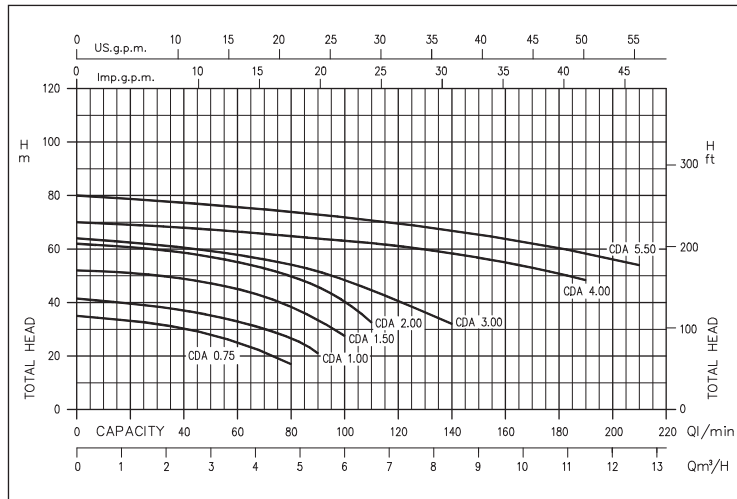


DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

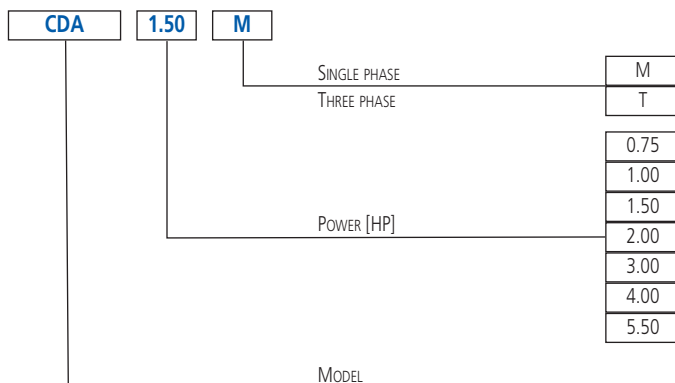
in cast iron



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
- G1¼ 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-amperometric 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

- 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
- Press•o•Matic - Variable speed control system (230V±10% single phase - power supply three phase 220V output - maximum motor power 2.2 kW - 3 HP)
- E-drive - Frequency converter

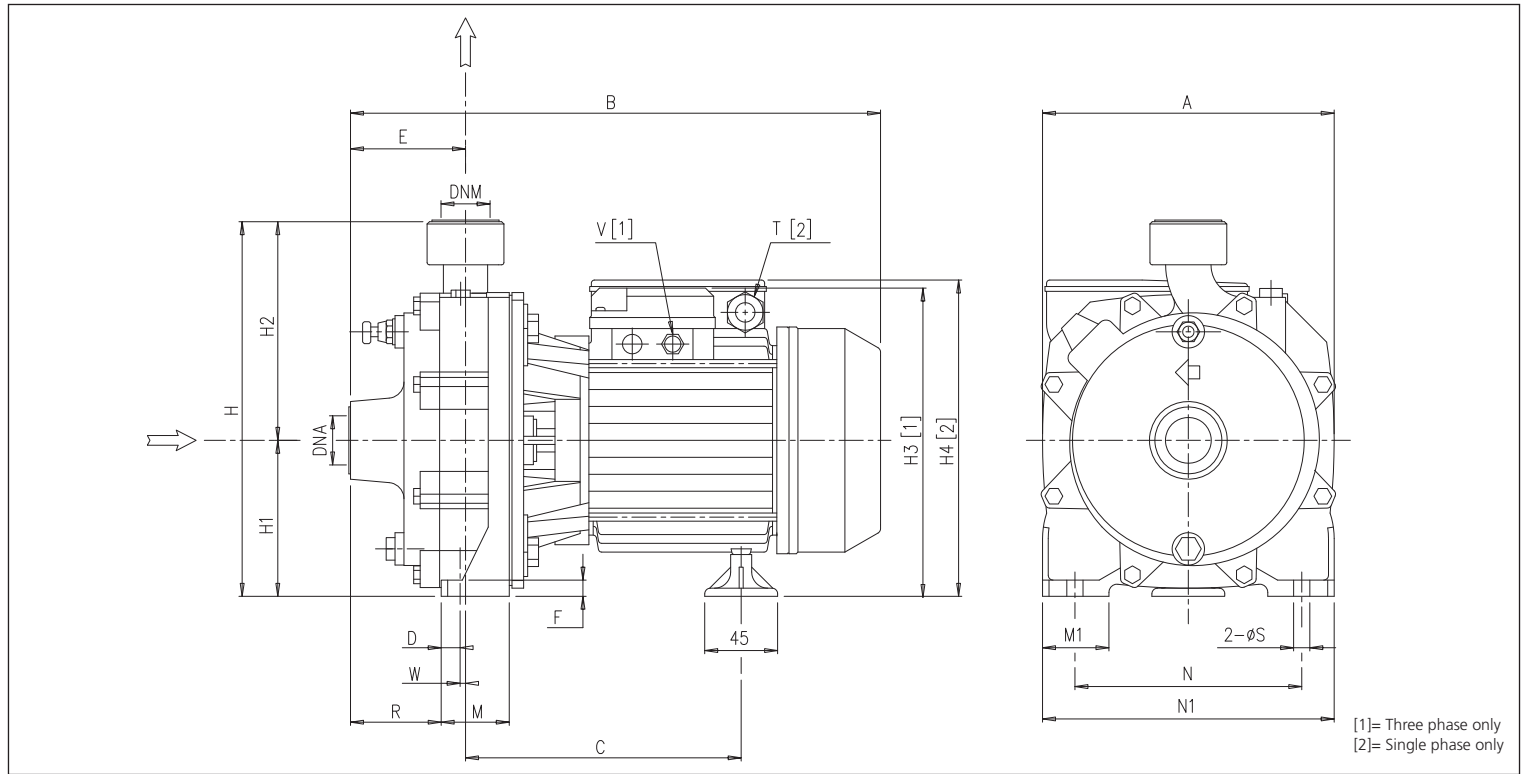
DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

PERFORMANCE TABLE

Single phase 230V	Model Three phase 230/400V	P ₂		Q=Flow rate																					
		[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



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

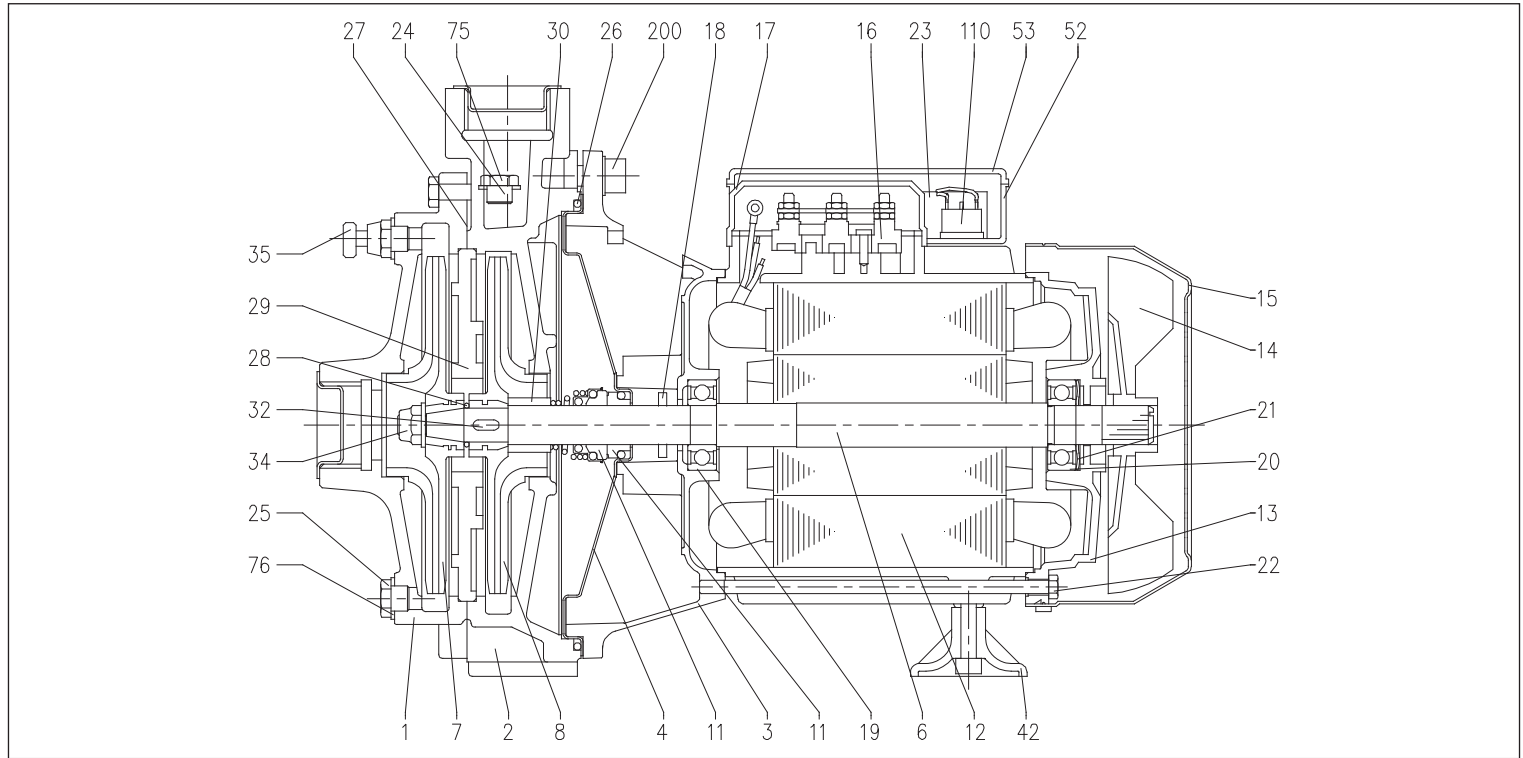
[1]= Three phase only

[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	AlSi 316
13	Motor cover	Aluminium	34	Impeller nut [7]	AlSi 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]= AlSi 304 for CDA 0.75 - 1.00, cast iron integrated Motor support for the rest of the range

[5]= AlSi 303 (part in contact with the liquid) for CDA 0.75 - 1.00 - 1.50 - 2.00 - 3.00, AlSi 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]= Versione with impeller brass only

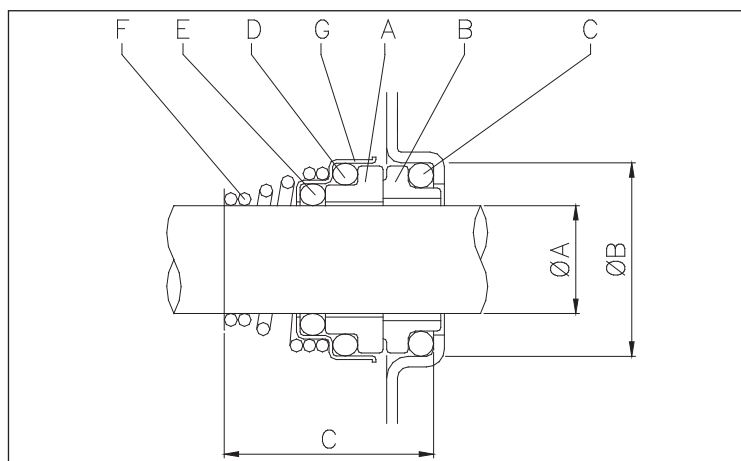
[8]= With gasket in NBR only for CDA 0.75 - 1.00 single phase models

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

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

Model		P ₂		Efficiency		Capacitor		Efficiency (%)			P ₁		Absorbed Current [A]		
Single phase 230V	Three phase 230/400V	[HP]	[kW]	Single phase	Three phase	Single phase µF	Three phase V _c	Three phase η %			Single phase [kW]	Three phase [kW]	Single phase 230V	Three phase 230V	Three phase 400V
								50%	75%	100%					
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

Model		P ₂		L _{pA} - dB(A)*
Single phase 230V	Three phase 230/400V	[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.