

AC centrifugal fans

backward curved, 3-D, Ø 450



- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 6
- **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

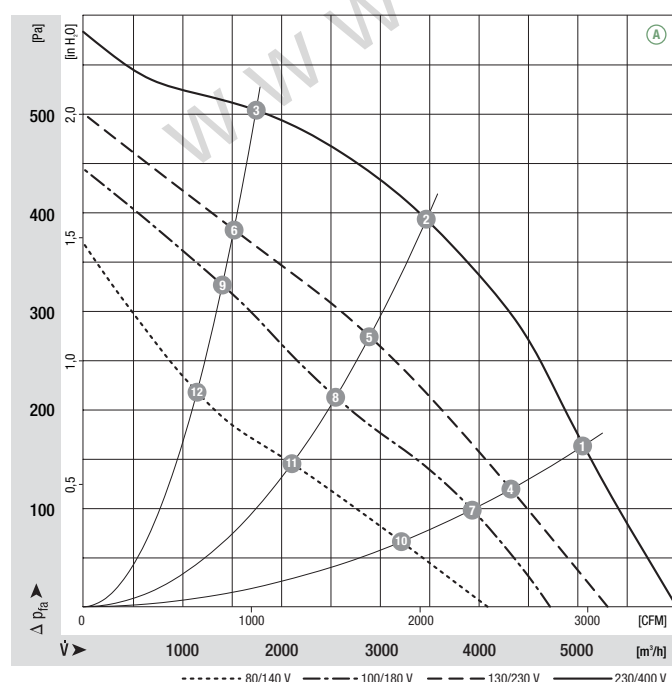
Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Speed/rpm ⁽¹⁾ rpm	Max. power input ⁽¹⁾ kW	Max. current draw ⁽¹⁾ A	Capacitor µF/VDB	Perm. amb. temp. °C	Electr. connection p. 596 f.
R4D 450 ⁽²⁾	M4D 110-GF	Ⓐ	3~ 230/400	50	1350	0.74	2.60/1.50	—	-40 to +80	D1)/D2)

subject to alterations

(1) Nominal data in operating point with maximum load

(2) 230 VAC Δ / 400 VAC Y

Curves



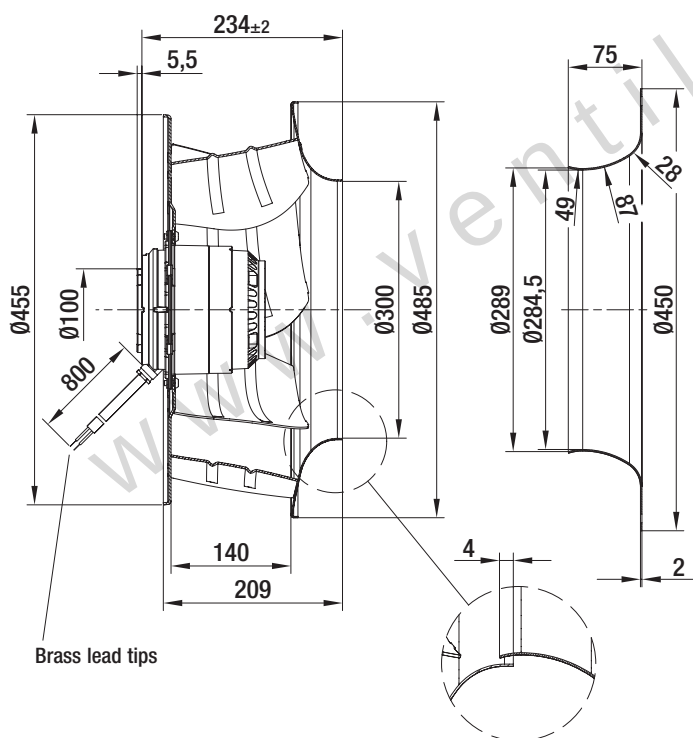
	n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
Ⓐ 1	1370	0.65	2.35/1.35	75
Ⓐ 2	1350	0.73	2.50/1.45	70
Ⓐ 3	1380	0.61	2.25/1.30	76
Ⓐ 4	1155	0.47	2.40/1.40	70
Ⓐ 5	1115	0.51	2.60/1.50	65
Ⓐ 6	1180	0.45	2.25/1.30	72
Ⓐ 7	1055	0.37	2.45/1.40	68
Ⓐ 8	955	0.38	2.60/1.50	61
Ⓐ 9	1100	0.32	2.25/1.30	70
Ⓐ 10	830	0.26	2.25/1.30	61
Ⓐ 11	780	0.27	2.25/1.30	56
Ⓐ 12	850	0.25	2.15/1.25	63

- **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)

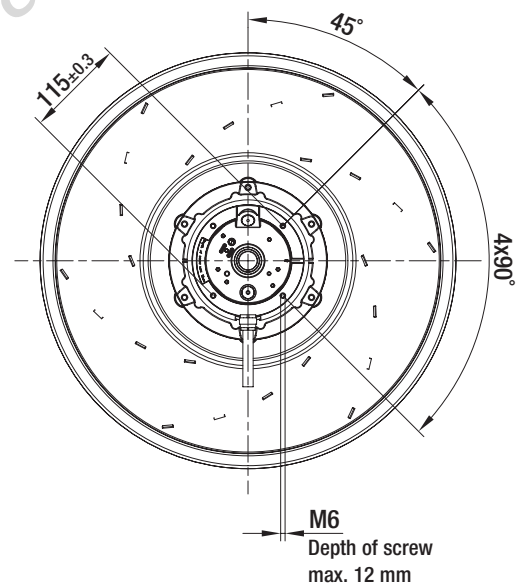


Mass of centrifugal fan

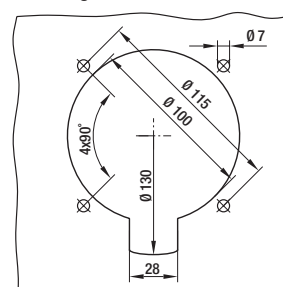
Centrifugal fan	kg	Inlet nozzle (long)
R4D 450-AK01 -01	12.5	63045-2-4013



Brass lead tips



Mounting dimensions



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- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 6
- **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

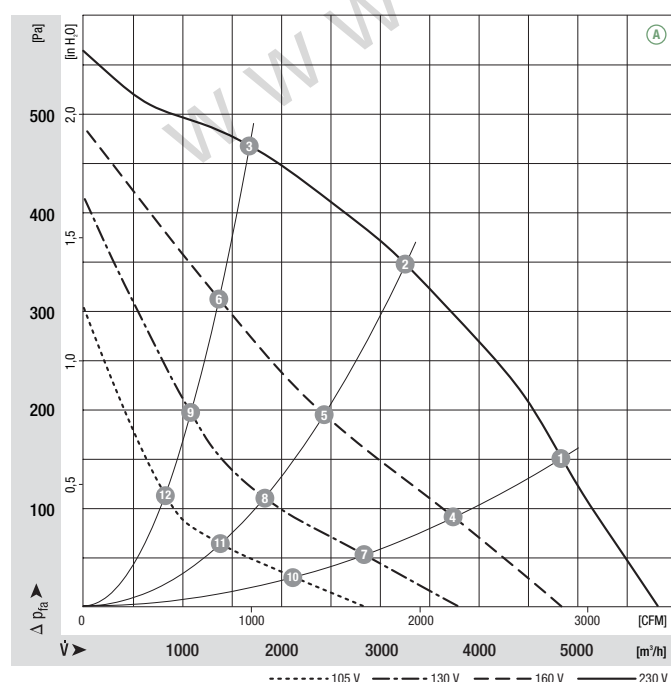
Nominal data

Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Speed/rpm ⁽¹⁾ rpm	Max. power input ⁽¹⁾ kW	Max. current draw ⁽¹⁾ A	Capacitor µF/VDB	Perm. amb. temp. °C	Electr. connection p. 596 f.
R4E 450	M4E 110-GF	Ⓐ	1~ 230	50	1250	0.68	3.00	14.0/400	-40 to +70	A2a)

subject to alterations

(1) Nominal data in operating point with maximum load

Curves



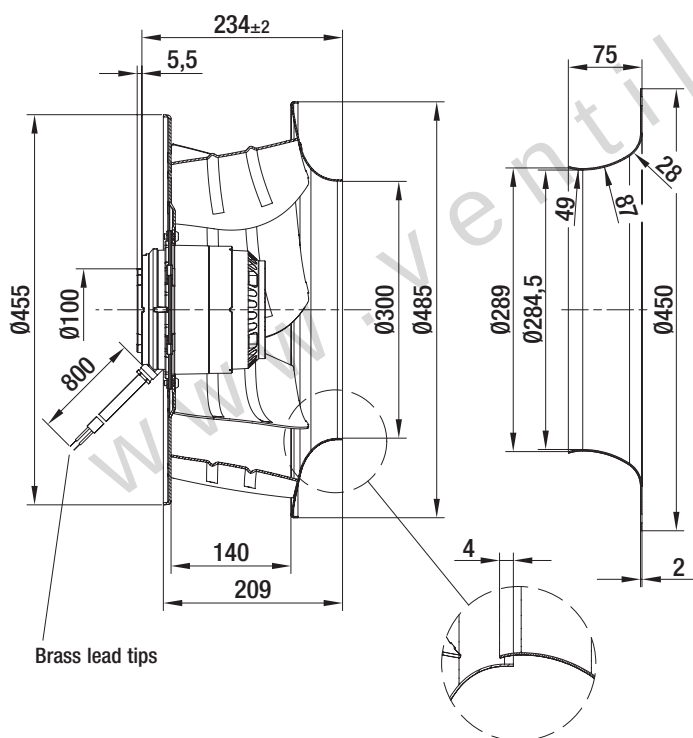
	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	1300	0.65	2.80	74
Ⓐ 2	1265	0.68	3.00	69
Ⓐ 3	1320	0.62	2.68	75
Ⓐ 4	970	0.43	2.80	65
Ⓐ 5	900	0.43	2.90	60
Ⓐ 6	1040	0.41	2.71	69
Ⓐ 7	720	0.29	2.40	61
Ⓐ 8	670	0.29	2.49	53
Ⓐ 9	790	0.29	2.41	62
Ⓐ 10	545	0.19	2.00	50
Ⓐ 11	510	0.19	2.00	47
Ⓐ 12	580	0.19	2.00	54

- **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)

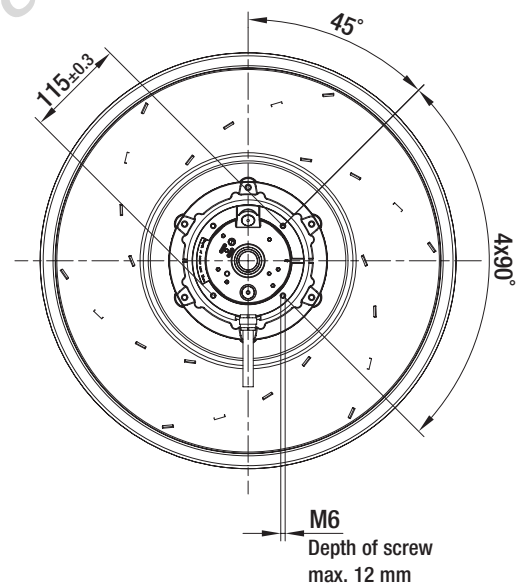


Mass of centrifugal fan

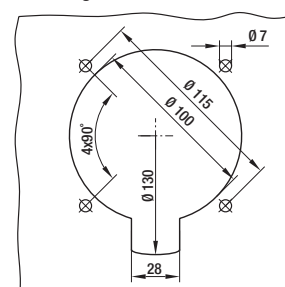
Centrifugal fan	kg	Inlet nozzle (long)
R4E 450-AK01 -01	12.5	63045-2-4013



Brass lead tips



Mounting dimensions



AC centrifugal fans

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- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 6
- **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

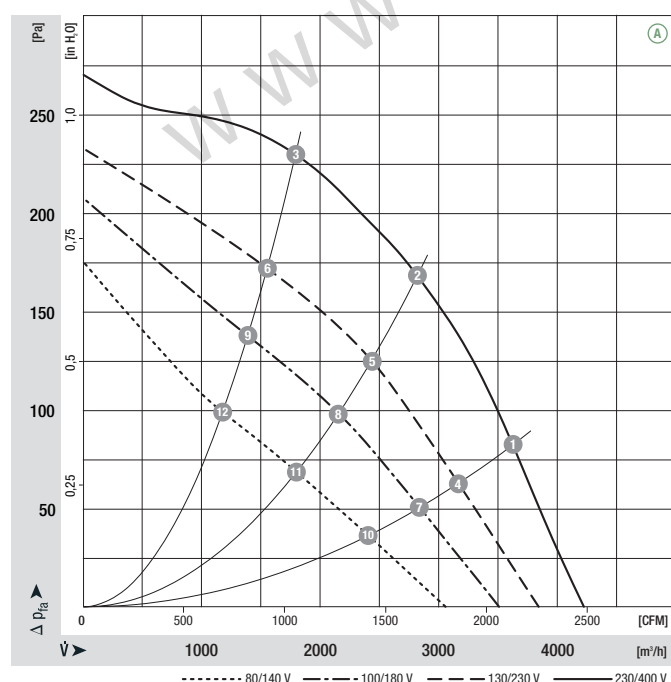
Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Speed/rpm ⁽¹⁾ rpm	Max. power input ⁽¹⁾ kW	Max. current draw ⁽¹⁾ A	Capacitor µF/VDB	Perm. amb. temp. °C	Electr. connection p. 596 f.
R6D 450⁽²⁾	M6D 110-EF	Ⓐ	3~ 230/400	50	930	0.29	1.30/0.75	—	-40 to +85	D1)/D2)

subject to alterations

(1) Nominal data in operating point with maximum load

(2) 230 VAC Δ / 400 VAC Y

Curves



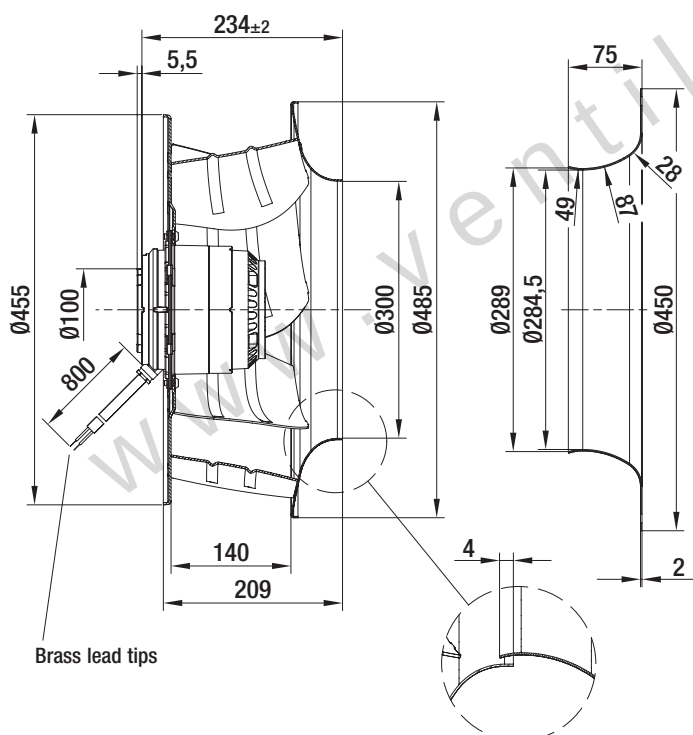
	n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
Ⓐ 1	950	0.25	1.12/0.65	66
Ⓐ 2	940	0.28	1.15/0.66	63
Ⓐ 3	950	0.26	1.12/0.65	65
Ⓐ 4	830	0.18	0.92/0.53	61
Ⓐ 5	805	0.20	1.00/0.58	58
Ⓐ 6	825	0.18	0.94/0.54	60
Ⓐ 7	735	0.15	0.94/0.54	58
Ⓐ 8	705	0.16	1.01/0.58	54
Ⓐ 9	730	0.15	0.95/0.55	58
Ⓐ 10	615	0.11	0.90/0.52	52
Ⓐ 11	580	0.11	0.94/0.54	48
Ⓐ 12	610	0.11	0.90/0.52	52

- **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)

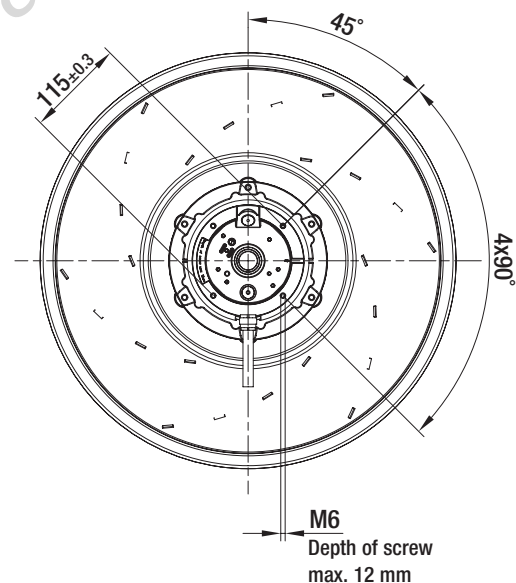


Mass of centrifugal fan

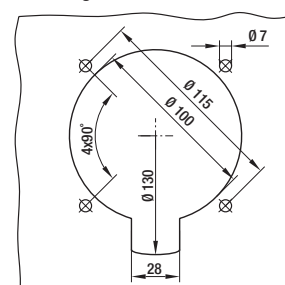
Centrifugal fan	kg	Inlet nozzle (long)
R6D 450-AN01 -01	10.0	63045-2-4013



Brass lead tips



Mounting dimensions



AC centrifugal fans

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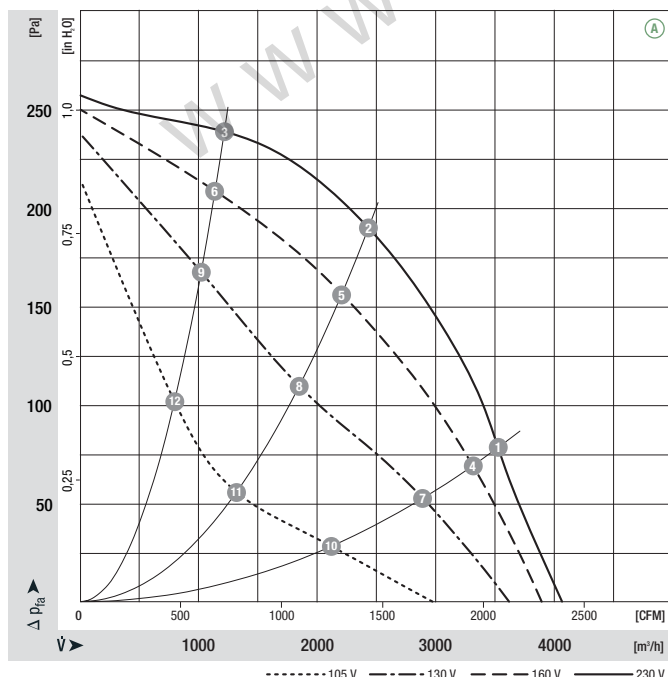


- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 6
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharge holes:** On rotor and stator sides
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Perm. amb. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	°C	p. 596 f.	
R6E 450	M6E 110-EF	Ⓐ 1~ 230	50	930	0.30	1.42	8.0/450	-40 to +70	A2a)	

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

Curves



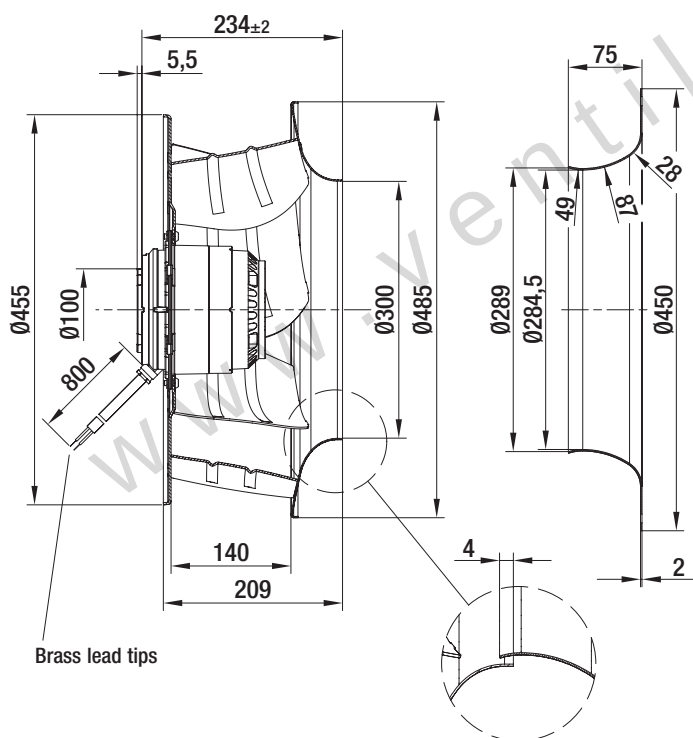
	n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
Ⓐ 1	945	0.27	1.30	65
Ⓐ 2	935	0.29	1.38	61
Ⓐ 3	945	0.27	1.28	67
Ⓐ 4	865	0.21	1.30	62
Ⓐ 5	840	0.22	1.40	59
Ⓐ 6	880	0.19	1.20	64
Ⓐ 7	740	0.17	1.41	58
Ⓐ 8	665	0.18	1.50	53
Ⓐ 9	775	0.16	1.39	61
Ⓐ 10	520	0.12	1.30	48
Ⓐ 11	465	0.12	1.38	44
Ⓐ 12	565	0.12	1.30	52

- **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)

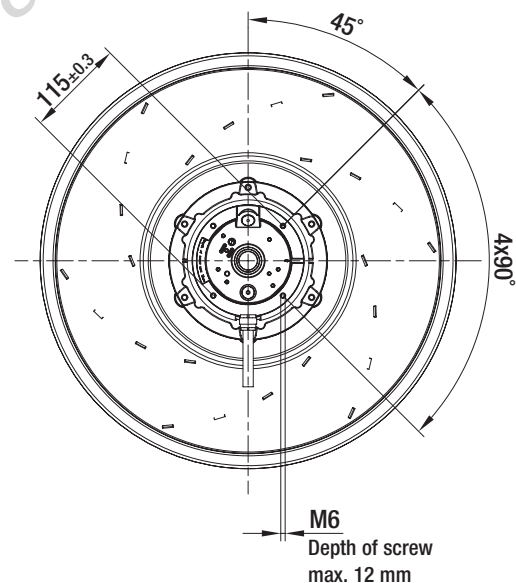


Mass of centrifugal fan

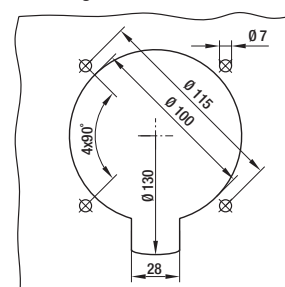
Centrifugal fan	kg	Inlet nozzle (long)
R6E 450-AN01 -01	10.0	63045-2-4013



Brass lead tips



Mounting dimensions



AC centrifugal fans

backward curved, Ø 450



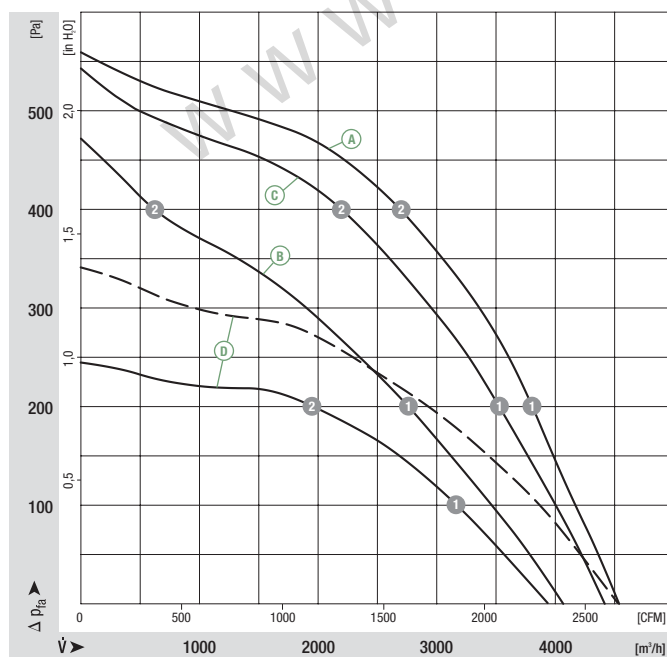
- **Material:** Impeller: Sheet aluminium, riveted
Rotor: Coated in black
- **Number of blades:** 6
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed/rpm ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Perm. amb. temp.	Electr. connection
Type	Motor		VAC	Hz	rpm	W	A	µF/VDB	°C	p. 596 f.
R4D 450	M4D 094-HA	(A)	3~ 400 Δ	50	1380	665	1.55	—	-40 to +50	F1a)/F2a)
		(B)	3~ 400 Y	50	1130	470	0.82	—	-40 to +55	
R4E 450	M4E 094-HA	(C)	1~ 230	50	1290	640	3.10	10.0/400	-40 to +50	A2a)
R6E 450	M6E 094-HA	(D)	1~ 230	50	905	320	1.56	10.0/400	-40 to +40	A2a)
			1~ 230	60	1010	425	1.86	10.0/450	-40 to +55	

subject to alterations

(1) Nominal data in operating point with maximum load

Curves



	n [rpm]	P ₁ [W]	I [A]	Lp _A [dB(A)]
(A) 1	1390	610	1.52	70
(A) 2	1380	650	1.53	69
(B) 1	1130	470	0.82	64
(B) 2	1260	350	0.65	68
(C) 1	1310	602	2.97	69
(C) 2	1310	596	2.92	68
(D) 1	910	305	1.50	61
(D) 2	905	310	1.53	58

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

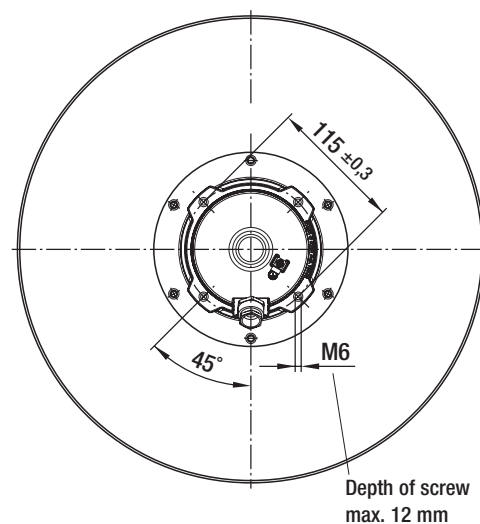
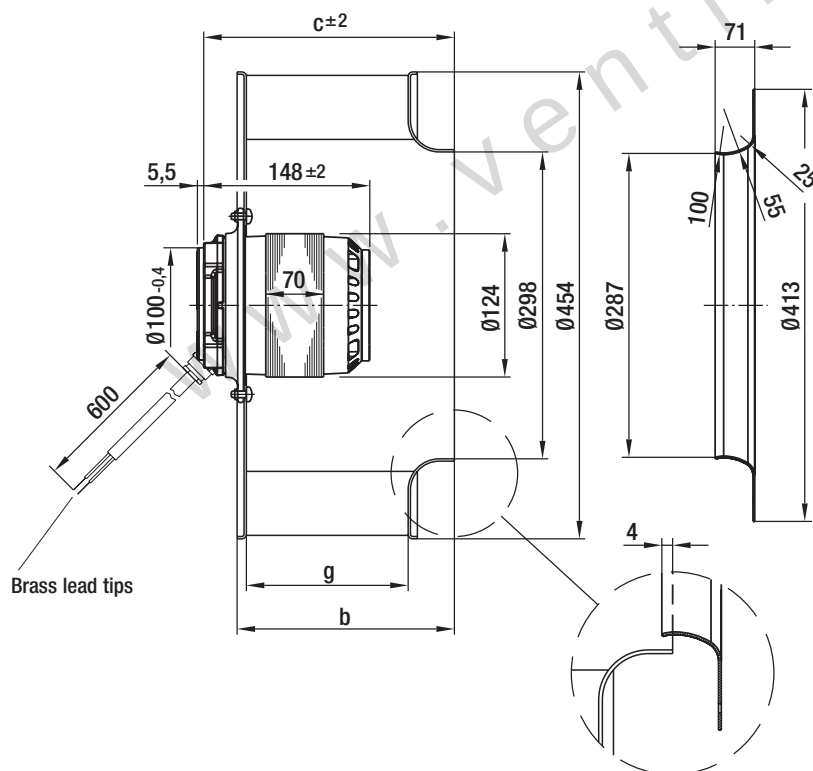


Mass of
centrifugal fan

Dimensions



Centrifugal fan	kg	b	c	g	Inlet nozzle (long)
R4D 450-AD22 -06	9.3	175.0	204.0	120.0	54478-2-4013
R4E 450-AB09 -06	9.3	175.0	204.0	120.0	54478-2-4013
R6E 450-AB06 -06	9.6	215.0	244.0	160.0	54478-2-4013



Mounting dimensions

