

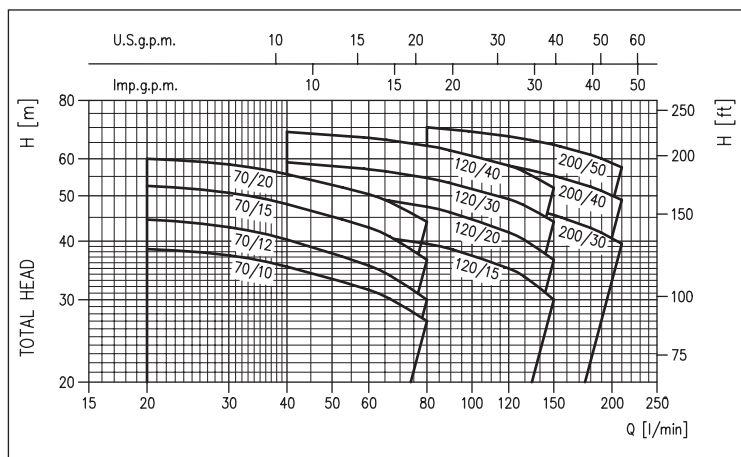
# 2CDX (L)

## DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

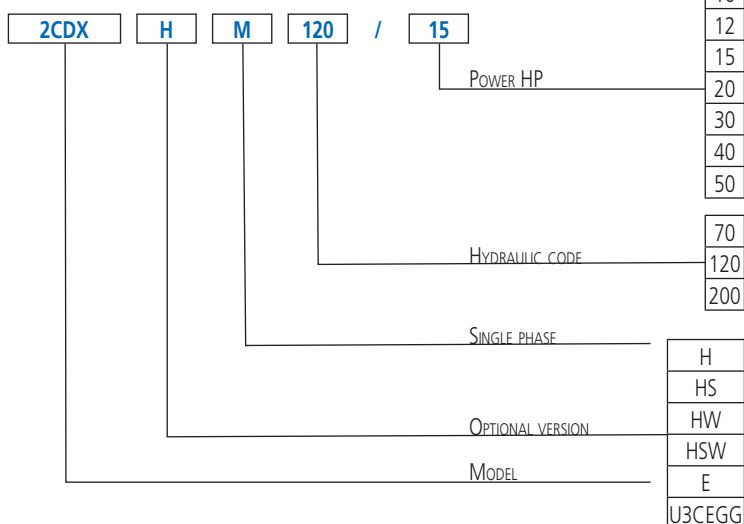
in AISI 304 and AISI 316



### PERFORMANCE RANGE (according to ISO 9906 Attachment A)



### IDENTIFICATION CODE



Dual impeller centrifugal electric pumps with hydraulic parts in AISI 304 and AISI 316 stainless steel.

### APPLICATIONS

- Domestic pressure boosting
- Small-scale garden irrigation
- Washing
- Treating water
- Cooling towers
- Moving clean water in general

### TECHNICAL DETAILS

- Strong structure
- Small dimensions

### PUMP TECHNICAL DATA

- Maximum working pressure: 8 bar
- Maximum temperature of the liquid:
  - 5°C ÷ +60°C for standard and E version
  - 5°C ÷ +110°C for H-HS-HW-HSW version
- G1½ suction connection for 2CDX 200, G1¼ for the rest of the range
- G1 discharge connection

### MOTOR TECHNICAL DATA

- High efficiency motors IE2 starting from 0,75kW
- Self-ventilated 2 pole asynchronous motor
- Class of insulation F
- IP55 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

#### AISI 304 version

- Pump casing, impeller, shaft, diffuser and seal housing disc in EN 1.4301 (AISI 304)

#### AISI 316 version

- Pump casing, impeller, shaft, diffuser and seal housing disc in EN 1.4301 (AISI 316)

- Aluminium motor bracket (up to 1.5 kW included), in cast iron (2.2 kW and above)
- Mechanical sealing in:
  - Ceramic/Carbon/NBR (standard)
  - Ceramic/Carbon/FPM (H version)
  - SiC/SiC/FPM (HS version)
  - Tungsten Carbide/Tungsten Carbide/FPM (HW version)
  - SiC/Tungsten Carbide/FPM (HSW version)
  - Ceramic/Graphite/EPDM (E version)
  - Tungsten Carbide/Special Carbon/EPDM (U3CEGG version)

### CONTROL PANELS

- 1EP
- 1EPBH

### ACCESSORIES (On request)

- 5 litres 10 bar ¾ EPDM vessel
- 24 litres 8 bar 1" EPDM vessel
- 24 litres 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

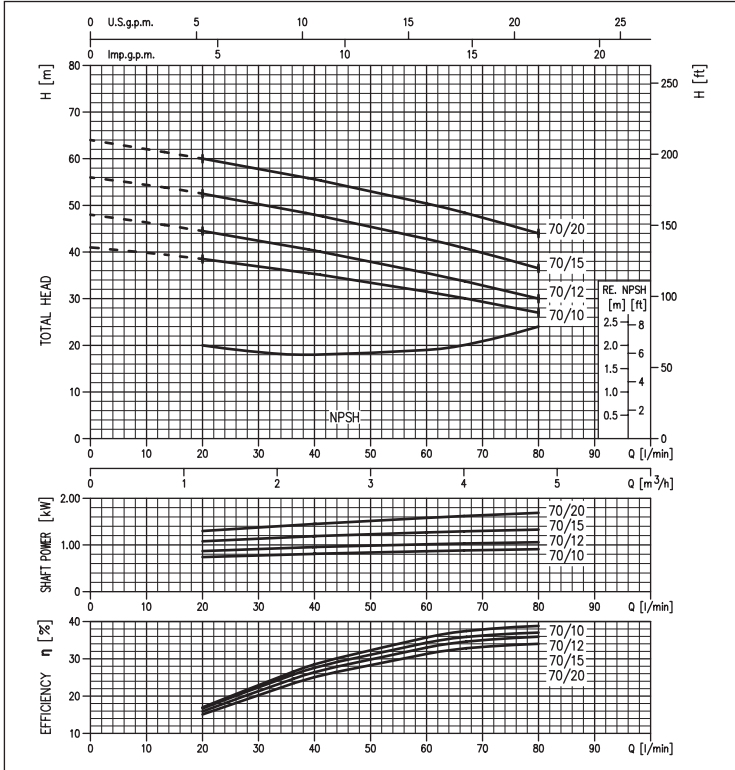




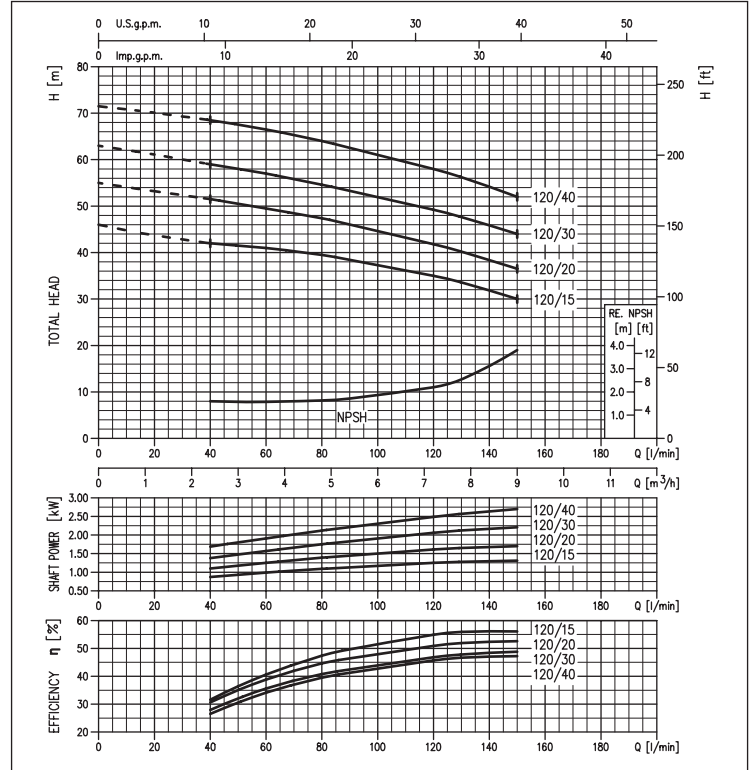
# 2CDX (L)

## DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS in AISI 304

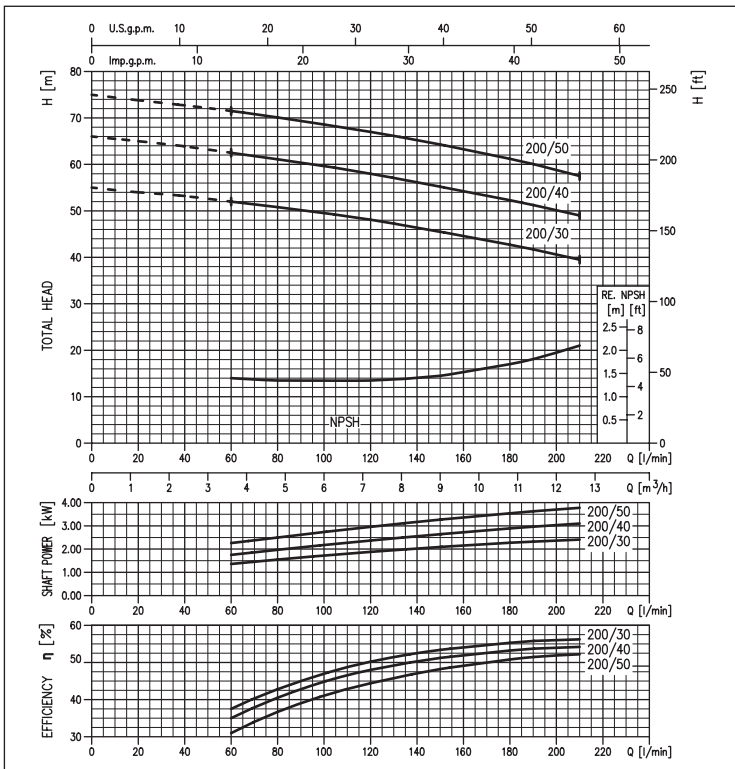
**PERFORMANCE CURVES 2CDX 70 series**  
(according to ISO 9906 Attachment A)



**PERFORMANCE CURVES 2CDX 120 series**  
(according to ISO 9906 Attachment A)



**PERFORMANCE CURVES 2CDX 200**  
(according to ISO 9906 Attachment A)



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# 2CDX (L)

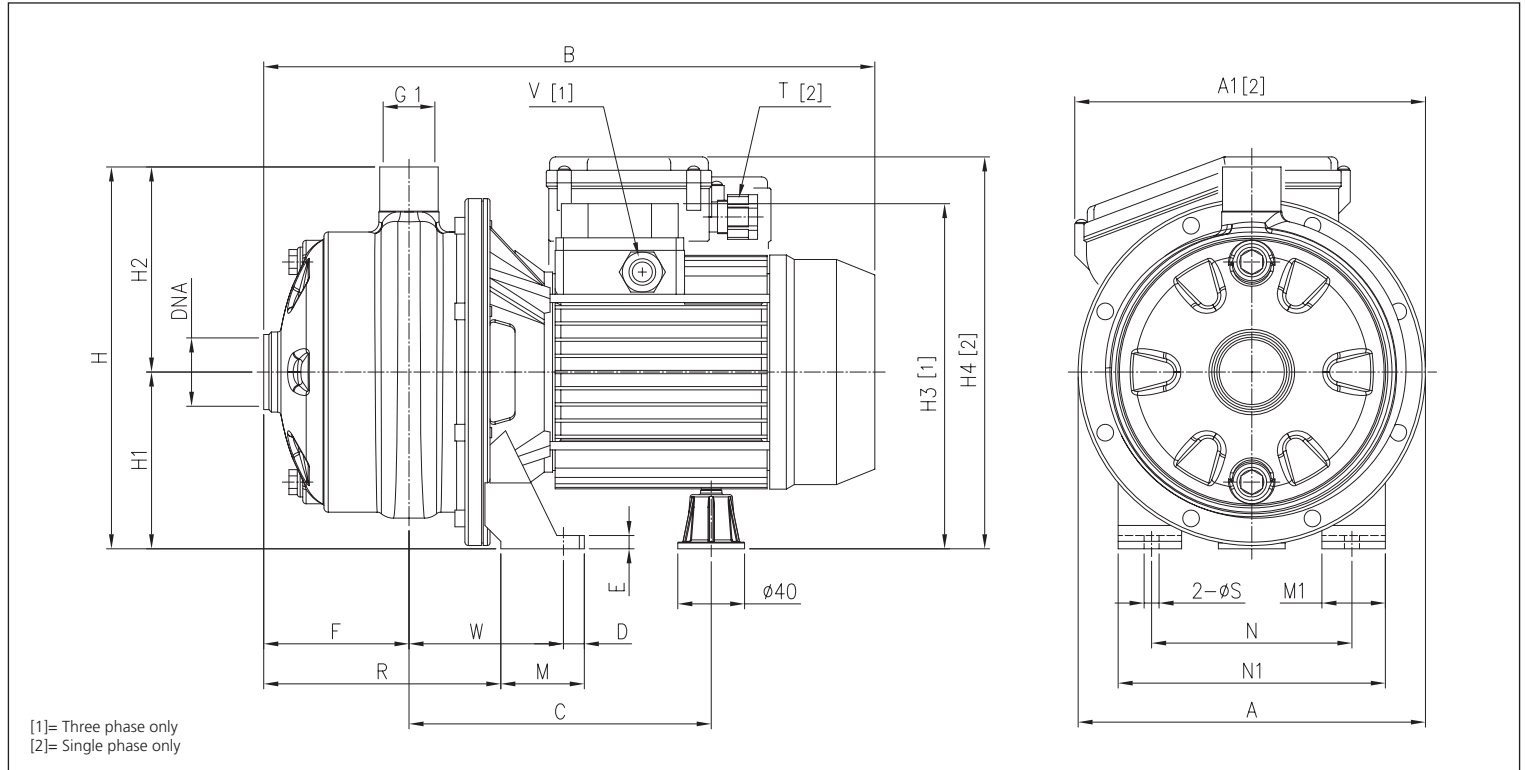
## DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

### PERFORMANCE TABLE

Model		P <sub>2</sub>		Q=Flow rate								
Single phase 230V	Three phase 230/400V	[HP]	[kW]	l/min	20	40	60	80	120	150	180	210
				m <sup>3</sup> /h	1,2	2,4	3,6	4,8	7,2	9	10,8	12,6
				H=Head [m]								
2CDXM 70/10	2CDX 70/10	1	0,75	38,5	35,3	31,5	27,0	-	-	-	-	-
2CDXM 70/12	2CDX 70/12	1,2	0,9	44,5	40,3	35,5	30,0	-	-	-	-	-
2CDXM 70/15	2CDX 70/15	1,5	1,1	52,5	48,0	42,8	36,5	-	-	-	-	-
2CDXM 70/20	2CDX 70/20	2	1,5	60,0	55,6	50,4	44,0	-	-	-	-	-
2CDXM 120/15	2CDX 120/15	1,5	1,1	-	42,0	41,0	39,5	35,0	30,0	-	-	-
2CDXM 120/20	2CDX 120/20	2	1,5	-	51,5	49,5	47,4	41,8	36,5	-	-	-
-	2CDX 120/30	3	2,2	-	59,0	57,0	54,6	49,2	44,0	-	-	-
-	2CDX 120/40	4	3	-	68,5	66,5	64,0	58,0	52,0	-	-	-
-	2CDX 200/30	3	2,2	-	-	52,0	50,8	48,1	45,5	42,7	39,5	-
-	2CDX 200/40	4	3	-	-	62,5	61,1	58,0	55,2	52,3	49,0	-
-	2CDX 200/50	5,5	3,7	-	-	71,5	70,1	67,0	64,3	61,2	57,5	-

### DIMENSIONS



### DIMENSIONAL TABLE

Model	Dimensions [mm]																				Weight [kg]				
	A	A1* [2]	B [2]	B [1]	C	D	E	F	H	H1	H2	H3 [1]	H4 [2]	M	M1	N	N1	R	T [2]	V [1]	W	S	DNA	[2]	[1]
2CDX(M) 70/10	208	-	355	354	181	12,5	8	87	229	106	123	207	216	50	38	120	160	142	PG 11	PG 11	92,5	9	G1¼	12,7	12,6
2CDX(M) 70/12	208	210	355	366	181	12,5	8	87	229	106	123	207	235	50	38	120	160	142	PG 13,5	PG 11	92,5	9	G1¼	13,3	13,7
2CDX(M) 70/15	232	-	395,5	382	198,5	12,5	8	89	250	118	132	237	248,5	55	40	140	180	141,5	PG 13,5	PG 11	95	9	G1¼	17,5	17,0
2CDX(M) 70/20	232	-	382,5	395	198,5	12,5	8	89	250	118	132	237	248,5	55	40	140	180	141,5	PG 13,5	PG 11	95	9	G1¼	18,5	19,2
2CDX(M) 120/15	208	210	395,5	382	198,5	12,5	8	89	229	106	123	225	236,5	55	40	140	180	141,5	PG 13,5	PG 11	95	9	G1¼	16,3	15,6
2CDX(M) 120/20	208	210	382,5	395	198,5	12,5	8	89	229	106	123	225	236,5	55	40	140	180	141,5	PG 13,5	PG 11	95	9	G1¼	17,0	17,4
2CDX 120/30	232	-	-	419	223,5÷234,5	12,5	10	87	250	118	132	242	-	65	40	140	180	143,5	-	PG 13,5	109	9	G1¼	-	25,2
2CDX 120/40	232	-	-	458	223,5÷234,5	12,5	10	87	250	118	132	242	-	65	40	140	180	143,5	-	PG 13,5	109	9	G1¼	-	27,8
2CDX 200/30	208	-	-	458	223,5÷234,5	12,5	10	87	229	106	123	230	-	65	40	140	180	143,5	-	PG 13,5	109	9	G1½	-	25,7
2CDX 200/40	232	-	-	458	223,5÷234,5	12,5	10	87	250	118	132	242	-	65	40	140	180	143,5	-	PG 13,5	109	9	G1½	-	27,6
2CDX 200/50	232	-	-	481	232,5	16	12	87	250	118	132	259	-	68	50	160	210	143,5	-	PG 16	108,5	12	G1½	-	35,6

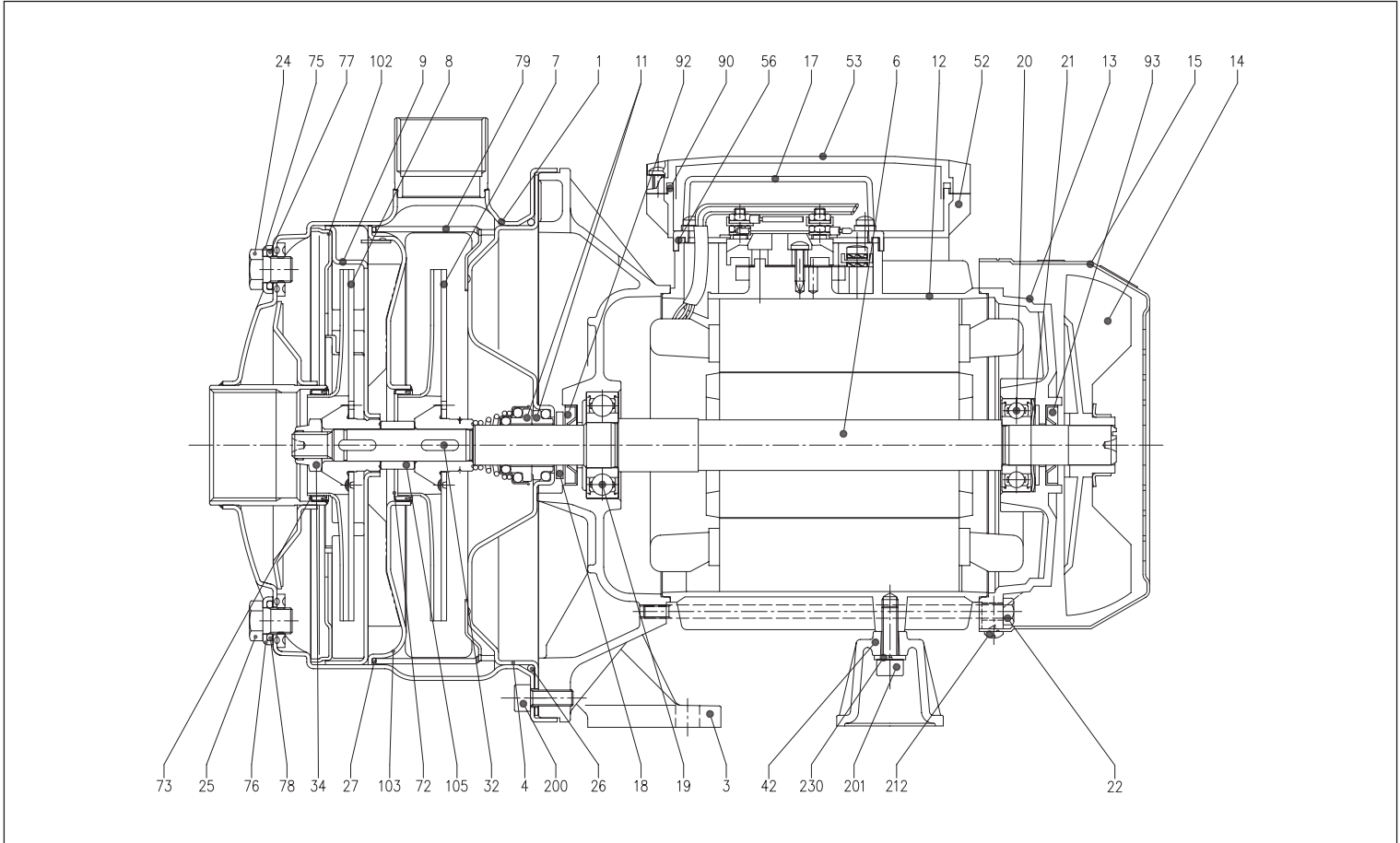
[1]= Three phase only  
[2]= Single phase only

# 2CDX (L)

## DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

### SECTIONAL VIEW



### MATERIALS TABLE

Ref.	Name	Materials	Ref.	Name	Materials
1	Pump casing	EN 1.4301 (AISI 304)/AISI 316	32	Key	AISI 316
3	Motor bracket	Aluminium (up to 1.5 kW included) Cast iron (from 2.2 kW and above)	34	Impeller nut	Stainless steel A2-70/AISI 316
4	Casing cover	EN 1.4301 (AISI 304)/AISI 316	42	Motor support	Aluminium
6	Shaft	EN 1.4301 (AISI 304)/AISI 316 Part in contact with the liquid	52	Terminal box [2]	ABS
7	Impeller	EN 1.4301 (AISI 304)	53	Terminal box cover [2]	ABS
8	Impeller	EN 1.4301 (AISI 304)	56	Terminal box cover gasket	NBR
9	Diffuser	EN 1.4301 (AISI 304)	72	Casing ring [4]	NBR
11	Mechanical seal	Ceramic/Carbon/NBR	73	Casing ring [4]	NBR
12	Motor frame	-	75	Washer	EN 1.4301 (AISI 304)/AISI 316
13	Motor cover	Aluminium	76	Washer	EN 1.4301 (AISI 304)/AISI 316
14	Fan	PA	77	O-Ring [3]	NBR
15	Fan cover	Galvanised Fe P04	78	O-Ring [3]	NBR
17	Terminal box cover [1]	Aluminium	79	Diffuser spacer	EN 1.4301 (AISI 304)
18	Splash ring	NBR	90	Gasket [2]	NBR
19	Bearing (pump side)	-	92	Seal ring	NBR
20	Bearing (motor side)	-	93	Seal ring	NBR
21	Adjusting ring	Steel C70	102	Diffuser cover	EN 1.4301 (AISI 304)
22	Tie-rod	Galvanised Fe 42	103	Conveyor cover	EN 1.4301 (AISI 304)
24	Plug	EN 1.4301 (AISI 304)/AISI 316	105	Impeller spacer	EN 1.4301 (AISI 304)
25	Plug	EN 1.4301 (AISI 304)/AISI 316	200	Screw (pump body)	Stainless steel A2-70
26	O-Ring [3]	NBR	201	Screw	Zn. Steel cl.8.8
27	O-Ring [3]	NBR	212	Screw	Stainless steel A2
			230	Washer	Steel C70

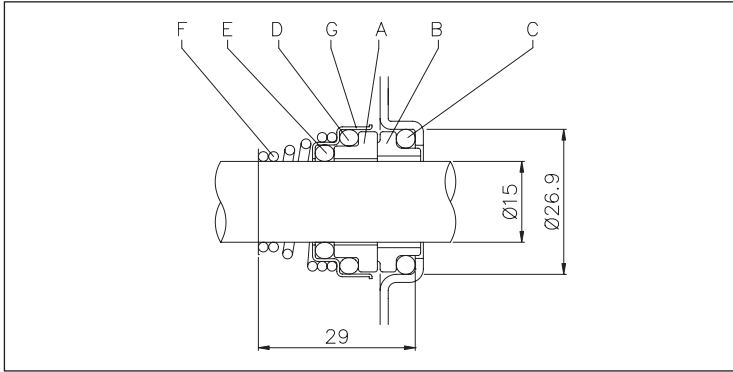
[1]= Three phase only  
 [2]= Single phase only  
 [3]= FPM for H-HS-HW-HSW versions, EPDM for E version  
 [4]= FPM for H-HS-HW-HSW versions, NBR for E version

# 2CDX (L)

## DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

### MECHANICAL SEAL 2CDX standard



### MATERIALS TABLE

Ref.	Name	Materials
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

### SPECIAL MECHANICAL SEALS (on request)

Ref.	Name	Materials					
		H version	HS version	HW version	HSW version	E version	U3CEGG version
A	Rotating part	Ceramic	SiC	Tungsten Carbide	SiC	Ceramic	Tungsten Carbide
B	Fixed part	Carbon	SiC	Tungsten Carbide	Tungsten Carbide	Carbon	Special Carbon
C	O-Ring	FPM	FPM	FPM	FPM	EPDM	EPDM
D	O-Ring	FPM	FPM	FPM	FPM	EPDM	EPDM
E	O-Ring	FPM	FPM	FPM	FPM	EPDM	EPDM
F	Spring	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
G	Structure/frame	AISI 304	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316

### ELECTRIC DATA TABLE

Single phase 230V	Model Three phase 230/400V	P <sub>1</sub>		Efficiency		Capacitor		Efficiency (%)			P <sub>2</sub>		Absorbed Current [A]		
		[HP]	[kW]	Single phase	Three phase	Single phase	V.	50%	75%	100%	Single phase	Three phase	Single phase	Three phase	
						μF		η %				[kW]	[kW]	230V	230V
2CDXM 70/10	2CDX 70/10	1	0,75	-	IE2	20	450	77,2	80,9	81,3	1,30	1,14	6,0	3,6	2,0
2CDXM 70/12	2CDX 70/12	1,2	0,9	-	IE2	31,5	450	79,0	81,7	81,6	1,55	1,35	7,0	4,3	2,5
2CDXM 70/15	2CDX 70/15	1,5	1,1	-	IE2	40	450	79,7	82,5	83,0	1,80	1,80	8,1	5,6	3,2
2CDXM 70/20	2CDX 70/20	2	1,5	-	IE2	40	450	80,3	83,4	83,8	2,30	2,28	10,0	7,4	4,3
2CDXM 120/15	2CDX 120/15	1,5	1,1	-	IE2	40	450	79,7	82,5	83,0	1,80	1,80	8,3	5,6	3,2
2CDXM 120/20	2CDX 120/20	2	1,5	-	IE2	40	450	80,3	83,4	83,8	2,35	2,28	10,2	7,3	4,2
-	2CDX 120/30	3	2,2	-	IE2	-	-	83,1	85,7	86,2	-	2,90	-	8,8	5,1
-	2CDX 120/40	4	3	-	IE2	-	-	85,0	86,7	86,3	-	3,48	-	10,6	6,1
-	2CDX 200/30	3	2,2	-	IE2	-	-	85,0	86,7	86,3	-	3,48	-	10,6	6,1
-	2CDX 200/40	4	3	-	IE2	-	-	85,0	86,7	86,3	-	3,83	-	11,6	6,7
-	2CDX 200/50	5,5	3,7	-	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 <sub>2</sub>		L <sub>PA</sub> - dB(A)*
		[HP]	[kW]	
2CDXM 70/10	2CDX 70/10	1	0,75	62
2CDXM 70/12	2CDX 70/12	1,2	0,9	
2CDXM 70/15	2CDX 70/15	1,5	1,1	
2CDXM 70/20	2CDX 70/20	2	1,5	64
2CDXM 120/15	2CDX 120/15	1,5	1,1	
2CDXM 120/20	2CDX 120/20	2	1,5	
-	2CDX 120/30	3	2,2	68
-	2CDX 120/40	4	3	
-	2CDX 200/30	3	2,2	
-	2CDX 200/40	4	3	68
-	2CDX 200/50	5,5	3,7	

\* Mean value of several measures at 1m distance around the pump.  
Tolerance ± 2.5 dB.

