

- Roof fans AC motor
- Vertical discharge
- Motor in air stream



## Roof Exhaust Units type ARFV-S

Backward curved centrifugal fan

### Application

- These fans are designed for direct or ducted ventilation in residential, commercial and industrial buildings

### Composition

- Octogon housing made of seawater resistant aluminium AlMg3
- Turbine with backward-curved blades made of galvanized steel sheet up to type 280 and aluminum for all others, balanced G6.3 according to DIN ISO 1940
- Outer pole motor with maintenance-free ball bearings
- Voltage: 230Vac 1ph (type E) and 400Vac 3ph (type D)
- Insulation class F - protection classes:
  - ARFV-S 190 E2 31 - ARFV-S 280 E4 31: IP33 for the motor, IPX4 for the entire fan
  - ARFV-S 315 E4 33: IP44 for the engine
  - ARFV-S 355 E4 31: IP44 for the engine, IPX4 for the entire fan
  - ARFV-S 400 E4 31 - ARFV-S 560 E4 31: IP54 for the motor, IPX4 for the entire fan
- Connection box IP44 with cable gland (excluding ARFV-S 220 E4 31, ARFV-S 225 E2 31 and ARFV-S 250 E4)
- Tiltable motor section
- Integrated safety switch

### Accessories

- Roof socket, type **RAC-I**
- Roof socket, type **RC-I**
- Adapter plate, type **RAP**
- Backdraught shutter, type **RAS**
- Flexible connector, type **RFC**
- Matching flange, type **RIF**
- Transformer speed controllers, type **TSC(TK)-1**

### Order example

- **ARFV-S 220 E2 31**

ARFV-S = Type of fan

220 = Size

E = 1x230 V

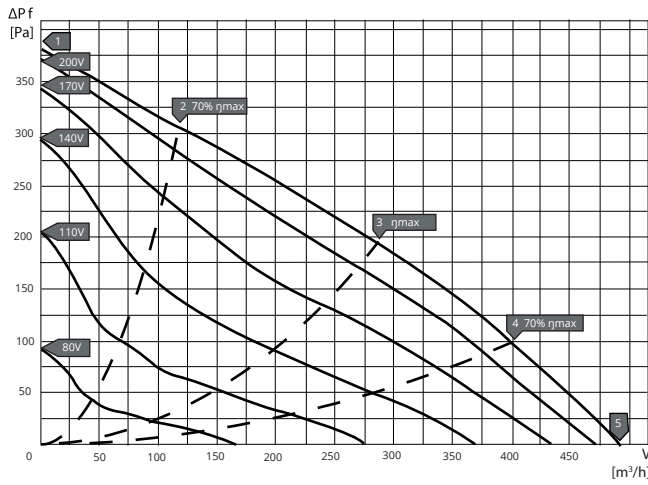
2 = 2800 rpm

31 = version

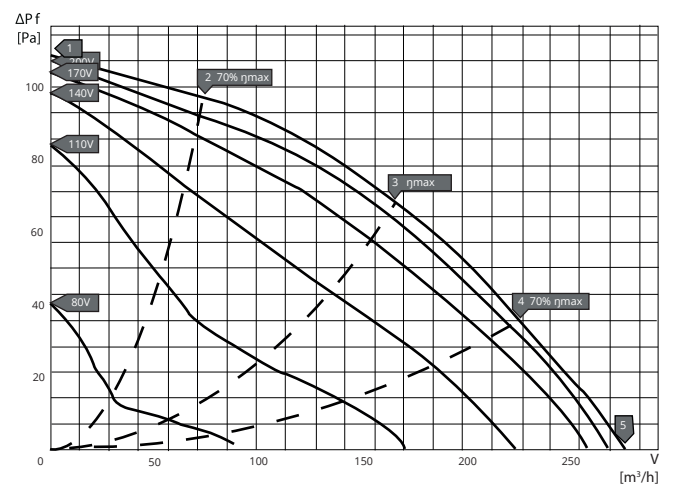
Air performance data										
	Q [m³/h]									
	50Pa	100Pa	150Pa	200Pa	250Pa	300Pa	400Pa	500Pa	600Pa	700Pa
ARFV-S 190 E2 31	449	400	347	282	209	132	-	-	-	-
ARFV-S 190 E4 31	203	64	-	-	-	-	-	-	-	-
ARFV-S 220 E2 31	745	689	625	562	492	411	233	50	-	-
ARFV-S 220 E4 31	309	157	-	-	-	-	-	-	-	-
ARFV-S 225 E2 31	900	861	817	768	712	651	522	339	80	-
ARFV-S 250 E4 31	491	336	104	-	-	-	-	-	-	-
ARFV-S 280 E4 31	921	728	474	143	-	-	-	-	-	-
ARFV-S 315 E4 43	1365	1163	904	465	-	-	-	-	-	-
ARFV-S 355 E4 31	2491	2262	2076	1876	1642	1332	-	-	-	-
ARFV-S 400 E4 31	3535	3315	3102	2858	2581	2316	1650	-	-	-

Selection curves

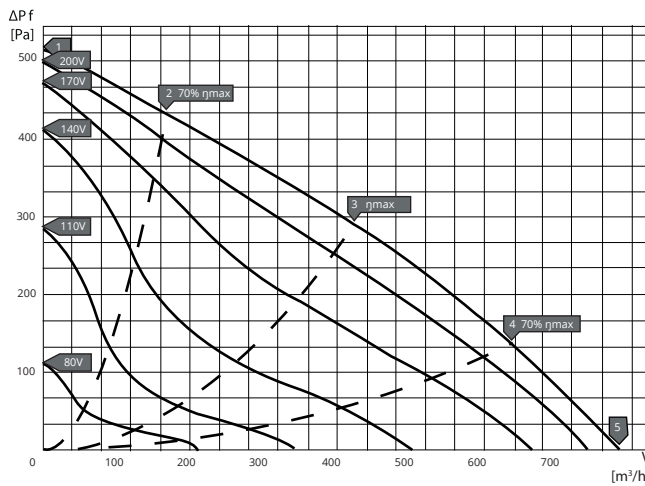
ARFV-S 190 E2 30



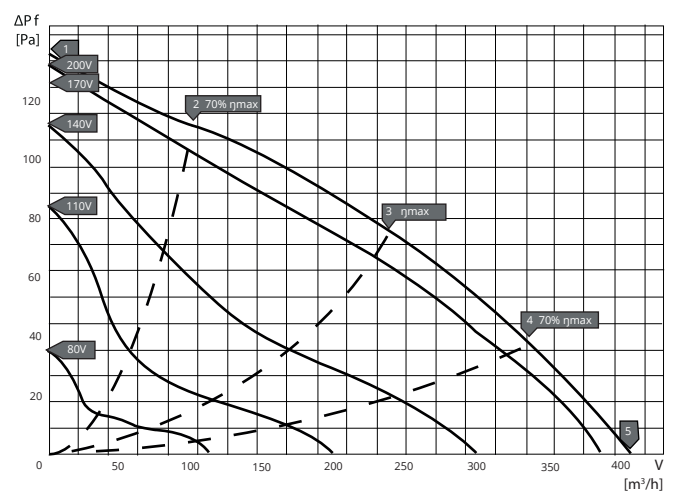
ARFV-S 190 E4 30



ARFV-S 220 E2 30

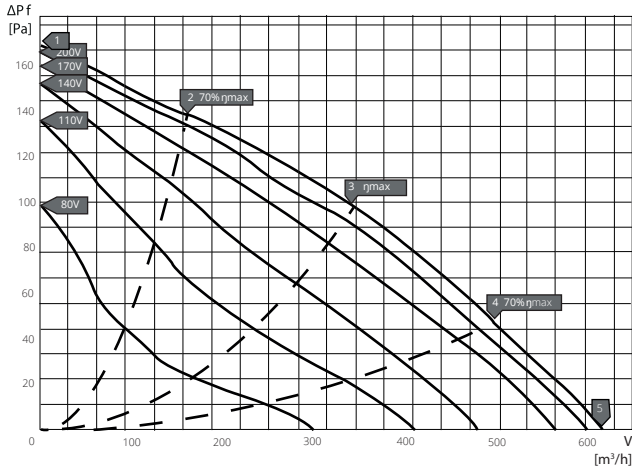


ARFV-S 220 E4 30

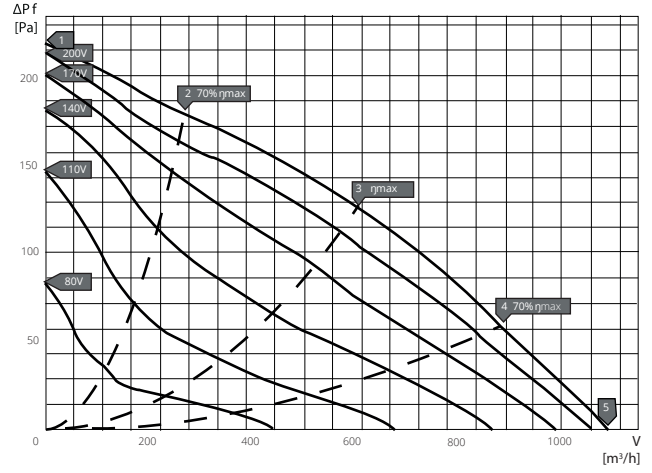


Selection curves

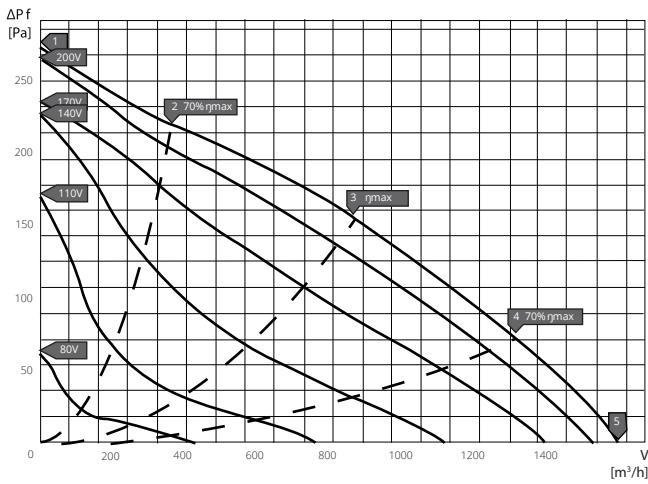
ARFV-S 250 E4 30



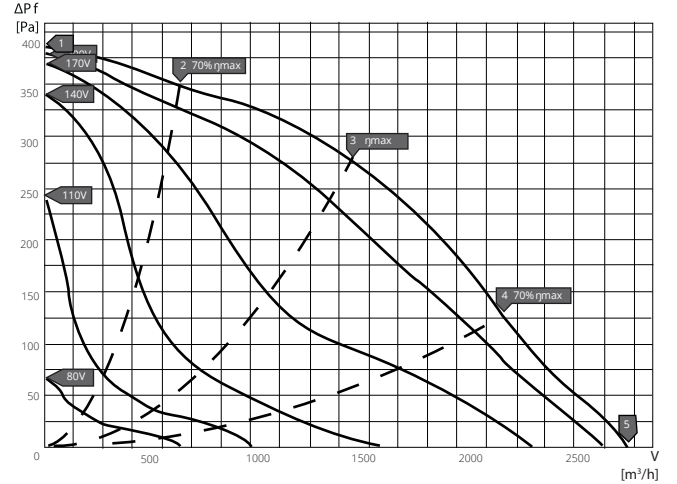
ARFV-S 280 E4 30



ARFV-S 315 E4 30

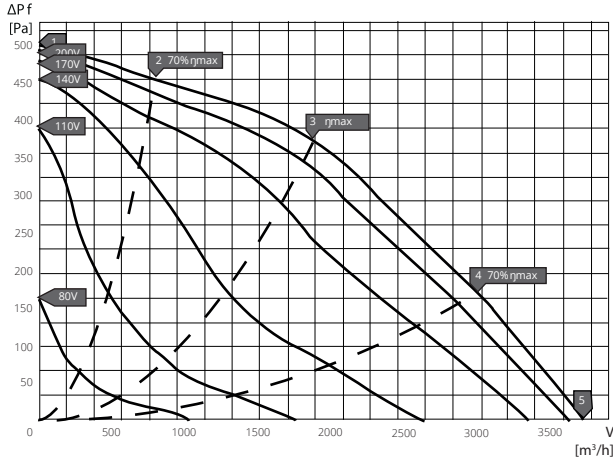


ARFV-S 355 E4 30

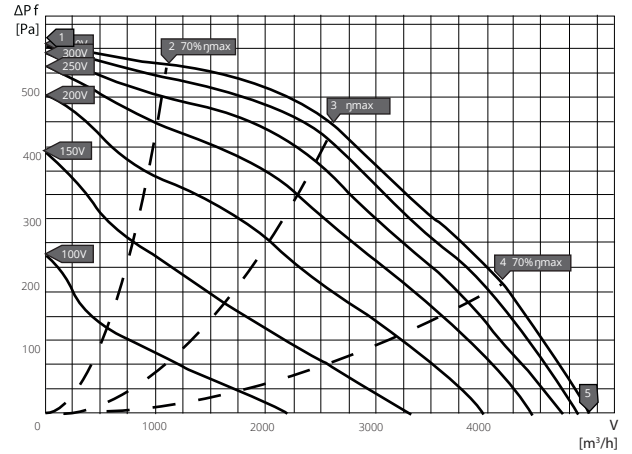


### Selection curves

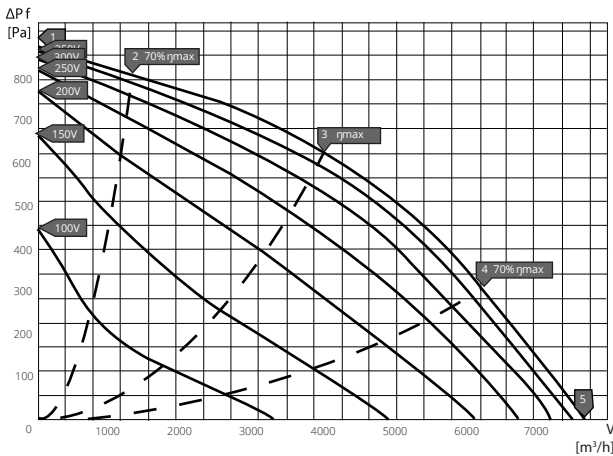
ARFV-S 400 E4 30



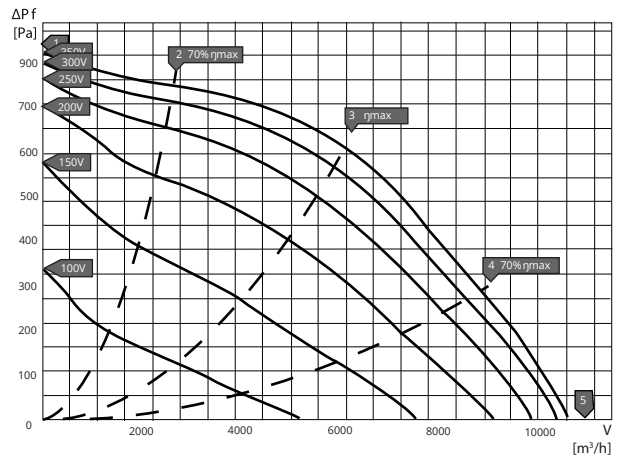
ARFV-S 450 D4 30



ARFV-S 500 D4 30

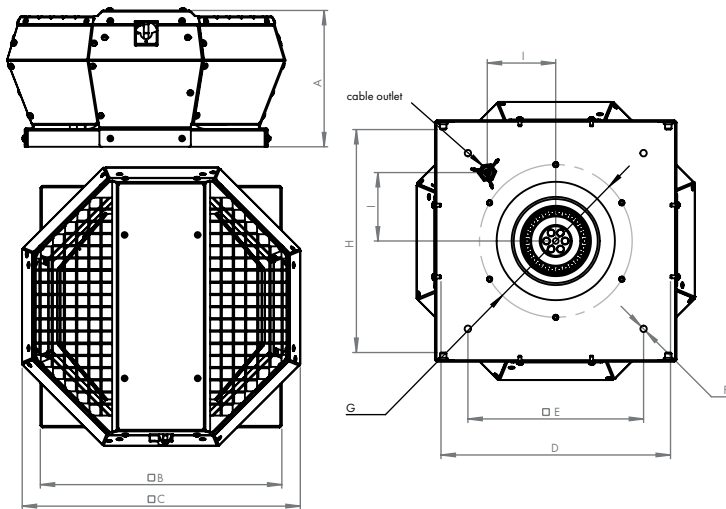


ARFV-S 560 D4 30



	Technical data										Lwa [dB(A)]		
	U [V]	P [W]	I [A]	SC <sub>T</sub>	$\eta_t$	T <sub>m</sub> [°C]	T <sub>u</sub> [°C]	T <sub>o</sub> [°C]	n [rpm]	Lwa 5	Lwa 6	Lwa 2	
ARFV-S 190 E2 31	1 x 230	49	0.3	TSC-1-15	28.7	70	70	-25	2415	70	71	-	
ARFV-S 190 E4 31	1 x 230	18	0.2	TSC-1-15	16.7	70	70	-25	1370	56	58	-	
ARFV-S 220 E2 31	1 x 230	110	0.6	TSC-1-15	31.1	60	60	-25	2460	71	73	-	
ARFV-S 220 E4 31	1 x 230	21	0.2	TSC-1-15	23	80	80	-25	1290	57	59	-	
ARFV-S 225 E2 31	1 x 230	154	0.9	TSC-1-15	37.9	60	60	-25	2730	75	78	-	
ARFV-S 250 E4 31	1 x 230	52	0.3	TSC-1-15	17.5	70	70	-25	1300	65	66	-	
ARFV-S 280 E4 31	1 x 230	82	0.4	TSC-1-15	24.9	70	70	-25	1260	64	67	-	
ARFV-S 315 E4 43	1 x 230	113	0.6	TSC-1-15	33.1	70	70	-25	1440	66	69	-	
ARFV-S 355 E4 31	1 x 230	249	1.3	TSCTK-1-15	45.2	45	45	-25	1350	74	75	-	
ARFV-S 400 E4 31	1 x 230	452	2.6	TSCTK-1-30	44.3	65	65	-25	1360	75	79	-	

- SC<sub>T</sub> = Speed controller
- $\eta_t$  = Maximum total efficiency
- T<sub>m</sub> = Maximum air temperature
- T<sub>u</sub> = Maximum ambient temperature
- T<sub>o</sub> = Minimum operating temperature
- Lwa 2 = Casing sound power level
- Lwa 5 = Sound power level @inlet
- Lwa 6 = Sound power level @outlet
- The sound power levels are measured according to DIN 45635 part 2 & 38



	Dimensions									
	A [mm]	B [mm]	C [mm]	D* [mm]	E [mm]	F [mm]	G [mm]	H* [mm]	I [mm]	[kg]
ARFV-S 190 E2/E4 31	190	337	388	320	245	4x Ø 9	Ø 213 - (6x) M6	305	94	5
ARFV-S 220 E2/E4 31	190	337	388	320	245	4x Ø 9	Ø 213 - (6x) M6	305	94	5.5
ARFV-S 225 E2 31	190	337	388	320	245	4x Ø 9	Ø 213 - (6x) M6	305	94	5.7
ARFV-S 250 E4 31	190	337	388	320	245	4x Ø 9	Ø 213 - (6x) M6	305	94	5.8
ARFV-S 280 E4 31	249	437	541	420	330	4x Ø 9	Ø 286 - (6x) M6	405	135	8.4
ARFV-S 315 E4 43	249	437	541	420	330	4x Ø 9	Ø 286 - (6x) M6	405	135	10
ARFV-S 355 E4 31	333	598	745	580	450	4x Ø 9	Ø 438 - (6x) M6	565	193	16.5
ARFV-S 400 E4 31	333	598	745	580	450	4x Ø 9	Ø 438 - (6x) M6	565	193	19.5

\* Tolerance 0-2mm

## Dimensions

Go to 'downloads' to see all technical drawings and dimensions