CMA/EW

INDUSTRIAL BRUSHLESS MOTOR E.C.

VARIABLE SPEED DRIVE
VSD: Variable Speed Drive.
. VSD1/B
. VSD3/B

Supply included with fan

CONTROL
Supply optional accesory

SUPPLY
VSD1/B:
220-240 V 50/60 Hz
VSD3/B:
380-415 V 50/60 Hz

Centrifugal single-inlet, medium-pressure fans with casing and impeller made from cast aluminium fitted with industrial BRUSHLESS motor E.C.

Fan:
- Casing made from cast aluminium.
- Impeller made from cast aluminium.
- Models 324, 325 and 426 with polyamide impeller, sheet steel model 531-2T-3.
- Electronic variable speed drive (VSD), three-phase or single-phase, is supplied with fan.

Motor and electronic variable speed:
- High-efficiency Industrial Brushless Motors E.C., fitted with electronic variable speed (VSD), adjustable via external control input 0-10V. IP55 protection.
- 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). Standard protection IP20, on demand IP66 protection.
- By default, the electronic variable speed drive (VSD) is delivered programmed for constant speed.
- Working fan temperature: -25 ºC +120 ºC.
- Working temperature (VSD): -25 ºC +50 ºC.

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

On request:
- Cast aluminium impellers for models 324, 325 and 426.

Order code with variable speed drive (VSD) included

CMA/EW — 531 — 2 — 1,5 — B — T — D

- **CMA/EW**: CMA/EW: High-efficiency centrifugal single-inlet, medium-pressure fans with casing and impeller made from cast aluminium, “Efficient work”
- **531**: Impeller size
- **2**: Number of poles: 2=2850 r/min
- **1,5**: Motor power (CV)
- **B**: Industrial Brushless Motors E.C.
- **T**: M: Fitted with VSD1/B, electronic variable speed, single phase power supply 220-240 V 50/60 Hz.
  T: Fitted with VSD3/B, electronic variable speed, three-phase power supply 380-415 V 50/60 Hz.
- **D**: D: Standard version, VSD supplied programmed for constant speed.
  P: Supplied with VSD programmed for pressure control and Si-Presión pressure transmitter
  K: Supplied with VSD programmed for pressure control and built into a BOXPRES KIT/B box.

Technical characteristics

Model	Speed min/max	Single-phase VSD 230 V50/60 Hz		Three-phase VSD 400 V50/60 Hz		Maximum electrical power	Maximum Airflow min/max	Sound pressure level min/max	Weight approx.
	(r/min)	Maximum current input (A)	Model VSD	Maximum current input (A)	Model VSD	(W)	(m³/h)	dB(A)	(Kg)
CMA/EW-218-2	300 / 2850	2.09	VSD1/B-0.37	0.61	VSD3/B-0.75	255	30 / 265	14 / 63	6.0
CMA/EW-324-2	300 / 2850	2.09	VSD1/B-0.37	0.61	VSD3/B-0.75	255	45 / 440	21 / 70	9.0
CMA/EW-325-2	300 / 2850	2.86	VSD1/B-0.37	0.84	VSD3/B-0.75	345	65 / 600	24 / 73	11.0
CMA/EW-426-2	300 / 2850	4.08	VSD1/B-0.37	1.20	VSD3/B-0.75	495	90 / 850	26 / 75	13.0
CMA/EW-527-2	300 / 2850	5.99	VSD1/B-0.37	1.76	VSD3/B-0.75	730	105 / 1000	31 / 80	14.8
CMA/EW-528-2-1	300 / 2850	8.15	VSD1/B-0.75	1.92	VSD3/B-0.75	925	130 / 1250	33 / 82	23.5
CMA/EW-528-2-1.5	300 / 2850	11.80	VSD1/B-0.75	2.78	VSD3/B-1.5	1345	185 / 1750	34 / 83	26.0
CMA/EW-531-2-1.5	300 / 2850	11.80	VSD1/B-0.75	2.78	VSD3/B-1.5	1345	190 / 1790	35 / 84	29.0
CMA/EW-531-2-2	300 / 2850	15.89	VSD1/B-1.5	3.74	VSD3/B-1.5	1810	210 / 2000	36 / 85	31.0
CMA/EW-531-2-3	300 / 2850	23.11	VSD1/B-2.2	5.45	VSD3/B-2.2	2630	255 / 2400	37 / 86	30.0
CMA/EW-540-2	300 / 2850	15.89	VSD1/B-1.5	3.74	VSD3/B-1.5	1810	275 / 2600	36 / 85	38.0
CMA/EW-545-2-3	300 / 2850	23.11	VSD1/B-2.2	5.45	VSD3/B-2.2	2630	275 / 2630	37 / 86	54.0

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EFFICIENT WORK

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.

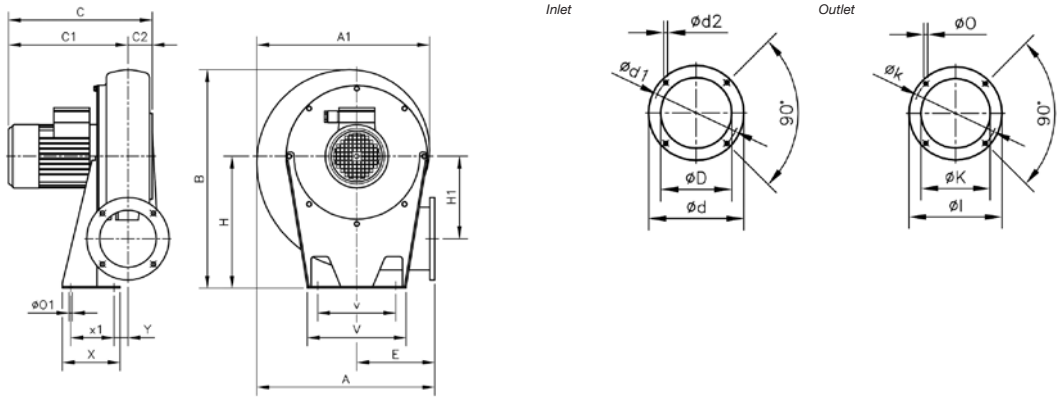
Sound power Lw(A) spectrum in dB(A) via frequency band in Hz.

Model	63	125	250	500	1000	2000	4000	8000
CMA/EW-218-2	29	43	61	67	71	68	63	54
CMA/EW-324-2	36	50	68	74	78	75	70	61
CMA/EW-325-2	39	53	71	77	81	78	73	64
CMA/EW-426-2	41	55	73	79	83	80	75	66
CMA/EW-527-2	46	60	78	84	88	85	80	71
CMA/EW-528-2-1	48	62	80	86	90	87	82	73

Model	63	125	250	500	1000	2000	4000	8000
CMA/EW-528-2-1.5	49	63	81	87	91	88	83	74
CMA/EW-531-2-1.5	50	64	82	88	92	89	84	75
CMA/EW-531-2-2	51	65	83	89	93	90	85	76
CMA/EW-531-2-3	52	66	84	90	94	91	86	77
CMA/EW-540-2	54	67	85	91	96	92	87	79
CMA/EW-545-2-3	55	68	86	92	97	93	88	80

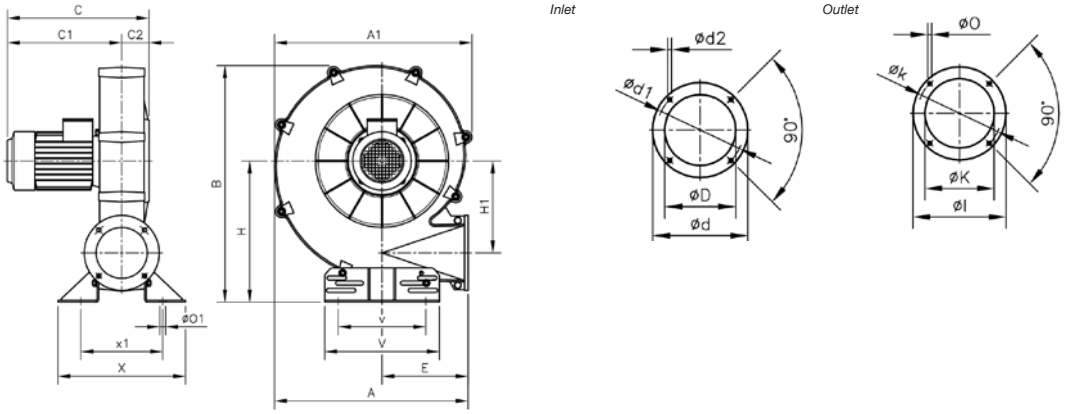
Dimensions in mm

CMA/EW-218...531



Model	A	A1	B	C	C1	C2	øD	ød	ød1	ød2	E	H	H1	øI	øK	øk	øO	øO1	V	v	X	x1	Y
CMA/EW-218-2	241	236	288	239	208	32	80	113	90	M5	110	170	114,5	90	54	76	5,5	7	140	100	80	50	20
CMA/EW-324-2	311	302	356	268	202	38	80	130	112	M5	145	205	145	108	62	90	7	9	173	125	90	60	20
CMA/EW-325-2	335	328	399	271	223	40	94	140	122	M6	155	235	152	120	80	102	7	9	180	145	110	80	20
CMA/EW-426-2	354	344	412	291	250	40	117	155	132	M6	162	240	163	140	90	119	7	13	210	160	105	65	26
CMA/EW-527-2	371	361	440	295	254	42	125	170	147	M6	168	260	170	155	100	129	7	13	220	170	120	80	20
CMA/EW-528-2-1	401	395	488	340	289	51	116	190	162	M6	178	290	177	190	130	160	11	13	230	180	140	100	20
CMA/EW-528-2-1.5	401	395	488	337	289	48	135	190	162	M6	178	290	177	190	130	160	11	13	230	180	140	100	20
CMA/EW-531-2-1.5	440	434	537	341	290	50	160	215	180	M6	193	320	200	200	140	175	11	13	240	190	160	120	21
CMA/EW-531-2-2	440	434	537	388	340	50	160	215	180	M6	193	320	200	200	140	175	11	13	240	190	160	120	21
CMA/EW-531-2-3	440	434	537	388	350	50	160	215	180	M6	193	320	200	200	140	175	11	13	240	190	160	120	21

CMA/EW-540-545



Model	A	A1	B	C	C1	C2	øD	ød	ød1	ød2	E	H	H1	øI	øK	øk	øO	øO1	V	v	X	x1
CMA/EW-540-2	567	580	695	375	320	80	170	240	205	M10	252	415	270	220	150	190	13	11	336	218	374	240
CMA/EW-545-2-3	651	646	776	423	344	115	180	255	220	M10	290	450	309	250	175	220	13	13	336	238	392	292

Positions

LG 270 standard supply. LG 180 position on request and with special fixing measures

LG0 LG45 LG90 LG135 LG180 LG270 LG315

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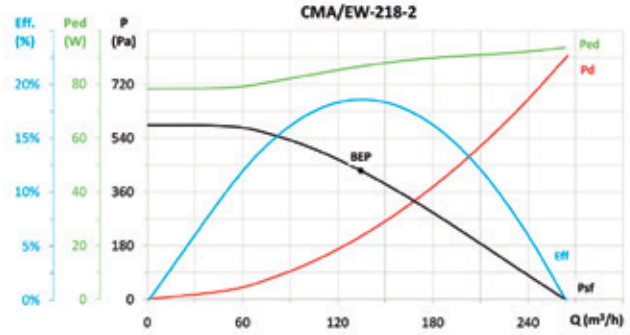
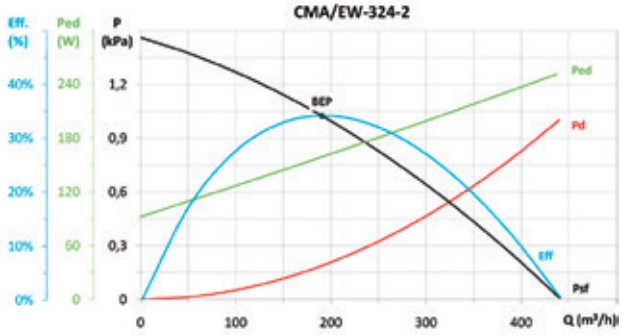
Erp. Characteristic curves and ErP data

CMA/EW-218-2



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
A	S	-	-	-	-	0,087	135	431	2850	INCLUDED

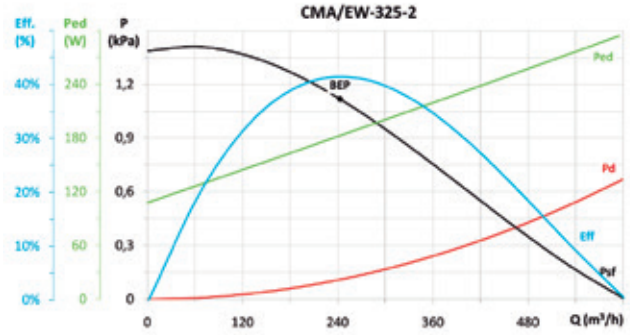
CMA/EW-324-2



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
A	S	1,01	1,14	39,1%	50,5	0,158	191	1024	2850	INCLUDED

*η_e (%) = Eff. (%) x Cc

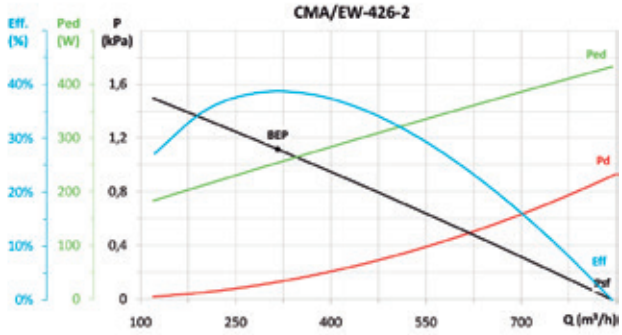
CMA/EW-325-2



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
A	S	1,01	1,14	47,2%	58,2	0,182	243	1118	2850	INCLUDED

*η_e (%) = Eff. (%) x Cc

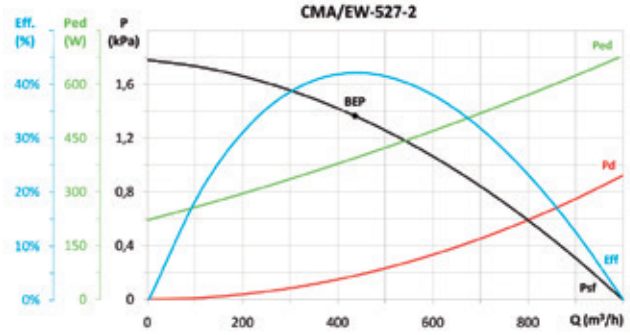
CMA/EW-426-2



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
A	S	1,01	1,13	43,7%	53,8	0,253	316	1117	2850	INCLUDED

*η_e (%) = Eff. (%) x Cc

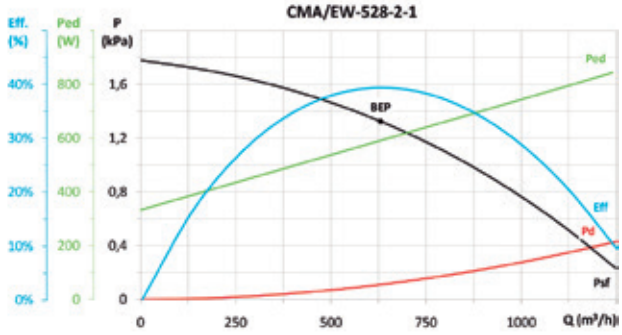
CMA/EW-527-2



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
A	S	1,02	1,12	47,0%	55,9	0,393	436	1365	2850	INCLUDED

*η_e (%) = Eff. (%) x Cc

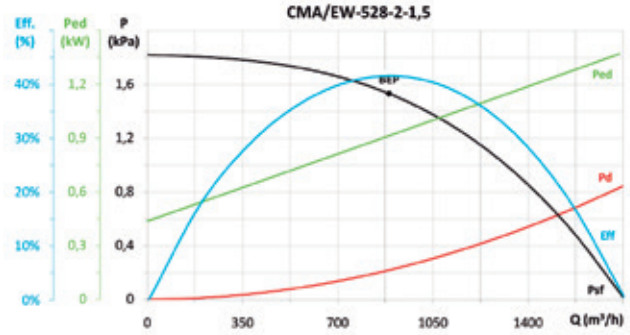
CMA/EW-528-2-1



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
A	S	1,01	1,10	43,5%	51,3	0,589	631	1324	2850	INCLUDED

*η_e (%) = Eff. (%) x Cc

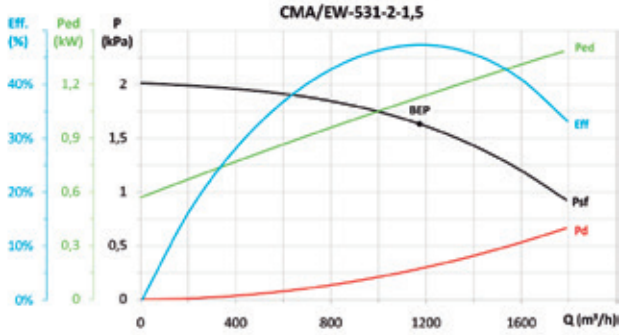
CMA/EW-528-2-1,5



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
A	S	1,02	1,09	45,3%	51,9	0,909	889	1530	2850	INCLUDED

*η_e (%) = Eff. (%) x Cc

CMA/EW-531-2-1,5



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
A	S	1,02	1,08	51,3%	57,3	1,123	1173	1630	2850	INCLUDED

*η_e (%) = Eff. (%) x Cc

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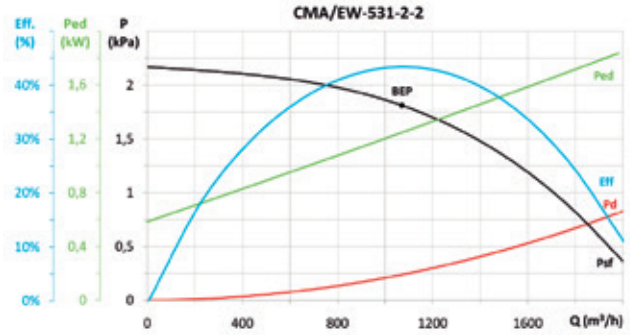
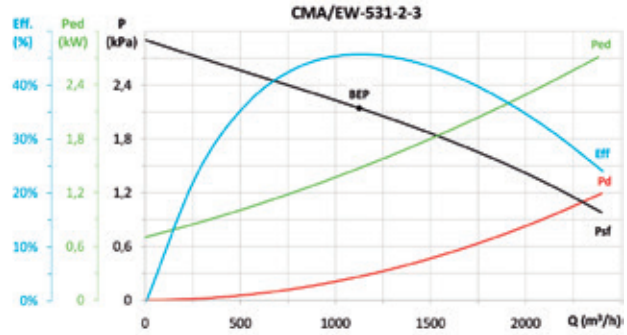
Erp. Characteristic curves and ErP data



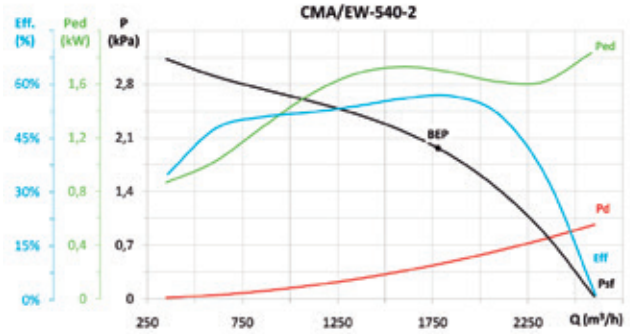
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
A	S	1,02	1,08	46,9%	52,7	1,242	1071	1811	2850	INCLUDED

*ηe (%) = Eff. (%) x Cc



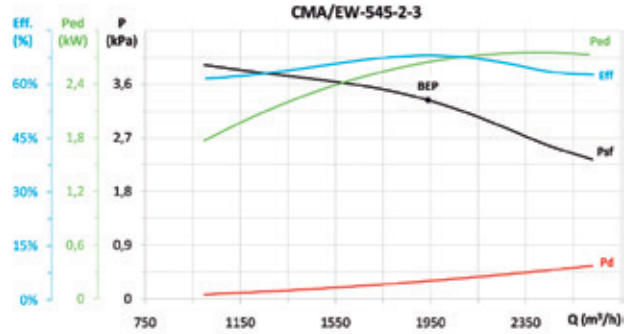
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
A	S	1,02	1,08	49,2%	54,5	1,465	1125	2143	2850	INCLUDED

*ηe (%) = Eff. (%) x Cc



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
A	S	1,02	1,07	60,9%	69,0	1,708	1778	1967	2850	INCLUDED

*ηe (%) = Eff. (%) x Cc



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
A	S	1,04	1,06	72,0%	78,1	2,640	1939	3332	2850	INCLUDED

*ηe (%) = Eff. (%) x Cc

Accessories

See accessories section.

INT

RPA

B

ACE

S

REG

CONTROL UNITS AND SENSORS

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