

CJTCR/R/EW

400 °C/2h extraction units fans with backward curved impeller fitted with electronically adjustable, high-efficiency, asynchronous IE3 motors



VARIABLE SPEED DRIVE
VSD: Electronic speed drive.
· VSD1/A-RFM
· VSD3/A-RFT
Supply on request

CONTROL
Supplied as an optional accessory

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

Extremely robust 400 °C/2h single inlet extractor fan units with acoustically insulated box, for outdoor operation in fire risk zones. Fitted with electronically adjustable and high efficiency asynchronous IE3 motors.

Fan:

- Sheet steel casing.
- Backward curved impeller in very robust sheet steel, with anti-heat paint.
- Approved in accordance with standard EN 12101-3.

Motor:

- New high efficiency AC asynchronous motors (IE3).
- Fitted with durable ball bearings. IP55 protection.
- Three-phase 230/400 V 50 Hz (up to 4 kW) and 400/690 V 50 Hz (powers greater than 4 kW).
- Maximum temperature of air to be carried: S1 -20 °C+ 250 °C continuous service. S2 300 °C/2h and 400 °C/2h service.

Electronic speed drive:

- Adjustable speed by 0-10 V signal or PI automatic control integrated in the inverter.
- Highly configurable electronic drive with 2 analog inputs, 2 digital inputs, 1 relay output and 1 analog or digital output to select.
- Possibility of connection to MODBUS and CAN Open field buses.
- Electronic drive for easy installation outside the work area. Thanks to its DIN rail it can be mounted on control panels minimizing connections.
- Supplied pre-wired with shielded cable in accordance with EMC directive 2014/30/EU.
- Available with single-phase 220-240 V 50/60 Hz input up to 3 CV (Type VSD1 / A-RFM) or three-phase 380-415 V 50/60 Hz (Type VSD3 / A-RFT). IP20 standard protection. IP66 protection up to 10 CV on request.
- Working temperature (VSD): -25°C + 50 °C.

Finishing:

- Anti-corrosive in galvanized steel sheet.

Fan order code

CJTCR/R/EW – 1650 – 4T – IE3

CJTCR/R/EW: 400 °C/2h extraction units fans with backward curved impeller fitted with electronically adjustable, high-efficiency, asynchronous IE3 motors

Impeller size

Number of motor poles
T = Three-phase
2=2900 r/min 50 Hz
4=1400 r/min 50 Hz
6=900 r/min 50 Hz

T = Three-phase

IE3 motor

Order code with variable speed drive (VSD) included

CJTCR/R/EW – 1650 – 4T – IE3 – VSD1 – D

CJTCR/R/EW: 400 °C/2h extraction units fans with backward curved impeller fitted with electronically adjustable, high-efficiency, asynchronous IE3 motors

Impeller size

Number of motor poles
T = Three-phase
2=2900 r/min 50 Hz
4=1400 r/min 50 Hz
6=900 r/min 50 Hz

T = Three-phase

IE3 motor

VSD1: Fitted with VSD1/ARFM, electronic variable speed, single phase power supply 220-240 V 50/60 Hz.

VSD3: Fitted with VSD3/A-RFT, electronic variable speed, three-phase power supply 380-415 V 50/60 Hz.

D: Standard version, VSD supplied programmed for constant speed.
P: Supplied with VSD programmed for pressurecontrol and Si-Presión pressuretransmitter.
K: Supplied with VSD programmed for pressure control and built into a BOXPRES KIT/B box.
Only available for fans with motor power less than or equal to 2.2 kW.

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 (A)			Installed power (kW)	Flow rate min/max (m³/h)	Sound pressure level min/max dB (A)	Approx. weight (Kg)
		Maximum current input (A)	Model VSD	Maximum current input (A)	Model VSD	230V	400V	690V				
CJTCR/R/EW-1240-2T-IE3	1160/2900	-	-	9.44	VSD3/A-RFT-5.5	13.00	7.50	-	4.00	4440 / 11110	57/77	147
CJTCR/R/EW-1240-4T-IE3	570/1420	8.32	VSD1/A-RFM-1	2.31	VSD3/A-RFT-1	2.82	1.62	-	0.75	2330 / 5830	42/62	125
CJTCR/R/EW-1445-2T-IE3	1170/2935	-	-	17.45	VSD3/A-RFT-10	-	13.90	8.06	7.50	6620 / 16560	60/80	210
CJTCR/R/EW-1445-4T-IE3	580/1455	11.87	VSD1/A-RFM-2	3.30	VSD3/A-RFT-2	4.07	2.34	-	1.10	3240 / 8100	45/65	177
CJTCR/R/EW-1650-4T-IE3	580/1440	15.78	VSD1/A-RFM-2	4.38	VSD3/A-RFT-2	5.41	3.11	-	1.50	4240 / 10600	46/66	189
CJTCR/R/EW-1650-6T-IE3	380/940	8.69	VSD1/A-RFM-1	2.41	VSD3/A-RFT-1	3.36	1.93	-	0.75	2980 / 7450	37/57	186
CJTCR/R/EW-1856-4T-IE3	580/1440	-	-	7.20	VSD3/A-RFT-5.5	10.70	6.15	-	3.00	6100 / 15240	53/73	273
CJTCR/R/EW-1856-6T-IE3	380/945	12.43	VSD1/A-RFM-2	3.45	VSD3/A-RFT-2	4.68	2.69	-	1.10	4020 / 10040	45/65	266
CJTCR/R/EW-2063-4T-IE3	590/1465	-	-	12.81	VSD3/A-RFT-7.5	-	10.30	5.97	5.50	9800 / 24490	55/75	380
CJTCR/R/EW-2063-6T-IE3	380/950	16.64	VSD1/A-RFM-2	4.62	VSD3/A-RFT-2	6.43	3.70	-	1.50	6460 / 16140	45/65	364
CJTCR/R/EW-2271-4T-IE3	590/1470	-	-	25.10	VSD3/A-RFT-15	-	21.40	12.40	11.00	13900 / 34760	62/82	508
CJTCR/R/EW-2271-6T-IE3	390/970	-	-	7.39	VSD3/A-RFT-5.5	12.00	6.91	-	3.00	9200 / 23000	52/72	473



Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

Acoustic characteristics

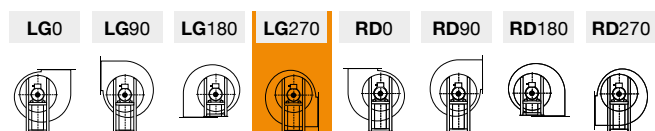
The indicated values are determined by measuring the sound pressure level and sound power in dB(A) obtained in a free field at a distance equivalent to twice the size of the fan plus the impeller diameter, with a minimum of 1.5 m.

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

	63	125	250	500	1000	2000	4000	8000		63	125	250	500	1000	2000	4000	8000
CJTCR/R/EW-1240-2T	63	78	76	88	85	89	91	78	CJTCR/R/EW-1856-4T	64	73	86	82	85	86	80	66
CJTCR/R/EW-1240-4T	51	65	71	74	74	75	65	54	CJTCR/R/EW-1856-6T	56	64	76	78	75	76	66	55
CJTCR/R/EW-1445-2T	68	80	78	90	88	92	94	84	CJTCR/R/EW-2063-4T	75	80	86	88	86	83	76	68
CJTCR/R/EW-1445-4T	54	67	73	78	75	78	73	59	CJTCR/R/EW-2063-6T	64	65	77	77	76	78	68	58
CJTCR/R/EW-1650-4T	58	68	76	78	77	79	70	60	CJTCR/R/EW-2271-4T	79	80	89	92	94	95	91	78
CJTCR/R/EW-1650-6T	48	60	67	72	68	64	57	49	CJTCR/R/EW-2271-6T	68	68	82	81	85	85	74	63

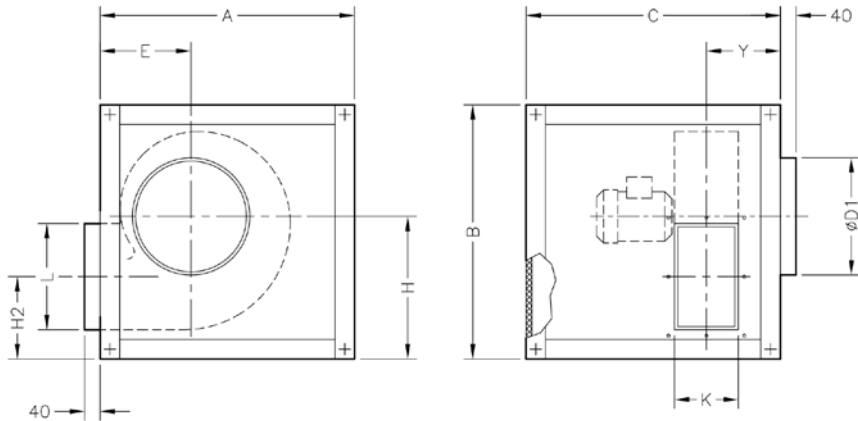
Orientations

Standard supply LG 270



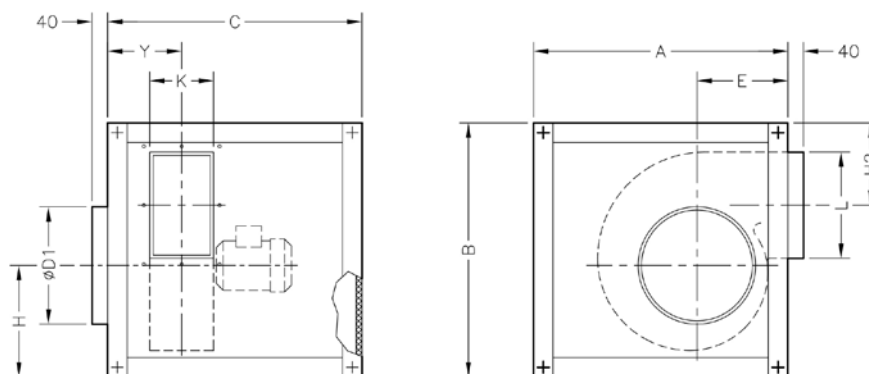
Dimensions mm

Standard supply: LG 270



	A	B	C	ØD1	E	H	H2	K	L	Y
CJTCR/R/EW-1240	970	970	970	400	312	549	308	315	400	307.5
CJTCR/R/EW-1445	1070	1070	1070	450	357	610	339	355	450	333.5
CJTCR/R/EW-1650	1160	1160	1160	500	382	660	365	400	500	355
CJTCR/R/EW-1856	1260	1260	1050	560	422	727	399	450	560	360
CJTCR/R/EW-2063	1400	1400	1200	630	472	810	444	500	630	395
CJTCR/R/EW-2271	1555	1555	1355	710	532	906	489	560	715	430

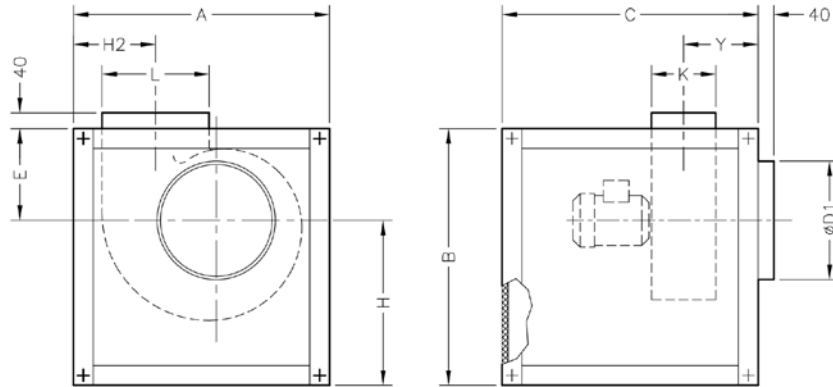
Supply on request: LG 90



	A	B	C	ØD1	E	H	H2	K	L	Y
CJTCR/R/EW-1240	970	970	970	400	312	379	350	315	400	307.5
CJTCR/R/EW-1445	1070	1070	1070	450	357	408	391	355	450	333.5
CJTCR/R/EW-1650	1160	1160	1160	500	382	447	419	400	500	355
CJTCR/R/EW-1856	1260	1260	1050	560	422	495	438	450	560	360
CJTCR/R/EW-2063	1400	1400	1200	630	472	546	488	500	630	395
CJTCR/R/EW-2271	1555	1555	1355	710	532	607	532	560	715	430

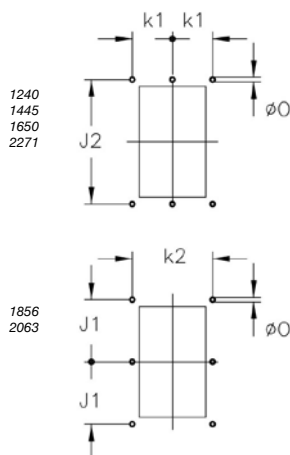
Dimensions mm

Supply on request: LG 0



	A	B	C	ØD1	E	H	H2	K	L	Y
CJTCR/R/EW-1240	970	970	970	400	533	437	322	315	400	307.5
CJTCR/R/EW-1445	1070	1070	1070	450	586	484	367	355	450	333.5
CJTCR/R/EW-1650	1160	1160	1160	500	634.5	525.5	391.5	400	500	355
CJTCR/R/EW-1856	1260	1260	1050	560	681.5	578.5	442.5	450	560	360
CJTCR/R/EW-2063	1400	1400	1200	630	759	641	482	500	630	395
CJTCR/R/EW-2271	1555	1555	1355	710	838	717	518.5	560	715	430

Outlet nozzle

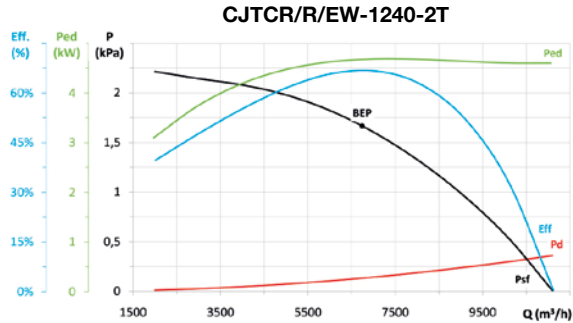


	k1	k2	J1	J2	ØO
CJTCR/R/EW-1240	177.5	-	-	440	11
CJTCR/R/EW-1445	202.5	-	-	498	11
CJTCR/R/EW-1650	225	-	-	550	13
CJTCR/R/EW-1856	-	500	305	-	13
CJTCR/R/EW-2063	-	560	345	-	13
CJTCR/R/EW-2271	312.5	-	-	775	13

Characteristic curves

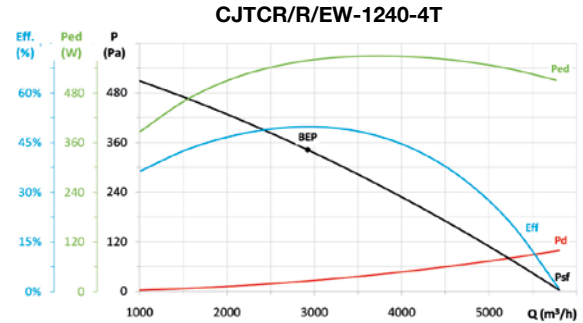
Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inwg



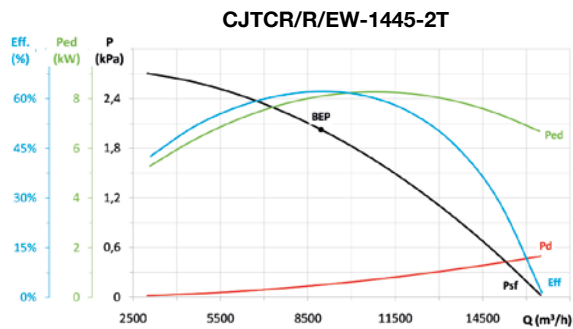
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m ³ /h]	[Pa]	[rpm]	VSD
A	S	1,02	1,04	69,6%	73,1	4,675	6744	1667,2	2901	NECESSARY

* η_e (%) = Eff. (%) x Cc



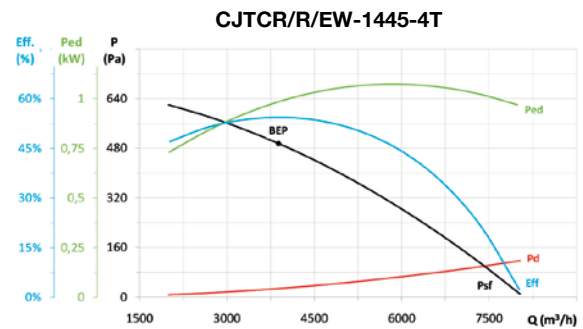
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m ³ /h]	[Pa]	[rpm]	VSD
A	S	1,00	1,11	55,1%	68,2	0,558	2924	342,3	1453	NECESSARY

* η_e (%) = Eff. (%) x Cc



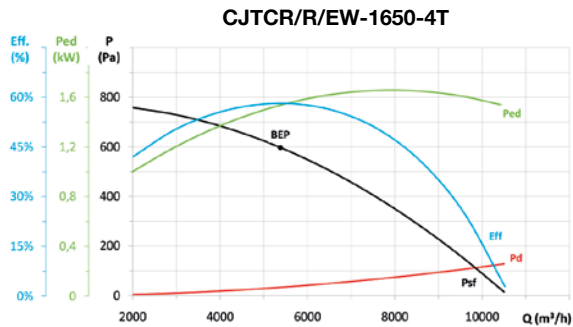
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m ³ /h]	[Pa]	[rpm]	VSD
A	S	1,02	1,04	64,6%	65,6	8,103	8951	2025,7	2939	NECESSARY

* η_e (%) = Eff. (%) x Cc



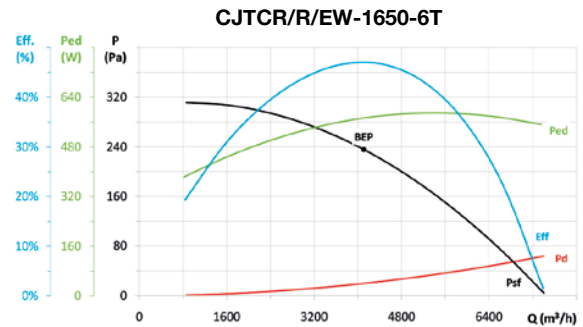
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m ³ /h]	[Pa]	[rpm]	VSD
A	S	1,01	1,09	59,1%	69,7	0,983	3883	495,3	1468	NECESSARY

* η_e (%) = Eff. (%) x Cc



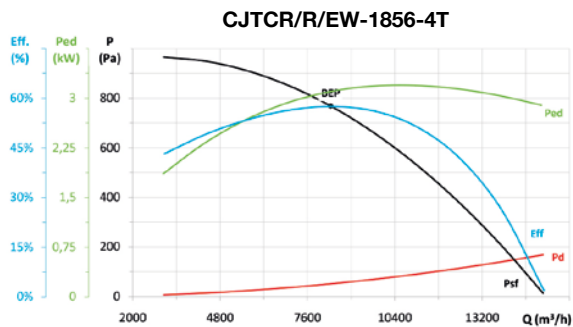
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m ³ /h]	[Pa]	[rpm]	VSD
A	S	1,01	1,08	62,5%	71,1	1,535	5378	597,4	1449	NECESSARY

* η_e (%) = Eff. (%) x Cc



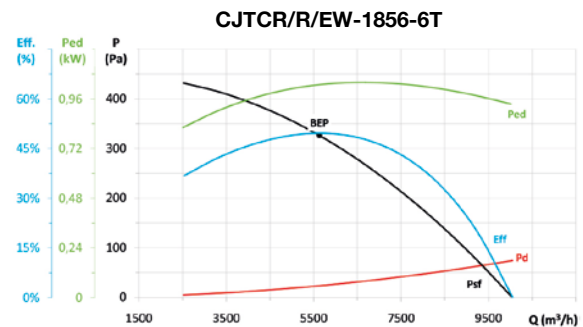
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m ³ /h]	[Pa]	[rpm]	VSD
A	S	1,00	1,10	52,0%	65,0	0,572	4109	235,7	966	NECESSARY

* η_e (%) = Eff. (%) x Cc



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m ³ /h]	[Pa]	[rpm]	VSD
A	S	1,01	1,05	60,6%	65,9	3,096	8342	768,0	1448	NECESSARY

* η_e (%) = Eff. (%) x Cc



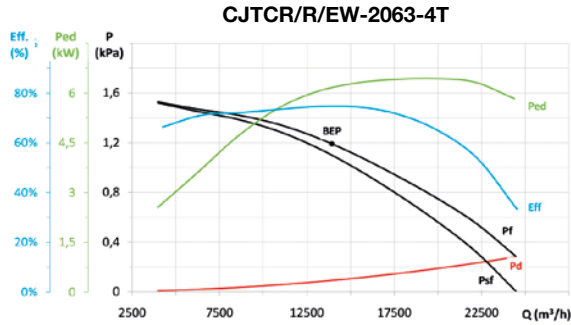
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m ³ /h]	[Pa]	[rpm]	VSD
A	S	1,00	1,09	53,9%	64,3	1,028	5632	326,1	960	NECESSARY

* η_e (%) = Eff. (%) x Cc

Characteristic curves

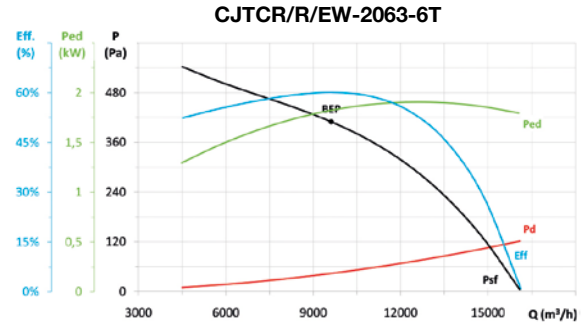
Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inwg



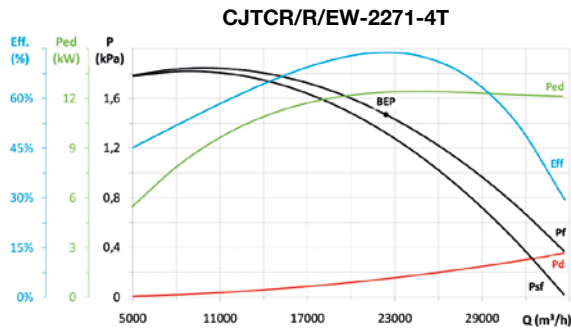
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m ³ /h]	[Pa]	[rpm]	VSD
B	T	1,01	1,04	77,8%	80,0	6,161	13932	1190,7	1466	NECESSARY

* η_e (%) = Eff. (%) x Cc



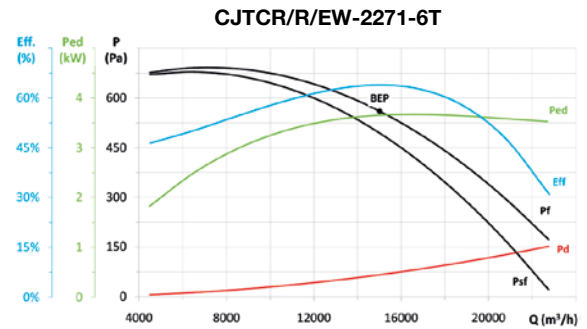
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m ³ /h]	[Pa]	[rpm]	VSD
A	S	1,00	1,07	64,3%	72,1	1,822	9620	409,7	952	NECESSARY

* η_e (%) = Eff. (%) x Cc



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m ³ /h]	[Pa]	[rpm]	VSD
B	T	1,01	1,04	76,8%	76,7	12,369	22380	1469,6	1470	NECESSARY

* η_e (%) = Eff. (%) x Cc



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m ³ /h]	[Pa]	[rpm]	VSD
B	T	1,01	1,05	67,1%	71,7	3,654	15016	560,2	970	NECESSARY

* η_e (%) = Eff. (%) x Cc

Accessories

