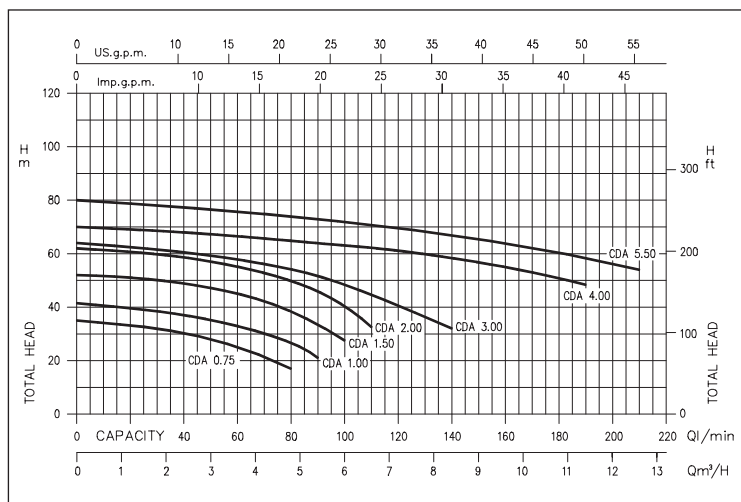


DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

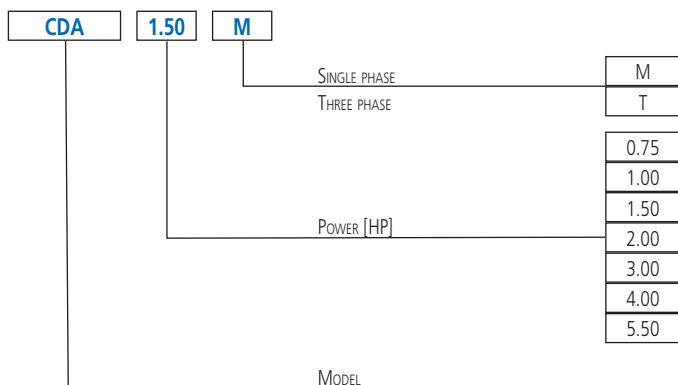
in cast iron



PERFORMANCE CURVES (according to ISO 9906 Attachment A)



IDENTIFICATION CODE



Cast iron dual impeller centrifugal electric pumps

APPLICATIONS

- Pressure boosting domestic plants
- Small-sale irrigation
- Moving non-aggressive liquids for civil and industrial use
- Washing plants and washing vehicles

TECHNICAL DETAILS

- Available with brass impeller (CDA 0.75 M GO, CDA 1.00 M GO).
- They can be inserted into machinery for industrial use

PUMP TECHNICAL DATA

- Maximum working pressure:
 - 6 bar for CDA 0.75 - 1.00
 - 10 bar for the rest of the range
- Maximum temperature of the liquid 40°C for CDA 0.75 - 1.00, 90°C for the rest of the range
- G1 suction connection for CDA 0.75 - 1.00
- G1½ for CDA 1.50 - 2.00 - 3.00, G1½ per CDA 4.00 - 5.50
- G1 discharge connection for CDA 0.75 - 1.00 - 1.50 - 2.00 - 3.00
- G1¼ for CDA 4.00 - 5.50

MOTOR TECHNICAL DATA

- High efficiency IE2 motors starting from 0,75kW
- Self-ventilated 2 poles asynchronous motor
- Class of insulation F
- IP44 Protection degree
- 230V±10%, 50Hz single phase voltage, 230/400V ±10%, 50Hz three phase voltage
- Permanent capacitor inserted and thermo-ampereometric protection with automatic rearm incorporated for the single phase motor
- Protection under user's responsibility for the three phase version

MATERIALS

- Cast iron pump casing
- Mechanical seal in Carbon/Ceramic/NBR
- Impeller in PPE+PS reinforced with glass fibres for CDA 0.75 - 1.00, in brass for the rest of the range
- Shaft in AISI 303 for CDA 0.75 - 1.00 - 1.50 - 2.00 - 3.00, in AISI 304 for CDA 4.00 - 5.50
- Bracket in aluminium for CDA 0.75 - 1.00, in cast iron for the rest of the range
- Seal housing disc in AISI 304 for CDA 0.75 - 1.00, in cast iron built-in the motor bracket for the rest of the range

CONTROL PANELS

- 1EP
- 1EPBH

ACCESSORIES (on request)

- 5 litre 10 bar ¾ EPDM vessel
- 24 litre 8 bar 1" EPDM vessel
- 24 litre 10 bar 1" EPDM vessel
- PVC 5m key float with counter-weight
- PVC 10m key float with counter-weight
- SQUARE-D FSG-2 1.4÷4.6 bar G¼ F pressure switch
- FYG-22 2.8÷7 bar G¼ F pressure switch
- Presscomfort - Pressure regulator

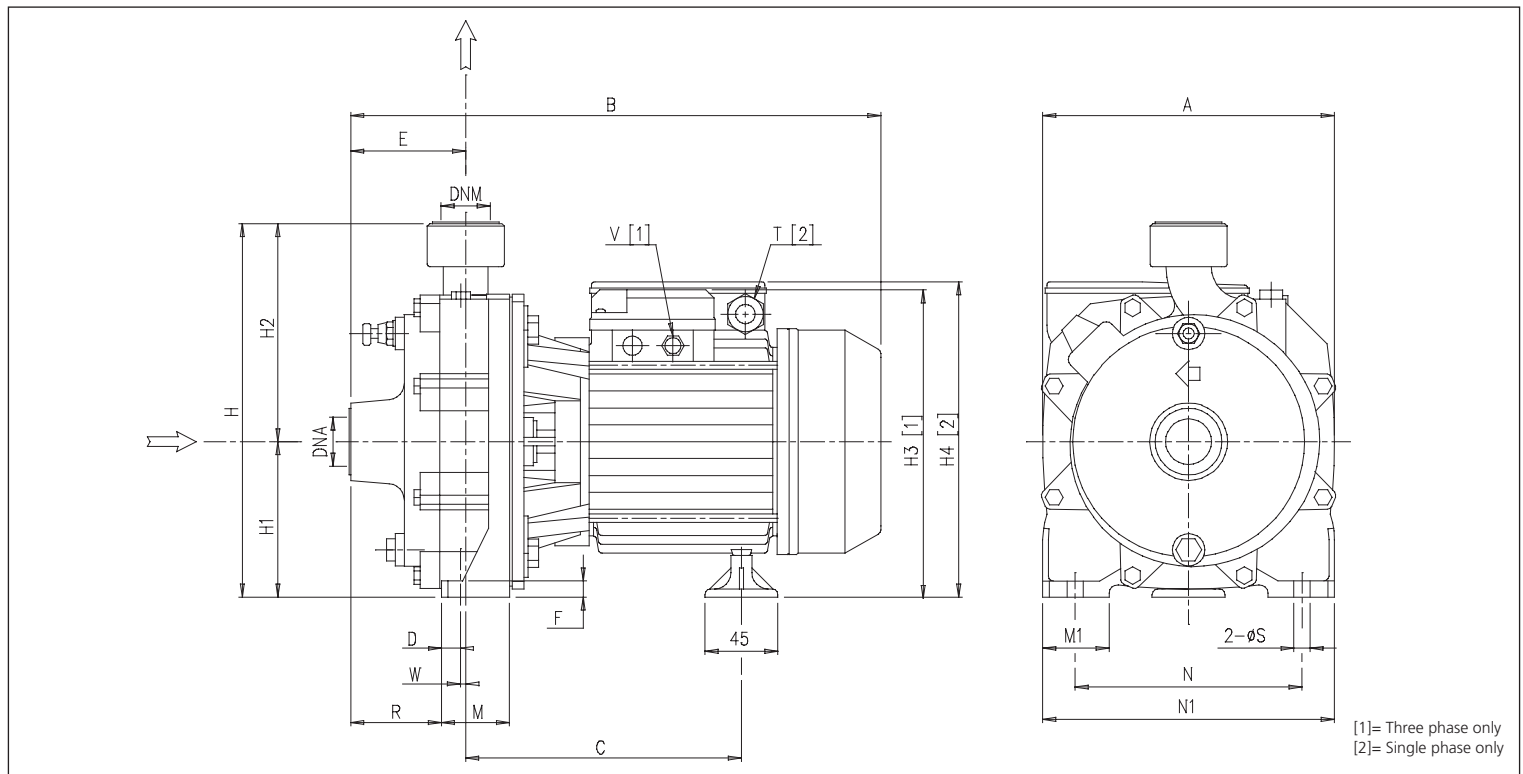
DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

PERFORMANCE TABLE

Model		P ₂		Q=Flow rate											
Single phase 230V	Three phase 230/400V	[HP]	[kW]	l/min	20	40	50	80	90	100	110	140	170	190	210
				m ³ /h	1,2	2,4	3	4,8	5,4	6	6,6	8,4	10,2	11,4	12,6
				H=Head [m]											
CDA 0.75 M	CDA 0.75 T	0,75	0,55	33,0	30,2	27,9	17,0	-	-	-	-	-	-	-	-
CDA 1.00 M	CDA 1.00 T	1	0,75	39,5	37,0	35,2	27,0	21,0	-	-	-	-	-	-	-
CDA 1.50 M	CDA 1.50 T	1,5	1,1	50,8	48,8	47,1	38,4	33,4	27,5	-	-	-	-	-	-
CDA 2.00 M	CDA 2.00 T	2	1,5	60,5	58,6	56,9	49,8	46,5	40,3	32,5	-	-	-	-	-
-	CDA 3.00 T	3	2,2	-	60,5	59,3	54,1	51,6	48,4	44,6	32,0	-	-	-	-
-	CDA 4.00 T	4	3	-	-	67,0	64,8	63,9	62,5	62,0	58,0	53,5	48,0	-	-
-	CDA 5.50 T	5,5	4	-	-	76,5	73,9	72,9	71,8	70,5	66,8	62,0	58,3	54,0	-

DIMENSIONS



[1]= Three phase only
[2]= Single phase only

DIMENSIONS TABLE

Model	Dimensions [mm]																				Weight [kg]		
	A	B	C	D	E	F	H	H1	H2	H3 [1]	H4 [2]	M	M1	N	N1	R	T [2]	V [1]	W	S		DNA	DNM
CDA 0.75M	183	336,3	179,8	8,3	73	9	227	97	130	-	198	42	40	140	180	57,5	PG11	-	6,8	9,5	G1	G1	13,8
CDA 0.75T	183	336,3	179,8	8,3	73	9	227	97	130	198	-	42	40	140	180	57,5	-	PG11	6,8	9,5	G1	G1	13,8
CDA 1.00M	183	336,3	179,8	8,3	73	9	227	97	130	-	198	42	40	140	180	57,5	PG11	-	6,8	9,5	G1	G1	15,0
CDA 1.00T	183	336,3	179,8	8,3	73	9	227	97	130	198	-	42	40	140	180	57,5	-	PG11	6,8	9,5	G1	G1	15,0
CDA 1.50M	209	407,8	218,3	8,3	86	9	265	110	155	-	242	48	40	155	195	65,5	PG13,5	-	12,3	9,5	G1¼	G1	24,2
CDA 1.50T	194	394,8	218,3	8,3	86	9	265	110	155	224	-	48	40	155	195	65,5	-	PG11	12,3	9,5	G1¼	G1	24,9
CDA 2.00M	209	410,8	218,3	8,3	86	9	265	110	155	-	242	48	40	155	195	65,5	PG13,5	-	12,3	9,5	G1¼	G1	26,0
CDA 2.00T	194	408,0	218,3	8,3	86	9	265	110	155	224	-	48	40	155	195	65,5	-	PG11	12,3	9,5	G1¼	G1	27,1
CDA 3.00T	194	410,8	218,3	8,3	86	9	265	110	155	224	-	48	40	155	195	65,5	-	PG11	12,3	9,5	G1¼	G1	25,8
CDA 4.00T	228	467,3	225,3	12	95,5	12	308,5	133,5	175	265	-	57	50	180	230	71,5	-	G1½	12,0	12	G1½	G1¼	46,8
CDA 5.50T	228	508,0	225,3	12	95,5	12	308,5	133,5	175	265	-	57	50	180	230	71,5	-	G1½	12,0	12	G1½	G1¼	52,0

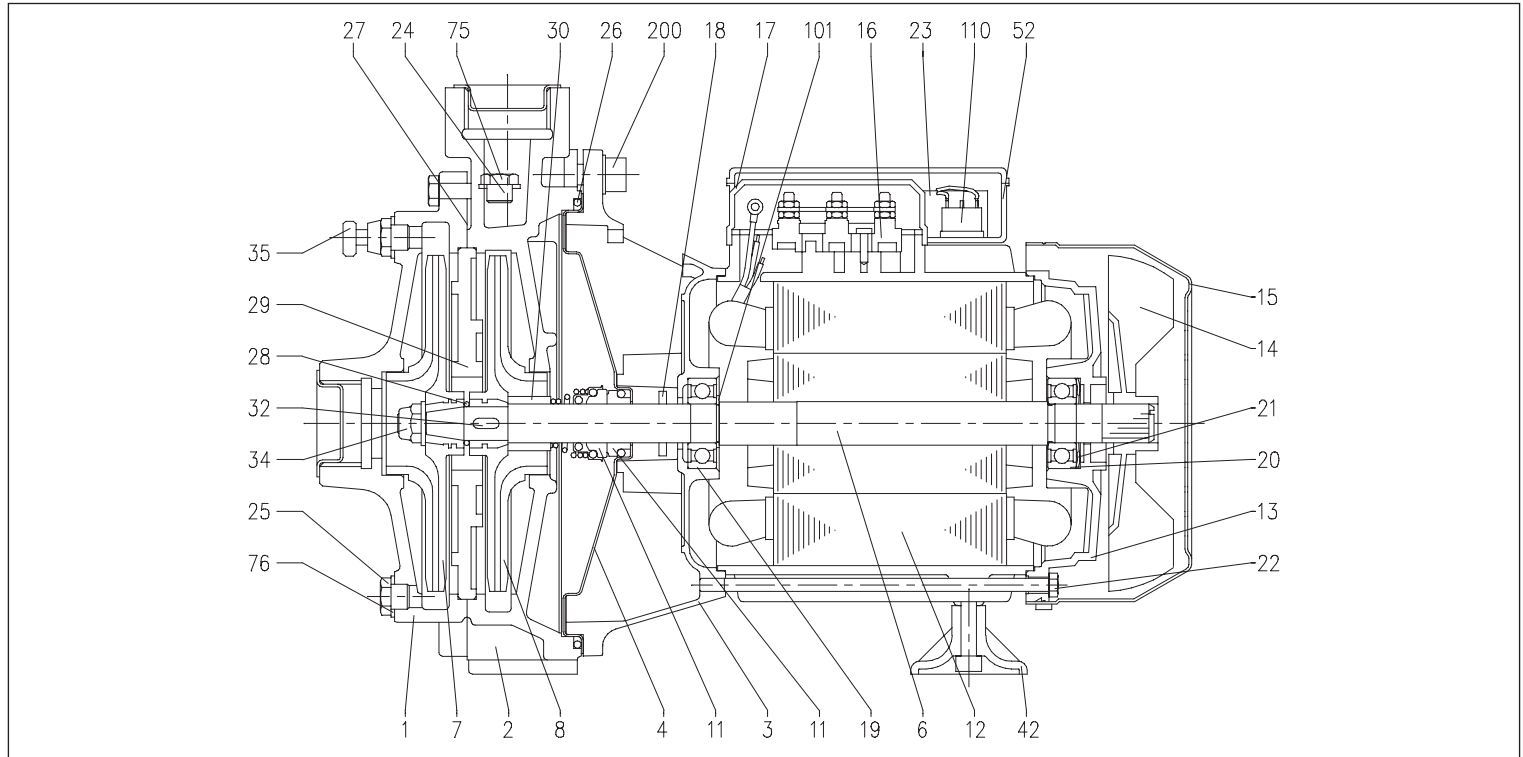
[1]= Three phase only

[2]= Single phase only

DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

SECTIONAL VIEW



MATERIALS TABLE

Ref.	Name	Material	Ref.	Name	Material
1	Pump body	Cast iron	23	Capacitor [2]	-
2	Pump body	Cast iron	24	Filler cap	Brass
3	Motor support	[3]	25	Drain plug	Brass
4	Seal housing disc	[4]	26	O-Ring	NBR
6	Shaft	[5]	27	Pump body gasket	Cellulose fibres
7	Impeller	[6]	28	O-Ring	NBR
8	Impeller	[6]	29	Intermediate disc	Cast iron
11	Mechanical sealing	Carbon/Ceramic/NBR	30	Seal spacer	Brass
12	Motor case	-	32	Key	AISI 316
13	Motor cover	Aluminium	34	Impeller nut [7]	AISI 304
14	Fan	PP	35	Bleed valve	Brass
15	Fan cover	Galvanised Fe P04	42	Foot	PP
16	Terminal box	-	52	Capacitor-holder box [2]	ABS
17	Terminal box cover [1]	Aluminium	53	Capacitor-holder box cover [8]	ABS
18	Spray protector ring	NBR	75	Washer	Aluminium
19	Bearing (pump side)	-	76	Washer	Aluminium
20	Bearing (motor side)	-	110	Motorprotector [9]	-
21	Adjusting ring	Steel C70	200	Screw (Pump body)	Zn stainless steel Cl. 8.8 ISO 898-1
22	Tie-rod	Galvanised Fe 42			

[1]= For three phase only

[2]= For single phase only

[3]= Aluminium for CDA 0.75 - 1.00, cast iron for the rest of the range

[4]= AISI 304 for CDA 0.75 - 1.00, cast iron integrated Motor support for the rest of the range

[5]= AISI 303 (part in contact with the liquid) for CDA 0.75 - 1.00 - 1.50 - 2.00 - 3.00, AISI 304 (part in contact with the liquid) for the rest of the range

[6]= PPE+PS reinforced with fibreglass for CDA 0.75 - 1.00, brass for the rest of the range

[7]= Version with impeller brass only

[8]= With gasket in NBR only for CDA 0.75 - 1.00 single phase models

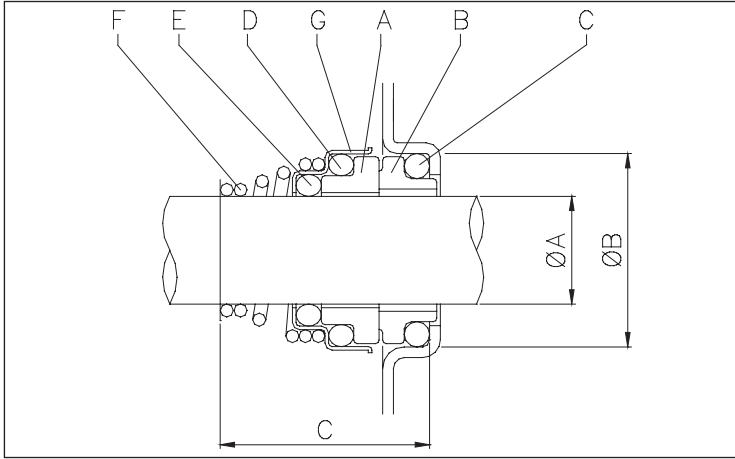
[9]= Version CDA 1.50 - 2.00 single phase only

The contents of this publication must not be regarded as binding. EBARA Pumps Europe S.p.A. reserves the right to effect any modifications it deems necessary, without prior notice.

DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

MECHANICAL SEAL



MATERIALS TABLE

Ref.	Name	Material
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

DIMENSIONS

Single phase	Three phase	ØA	ØB	C
CDA 0.75 M	CDA 0.75 T	15	26	29
CDA 1.00 M	CDA 1.00 T	15	26	29
CDA 1.50 M	CDA 1.50 T	18	30,9	32
CDA 2.00 M	CDA 2.00 T	18	30,9	32
-	CDA 3.00 T	18	30,9	32
-	CDA 4.00 T	20	30,9	33
-	CDA 5.50 T	20	30,9	33

ELECTRIC DATA TABLE

Single phase 230V	Model Three phase 230/400V	P ₂		Efficiency		Capacitor		Efficiency (%)			P ₁		Absorbed Current [A]		
		[HP]	[kW]	Single phase	Three phase	Single phase µF	Three phase V _c	Three phase η %			Single phase	Three phase	Single phase	Three phase	
								50%	75%	100%	[kW]	[kW]	230V	230V	400V
CDA 0.75 M	CDA 0.75 T	0,75	0,55	-	-	16	450	-	-	-	1,1	1,05	5,0	3,4	2,0
CDA 1.00 M	CDA 1.00 T	1	0,75	-	IE2	20	450	77,2	80,9	81,3	1,38	1,13	6,1	3,4	2,0
CDA 1.50 M	CDA 1.50 T	1,5	1,1	-	IE2	40	450	79,7	82,5	83,0	1,85	1,80	8,6	5,5	3,2
CDA 2.00 M	CDA 2.00 T	2	1,5	-	IE2	40	450	80,3	83,4	83,8	2,35	2,25	10,8	7,8	4,5
-	CDA 3.00 T	3	2,2	-	IE2	-	-	83,0	84,4	83,8	-	2,74	-	8,5	4,9
-	CDA 4.00 T	4	3	-	IE2	-	-	83,1	86,3	86,8	-	4,10	-	12,5	7,2
-	CDA 5.50 T	5,5	4	-	IE2	-	-	84,3	87,2	87,8	-	4,56	-	15,1	8,7

NOISE DATA TABLE

Single phase 230V	Model Three phase 230/400V	P ₂		L _{pa} - dB(A)*
		[HP]	[kW]	
CDA 0.75 M	CDA 0.75 T	0,75	0,55	<70
CDA 1.00 M	CDA 1.00 T	1	0,75	
CDA 1.50 M	CDA 1.50 T	1,5	1,1	
CDA 2.00 M	CDA 2.00 T	2	1,5	
-	CDA 3.00 T	3	2,2	
-	CDA 4.00 T	4	3	
-	CDA 5.50 T	5,5	4	

* Mean value of several measures at 1m distance around the pump.
Tolerance ± 2,5 dB.