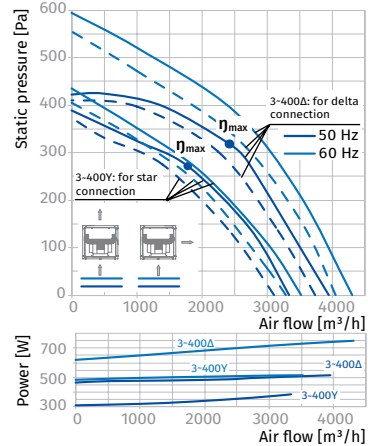
**ISO-V 400 4E**

Sound power level, A-weighted	Total	Octave frequency bands [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



**ISO-V 400 4D**

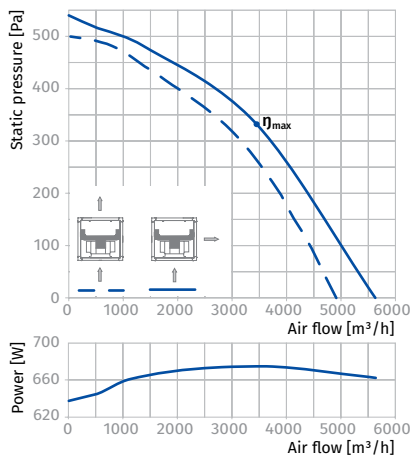
Sound power level, A-weighted	Total	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet [dBA]	73	57	63	64	67	68	62	59	52
L <sub>WA</sub> to outlet [dBA]	74	60	63	65	69	66	67	61	51
L <sub>WA</sub> to environment [dBA]	54	43	44	49	50	51	47	42	36



Parameters	Iso-V 450 4E	Iso-V 450 4D	Iso-V 500 4E	Iso-V 500 4D
Voltage [V]	1 ~ 230	3 ~ 400	1 ~ 230	3 ~ 400
Frequency [Hz]	50	50	50	50
Power [W]	680	740	1300	1430
Current [A]	3	1.5	5.70	3.00
Max. air flow at air flow direction [m³/h (l/s)]:				
- perpendicular air flow	5630 (1564)	5700 (1583)	7330 (2036)	7940 (2206)
- direct air flow	4930 (1370)	5080 (1411)	6680 (1856)	7200 (2000)
RPM [min <sup>-1</sup> ]	1250	1350	1320	1375
Sound pressure level at 3 m [dBA]	53	54	55	58
Transported air temperature [°C]	-40...+70	-40...+80	-20...+50	-40...+80
IP rating	IPX4	IPX4	IPX4	IPX4
Motor IP rating	IP44	IP44	IP44	IP44
ErP	2018	2018	-	-

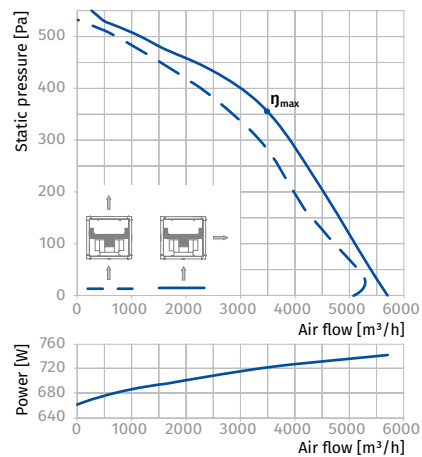
### ISO-V 450 4E

Sound power level, A-weighted	Total	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	76	62	64	67	68	69	66	63	53
LWA to outlet [dBA]	76	63	66	70	71	69	66	63	57
LWA to environment [dBA]	57	44	48	52	56	53	50	47	38



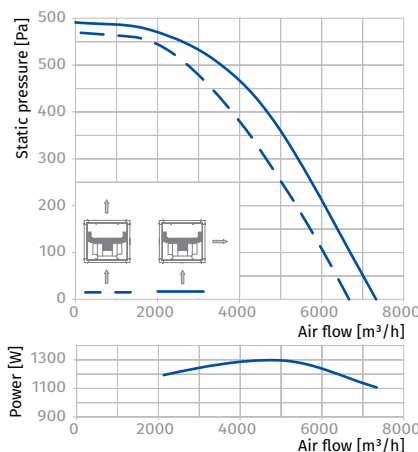
### ISO-V 450 4D

Sound power level, A-weighted	Total	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	76	61	65	67	68	68	66	50	55
LWA to outlet [dBA]	75	63	67	69	70	72	68	63	54
LWA to environment [dBA]	61	46	47	52	52	51	51	44	36



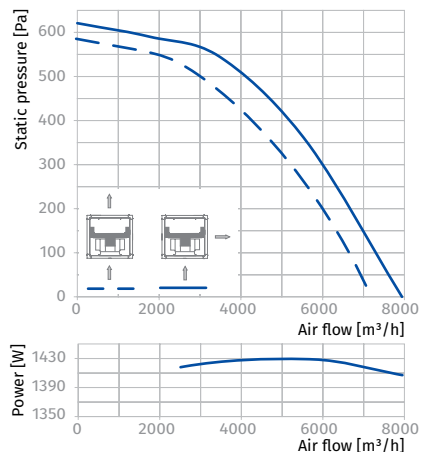
### ISO-V 500 4E

Sound power level, A-weighted	Total	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	81	65	70	73	74	75	69	65	57
LWA to outlet [dBA]	81	68	72	74	76	75	71	69	61
LWA to environment [dBA]	65	52	53	56	57	56	55	51	40



### ISO-V 500 4D

Sound power level, A-weighted	Total	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	77	66	67	71	71	74	71	65	55
LWA to outlet [dBA]	79	69	67	73	76	74	73	68	59
LWA to environment [dBA]	61	52	54	54	56	55	54	51	44



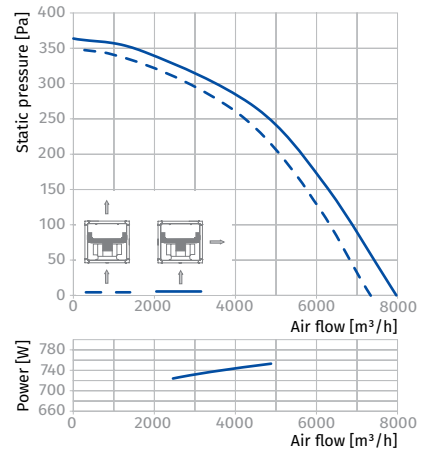
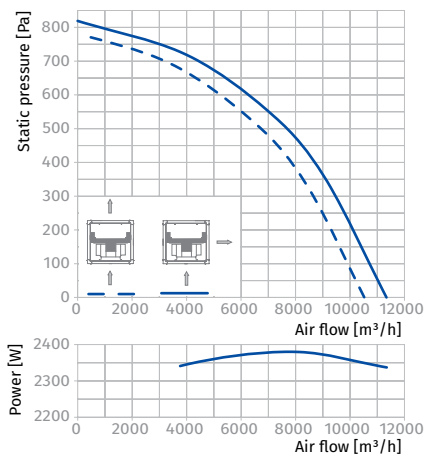
Parameters	Iso-V 560 4D	Iso-V 560 6D	Iso-V 630 4D	Iso-V 630 4D max
Voltage [V]	3 ~ 400	3 ~ 400	3 ~ 400	3 ~ 400
Frequency [Hz]	50	50	50	50
Power [W]	2380	780	3310	4250
Current [A]	5.00	1.70	6.20	7.55
Max. air flow at air flow direction [m³/h (l/s)]:				
- perpendicular air flow	11340 (3150)	7970 (2214)	15170 (4214)	16870 (4686)
- direct air flow	10490 (2914)	7330 (2036)	13740 (3817)	14930 (4148)
RPM [min <sup>-1</sup> ]	1365	885	1170	1300
Sound pressure level at 3 m [dBA]	56	49	67	69
Transported air temperature [°C]	-40...+60	-40...+55	-40...+35	-40...+60
IP rating	IPX4	IPX4	IPX4	IPX4
Motor IP rating	IP44	IP44	IP44	IP44
ErP	-	2018	-	-

**ISO-V 560 4D**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	80	66	67	73	75	73	69	67	58
LWA to outlet [dBA]	80	67	71	73	77	74	73	65	61
LWA to environment [dBA]	63	53	55	59	57	60	53	49	41

**ISO-V 560 6D**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	72	59	57	64	67	67	62	56	49
LWA to outlet [dBA]	70	58	61	66	68	65	65	60	51
LWA to environment [dBA]	56	44	43	48	52	50	46	41	33

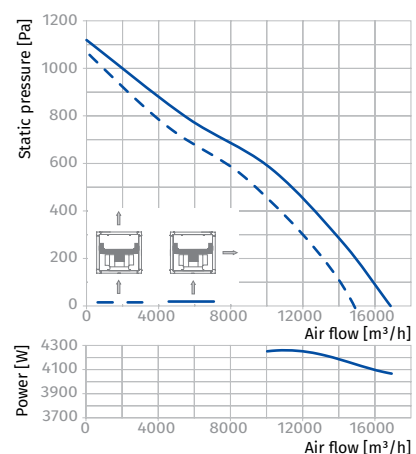
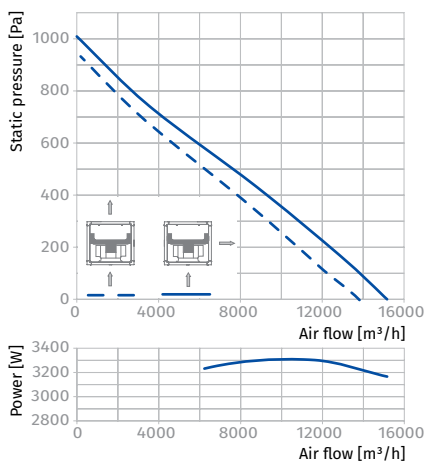


**ISO-V 630 4D**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	85	76	78	80	80	83	78	75	68
LWA to outlet [dBA]	88	76	76	84	86	82	78	77	67
LWA to environment [dBA]	76	64	65	67	73	68	69	62	53

**ISO-V 630 4D MAX**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	85	76	77	81	83	82	77	72	68
LWA to outlet [dBA]	89	77	78	81	85	84	80	73	68
LWA to environment [dBA]	78	65	65	70	71	70	69	62	54



Parameters	Iso-V 630 6D	Iso-V 710 6D
Voltage [V]	3 ~ 400	3 ~ 400
Frequency [Hz]	50	50
Power [W]	1310	2000
Current [A]	2.80	3.90
Max. air flow at air flow direction [m³/h (l/s)]: - perpendicular air flow - direct air flow	12030 (3342) 10440 (2900)	15830 (4398) 14880 (4134)
RPM [min <sup>-1</sup> ]	880	890
Sound pressure level at 3 m [dBA]	55	59
Transported air temperature [°C]	-40...+60	-20...+40
IP rating	IPX4	IPX4
Motor IP rating	IP44	IP44
ErP	-	2018

### ISO-V 630 6D

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

### ISO-V 710 6D

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

