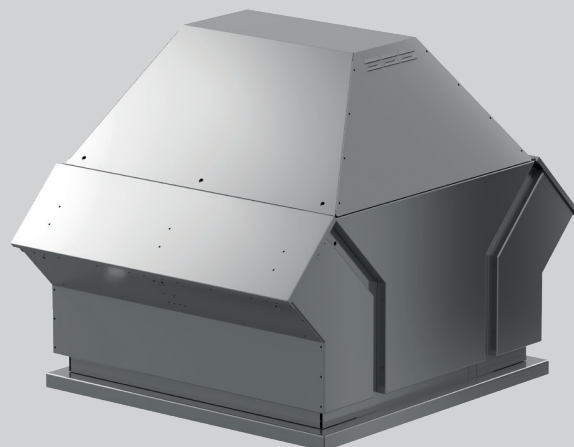


# High Temperature Roof Fans (RDM)

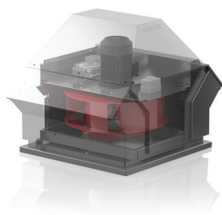
- Handles air temperatures up to +120°C
- High performance directed vertical discharge
- Motor mounted outside of the airstream
- Manufactured from aluminium
- IP65 service isolator
- Integral backdraught shutter
- Manufacture controlled to ISO 9001
- Performance tested to ISO 5801
- 2 Year Warranty



Designed to comply with the latest EU regulations for Ventilation units the new RDM range of roof extract fans from Vent-Axia are suitable for both general ventilation and kitchen ventilation with in-duct temperatures of up to 120°C.

## Motors

High performance centrifugal impeller with backward curved blades directly fitted to a premium efficiency IE3 motor protected to IP55. The motor is fitted with PTC Thermistors as standard and is designed for best operation through a frequency inverter with sine filters. Balanced statically and dynamically according to DIN ISO 1940. Meets the efficiency requirements of Regulation EU1253/2014 ErP Lot 6 for ventilation units.



## Performance

The fan performance is tested in accordance with ISO 5801.

## Electrical

All models are suitable for 380-415 / 3 / 50 electrical supply.

## Sound

Sound measurements are made in accordance with DIN 45635-38. Inlet side is in accordance with ISO 5136 as an in-duct figure.

Discharge side is in accordance with DIN 45635-1 and BS848 part 2 as a free field figure.

## Accessories

### Flat roof upstand

Manufactured from galvanised sheet steel with sound absorbing and thermal lining.

### Inclined roof upstand

Upstand for inclined roof made of aluminium sheet, provided with sound and thermal insulation, available in steps of 5 degrees from 5 to 45 degrees roof pitch - to be advised at time of order.

### Intake flexible connection

Flanged flexible connection to prevent the transmission of vibration to other parts of the installation. Flange dimensions are in accordance with DIN 24 155 - 2.

### Protection grid for intake

Use in installations with an open inlet.

### Inlet silencer

The tubular inlet silencer has a square flange on the side nearest to the roof unit for bolting to the respective flat roof upstand. It slides inside the upstand, while the opposite end can take either additional ducting or an inlet cone.

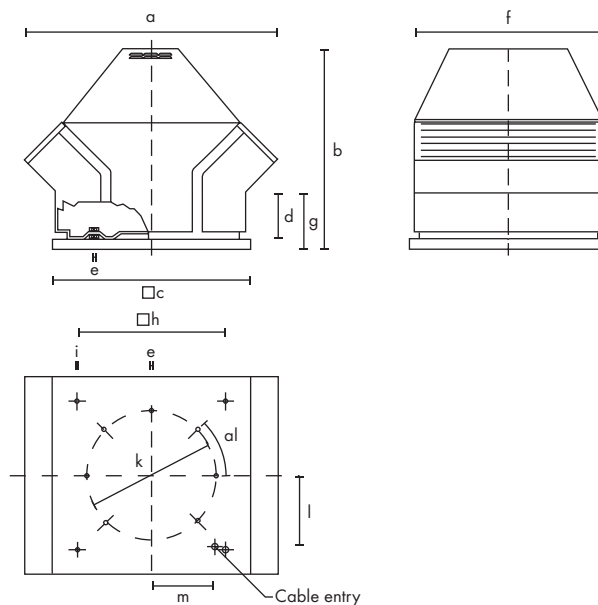
The exterior skin is made of galvanised sheet steel, and the interior of galvanised perforated plate. The cavity between them is filled with non-flammable acoustic material.

There is no central core of material, so any pressure loss will be insignificant.

Stock Ref	dB	63	125	250	500	1k	2k	4k	8k
475820	7	0	3	5	10	14	13	8	7
475821	8	2	4	6	12	16	14	10	8
475822	12	2	4	8.5	17	20	15	12	10
475823	13	3	5	9	17	21	15	12	10
475824	13	3	5	10	18	22	16	12	10

For full details please contact Technical Support 0344 856 0595.

## Dimensions (mm)



Stock Ref	a	α	b	c	d	e	f	g	h	i	k	l	m
RDM3E25284D	600	6x60°	543	440	32	M6	440	135	330	12	286	138	138
RDM3E25314D	600	6x60°	543	440	32	M6	440	135	330	12	286	138	138
RDM3E35354D	770	6x60°	635	600	32	M8	570	170	450	12	395	216	192
RDM3E354043	770	6x60°	635	600	32	M8	570	170	450	12	395	216	192
RDM3E354543	770	6x60°	635	600	32	M8	570	170	450	12	395	216	192
RDM3E455043	985	6x60°	775	750	32	M8	730	208	590	14	487	282	222
RDM3E455643	985	6x60°	775	750	32	M8	730	208	590	14	487	282	222
RDM3E455663	985	6x60°	775	750	32	M8	730	208	590	14	487	282	222
RDM3E566363	1125	8x45°	946	940	40	278	920	278	750	14	605	335	317
RDMFE567163	1125	8x45°	946	940	40	278	920	278	750	14	605	335	317
RDMFE718063	1625	8x45°	1195	1270	65	M10	1230	380	1050	14	751	500	445
RDMFE719063	1625	8x45°	1195	1270	65	M10	1230	380	1050	14	751	500	445

## Accessories



Fan  
Stock Ref



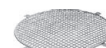
Flat roof upstand  
Stock Ref



Inclined roof upstand  
Stock Ref



Intake flexible connection  
Stock Ref



Protection grid for intake  
Stock Ref

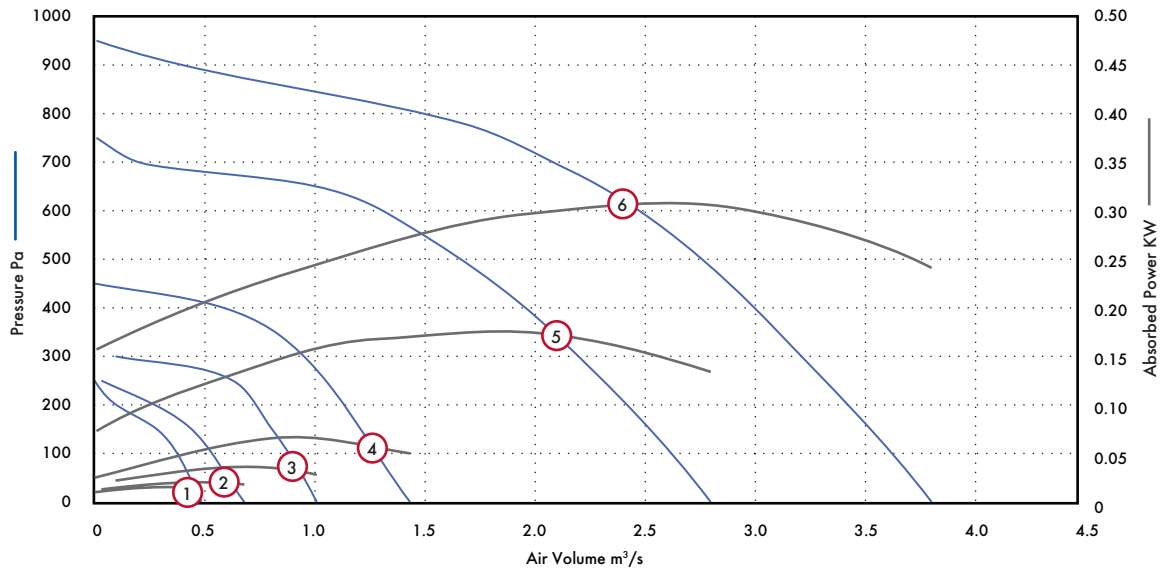


Inlet silencer  
Stock Ref

RDM3E25284D	475776	475787	475798	475809	475820
RDM3E25314D	475776	475787	475798	475809	475820
RDM3E35354D	475777	475788	475799	475810	475821
RDM3E354043	475777	475788	475799	475810	475821
RDM3E455043	475778	475789	475800	475811	475822
RDM3E455643	475778	475789	475800	475811	475822
RDM3E455663	475778	475789	475800	475811	475822
RDM3E566363	475779	475790	475801	475812	475823
RDMFE567163	475779	475790	475801	475812	475823
RDMFE718063	475780	475791	475802	475813	475824
RDMFE719063	475780	475791	475802	475813	475824

Note. The accessories listed are bespoke to this product range, for full dimensional details please contact Technical Support

# Performance Guide

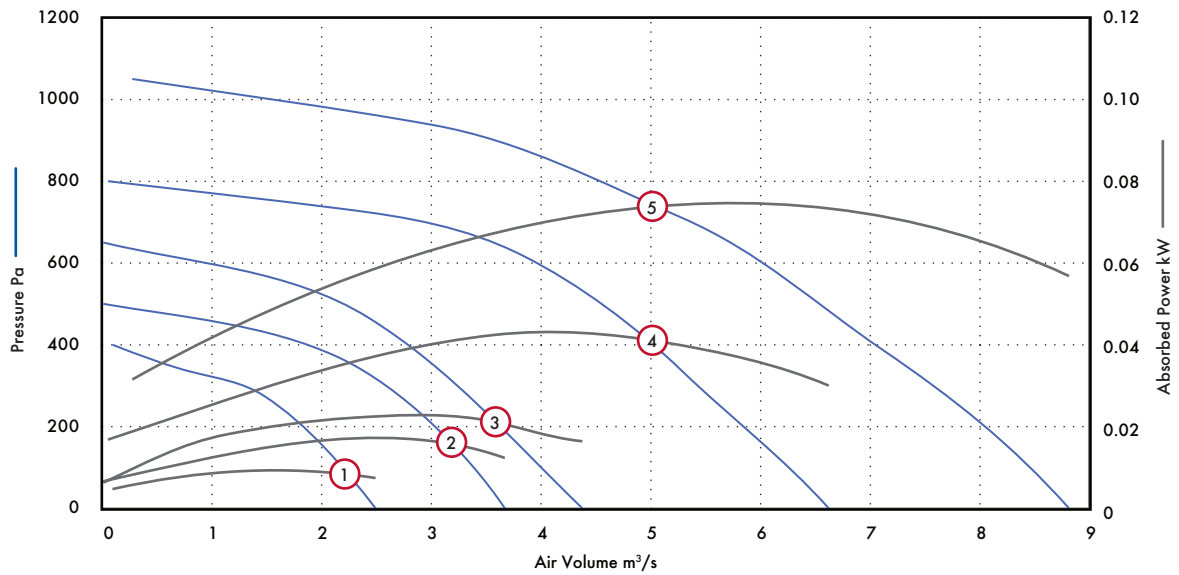


Stock Ref	Supply	r.p.m	Curve Ref	Air Volume m³/s											Motor kW	FLC	SC		
				0	100	200	300	400	500	600	700	800	900						
RDM3E25284D	400/3/50	1350	1	m³/s	0.49	0.37	0.07								0.25	0.84	2.52		
				kW	0.14	0.16	0.12												
RDM3E25314D	400/3/50	1350	2	m³/s	0.68	0.53	0.26								0.25	0.84	2.52		
				kW	0.18	0.21	0.19												
RDM3E35354D	400/3/50	1370	3	m³/s	1.01	0.89	0.72	0.10								0.37	1.11	3.33	
				kW	0.28	0.34	0.37	0.22											
RDM3E354043	400/3/50	1440	4	m³/s	1.43	1.28	1.13	0.94	0.58							0.55	1.25	3.75	
				kW	0.50	0.57	0.65	0.68	0.58										
RDM3E455043	400/3/50	1420	5	m³/s	2.79	2.63	2.44	2.19	1.96	1.69	1.31	0.18					1.5	3.6	10.8
				kW	1.34	1.47	1.61	1.68	1.75	1.77	1.68	0.96							
RDM3E455643	400/3/50	1430	6	m³/s	3.79	3.61	3.41	3.19	2.99	2.74	2.46	2.08	1.49	0.33			3	6.4	19.2
				kW	2.41	2.59	2.74	2.85	2.98	3.05	3.07	2.98	2.72	1.93					

## Sound Power Level Spectra dB (re 10<sup>-12</sup>Watts)

Stock Ref		125	250	500	1k	2k	4k	8k	dBA
RDM3E25284D	Inlet	75	66	60	57	52	49	47	44
RDM3E25284D	Outlet	63	62	59	60	56	53	52	44
RDM3E25314D	Inlet	76	66	61	61	53	51	45	46
RDM3E25314D	Outlet	73	62	60	62	57	54	50	47
RDM3E35354D	Inlet	82	73	67	60	56	52	51	51
RDM3E35354D	Outlet	72	70	68	66	65	61	58	52
RDM3E354043	Inlet	84	76	70	64	58	54	52	53
RDM3E354043	Outlet	77	73	70	70	67	64	61	55
RDM3E455043	Inlet	93	81	76	72	66	67	62	61
RDM3E455043	Outlet	91	82	78	80	73	71	67	64
RDM3E455643	Inlet	96	86	81	78	74	72	68	66
RDM3E455643	Outlet	90	85	83	82	79	76	74	67

## Performance Guide



Stock Ref	Supply	r.p.m	Curve Ref												Motor kW	FLC	SC	
				0	100	200	300	400	500	600	700	800	900	1000				
RDM3E455663	400/3/50	935	1	m³/s	2.50	2.19	1.82	1.31	0.10							0.75	2.1	6.3
				kW	0.74	0.86	0.95	0.92	0.47									
RDM3E566363	400/3/50	950	2	m³/s	3.68	3.36	2.99	2.56	1.86	0.01						1.5	3.7	11.1
				kW	1.23	1.41	1.57	1.67	1.56	0.66								
RDMFE567163	400/3/50	965	3	m³/s	4.39	4.00	3.67	3.27	2.81	2.22	0.79					3	6.9	20.7
				kW	1.64	1.77	2.04	2.21	2.27	2.20	1.59							
RDMFE718063	400/3/50	970	4	m³/s	6.64	6.28	5.89	5.42	4.97	4.56	3.97	3.03	0.06			4	9	27
				kW	3.00	3.35	3.66	3.85	4.06	4.29	4.32	4.00	1.68					
RDMFE719063	400/3/50	950	5	m³/s	8.83	8.50	8.14	7.67	7.06	6.53	6.11	5.39	4.53	3.72	1.53	7.5	14.5	43.4
				kW	5.68	6.15	6.65	6.98	7.08	7.30	7.62	7.51	7.14	6.91	5.03			

## Sound Power Level Spectra dB (re 10<sup>-12</sup>Watts)

Stock Ref		125	250	500	1k	2k	4k	8k	dBA
RDM3E455663	Inlet	88	76	70	67	62	60	57	55
RDM3E455663	Outlet	77	75	73	72	69	66	63	57
RDM3E566363	Inlet	92	78	73	69	65	64	56	57
RDM3E566363	Outlet	85	79	77	74	71	68	62	59
RDMFE567163	Inlet	93	79	72	71	66	64	56	58
RDMFE567163	Outlet	80	81	76	76	73	69	63	61
RDMFE718063	Inlet	92	83	76	73	68	66	60	60
RDMFE718063	Outlet	86	84	79	77	74	71	67	63
RDMFE719063	Inlet	101	86	83	78	72	68	62	66
RDMFE719063	Outlet	91	87	84	82	78	74	70	67