

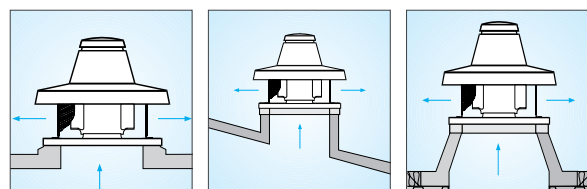


# TORRETTE TR ED RANGE

Centrifugal roof fans with horizontal discharge  
for hot fumes extraction

**Suitable for mounting on flat roofs of commercial, industrial buildings and blocks of flats, etc.**

- **20 models: 6 single-phase and 14 three-phase.**
- All models fitted with steel bird guards.
- Asynchronous induction motors, standard UNELMEC B5, ball bearing mounted shafts.
- Galvanised steel sheet fans with self cleaning, backward curved blades, die casted aluminium hubs, clockwise rotation (intake view).
- Streamlined cross-section intake port, made of polyester painted steel.
- For long term safety each unit has a safety cable to anchor it to the base.
- Max airflow up to 18.000 m³/h.
- The usage is admitted also in ambient temperature between -25°C and +90°C only in countries where the N°327/2011/UE European Regulation is not recognized.
- Minimum speed operation is admitted for products used for cold air treatment (fans not intended for hot fumes 400°C / 2h aspiration) in countries that do not adhere to N°327/2011/UE European Regulation.
- Motors insulation class H.
- Protection rating: IP55.
- Insulation class: I. ⊕



Wiring diagrams shown from page 458

## TECHNICAL DATA

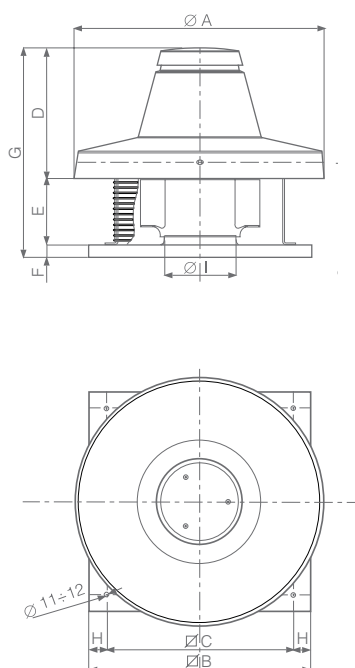
	Models	Code	W min/max	A min/max	POLES	RPM min/max	Max Airflow		Max Pressure		Lp dB(A)*	Max °C
							m³/h min/max	l/s min/max	mmH₂O min/max	Pa min/max		
Single-phase	TRM 10 ED 4P	15039	110	0.46	4	1395	1000	278	20	196	56	400 °C/2h
	TRM 15 ED 4P	15041	140	0.60		1315	1400	389	24	235	58.5	
	TRM 20 ED 4P	15043	270	1.20		1375	2200	611	34	334	68	
	TRM 30 ED 4P	15046	420	1.90		1285	3100	861	40	392	67	
	TRM 50 ED 4P	15048	720	3.30		1290	4500	1250	52	510	72.5	
	TRM 70 ED 4P	15080	1020	4.50		1415	5800	1611	65	638	77	
	TRT 10 ED 4P	15040	72 100	0.13 0.24		1270 1430	890 1100	247 306	17 21	167 206	56	
	TRT 15 ED 4P	15042	93 130	0.16 0.27		1150 1400	1100 1400	306 389	16 24	157 235	58.5	
	TRT 20 ED 4P	15045	208 270	0.32 0.53		1050 1400	1800 2200	500 611	24 34	235 334	68	
	TRT 30 ED 4P	15047	305 420	0.48 0.75		1070 1400	2555 3100	710 861	30 43	294 422	67	
Three-phase	TRT 50 ED 4P	15049	530 690	0.80 1.20	6	1150 1400	3800 4500	1056 1250	38 52	373 510	72.5	
	TRT 70 ED 4P	15081	820 1090	1.50 2.00		1150 1400	5300 6000	1472 1667	52 67	510 657	77	
	TRT 70 ED 6P	15082	420 580	0.80 1.30		750 950	5300 6000	1472 1667	30 38	294 373	74	
	TRT 100 ED 4P	15083	1400 1950	2.30 4.90		1200 1400	8300 9100	2306 2528	72 84	706 824	84	
	TRT 100 ED 6P	15084	900 1130	1.40 2.40		730 950	7550 8600	2097 2389	38 47	373 461	77	
	TRT 100 ED 8P	15085	600 860	1.20 2.00		570 715	8200 9200	2278 2556	28 34	275 334	71	
	TRT 150 ED 6P	15086	1280 1930	2.40 3.50		700 930	11000 12800	3056 3556	42 59	412 579	80	
	TRT 150 ED 8P	15087	1000 1500	2.00 3.00		610 715	11600 13500	3222 3750	34 42	334 412	74	
	TRT 180 ED 6P	15919	3200	6.11		950	16500	4583	79	775	83	
	TRT 210 ED 6P	15920	3460	6.42		950	18000	5000	80	785	84	

\* The sound pressure values conform to standard ISO 3744. The appliances are designed so that they are able to operate at an air temperature more than 65°C.

Electric supply: 230 V ~ 50 Hz (Single-phase)  
400 V ~ 50 Hz (Three-phase).








## DIMENSIONS






Models	Ø A	Ø B	Ø C	D	E	F	G	H	Ø L	Ø M	Ø N	Kg	
TRM 10 ED 4P	600	410	357	309	166	38	26.5	513	183	187.5	280	18.5	
TRM 15 ED 4P									206	211	315	19	
TRM 20 ED 4P									231	236.5	355	33	
TRM 30 ED 4P	780	550	500	397	226		25	661	2600	265.5	400	35	
TRM 50 ED 4P									292	298	450	40	
TRM 70 ED 4P									328	335	504	80	
TRT 10 ED 4P	600	410	357	309	166		26.5	513	183	187.5	280	19	
TRT 15 ED 4P									206	211	315	19	
TRT 20 ED 4P									231	236.5	355	33	
TRT 30 ED 4P	780	550	500	397	226		25	661	2600	265.5	400	35	
TRT 50 ED 4P									292	298	450	40	
TRT 70 ED 4P									328	335	504	78	
TRT 70 ED 6P	1015	830	750	449	283		25	678	770	365	375	562	81
TRT 100 ED 4P										415	421	635	81.5
TRT 100 ED 6P										465	472	715	124
TRT 100 ED 8P	1165	980	900	605	383		40	1026	520	529	805	125	
TRT 150 ED 6P												129	
TRT 150 ED 8P												220	
TRT 180 ED 6P												222	
TRT 210 DE 6P													

Dimensions (mm)

## PRODUCT ACCESSORIES

Models		Code	Product																			
			TRM 10 ED 4P code 15039	TRM 15 ED 4P code 15041	TRM 20 ED 4P code 15043	TRM 30 ED 4P code 15046	TRM 50 ED 4P code 15048	TRM 70 ED 4P code 15080	TRT 10 ED 4P code 15040	TRT 15 ED 4P code 15042	TRT 20 ED 4P code 15045	TRT 30 ED 4P code 15047	TRT 50 ED 4P code 15049	TRT 70 ED 4P code 15081	TRT 70 ED 6P code 15082	TRT 100 ED 4P code 15083	TRT 100 ED 6P code 15084	TRT 100 ED 8P code 15085	TRT 150 ED 6P code 15086	TRT 150 ED 8P code 15087	TRT 180 ED 6P code 15919	TRT 210 ED 6P code 15920
	IRM 30* Three position single-phase speed controller	12921	●	●																		
	IRM 40* Three position single-phase speed controller	12922			●	●																
	IRM 50* Three position single-phase speed controller	12928					●															
	IRT 15* Three position three-phase speed controller	12923							●	●	●											
	IRT 35* Three position three-phase speed controller	12924										●	●		●			●				
	IRT 40* Three position three-phase speed controller	12927															●			●		
	IREM 3* Single-phase speed controller	12931	●	●	●	●																
	IREM 5* *** Single-phase speed controller	12932					●															
	IREM 9* *** Single-phase speed controller	12933						●														
	IRET 6* Three-phase speed controller	12934												●	●	●	●	●	●	●		

Models		Code	Product																			
			TRM 10 ED 4P code 15039	TRM 15 ED 4P code 15041	TRM 20 ED 4P code 15043	TRM 30 ED 4P code 15046	TRM 50 ED 4P code 15048	TRM 70 ED 4P code 15080	TRT 10 ED 4P code 15040	TRT 15 ED 4P code 15042	TRT 20 ED 4P code 15045	TRT 30 ED 4P code 15047	TRT 50 ED 4P code 15049	TRT 70 ED 4P code 15081	TRT 70 ED 6P code 15082	TRT 100 ED 4P code 15083	TRT 100 ED 6P code 15084	TRT 100 ED 8P code 15085	TRT 150 ED 6P code 15086	TRT 150 ED 8P code 15087	TRT 180 ED 6P code 15919	TRT 210 ED 6P code 15920
	IRET INVERTER 1.2 Three-phase speed controller INVERTER	12909							•	•	•	•										
	IRET INVERTER 2.2 Three-phase speed controller INVERTER	12925											•	•	•			•				
	IRET INVERTER 5 Three-phase speed controller INVERTER	12947														•	•		•	•		
	IRET INVERTER 8 Three-phase speed controller INVERTER	12989																			•	•
	TR-CU 10/15 Sub-frame	22511	•	•					•	•												
	TR-CU 20/30/50 Sub-frame	22512			•	•	•				•	•	•									
	TR-CU 70/100 Sub-frame	22539						•							•	•	•					
	TR-CU 100/150-6P/8P Sub-frame	22540															•	•	•	•	•	•
	TR-G 10/15 Intake port protection grille	22700	•	•					•	•												
	TR-G 20/30/50 Intake port protection grille	22710			•	•	•				•	•	•									
	TR-G 70/100 Intake port protection grille	22506						•							•	•	•					
	TR-G 100/150-6P/8P Intake port protection grille	22507															•	•	•	•	•	•
	Intake port protection grille																					

\* Use in conjunction with appliances having speed selectors or controllers is not permitted in countries implementing European regulation 327/2011/EU.

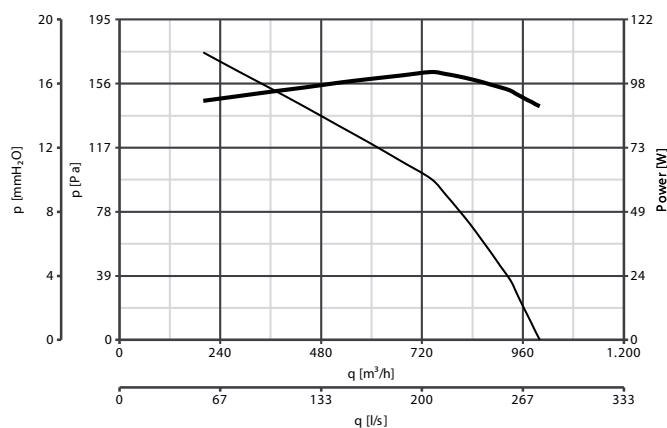
\*\* Can control multiple fans up to a maximum 5A.

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

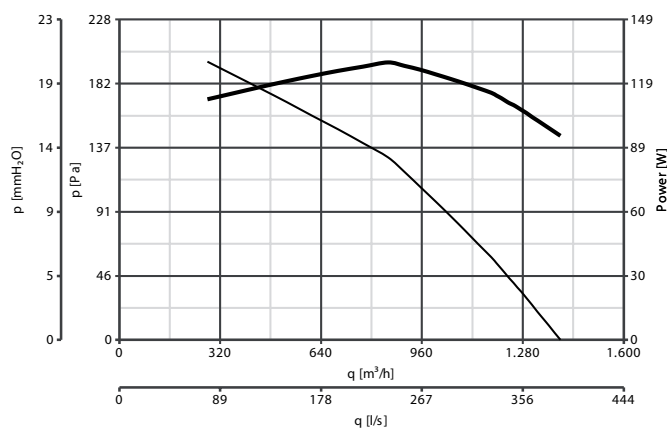
Description and sizes on page 325; System components on page 300.

## PERFORMANCE CURVES

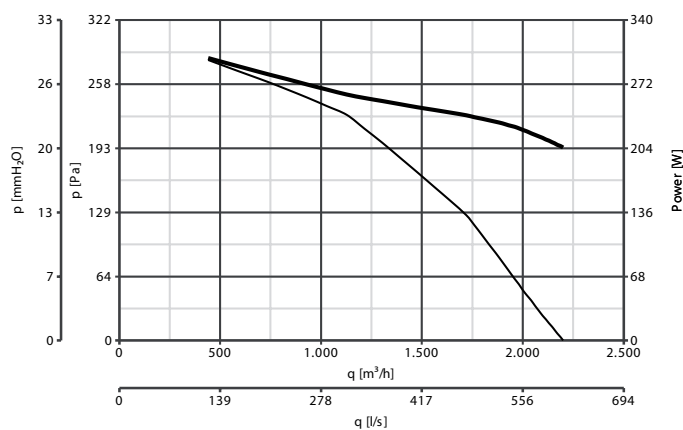
TRM 10 ED 4P code 15039



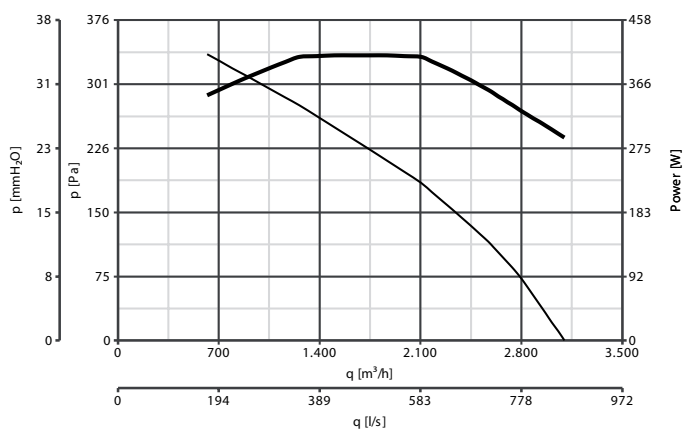
TRM 15 ED 4P code 15041



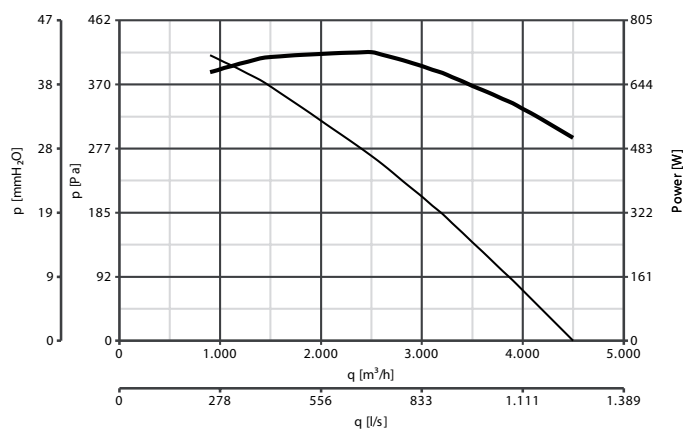
TRM 20 ED 4P code 15043



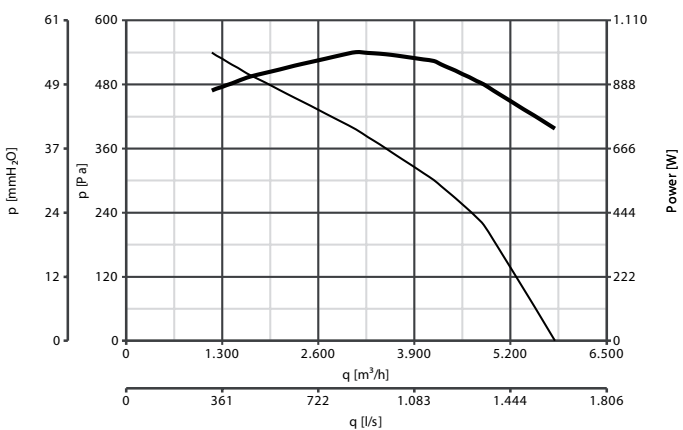
TRM 30 ED 4P code 15046



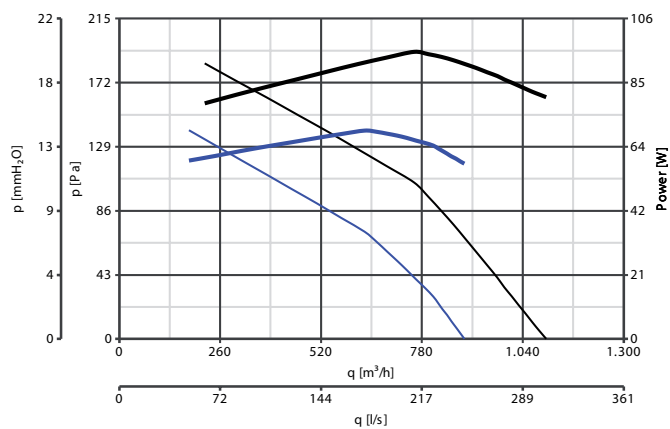
TRM 50 ED 4P code 15048



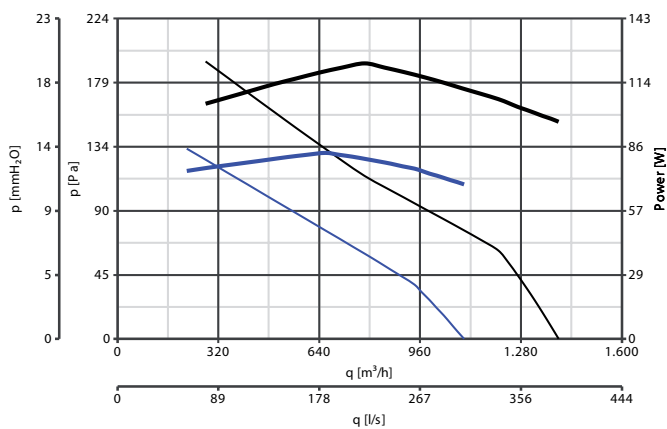
TRM 70 ED 4P CODE 15080

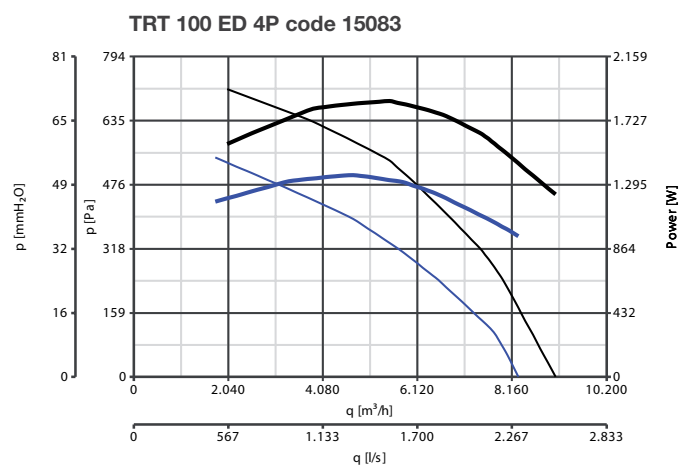
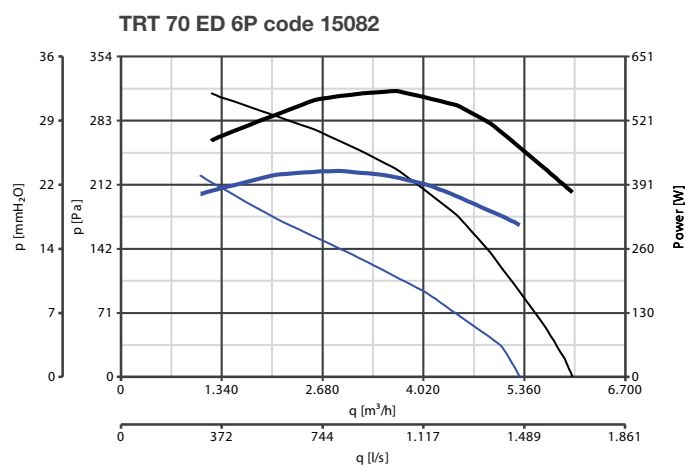
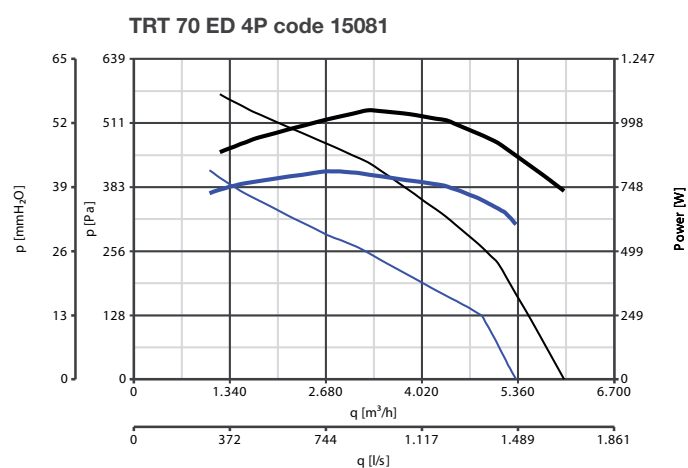
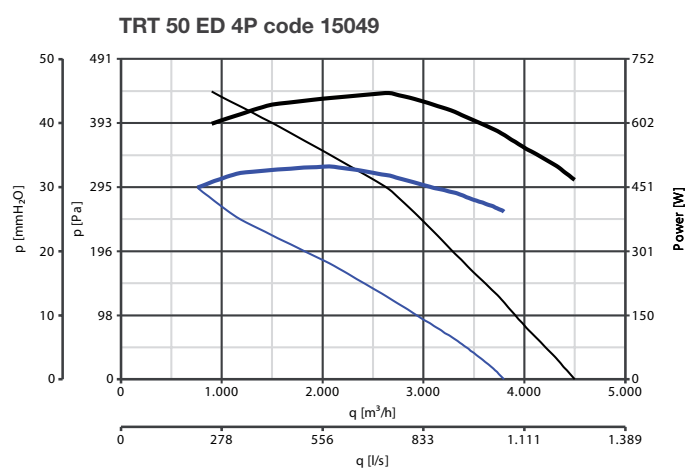
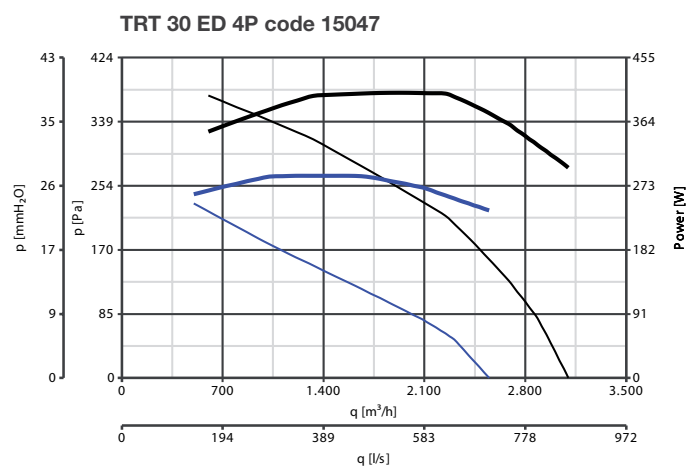
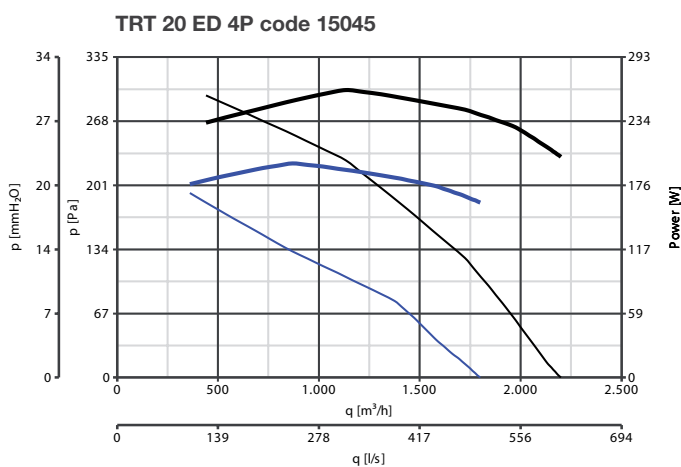


TRT 10 ED 4P code 15040

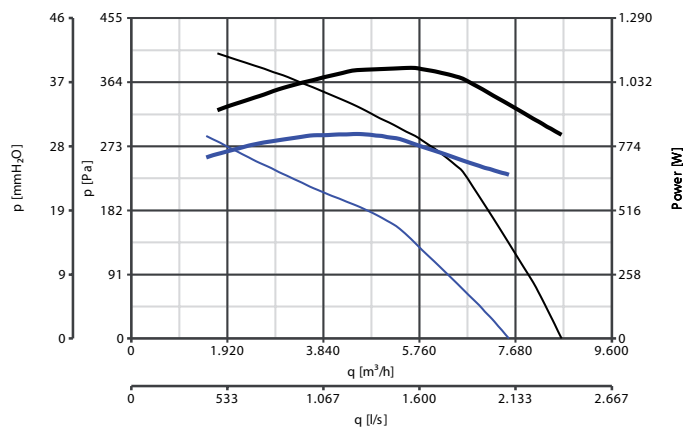


TRT 15 ED 4P code 15042

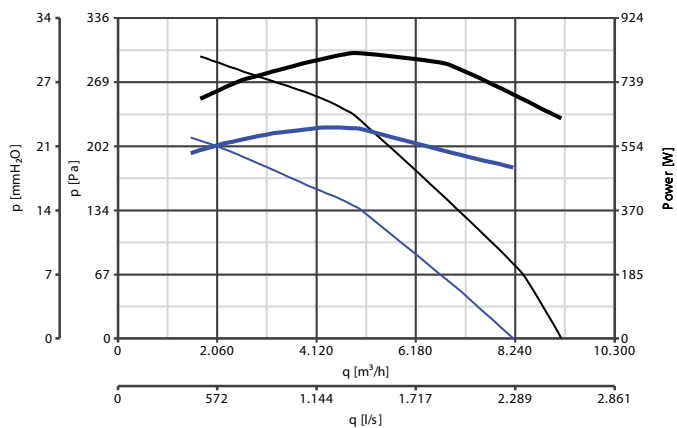




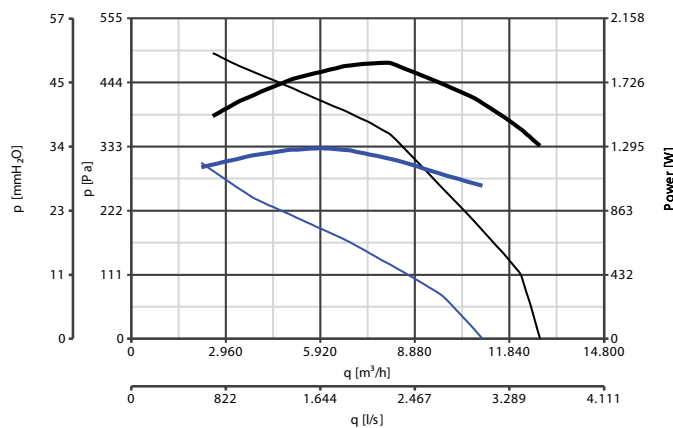
TRT 100 ED 6P code 15084



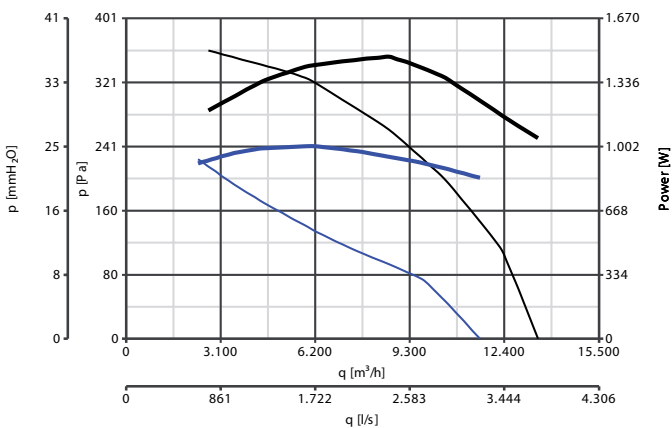
TRT 100 ED 8P code 15085



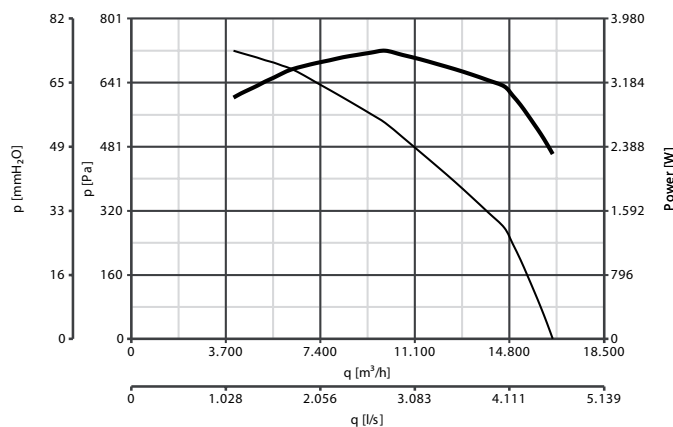
TRT 150 ED 6P code 15086



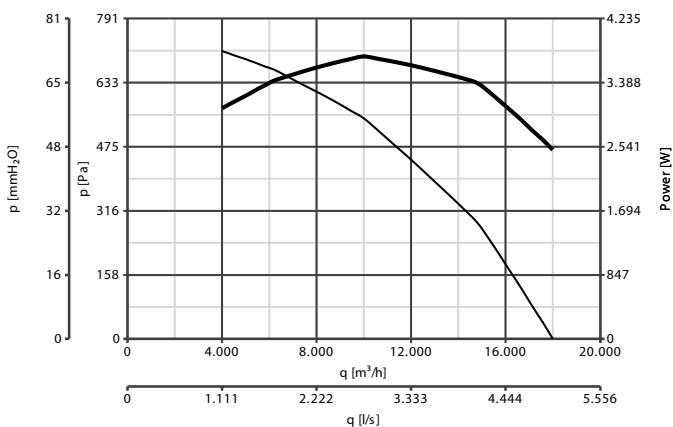
TRT 150 ED 8P code 15087



TRT 180 ED 6P code 15919



TRT 210 ED 6P code 15920



— Delivery — Consumption



## CERTIFICATIONS

### DECLARATION OF PERFORMANCE CE

**VORTICE ELETTROSOCIALI S.p.A**  
Strada Cerca, 2 - frazione di Zoate  
20067 TRIBIANO Milano, Italy



hereby declares that the performance of products:

Model	Code	Notified Body	Model	Code	Notified Body
TRM 10 ED 4P	15039	TÜV	TRM 10 ED-V 4P	15160	APPLUS
TRT 10 ED 4P	15040	TÜV	TRT 10 ED-V 4P	15161	APPLUS
TRM 15 ED 4P	15041	TÜV	TRM 15 ED-V 4P	15162	APPLUS
TRT 15 ED 4P	15042	TÜV	TRT 15 ED-V 4P	15163	APPLUS
TRM 20 ED 4P	15043	TÜV	TRM 20 ED-V 4P	15164	APPLUS
TRT 20 ED 4P	15045	TÜV	TRT 20 ED-V 4P	15165	APPLUS
TRM 30 ED 4P	15046	TÜV	TRM 30 ED-V 4P	15166	APPLUS
TRT 30 ED 4P	15047	TÜV	TRT 30 ED-V 4P	15167	APPLUS
TRM 50 ED 4P	15048	TÜV	TRM 50 ED-V 4P	15168	APPLUS
TRT 50 ED 4P	15049	TÜV	TRT 50 ED-V 4P	15169	APPLUS
TRM 70 ED 4P	15080	TÜV	TRM 70 ED-V 4P	15170	APPLUS
TRT 70 ED 4P	15081	TÜV	TRT 70 ED-V 4P	15171	APPLUS
TRT 70 ED 6P	15082	TÜV	TRT 70 ED-V 6P	15172	APPLUS
TRT 100 ED 4P	15083	TÜV	TRT 100 ED-V 4P	15173	APPLUS
TRT 100 ED 6P	15084	TÜV	TRT 100 ED-V 6P	15174	APPLUS
TRT 100 ED 8P	15085	TÜV	TRT 100 ED-V 8P	15175	APPLUS
TRT 150 ED 6P	15086	TÜV	TRT 150 ED-V 6P	15176	APPLUS
TRT 150 ED 8P	15087	TÜV	TRT 150 ED-V 8P	15177	APPLUS
TRT 180 ED 6P	15919	APPLUS	TRT 180 ED-V 6P	15178	APPLUS
TRT 210 ED 6P	15920	APPLUS	TRT 210 ED V-6P	15179	APPLUS

used for the evacuation of fumes and heat, is as follows:

Essential characteristics	Performance	Harmonised standard
400°C for a duration of 120 minutes	F400	<b>Smoke and heat control system</b> Specification for powered smoke and heat exhaust ventilators <b>EN 12101-3(2002)+AC(2005)</b>

verified by the following European Notified Bodies:

**TÜV SÜD INDUSTRIE SERVICE GMBH MÜNCHEN : Certification Body N° 0036**

Certificate No.:

- 0036 CPD RG03 01
- 0036 CPD RG03 02
- 0036 CPD RG03 03
- 0036 CPD RG03 04

**APPLUS- LGAI TECHNOLOGICAL CENTRE SA : Certification Body N° 0370**

Certificate No.:

- 0370 CPR 0860
- 0370 CPR 0861

The consistent performance of the above products is guaranteed by a Grade 1 system, in accordance with appendix V of European Regulation No. **305/2011 (EU)**.

## WARNING

TR ED ROOF FANS (400 °C/2H) ARE CERTIFIED ACCORDING TO THE EN 12101-3 STANDARD FOR OPERATING AT MAX SPEED; NOT SUITABLE FOR COUPLING WITH COMMUTARS ABD SPEED CONTROLLERS IF USED FOR THESE FUNCTIONS.

