

TORRETTE RF-EU RANGE

Centrifugal roof fans with horizontal discharge



Roof-mounted centrifugal fans with radial discharge and reduced vertical clearance. Available in different diameters and in single and three-phase versions, designed for the ventilation of civil and industrial environments such as gyms, restaurants, offices, theatres, discos, hospitals and factories.

Key features

- Robust and weatherproof construction.
- Easy installation on a wide range of roof types, thanks to the reduced vertical clearance.
- Designed to operate in high environmental temperatures ($\geq 50\text{ }^{\circ}\text{C}$), in compliance with typical application requirements for hot climates.

Versions

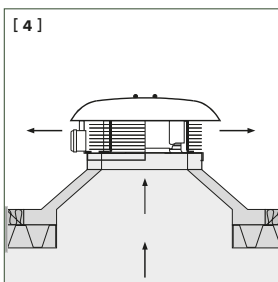
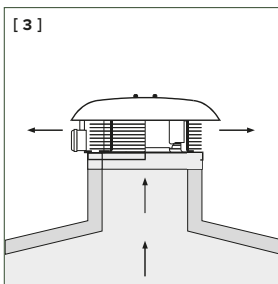
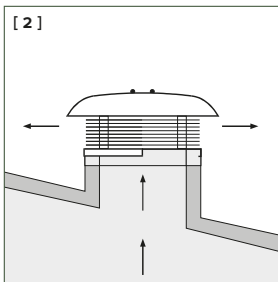
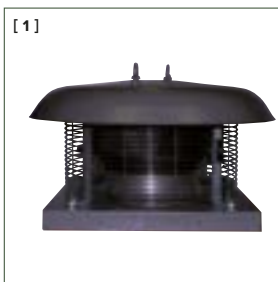
15 models, in single and three phase versions, with 4, 6 and 8 poles.

Technical features

- Motor cover made of pickled and phosphated steel sheet, polyester powder coated and furnace-baked, guaranteeing higher long-term resistance to aggressive agents, in grey colour with hammered finish.
- Galvanised steel sheet ventilation port, calibrated to optimize airflow.
- Safety and anti-bird protective grilles designed in accordance with the UNI ISO 13857 standard, made of electrically welded steel rings with epoxy black paint finish.
- Class F thermally protected asynchronous motors, single or three-phase depending on the model, with shafts turning on ball bearings, speed adjustable by Vortice controllers.
- Starting capacitors of the single-phase models comply with the EN 60252-1 standard and are third-party certified.
- Centrifugal impellers with galvanised steel sheet, self-cleaning, backward curved blades, dynamically balanced (UNI ISO 1940, Class 6.3).
- Wiring boxes complete with moulded cable glands in thermoplastic resin.
- Steel eye-bolts for lifting and transport, protected from corrosion by galvanic treatment.
- Steel cables for secure anchoring of the product to the destination surfaces supplied as standard.

Note

- The fans mounted in the torrette RF-EP range towers comply with Reg. ErP No. 327/2011/UE.
- The towers in the torrette RF-EP range comply with Reg. ErP No. 1253/2014/UE.
- The towers in the torrette RF-EP range are not suitable for handling flows characterized by significant concentrations of abrasive powders or acid or corrosive substances.



[1] Front view. [2] [3] [4] These devices are easily installed on top of each roof. The air must not be dusty, acidic or corrosive.



TECHNICAL DATA

	PRODUCTS	CODE	V~50HZ	W	A	POLES	RPM	MAX AIRFLOW		MAX PRESSURE		Lp dB(A)* 3 m	MAX °C**	KG
								m³/h	l/s	mmH ₂ O	Pa			
SINGLE-PHASE	RF-EU M15 4P	15121	230	119	0.52	4	1450	1460	405	24.1	236	37.0	60	14.8
	RF-EU M20 4P	15122	230	168	0.78	4	1426	2150	597	25.1	246	34.1	60	15.5
	RF-EU M30 4P	15123	230	500	1.3	4	1200	3760	1044	34.7	340	43.6	60	29.1
	RF-EU M70 4P	15125	230	999	5.20	4	1380	7200	2000	40.4	396	53.0	60	32.0
THREE-PHASE	RF-EU T10 4P	15126	400	90	0.21	4	1367	1350	375	20.7	203	30.5	60	15.0
	RF-EU T15 4P	15127	400	137	0.28	4	1387	1810	503	25.9	254	37.7	60	16.2
	RF-EU T20 4P	15128	400	416	0.63	4	1360	3750	937	23.9	323	44.0	60	22.3
	RF-EU T30 4P	15129	400	440	0.88	4	1300	4000	1111	50.4	494	38.7	60	29.3
	RF-EU T50 4P	15130	400	540	1.20	4	1290	5040	1400	31.5	309	52.0	60	32.2
	RF-EU T70 4P	15131	400	540	1.20	4	1290	5050	1405	29.4	288	47.0	60	33.0
	RF-EU T70 6P	15132	400	712	1.57	6	900	8100	2250	40.7	399	43.8	60	57.0
	RF-EU T100 4P	15133	400	2500	4.60	4	1330	13275	3687	57.8	567	55.0	60	60.0
	RF-EU T100 6P	15134	400	1385	3.40	6	920	13000	3611	33.5	329	51.0	60	66.0
	RF-EU T100 8P	15135	400	2970	4.5	8	1230	16000	4444	87.0	853	64.2	60	81.0
	RF-EU T150 6P	15136	400	3765	5.75	6	1340	17000	4722	111.0	1090	64.0	60	81.0

*Sound pressure level measured at 3 m in free field conditions in accordance with standard ISO 3741.

** Maximum continuous operating temperature of the product.



INDUSTRIAL VENTILATION

TORRETTE RF-EU RANGE

ENERGY DATA PURSUANT TO REGULATION N° 1253/2014/EU

	UNIT OF MEASUREMENT	RF-EU M15 4P	RF-EU M20 4P	RF-EU M30 4P	RF-EU M70 4P	RF-EU T10 4P
CODE		15121	15122	15123	15125	15126
Manufacturer's name or brand name	-	Vortice	Vortice	Vortice	Vortice	Vortice
Type of ventilation unit declared	-	UVNR-U**	UVNR-U**	UVNR-U**	UVNR-U**	UVNR-U**
Type of drive	-	VM***	VM***	VSD***	VM***	VM***
Type of heat exchanger system HRS	-	none	none	none	none	none
Heat efficiency of the heat recovery	%	NA*	NA*	NA*	NA*	NA*
Nominal flow rate	m ³ /s	0.2481	0.45194	0.945	1.750	0.22194
Effective electric power input	kW	0.119	0.162	0.229	0.999	0.090
SFPint ****	W/(m ³ /s)	NA*	NA*	NA*	NA*	NA*
Face velocity at nominal flow rate	m/s	9.74797	13.04838	18.07601	21.35715	8.72187
Nominal external pressure (Δp_s , ext)	Pa	119	114	69	153	112
Internal pressure drop of the ventilation components (Δp_s , int)	Pa	24	11	29	97	21
Internal pressure drop of the non-ventilation components (Δp_s , add)	Pa	0	0	0	0	0
Static efficiency in the nominal point of the ventilation unit (η_{FAN})	%	30.0	34.9	40.4	43.8	32.8
Maximum percentage of internal leakage of the case	%	NA*	NA*	NA*	NA*	NA*
Maximum percentage of external leakage of the case	%	NA*	NA*	NA*	NA*	NA*
Energy performance or energy classification of the filters	-	NA*	NA*	NA*	NA*	NA*
Description of the visual filter warning	-	NA*	NA*	NA*	NA*	NA*
Sound power LWA on the case	dB(A)	58	55	64	74	51

*NA Not Applicable. **UVNR-U: Non-Residential Ventilation Unit - Unidirectional. ***VM: Multiple Speed. ****SFPint: Specific internal power of the ventilation components. ****VSD: with variable speed drive



ENERGY DATA PURSUANT TO REGULATION N° 1253/2014/EU

	UNIT OF MEASUREMENT	RF-EU T15 4P	RF-EU T20 4P	RF-EU T30 4P	RF-EU T50 4P	RF-EU T70 4P
CODE		15127	15128	15129	15130	15131
Manufacturer's name or brand name	-	Vortice	Vortice	Vortice	Vortice	Vortice
Type of ventilation unit declared	-	UVNR-U**	UVNR-U**	UVNR-U**	UVNR-U**	UVNR-U**
Type of drive	-	VM***	VM***	VM***	VM***	VM***
Type of heat exchanger system HRS	-	none	none	none	none	none
Heat efficiency of the heat recovery	%	NA*	NA*	NA*	NA*	NA*
Nominal flow rate	m ³ /s	0.49528	0.6144	0.82861	1.125	1.125
Effective electric power input	kW	0.113	0.306	0.429	0.540	0.53
SFPint ****	W/(m ³ /s)	NA*	NA*	NA*	NA*	NA*
Face velocity at nominal flow rate	m/s	15.30266	11.31049	14.91069	15.49942	15.49942
Nominal external pressure (Δp_s , ext)	Pa	39	200	162	144	147
Internal pressure drop of the ventilation components (Δp_s , int)	Pa	46	3	41	62	61
Internal pressure drop of the non-ventilation components (Δp_s , add)	Pa	0	0	0	0	0
Static efficiency in the nominal point of the ventilation unit (η_{FAN})	%	37.3	40.8	39.2	42.9	44.2
Maximum percentage of internal leakage of the case	%	NA*	NA*	NA*	NA*	NA*
Maximum percentage of external leakage of the case	%	NA*	NA*	NA*	NA*	NA*
Energy performance or energy classification of the filters	-	NA*	NA*	NA*	NA*	NA*
Description of the visual filter warning	-	NA*	NA*	NA*	NA*	NA*
Sound power LWA on the case	dB(A)	58	65	59	68	68

*NA Not Applicable. ** UVNR-U: Non- Residential Ventilation Unit - Unidirectional. *** VM: Multiple Speed. **** SFPint: Specific internal power of the ventilation components. *****VSD: with variable speed drive



INDUSTRIAL VENTILATION

TORRETTE RF-EU RANGE

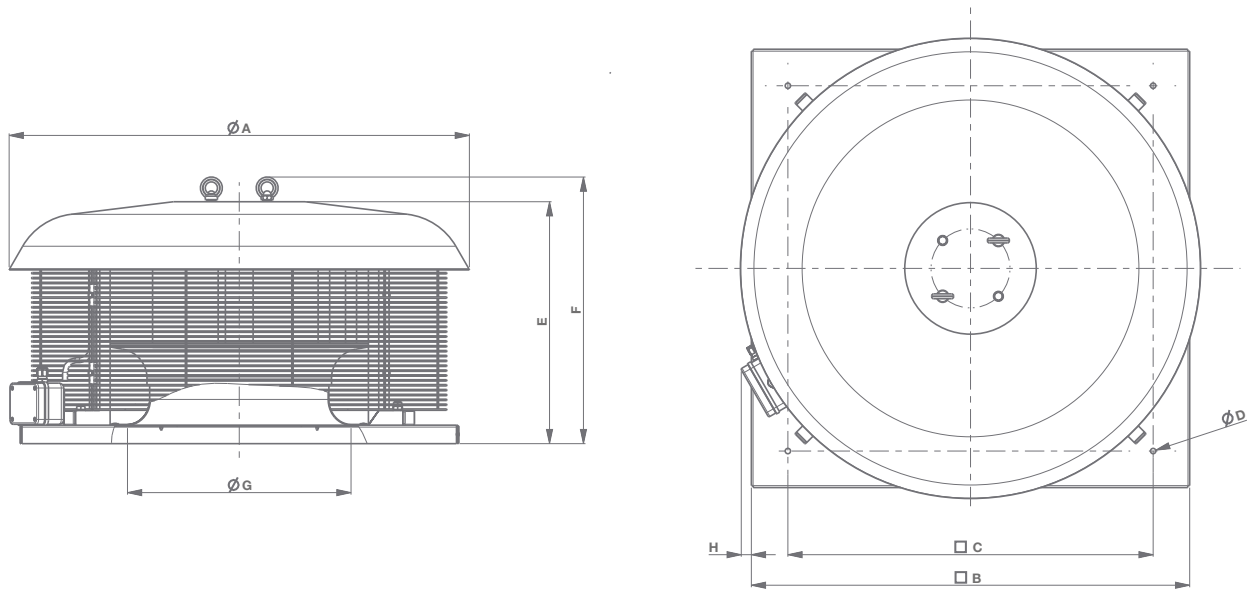
ENERGY DATA PURSUANT TO REGULATION N° 1253/2014/EU

	UNIT OF MEASUREMENT	RF-EU T70 6P	RF-EU T100 4P	RF-EU T100 6P	RF-EU T100 8P	RF-EU T150 6P
CODE		15132	15133	15134	15135	15136
Manufacturer's name or brand name	-	Vortice	Vortice	Vortice	Vortice	Vortice
Type of ventilation unit declared	-	UVNR-U**	UVNR-U**	UVNR-U**	UVNR-U**	UVNR-U**
Type of drive	-	VM***	VM***	VM***	VSD***	VSD***
Type of heat exchanger system HRS	-	none	none	none	none	none
Heat efficiency of the heat recovery	%	NA*	NA*	NA*	NA*	NA*
Nominal flow rate	m ³ /s	1.56444	2.75	3	3.19056	3.42556
Effective electric power input	kW	0.698	2.5	1.385	2.936	3.7
SFPint ****	W/(m ³ /s)	NA*	NA*	NA*	NA*	NA*
Face velocity at nominal flow rate	m/s	15.28467	20.13589	17.81843	24.40373	26.20118
Nominal external pressure (Δp_s , ext)	Pa	178	342	148	481	577
Internal pressure drop of the ventilation components (Δp_s , int)	Pa	8	158	77	20	41
Internal pressure drop of the non-ventilation components (Δp_s , add)	Pa	0	0	0	0	0
Static efficiency in the nominal point of the ventilation unit (η_{FAN})	%	41.7	55.0	48.7	54.4	57.2
Maximum percentage of internal leakage of the case	%	NA*	NA*	NA*	NA*	NA*
Maximum percentage of external leakage of the case	%	NA*	NA*	NA*	NA*	NA*
Energy performance or energy classification of the filters	-	NA*	NA*	NA*	NA*	NA*
Description of the visual filter warning	-	NA*	NA*	NA*	NA*	NA*
Sound power LWA on the case	dB(A)	64	76	72	85	85

*NA Not Applicable. ** UVNR-U: Non- Residential Ventilation Unit - Unidirectional. *** VM: Multiple Speed. **** SFPint: Specific internal power of the ventilation components. *****VSD: with variable speed drive



DIMENSIONS



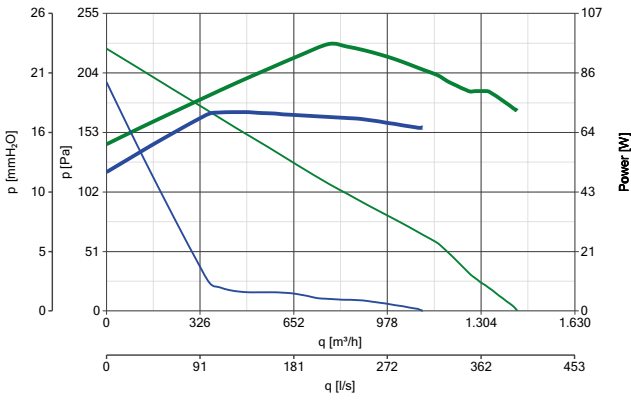
PRODUCTS	ØA	ØB	ØC	ØD	E	F	ØG	H
RF-EU M15 4P	540	410	357	11	255	293	235	69
RF-EU M20 4P	540	410	357	11	282	320	248	69
RF-EU M30 4P	720	550	500	11	341	380	314	75
RF-EU M70 4P	720	600	500	11	400	451	402	76
RF-EU T10 4P	540	410	357	11	256	295	235	69
RF-EU T15 4P	540	410	357	11	282	321	255	69
RF-EU T20 4P	720	550	500	11	330	369	314	69
RF-EU T30 4P	720	550	500	11	338	378	325	69
RF-EU T50 4P	720	550	500	11	355	393	360	69
RF-EU T70 4P	720	550	500	11	398	436	402	69
RF-EU T70 6P	945	900	750	11	497	548	460	21
RF-EU T100 4P	945	900	750	11	455	506	496	21
RF-EU T100 6P	945	900	750	11	493	544	553	21
RF-EU T100 8P	945	900	750	11	501	552	496	37
RF-EU T150 6P	945	900	750	11	501	552	496	37

Dimensions (mm)

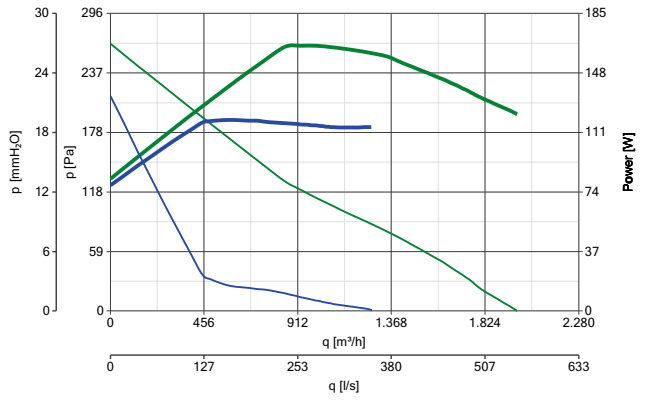


PERFORMANCE CURVES

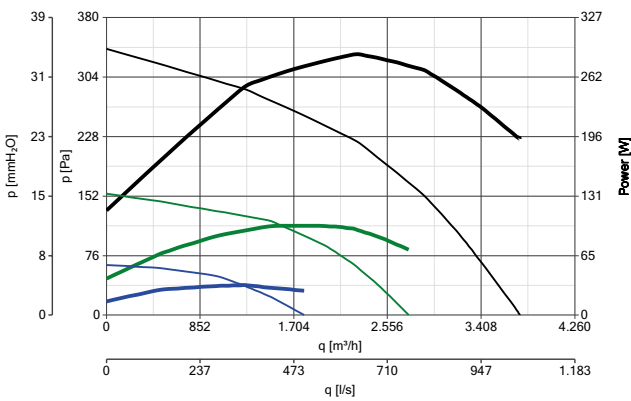
RF-EU M15 4P



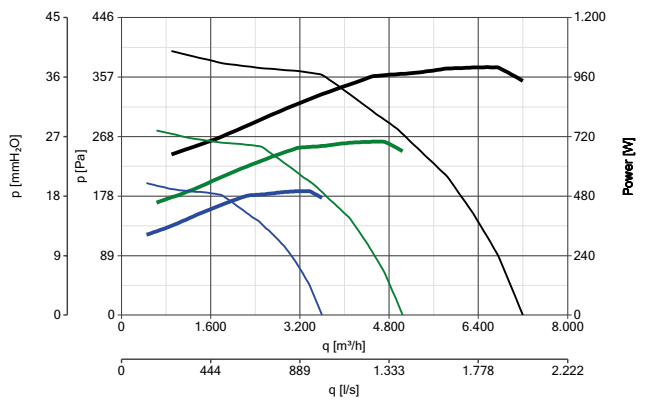
RF-EU M20 4P



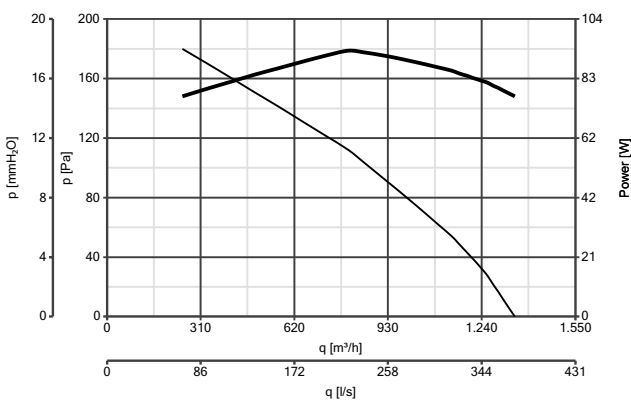
RF-EU M30 4P



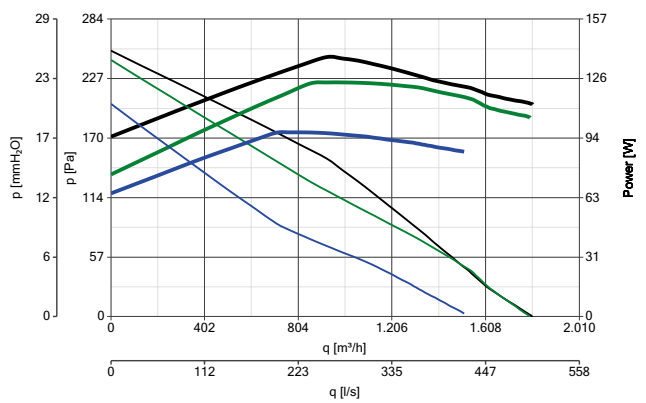
RF-EU M70 4P



RF-EU T10 4P



RF-EU T15 4P



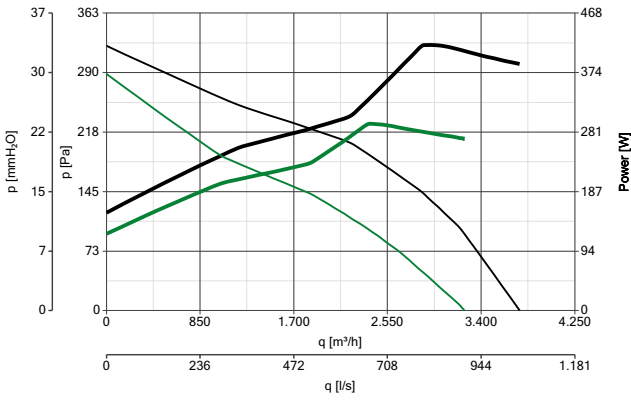
POWER CONSUMPTION
 — max
 — med
 — min

PERFORMANCE CURVES
 — max
 — med
 — min

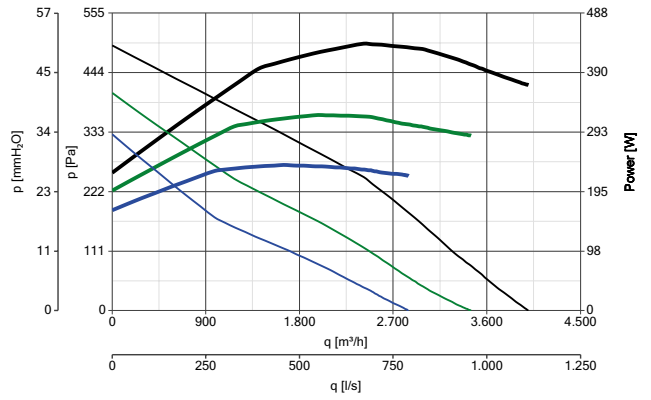


PERFORMANCE CURVES

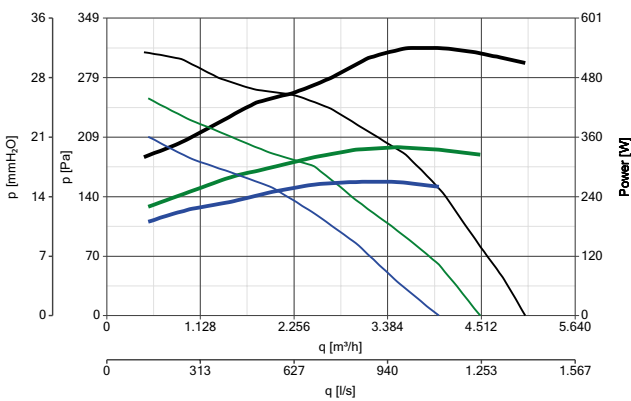
RF-EU T20 4P



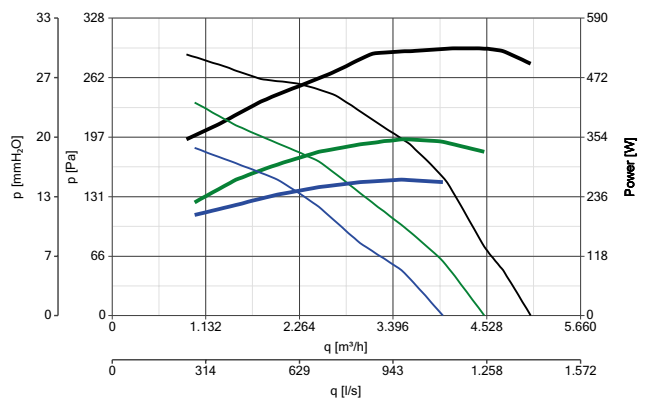
RF-EU T30 4P



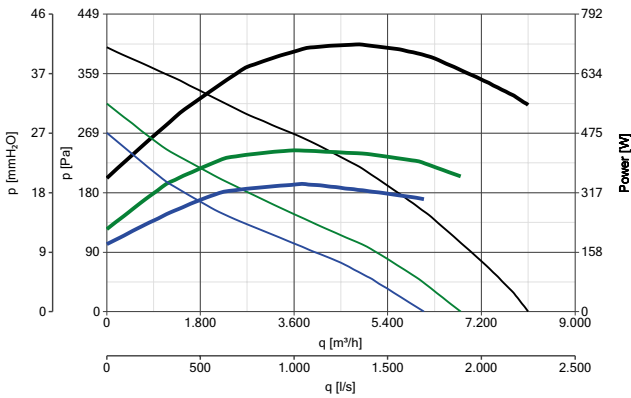
RF-EU T50 4P



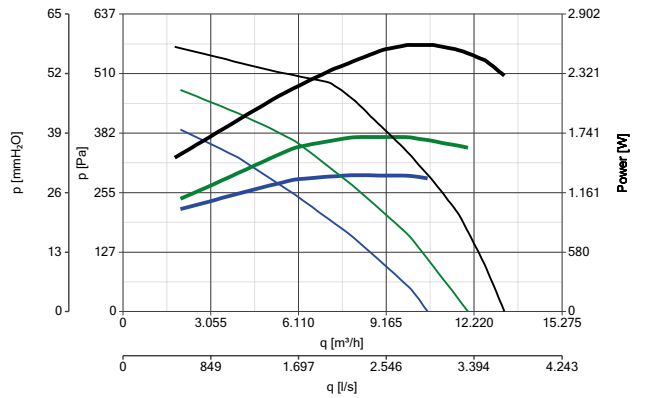
RF-EU T70 4P



RF-EU T70 6P



RF-EU T100 4P



POWER CONSUMPTION
 — max
 — med
 — min

PERFORMANCE CURVES
 — max
 — med
 — min

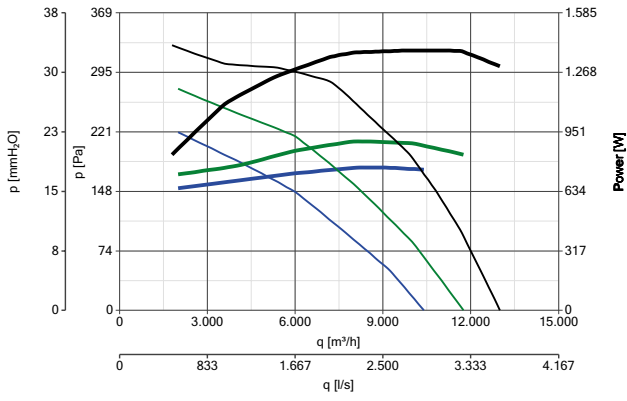


INDUSTRIAL VENTILATION

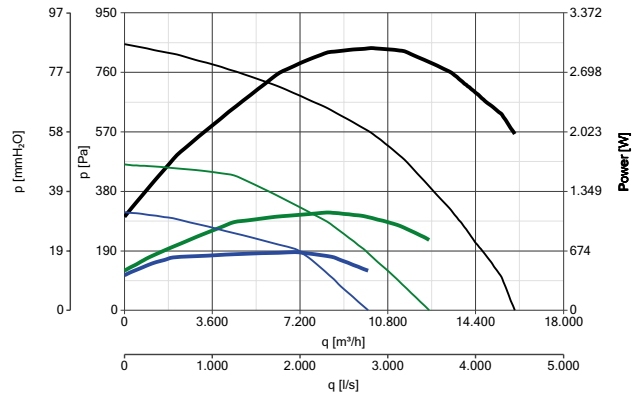
TORRETTE RF-EU RANGE

PERFORMANCE CURVES

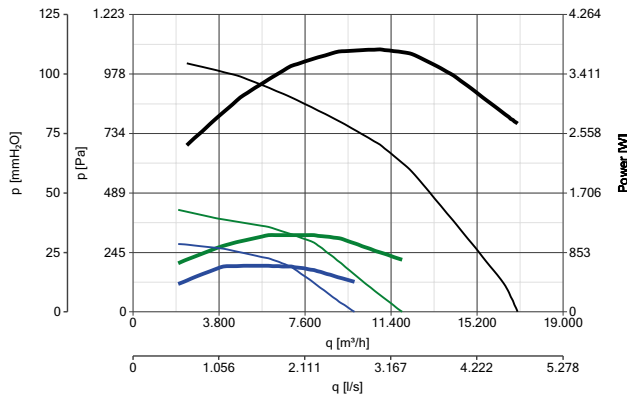
RF-EU T100 6P



RF-EU T100 8P




RF-EU T150 6P





POWER CONSUMPTION PERFORMANCE CURVES
 — max — max
 — med — med
 — min — min



ACCESSORIES

MODELS	DESCRIPTION	CODE	PRODUCTS	
	TR-CU - Sub-frame	10/15	22511	15121 - 15122 - 15126 - 15127
		20/30/50	22512	15123 - 15125 - 15128 - 15129 - 15130 - 15131
		70/100	22539	15132 - 15133 - 15134 - 15135 - 15136
	TR-S - Backdraught shutter	20/30/50	22510	15121 - 15122 - 15126 - 15127
		70/100	22541	15123 - 15125 - 15128 - 15129 - 15130 - 15131
		100/150/180/210	22542	15132 - 15133 - 15134 - 15135 - 15136
	TR-B - Suction connector	20/30/50	22610	15121 - 15122 - 15126 - 15127
		70/100	22508	15123 - 15125 - 15128 - 15129 - 15130 - 15131
		100/150/180/210	22509	15132 - 15133 - 15134 - 15135 - 15136
	TR-G - Intake port protection grille	20/30/50	22710	15121 - 15122 - 15126 - 15127
		70/100	22506	15123 - 15125 - 15128 - 15129 - 15130 - 15131
		100/150/180/210	22507	15132 - 15133 - 15134 - 15135 - 15136

CONTROLLERS

MODELS	DESCRIPTION	CODE	PRODUCTS
	IRM 30 - Three position single-phase speed controller	12921	15121 - 15122
	IRM 70 - Three position single-phase speed controller	12837	15125
	IRT 15 - Three position single-phase speed controller	12923	15126 - 15127 - 15128
	IRT 35 - Three position single-phase speed controller	12924	15129 - 15130 - 15131 - 15132
	IRT 40 - Three position single-phase speed controller	12927	15134
	IRT 100 - Three position single-phase speed controller	12838	15133
	POT - Potentiometer	12828	15123 - 15135 - 15136

* Can control multiple fans up to a maximum 5A.

** Used for simultaneous control of multiple appliances up to maximum 9A.