



EFFICIENT WORK



# HC/EW



**HIGHLY EFFICIENT  
IE3-COMPLIANT  
THREE-PHASE MOTORS**

## Wall-mounted axial fans fitted with high-efficiency IE3 asynchronous motor adjustable electronically

Fibreglass-reinforced plastic impeller.

Fan:

- Airflow direction from motor to impeller.
- Impeller in polyamide 6 reinforced with fibreglass.
- Sheet steel base plate.
- Protection guard to prevent contacts according to standard UNE 100250 as an accessory.

Motor and electronic variable speed:

- Motors with IE3 efficiency adjustable electronically.
- The variable speed drive VSD will be supplied as per order.
- Electronic variable speed drive (VSD) can be adjusted by external 0-10 V signal.
- It is advisable to install sinusoidal filters between the fan and the electronic variable speed drive (VSD) when they are far apart.
- It is advisable to install an electronic variable speed drive (VSD) outside the working area.
- The external signal can be supplied through a manual or automatic control with 0-10 V output.
- Electronic variable speed drive (VSD), available with single-phase 220-240 V 50/60 Hz input (VSD1/B type) or three-phase 380-415 V 50/60 Hz (VSD3/B type).
- By default, the electronic variable speed drive (VSD) is delivered programmed for constant speed.

Working fan temperature:

- -25 °C +60 °C.
- Working temperature (VSD): -25 °C +50 °C.
- Class F motors with ball bearings, IP55 protection.
- Three-phase 230/400 V 50 Hz (up to 5.5 CV) and 400/690 V. 50 Hz. (power over 5.5 CV.)

Finish:

- Anticorrosive finish in polyester resin polymerised at 190°C, after alkaline degreasing with nanotechnology treatment and phosphate-free.

On request:

- Motor, impeller and guard unit (version F)
- Motor, impeller and guard unit (version G).
- Airflow direction from impeller to motor.

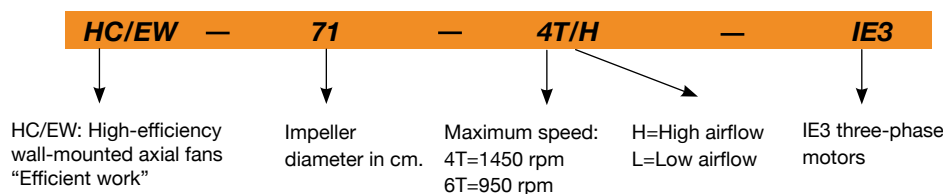


**VARIABLE SPEED DRIVE**  
VSD: Variable Speed Drive.  
• VSD1/A-RFM  
• VSD3/A-RFT  
Supply on request

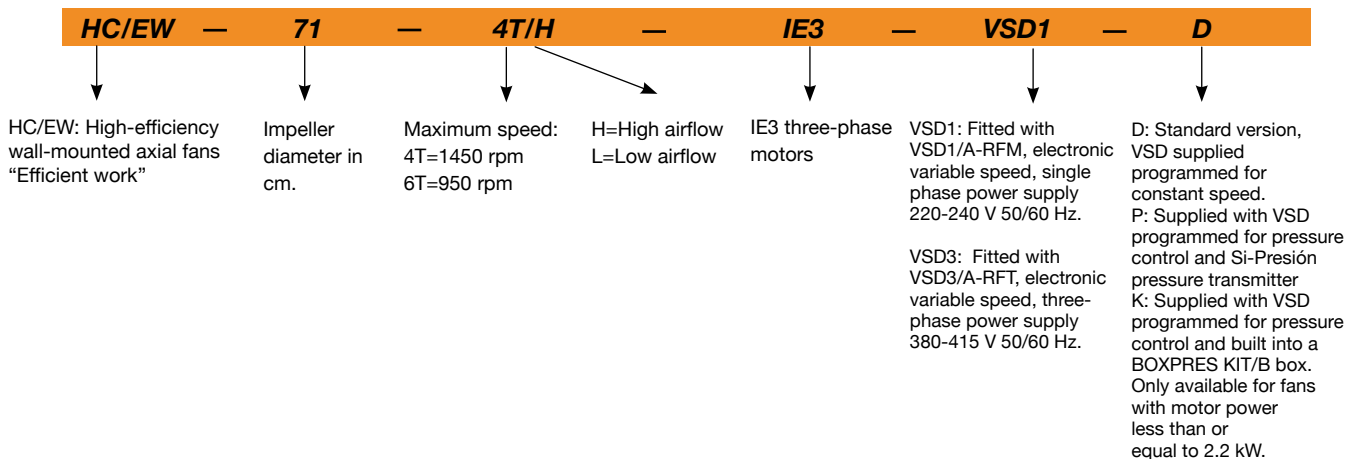
**CONTROL**  
Supply optional accessory

**SUPPLY**  
VSD1/A-RFM:  
220-240 V 50/60 Hz  
VSD3/A-RFT:  
380-415 V 50/60 Hz

### Fan order code



### Order code with variable speed drive (VSD) included





### Technical characteristics

Model	Speed min/max (r/min)	Single-phase VSD 230 V 50/60 Hz		Three-phase VSD 400 V 50/60 Hz		Maximum current Motor 50 Hz			Installed power (kW)	Maximum airflow min/max (m³/h)	Sound pressure level min/max dB(A)	Weight approx. (Kg)
		Maximum current input (A)	VSD model	Maximum current input (A)	VSD model	230V (A)	400V (A)	690V (A)				
HC/EW-71-4T/H	575/1440	15.78	VSD1/A-RFM-2	4.38	VSD3/A-RFT-2	5.41	3.11	-	1.50	8905 / 22300	58 / 78	35
HC/EW-71-6T/H	375/940	8.69	VSD1/A-RFM-1	2.41	VSD3/A-RFT-1	3.36	1.93	-	0.75	6980 / 17500	46 / 66	36
HC/EW-80-4T/H	575/1440	-	-	7.20	VSD3/A-RFT-5.5	10.70	6.15	-	3.00	13175 / 33000	62 / 82	55
HC/EW-80-4T/L	575/1440	15.78	VSD1/A-RFM-2	4.38	VSD3/A-RFT-2	5.41	3.11	-	1.50	9985 / 25000	59 / 79	44
HC/EW-80-6T/H	375/940	8.69	VSD1/A-RFM-1	2.41	VSD3/A-RFT-1	3.36	1.93	-	0.75	8775 / 22000	51 / 71	45
HC/EW-80-6T/L	370/925	6.90	VSD1/A-RFM-1	1.92	VSD3/A-RFT-1	2.52	1.45	-	0.55	7680 / 19200	50 / 70	39
HC/EW-90-4T/H	580/1450	-	-	9.48	VSD3/A-RFT-5.5	13.90	8.00	-	4.00	17400 / 43500	66 / 86	68
HC/EW-90-4T/L	575/1440	-	-	7.20	VSD3/A-RFT-5.5	10.70	6.15	-	3.00	13495 / 33800	63 / 83	63
HC/EW-90-6T/H	380/950	16.64	VSD1/A-RFM-2	4.62	VSD3/A-RFT-2	6.43	3.70	-	1.50	13320 / 33300	56 / 76	60
HC/EW-90-6T/L	380/945	12.43	VSD1/A-RFM-2	3.45	VSD3/A-RFT-2	4.68	2.69	-	1.10	10535 / 26200	53 / 73	55
HC/EW-100-4T/H	585/1465	-	-	12.81	VSD3/A-RFT-7.5	-	10.30	5.97	5.50	21565 / 54000	68 / 88	85
HC/EW-100-4T/L	580/1450	-	-	9.48	VSD3/A-RFT-5.5	13.90	8.00	-	4.00	17000 / 42500	64 / 84	71
HC/EW-100-6T/H	380/950	16.64	VSD1/A-RFM-2	4.62	VSD3/A-RFT-2	6.43	3.70	-	1.50	14800 / 37000	58 / 78	63
HC/EW-100-6T/L	380/945	12.43	VSD1/A-RFM-2	3.45	VSD3/A-RFT-2	4.68	2.69	-	1.10	11300 / 28100	56 / 76	73

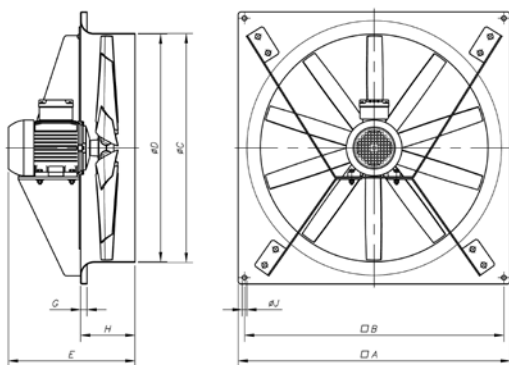
### Acoustic features at maximum speed

The specified values are determined according to free field measurements of sound levels in dB(A) at an equivalent distance of twice the fan's span plus the impeller's diameter, with a minimum of 1.5 m.

Sound power Lw(A) spectrum in dB(A) via frequency band in Hz.

Model	63	125	250	500	1000	2000	4000	8000	Model	63	125	250	500	1000	2000	4000	8000
HC/EW-71-4T/H	47	64	77	84	89	90	85	78	HC/EW-90-4T/L	54	75	82	87	90	86	79	68
HC/EW-71-6T/H	35	52	65	72	77	78	73	66	HC/EW-90-6T/H	61	82	89	94	97	93	86	75
HC/EW-80-4T/H	60	81	88	93	96	92	85	74	HC/EW-90-6T/L	51	72	79	84	87	83	76	85
HC/EW-80-4T/L	49	70	77	82	85	81	74	63	HC/EW-100-4T/H	68	88	96	101	103	100	93	82
HC/EW-80-6T/H	57	78	85	90	93	89	82	71	HC/EW-100-4T/L	58	78	86	91	93	90	83	72
HC/EW-80-6T/L	48	69	76	81	84	80	73	62	HC/EW-100-6T/H	64	84	92	97	99	96	89	78
HC/EW-90-4T/H	64	85	92	97	100	96	89	78	HC/EW-100-6T/L	56	76	84	89	91	88	81	70

### Dimensions in mm



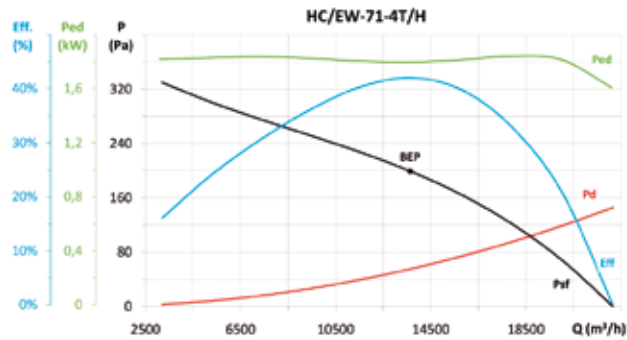
Model	∅A	∅B	∅C	∅D	E	G	H	∅J
HC/EW-71-4T/H	850	810	715	711	395	20	170	14.5
HC/EW-71-6T/H	850	810	715	711	395	20	170	14.5
HC/EW-80-4T/H	970	910	801	797	488	20	210	14.5
HC/EW-80-4T/L	970	910	801	797	458	20	210	14.5
HC/EW-80-6T/H	970	910	801	797	458	20	210	14.5
HC/EW-80-6T/L	970	910	801	797	416	20	210	14.5
HC/EW-90-4T/H	1170	1110	918	914	511	20	210	14.5
HC/EW-90-4T/L	1170	1110	918	914	488	20	210	14.5
HC/EW-90-6T/H	1170	1110	918	914	488	20	210	14.5
HC/EW-90-6T/L	1170	1110	918	914	455	20	210	14.5
HC/EW-100-4T/H	1170	1110	1003	999	548	20	220	14.5
HC/EW-100-4T/L	1170	1110	1003	999	521	20	220	14.5
HC/EW-100-6T/H	1170	1110	1003	999	498	20	220	14.5
HC/EW-100-6T/L	1170	1110	1003	999	468	20	220	14.5



**EFFICIENT WORK**

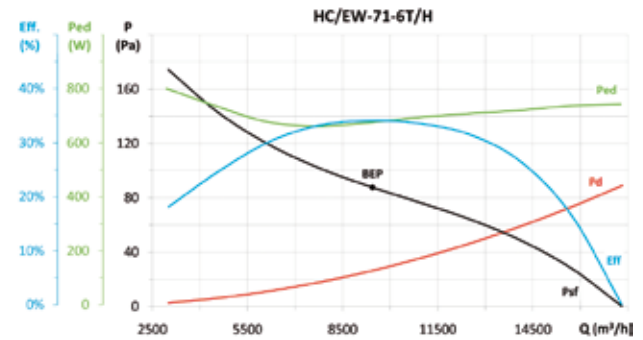


**Erp. Characteristic curves and ErP data**



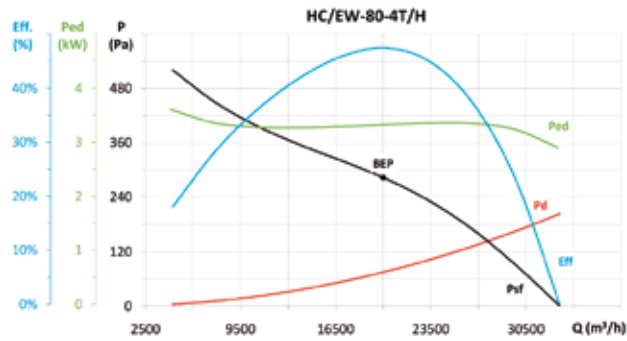
MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m <sup>3</sup> /h]	[Pa]	[rpm]	VSD
C	S	1,00	1,07	44,9%	49,6	1,796	13627	199,3	1441	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc



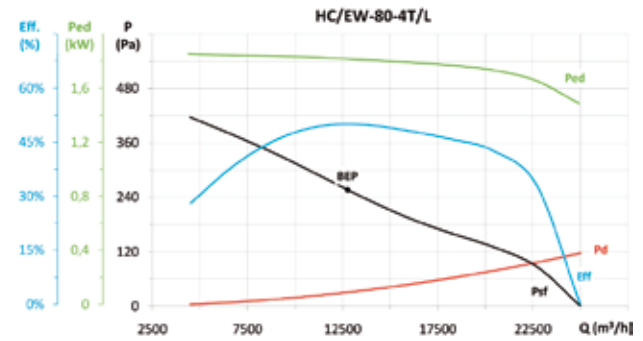
MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m <sup>3</sup> /h]	[Pa]	[rpm]	VSD
C	S	1,00	1,10	37,4%	44,8	0,675	9443	87,7	959	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc



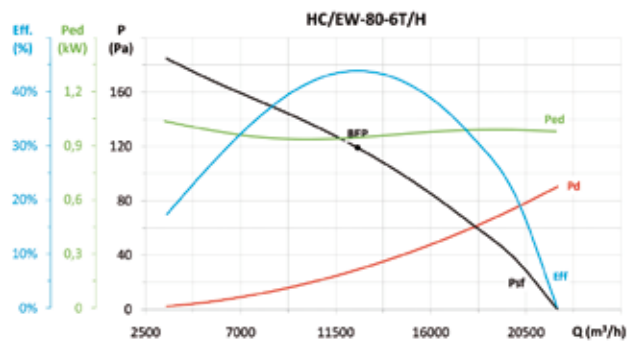
MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m <sup>3</sup> /h]	[Pa]	[rpm]	VSD
C	S	1,00	1,05	49,8%	52,9	3,321	19996	283,5	1444	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc



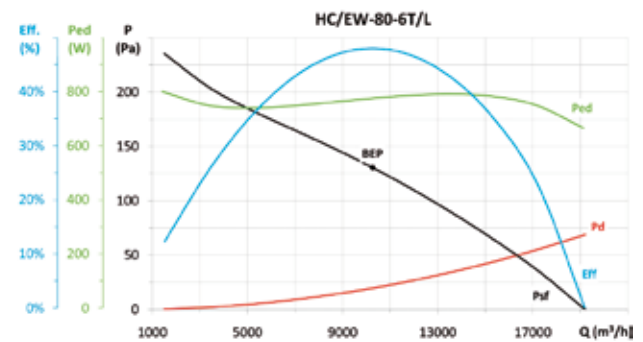
MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m <sup>3</sup> /h]	[Pa]	[rpm]	VSD
C	S	1,00	1,07	53,5%	58,2	1,818	12760	256,6	1440	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc



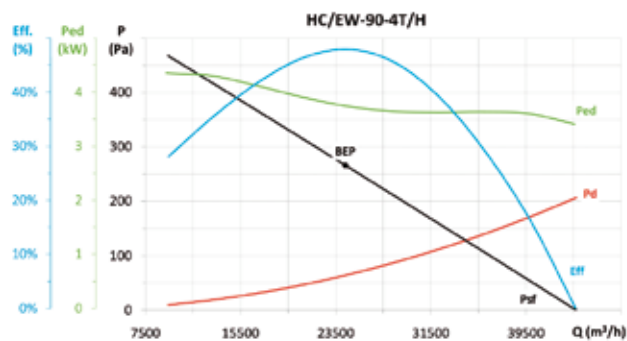
MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m <sup>3</sup> /h]	[Pa]	[rpm]	VSD
C	S	1,00	1,09	47,7%	54,2	0,945	12533	119,1	943	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc



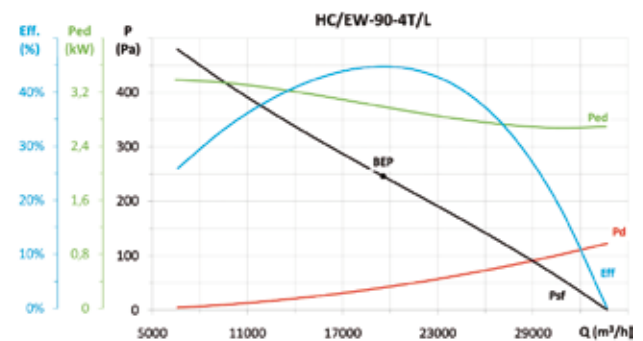
MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m <sup>3</sup> /h]	[Pa]	[rpm]	VSD
C	S	1,00	1,10	52,6%	59,6	0,775	10262	130,5	927	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc



MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m <sup>3</sup> /h]	[Pa]	[rpm]	VSD
C	S	1,00	1,05	50,2%	52,9	3,751	24299	266,4	1460	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc

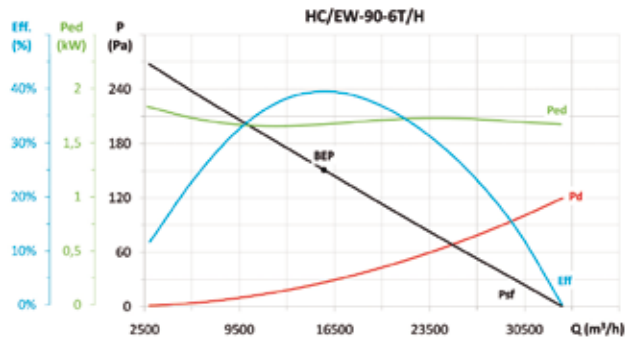


MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m <sup>3</sup> /h]	[Pa]	[rpm]	VSD
C	S	1,00	1,06	47,2%	50,5	2,989	19552	246,3	1450	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc

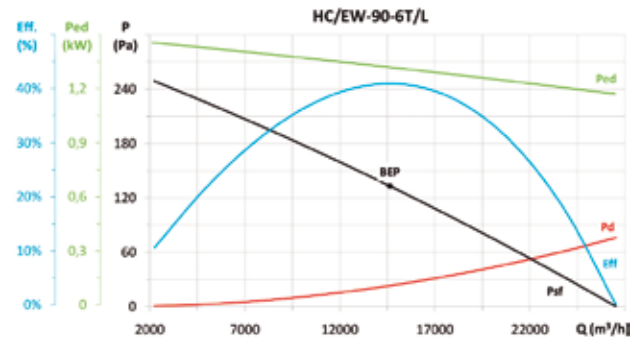


## Erp. Characteristic curves and ErP data



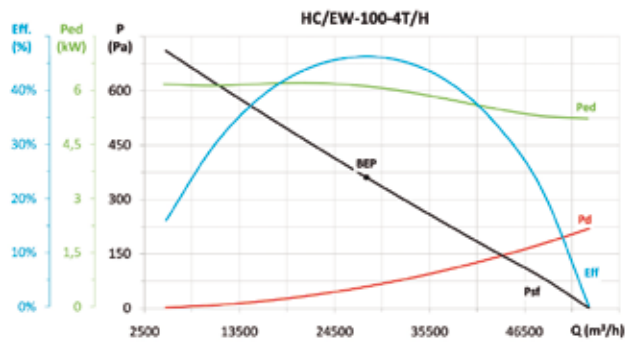
MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,00	1,07	42,3%	47,2	1,670	15731	150,9	956	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc



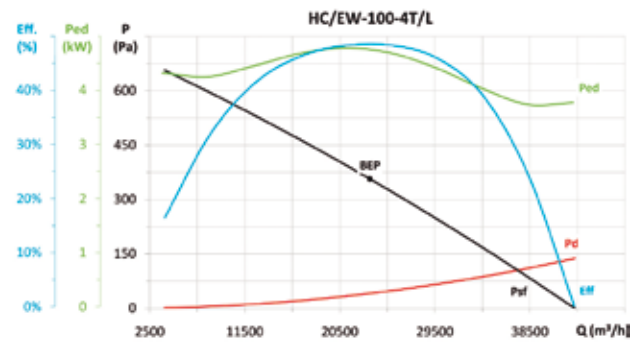
MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,00	1,08	44,1%	49,7	1,320	14635	132,9	949	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc



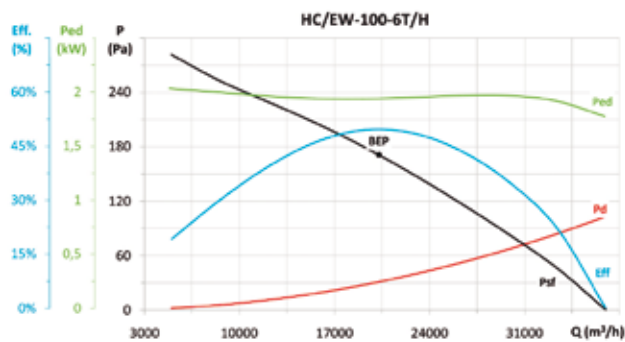
MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,04	1,04	48,0%	49,4	6,119	28190	361,3	1466	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc



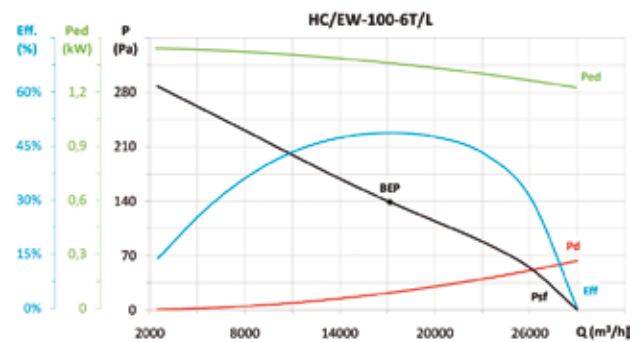
MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,00	1,04	50,5%	52,6	4,763	23348	356,7	1450	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc



MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,00	1,07	53,0%	57,5	1,940	20265	171,1	949	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc



MC	EC	SR	Cc	$\eta_e$ (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,00	1,08	52,4%	57,9	1,362	17161	139,0	948	NECESSARY

\* $\eta_e$  (%) = Eff. (%) x Cc

## Accessories

See accessories section.



INT



VSD1/A-RFM  
VSD3/A-RFT



AET



PL



P



R



RI



S



CONTROL UNITS  
AND SENSORS