

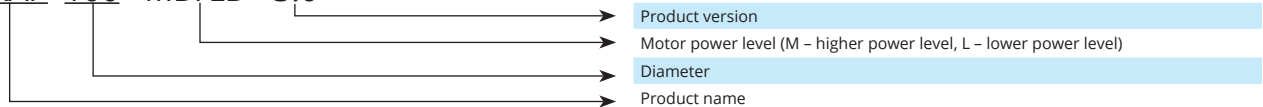
# VKAP 3.0

Circular duct fans with AC-type motor



<b>Application</b>	Circular duct fans VKAP 3.0 are used in low-to medium-pressure ducted systems. Fans are suitable for air supply or exhaust of residential buildings, warehouses, bathrooms, lavatories, auxiliary premises and other premises where the heat recovery is not required, also as boost fans in ventilation systems.
<b>Features</b>	<ul style="list-style-type: none"> <li>› Diameter - 100 mm to 315 mm;</li> <li>› Airflow up to 1450 m<sup>3</sup>/h;</li> <li>› Easily mounted in any position;</li> <li>› Backward-curved impeller;</li> <li>› Low ambient temperatures;</li> <li>› Cost-effective.</li> </ul>
<b>Power supply</b>	230V/50Hz/1f.
<b>Temperature range</b>	-40°C to 50°C.
<b>Sizes</b>	100, 125, 150, 160, 200, 250, 315.
<b>Construction</b>	<ul style="list-style-type: none"> <li>› Casing: galvanized sheet steel;</li> <li>› Fan: centrifugal impeller and external rotor motor;</li> <li>› Motor protection with built-in thermal-contact;</li> <li>› Motor protection class: IP44;</li> <li>› Terminal box protection class: IP55.</li> </ul>
<b>Installation</b>	<ul style="list-style-type: none"> <li>› Mounting with ducts: Spiro, flexible aluminium or plastic. Mounting bracket LAV is included;</li> <li>› Device can only be used indoors;</li> <li>› Not suitable for polluted air or volatile and explosive gases.</li> </ul>
<b>Speed control options</b>	<ul style="list-style-type: none"> <li>› Electronic voltage controller (phase cut);</li> <li>› Voltage controlled speed controller.</li> </ul>

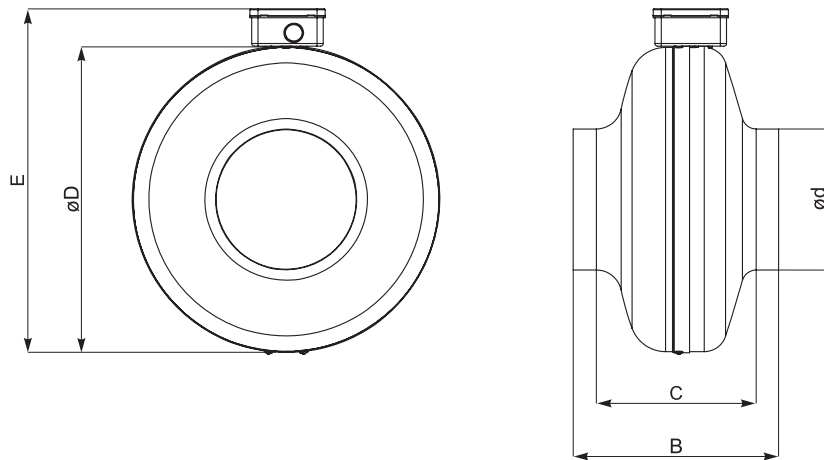
VKAP 100 MD/LD 3.0



## Accessories

Single phase speed controller	Single phase speed controller	Mounting clamp	Guard grille	Back draft shutter	Circular duct silencer
TGRV p. 127	ETY p. 128	AP p. 190	AGO p. 181	RSK p. 177	MUTE p. 174

## Circular duct fans with AC-type motor



Type	Dimensions [mm]				
	B	C	øD	ød	E
VKAP 100 MD/LD 3.0	189	152	244	100	287
VKAP 125 MD/LD 3.0	182	143	243	125	286
VKAP 150 LD 3.0	217	166	344	150	387
VKAP 160 MD 3.0	189	143	244	160	287
VKAP 160 LD 3.0	217	166	344	160	387
VKAP 200 MD 3.0	219	167	344	200	387
VKAP 200 LD 3.0	231	179	344	200	387
VKAP 250 MD 3.0	223	160	344	250	387
VKAP 250 LD 3.0	230	167	344	250	387
VKAP 315 MD 3.0	243	175	402	315	444
VKAP 315 LD 3.0	256	188	402	315	444

Type	Accessories										
	TGRV	ETY	AP	AGO	RSK	MUTE	FD	FDI	EKA	AVS	AVA
VKAP 100 MD/LD 3.0	1,5	1,5	100	100	100	100	100	100	100	100	100
VKAP 125 MD/LD 3.0	1,5	1,5	125	125	125	125	125	125	125	125	125
VKAP 150 LD 3.0	1,5	1,5	150	150	150	-	-	-	-	-	-
VKAP 160 MD 3.0	1,5	1,5	160	160	160	160	160	160	160	160	160
VKAP 160 LD 3.0	1,5	1,5	160	160	160	160	160	160	160	160	160
VKAP 200 MD 3.0	1,5	1,5	200	200	200	200	200	200	200	200	200
VKAP 200 LD 3.0	1,5	1,5	200	200	200	200	200	200	200	200	200
VKAP 250 MD 3.0	1,5	1,5	250	250	250	250	250	250	250	250	250
VKAP 250 LD 3.0	1,5	1,5	250	250	250	250	250	250	250	250	250
VKAP 315 MD 3.0	1,5	1,5	315	315	315	315	315	315	315	315	315
VKAP 315 LD 3.0	1,5	1,5	315	315	315	315	315	315	315	315	315

Filter box



FD

p. 169

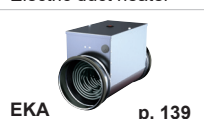
Filter box



FDI

p. 167

Electric duct heater



EKA

p. 139

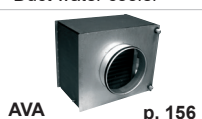
Heating coil



AVS

p. 148

Duct water cooler



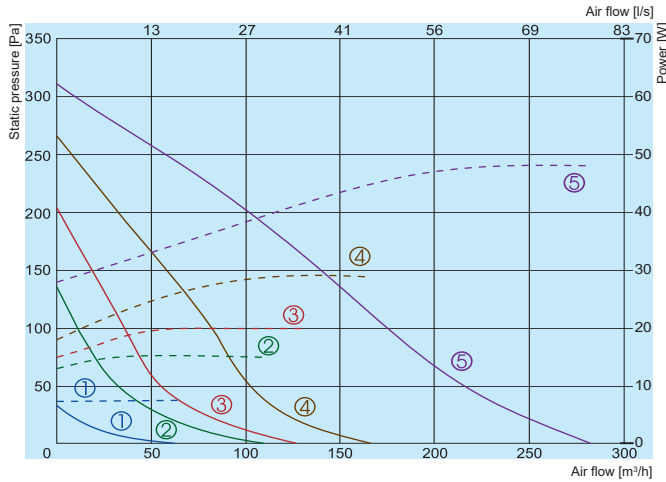
AVA

p. 156

# VKAP 3.0

Circular duct fans with AC-type motor

## VKAP 100 MD 3.0



Performance  
Power consumption

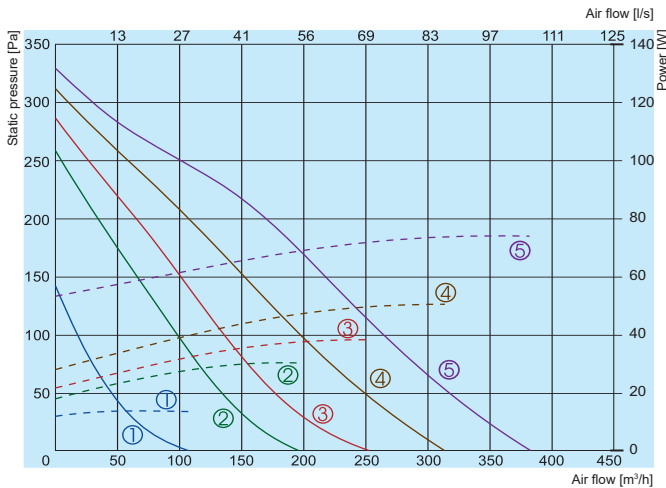
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

### 100 MD 3.0

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	61	45	57	52	56	51	40	31
Outlet	61	44	58	52	55	50	39	30
Surrounding	46	26	27	36	44	41	30	23

Measured at 200 m<sup>3</sup>/h, 62 Pa

## VKAP 100 LD 3.0



Performance  
Power consumption

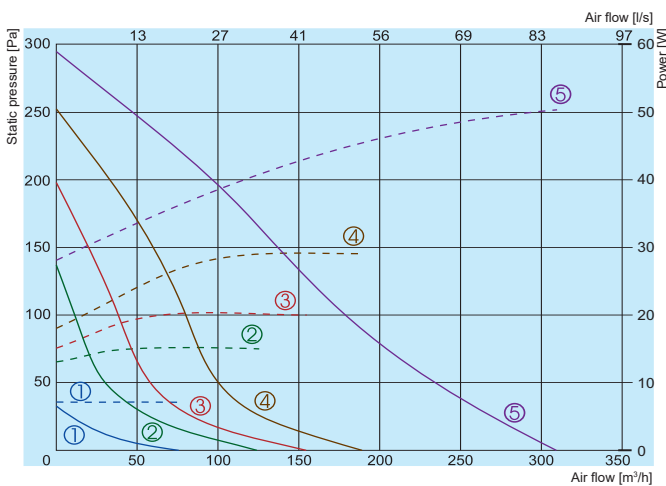
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

### 100 LD 3.0

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	70	53	58	60	66	65	58	47
Outlet	71	54	60	61	67	66	58	48
Surrounding	61	34	58	44	55	54	47	37

Measured at 257 m<sup>3</sup>/h, 104 Pa

## VKAP 125 MD 3.0



Performance  
Power consumption

- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

### 125 MD 3.0

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	59	43	52	53	54	51	41	33
Outlet	60	42	53	54	54	52	42	34
Surrounding	45	21	30	36	42	40	29	18

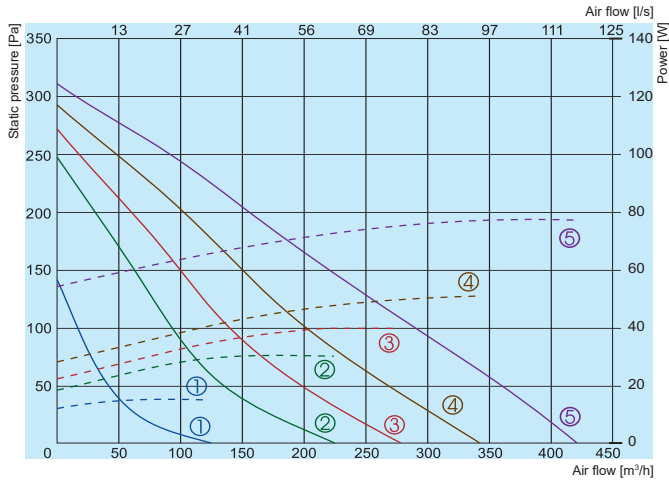
Measured at 191 m<sup>3</sup>/h, 83 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

# VKAP 3.0

## Circular duct fans with AC-type motor

### VKAP 125 LD 3.0



Performance  
Power consumption

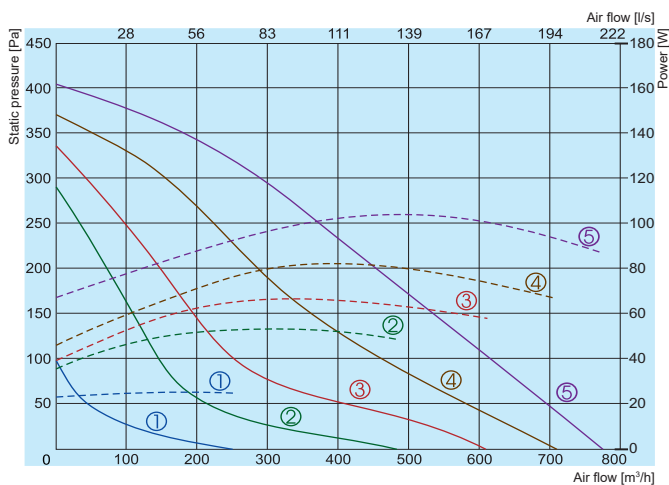
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

#### 125 LD 3.0

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	69	50	54	63	65	64	56	47
Outlet	68	49	53	61	64	63	55	45
Surrounding	56	28	29	45	53	52	44	35

Measured at 280 m³/h, 104 Pa

### VKAP 150 LD 3.0



Performance  
Power consumption

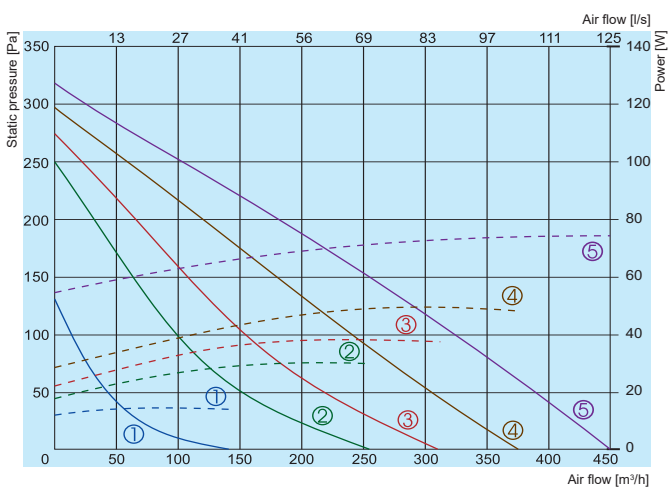
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

#### 150 LD 3.0

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	74	51	66	67	71	62	61	53
Outlet	75	52	67	68	72	64	63	50
Surrounding	62	30	49	51	60	52	50	36

Measured at 595 m³/h, 112 Pa

### VKAP 160 MD 3.0



Performance  
Power consumption

- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

#### 160 MD 3.0

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	68	47	50	56	64	63	61	49
Outlet	69	48	52	57	65	64	63	51
Surrounding	56	26	27	40	53	51	50	35

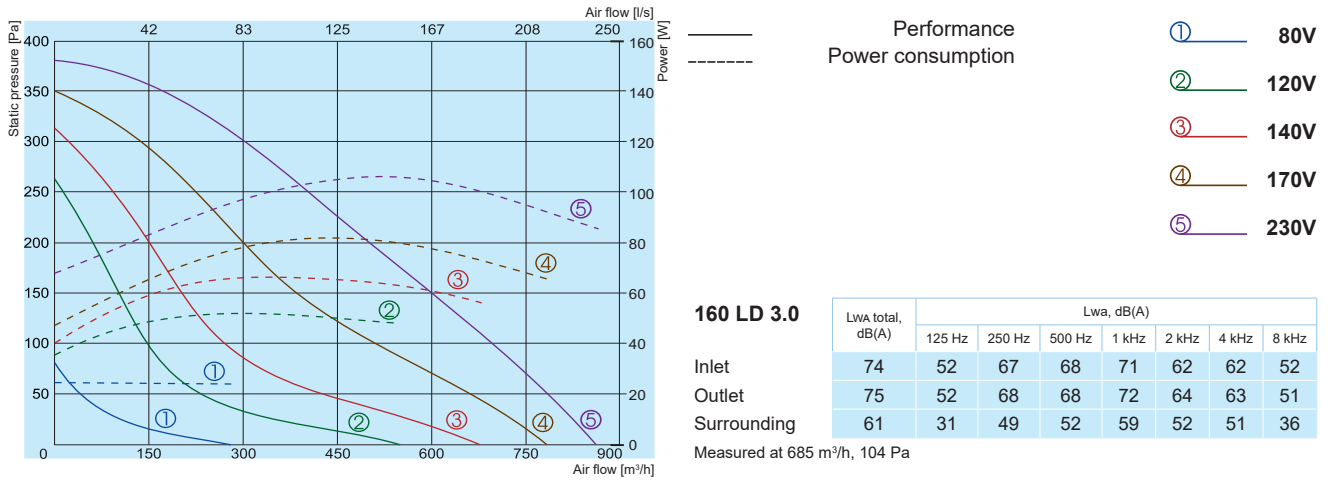
Measured at 318 m³/h, 103 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

# VKAP 3.0

Circular duct fans with AC-type motor

## VKAP 160 LD 3.0



		100 MD 3.0	100 LD 3.0	125 MD 3.0	125 LD 3.0	150 LD 3.0	160 MD 3.0	160 LD 3.0
<b>Electrical data</b>								
Phase/Voltage/Frequency	[V/Hz]	~1, 230/50	~1, 230/50	~1, 230/50	~1, 230/50	~1, 230/50	~1, 230/50	~1, 230/50
Max. power consumption	[kW]	0,074	0,074	0,074	0,074	0,103	0,074	0,103
Max. current	[A]	0,3	0,31	0,3	0,31	0,5	0,31	0,5
Capacitor	[μF]	2	2	2	2	2	2	2
Wiring diagram		No. 1	No. 1	No. 1	No. 1	No. 1	No. 1	No. 1
Fan speed controller		TGRV 1.5/ ETY-1,5	TGRV 1.5/ ETY-1,5	TGRV 1.5/ ETY-1,5	TGRV 1.5/ ETY-1,5	TGRV 1.5/ ETY-1,5	TGRV 1.5/ ETY-1,5	TGRV 1.5/ ETY-1,5
<b>Technical data</b>								
Max. airflow	[m <sup>3</sup> /h]	281	379	307	421	773	451	866
Fan impeler speed	[min <sup>-1</sup> ]	2800	2800	2800	2800	2796	2800	2796
Weight	[kg]	3	3	3	3	3	3	4
Max. air temperature	[°C]	-40/40	-40/40	-40/40	-40/40	-40/40	-40/40	-40/40
Impeler		Backwards curved	Backwards curved	Backwards curved	Backwards curved	Backwards curved	Backwards curved	Backwards curved
Protection class:	motor	IP44	IP44	IP44	IP44	IP44	IP44	IP44
	terminal box	IP55	IP55	IP55	IP55	IP55	IP55	IP55
<b>Ecodesign data</b>								
Classification**		RVU	RVU	RVU	RVU	RVU	RVU	RVU
Energy efficiency class	[local demand control]	C	C	C	C	B	C	B
Sound power level	[dB(A)]	46	58	42	54	59	54	57
Reference flow rate at 50 Pa	[m <sup>3</sup> /h]	121	182	120	200	431	224	483
SPI	[W/(m <sup>3</sup> /h)]	0,22	0,20	0,22	0,19	0,14	0,17	0,12
Comply with ERP 2018		+	+	+	+	+	+	+

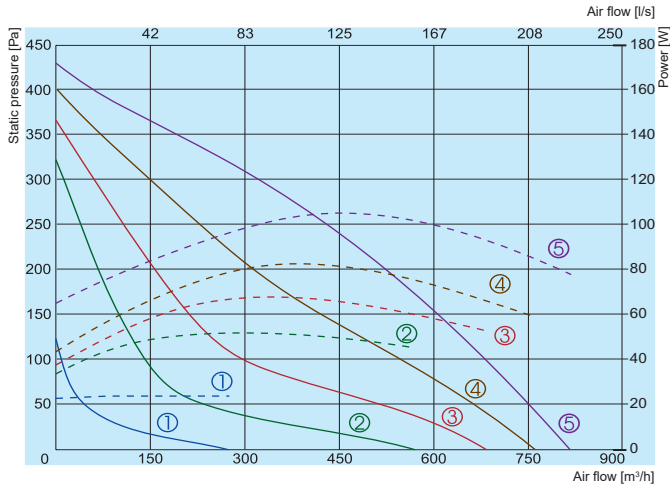
\* unit with local demand control complies with ErP 2018 requirements.

\*\* RVU - residential ventilation unit.

# VKAP 3.0

## Circular duct fans with AC-type motor

### VKAP 200 MD 3.0



Performance  
Power consumption

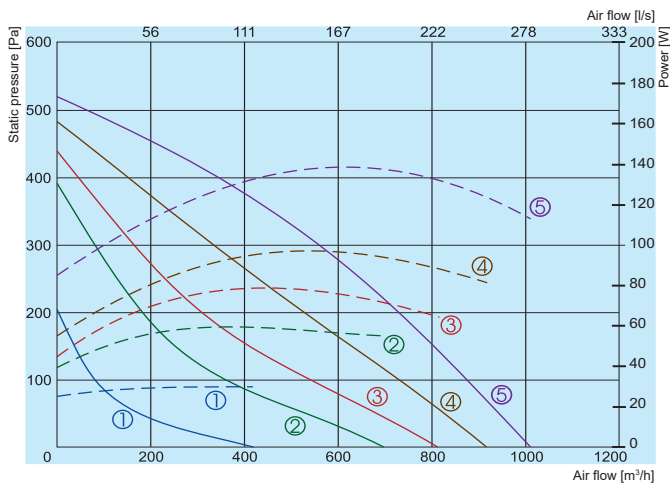
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

#### 200 MD 3.0

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	70	46	53	62	66	63	64	54
Outlet	71	45	54	61	68	64	65	53
Surrounding	55	22	24	41	49	53	43	40

Measured at 653 m<sup>3</sup>/h, 125 Pa

### VKAP 200 LD 3.0



Performance  
Power consumption

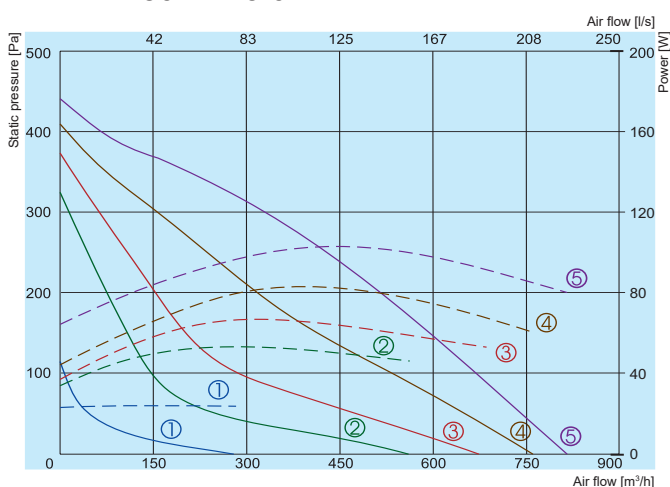
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

#### 200 LD 3.0

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	73	53	60	66	69	66	65	63
Outlet	74	54	62	65	70	67	67	63
Surrounding	58	25	35	46	53	55	47	45

Measured at 846 m<sup>3</sup>/h, 123 Pa

### VKAP 250 MD 3.0



Performance  
Power consumption

- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

#### 250 MD 3.0

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	71	41	52	61	66	66	64	56
Outlet	72	43	53	60	68	67	65	57
Surrounding	52	24	30	38	48	47	45	40

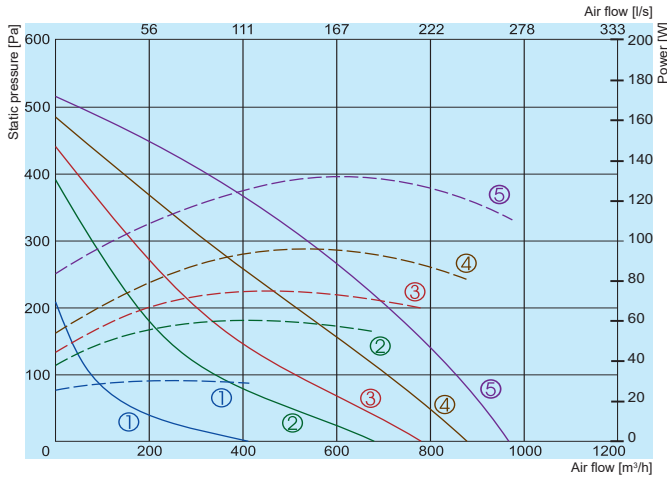
Measured at 634 m<sup>3</sup>/h, 125 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

# VKAP 3.0

Circular duct fans with AC-type motor

## VKAP 250 LD 3.0



Performance  
Power consumption

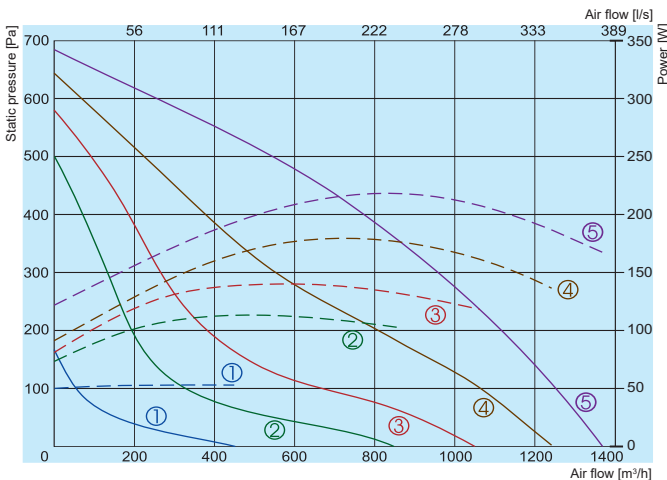
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

### 250 LD 3.0

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	74	54	62	67	69	67	65
Outlet	75	55	63	66	70	68	67
Surrounding	55	33	38	47	50	48	46

Measured at 810 m³/h, 123 Pa

## VKAP 315 MD 3.0



Performance  
Power consumption

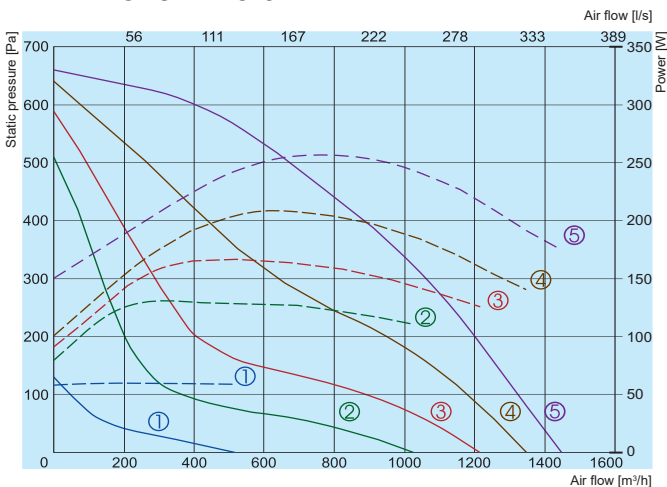
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

### 315 MD 3.0

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	78	52	63	71	75	68	65
Outlet	79	53	64	71	76	69	66
Surrounding	57	35	43	51	53	48	46

Measured at 1195 m³/h, 152 Pa

## VKAP 315 LD 3.0



Performance  
Power consumption

- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

### 315 LD 3.0

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	73	50	59	67	68	66	65
Outlet	74	51	60	66	69	67	65
Surrounding	53	33	38	45	48	47	43

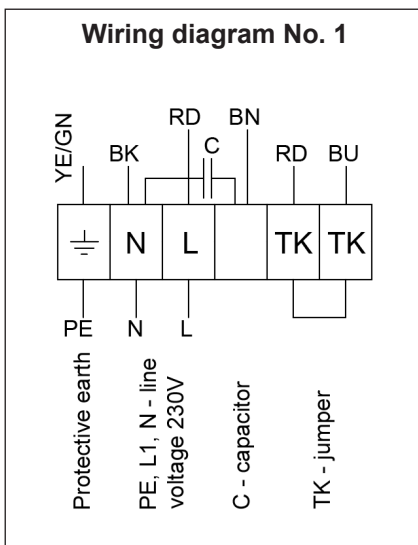
Measured at 1080 m³/h, 149 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

## Circular duct fans with AC-type motor

		200 MD 3.0	200 LD 3.0	250 MD 3.0	250 LD 3.0	315 MD 3.0	315 LD 3.0
<b>Electrical data</b>							
Phase/Voltage/Frequency	[V/Hz]	~1, 230/50	~1, 230/50	~1, 230/50	~1, 230/50	~1, 230/50	~1, 230/50
Max. power consumption	[kW]	0,103	0,14	0,103	0,14	0,219	0,278
Max. current	[A]	0,5	0,6	0,5	0,6	0,9	1,2
Capacitor	[µF]	2	4	2	4	5	5
Wiring diagram		No. 1	No. 1	No. 1	No. 1	No. 1	No. 1
Fan speed controller		TGRV 1.5/ETY-1,5	TGRV 1.5/ETY-1,5	TGRV 1.5/ETY-1,5	TGRV 1.5/ETY-1,5	TGRV 1.5/ETY-1,5	TGRV 1.5/ETY-1,5
<b>Technical data</b>							
Max. airflow	[m³/h]	816	1007	817	967	1372	1448
Fan impeler speed	[min <sup>-1</sup> ]	2796	2659	2796	2659	2704	2762
Weight	[kg]	4	4,7	4	4,7	5,6	6
Max. air temperature	[°C]	-40/40	-40/50	-40/40	-40/50	-40/50	-40/50
Impeler		Backwards curved	Backwards curved	Backwards curved	Backwards curved	Backwards curved	Backwards curved
Protection class:	motor	IP44	IP44	IP44	IP44	IP44	IP44
	terminal box	IP55	IP55	IP55	IP55	IP55	IP55
<b>Ecodesign data</b>							
Classification**		NRVU	NRVU	NRVU	NRVU	NRVU	NRVU
Sound power level	[dB(A)]	53	56	50	54	56	53
Nominal flow rate	[m³/s]	0,12	0,15	0,12	0,16	0,22	0,29
Nominal external pressure	[Pa]	247	312	247	288	404	318
Static efficiency of fans used in accordance with Regulation No 327/2011	[%]	28,3	34,7	28,2	34,4	39,5	37,7
Comply with ERP 2018		+	+	+	+	+	+

\*\* NRVU - non-residential ventilation unit.



YE/GN - yellow/green

BK - black

RD - red

BN - brown

BU - blue