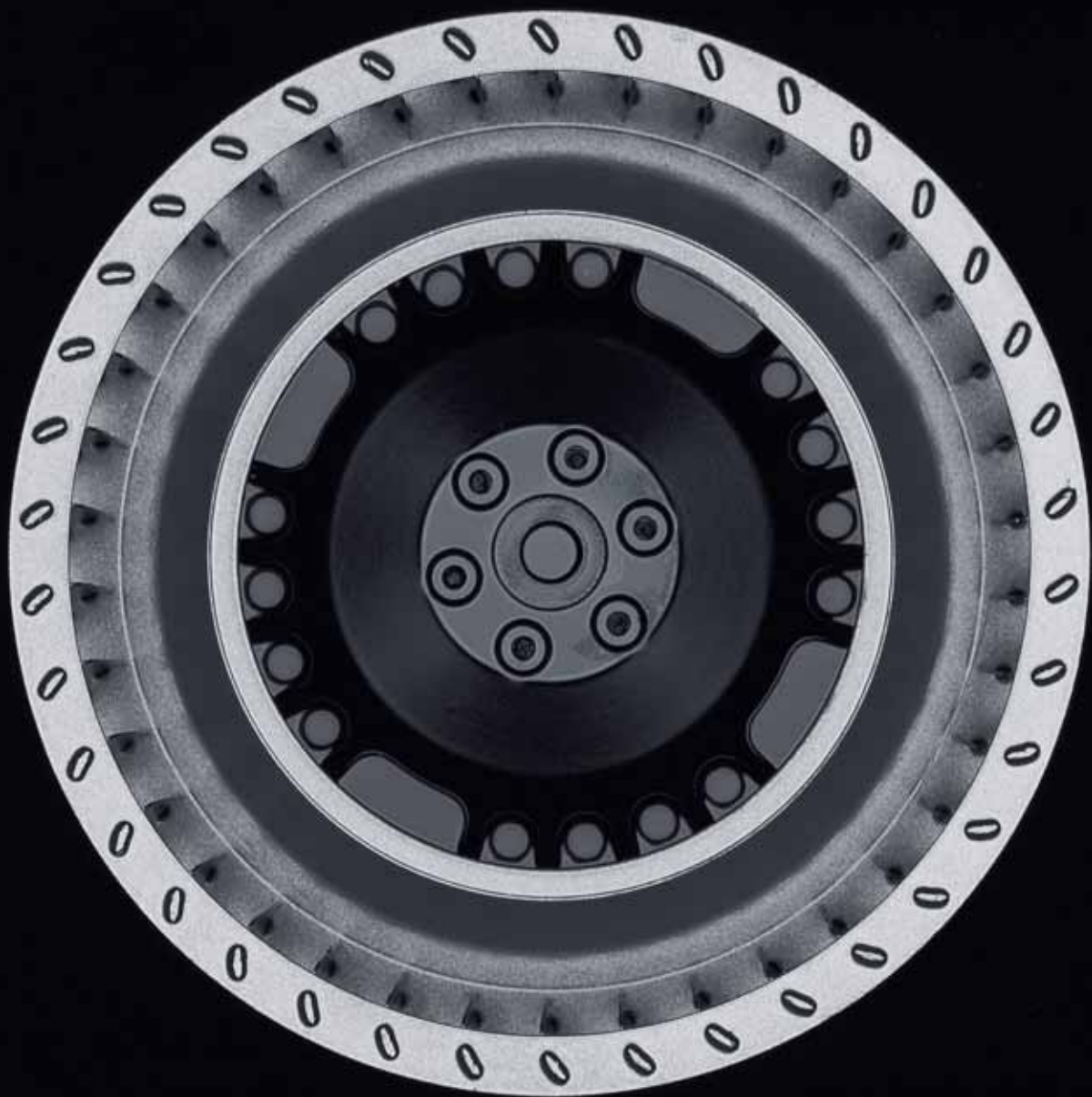


# AC centrifugal fans and blowers forward curved

AC centrifugal fans and blowers, single inlet	Ø 085 - Ø 400	92
AC centrifugal blowers with plastic housing, dual inlet	Ø 140 - Ø 160	158
AC centrifugal blowers, dual inlet	Ø 097 - Ø 250	178



# AC centrifugal fan and blower

single inlet, Ø 085

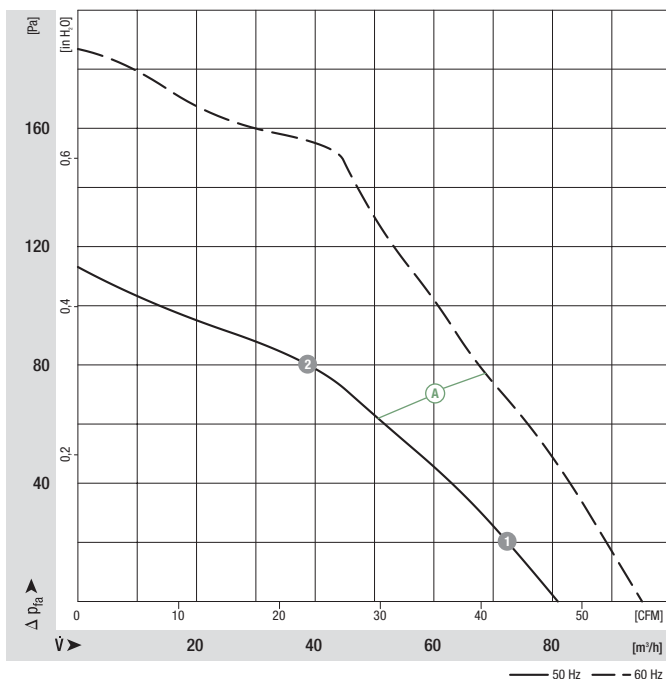


- **Material:** Housing: Die-cast aluminium  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor		VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.
*2E 085	M2E 042-CA	Ⓐ	1~ 230 1~ 230	50 60	80 95	2350 2800	32 30	0.15 0.14	1.0/400 1.0/400	53 57	0 0	-25 to +60 -25 to +70	A1)

subject to alterations

## Curves

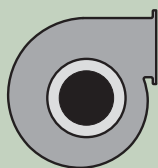


	n [rpm]	P <sub>1</sub> [W]	I [A]
Ⓐ 1	2430	32	0.15
Ⓐ 2	2590	30	0.14

- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Capacitor:** FPU (P2) acc. to IEC 252
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC

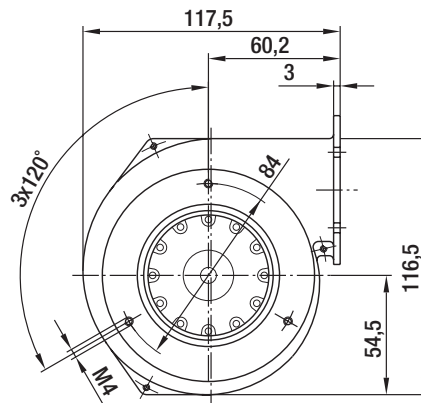
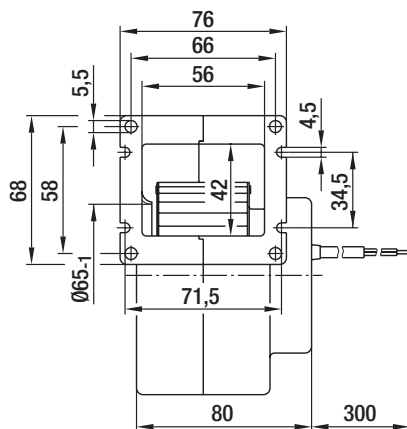
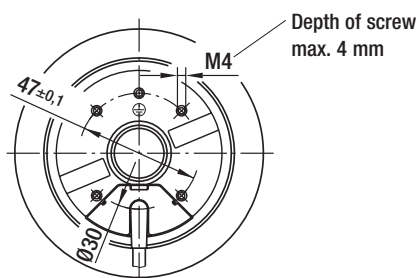
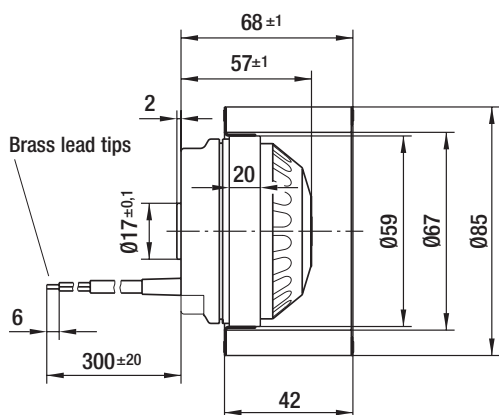


Mass of centrifugal fan



Mass of centrifugal blower

Centrifugal fan	kg	Centrifugal blower with flange	kg
R2E 085-AA01 -05	0.7	G2E 085-AA01 -01	0.9



# AC centrifugal fan and blower

single inlet, Ø 097

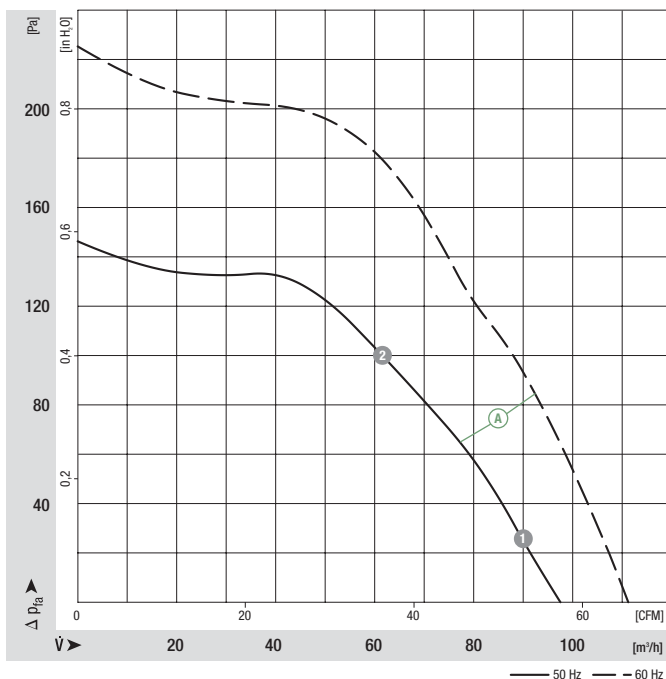


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
*2E 097	M2E 042-CA	Ⓐ 1~ 230 1~ 230	50 60	100 110	2050 2300	35 37	0.16 0.17	1.5/400 1.5/400	55 58	0 0	-25 to +40 -25 to +55	A1)	

subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
Ⓐ 1	2120	35	0.16
Ⓐ 2	2335	33	0.15





# AC centrifugal fan and blower

single inlet, Ø 108

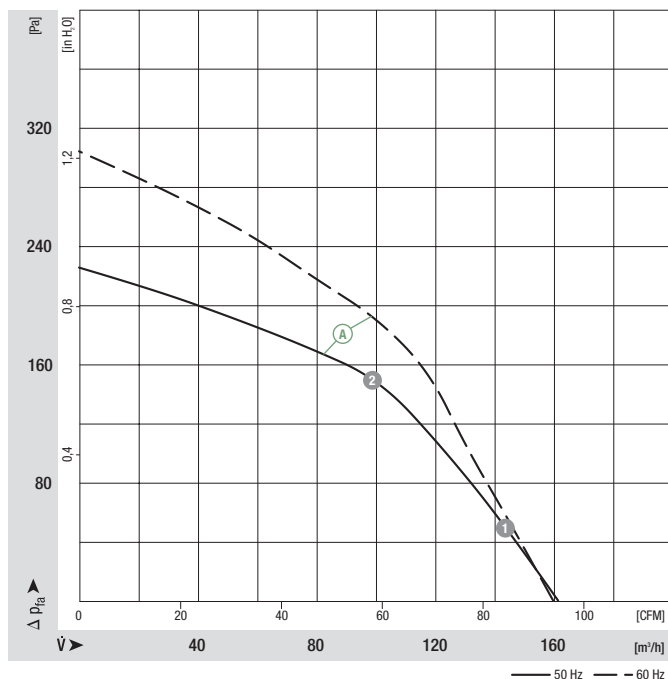


- **Material:** Housing: Die-cast aluminium  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor		VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.
*2E 108	M2E 052-BF	Ⓐ	1~ 230 1~ 230	50 60	160 160	1850 1850	30 35	0.14 0.16	1.0/400 1.0/400	56 56	0 0	-25 to +85 -25 to +80	A1)

subject to alterations

## Curves

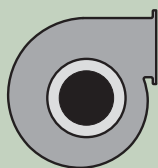


	n [rpm]	P <sub>1</sub> [W]	I [A]
Ⓐ 1	2070	34	0.16
Ⓐ 2	2470	31	0.15

- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC

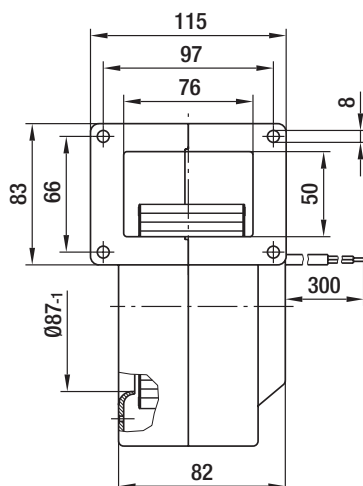
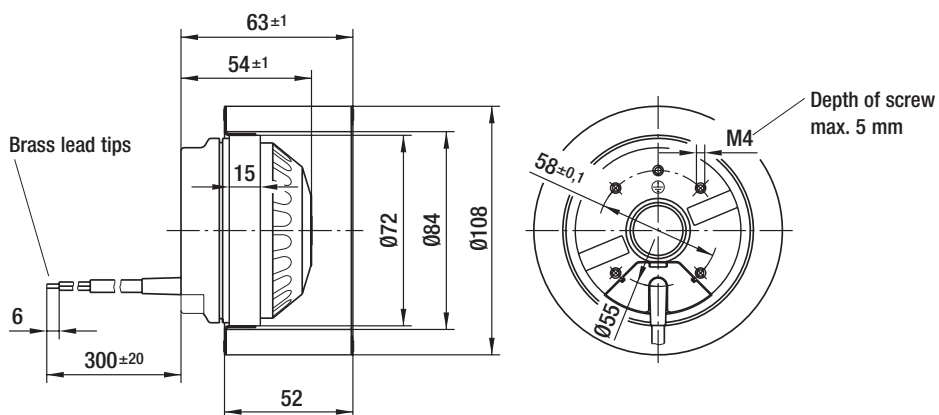


Mass of centrifugal fan



Mass of centrifugal blower

Centrifugal fan	kg	Centrifugal blower with flange	kg
R2E 108-AG63 -05	0.6	G2E 108-AG63 -01	1.3



# AC centrifugal fan and blower

single inlet, Ø 120

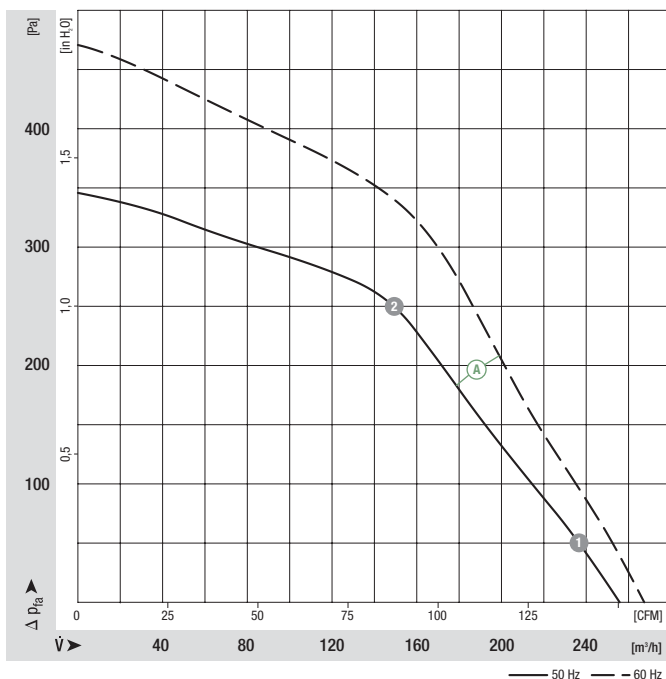


- **Material:** Housing: Die-cast aluminium  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
*2E 120	M2E 068-BF	Ⓐ	1~ 230	50	255	2350	80	0.35	2.0/450	61	0	-25 to +55	A1)
			1~ 230	60	265	2450	100	0.44	2.0/450	62	0	-25 to +60	

subject to alterations

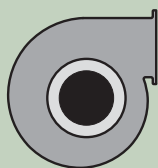
## Curves



- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC, GOST

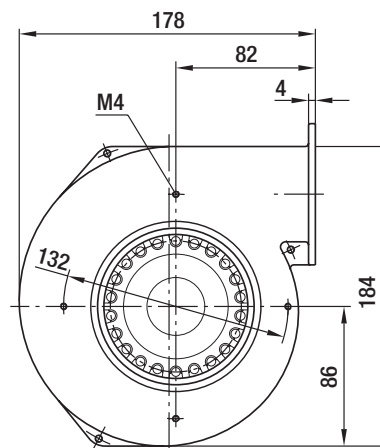
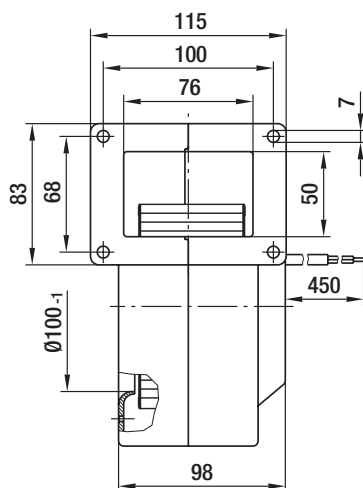
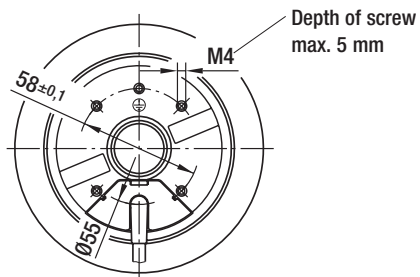
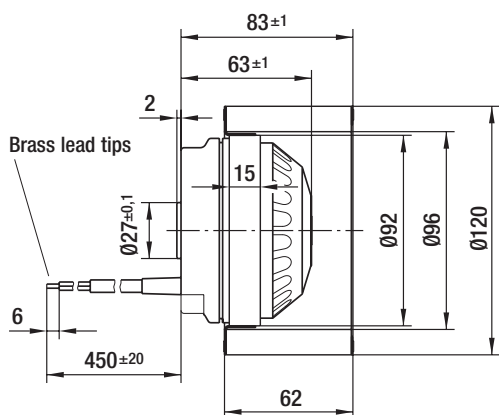


Mass of centrifugal fan



Mass of centrifugal blower

Centrifugal fan	kg	Centrifugal blower with flange	kg
R2E 120-AR77 -05	1.2	G2E 120-AR77 -01	1.8



# AC centrifugal fans and blowers

single inlet, Ø 120

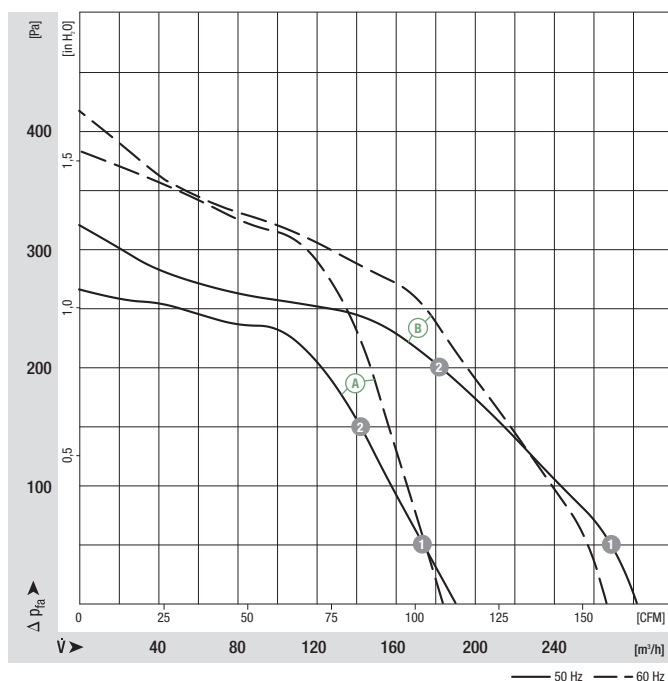


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** Ⓐ "F", Ⓑ "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
*2E 120	M2E 052-BF	Ⓐ	1~ 230	50	190	2050	57	0.25	1.5/400	63	0	-25 to +55	A1)
			1~ 230	60	185	2000	66	0.29	1.5/400	63	0	-25 to +55	
*2E 120	M2E 068-BF	Ⓑ	1~ 230	50	275	2200	83	0.37	2.0/450	64	0	-25 to +70	A1)
			1~ 230	60	255	2050	100	0.45	2.0/450	63	0	-25 to +60	

subject to alterations

## Curves



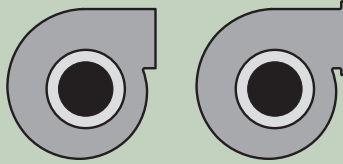
	n [rpm]	P <sub>1</sub> [W]	I [A]
Ⓐ 1	2200	54	0.24
Ⓐ 2	2410	51	0.23
Ⓑ 1	2335	80	0.36
Ⓑ 2	2580	72	0.32

- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC



Mass of centrifugal fan

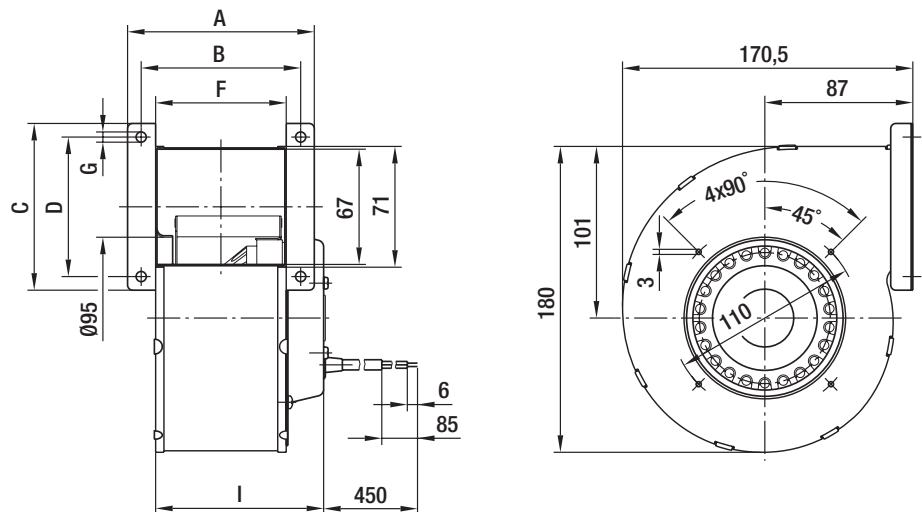
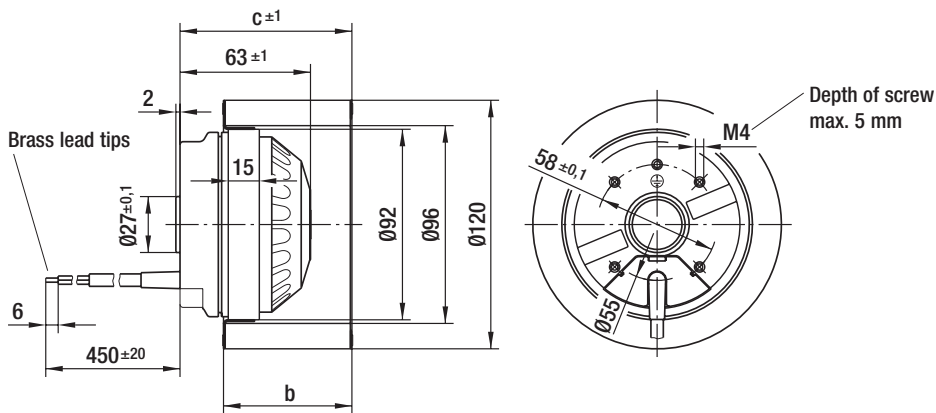
Dimensions



Mass of centrifugal blower

Dimensions

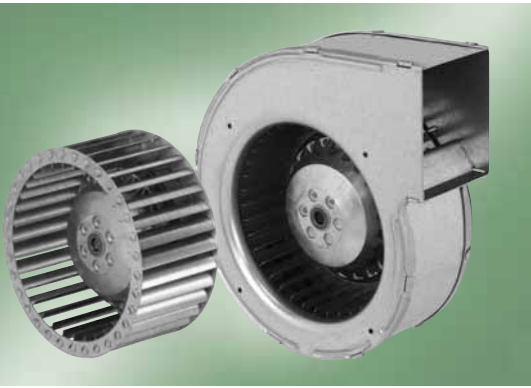
Centrifugal fan	kg	b	c	Centrifugal blower without flange	Centrifugal blower with flange	kg	A	B	C	D	F	G	I
R2E 120-BD76 -09	1.0	42.0	48.0	G2E 120-TD76 -01	—	1.3	—	—	—	—	59.0	—	60.0
R2E 120-AR21 -05	1.2	62.0	85.0	—	G2E 120-CR21 -01	1.9	110.0	94.0	98.0	82.0	77.0	6.0	99.0





# AC centrifugal fan and blower

single inlet, Ø 133

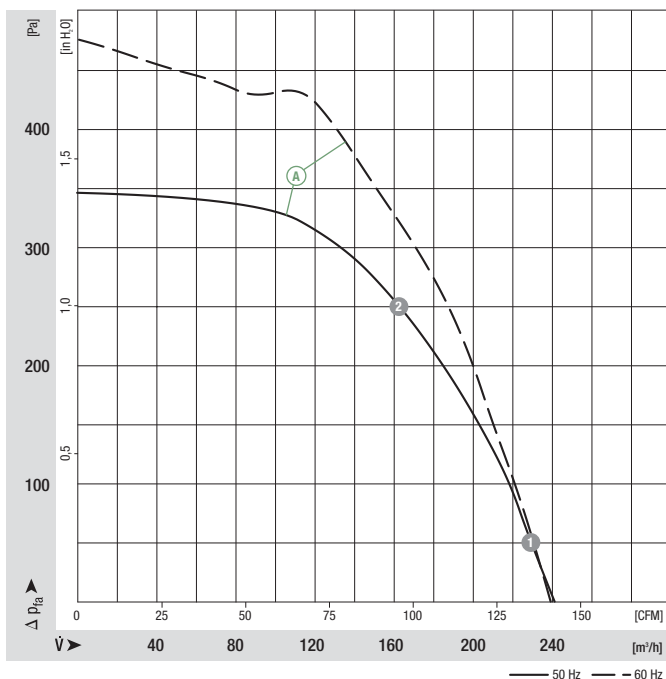


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor		VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.
*2E 133	M2E 068-BF	Ⓐ	1~ 230 1~ 230	50 60	245 235	2150 2100	88 110	0.39 0.49	2.0/450 2.0/450	65 65	0 0	-25 to +60 -25 to +50	A1)

subject to alterations

## Curves

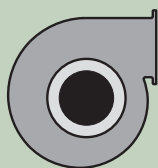


n [rpm]	P <sub>1</sub> [W]	I [A]
Ⓐ 1 2290	83	0.37
Ⓐ 2 2530	73	0.33

- **Motor protection:** TOP wired internally
- **Cable exit:** Axial
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC

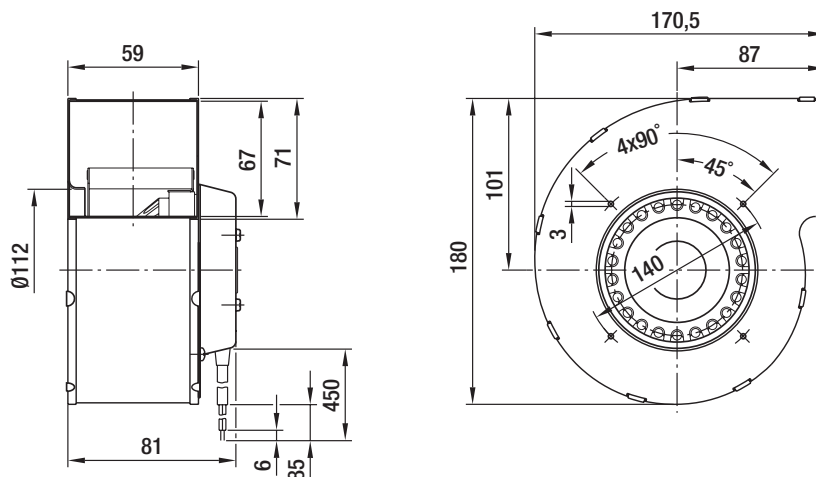
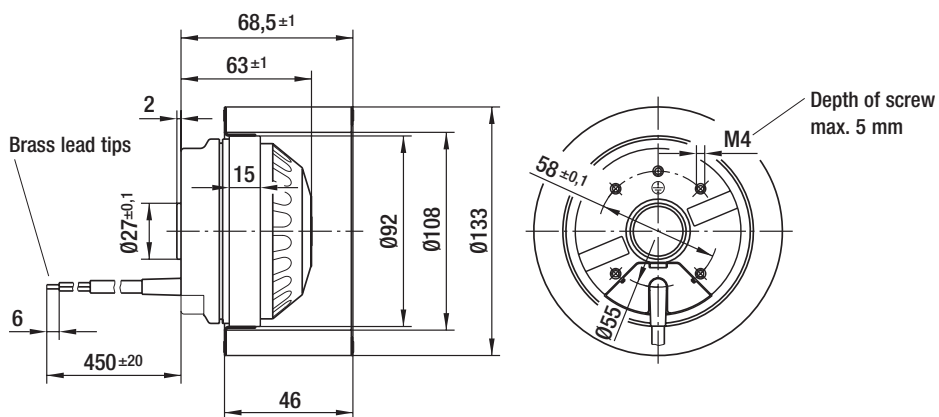


Mass of centrifugal fan



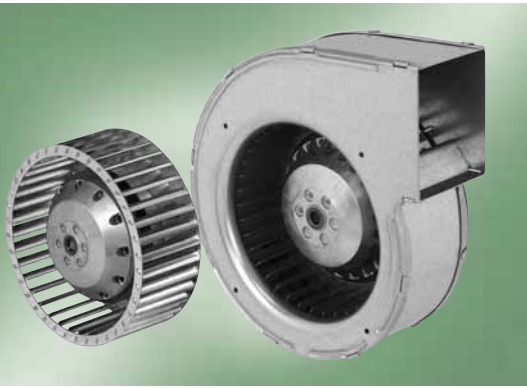
Mass of centrifugal blower

Centrifugal fan	kg	Centrifugal blower with flange	kg
R2E 133-AN77 -01	1.3	G2E 133-DN77 -01	1.9



# AC centrifugal fan and blower

single inlet, Ø 140

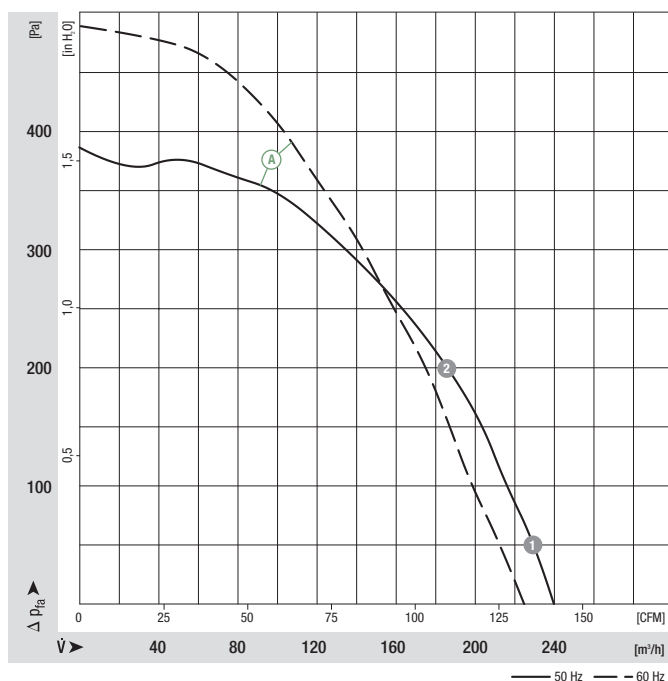


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor		VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.
*2E 140	M2E 052-CA	Ⓐ	1~ 230 1~ 230	50 60	240 225	1350 1300	63 70	0.29 0.31	1.5/400 1.5/400	55 53	0 0	-25 to +45 -25 to +35	A1)

subject to alterations

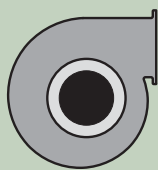
## Curves



- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE

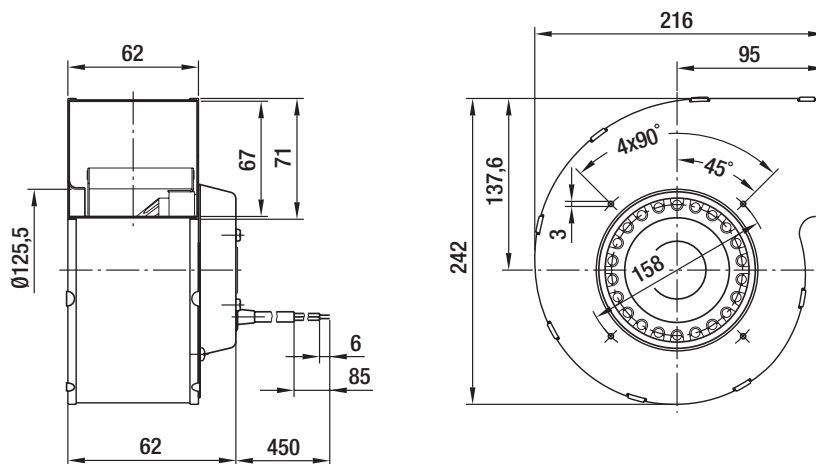
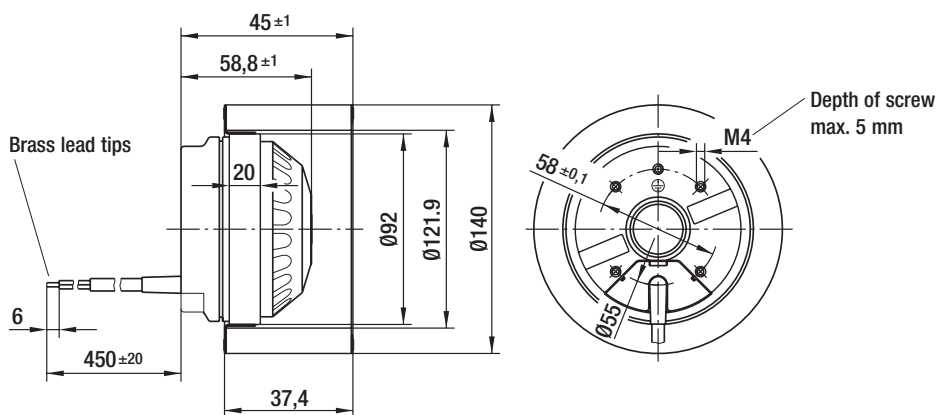


Mass of centrifugal fan



Mass of centrifugal blower

Centrifugal fan	kg	Centrifugal blower with flange	kg
R2E 140-BI52 -05	1.4	G2E 140-DI52 -01	1.9



# AC centrifugal fan and blower

single inlet, Ø 140

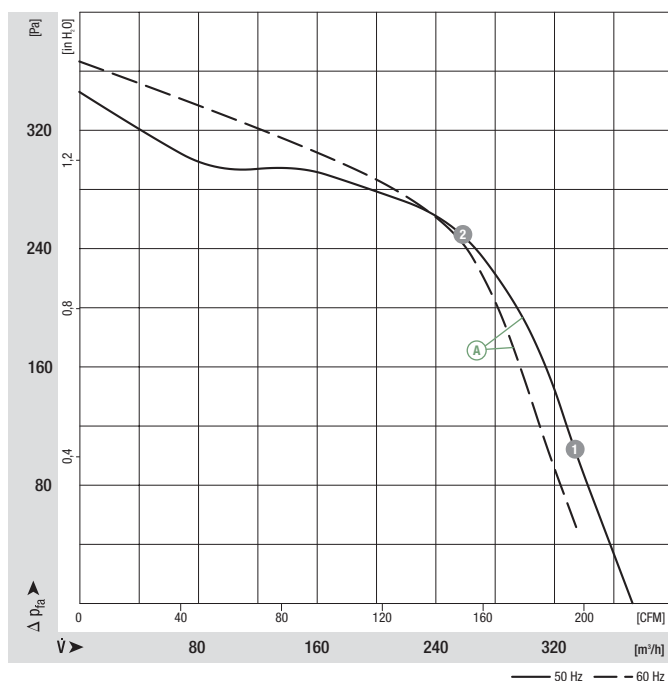


- **Material:** Housing: Die-cast aluminium  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
*2E 140	M2E 068-BF	Ⓐ	1~ 230	50	370	1400	105	0.46	2.0/450	59	0	-25 to +40	A1)
			1~ 230	60	335	1500	115	0.51	2.0/450	57	50	-25 to +45	

subject to alterations

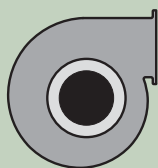
## Curves



- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC, GOST

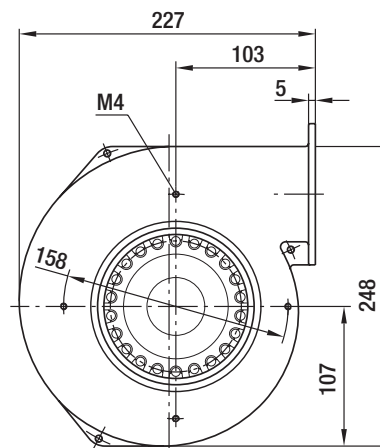
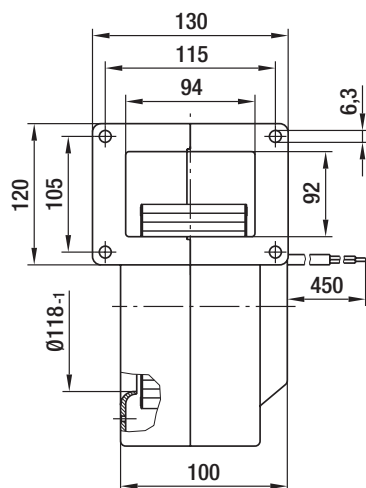
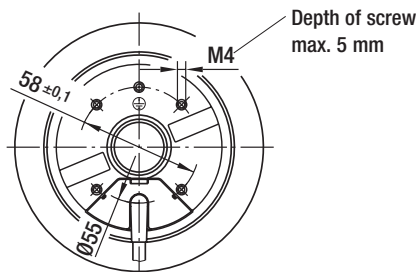
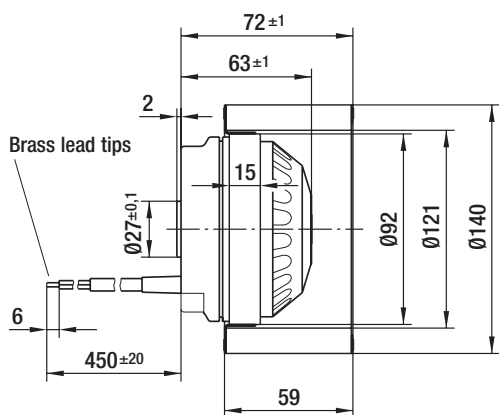


Mass of centrifugal fan



Mass of centrifugal blower

Centrifugal fan	kg	Centrifugal blower with flange	kg
R2E 140-AE77 -05	1.2	G2E 140-AE77 -01	2.6



# AC centrifugal fans and blowers

single inlet, Ø 140

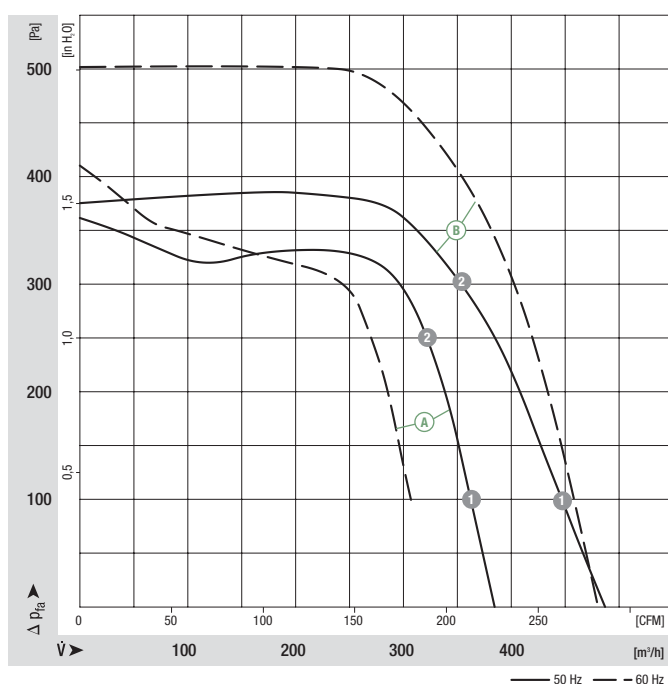


- **Material:** Housing: Die-cast aluminium  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
*2E 140	M2E 068-CF	A	1~ 230	50	385	1650	135	0.60	2.0/400	63	0	-25 to +55	A1)
			1~ 230	60	305	1700	145	0.64	2.0/400	60	100	-25 to +40	
*2E 140	M2E 068-DF	B	1~ 230	50	485	2400	160	0.70	4.0/400	72	0	-25 to +70	A1)
			1~ 230	60	480	2350	205	0.90	4.0/400	71	0	-25 to +45	

subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
A 1	1900	128	0.57
A 2	2200	117	0.52
B 1	2485	148	0.65
B 2	2630	128	0.57

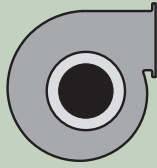


- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC, GOST



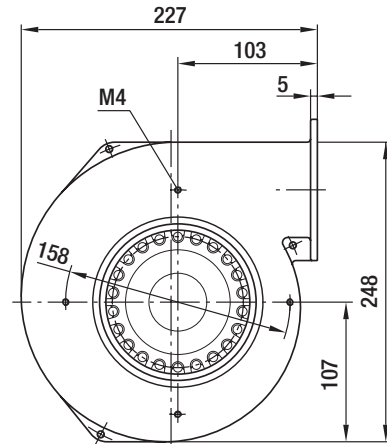
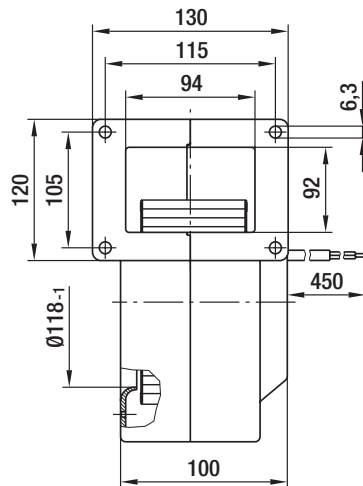
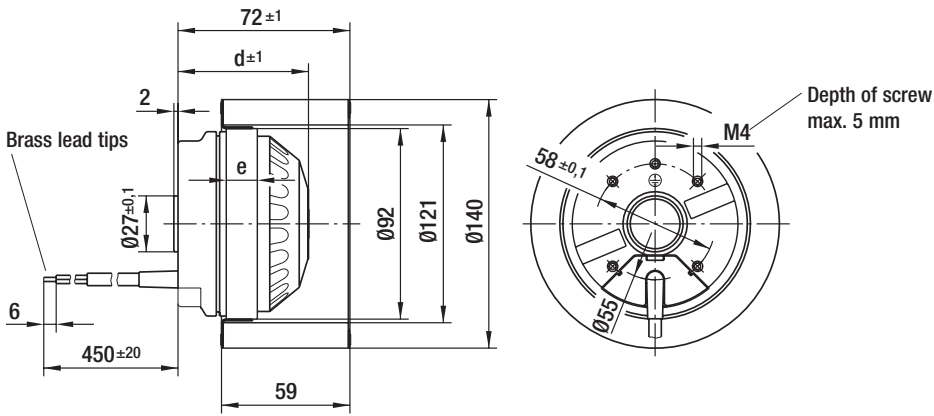
Mass of centrifugal fan

Dimensions



Mass of centrifugal blower

Centrifugal fan	kg	d	e	Centrifugal blower with flange	kg
R2E 140-AL40 -05	1.7	73.0	25.0	G2E 140-AL40 -01	3.0
R2E 140-AI28 -05	2.1	83.0	35.0	G2E 140-AI28 -01	3.4



# AC centrifugal blowers

single inlet, Ø 140

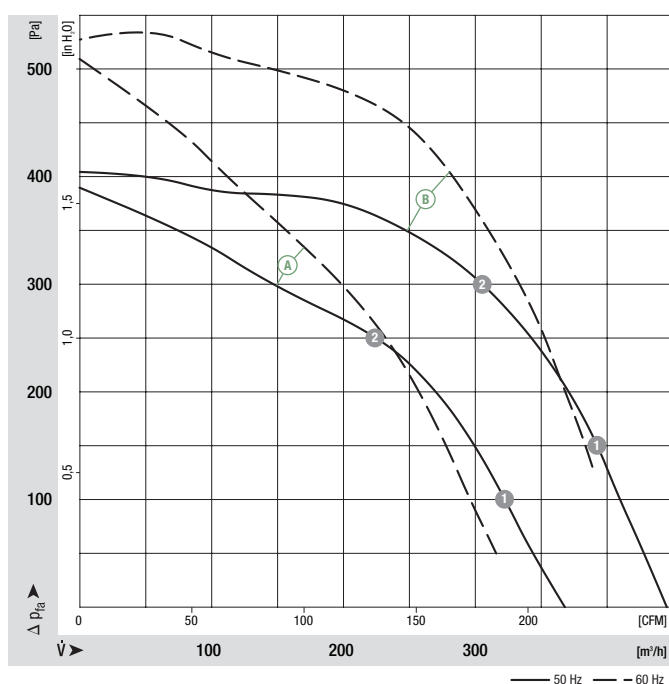


- **Material:** Housing: Heat-resistant plastic  
Impeller: (A) heat-resistant plastic, (B) galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
G2E 140	M2E 068-BF	(A) 1~ 230	50	370	1650	105	0.46	2.0/400	59	0	-25 to +55	A1)	
		1~ 230	60	315	1700	115	0.51	2.0/400	57	50	-25 to +40		
G2E 140	M2E 068-CF	(B) 1~ 230	50	445	2000	137	0.60	3.0/400	65	0	-25 to +65	A1)	
		1~ 230	60	390	2150	155	0.68	3.0/400	64	130	-25 to +50		

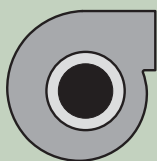
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
(A) 1	1910	98	0.43
(A) 2	2280	86	0.38
(B) 1	2220	123	0.54
(B) 2	2470	105	0.46

- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC, GOST



Mass of centrifugal blower

Centrifugal blower without flange

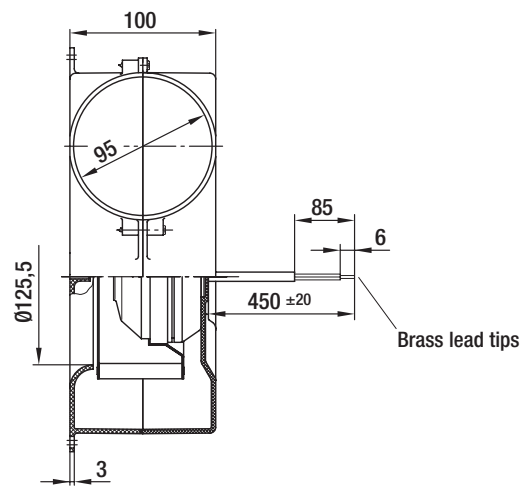
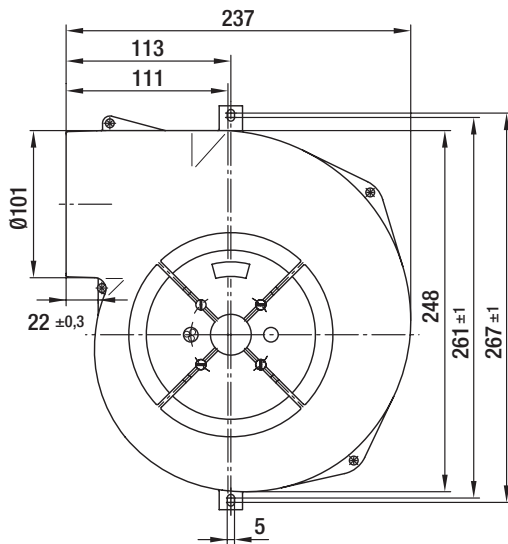
kg

G2E 140-NS38 -01

1.6

G2E 140-NL33 -01

1.6



# AC centrifugal fan and blower

single inlet, Ø 146

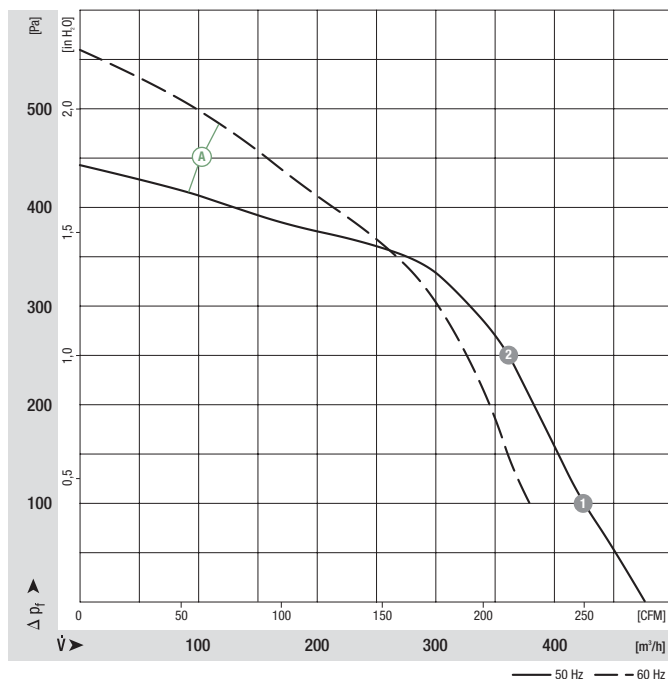


- **Material:** Housing: Die-cast aluminium  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
*2E 146	M2E 068-CA	Ⓐ	1~ 230 1~ 230	50 60	470 380	1550 1750	140 155	0.62 0.68	3.0/450 3.0/450	60 58	0 100	-25 to +50 -25 to +40	A1)

subject to alterations

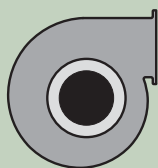
## Curves



- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC, GOST

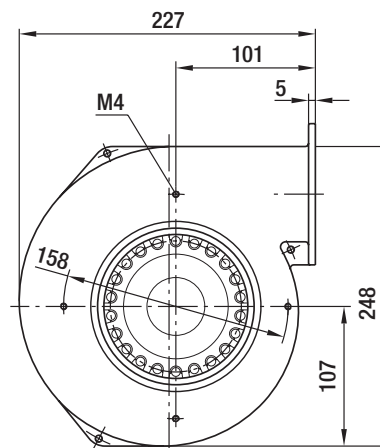
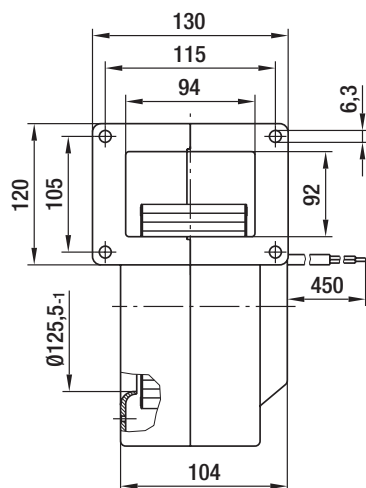
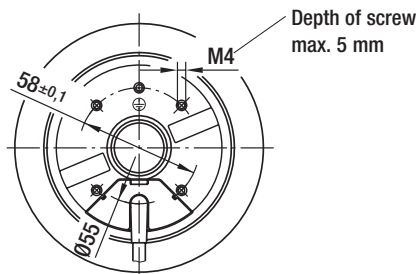
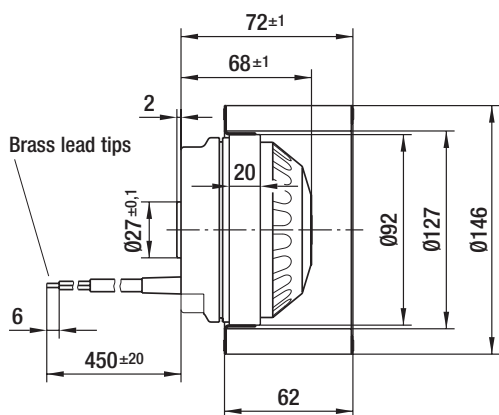


Mass of centrifugal fan



Mass of centrifugal blower

Centrifugal fan	kg	Centrifugal blower with flange	kg
R2E 146-AW07-05	1.4	G2E 146-DW07-01	2.6



# AC centrifugal fans and blowers

single inlet, Ø 160

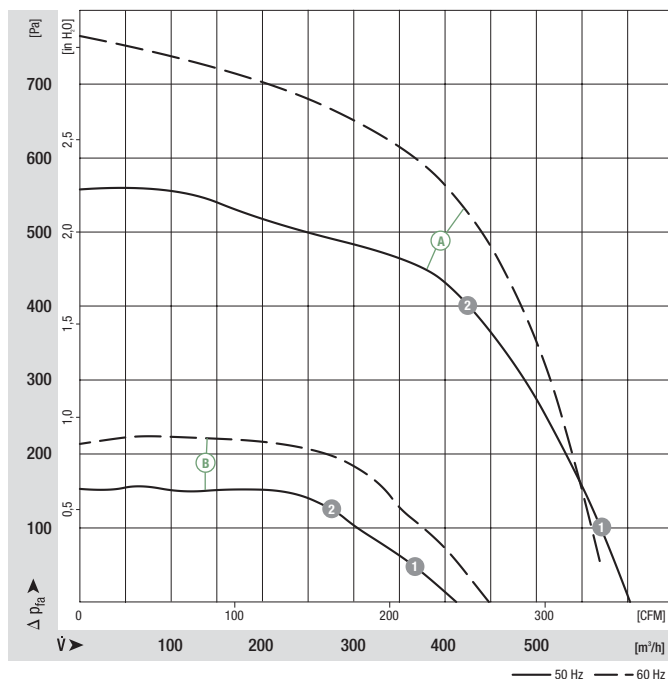


- **Material:** Housing: Die-cast aluminium  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
*2E 160	M2E 068-EC	A	1~ 230	50	600	2100	240	1.05	6.0/400	72	0	-25 to +50	A1)
			1~ 230	60	570	2100	280	1.23	6.0/400	71	50	-25 to +40	
*4E 160	M4E 068-CF	B	1~ 230	50	410	1300	67	0.30	2.0/450	65	0	-25 to +65	A1)
			1~ 230	60	445	1400	90	0.40	2.0/450	67	0	-25 to +65	

subject to alterations

## Curves

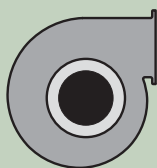


- **Motor protection:** TOP wired internally
- **Cable exit:** (A) variable, (B) lateral
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC



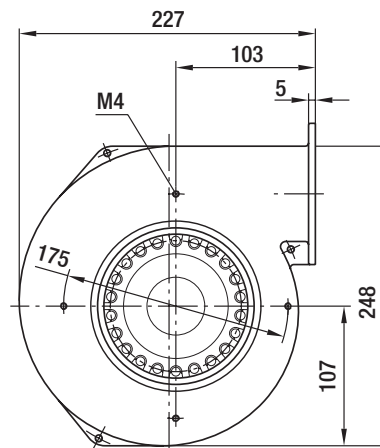
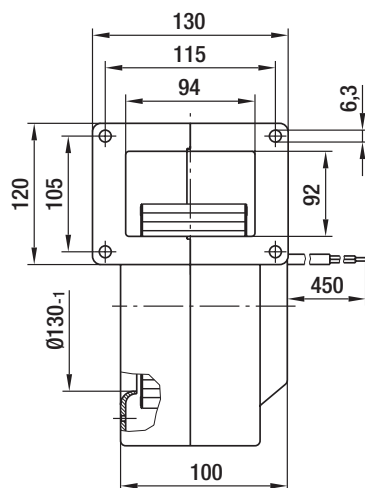
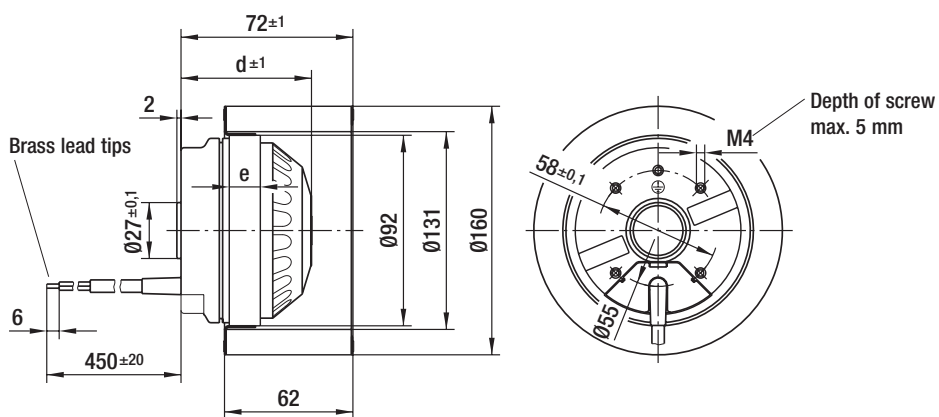
Mass of centrifugal fan

Dimensions



Mass of centrifugal blower

Centrifugal fan	kg	d	e	Centrifugal blower with flange	kg
R2E 160-AY47 -01	2.6	91.0	42.0	G2E 160-AY47 -01	3.9
R4E 160-AB01 -01	1.7	72.0	25.0	G4E 160-AB01 -01	2.9





# AC centrifugal fan and blower

single inlet, Ø 180

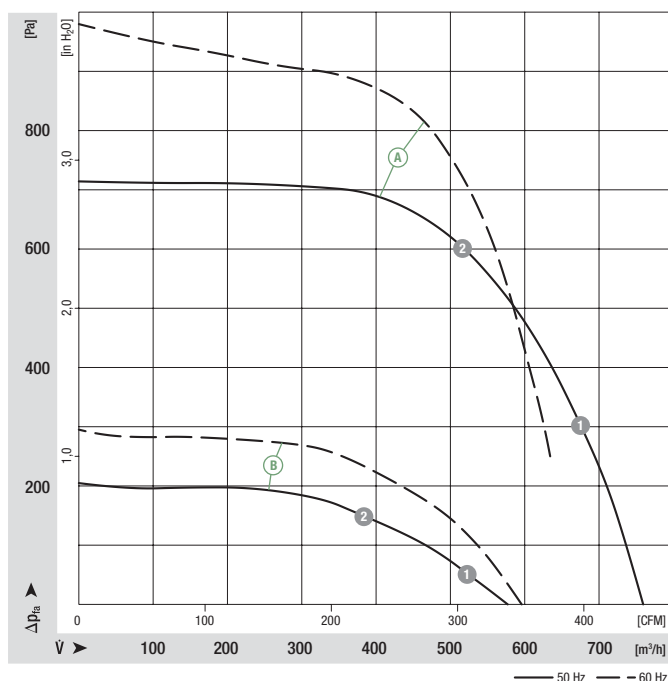


- **Material:** Housing: Die-cast aluminium  
Impeller: Galvanised sheet steel  
Rotor: (A) coated in black, (B) partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
G2E 180	M2E 074-EI	(A)	1~ 230	50	760	1950	400	1.75	8.0/400	73	0	-25 to +40	A1)
			1~ 230	60	630	2150	415	1.82	8.0/400	71	250	-25 to +40	
*4E 180	M4E 068-DF	(B)	1~ 230	50	575	1250	110	0.49	3.0/450	65	0	-25 to +55	A1)
			1~ 230	60	594	1300	145	0.64	3.0/450	65	0	-25 to +45	

subject to alterations

## Curves



Curve	n [rpm]	P <sub>1</sub> [W]	I [A]
(A) 1	2290	335	1.47
(A) 2	2600	255	1.12
(B) 1	1300	105	0.47
(B) 2	1385	92	0.41



# AC centrifugal fan and blower

single inlet, Ø 180

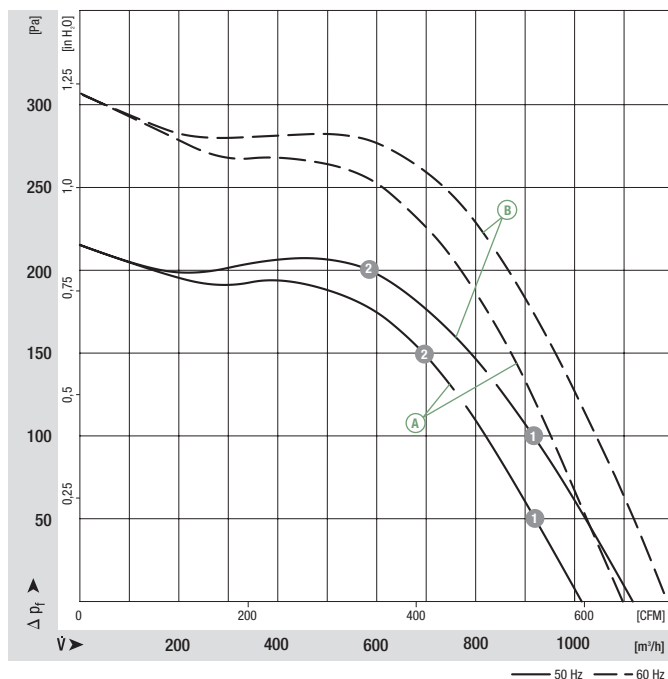


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
*4D 180 <sup>(2)</sup>	M4D 074-DF	A	3~ 230/400	50	1010	1330	175	0.68/0.39	—	67	0	-25 to +60	C1)/C2)
			3~ 230/400	60	1090	1440	240	0.74/0.43	—	69	0	-25 to +55	
G4D 180 <sup>(1)/(2)</sup>	M4D 074-DF	B	3~ 230/400	50	1110	1290	195	0.69/0.40	—	69	0	-25 to +60	C1)/C2)
			3~ 230/400	60	1180	1370	265	0.81/0.47	—	70	0	-25 to +45	

subject to alterations (1) data collected via exhaust duct (step diffuser, 1 m length) (2) 230 VAC Δ / 400 VAC Y

## Curves

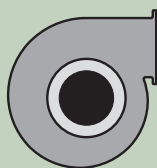


	n [rpm]	P <sub>1</sub> [W]	I [A]
A 1	1360	160	0.62/0.36
A 2	1410	120	0.46/0.27
B 1	1360	163	0.58/0.33
B 2	1420	105	0.38/0.22

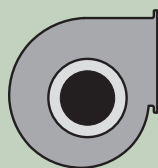
- **Motor protection:** Without thermal protection
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC



Mass of centrifugal fan

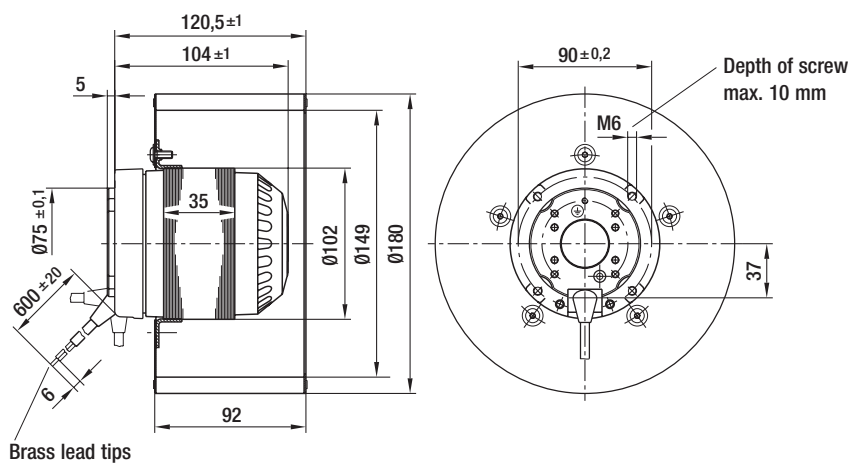


Mass of centrifugal blower

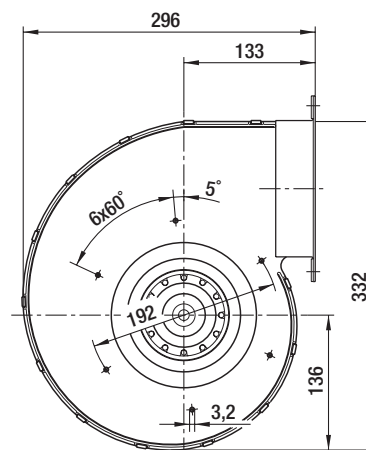
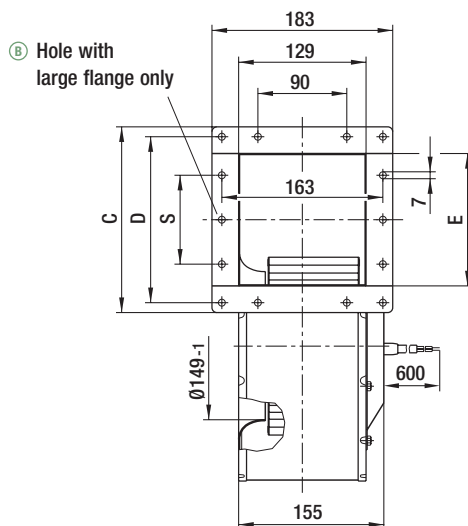


**Dimensions**

Centrifugal fan	kg	Centrifugal blower with flange (small)	Centrifugal blower with flange (large)	kg	C	D	E	S
R4D 180-AF20 -05	3.2	G4D 180-FF20 -01	—	6.4	188.0	168.0	134.0	90.0
—	—	—	G4D 180-GF20 -01	6.4	278.0	258.0	224.0	180.0



Brass lead tips



# AC centrifugal fan and blower

single inlet, Ø 180



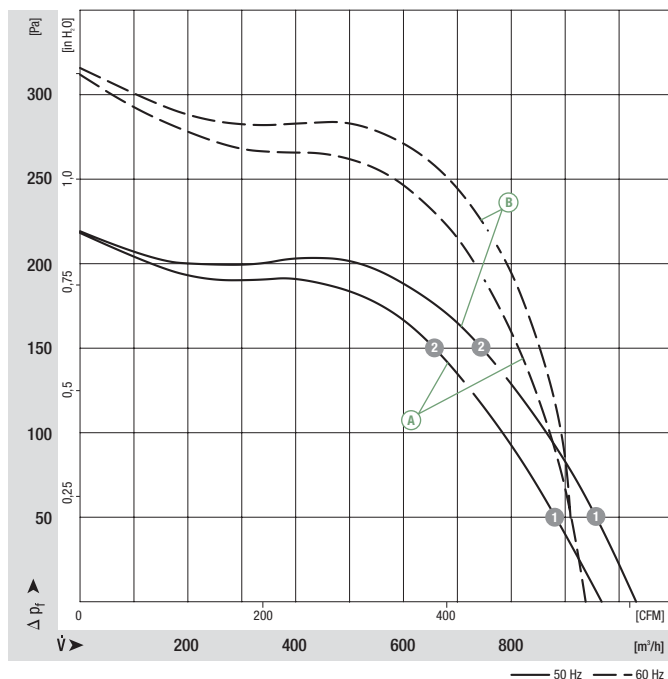
- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
*4E 180	M4E 074-DF	A	1~ 230	50	965	1220	160	0.71	4.0/400	66	0	-25 to +60	A1)
			1~ 230	60	935	1200	197	0.87	4.0/400	65	0	-25 to +40	
G4E 180 <sup>(1)</sup>	M4E 074-DF	B	1~ 230	50	1030	1130	180	0.80	4.0/400	66	0	-25 to +45	A1)
			1~ 230	60	910	1170	200	0.88	4.0/400	64	50	-25 to +35	

subject to alterations

(1) data collected via exhaust duct (step diffuser, length 1 m)

## Curves

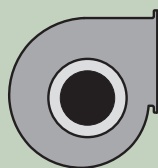
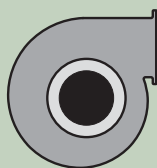


	n [rpm]	P <sub>1</sub> [W]	I [A]
A 1	1280	142	0.63
A 2	1375	112	0.50
B 1	1210	160	0.71
B 2	1340	123	0.55

- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC



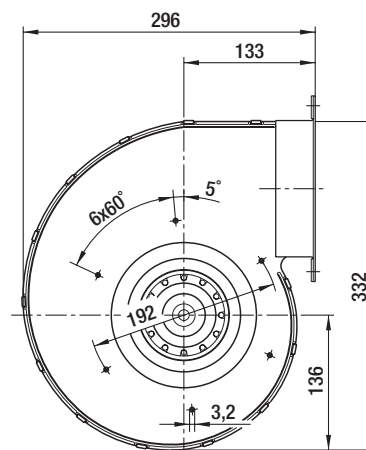
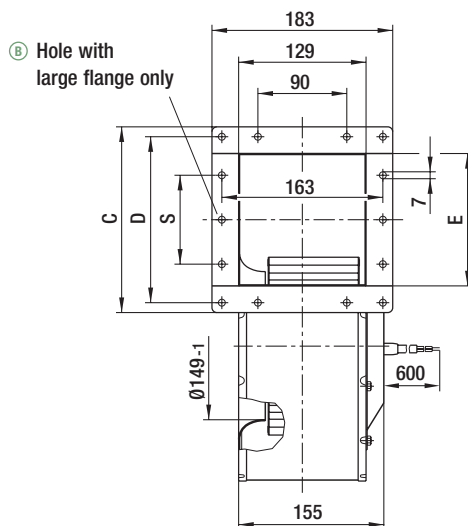
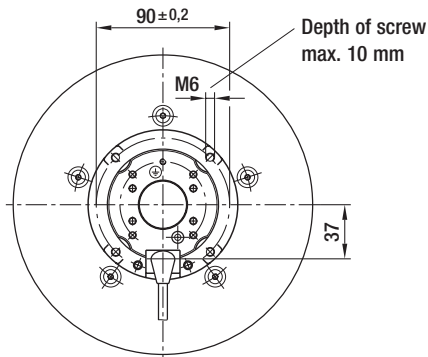
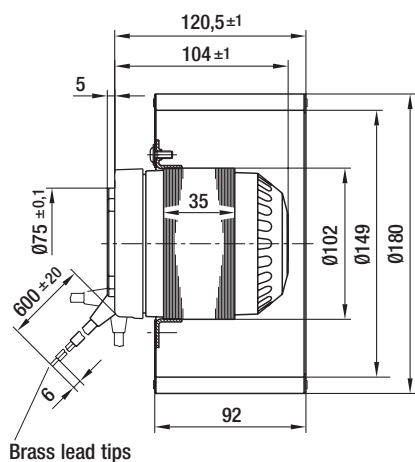
Mass of centrifugal fan



Mass of centrifugal blower

Dimensions

Centrifugal fan	kg	Centrifugal blower with flange (small)	Centrifugal blower with flange (large)	kg	C	D	E	S
R4E 180-AS11 -05	3.2	G4E 180-FS11 -01	—	6.4	188.0	168.0	134.0	90.0
—	—	—	G4E 180-GS11 -01	6.4	278.0	258.0	224.0	180.0



# AC centrifugal fan and blower

single inlet, Ø 200

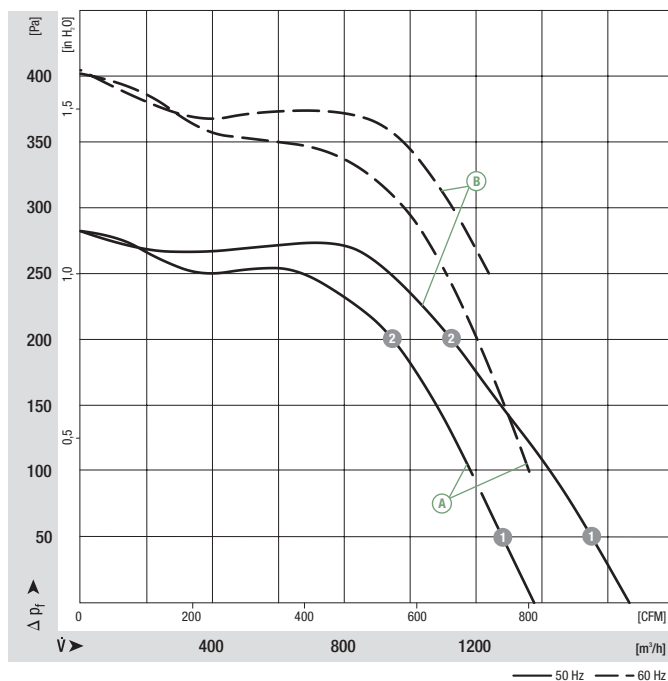


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
*4D 200 <sup>(2)</sup>	M4D 074-EI	A	3~ 230/400	50	1375	1350	285	1.00/0.58	—	69	0	-25 to +45	C1)/C2)
			3~ 230/400	60	1360	1530	360	1.13/0.65	—	69	100	-25 to +45	
G4D 200 <sup>(1)/(2)</sup>	M4D 074-EI	B	3~ 230/400	50	1665	1300	360	1.14/0.66	—	71	0	-25 to +45	C1)/C2)
			3~ 230/400	60	1220	1550	340	1.07/0.62	—	69	250	-25 to +40	

subject to alterations (1) data collected via exhaust duct (step diffuser, 1 m length) (2) 230 VAC Δ / 400 VAC Y

## Curves



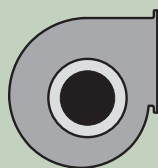
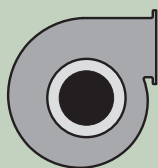
	n [rpm]	P <sub>1</sub> [W]	I [A]
A 1	1375	255	0.90/0.52
A 2	1415	192	0.68/0.39
B 1	1315	330	1.05/0.61
B 2	1385	230	0.74/0.43



- **Motor protection:** Without thermal protection
- **Cable exit:** Axial
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC



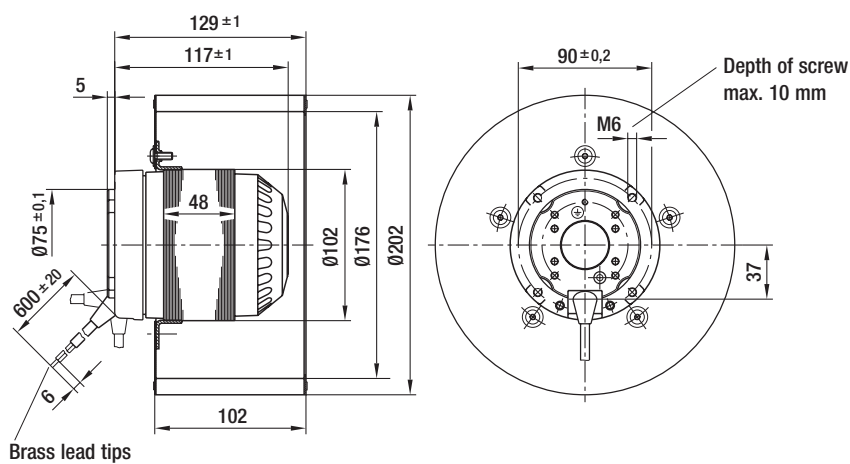
Mass of centrifugal fan



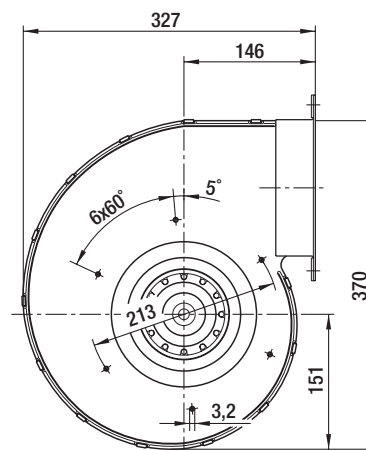
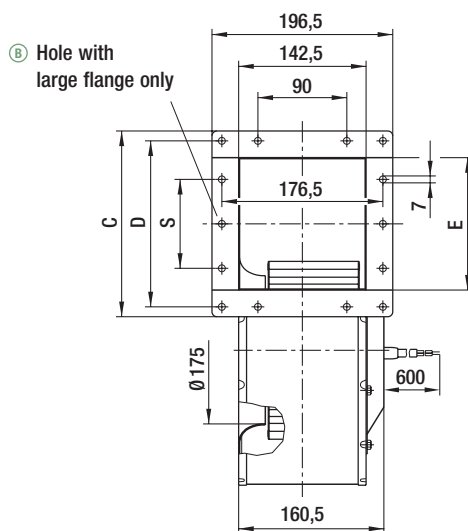
Mass of centrifugal blower

Dimensions

Centrifugal fan	kg	Centrifugal blower with flange (small)	Centrifugal blower with flange (large)	kg	C	D	E	S
R4D 200-AL12 -05	3.7	G4D 200-BL12 -01	—	7.0	200.0	180.0	146.0	90.0
—	—	—	G4D 200-CL12 -01	7.0	304.0	284.0	250.0	180.0

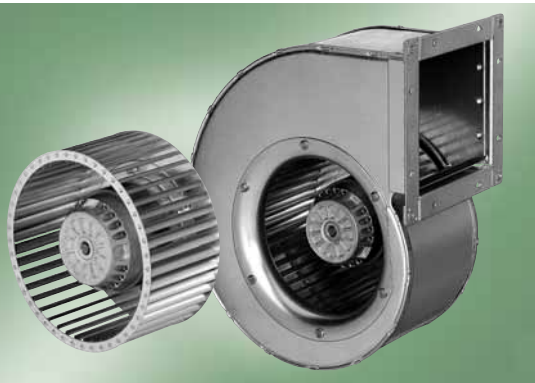


Brass lead tips



# AC centrifugal fans and blowers

single inlet, Ø 200



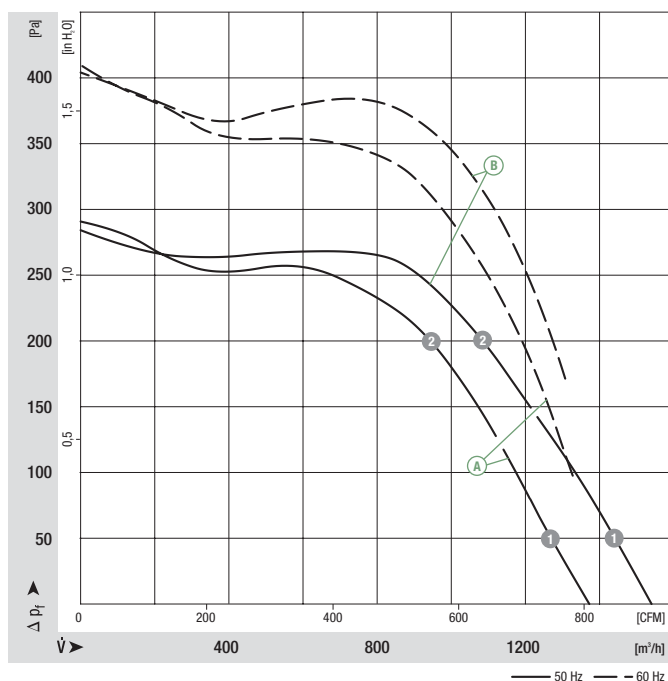
- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor		VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.
*4E 200	M4E 074-EI	A	1~ 230	50	1370	1300	280	1.25	8.0/400	69	0	-25 to +40	A1)
			1~ 230	60	1315	1480	350	1.55	8.0/400	69	100	-25 to +40	
G4E 200 <sup>(1)</sup>	M4E 074-EI	B	1~ 230	50	1540	1240	330	1.45	8.0/400	70	0	-25 to +50	A1)
			1~ 230	60	1300	1430	370	1.62	8.0/400	68	170	-25 to +40	


subject to alterations

(1) data collected via exhaust duct (step diffuser, length 1 m)

## Curves

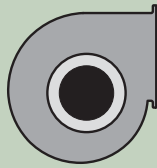
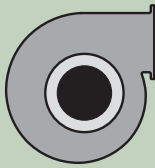


	n [rpm]	P <sub>1</sub> [W]	I [A]
A 1	1350	258	1.15
A 2	1400	214	0.96
B 1	1285	303	1.33
B 2	1370	242	1.07

- **Motor protection:** TOP wired internally
- **Cable exit:** Axial
- **Protection class:** I
- **Capacitor:** FPU (P2) acc. to IEC 252
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC,  also GOST



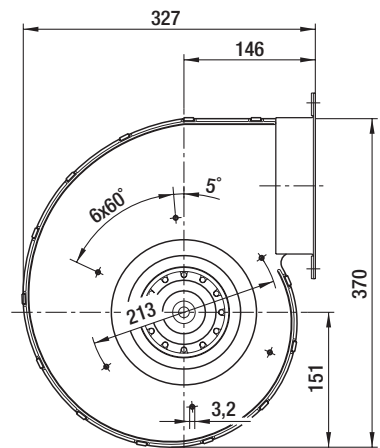
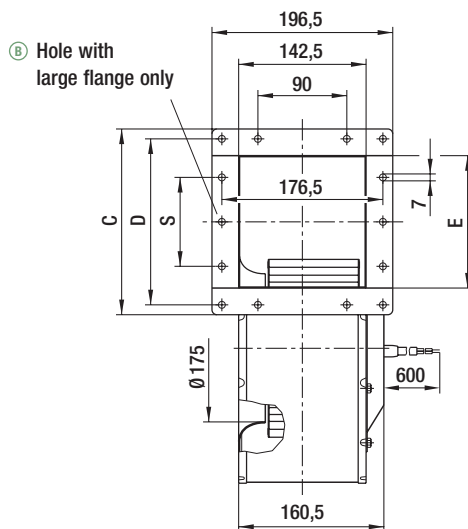
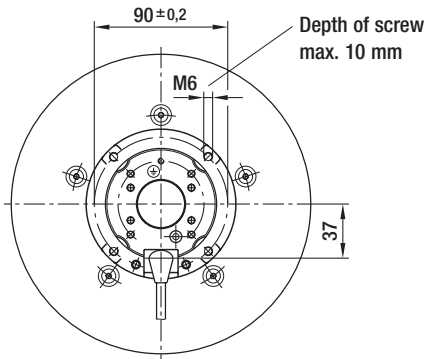
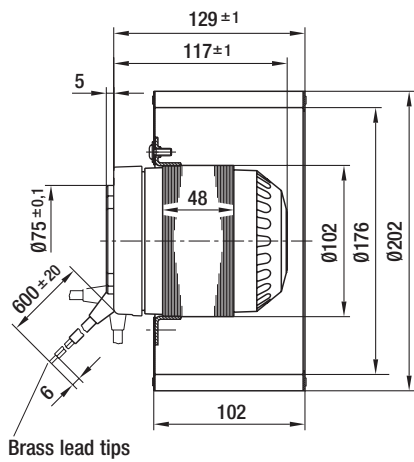
Mass of centrifugal fan



Mass of centrifugal blower

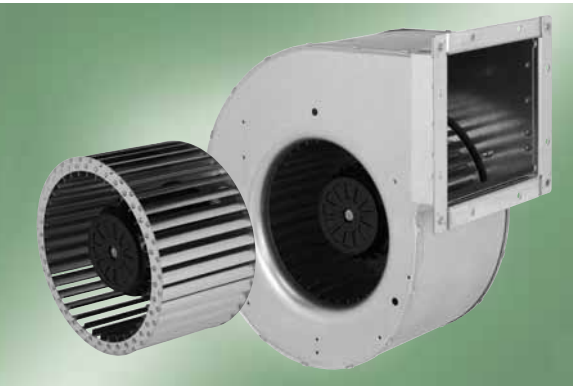
**Dimensions**

Centrifugal fan	kg	Centrifugal blower with flange (small)	Centrifugal blower with flange (large)	kg	C	D	E	S
R4E 200-AL03 -05	3.7	G4E 200-BL03 -01	—	7.0	200.0	180.0	146.0	90.0
—	—	—	G4E 200-CL03 -01	7.0	304.0	284.0	250.0	180.0



# AC centrifugal fan and blower

single inlet, Ø 225

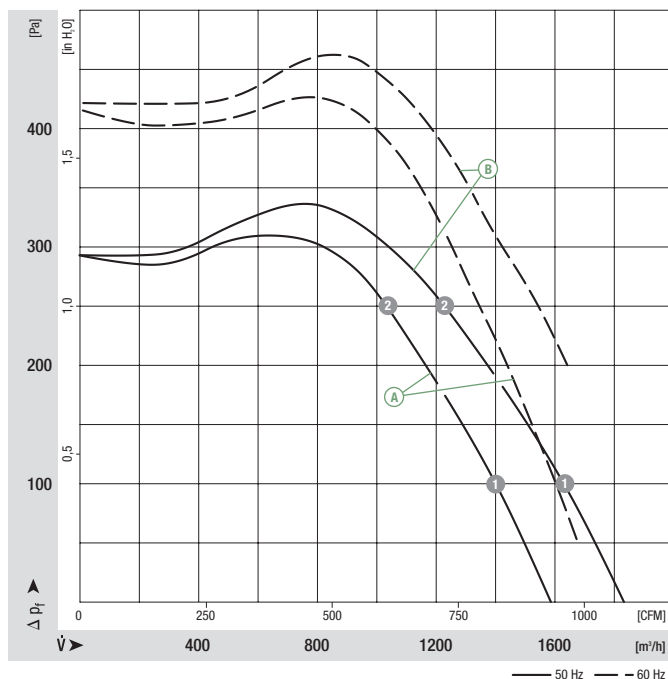


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	W	A	µF/VDB	Pa	°C	p. 596 f.	
*4D 225	M4D 094-FA	Ⓐ 3~ 400 Y	50	1350	380	0.75	—	0	-40 to +90	D2)	
		3~ 400 Y	60	1500	540	0.94	—	50	-40 to +55		
G4D 225 <sup>(2)</sup>	M4D 094-FA	Ⓑ 3~ 400 Y	50	1310	460	0.85	—	0	-40 to +75	D2)	
		3~ 400 Y	60	1520	515	0.90	—	200	-40 to +60		

subject to alterations (1) Nominal data in operating point with maximum load (2) Data collected via exhaust duct (step diffuser, 1 m length)

## Curves

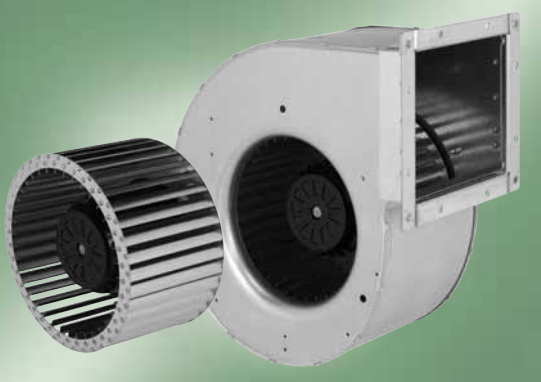


	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1380	325	0.69	71
Ⓐ 2	1420	228	0.60	67
Ⓑ 1	1345	388	0.76	74
Ⓑ 2	1400	271	0.64	69



# AC centrifugal fan and blower

single inlet, Ø 225

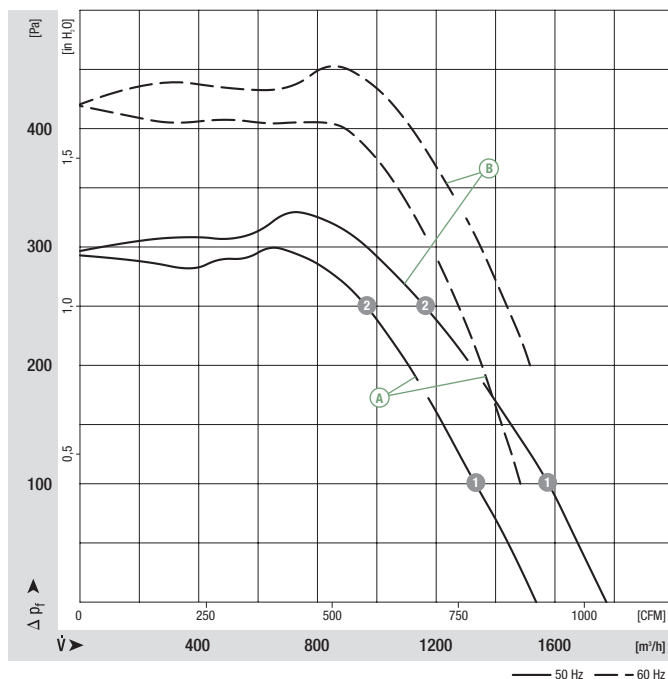


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	W	A	µF/VDB	Pa	°C	p. 596 f.	
*4E 225	M4E 094-FA	A	1~ 230	50	1330	395	1.98	6.0/450	0	-40 to +70	A2a)
			1~ 230	60	1500	500	2.30	6.0/450	100	-40 to +50	
G4E 225 <sup>(2)</sup>	M4E 094-FA	B	1~ 230	50	1260	485	2.30	6.0/450	0	-40 to +55	A2a)
			1~ 230	60	1470	510	2.30	6.0/450	200	-40 to +45	

subject to alterations (1) Nominal data in operating point with maximum load (2) Data collected via exhaust duct (step diffuser, 1 m length)

## Curves

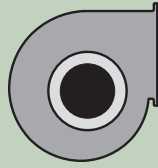
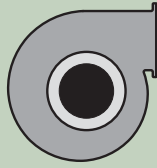


	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
A 1	1365	339	1.75	67
A 2	1415	255	1.46	70
B 1	1320	401	2.00	74
B 2	1395	292	1.57	69

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standard:** CE



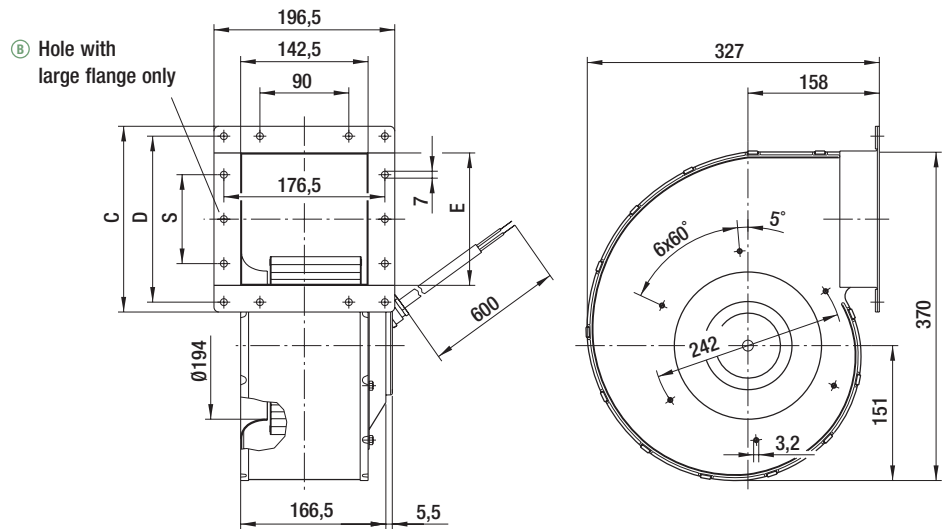
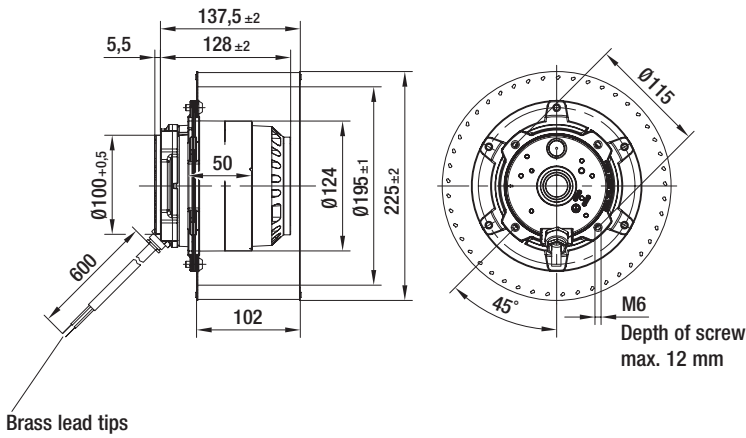
Mass of centrifugal fan



Mass of centrifugal blower

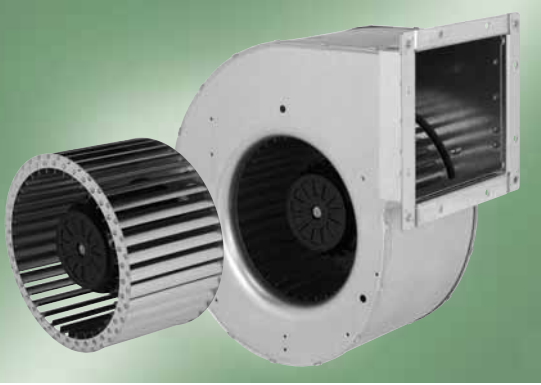
Dimensions

Centrifugal fan	kg	Centrifugal blower with flange (small)	Centrifugal blower with flange (large)	kg	C	D	E	S
R4E 225-BK05 -03	6.6	G4E 225-DK05 -03	—	9.6	200.0	180.0	146.0	90.0
—	—	—	G4E 225-EK05 -03	9.8	304.0	284.0	250.0	180.0



# AC centrifugal fan and blower

single inlet, Ø 250

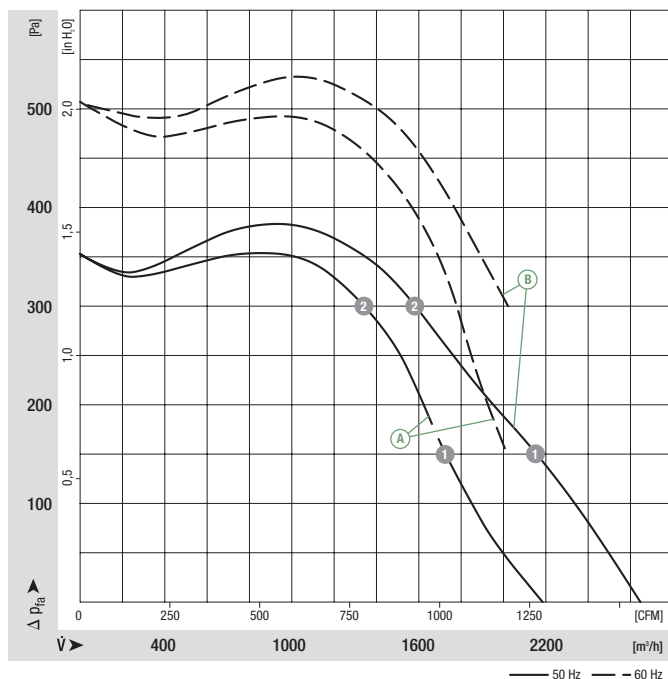


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	W	A	µF/VDB	Pa	°C	p. 596 f.	
*4D 250	M4D 094-HA	A	3~ 400 Y	50	1350	590	1.17	—	0	-40 to +80	D2)
			3~ 400 Y	60	1560	710	1.26	—	150	-40 to +60	
G4D 250 <sup>(2)</sup>	M4D 094-HA	B	3~ 400 Y	50	1280	800	1.46	—	0	-40 to +50	D2)
			3~ 400 Y	60	1560	700	1.24	—	300	-40 to +55	

subject to alterations (1) Nominal data in operating point with maximum load (2) Data collected via exhaust duct (step diffuser, 1 m length)

## Curves



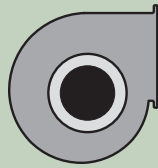
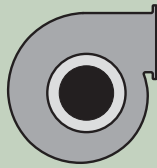
	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
A 1	1390	444	0.99	72
A 2	1430	312	0.87	70
B 1	1330	654	1.13	76
B 2	1410	386	0.94	71



- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standard:** CE
- **Options:** 400 VAC Δ/Y for two speed steps available on request



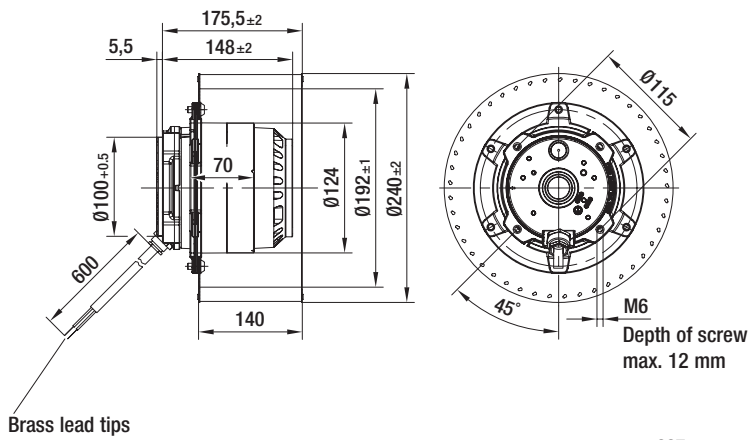
Mass of centrifugal fan



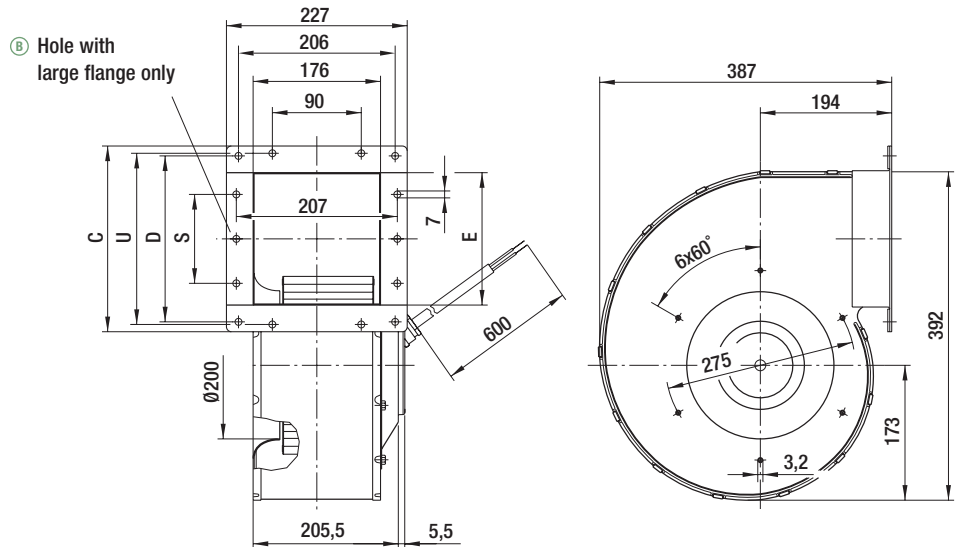
Mass of centrifugal blower

Dimensions

Centrifugal fan	kg	Centrifugal blower with flange (small)	Centrifugal blower with flange (large)	kg	C	D	E	S	U
R4D 250-AC10 -03	9.7	G4D 250-DC10 -03	—	13.1	218.0	190.0	167.0	90.0	198.0
—	—	—	G4D 250-EC10 -03	13.5	313.0	285.0	262.0	180.0	293.0

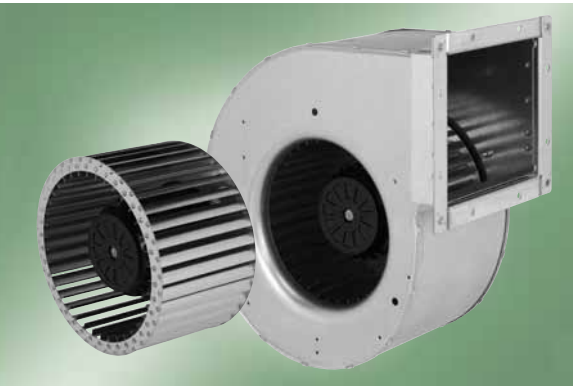


Brass lead tips



# AC centrifugal fan and blower

single inlet, Ø 250

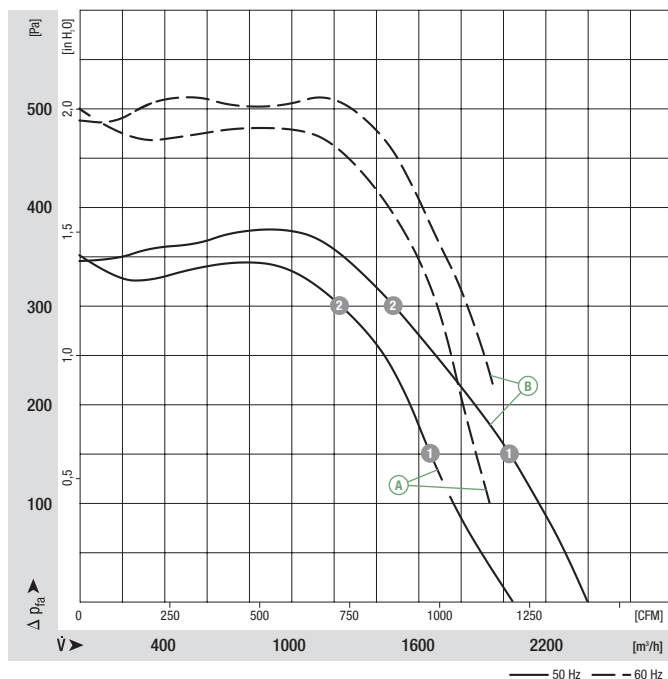


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	W	A	µF/VDB	Pa	°C	p. 596 f.	
*4E 250	M4E 094-HA	A	1~ 230	50	1310	570	2.48	10.0/450	0	-40 to +70	A2a)
			1~ 230	60	1470	690	3.05	10.0/450	100	-40 to +55	
G4E 250 <sup>(2)</sup>	M4E 094-HA	B	1~ 230	50	1150	760	3.80	10.0/450	0	-40 to +45	A2a)
			1~ 230	60	1400	730	3.30	10.0/450	220	-40 to +55	

subject to alterations (1) Nominal data in operating point with maximum load (2) Data collected via exhaust duct (step diffuser, 1 m length)

## Curves

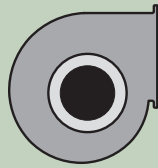
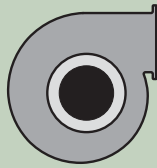


	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
A 1	1370	448	2.25	70
A 2	1420	325	1.85	68
B 1	1310	560	2.73	73
B 2	1390	395	2.05	69

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standard:** CE



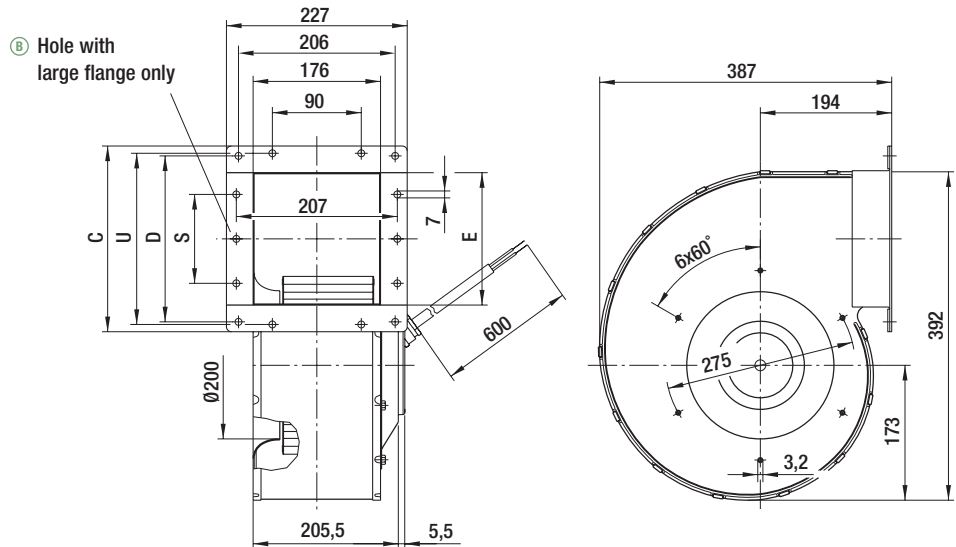
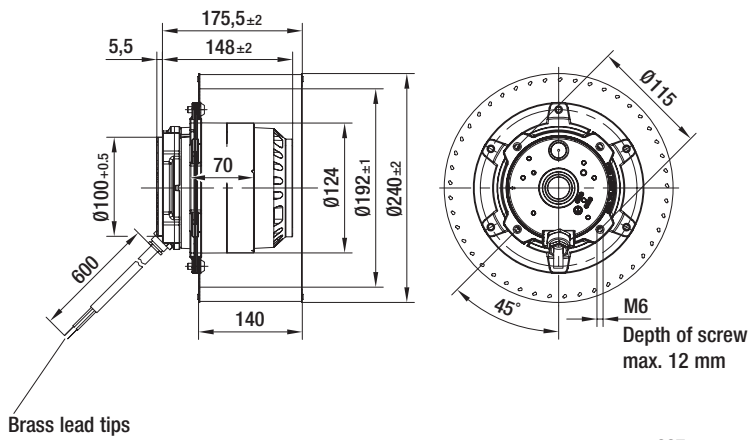
Mass of centrifugal fan



Mass of centrifugal blower

Dimensions

Centrifugal fan	kg	Centrifugal blower with flange (small)	Centrifugal blower with flange (large)	kg	C	D	E	S	U
R4E 250-BA09 -03	9.3	G4E 250-DA09 -03	—	12.7	218.0	190.0	167.0	90.0	198.0
—	—	—	G4E 250-EA09 -03	13.1	313.0	285.0	262.0	180.0	293.0



# AC centrifugal fan and blowers

single inlet, Ø 250

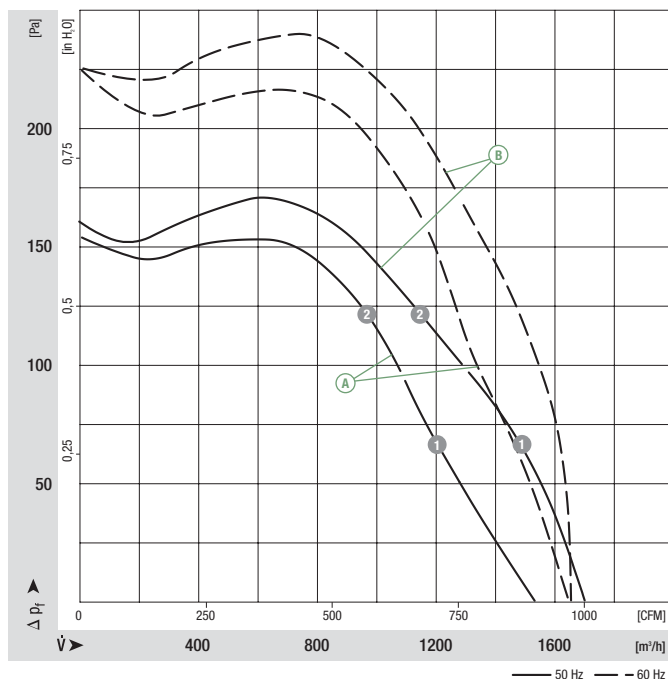


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	W	A	µF/VDB	Pa	°C	p. 596 f.	
*6E 250	M6E 094-FA	A	1~ 230	50	850	220	1.00	6.0/450	0	-40 to +80	A2a)
			1~ 230	60	900	295	1.30	6.0/500	0	-40 to +80	
G6E 250 <sup>(2)</sup>	M6E 094-FA	B	1~ 230	50	780	255	1.15	6.0/450	0	-40 to +80	A2a)
			1~ 230	60	760	305	1.35	6.0/500	0	-40 to +70	

subject to alterations (1) Nominal data in operating point with maximum load (2) Data collected via exhaust duct (step diffuser, 1 m length)

## Curves

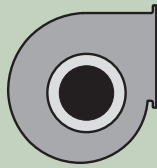


	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
A 1	900	180	0.82	63
A 2	930	156	0.74	61
B 1	855	215	0.96	65
B 2	910	173	0.79	62

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standard:** CE



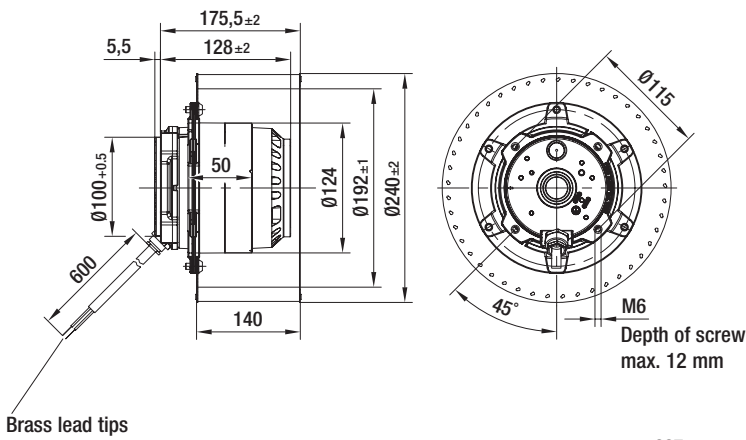
Mass of centrifugal fan



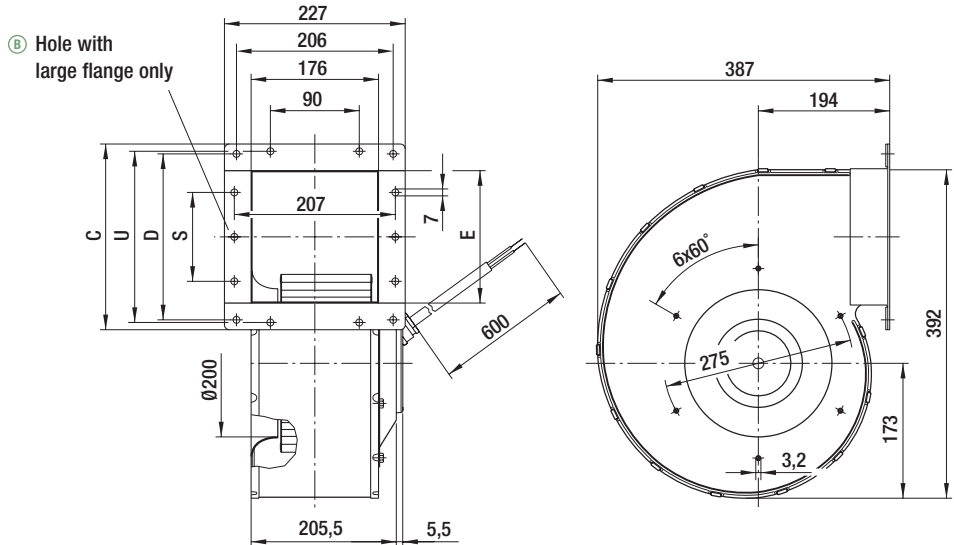
Mass of centrifugal blower

Dimensions

Centrifugal fan	kg	Centrifugal blower with flange (small)	Centrifugal blower with flange (large)	kg	C	D	E	S	U
R6E 250-AK05 -03	7.0	G6E 250-DK05 -03	—	10.5	218.0	190.0	167.0	90.0	198.0
—	—	—	G6E 250-EK05 -03	10.9	313.0	285.0	262.0	180.0	293.0

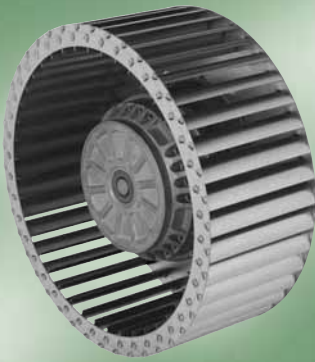


Brass lead tips



# AC centrifugal fans

single inlet, Ø 250

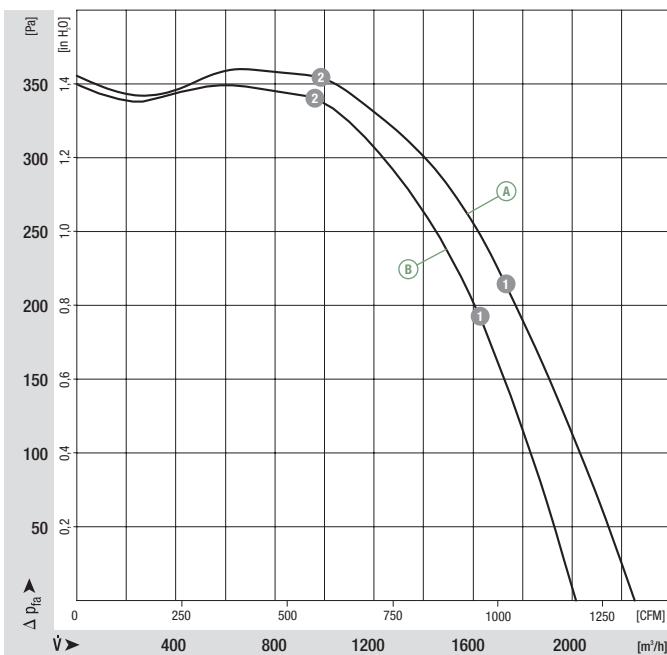


- **Material:** Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharge holes:** On rotor and stator sides
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 596 f.	
<b>R4D 250<sup>(2)</sup></b>	M4D 110-GF	Ⓐ 3~	230/400	50	1400	0.75	2.77/1.60	—	0	-25 to +80	D1)/D2)
<b>R4E 250</b>	M4E 110-GF	Ⓑ 1~	230	50	1270	0.64	2.80	12.0/450	0	-25 to +80	A2a)

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y

## Curves



	n [rpm]	P <sub>1</sub> [kW]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1430	0.53	2.48/1.43	77
Ⓐ 2	1460	0.32	2.23/1.29	70
Ⓑ 1	1370	0.49	2.14	76
Ⓑ 2	1430	0.33	1.49	70



# AC centrifugal fans

single inlet, Ø 250

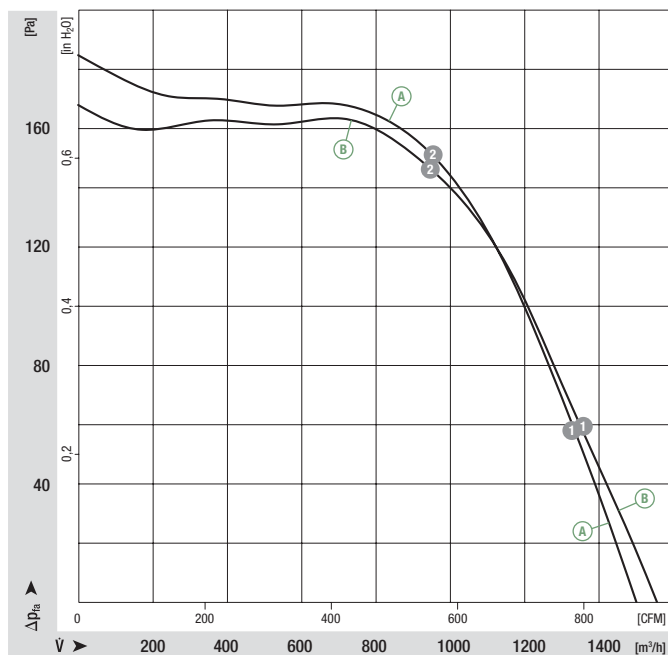


- **Material:** Impeller: Galvanised sheet steel  
Rotor: (A) cast in aluminium, (B) coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharge holes:** (A) on rotor and stator sides, (B) none
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 596 f.	
<b>R6D 250<sup>(2)</sup></b>	M6D 110-EF	(A) 3~ 230/400	50	930	0.27	1.25/0.72	—	0	-25 to +95	D1)/D2)	
<b>R6E 250</b>	M6E 094-FA	(B) 1~ 230	50	800	0.26	1.16	6.0/450	0	-25 to +90	A2a)	

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y

## Curves



	n [rpm]	P <sub>1</sub> [kW]	I [A]	Lp <sub>A</sub> [dB(A)]
(A) 1	945	0.23	1.18/0.68	68
(A) 2	965	0.17	1.11/0.64	63
(B) 1	875	0.22	1.00	67
(B) 2	930	0.17	0.81	62





# AC centrifugal fan and blower

single inlet, Ø 280

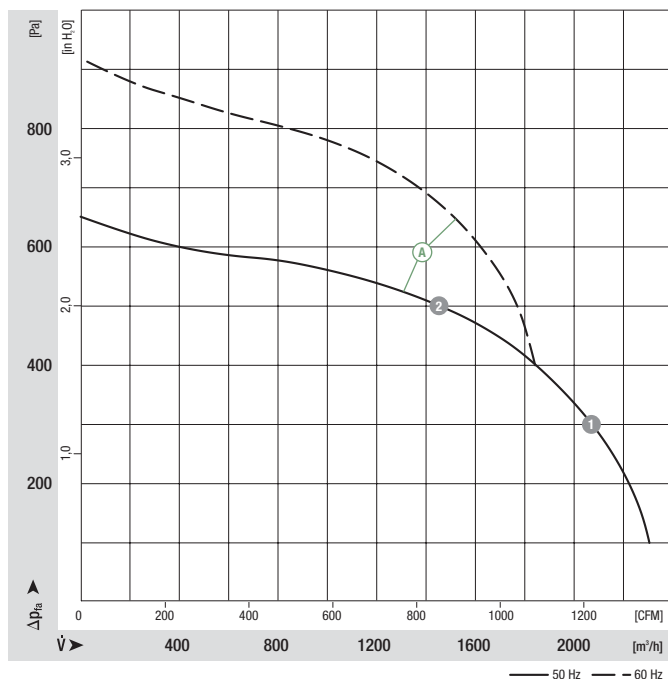


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 20 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	W	A	µF/VDB	Pa	°C	p. 596 f.	
*4E 280	M4E 094-HA	Ⓐ 1~ 230 1~ 230	50 60	1100 1350	1080 990	5.30 4.70	12.0/400 12.0/450	100 400	-40 to +60 -40 to +55	A2a)	

subject to alterations (1) Nominal data in operating point with maximum load

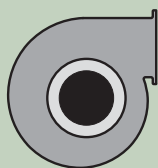
## Curves



- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standard:** CE



Mass of centrifugal fan



Mass of centrifugal blower

Centrifugal fan

kg

Centrifugal blower with flange (small)

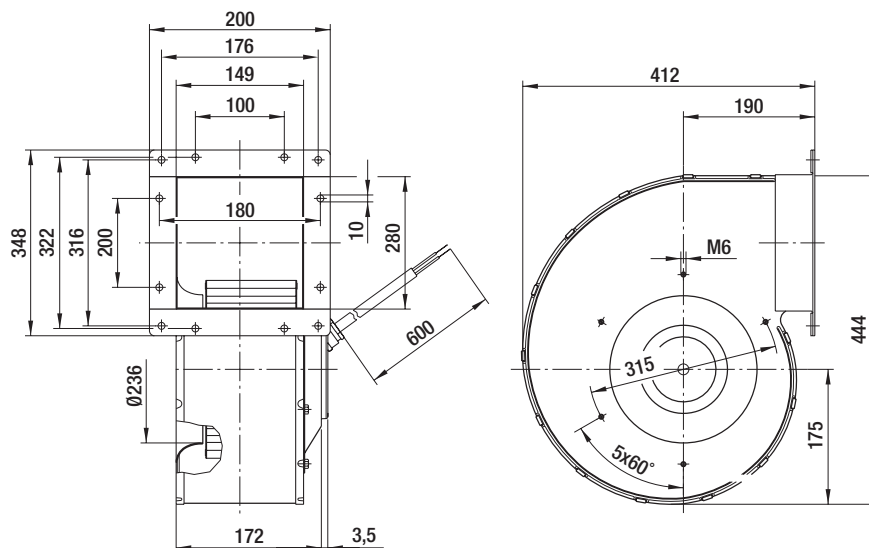
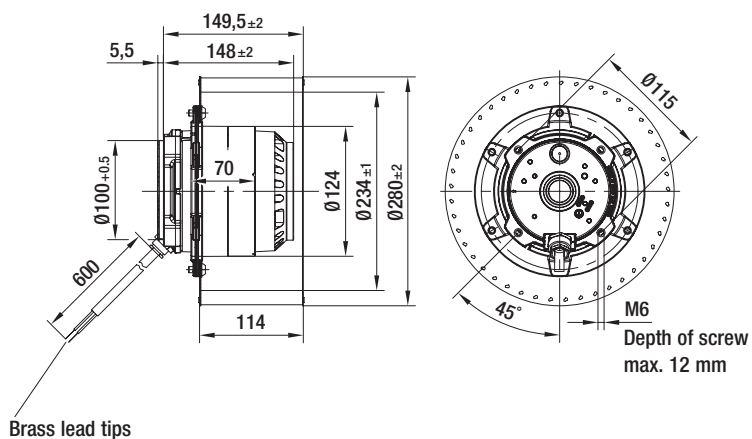
kg

R4E 280-CC21 -01

10.2

G4E 280-CA21 -01

14.0



# AC centrifugal fans

single inlet, Ø 280

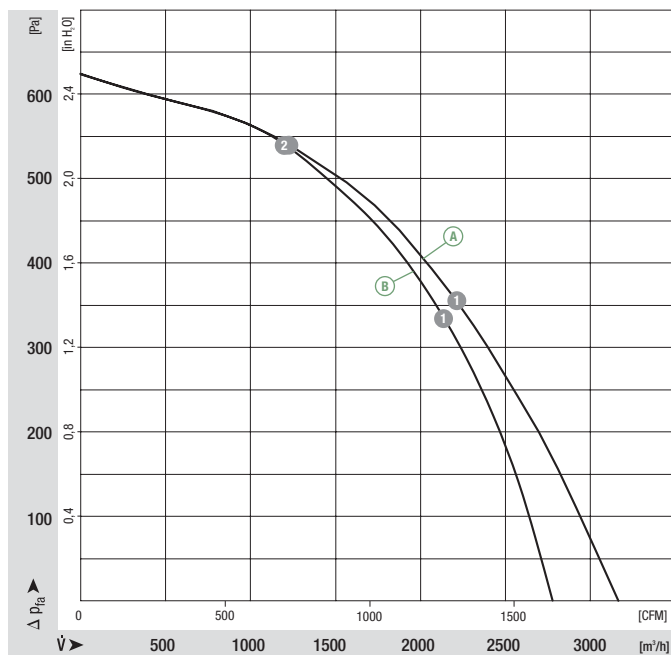


- **Material:** Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharge holes:** On rotor and stator sides
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 596 f.	
<b>R4D 280<sup>(2)</sup></b>	M4D 110-IA	Ⓐ 3~ 230/400	50	1330	1.32	4.75/2.75	—	0	-25 to +65	D1)/D2)	
<b>R4E 280</b>	M4E 110-IA	Ⓑ 1~ 230	50	1230	1.05	4.75	16.0/450	100	-25 to +50	A2a)	

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y

## Curves



	n [rpm]	P <sub>1</sub> [kW]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1390	0.87	3.79/2.19	77
Ⓐ 2	1440	0.51	3.29/1.90	72
Ⓑ 1	1340	0.82	3.59	76
Ⓑ 2	1425	0.54	2.34	72



# AC centrifugal fans

single inlet, Ø 280



- **Material:** Impeller: Galvanised sheet steel  
Rotor: (A) cast in aluminium, (B) coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharge holes:** (A) on rotor and stator sides, (B) none
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

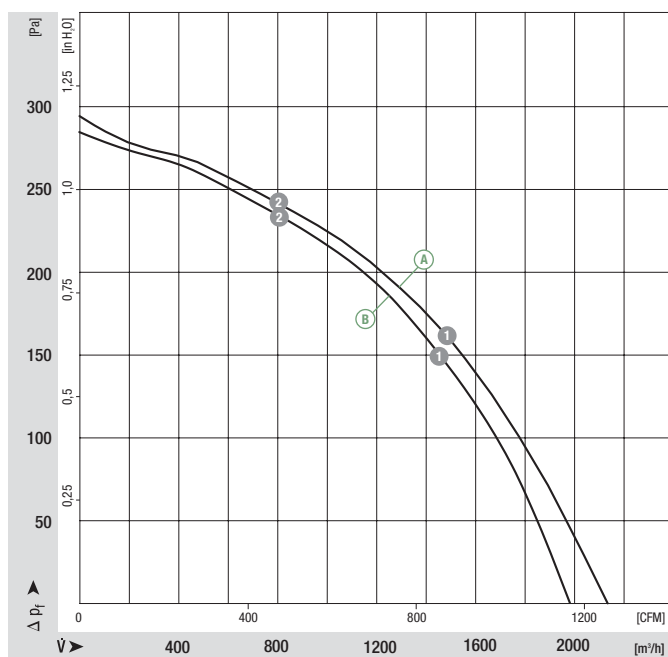
Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 596 f.	
<b>R6D 280</b> <sup>(2)</sup>	M6D 110-EF	(A) 3~ 230/400	50	870	0.45	1.56/0.90	—	0	-25 to +70	D1)/D2)	
<b>R6E 280</b>	M6E 094-HA	(B) 1~ 230	50	795	0.42	1.95	12.0/450	0	-25 to +55	A2a)	

subject to alterations

(1) Nominal data in operating point with maximum load

(2) 230 VAC Δ / 400 VAC Y

## Curves

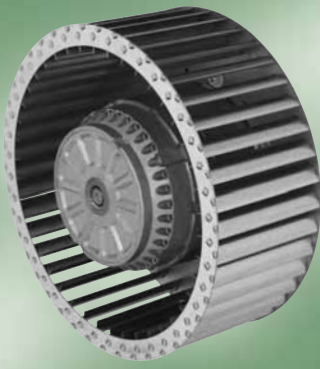


	n [rpm]	P <sub>1</sub> [kW]	I [A]	Lp <sub>A</sub> [dB(A)]
(A) 1	930	0.29	1.30/0.75	66
(A) 2	960	0.18	1.16/0.67	61
(B) 1	890	0.34	1.60	66
(B) 2	940	0.27	1.37	61



# AC centrifugal fan

single inlet, Ø 310

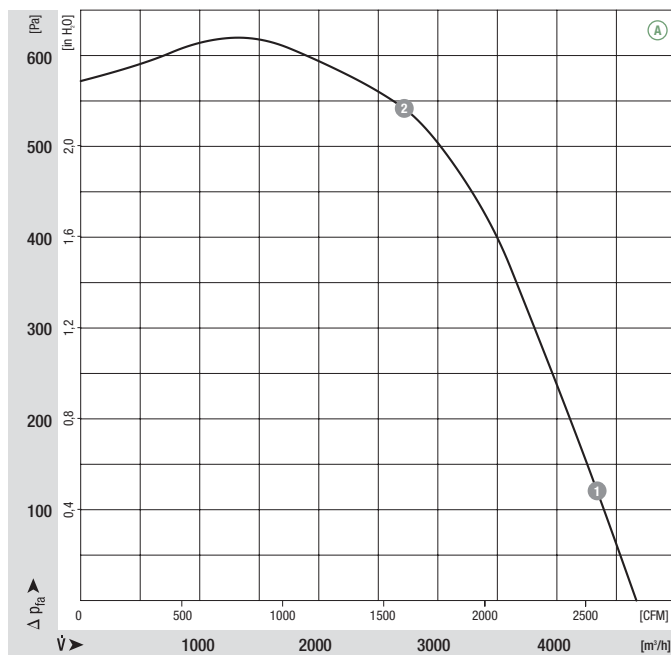


- **Material:** Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharge holes:** On rotor and stator sides
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 596 f.	
<b>R4D 310</b> <sup>(2)</sup>	M4D 138-HF	Ⓐ 3~ 230/400	50	1310	2.18	6.29/3.90	—	0	-25 to +55	D1)/D2)	

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y

## Curves



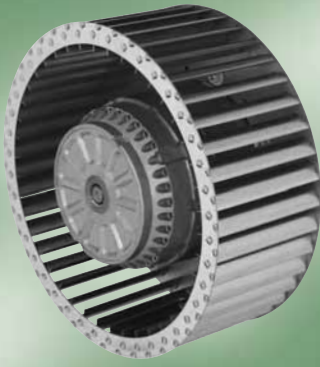
	n [rpm]	P <sub>1</sub> [kW]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1330	1.96	6.29/3.63	82
Ⓐ 2	1410	1.12	4.43/2.56	77





# AC centrifugal fans

single inlet, Ø 310



- **Material:** Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharge holes:** On rotor and stator sides
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

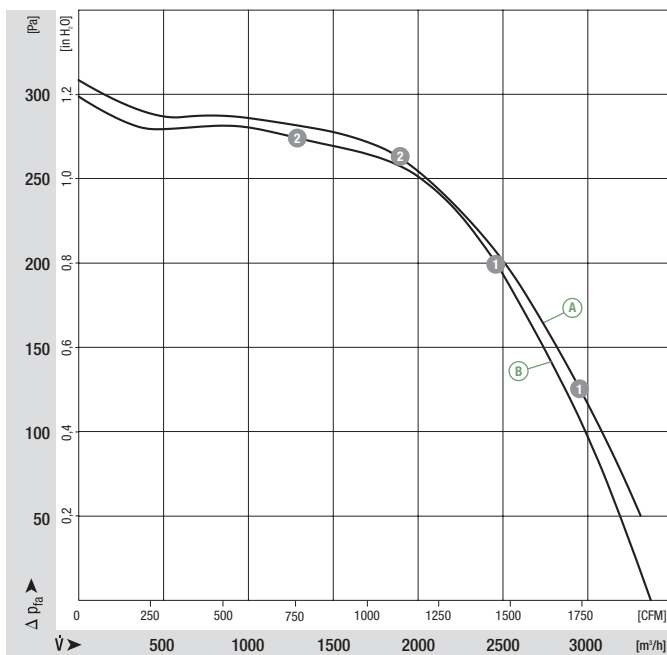
Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 596 f.	
<b>R6D 310<sup>(2)</sup></b>	M6D 110-GF	Ⓐ 3~ 230/400	50	840	0.76	2.50/1.45	—	50	-25 to +50	D1)/D2)	
<b>R6E 310</b>	M6E 110-IA	Ⓑ 1~ 230	50	800	0.77	3.37	16.0/400	0	-25 to +65	A2a)	

subject to alterations

(1) Nominal data in operating point with maximum load

(2) 230 VAC Δ / 400 VAC Y

## Curves



	n [rpm]	P <sub>1</sub> [kW]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	870	0.65	2.25/1.30	72
Ⓐ 2	930	0.40	1.75/1.01	67
Ⓑ 1	900	0.58	2.81	70
Ⓑ 2	950	0.42	2.32	65



# AC centrifugal fan

single inlet, Ø 355

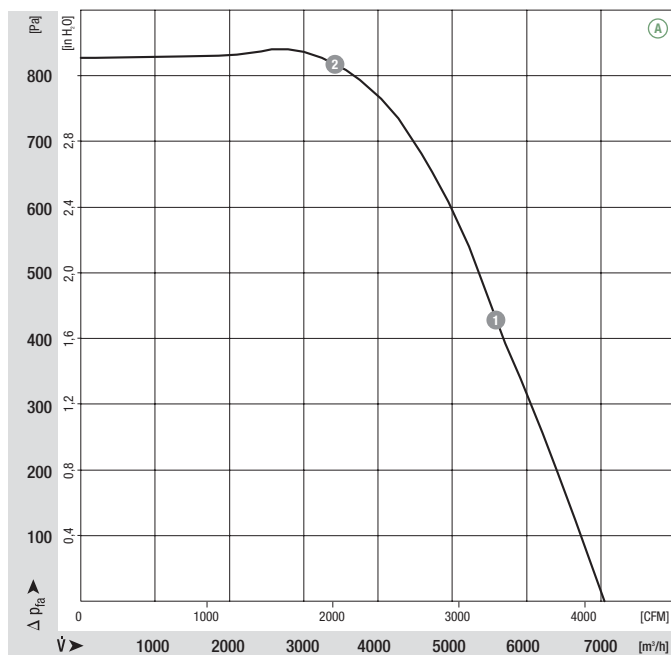


- **Material:** Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 20 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 596 f.	
<b>R4D 355</b> <sup>(2)</sup>	M4D 138-LA	Ⓐ 3~	230/400	50	1300	4.36	13.75/7.95	—	0	-25 to +70	D1)/D2)

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y

## Curves

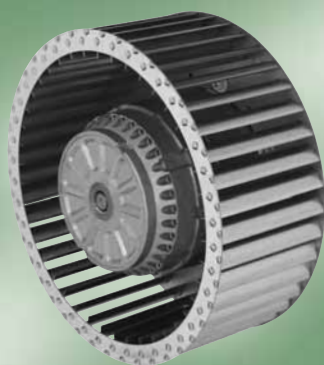


	n [rpm]	P <sub>1</sub> [kW]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1370	3.20	10.58/6.11	86
Ⓐ 2	1430	1.89	7.52/4.34	80



# AC centrifugal fans

single inlet, Ø 355



- **Material:** Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharge holes:** On rotor and stator sides
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

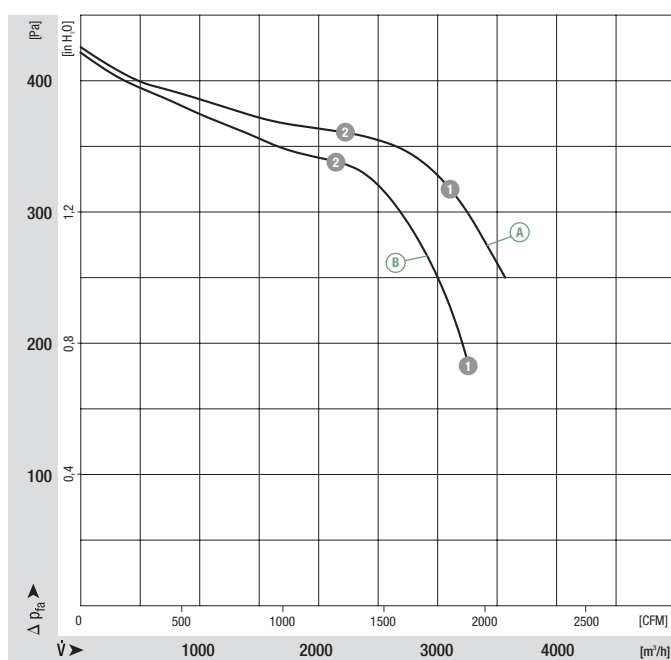
Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 596 f.	
<b>R6D 355<sup>(2)</sup></b>	M6D 110-IA	Ⓐ 3~ 230/400	50	865	0.90	3.05/1.77	—	250	-25 to +50	D1)/D2)	
<b>R6E 355</b>	M6E 110-IA	Ⓑ 1~ 230	50	830	0.83	3.90	16.0/400	175	-25 to +55	A2a)	

subject to alterations

(1) Nominal data in operating point with maximum load

(2) 230 VAC Δ / 400 VAC Y

## Curves



	n [rpm]	P <sub>1</sub> [kW]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	890	0.78	2.82/1.63	70
Ⓐ 2	920	0.59	2.44/1.41	68
Ⓑ 1	830	0.83	3.90	70
Ⓑ 2	890	0.61	2.90	67

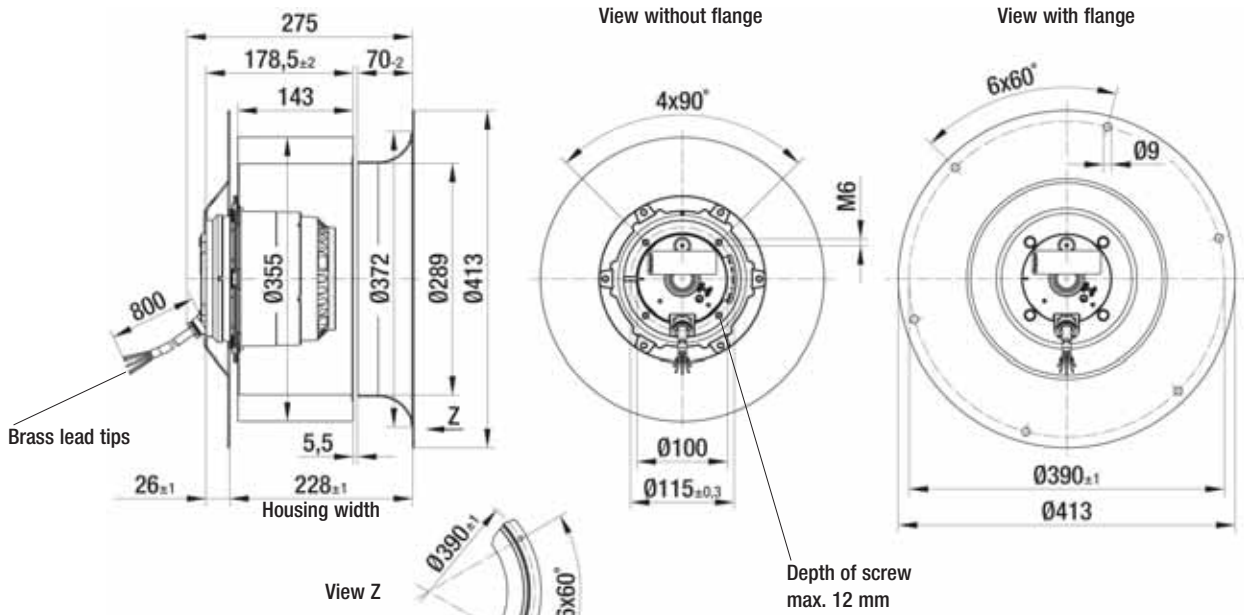
- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** VDE (acc. to EN 60034)



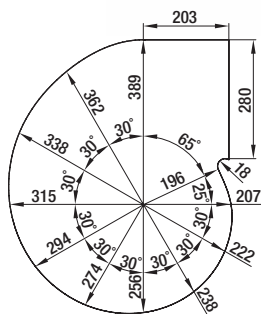
Mass of centrifugal fan



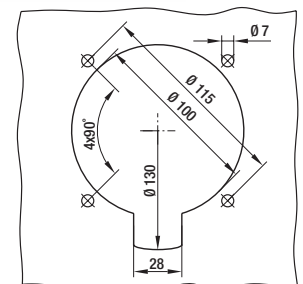
Centrifugal fan	kg	Inlet nozzle	Flange
R6D 355-CI05 -01	15.5	35510-2-4013	10355-2-4017
R6E 355-CI01 -01	15.5	35510-2-4013	10355-2-4017



Scroll housing used:

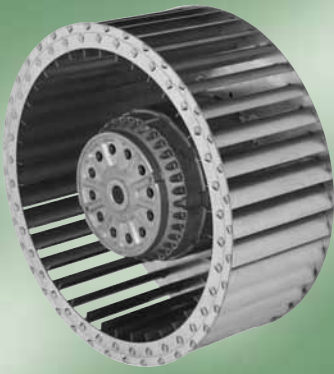


Mounting dimensions



# AC centrifugal fan

single inlet, Ø 400

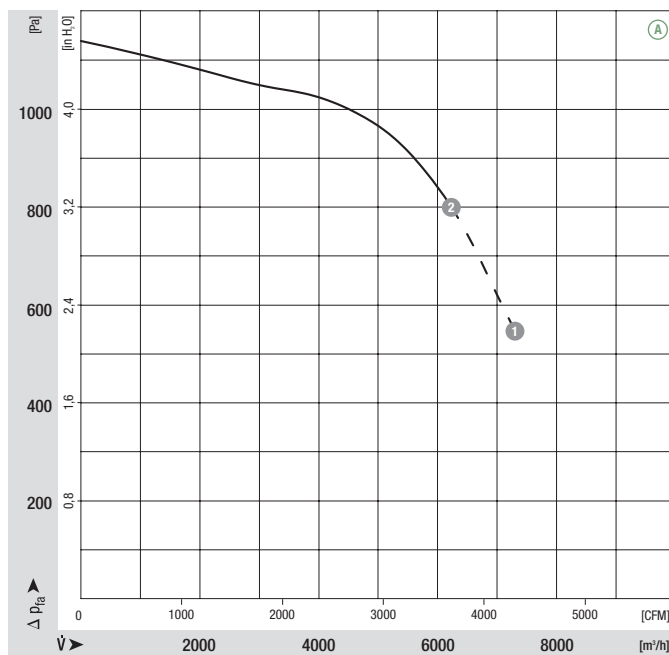


- **Material:** Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 20 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 596 f.	
<b>R4D 400<sup>(2)</sup></b>	M4D 138-NA	Ⓐ 3~	230/400	50	1210	4.92	14.70/8.50	—	550 <sup>(3)</sup>	-25 to +35	D1)/D2)

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y (3) without voltage control

## Curves



	n [rpm]	P <sub>1</sub> [kW]	I [A]	L <sub>pA</sub> [dB(A)]
Ⓐ 1	1210	4.92	14.70/8.50	87
Ⓐ 2	1300	3.70	11.19/6.46	86

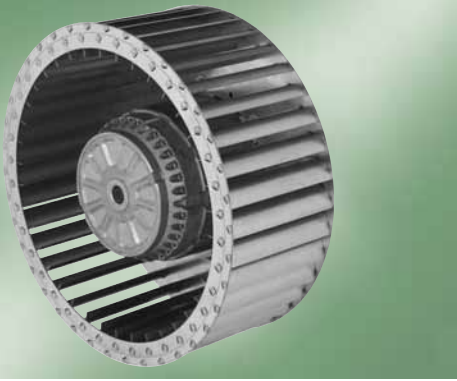
--- ohne Spannungssteuerung einsetzbar





# AC centrifugal fans

single inlet, Ø 400

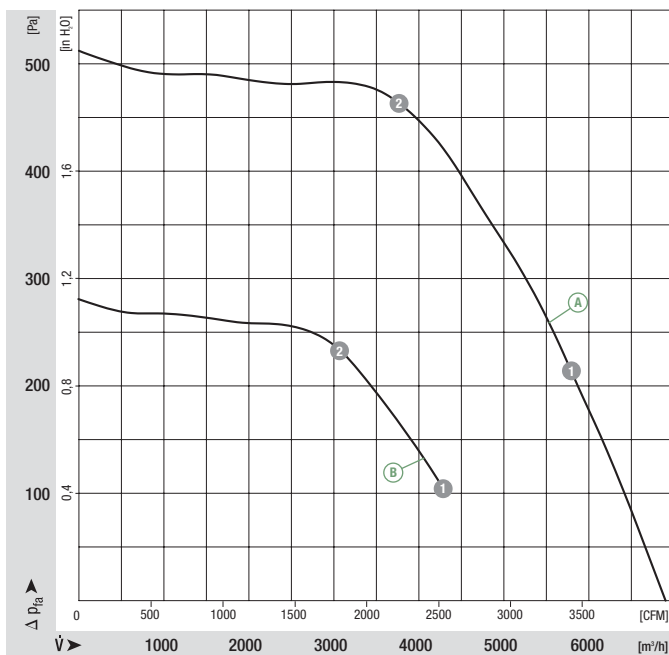


- **Material:** Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** (A) IP 20, (B) IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharge holes:** (A) none, (B) on rotor and stator sides
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 596 f.	
<b>R6D 400<sup>(2)</sup></b>	M6D 138-LA	(A) 3~	230/400	50	840	2.40	8.47/4.90	—	0	-25 to +75	D1)/D2)
<b>R8D 400<sup>(2)</sup></b>	M8D 138-HF	(B) 3~	230/400	50	615	0.89	3.46/2.00	—	100	-25 to +65	D1)/D2)

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y

## Curves



	n [rpm]	P <sub>1</sub> [kW]	I [A]	Lp <sub>A</sub> [dB(A)]
(A) 1	890	1.86	7.10/4.10	80
(A) 2	940	1.16	5.51/3.18	74
(B) 1	615	0.89	3.46/2.00	71
(B) 2	675	0.60	2.74/1.58	67



# AC centrifugal blowers

dual inlet, Ø 140

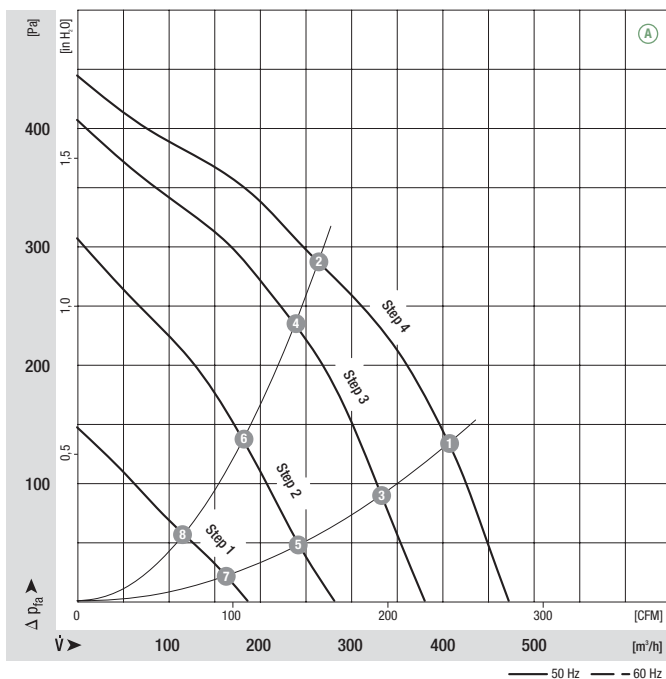


- **Material:** Housing: PP plastic, black  
Impeller: PP plastic, white  
Rotor: Partially cast in aluminium  
Terminal box: PP plastic, black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** 4-step blower with integrated terminal box, standard external-rotor motor anti-vibration mounted on one side
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C		
D2E 140	M2E 068-CF	Ⓐ 1 ~ 230	50	470	1150	130	0.58	2.0/400	58	0	-25 to +50	—	
		1 ~ 230	60	430	1050	130	0.58	2.0/400	56	0	-25 to +40		

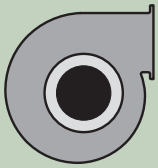
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1675	118	0.51	56
Ⓐ 2	2235	100	0.43	59
Ⓐ 3	1385	93	0.41	52
Ⓐ 4	2020	80	0.36	56
Ⓐ 5	1000	73	0.33	46
Ⓐ 6	1540	68	0.31	49
Ⓐ 7	690	56	0.26	36
Ⓐ 8	1015	55	0.25	38

- **Motor protection:** TOP wired internally
- **Connection leads:** Via plug
- **Protection class:** I
- **Capacitor:** FPU (P2) integrated in terminal box completely wired up and ready for plug-in
- **Product conforming to standards:** EN 60335-2-31, CE
- **Approvals:** VDE



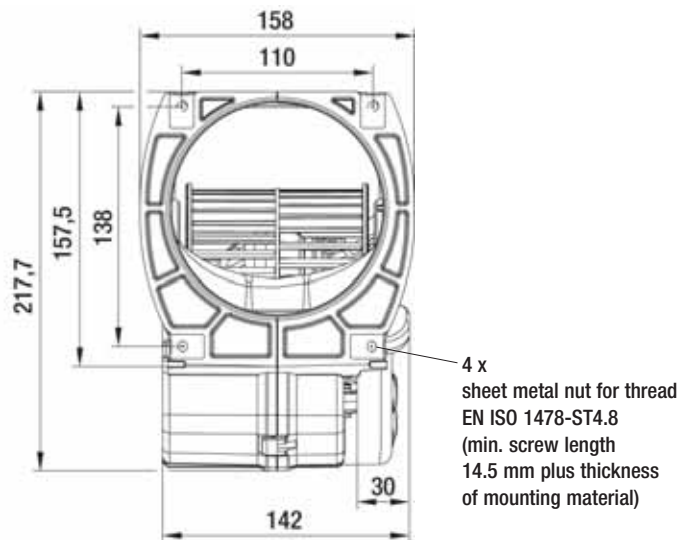
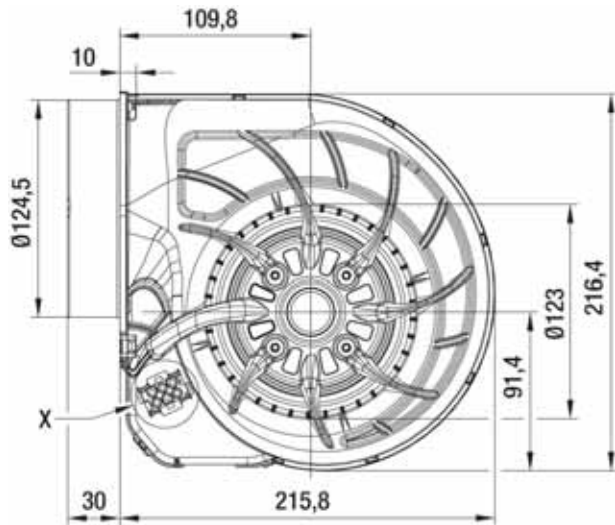
Mass of centrifugal blower

Centrifugal blower with flange

kg

D2E 140-HR97 -07

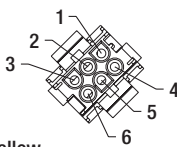
2.3



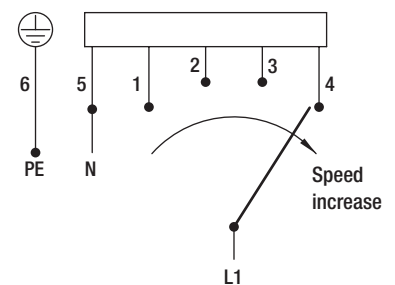
**View X**

AMP Universal Mate-N-Lok coded plug system  
 Connector shell: AMP 926 682-3  
 6 x plug pin: AMP 926 886-1

- 1 = Step 1 (min.) white
- 2 = Step 2 red
- 3 = Step 3 grey
- 4 = Step 4 (max.) black
- 5 = N blue
- 6 = Protective earth green/yellow



**Electrical connection:**  
 When changing speeds, switch must break the circuit



# AC centrifugal blowers

dual inlet, Ø 146



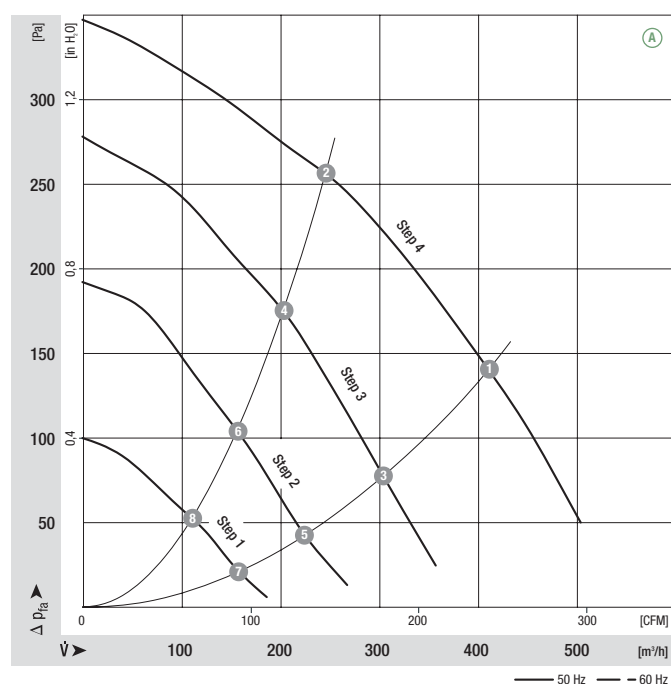
- **Material:** Housing: PP plastic, black  
Impeller: PA plastic, red-brown  
Rotor: Partially cast in aluminium  
Terminal box: PP plastic, black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** 4-step blower with integrated terminal box, standard external-rotor motor anti-vibration mounted via support plate
- **Bearings:** Maintenance-free ball bearings

## Nominal data

Type	Motor	Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
			VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	
D2E 146	M2E 068-CA	Ⓐ	1~ 230	50	520	1350	120	0.53	3.0/400	51	50	-25 to +55	—
			1~ 230	60	375	1400	125	0.55	3.0/400	53	100	-25 to +40	

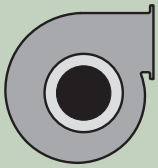
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1635	113	0.49	55
Ⓐ 2	2115	104	0.45	58
Ⓐ 3	1210	72	0.36	48
Ⓐ 4	1740	66	0.35	53
Ⓐ 5	925	58	0.31	40
Ⓐ 6	1355	55	0.30	47
Ⓐ 7	660	48	0.27	31
Ⓐ 8	960	46	0.26	38

- **Motor protection:** TOP wired internally
- **Connection leads:** Via plug
- **Protection class:** I
- **Capacitor:** FPU (P2) integrated in terminal box completely wired up and ready for plug-in
- **Product conforming to standards:** EN 60335-2-31, CE
- **Approvals:** VDE



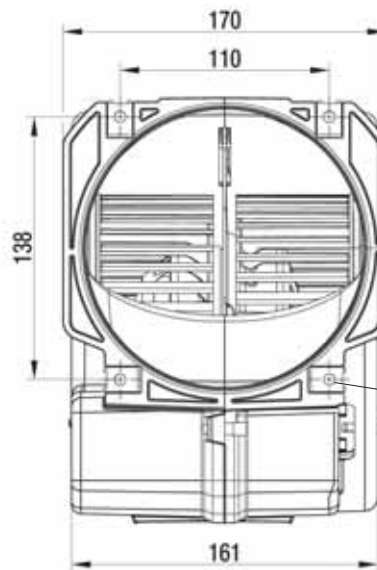
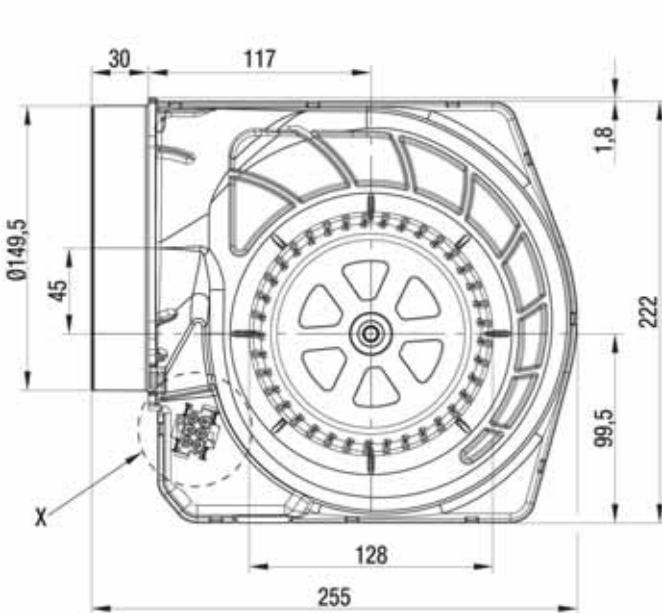
Mass of centrifugal blower

Centrifugal blower with flange

kg

D2E 146-KA45 -01

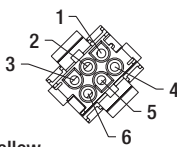
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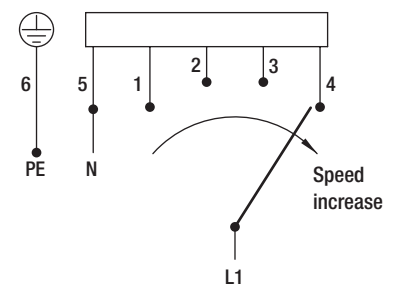
**View X**

AMP Universal Mate-N-Lok coded plug system  
 Connector shell: AMP 926 682-3  
 6 x plug pin: AMP 926 886-1

- 1 = Step 1 (min.) white
- 2 = Step 2 red
- 3 = Step 3 grey
- 4 = Step 4 (max.) black
- 5 = N blue
- 6 = Protective earth green/yellow



**Electrical connection:**  
 When changing speeds, switch must break the circuit





# AC centrifugal blowers

dual inlet, Ø 146

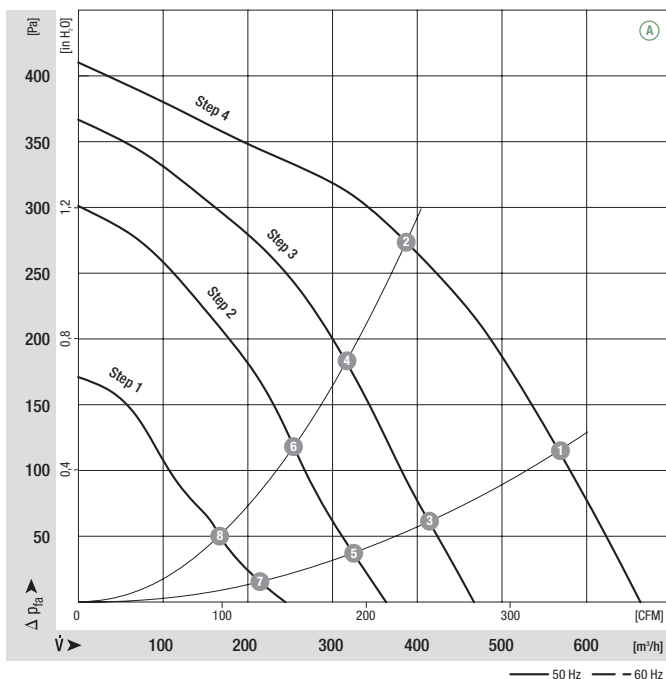


- **Material:** Housing: PP plastic, black  
Impeller: PA plastic, red-brown  
Rotor: Partially cast in aluminium  
Terminal box: PP plastic, black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** 4-step blower with integrated terminal box, standard external-rotor motor anti-vibration mounted via support plate
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C		
D2E 146	M2E 068-CF	Ⓐ 1 ~ 230	50	665	1250	160	0.70	4.0/400	53	0	-25 to +50	—	
		1 ~ 230	60	390	1950	170	0.75	4.0/400	58	200	-25 to +40		

subject to alterations

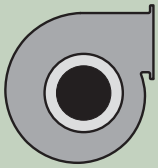
## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1675	151	0.66	59
Ⓐ 2	2185	136	0.60	62
Ⓐ 3	1230	101	0.50	50
Ⓐ 4	1800	92	0.47	55
Ⓐ 5	950	85	0.43	43
Ⓐ 6	1440	80	0.42	49
Ⓐ 7	660	71	0.37	31
Ⓐ 8	960	68	0.36	38



- **Motor protection:** TOP wired internally
- **Connection leads:** Via plug
- **Protection class:** I
- **Capacitor:** FPU (P2) integrated in terminal box completely wired up and ready for plug-in
- **Product conforming to standards:** EN 60335-2-31, CE
- **Approvals:** VDE



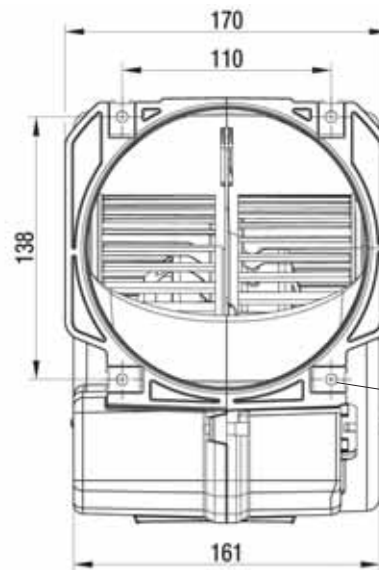
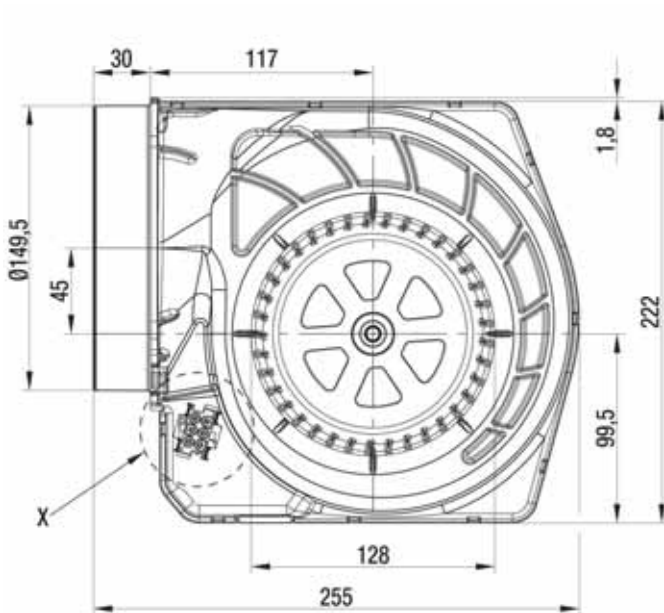
Mass of centrifugal blower

Centrifugal blower with flange

kg

D2E 146-KB27 -01

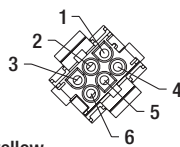
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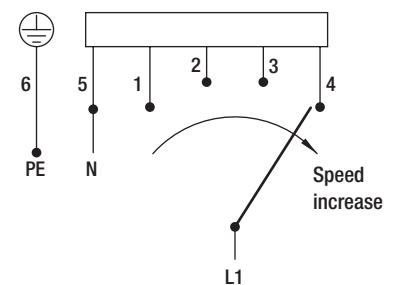
**View X**

AMP Universal Mate-N-Lok coded plug system  
 Connector shell: AMP 926 682-3  
 6 x plug pin: AMP 926 886-1

- 1 = Step 1 (min.) white
- 2 = Step 2 red
- 3 = Step 3 grey
- 4 = Step 4 (max.) black
- 5 = N blue
- 6 = Protective earth green/yellow



**Electrical connection:**  
 When changing speeds, switch must break the circuit



# AC centrifugal blowers

dual inlet, Ø 146

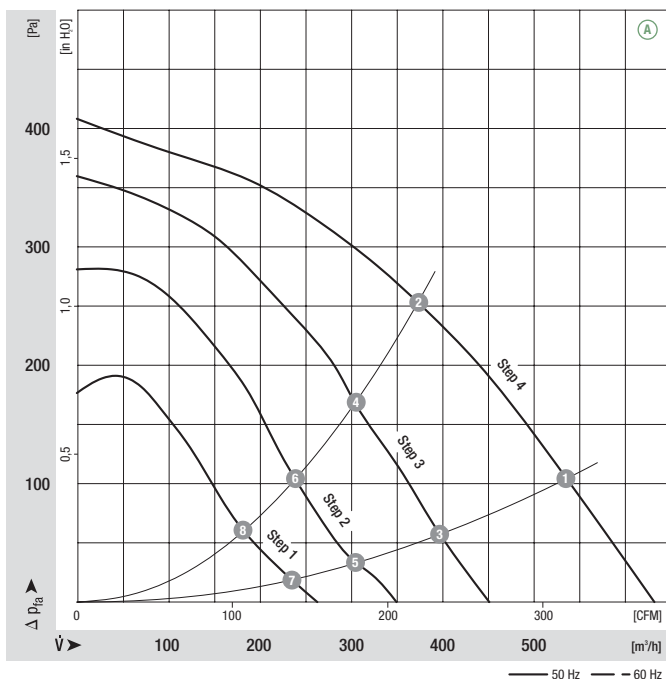


- **Material:** Housing: PP plastic, black  
Impeller: PP plastic, white  
Rotor: Partially cast in aluminium  
Terminal box: PP plastic, black
- **Direction of rotation:** Counter-clockwise, seen on plug
- **Type of protection:** IP 20
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** 4-step blower with integrated terminal box, EW motor
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C		
D2E 146	M2E 068-CF	Ⓐ 1 ~ 230	50	630	1100	150	0.66	4.0/400	51	0	-25 to +50	—	
		1 ~ 230	60	415	1600	160	0.71	4.0/400	55	150	-25 to +45		

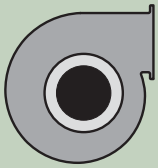
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1490	143	0.62	51
Ⓐ 2	2005	133	0.59	55
Ⓐ 3	1110	98	0.49	47
Ⓐ 4	1635	92	0.47	49
Ⓐ 5	890	81	0.42	37
Ⓐ 6	1315	77	0.42	43
Ⓐ 7	680	69	0.38	31
Ⓐ 8	990	67	0.37	35

- **Motor protection:** TOP wired internally
- **Connection leads:** Via plug
- **Protection class:** I
- **Capacitor:** FPU (P2) integrated in terminal box completely wired up and ready for plug-in
- **Product conforming to standards:** EN 60335-2-31, CE
- **Approvals:** VDE, CCC, GOST



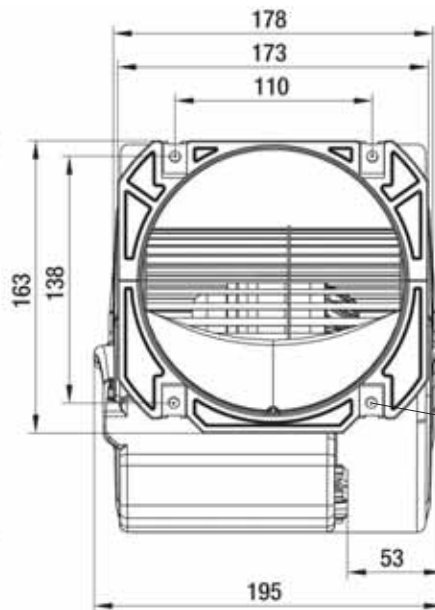
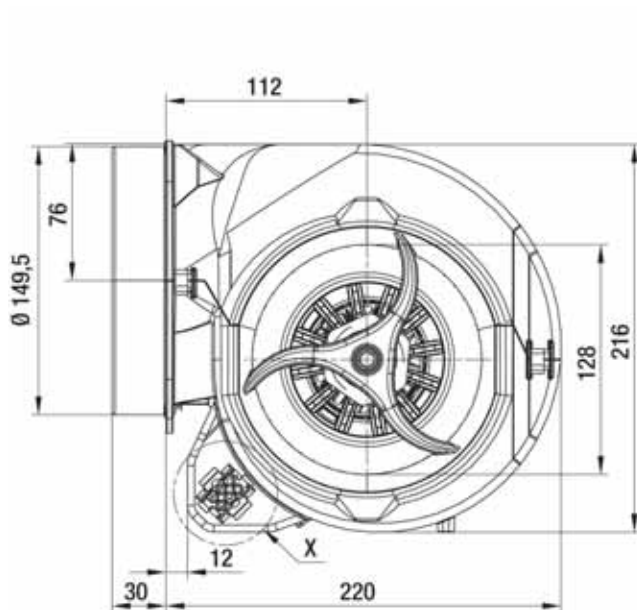
Mass of centrifugal blower

Centrifugal blower with flange

kg

D2E 146-HR93 -03

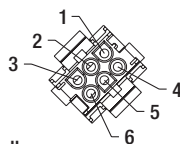
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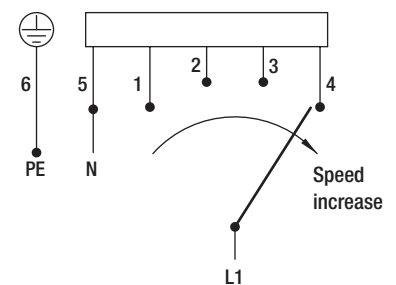
**View X**

AMP Universal Mate-N-Lok coded plug system  
 Connector shell: AMP 926 682-3  
 6 x plug pin: AMP 926 886-1

- 1 = Step 1 (min.) white
- 2 = Step 2 red
- 3 = Step 3 grey
- 4 = Step 4 (max.) black
- 5 = N blue
- 6 = Protective earth green/yellow



**Electrical connection:**  
 When changing speeds, switch must break the circuit



# AC centrifugal blowers

dual inlet, Ø 146



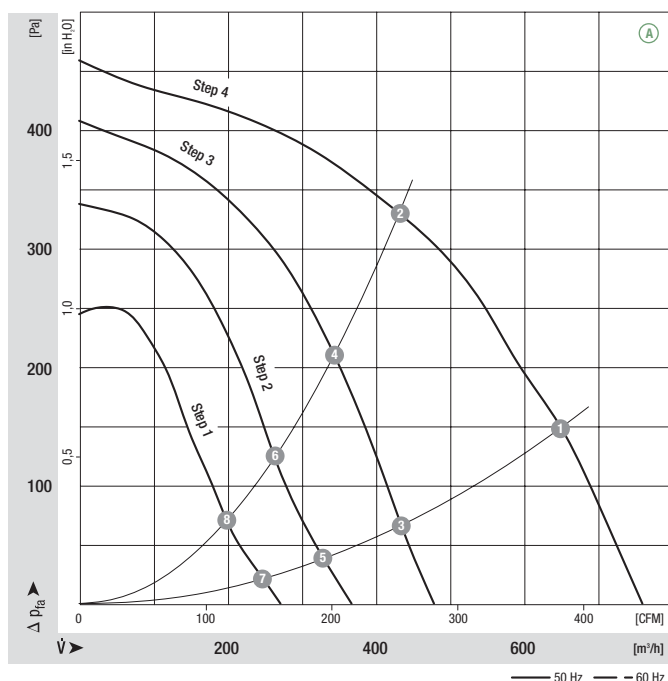
- **Material:** Housing: PP plastic, black  
Impeller: PP plastic, white  
Rotor: Partially cast in aluminium  
Terminal box: PP plastic, black
- **Direction of rotation:** Counter-clockwise, seen on plug
- **Type of protection:** IP 20
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** 4-step blower with integrated terminal box, EW motor
- **Bearings:** Maintenance-free ball bearings

## Nominal data

Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Air flow m³/h	Speed/rpm	Power input W	Current draw A	Capacitor µF/VDB	Sound pressure level dB(A)	Min. back pressure Pa	Perm. amb. temp. °C	Electr. connection
D2E 146	M2E 068-DF	Ⓐ	1~ 230 1~ 230	50 60	755 580	1350 1750	195 215	0.86 0.94	5.0/400 5.0/400	57 54	0 150	-25 to +55 -25 to +40	—

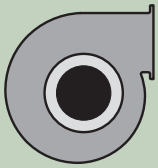
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1790	185	0.81	56
Ⓐ 2	2290	164	0.72	59
Ⓐ 3	1210	125	0.60	45
Ⓐ 4	1820	112	0.57	52
Ⓐ 5	910	106	0.52	38
Ⓐ 6	1415	100	0.50	45
Ⓐ 7	710	94	0.47	30
Ⓐ 8	1055	91	0.46	38

- **Motor protection:** TOP wired internally
- **Connection leads:** Via plug
- **Protection class:** I
- **Capacitor:** FPU (P2) integrated in terminal box completely wired up and ready for plug-in
- **Product conforming to standards:** EN 60335-2-31, CE
- **Approvals:** VDE, GOST



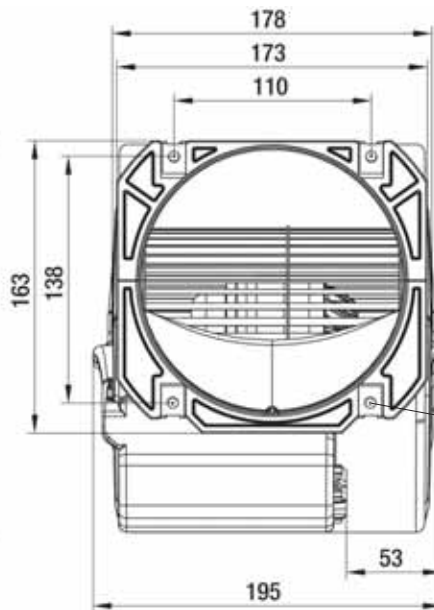
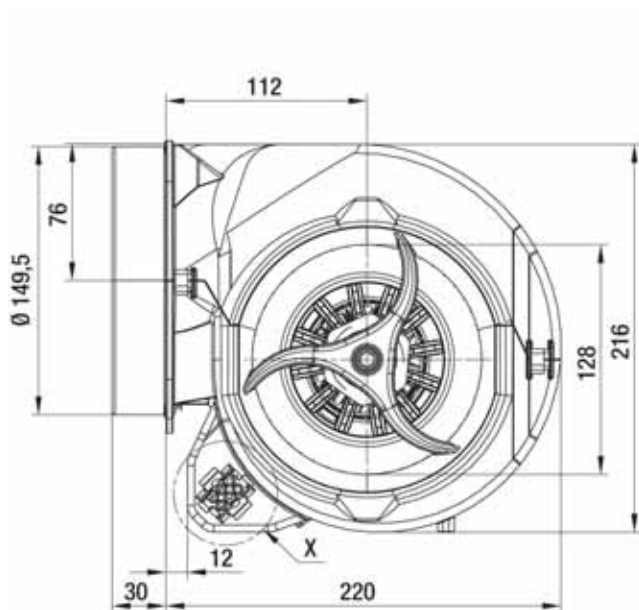
Mass of centrifugal blower

Centrifugal blower with flange

kg

D2E 146-HS97 -03

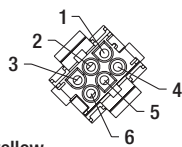
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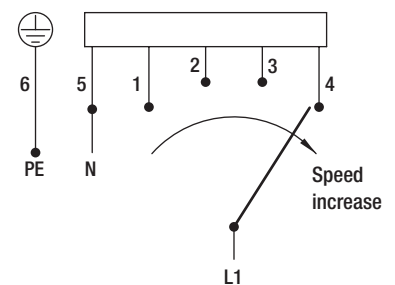
**View X**

AMP Universal Mate-N-Lok coded plug system  
 Connector shell: AMP 926 682-3  
 6 x plug pin: AMP 926 886-1

- 1 = Step 1 (min.) white
- 2 = Step 2 red
- 3 = Step 3 grey
- 4 = Step 4 (max.) black
- 5 = N blue
- 6 = Protective earth green/yellow



**Electrical connection:**  
 When changing speeds, switch must break the circuit



# AC centrifugal blowers

dual inlet, Ø 146

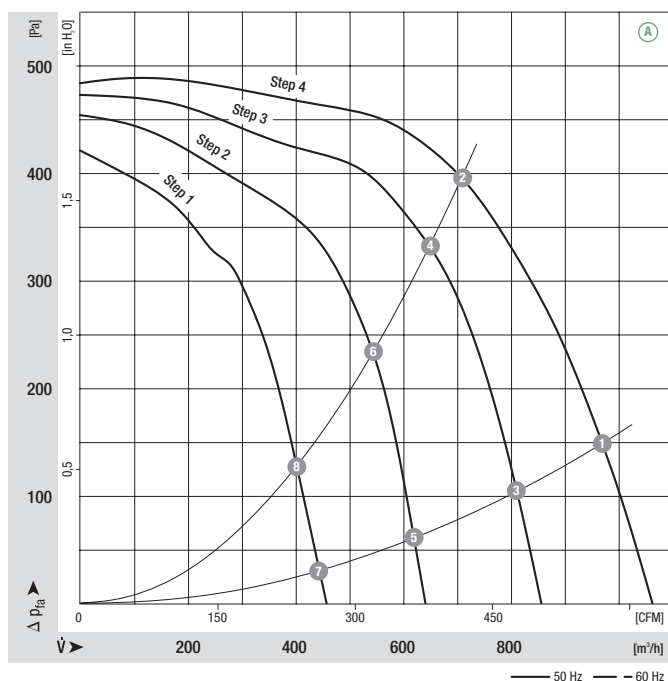


- **Material:** Housing: PP plastic, black  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium  
Terminal box: PP plastic, black
- **Direction of rotation:** Counter-clockwise, seen on plug
- **Type of protection:** IP 20
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** 4-step blower with integrated terminal box, EW motor
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C		
D2E 146	M2E 068-EC	Ⓐ 1 ~ 230	50	1060	1850	355	1.55	8.0/450	66	0	-25 to +50	—	
		Ⓐ 1 ~ 230	60	875	2100	400	1.75	8.0/450	63	200	-25 to +55		

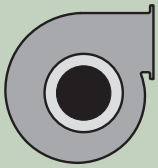
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	2075	328	1.42	66
Ⓐ 2	2430	269	1.17	61
Ⓐ 3	1770	268	1.20	61
Ⓐ 4	2230	222	1.04	62
Ⓐ 5	1375	225	1.03	54
Ⓐ 6	1885	197	0.94	57
Ⓐ 7	1000	192	0.88	45
Ⓐ 8	1415	180	0.84	49

- **Motor protection:** TOP wired internally
- **Connection leads:** Via plug
- **Protection class:** I
- **Capacitor:** FPU (P2) integrated in terminal box completely wired up and ready for plug-in
- **Product conforming to standards:** EN 60335-2-31, CE
- **Approvals:** VDE



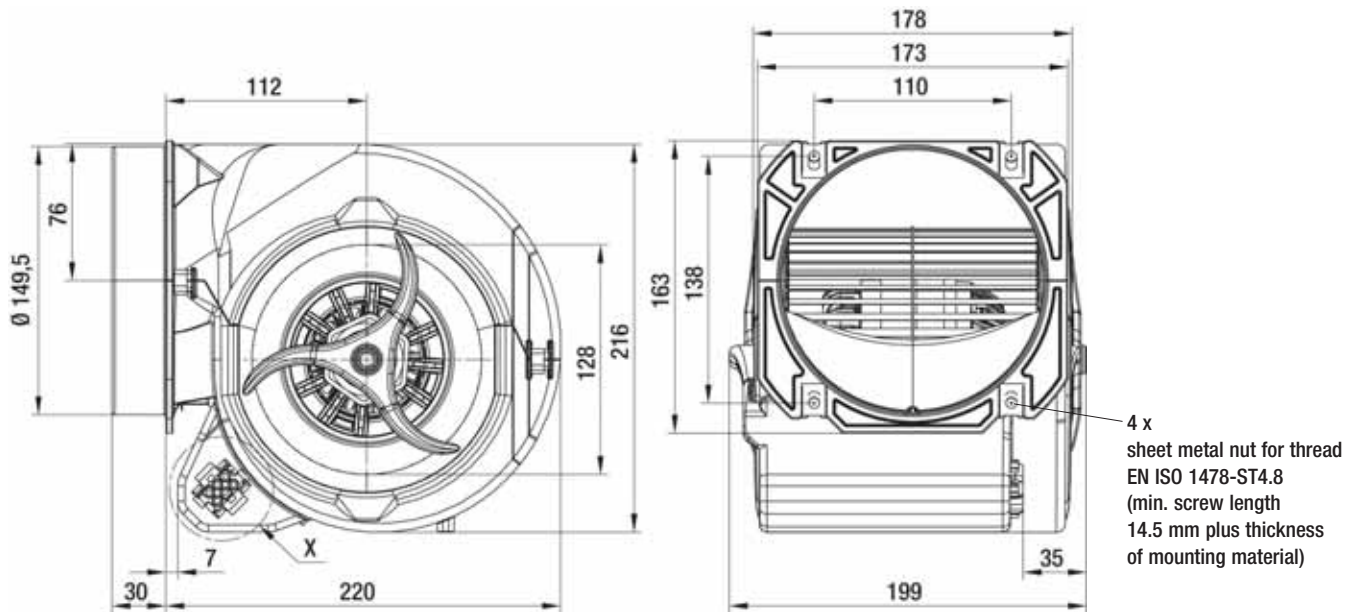
Mass of centrifugal blower

Centrifugal blower with flange

kg

D2E 146-HT67 -02

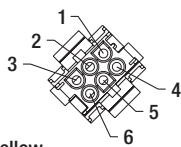
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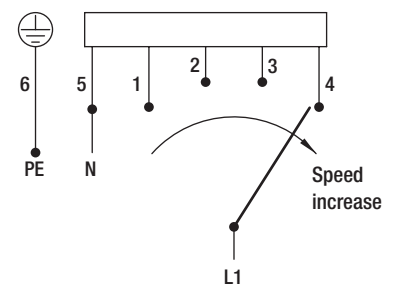
**View X**

AMP Universal Mate-N-Lok coded plug system  
 Connector shell: AMP 926 682-3  
 6 x plug pin: AMP 926 886-1

- 1 = Step 1 (min.) white
- 2 = Step 2 red
- 3 = Step 3 grey
- 4 = Step 4 (max.) black
- 5 = N blue
- 6 = Protective earth green/yellow



**Electrical connection:**  
 When changing speeds, switch must break the circuit





# AC centrifugal blowers

dual inlet, Ø 160

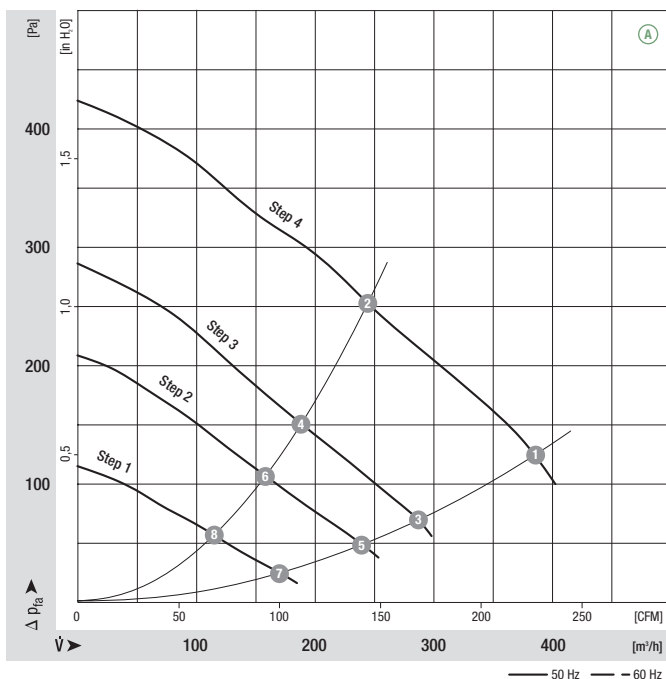


- **Material:** Housing: PP plastic, black  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium  
Terminal box: PP plastic, black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** 4-step blower with integrated terminal box, standard external-rotor motor anti-vibration mounted on one side
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C		
D2E 160	M2E 068-BF	Ⓐ 1~ 230	50	400	1170	110	0.49	2.5/400	53	100	-25 to +55	—	

subject to alterations

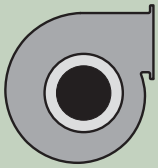
## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1210	108	0.47	51
Ⓐ 2	1735	102	0.44	55
Ⓐ 3	910	74	0.35	43
Ⓐ 4	1345	71	0.34	48
Ⓐ 5	765	64	0.31	38
Ⓐ 6	1135	61	0.30	44
Ⓐ 7	555	50	0.26	30
Ⓐ 8	835	49	0.25	36



- **Motor protection:** TOP wired internally
- **Connection leads:** Via plug
- **Protection class:** I
- **Capacitor:** FPU (P2) integrated in terminal box completely wired up and ready for plug-in
- **Product conforming to standards:** EN 60335-2-31, CE
- **Approvals:** CCC, GOST



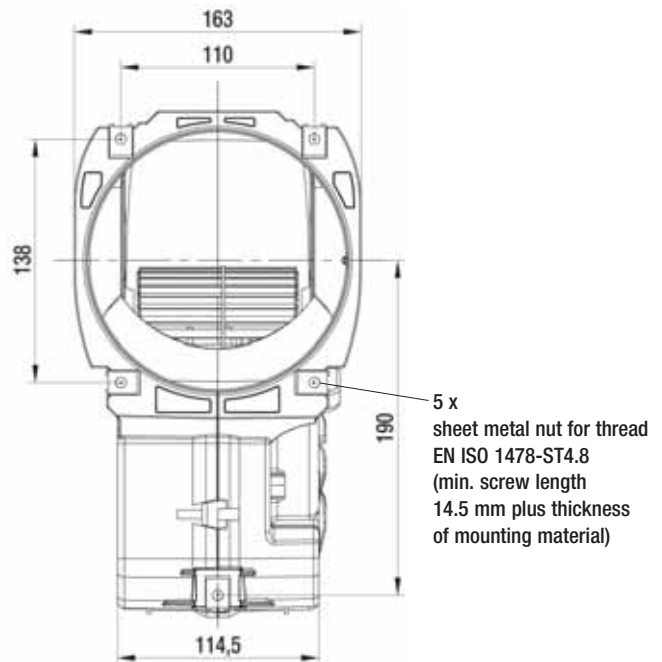
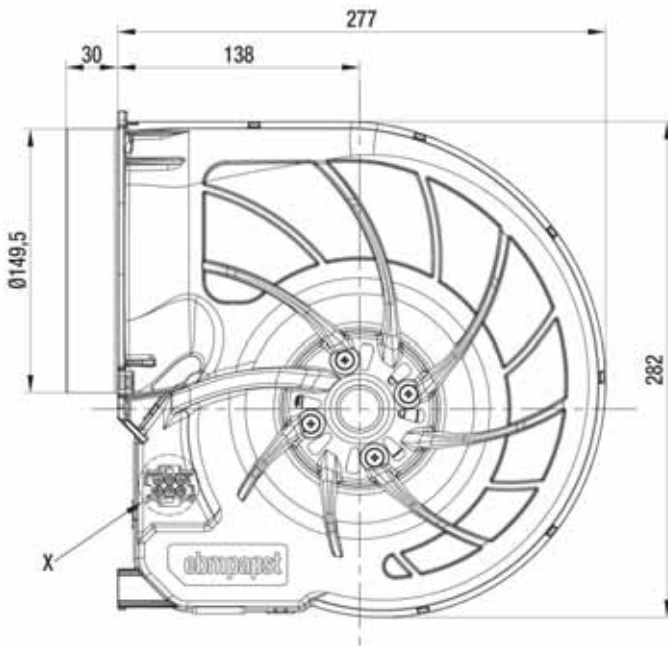
Mass of centrifugal blower

Centrifugal blower with flange

kg

D2E 160-FI01 -01

2.5

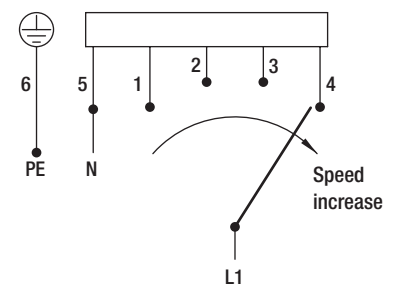


**View X**

AMP Universal Mate-N-Lok coded plug system  
 Connector shell: AMP 926 682-3  
 6 x plug pin: AMP 926 886-1

- |                      |              |  |
|----------------------|--------------|--|
| 1 = Step 1 (min.)    | white        |  |
| 2 = Step 2           | red          |  |
| 3 = Step 3           | grey         |  |
| 4 = Step 4 (max.)    | black        |  |
| 5 = N                | blue         |  |
| 6 = Protective earth | green/yellow |  |

**Electrical connection:**  
 When changing speeds, switch must break the circuit



# AC centrifugal blowers

dual inlet, Ø 160

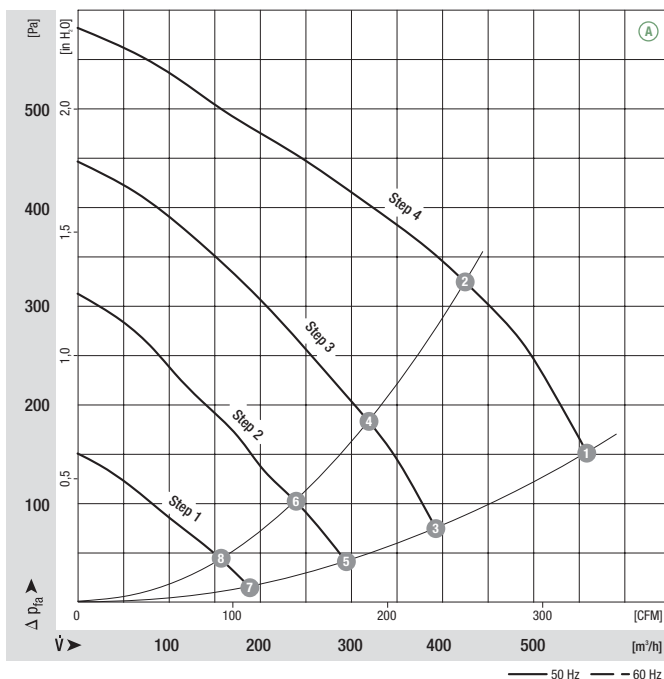


- **Material:** Housing: PP plastic, black  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium  
Terminal box: PP plastic, black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** 4-step blower with integrated terminal box, standard external-rotor motor anti-vibration mounted on one side
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m <sup>3</sup> /h	rpm	W	A	µF/VDB	dB(A)	Pa	°C		
D2E 160	M2E 068-CF	Ⓐ 1~ 230	50	550	1400	180	0.80	4.0/400	59	150	-25 to +40	—	

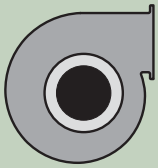
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1400	180	0.80	59
Ⓐ 2	1920	162	0.70	60
Ⓐ 3	1010	120	0.56	48
Ⓐ 4	1450	113	0.53	52
Ⓐ 5	770	96	0.46	40
Ⓐ 6	1115	93	0.45	44
Ⓐ 7	500	76	0.38	28
Ⓐ 8	740	75	0.37	34

- **Motor protection:** TOP wired internally
- **Connection leads:** Via plug
- **Protection class:** I
- **Capacitor:** FPU (P2) integrated in terminal box completely wired up and ready for plug-in
- **Product conforming to standards:** EN 60335-2-31, CE
- **Approvals:** CCC, GOST



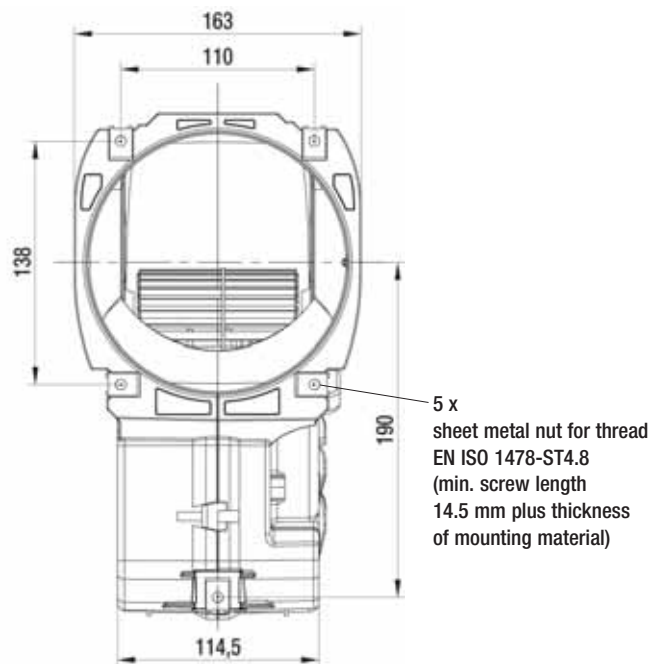
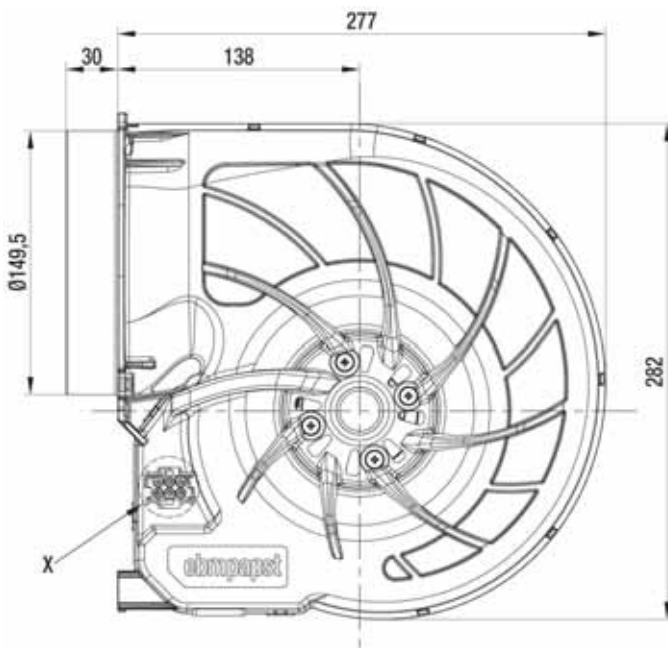
Mass of centrifugal blower

Centrifugal blower with flange

kg

D2E 160-FK11 -02

3.0

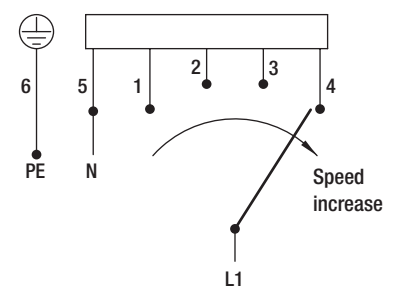


**View X**

AMP Universal Mate-N-Lok coded plug system  
 Connector shell: AMP 926 682-3  
 6 x plug pin: AMP 926 886-1

- |                      |              |  |
|----------------------|--------------|--|
| 1 = Step 1 (min.)    | white        |  |
| 2 = Step 2           | red          |  |
| 3 = Step 3           | grey         |  |
| 4 = Step 4 (max.)    | black        |  |
| 5 = N                | blue         |  |
| 6 = Protective earth | green/yellow |  |

**Electrical connection:**  
 When changing speeds, switch must break the circuit



# AC centrifugal blowers

dual inlet, Ø 146



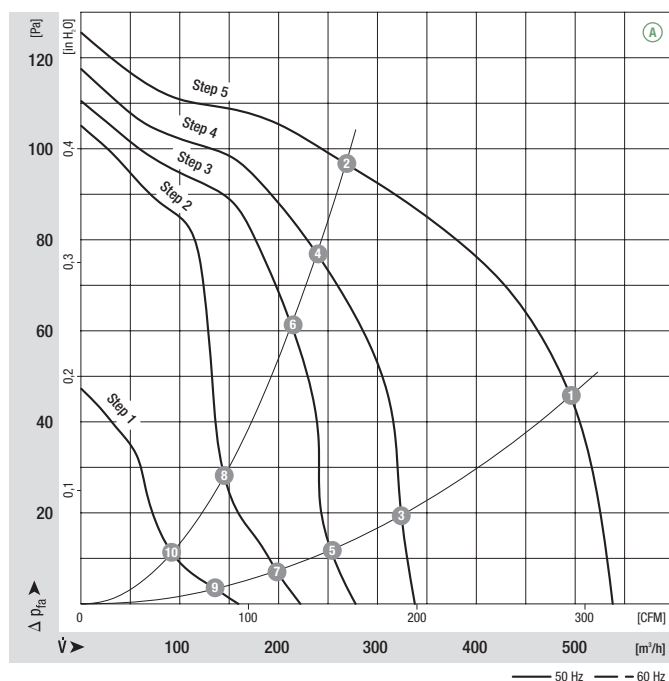
- **Material:** Housing: PP plastic, black  
Impeller: PA plastic, black  
Rotor: Partially cast in aluminium  
Terminal box: PP plastic, black
- **Direction of rotation:** Counter-clockwise, seen on cable exit
- **Type of protection:** IP 44
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** 5-step blower with integrated terminal box, EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

## Nominal data

Type	Motor	Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
			VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	
D4E 146	M4E 068-CF	Ⓐ	1~ 230 1~ 230	50 60	565 510	780 710	65 68	0.29 0.30	2.0/400 2.0/400	46 42	0 0	-25 to +50 -25 to +40	—

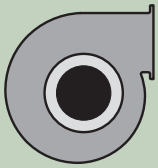
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1080	58	0.25	45
Ⓐ 2	1345	43	0.19	46
Ⓐ 3	695	52	0.23	33
Ⓐ 4	1210	39	0.18	43
Ⓐ 5	560	48	0.22	26
Ⓐ 6	1080	40	0.19	39
Ⓐ 7	450	20	0.16	21
Ⓐ 8	735	20	0.16	29
Ⓐ 9	315	13	0.13	17
Ⓐ 10	475	13	0.13	20

- **Motor protection:** TOP wired internally
- **Connection leads:** Via plug
- **Protection class:** I
- **Capacitor:** FPU (P2) integrated in terminal box completely wired up and ready for plug-in
- **Product conforming to standards:** EN 60335-1, CE



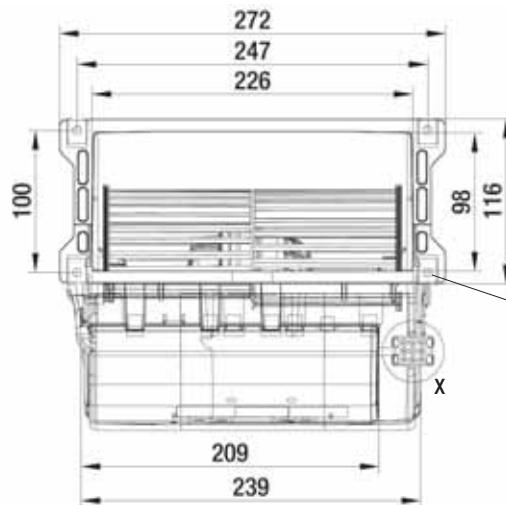
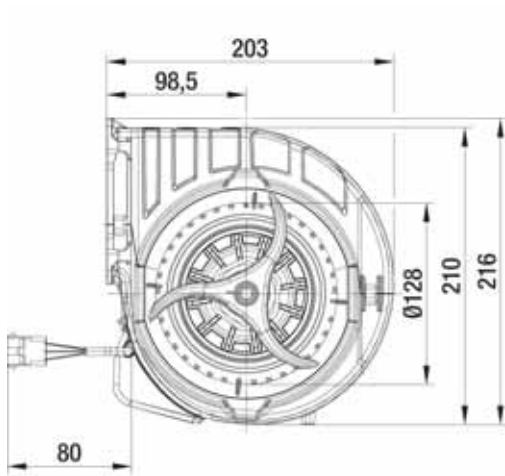
Mass of centrifugal blower

Centrifugal blower with flange

kg

D4E 146-LV19 -14

2.5

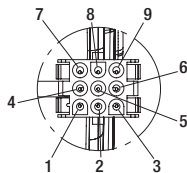


4 x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)

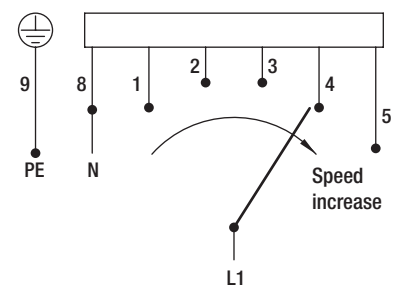
**View X**

AMP Universal Mate-N-Lok coded plug system  
 Connector shell: AMP 927 231-3  
 7 x plug pin: AMP 926 886-1

- 1 = Step 1 (min.)
- 2 = Step 2
- 3 = Step 3
- 4 = Step 4
- 5 = Step 5 (max.)
- 8 = N
- 9 = Protective earth



**Electrical connection:**  
 When changing speeds, switch must break the circuit



# AC centrifugal blowers

dual inlet, Ø 146



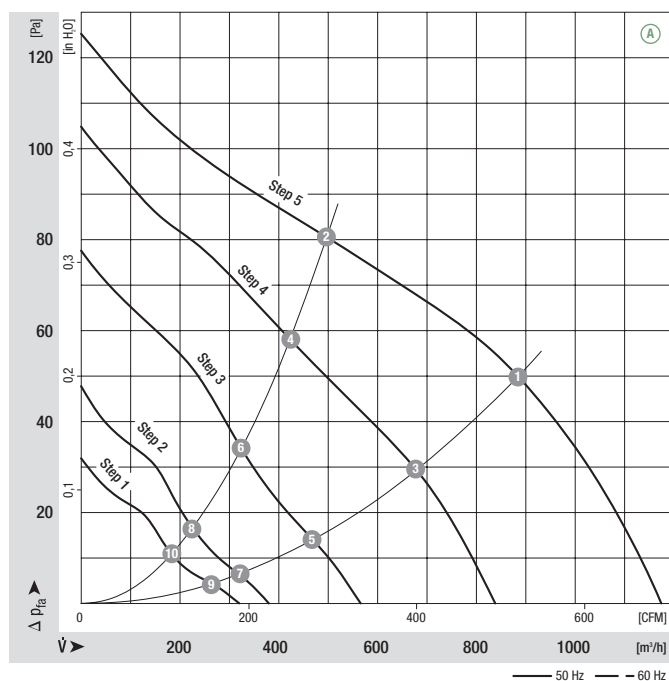
- **Material:** Housing: PP plastic, black  
Impeller / motor suspension: PA plastic, black  
Rotor: Partially cast in aluminium  
Terminal box: PP plastic, black
- **Direction of rotation:** Counter-clockwise, seen on cable exit
- **Type of protection:** IP 44
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** 5-step dual blower with integrated terminal box, standard external-rotor motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

## Nominal data

Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Air flow m³/h	Speed/rpm	Power input W	Current draw A	Capacitor µF/VDB	Sound pressure level dB(A)	Min. back pressure Pa	Perm. amb. temp. °C	Electr. connection
K4E 146	M4E 068-DF	Ⓐ	1~ 230	50	1180	750	85	0.38	2.5/450	47	0	-25 to +50	—

subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1050	76	0.33	45
Ⓐ 2	1240	65	0.28	46
Ⓐ 3	810	59	0.27	39
Ⓐ 4	1060	51	0.24	41
Ⓐ 5	570	47	0.22	29
Ⓐ 6	820	43	0.21	35
Ⓐ 7	400	13	0.15	25
Ⓐ 8	580	13	0.15	28
Ⓐ 9	330	10	0.13	25
Ⓐ 10	480	10	0.13	26



# AC centrifugal blowers

dual inlet, Ø 097

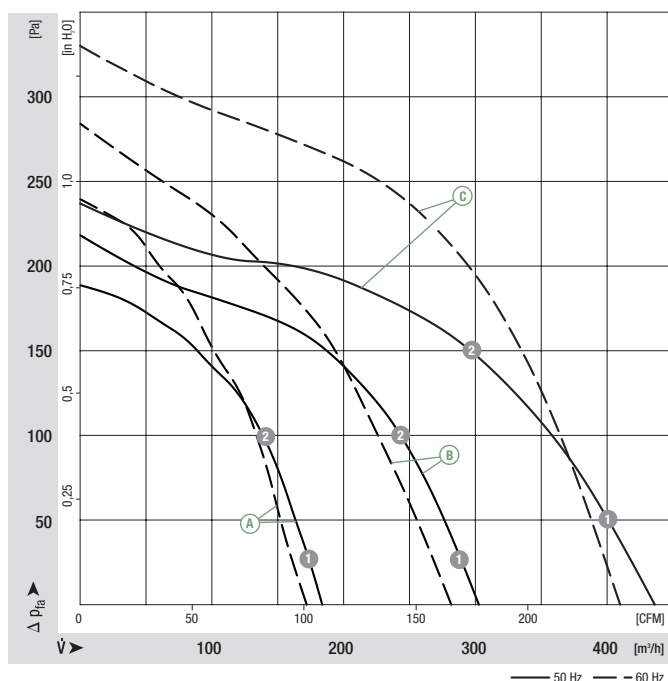


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Type of protection:** IP 20
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** Standard external-rotor motor mounted via brackets on one side
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
D2E 097	M2E 052-BF	A	1~ 230	50	180	1550	28	0.13	1.0/400	46	0	-25 to +85	A1)
			1~ 230	60	170	1450	32	0.15	1.0/400	44	0	-25 to +80	
D2E 097	M2E 052-BF	B	1~ 230	50	300	1350	50	0.23	1.5/400	50	0	-25 to +70	A1)
			1~ 230	60	280	1250	55	0.25	1.5/400	48	0	-25 to +55	
D2E 097	M2E 052-CA	C	1~ 230	50	435	1950	87	0.39	2.0/400	58	0	-25 to +40	A1)
			1~ 230	60	410	1850	100	0.45	2.0/400	57	0	-25 to +35	

subject to alterations

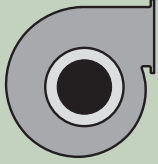
## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
A 1	1670	27	0.13
A 2	2080	25	0.12
B 1	1490	48	0.22
B 2	2000	44	0.20
C 1	2150	83	0.37
C 2	2475	73	0.33



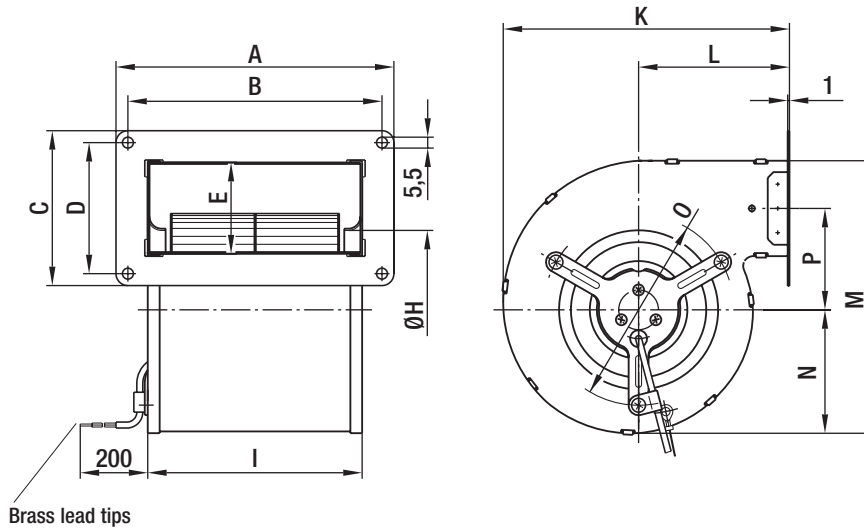
- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** © CCC, GOST



Mass of centrifugal blower

**Dimensions**

Centrifugal blower without flange	Centrifugal blower with flange	kg	A	B	C	D	E	H	I	K	L	M	N	O	P
D2E 097-CH85 -02	D2E 097-CH85 -48	1.5	140.0	128.0	78.0	66.0	46.0	80.0	108.0	144.0	76.0	137.0	62.0	96.0	51.0
D2E 097-BK66 -02	D2E 097-BK66 -48	1.5	180.0	168.0	100.0	88.0	67.0	79.5	146.0	162.0	86.0	165.0	68.0	114.0	62.5
D2E 097-BI56 -02	D2E 097-BI56 -48	1.5	180.0	168.0	100.0	88.0	67.0	79.5	146.0	162.0	86.0	165.0	68.0	114.0	62.5



# AC centrifugal blowers

dual inlet, Ø 133

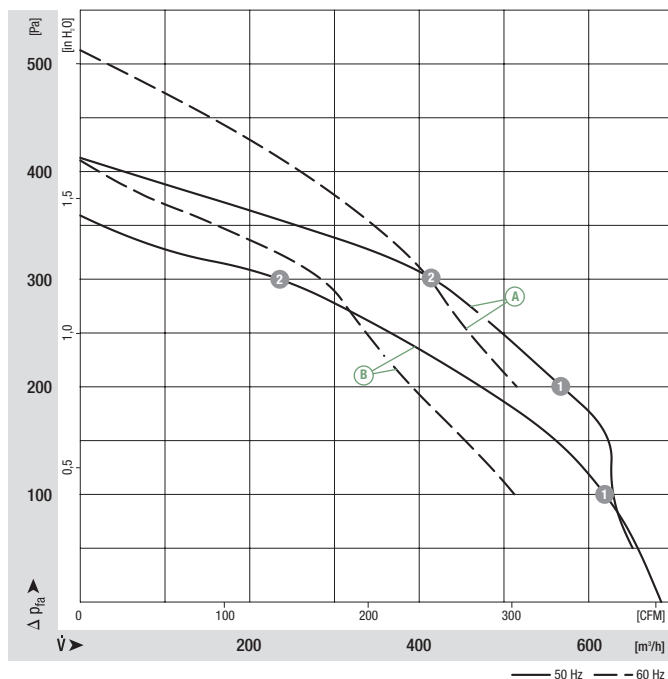


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Ⓐ Counter-clockwise, Ⓑ clockwise seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** Standard external-rotor motor mounted via brackets on one side
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
D2E 133	M2E 068-CF	Ⓐ	1~ 230	50	700	1700	175	0.77	4.0/400	58	50	-25 to +40	A1)
			1~ 230	60	500	2100	190	0.84	4.0/400	58	200	-25 to +40	
D2E 133	M2E 068-DF	Ⓑ	1~ 230	50	685	1500	190	0.84	3.0/450	59	0	-25 to +45	A1)
			1~ 230	60	510	1800	200	0.88	3.0/450	56	100	-25 to +40	

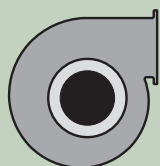
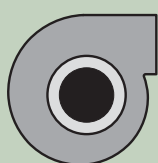
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
Ⓐ 1	2135	160	0.70
Ⓐ 2	2450	138	0.61
Ⓑ 1	1885	180	0.80
Ⓑ 2	2640	130	0.58

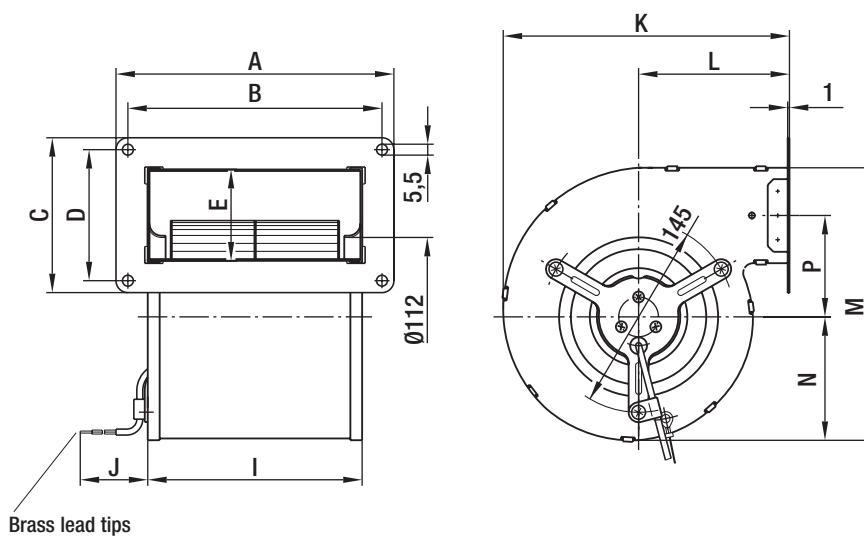
- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC,  also GOST



Mass of centrifugal blower

**Dimensions**

Centrifugal blower without flange	Centrifugal blower with flange	kg	A	B	C	D	E	I	J	K	L	M	N	P
D2E 133-CI33 -56	D2E 133-CI33 -22	3.3	206.0	190.0	142.0	126.0	102.0	168.0	400.0	204.0	97.0	213.0	93.5	67.5
D2E 133-AM47-01	D2E 133-AM47-23	3.5	254.0	238.0	108.0	92.0	69.0	215.0	300.0	171.5	88.0	180.0	79.0	66.0



# AC centrifugal blowers

dual inlet, Ø 133

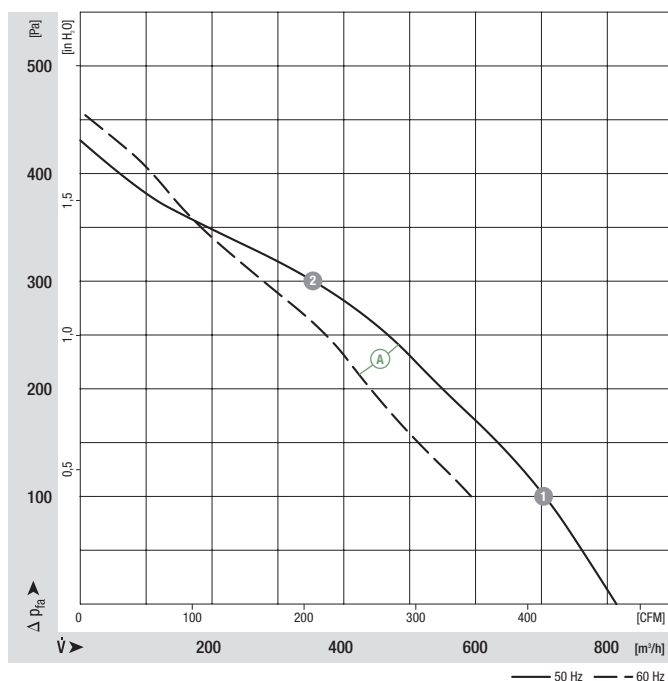


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** Standard external-rotor motor mounted via brackets on one side
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor		VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.
D2E 133	M2E 068-DF	Ⓐ	1~ 230	50	810	1150	190	0.84	3.0/450	56	0	-25 to +40	A1)
			1~ 230	60	600	1550	195	0.85	3.0/450	55	100	-25 to +40	

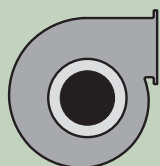
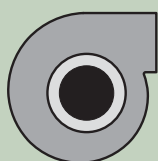
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
Ⓐ 1	1700	180	0.80
Ⓐ 2	2480	138	0.61

- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC



Mass of centrifugal blower

Centrifugal blower without flange

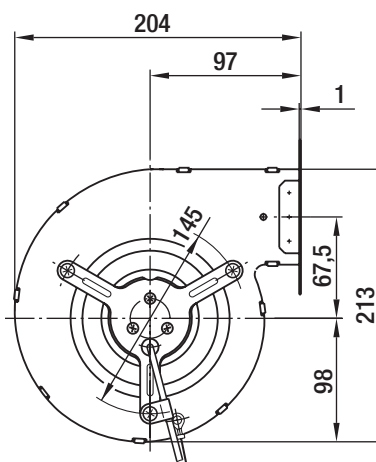
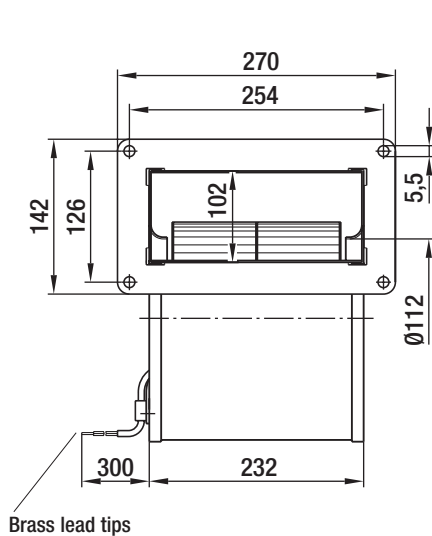
Centrifugal blower with flange

kg

D2E 133-DM47-01

D2E 133-DM47-23

4.4



# AC centrifugal blowers

dual inlet, Ø 133

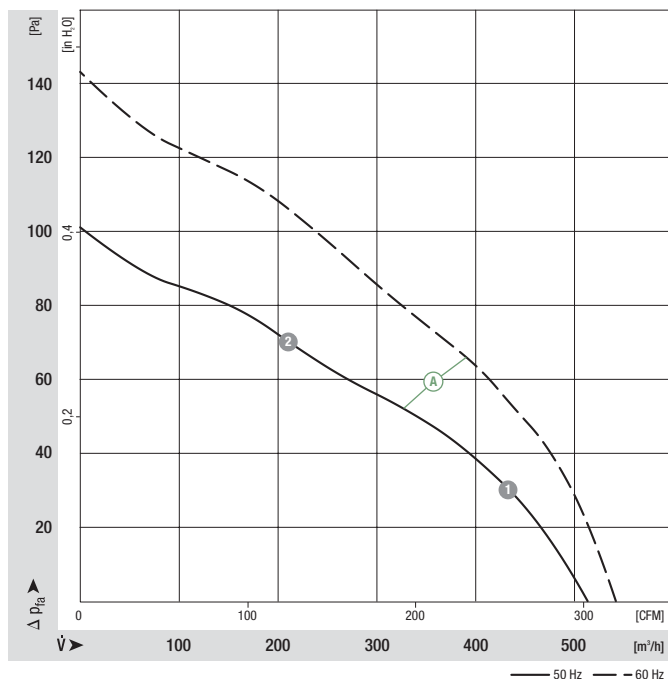


- **Material:** Housing: Galvanised sheet steel  
Impeller: PA plastic  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** Standard external-rotor motor mounted via brackets on one side
- **Bearings:** Maintenance-free ball bearings

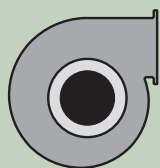
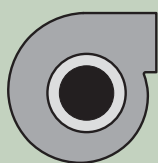
Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
D4E 133	M4E 068-BF	Ⓐ 1~ 230	50	510	1180	70	0.32	2.0/400	52	0	-25 to +40	A1)	
		1~ 230	60	540	1240	80	0.35	2.0/400	54	0	-25 to +40		

subject to alterations

## Curves



- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC



Mass of centrifugal blower

Centrifugal blower without flange

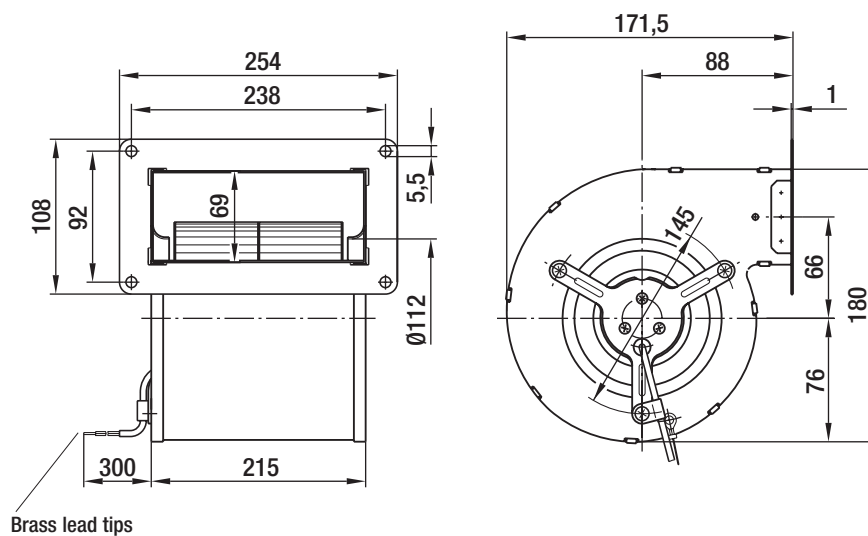
Centrifugal blower with flange

kg

D4E 133-AH01 -55

D4E 133-AH01 -58

2.6



# AC centrifugal blowers

dual inlet, Ø 133

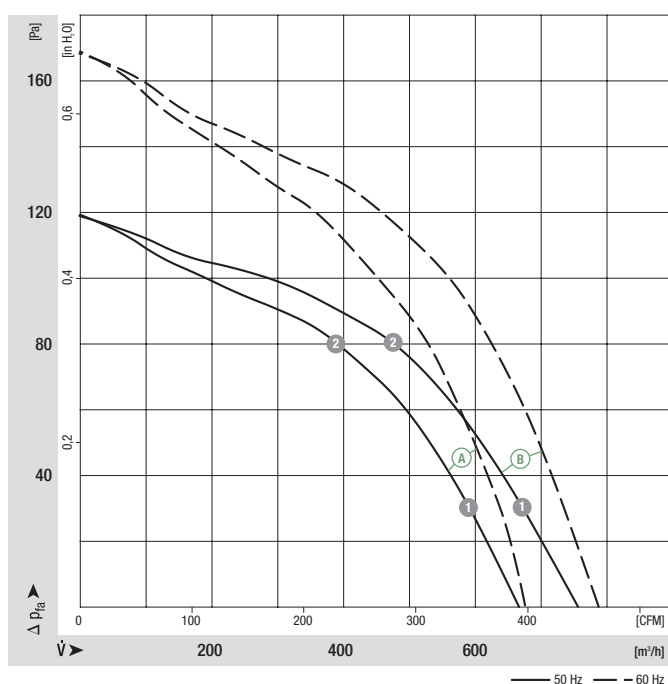


- **Material:** Housing: Galvanised sheet steel  
Impeller: PA plastic  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** Standard external-rotor motor mounted via brackets on one side
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
D4E 133	M4E 068-BF	Ⓐ 1~ 230	50	670	1080	73	0.33	2.0/400	52	0	-25 to +40	A1)	
		1~ 230	60	675	1100	83	0.37	2.0/400	52	0	-25 to +40		
D4E 133	M4E 068-CF	Ⓑ 1~ 230	50	760	1230	75	0.34	2.0/450	55	0	-25 to +70	A1)	
		1~ 230	60	790	1280	95	0.43	2.0/450	56	0	-25 to +60		

subject to alterations

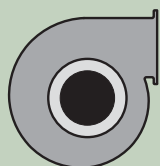
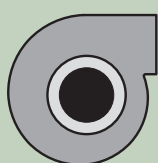
## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
Ⓐ 1	1150	69	0.31
Ⓐ 2	1300	65	0.30
Ⓑ 1	1280	67	0.30
Ⓑ 2	1370	58	0.27



- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE



Mass of centrifugal blower

Centrifugal blower without flange

Centrifugal blower with flange

kg

D4E 133-DH01 -J2

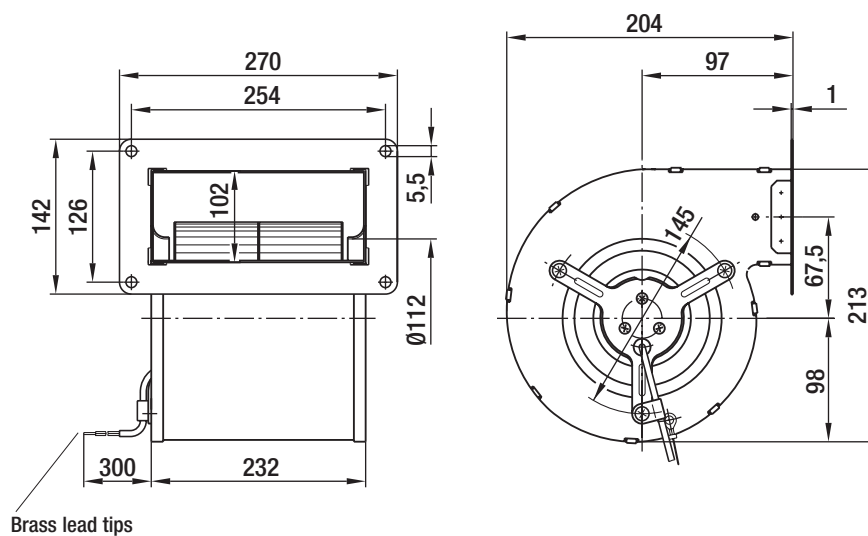
D4E 133-DH01 -J4

3.3

D4E 133-DL01 -H9

D4E 133-DL01 -J5

3.8



# AC centrifugal blowers

dual inlet, Ø 146

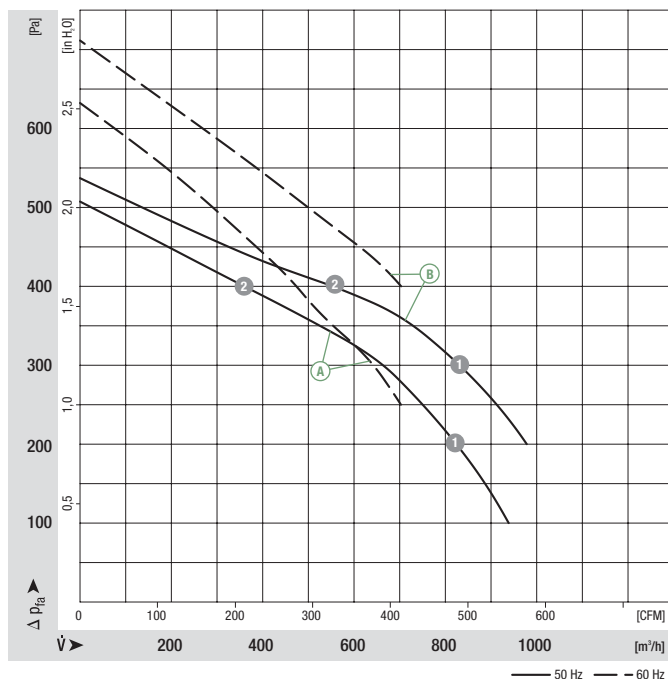


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** Standard external-rotor motor mounted via brackets on one side
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
D2E 146	M2E 068-EC	A	1~ 230	50	935	1650	245	1.08	6.0/400	60	100	-25 to +40	A1)
			1~ 230	60	690	2100	270	1.20	6.0/400	62	250	-25 to +40	
D2E 146	M2E 068-EC	B	1~ 230	50	970	2050	300	1.31	8.0/400	63	200	-25 to +40	A1)
			1~ 230	60	690	2550	330	1.45	8.0/400	68	400	-25 to +35	

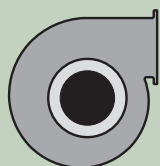
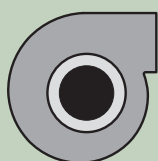
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
A 1	1935	230	1.02
A 2	2560	167	0.74
B 1	2300	262	1.15
B 2	2600	206	0.91

- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC, GOST



Mass of centrifugal blower

Centrifugal blower without flange

Centrifugal blower with flange

kg

D2E 146-AP43 -02

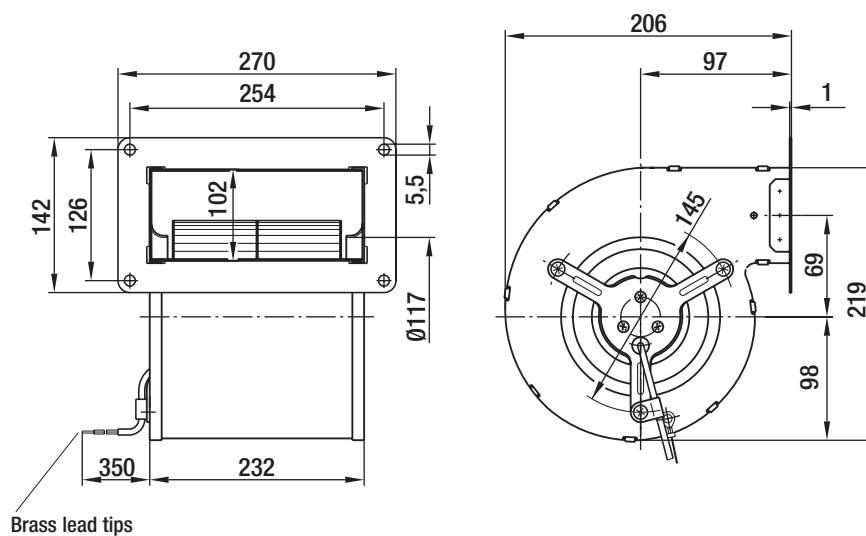
D2E 146-AP43 -22

4.2

D2E 146-AP47 -02

D2E 146-AP47 -22

4.2



# AC centrifugal blowers

dual inlet, Ø 146



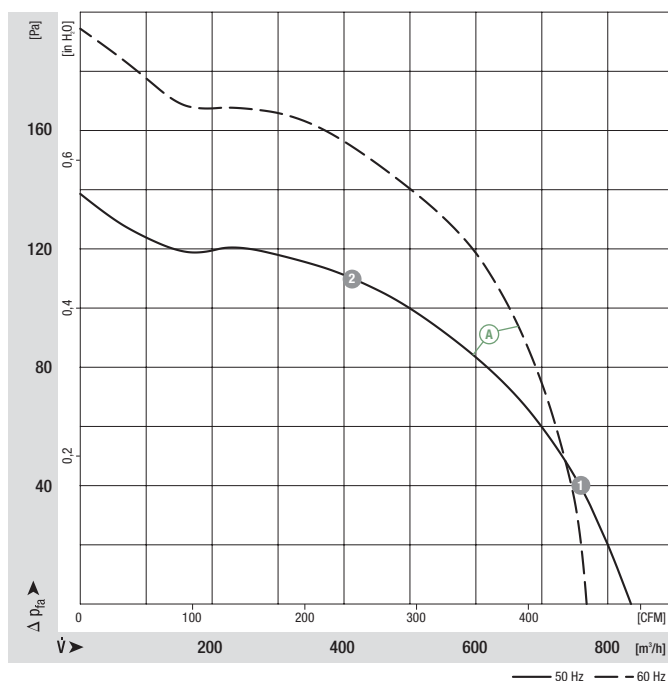
- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** Standard external-rotor motor mounted via brackets on one side
- **Bearings:** Maintenance-free ball bearings

## Nominal data

Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Air flow m³/h	Speed/rpm	Power input W	Current draw A	Capacitor µF/VDB	Sound pressure level dB(A)	Min. back pressure Pa	Perm. amb. temp. °C	Electr. connection p. 596 f.
D4E 146	M4E 068-CF	Ⓐ	1~ 230 1~ 230	50 60	835 765	1000 950	100 116	0.44 0.51	2.0/450 2.0/450	55 53	0 0	-25 to +50 -25 to +50	A1)

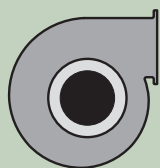
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
Ⓐ 1	1180	88	0.39
Ⓐ 2	1390	65	0.29

- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC



Mass of centrifugal blower

Centrifugal blower without flange

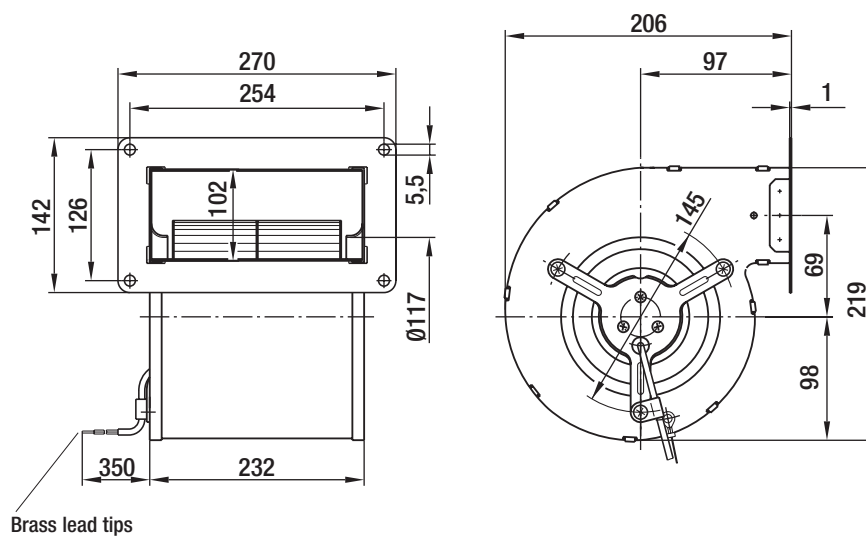
Centrifugal blower with flange

kg

D4E 146-AA07 -02

D4E 146-AA07 -22

3.5



# AC centrifugal blowers

dual inlet, Ø 160



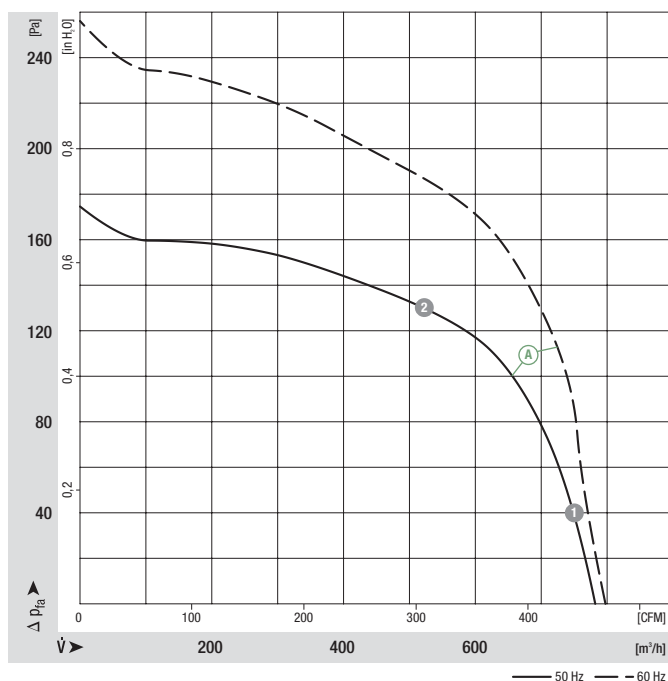
- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** Standard external-rotor motor mounted via brackets on one side
- **Bearings:** Maintenance-free ball bearings

## Nominal data

Type	Motor	Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
			VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.
D4E 160	M4E 068-DF	Ⓐ	1~ 230	50	780	1200	117	0.51	3.0/450	58	0	-25 to +55	A1)
			1~ 230	60	820	1200	140	0.62	3.0/450	58	0	-25 to +40	

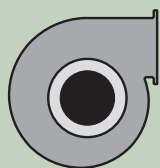
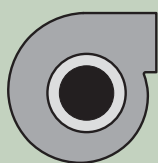
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
Ⓐ 1	1230	114	0.50
Ⓐ 2	1360	93	0.41

- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC



Mass of centrifugal blower

Centrifugal blower without flange

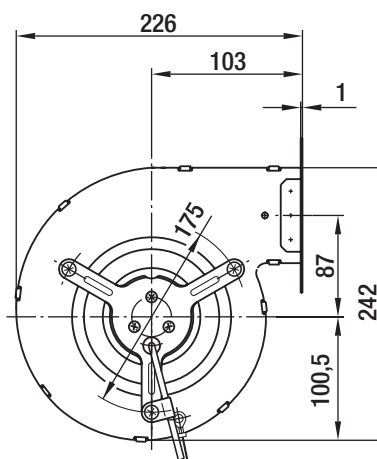
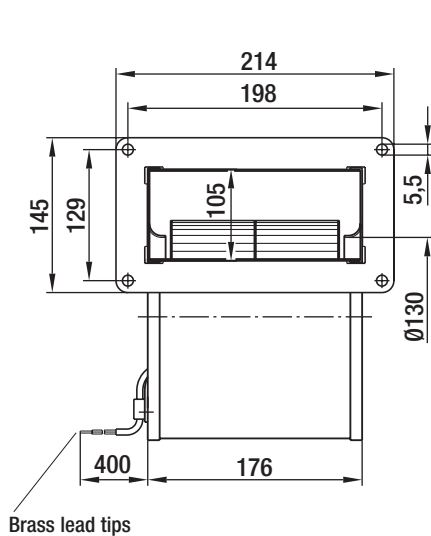
Centrifugal blower with flange

kg

D4E 160-DA01 -02

D4E 160-DA01 -22

4.3



# AC centrifugal blowers

dual inlet, Ø 160



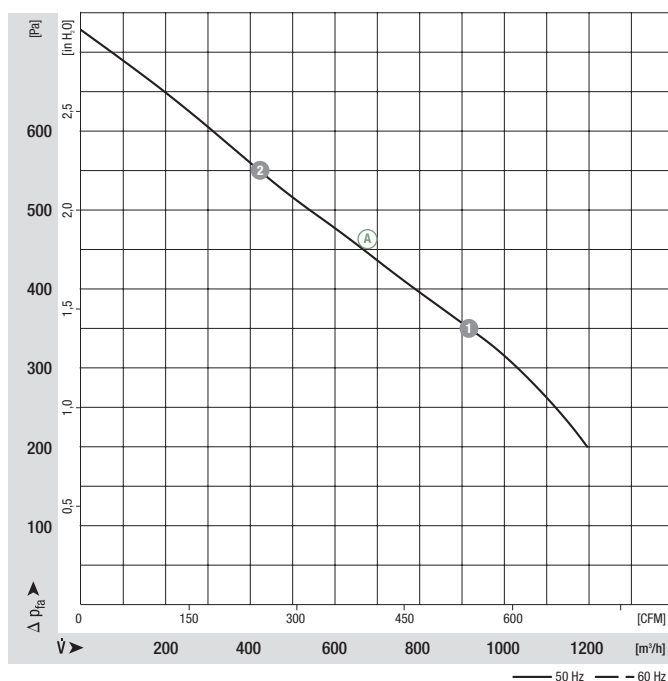
- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor (opposite cable exit)
- **Type of protection:** IP 20
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

## Nominal data

Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Air flow m³/h	Speed/rpm	Power input W	Current draw A	Capacitor µF/VDB	Sound pressure level dB(A)	Min. back pressure Pa	Perm. amb. temp. °C	Electr. connection p. 596 f.
D2E 160	M2E 074-FA	Ⓐ	1~ 230	50	1195	1850	410	1.80	10.0/400	64	200	-25 to +40	A1)

subject to alterations

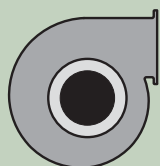
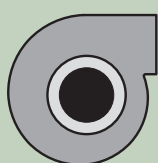
## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
Ⓐ 1	2265	380	1.67
Ⓐ 2	2520	338	1.50



- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC, GOST



Mass of centrifugal blower

Centrifugal blower without flange

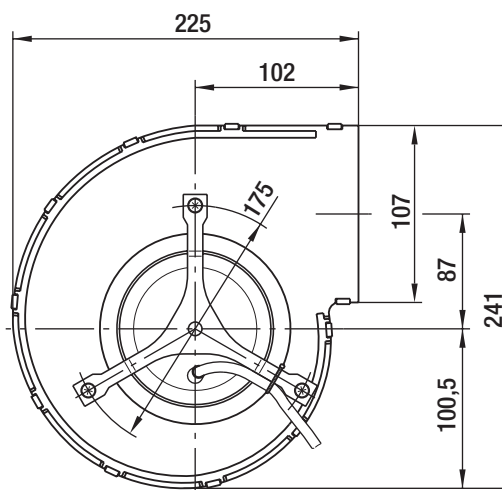
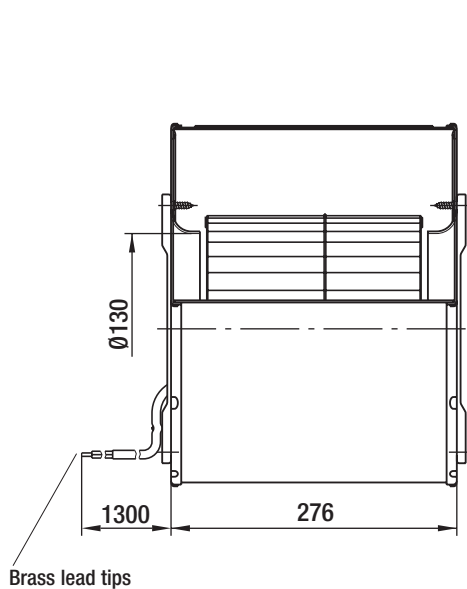
Centrifugal blower with flange

kg

D2E 160-AB01 -06

—

5.7



# AC centrifugal blowers

dual inlet, Ø 160

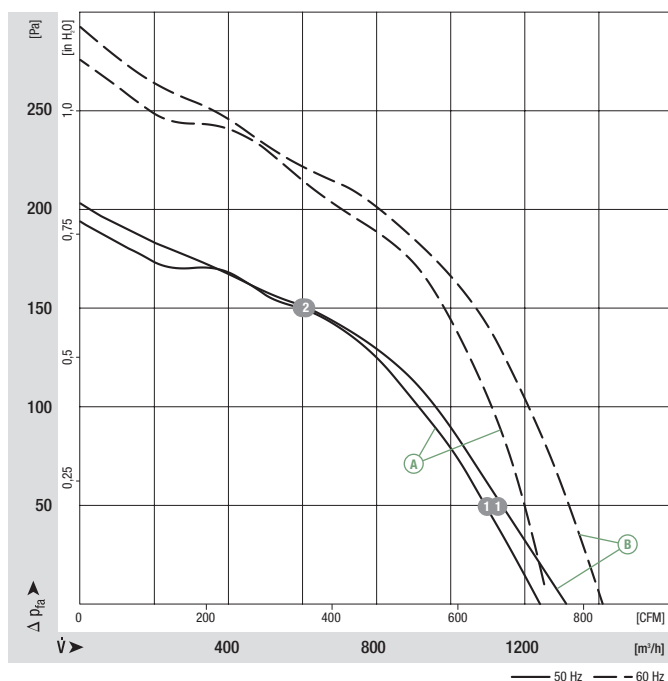


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor (opposite cable exit)
- **Type of protection:** IP 44
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
D4E 160	M4E 068-EC	A	1~ 230	50	1240	1300	180	0.79	5.0/400	63	0	-25 to +65	A1)
			1~ 230	60	1250	1350	245	1.07	5.0/400	64	10	-25 to +30	
D4E 160	M4E 068-GA	B	1~ 230	50	1310	1350	185	0.81	6.0/400	64	0	-25 to +70	A1)
			1~ 230	60	1410	1450	270	1.18	6.0/400	67	0	-25 to +40	

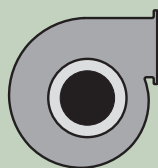
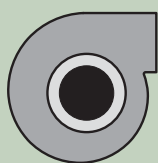
subject to alterations

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
A 1	1355	153	0.67
A 2	1445	100	0.43
B 1	1400	154	0.68
B 2	1460	103	0.46

- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** Ⓢ CCC, GOST
- **Options:** With flange



Mass of centrifugal blower

Dimensions

Centrifugal blower without flange

Centrifugal blower with flange

kg

l

D4E 160-EG06 -05

—

4.5

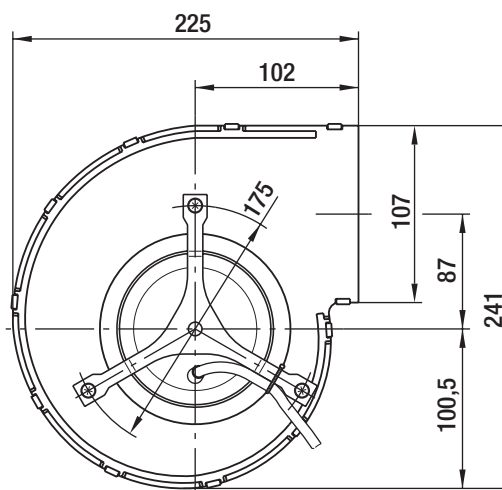
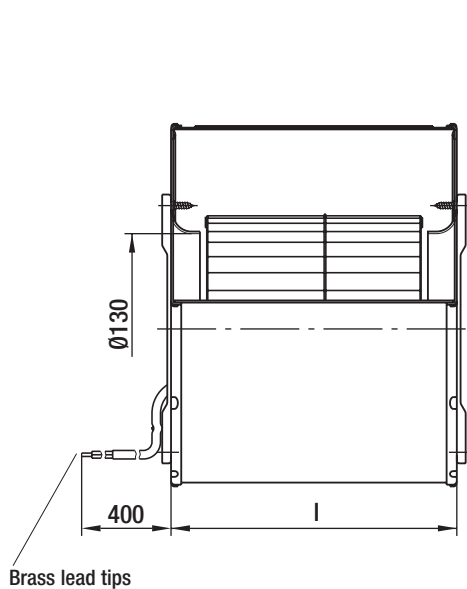
232.0

D4E 160-FH12 -05

—

5.9

276.0



# AC centrifugal blowers

dual inlet, Ø 180

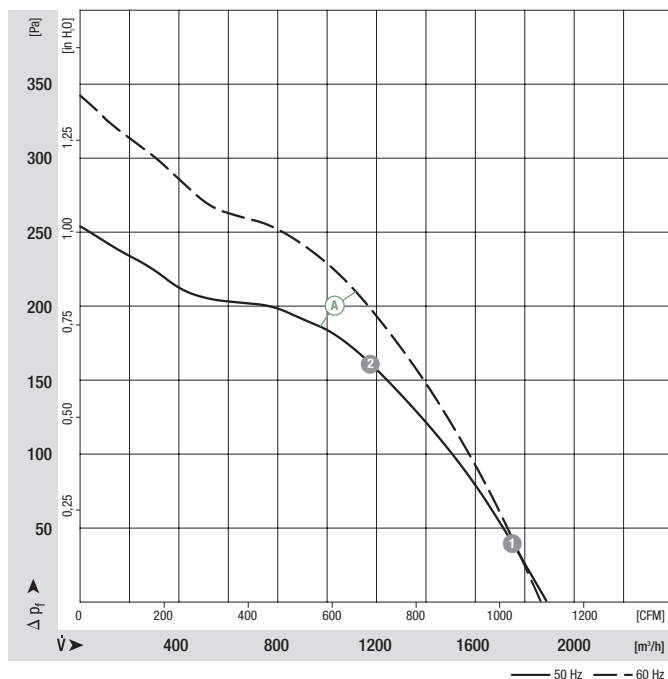


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor (opposite cable exit)
- **Type of protection:** IP 54
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

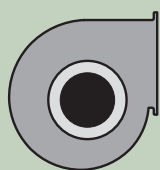
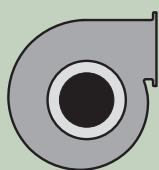
Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
<b>D4D 180</b> (1)/(2)	M4D 068-GA	Ⓐ 3~ 3~	230/400 230/400	50 60	1880 1860	1050 1030	290 360	0.92/0.53 1.04/0.60	— —	62 62	0 0	-25 to +55 -25 to +30	C1)/C2)

subject to alterations (1) data collected via exhaust duct (step diffuser, 1 m length) (2) 230 VAC Δ / 400 VAC Y

## Curves



- **Motor protection:** Without thermal protection
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC



Mass of centrifugal blower

Centrifugal blower with flange

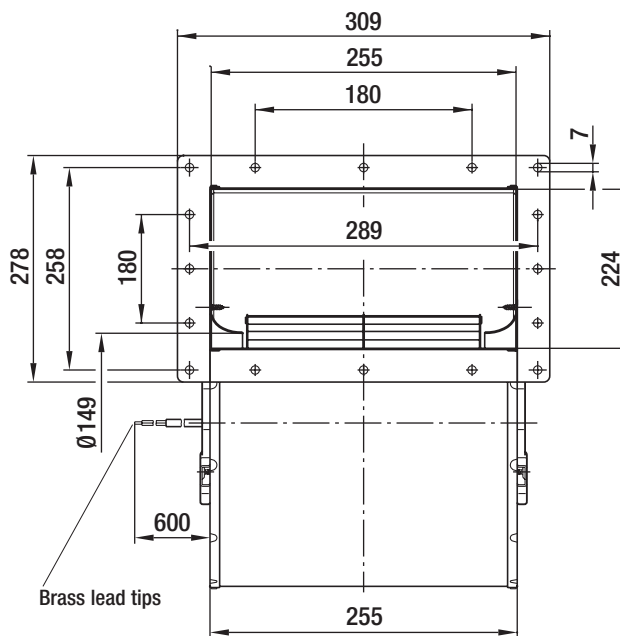
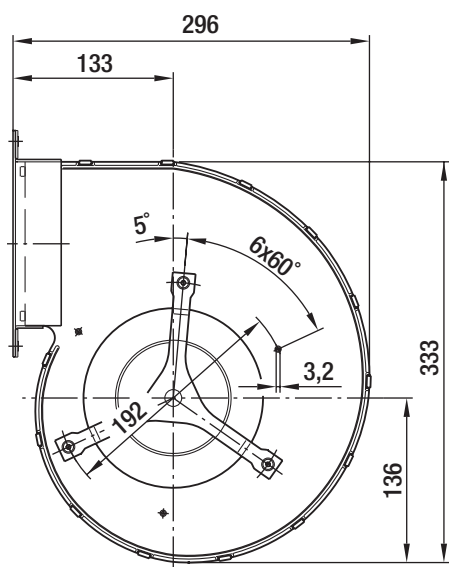
Radial blower with flange (large)

kg

—

D4D 180-CB01 -02

9.5



# AC centrifugal blowers

dual inlet, Ø 180



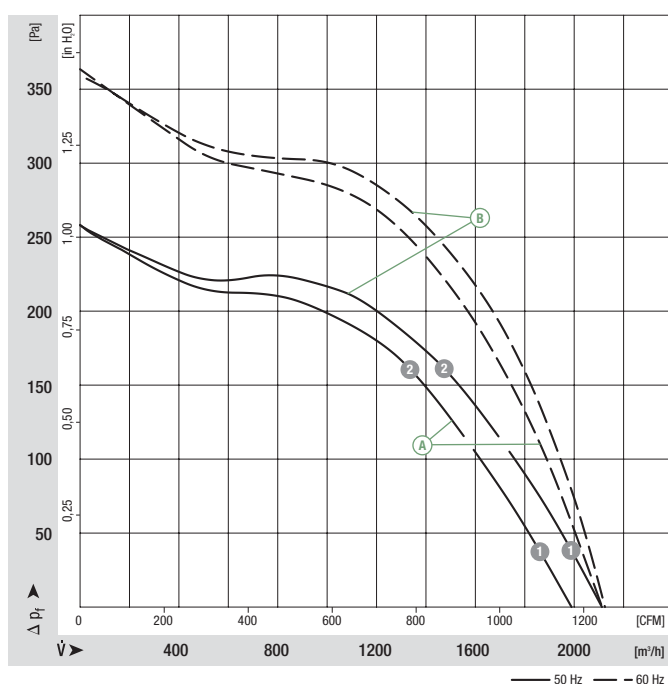
- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor (opposite cable exit)
- **Type of protection:** IP 54
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
D4E 180	M4E 068-LA	Ⓐ 1~ 230	50	1900	1300	360	1.58	10.0/400	65	0	-25 to +65	A1)	
		Ⓐ 1~ 230	60	2040	1360	460	2.02	10.0/400	66	0	-25 to +40		
D4E 180 <sup>(1)</sup>	M4E 068-LA	Ⓑ 1~ 230	50	2110	1250	380	1.68	10.0/400	64	0	-25 to +60	A1)	
		Ⓑ 1~ 230	60	2125	1280	495	2.16	10.0/400	64	0	-25 to +35		

subject to alterations

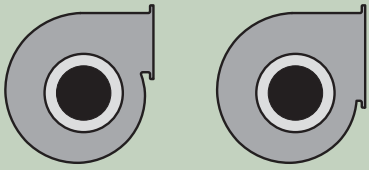
(1) data collected via exhaust duct (step diffuser, length 1 m)

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
Ⓐ 1	1350	310	1.36
Ⓐ 2	1400	240	1.07
Ⓑ 1	1300	360	1.60
Ⓑ 2	1385	270	1.20

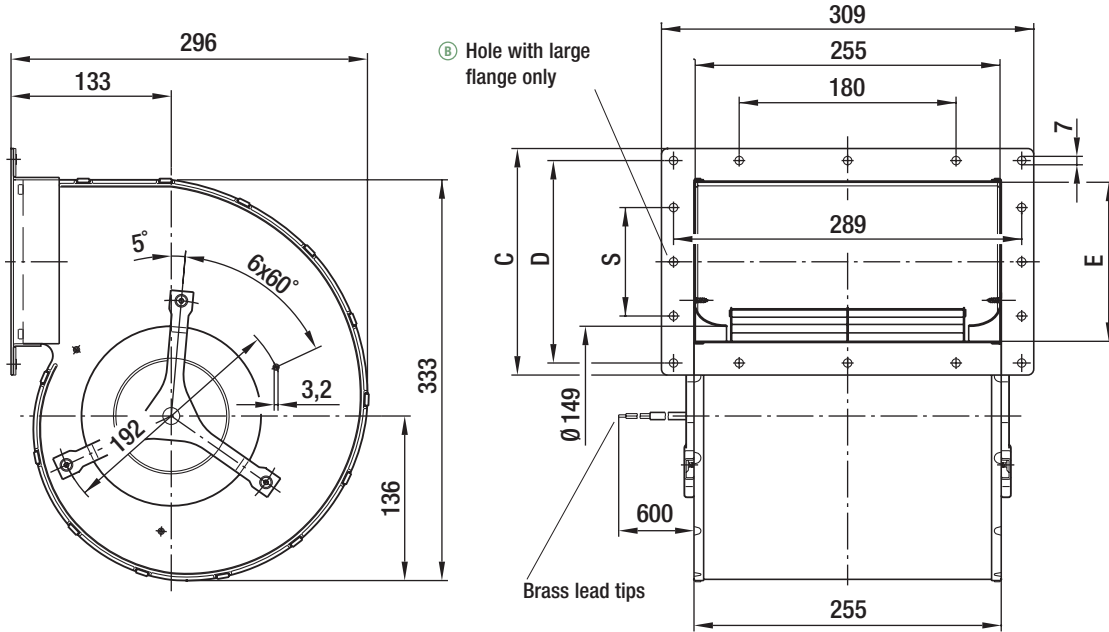
- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC, <sup>A</sup> also GOST



Mass of centrifugal blower

**Dimensions**

Centrifugal blower with flange	Centrifugal blower with flange (large)	kg	C	D	E	S
D4E 180-BA02 -02	—	11.0	188.0	168.0	134.0	90.0
—	D4E 180-CA02 -02	10.8	278.0	258.0	224.0	180.0



# AC centrifugal blowers

dual inlet, Ø 200

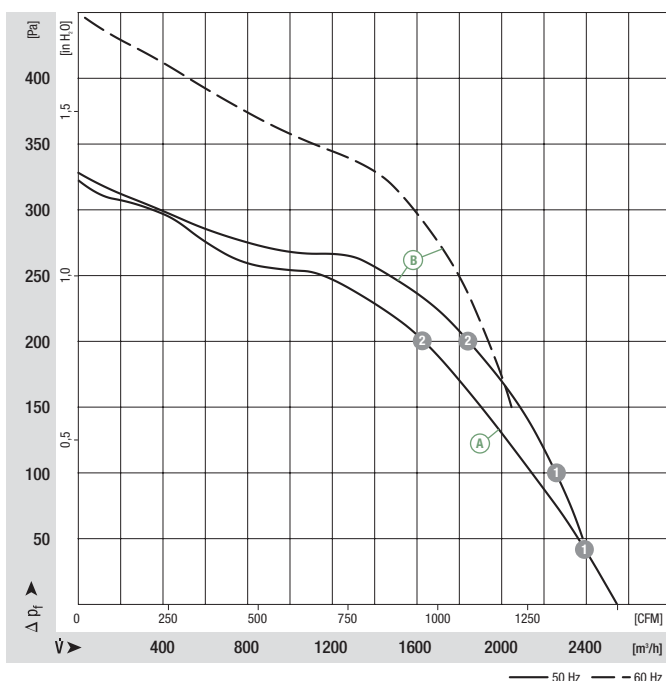


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor (opposite cable exit)
- **Type of protection:** IP 54
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
<b>D4D 200</b> (1)(2)	M4D 068-LA	Ⓐ 3~ 230/400	50	2550	1080	480	1.54/0.89	—	63	0	-25 to +30	C1)/C2)	
<b>D4E 200</b> (1)	M4E 068-LA	Ⓑ 1~ 230	50	2380	1100	490	2.15	10.0/400	60	50	-25 to +40	A1)	
		1~ 230	60	2050	1250	525	2.30	10.0/400	60	150	-25 to +40		

subject to alterations (1) data collected via exhaust duct (step diffuser, 1 m length) (2) 230 VAC Δ / 400 VAC Y

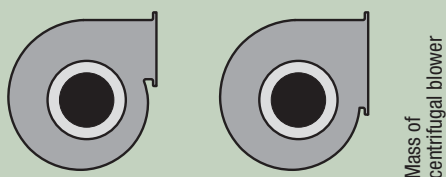
## Curves



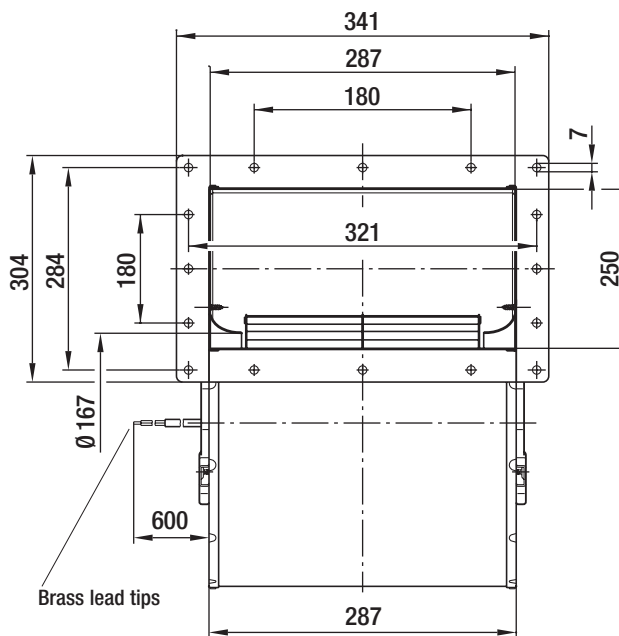
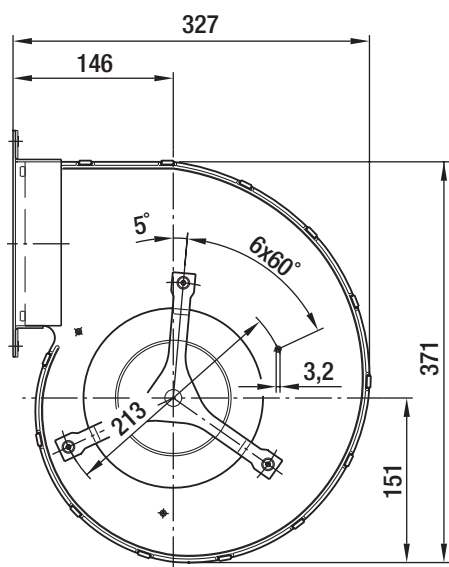
	n [rpm]	P <sub>1</sub> [W]	I [A]
Ⓐ 1	1125	425	1.36/0.79
Ⓐ 2	1260	310	1.00/0.58
Ⓑ 1	1185	445	1.95
Ⓑ 2	1300	350	1.55



- **Motor protection:** Ⓐ without TOP, Ⓑ TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC



Centrifugal blower with flange	Centrifugal blower with flange (large)	kg
—	D4D 200-CA01 -02	12.0
—	D4E 200-CA02 -02	11.9



# AC centrifugal blowers

dual inlet, Ø 225

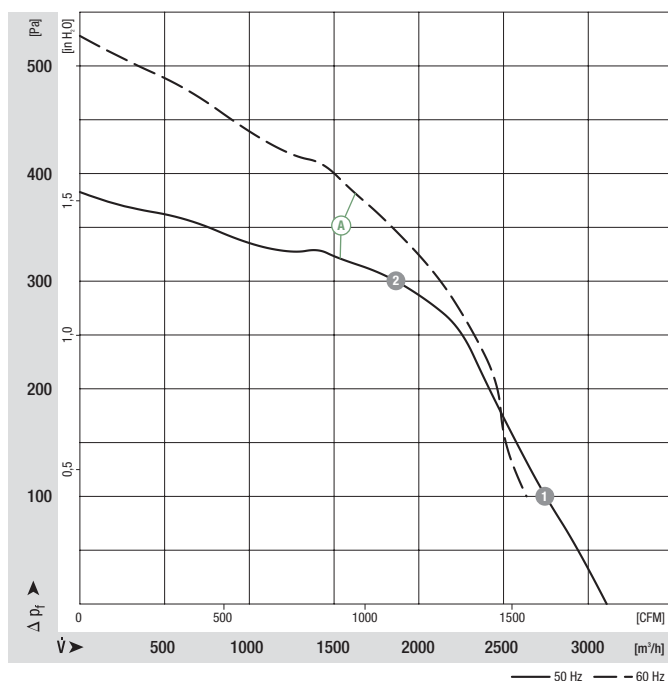


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor (opposite cable exit)
- **Type of protection:** IP 22
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

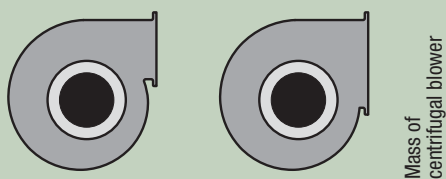
Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
D4D 225 <sup>(1)(2)</sup>	M4D 074-LA	Ⓐ 3~	230/400	50	2980	1000	680	1.99/1.15	—	64	0	-25 to +45	C1)/C2)
		3~	230/400	60	2430	1050	700	2.17/1.25	—	62	100	-25 to +35	

subject to alterations (1) data collected via exhaust duct (step diffuser, 1 m length) (2) 230 VAC Δ / 400 VAC Y

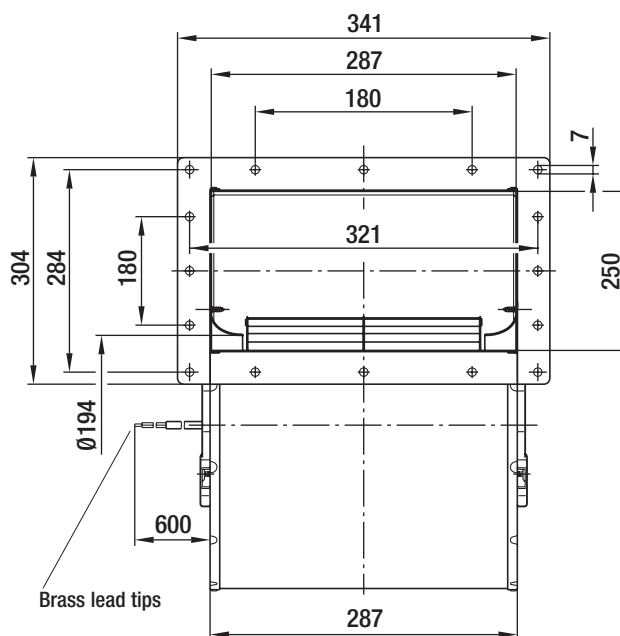
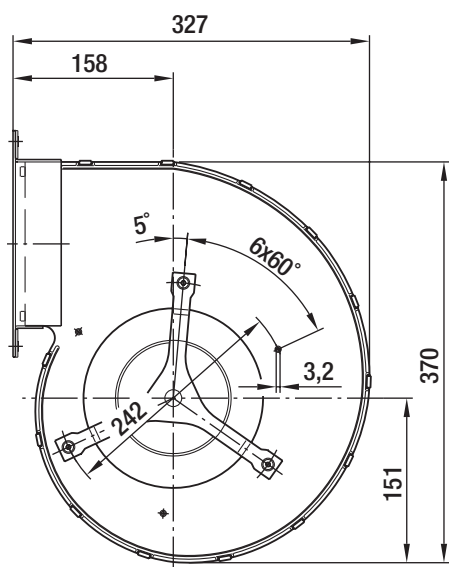
## Curves



- **Motor protection:** Without thermal protection
- **Cable exit:** Variable
- **Protection class:** I
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** CCC



Centrifugal blower with flange	Centrifugal blower with flange (large)	kg
—	D4D 225-CC01 -02	12.5



# AC centrifugal blowers

dual inlet, Ø 225



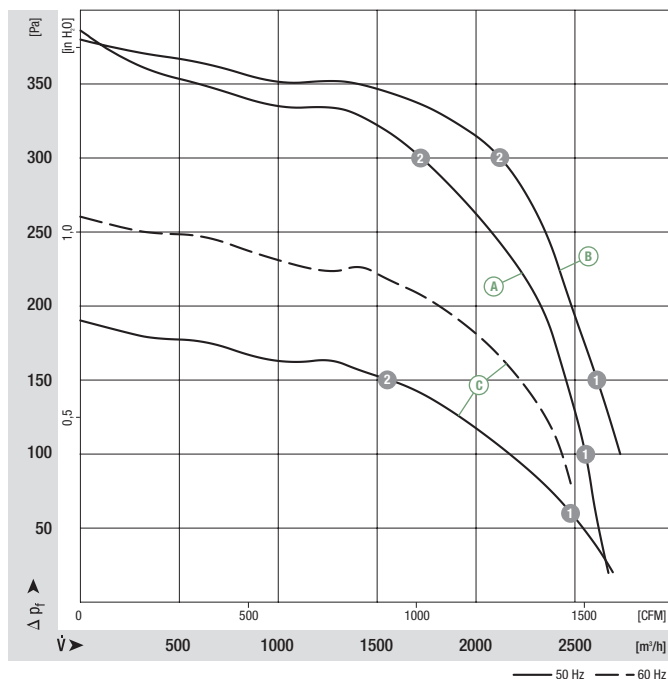
- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Partially cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor (opposite cable exit)
- **Type of protection:** (A) (B) IP 22, (C) IP 54
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed/rpm	Power input	Current draw	Capacitor	Sound pressure level	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	m³/h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	p. 596 f.	
D4E 225	M4E 074-LA	(A)	1~ 230	50	2600	1100	700	3.05	25.0/400	67	20	-25 to +40	A1)
D4E 225 (1)	M4E 074-LA	(B)	1~ 230	50	2650	1150	650	2.84	25.0/400	65	100	-25 to +40	A1)
D6E 225 (1)	M6E 068-LA	(C)	1~ 230	50	2680	800	365	1.60	10.0/450	59	20	-25 to +40	A1)
			1~ 230	60	2480	900	410	1.80	10.0/450	59	80	-25 to +40	

subject to alterations

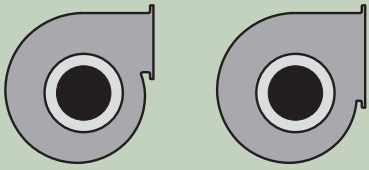
(1) data collected via exhaust duct (step diffuser, length 1 m)

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]
(A) 1	1200	660	2.88
(A) 2	1370	480	2.13
(B) 1	1170	680	2.98
(B) 2	1300	550	2.44
(C) 1	850	330	1.45
(C) 2	940	245	1.08

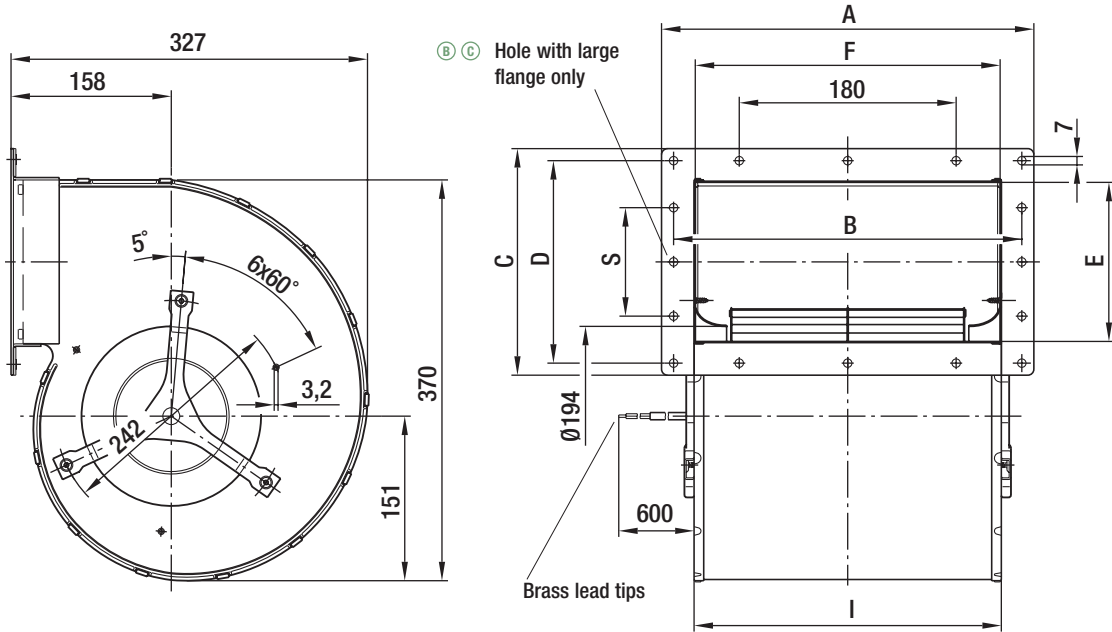
- **Motor protection:** TOP wired internally
- **Cable exit:** Variable
- **Protection class:** I
- **Capacitor:** (A) (B) FPU (P2) acc. to IEC 252
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** (A) (B) CCC, (B) GOST



Mass of centrifugal blower

Dimensions

Centrifugal blower with flange	Centrifugal blower with flange (large)	kg	A	B	C	D	E	F	I	S
D4E 225-BC01 -02	—	12.1	341.0	321.0	200.0	180.0	146.0	287.0	287.0	90.0
—	D4E 225-CC01 -02	12.4	341.0	321.0	304.0	284.0	250.0	287.0	287.0	180.0
—	D6E 225-FB07 -02	12.5	387.0	367.0	304.0	284.0	250.0	333.0	333.0	180.0



# AC centrifugal blowers

dual inlet, Ø 225



- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor (on cable exit)
- **Type of protection:** IP 20 (acc. to EN 60527)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

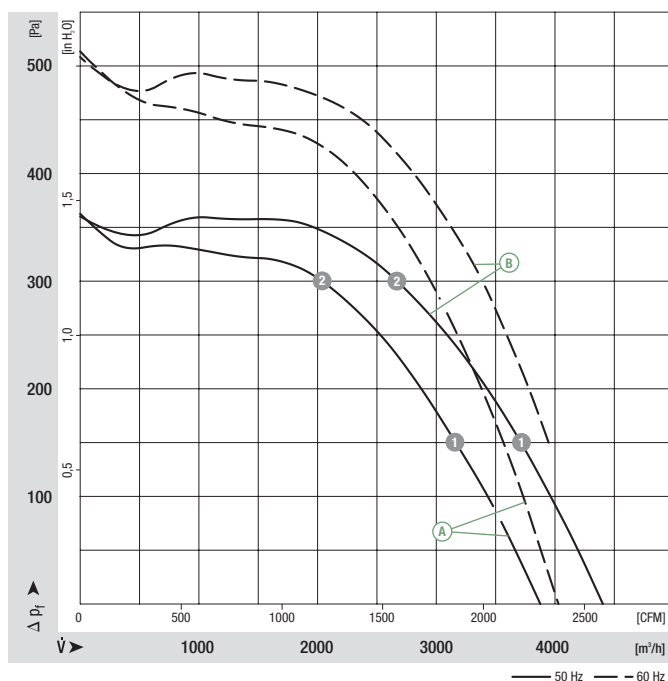
Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	W	A	µF/VDB	Pa	°C	p. 596 f.	
D4D 225	M4D 094-LA	A	3~ 400 Y	50	1300	950	1.82	—	0	-40 to +85	D1)
			3~ 400 Y	60	1350	1320	2.40	—	0	-40 to +40	
D4D 225 <sup>(2)</sup>	M4D 094-LA	B	3~ 400 Y	50	1230	1140	2.10	—	0	-40 to +70	D1)
			3~ 400 Y	60	1360	1280	2.30	—	150	-40 to +50	

subject to alterations

(1) Nominal data in operating point with maximum load

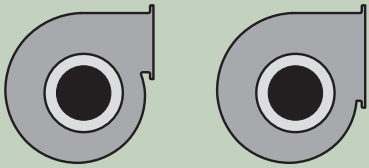
(2) Data collected via exhaust duct (step diffuser, 1 m length)

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
A 1	1360	717	1.50	69
A 2	1420	454	1.18	63
B 1	1320	877	1.70	72
B 2	1390	589	1.31	65

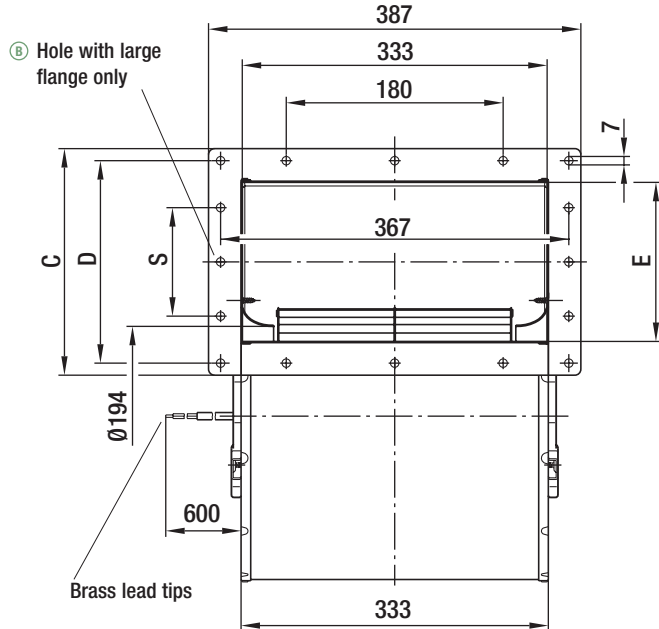
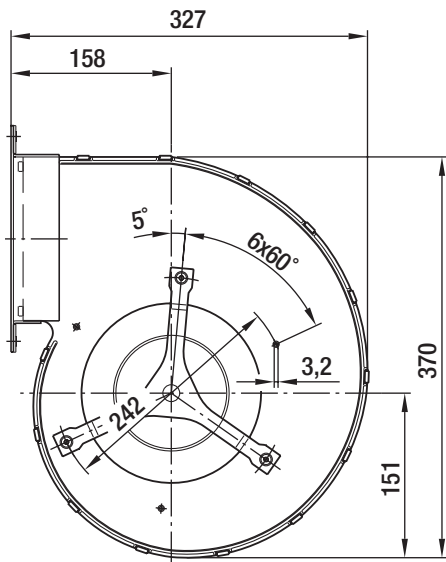
- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Axial
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** Ⓐ GOST
- **Options:** 400 VAC Δ/Y for two speed steps available on request, mounting brackets on request



Mass of centrifugal blower

Dimensions

Centrifugal blower with flange	Centrifugal blower with flange (large)	kg	C	D	E	S
D4D 225-FH02 -01	—	15.6	200.0	180.0	146.0	90.0
—	D4D 225-GH02 -01	15.6	304.0	284.0	250.0	180.0



# AC centrifugal blowers

dual inlet, Ø 225



- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor (on cable exit)
- **Type of protection:** IP 20 (acc. to EN 60527)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

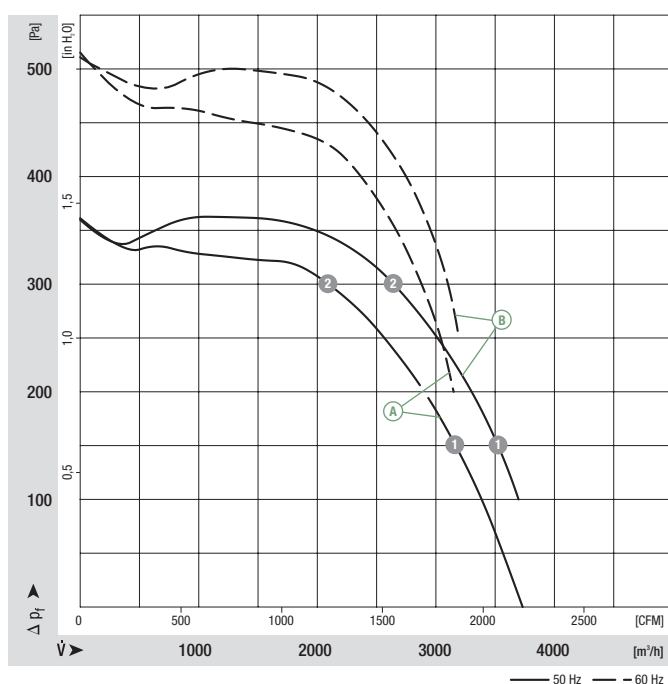
Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	W	A	µF/VDB	Pa	°C	p. 596 f.	
D4E 225	M4E 094-LA	A	1~ 230	50	1230	1060	5.38	10.0/450	0	-40 to +55	A2a)
			1~ 230	60	1410	1085	5.24	10.0/500	200	-40 to +45	
D4E 225 <sup>(2)</sup>	M4E 094-LA	B	1~ 230	50	1230	1060	5.38	10.0/450	100	-40 to +55	A2a)
			1~ 230	60	1370	1120	5.40	10.0/500	250	-40 to +45	

subject to alterations

(1) Nominal data in operating point with maximum load

(2) Data collected via exhaust duct (step diffuser, 1 m length)

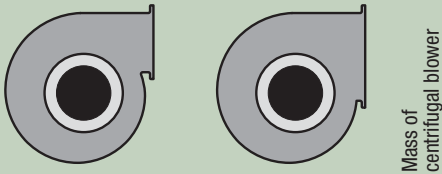
## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
A 1	1330	802	4.16	69
A 2	1410	530	3.08	63
B 1	1270	947	4.81	71
B 2	1380	652	3.52	65



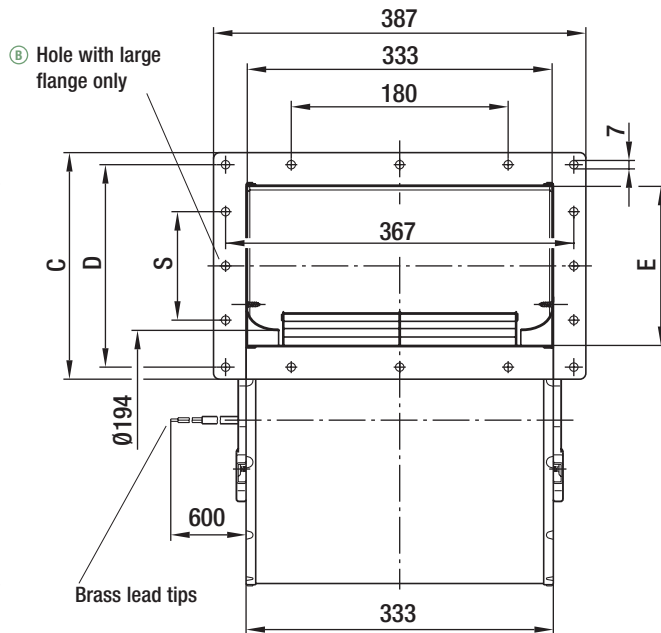
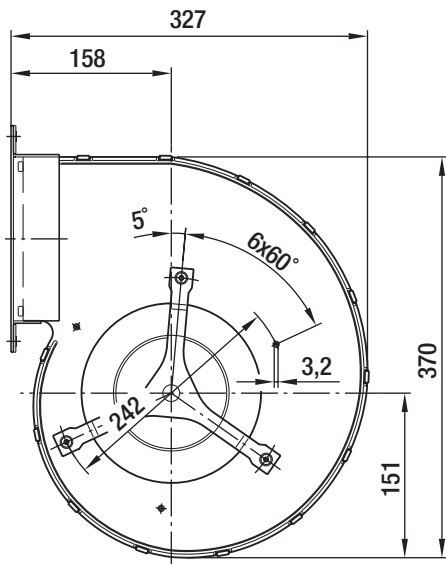
- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Axial
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** Ⓐ GOST
- **Options:** Mounting brackets on request



Mass of centrifugal blower

Dimensions

Centrifugal blower with flange	Centrifugal blower with flange (large)	kg	C	D	E	S
D4E 225-EH01 -01	—	16.7	200.0	180.0	146.0	90.0
—	D4E 225-DH01 -01	16.7	304.0	284.0	250.0	180.0



# AC centrifugal blowers

dual inlet, Ø 240

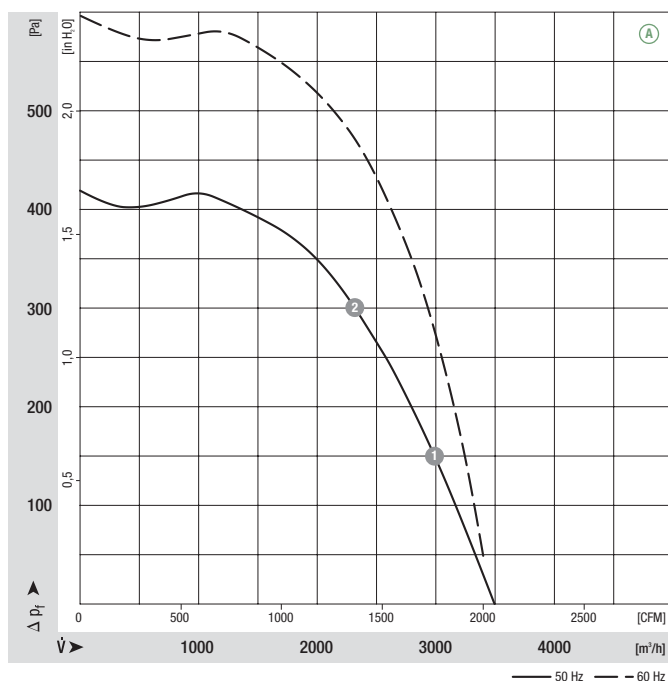


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor (on cable exit)
- **Type of protection:** IP 20 (acc. to EN 60527)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	W	A	µF/VDB	Pa	°C	p. 596 f.	
D4E 240	M4E 094-IF	Ⓐ 1~ 230 1~ 230	50 60	1300 1310	1020 1320	4.45 5.75	25.0/400 25.0/400	0 50	-40 to +50 -40 to +55	A2a)	

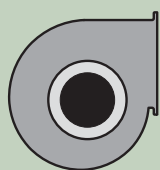
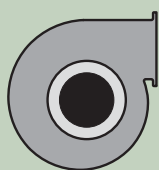
subject to alterations (1) Nominal data in operating point with maximum load

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
Ⓐ 1	1345	849	3.80	73
Ⓐ 2	1390	692	3.10	70

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Axial
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standard:** CE
- **Options:** Mounting brackets on request



Mass of centrifugal blower

Centrifugal blower with flange

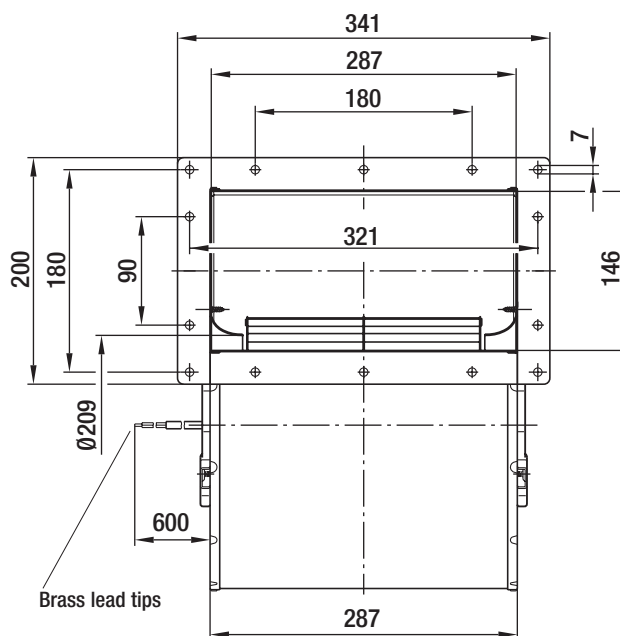
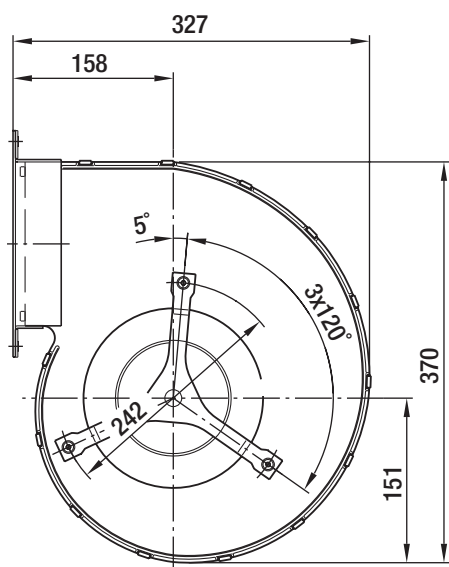
Centrifugal blower with flange (large)

kg

D4E 240-BA01 -01

—

15.3



# AC centrifugal blowers

dual inlet, Ø 250

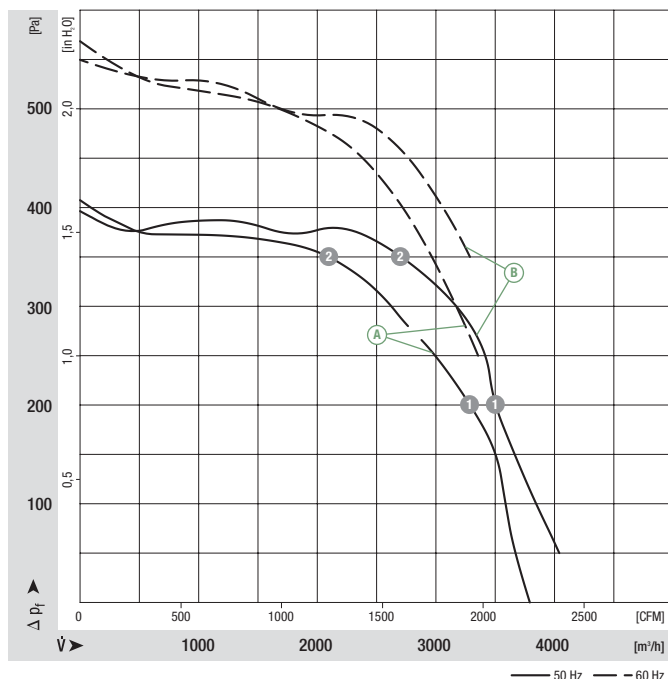


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor (on cable exit)
- **Type of protection:** IP 20 (acc. to EN 60527)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	W	A	µF/VDB	Pa	°C	p. 596 f.	
D4D 250	M4D 094-LA	A	3~ 400 Y	50	1240	1140	2.10	—	0	-40 to +60	D1)
			3~ 400 Y	60	1410	1210	2.20	—	250	-40 to +45	
D4D 250 <sup>(2)</sup>	M4D 094-LA	B	3~ 400 Y	50	1200	1270	2.30	—	50	-40 to +45	D1)
			3~ 400 Y	60	1410	1270	2.20	—	350	-40 to +45	

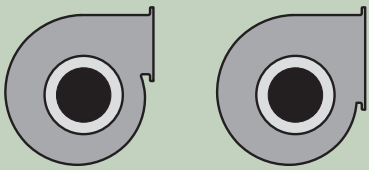
subject to alterations (1) Nominal data in operating point with maximum load (2) Data collected via exhaust duct (step diffuser, 1 m length)

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
A 1	1320	875	1.73	71
A 2	1410	481	1.21	65
B 1	1280	1001	1.89	72
B 2	1370	675	1.43	69

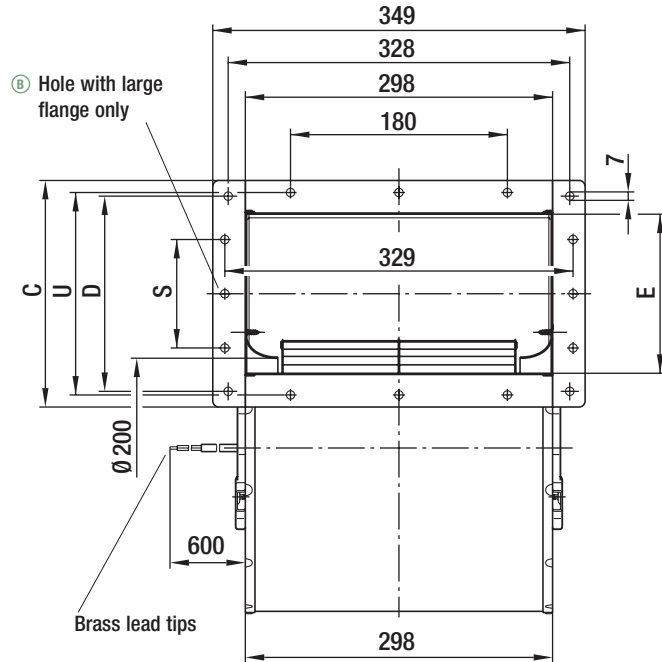
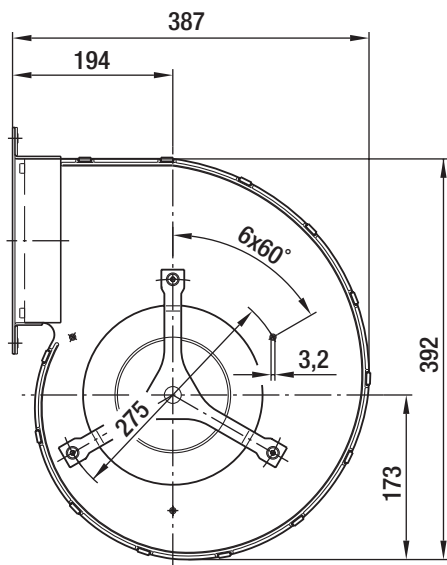
- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Axial
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standard:** CE
- **Options:** 400 VAC  $\Delta/Y$  for two speed steps available on request, mounting brackets on request



Mass of centrifugal blower

Dimensions

Centrifugal blower with flange	Centrifugal blower with flange (large)	kg	C	D	E	S	U
D4D 250-BA02 -01	—	16.7	218.0	190.0	167.0	90.0	198.0
—	D4D 250-CA02 -01	16.7	313.0	285.0	262.0	180.0	293.0



# AC centrifugal blowers

dual inlet, Ø 250

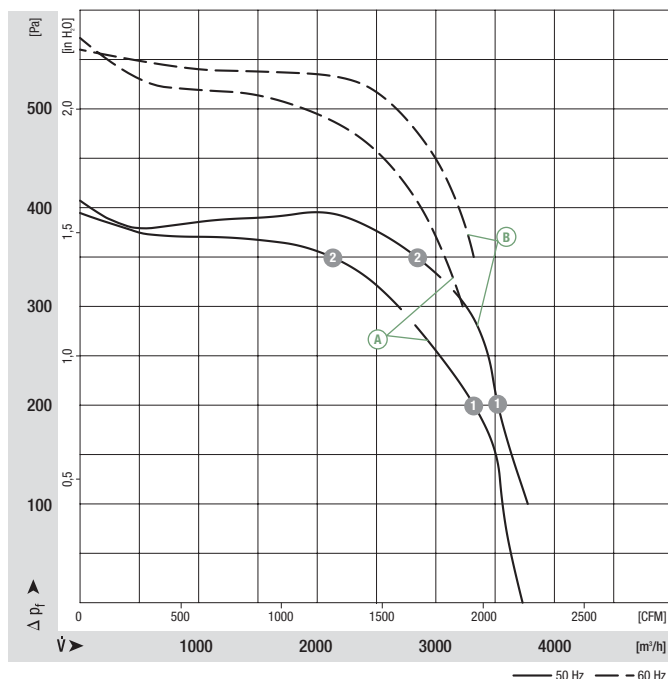


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor (on cable exit)
- **Type of protection:** IP 20 (acc. to EN 60527)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	W	A	µF/VDB	Pa	°C	p. 596 f.	
<b>D4E 250</b>	M4E 094-LA	A	1~ 230	50	1210	1240	6.00	14.0/500	0	-40 to +40	A2a)
			1~ 230	60	1460	1230	5.54	14.0/500	300	-40 to +45	
<b>D4E 250<sup>(2)</sup></b>	M4E 094-LA	B	1~ 230	50	1200	1250	6.00	14.0/500	100	-40 to +40	A2a)
			1~ 230	60	1400	1285	5.90	14.0/500	350	-40 to +40	

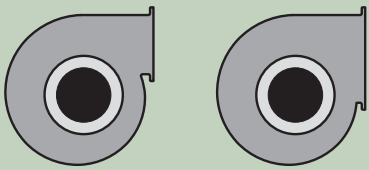
subject to alterations (1) Nominal data in operating point with maximum load (2) Data collected via exhaust duct (step diffuser, 1 m length)

## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
A 1	1320	975	4.74	71
A 2	1400	665	3.50	65
B 1	1270	1100	5.31	72
B 2	1370	788	3.94	69

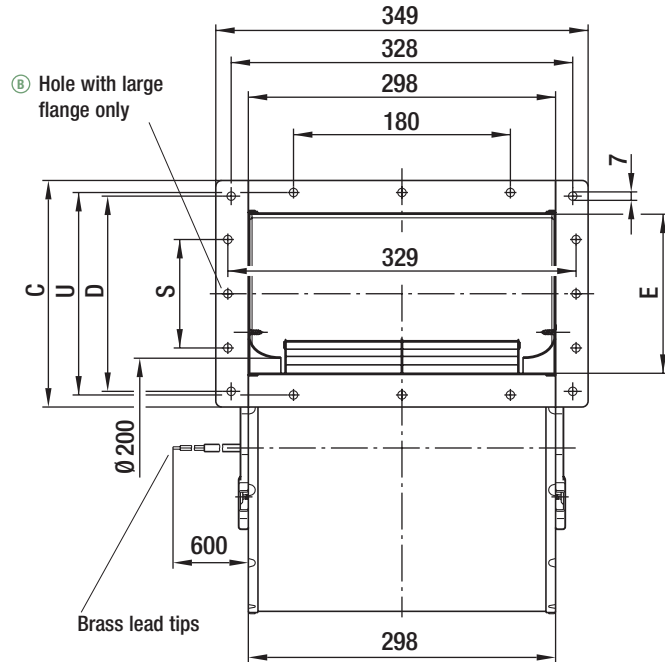
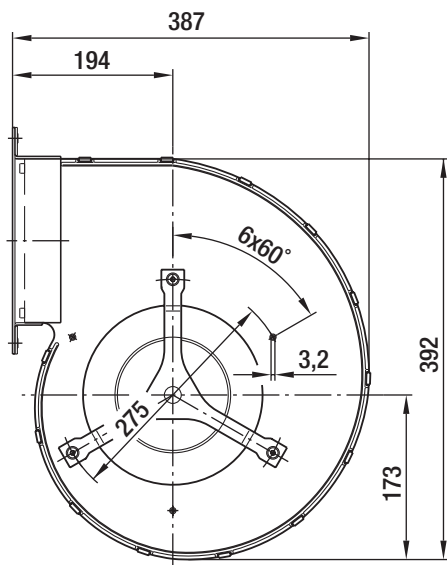
- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Axial
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** Ⓟ GOST
- **Options:** Mounting brackets on request



Mass of centrifugal blower

Dimensions

Centrifugal blower with flange	Centrifugal blower with flange (large)	kg	C	D	E	S	U
D4E 250-BA01 -01	—	16.3	218.0	190.0	167.0	90.0	198.0
—	D4E 250-CA01 -01	16.3	313.0	285.0	262.0	180.0	293.0



# AC centrifugal blowers

dual inlet, Ø 250

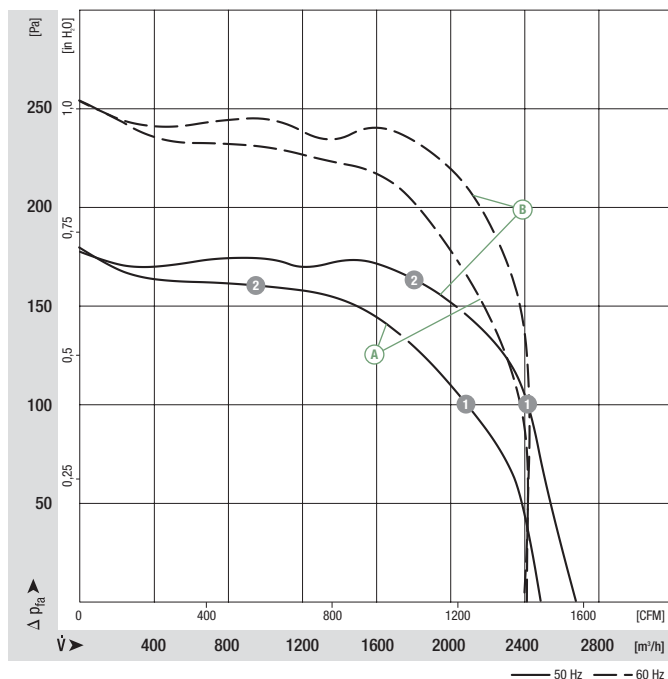


- **Material:** Housing: Galvanised sheet steel  
Impeller: Galvanised sheet steel  
Rotor: Cast in aluminium
- **Direction of rotation:** Counter-clockwise, seen on rotor (on cable exit)
- **Type of protection:** IP 20 (acc. to EN 60527)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Design:** EW motor anti-vibration mounted on both sides
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm <sup>(1)</sup>	Max. power input <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Capacitor	Min. back pressure	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	W	A	µF/VDB	Pa	°C	p. 596 f.	
D6E 250	M6E 094-HA	A	1~ 230	50	800	400	1.85	10.0/400	0	-40 to +80	A2a)
			1~ 230	60	770	480	2.15	10.0/450	0	-40 to +80	
D6E 250 <sup>(2)</sup>	M6E 094-HA	B	1~ 230	50	680	470	2.20	10.0/400	0	-40 to +70	A2a)
			1~ 230	60	580	500	2.30	10.0/450	0	-40 to +55	

subject to alterations (1) Nominal data in operating point with maximum load (2) Data collected via exhaust duct (step diffuser, 1 m length)

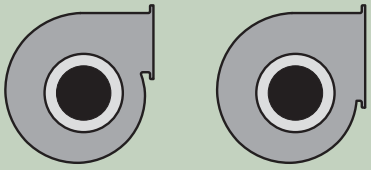
## Curves



	n [rpm]	P <sub>1</sub> [W]	I [A]	Lp <sub>A</sub> [dB(A)]
A 1	890	318	1.51	59
A 2	940	244	1.25	53
B 1	830	375	1.74	65
B 2	900	304	1.45	57



- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Axial
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standard:** CE
- **Options:** Mounting brackets on request



Mass of centrifugal blower

Dimensions

Centrifugal blower with flange	Centrifugal blower with flange (large)	kg	C	D	E	S	U
D6E 250-BA01 -01	—	14.4	218.0	190.0	167.0	90.0	198.0
—	D6E 250-CA01 -01	14.4	313.0	285.0	262.0	180.0	293.0

