

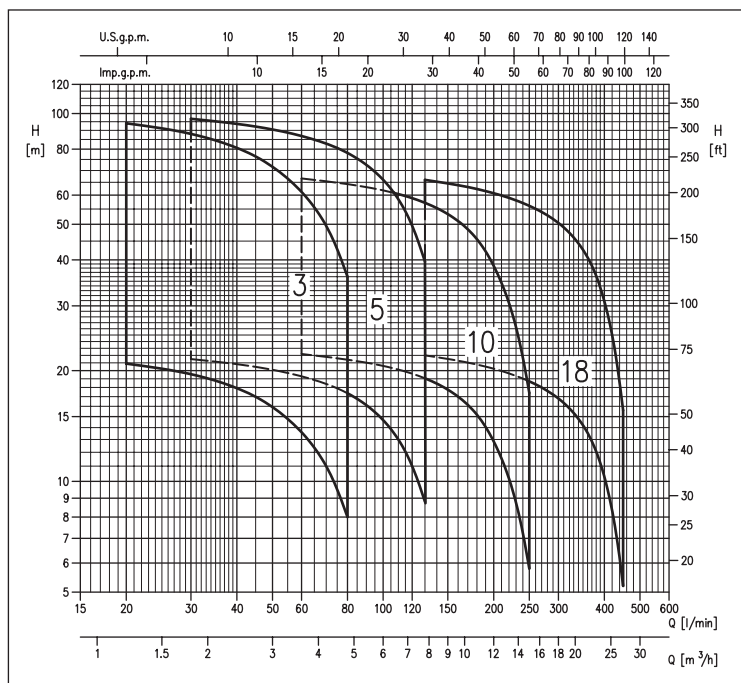
# MATRIX

## HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

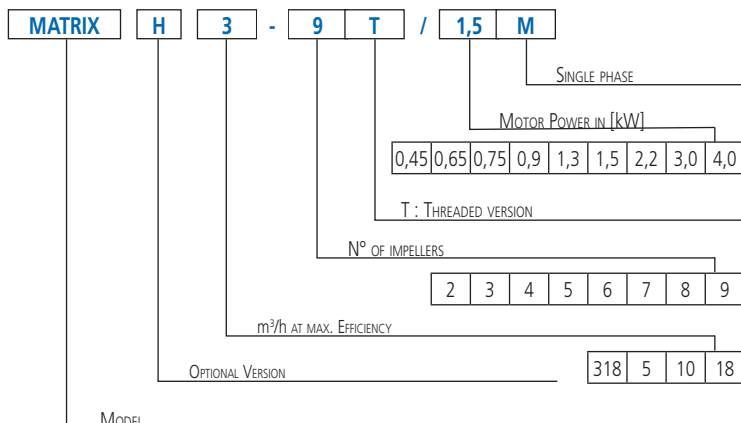
in AISI 304



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



### IDENTIFICATION CODE



Horizontal multistage centrifugal electric pumps in AISI 304 stainless steel

### APPLICATION

- Industrial washing
- Pressure boosting units
- Industrial plants
- Distribution and treatment of water
- Heating and air conditioning
- Cooling and chiller
- Irrigation
- Recovery of rain water

### TECHNICAL DETAILS

- Strong and compact construction
- Available in various versions and models
- WRAS approval for the standard version (up to +85°C)

### PUMP TECHNICAL DATA

- Temperature of the liquid: from -15°C to +85°C (standard)
- from -15°C to +110°C ( for TE version for high temperature)
- Maximum working pressure: 10 bar
- Maximum chlorine content: 500 ppm
- G1 suction connection for MATRIX 3, G1¼ for MATRIX 5, G1½ for MATRIX 10, G2 for MATRIX 18
- G1 discharge connection for MATRIX 3-5, G1¼ for MATRIX 10, G1½ for MATRIX 18

### MOTOR TECHNICAL DATA

- High efficiency motors IE2 starting from 0,75kW
- Self-ventilated 2 poles 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

- Pump casing, impellers, intermediate stages, seal housing disc and shaft (part in contact with the liquid) in EN 1.4301 (AISI 304)
- Mechanical seal in Carbon/Ceramic/EPDM
- Bracket in EN AB-AISI11Cu2(Fe) (microcasted aluminium)
- Pump casing, impellers, intermediate stages, seal housing disc and shaft (part in contact with the liquid) in AISI 304
- Mechanical sealing in Carbon/Ceramic/EPDM
- Support and motor casing in aluminium

### 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
- 24 litres 16 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
- FYG-32 5.6÷10.5 bar G¼ F pressure switch
- Presscomfort - Pressure regulator
- E-drive - Frequency inverter
- Body insulation casing for MATRIX

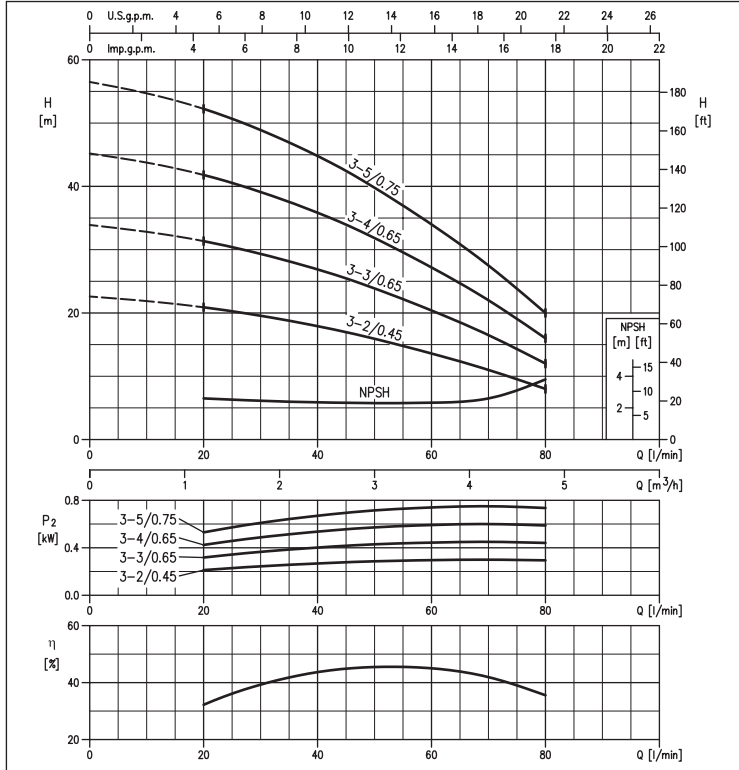
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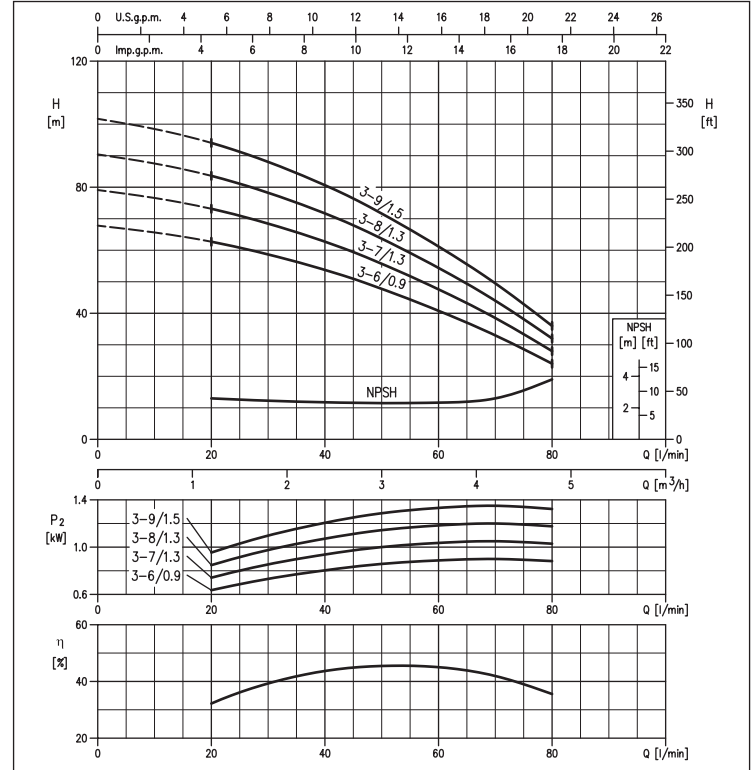
# MATRIX

## HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS in AISI 304

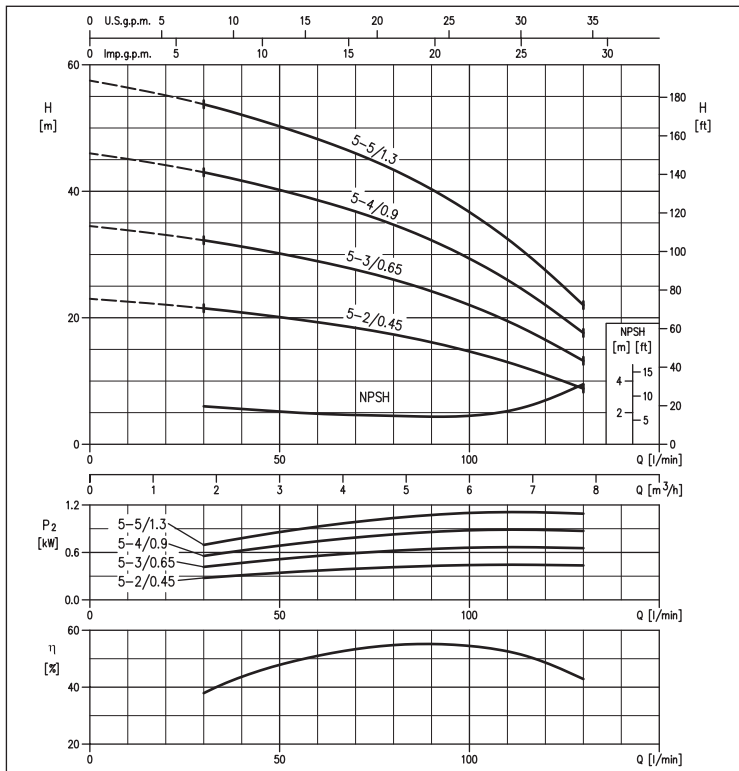
**PERFORMANCE CURVES series MATRIX 3** (from 2 to 5 impellers)  
(according to ISO 9906 Attachment A)



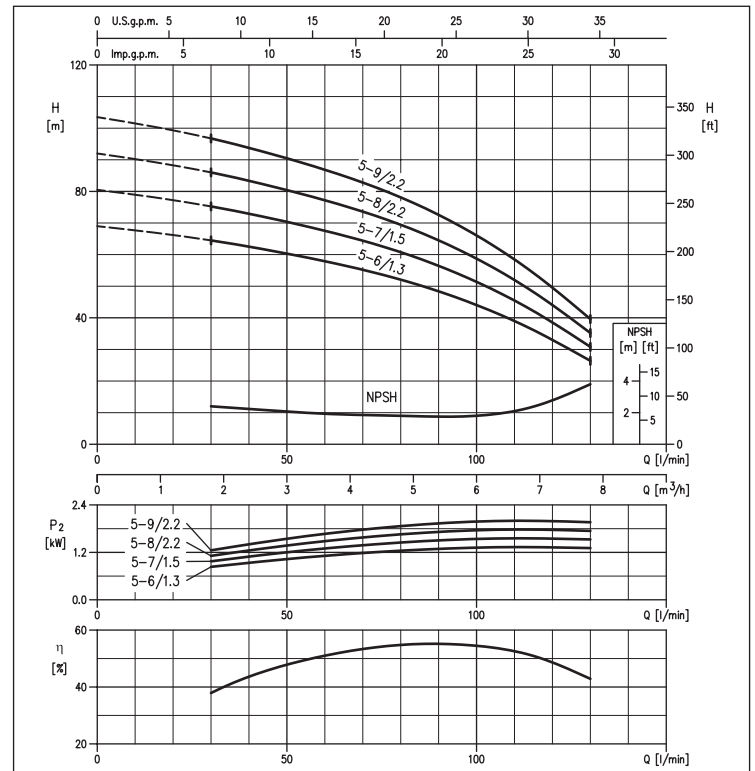
**PERFORMANCE CURVES series MATRIX 3** (from 6 to 9 impellers)  
(according to ISO 9906 Attachment A)



**PERFORMANCE CURVES series MATRIX 5** (from 2 to 5 impellers)  
(according to ISO 9906 Attachment A)



**PERFORMANCE CURVES series MATRIX 5** (from 6 to 9 impellers)  
(according to ISO 9906 Attachment A)



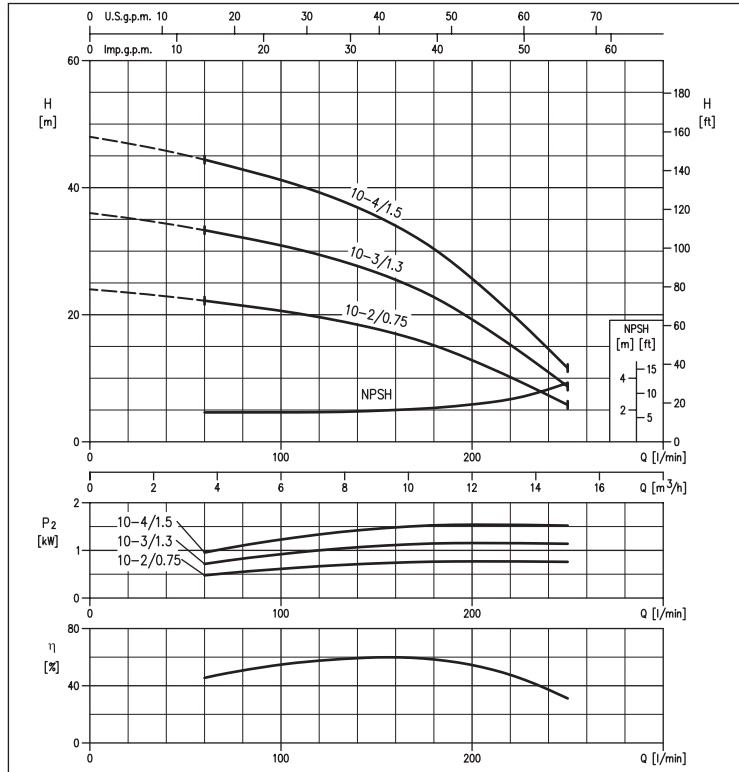
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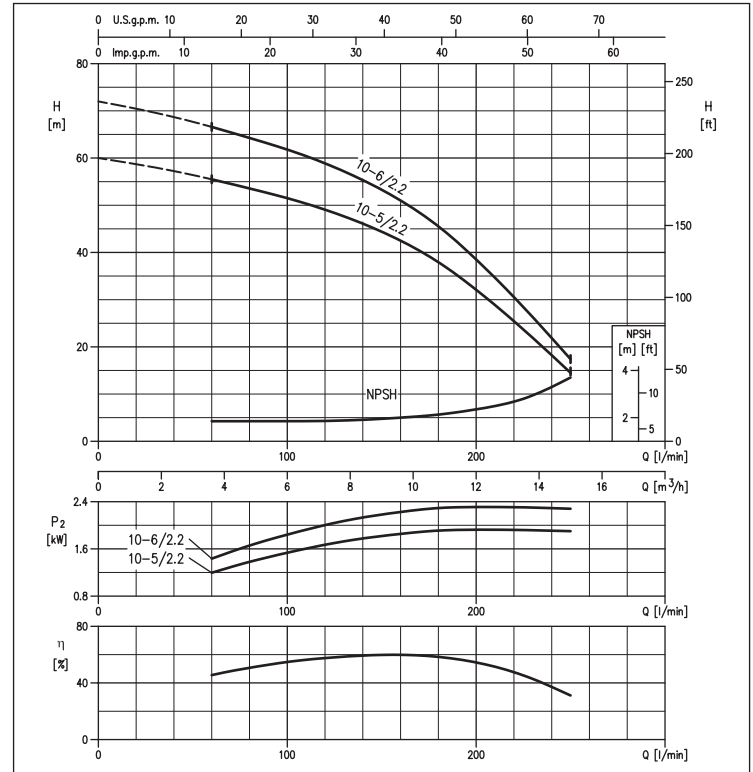
# MATRIX

## HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS in AISI 304

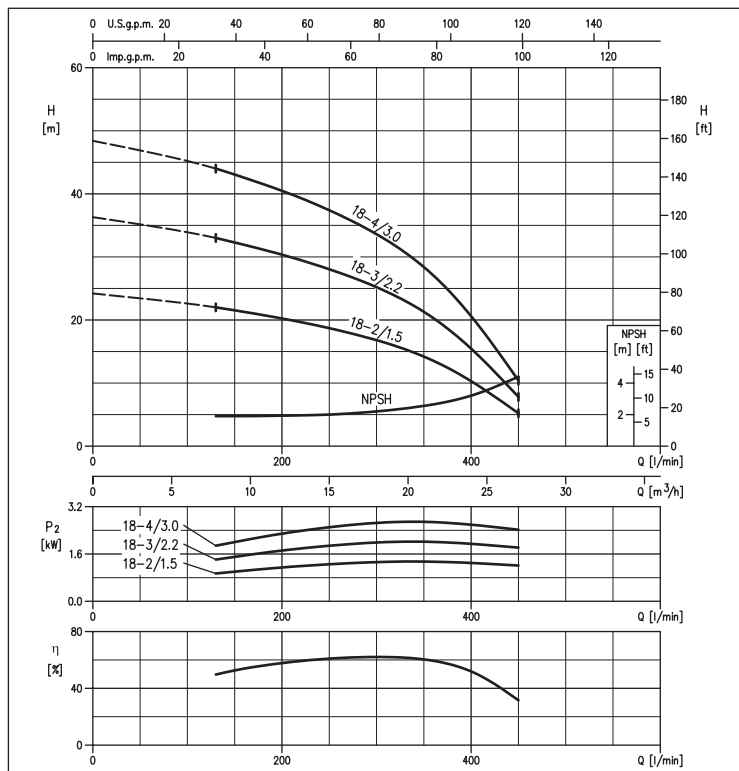
**PERFORMANCE CURVES series MATRIX 10** (from 2 to 4 impellers)  
(according to ISO 9906 Attachment A)



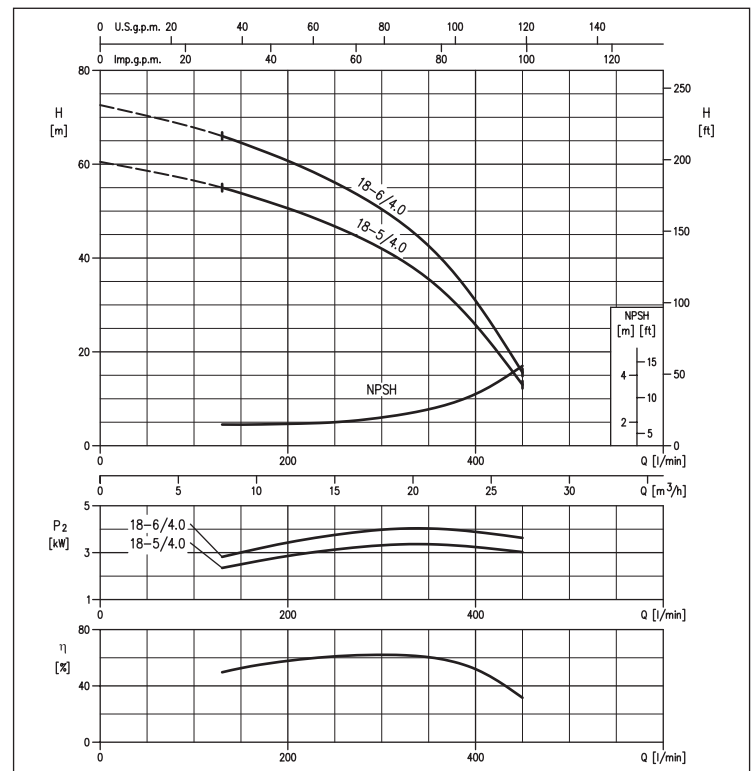
**PERFORMANCE CURVES series MATRIX 10** (5 e 6 impellers)  
(according to ISO 9906 Attachment A)



**PERFORMANCE CURVES series MATRIX 18** (from 2 to 4 impellers)  
(according to ISO 9906 Attachment A)



**PERFORMANCE CURVES series MATRIX 18** (5 e 6 impellers)  
(according to ISO 9906 Attachment A)



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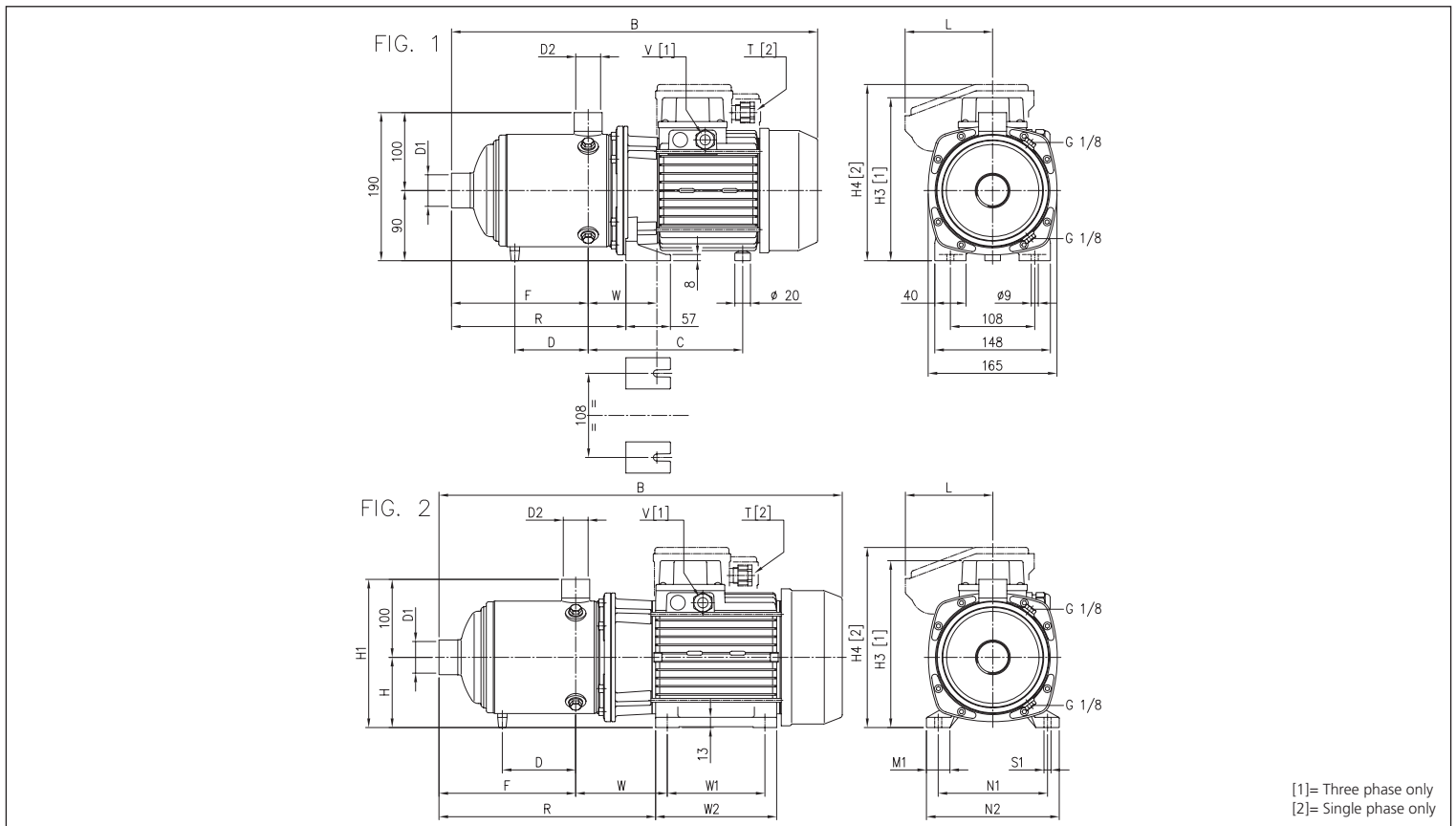
## HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

### PERFORMANCE TABLE

Single phase 230V	Model Three phase 230/400V	P <sub>2</sub>		Q=Flow rate															
		[HP]	[kW]	l/min	20	30	45	60	80	100	130	160	200	250	300	350	400	450	
				m <sup>3</sup> /h	1,2	1,8	2,7	3,6	4,8	6	7,8	9,6	12	15	18	21	24	27	
				H=Head [m]															
MATRIX 3-2T/0.45M	MATRIX 3-2T/0.45	0,6	0,45	20,9	19,6	17,0	13,6	8,0	-	-	-	-	-	-	-	-	-	-	-
MATRIX 3-3T/0.65M	MATRIX 3-3T/0.65	0,9	0,65	31,4	29,3	25,5	20,4	12,0	-	-	-	-	-	-	-	-	-	-	-
MATRIX 3-4T/0.65M	MATRIX 3-4T/0.65	0,9	0,65	42,0	39,1	34,0	27,2	16,0	-	-	-	-	-	-	-	-	-	-	-
MATRIX 3-5T/0.75M	MATRIX 3-5T/0.75	1	0,75	52,5	49,0	42,5	34,0	20,0	-	-	-	-	-	-	-	-	-	-	-
MATRIX 3-6T/0.9M	MATRIX 3-6T/0.9	1,2	0,9	62,5	58,5	51,0	41,0	24,0	-	-	-	-	-	-	-	-	-	-	-
MATRIX 3-7T/1.3M	MATRIX 3-7T/1.3	1,8	1,3	73,0	68,5	59,5	47,5	28,0	-	-	-	-	-	-	-	-	-	-	-
MATRIX 3-8T/1.3M	MATRIX 3-8T/1.3	1,8	1,3	83,5	78,0	68,0	54,5	32,0	-	-	-	-	-	-	-	-	-	-	-
MATRIX 3-9T/1.5M	MATRIX 3-9T/1.5	2	1,5	94,0	88,0	76,5	61,0	36,0	-	-	-	-	-	-	-	-	-	-	-
MATRIX 5-2T/0.45M	MATRIX 5-2T/0.45	0,6	0,45	-	21,5	20,5	19,3	17,4	14,7	8,8	-	-	-	-	-	-	-	-	-
MATRIX 5-3T/0.65M	MATRIX 5-3T/0.65	0,9	0,65	-	32,3	30,7	29,0	26,0	22,0	13,2	-	-	-	-	-	-	-	-	-
MATRIX 5-4T/0.9M	MATRIX 5-4T/0.9	1,2	0,9	-	43,0	41,0	38,6	34,7	29,4	17,6	-	-	-	-	-	-	-	-	-
MATRIX 5-5T/1.3M	MATRIX 5-5T/1.3	1,8	1,3	-	54,0	51,0	48,5	43,5	36,7	22,0	-	-	-	-	-	-	-	-	-
MATRIX 5-6T/1.3M	MATRIX 5-6T/1.3	1,8	1,3	-	64,5	61,5	58,0	52,0	44,0	26,4	-	-	-	-	-	-	-	-	-
MATRIX 5-7T/1.5M	MATRIX 5-7T/1.5	2	1,5	-	75,5	72,0	67,5	61,0	51,5	30,8	-	-	-	-	-	-	-	-	-
MATRIX 5-8T/2.2M	MATRIX 5-8T/2.2	3	2,2	-	86,0	82,0	77,0	69,5	58,5	35,2	-	-	-	-	-	-	-	-	-
MATRIX 5-9T/2.2M	MATRIX 5-9T/2.2	3	2,2	-	97,0	92,0	87,0	78,0	66,0	39,6	-	-	-	-	-	-	-	-	-
MATRIX 10-2T/0.75M	MATRIX 10-2T/0.75	1	0,75	-	-	-	22,2	21,4	20,6	19,1	17,0	12,8	5,8	-	-	-	-	-	-
MATRIX 10-3T/1.3M	MATRIX 10-3T/1.3	1,8	1,3	-	-	-	33,3	32,1	30,9	28,6	25,5	19,3	8,7	-	-	-	-	-	-
MATRIX 10-4T/1.5M	MATRIX 10-4T/1.5	2	1,5	-	-	-	44,5	43,0	41,0	38,1	34,0	25,7	11,6	-	-	-	-	-	-
MATRIX 10-5T/2.2M	MATRIX 10-5T/2.2	3	2,2	-	-	-	55,5	53,5	51,5	47,5	42,5	32,1	14,5	-	-	-	-	-	-
MATRIX 10-6T/2.2M	MATRIX 10-6T/2.2	3	2,2	-	-	-	66,5	64,5	62,0	57,0	51,0	38,5	17,4	-	-	-	-	-	-
MATRIX 18-2T/1.5M	MATRIX 18-2T/1.5	2	1,5	-	-	-	-	-	-	22,0	21,3	20,2	18,7	16,8	14,2	10,3	5,2	-	-
MATRIX 18-3T/2.2M	MATRIX 18-3T/2.2	3	2,2	-	-	-	-	-	-	33,0	31,9	30,4	28,1	25,2	21,3	15,5	7,8	-	-
	MATRIX 18-4T/3	4	3	-	-	-	-	-	-	44,0	42,5	40,5	37,4	33,6	28,4	20,6	10,4	-	-
	MATRIX 18-5T/4	5,5	4	-	-	-	-	-	-	55,0	53,0	50,5	47,0	42,0	35,5	25,8	13,0	-	-
	MATRIX 18-6T/4	5,5	4	-	-	-	-	-	-	66,0	64,0	60,5	56,0	50,5	42,5	30,9	15,6	-	-

### DIMENSIONS



# MATRIX

## HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

**MATRIX 3 DIMENSIONS TABLE**

Model	Fig.	Dimensions [mm]											Weight [kg]		
		B	C	D	F	H3 [1]	H4 [2]	L	R	T [2]	V [1]	W		D1	D2
MATRIX 3-2T/0,45M	1	360	171	-	103	-	200	86,5	151,5	PG11	-	88÷97	1"	1"	8,5
MATRIX 3-2T/0,45	1	360	171	-	103	192	-	-	151,5	-	PG11	88÷97	1"	1"	8,4
MATRIX 3-3T/0,65M	1	360	171	-	103	-	200	86,5	151,5	PG11	-	88÷97	1"	1"	9,9
MATRIX 3-3T/0,65	1	360	171	-	103	192	-	-	151,5	-	PG11	88÷97	1"	1"	9,8
MATRIX 3-4T/0,65M	1	384	171	-	127	-	200	86,5	175,5	PG11	-	88÷97	1"	1"	10,6
MATRIX 3-4T/0,65	1	384	171	-	127	192	-	-	175,5	-	PG11	88÷97	1"	1"	10,4
MATRIX 3-5T/0,75M	1	408	171	-	151	-	200	86,5	199,5	PG11	-	88÷97	1"	1"	12,5
MATRIX 3-5T/0,75	1	408	171	-	151	192	-	-	199,5	-	PG11	88÷97	1"	1"	12,4
MATRIX 3-6T/0,9M	1	432	171	-	175	-	219	106	223,5	M20x1,5	-	88÷97	1"	1"	13,7
MATRIX 3-6T/0,9	1	444	171	-	175	192	-	-	223,5	-	PG11	88÷97	1"	1"	13,6
MATRIX 3-7T/1,3M	1	493	198	110,5	199	-	226	112	247,5	M20x1,5	-	88÷97	1"	1"	16,3
MATRIX 3-7T/1,3	1	493	198	110,5	199	209	-	-	247,5	-	PG11	88÷97	1"	1"	17,0
MATRIX 3-8T/1,3M	1	517	198	134,5	223	-	226	112	271,5	M20x1,5	-	88÷97	1"	1"	16,3
MATRIX 3-8T/1,3	1	517	198	134,5	223	209	-	-	271,5	-	PG11	88÷97	1"	1"	17,8
MATRIX 3-9T/1,5M	1	541	198	158,5	247	-	226	112	295,5	M20x1,5	-	88÷97	1"	1"	18,3
MATRIX 3-9T/1,5	1	554	198	158,5	247	209	-	-	295,5	-	PG11	88÷97	1"	1"	20,0

[1]= Three phase only

[2]= Single phase only

**MATRIX 5-10-18 DIMENSIONS TABLE**

Model	Fig.	Dimensions [mm]																		Weight [kg]				
		B	C	D	F	H	H1	H3 [1]	H4 [2]	L	R	T [2]	V [1]	W	W1	W2	M1	N1	N2		S1	D1	D2	
MATRIX 5-2T/0,45 M	1	360	171	-	103	-	-	-	200	86,5	151,5	PG11	-	88÷97	-	-	-	-	-	-	-	1"¼	1"	8,5
MATRIX 5-2T/0,45	1	360	171	-	103	-	-	192	-	-	151,5	-	PG11	88÷97	-	-	-	-	-	-	-	1"¼	1"	8,4
MATRIX 5-3T/0,65 M	1	360	171	-	103	-	-	-	200	86,5	151,5	PG11	-	88÷97	-	-	-	-	-	-	-	1"¼	1"	9,9
MATRIX 5-3T/0,65	1	360	171	-	103	-	-	192	-	-	151,5	-	PG11	88÷97	-	-	-	-	-	-	-	1"¼	1"	9,8
MATRIX 5-4T/0,9 M	1	384	171	-	127	-	-	-	219	106	175,5	M20x1,5	-	88÷97	-	-	-	-	-	-	-	1"¼	1"	12,2
MATRIX 5-4T/0,9	1	396	171	-	127	-	-	192	-	-	175,5	-	PG11	88÷97	-	-	-	-	-	-	-	1"¼	1"	12,4
MATRIX 5-5T/1,3 M	1	445	198	-	151	-	-	-	226	112	199,5	M20x1,5	-	88÷97	-	-	-	-	-	-	-	1"¼	1"	15,8
MATRIX 5-5T/1,3	1	445	198	-	151	-	-	209	-	-	199,5	-	PG11	88÷97	-	-	-	-	-	-	-	1"¼	1"	15,8
MATRIX 5-6T/1,3 M	1	469	198	-	175	-	-	-	226	112	223,5	M20x1,5	-	88÷97	-	-	-	-	-	-	-	1"¼	1"	15,2
MATRIX 5-6T/1,3	1	469	198	-	175	-	-	209	-	-	223,5	-	PG11	88÷97	-	-	-	-	-	-	-	1"¼	1"	16,2
MATRIX 5-7T/1,5 M	1	493	198	110,5	199	-	-	-	226	112	247,5	M20x1,5	-	88÷97	-	-	-	-	-	-	-	1"¼	1"	18,3
MATRIX 5-7T/1,5	1	506	198	110,5	199	-	-	209	-	-	247,5	-	PG11	88÷97	-	-	-	-	-	-	-	1"¼	1"	18,7
MATRIX 5-8T/2,2 M	2	565	-	134,5	223	90	190	-	231	112	325,5	M20x1,5	-	117,5	125	155	30	140	170	9	1"¼	1"	22,3	
MATRIX 5-8T/2,2	1	530	198	134,5	223	-	-	209	-	-	271,5	-	PG11	88÷97	-	-	-	-	-	-	-	1"¼	1"	18,7
MATRIX 5-9T/2,2 M	2	589	-	158,5	247	90	190	-	231	112	349,5	M20x1,5	-	117,5	125	155	30	140	170	9	1"¼	1"	23,3	
MATRIX 5-9T/2,2	1	554	198	158,5	247	-	-	209	-	-	295,5	-	PG11	88÷97	-	-	-	-	-	-	-	1"¼	1"	18,8
MATRIX 10-2T/0,75 M	1	379	175	-	118	-	-	-	200	86,5	170,5	PG11	-	92÷101	-	-	-	-	-	-	-	1"½	1"¼	11,3
MATRIX 10-2T/0,75	1	379	175	-	118	-	-	192	-	-	170,5	-	PG11	92÷101	-	-	-	-	-	-	-	1"½	1"¼	11,2
MATRIX 10-3T/1,3 M	1	416	202	-	118	-	-	-	226	112	170,5	M20x1,5	-	92÷101	-	-	-	-	-	-	-	1"½	1"¼	14,3
MATRIX 10-3T/1,3	1	416	202	-	118	-	-	209	-	-	170,5	-	PG11	92÷101	-	-	-	-	-	-	-	1"½	1"¼	13,6
MATRIX 10-4T/1,5 M	1	446	202	-	148	-	-	-	226	112	200,5	M20x1,5	-	92÷101	-	-	-	-	-	-	-	1"½	1"¼	15,6
MATRIX 10-4T/1,5	1	459	202	-	148	-	-	209	-	-	200,5	-	PG11	92÷101	-	-	-	-	-	-	-	1"½	1"¼	17,3
MATRIX 10-5T/2,2 M	2	524	-	-	178	90	190	-	231	112	284,5	M20x1,5	-	121,5	125	155	30	140	170	9	1"½	1"¼	21,8	
MATRIX 10-5T/2,2	1	489	202	-	178	-	-	209	-	-	230,5	-	PG11	92÷101	-	-	-	-	-	-	-	1"½	1"¼	17,9
MATRIX 10-6T/2,2 M	2	554	-	118,5	208	90	190	-	231	112	314,5	M20x1,5	-	121,5	125	155	30	140	170	9	1"½	1"¼	22,1	
MATRIX 10-6T/2,2	1	519	202	118,5	208	-	-	209	-	-	260,5	-	PG11	92÷101	-	-	-	-	-	-	-	1"½	1"¼	18,3
MATRIX 18-2T/1,5M	1	442	205	-	141	-	-	-	226	112	196,5	M20x1,5	-	95 ÷ 104	-	-	-	-	-	-	-	2"	1"½	14,5
MATRIX 18-2T/1,5M	1	455	205	-	141	-	-	209	-	-	196,5	-	PG11	95 ÷ 104	-	-	-	-	-	-	-	2"	1"½	16,2
MATRIX 18-3T/2,2M	2	490	-	-	141	90	190	-	231	112	250,5	M20x1,5	-	124,5	125	155	30	140	170	9	2"	1"½	20,7	
MATRIX 18-3T/2,2	1	455	205	-	141	-	-	209	-	-	196,5	-	PG11	95 ÷ 104	-	-	-	-	-	-	-	2"	1"½	17,2
MATRIX 18-4T/3	2	565	-	-	178,5	90	190	214	-	-	288	-	PG13,5	124,5	125	155	30	140	170	9	2"	1"½	23,8	
MATRIX 18-5T/4	2	615	-	123	216	100	200	241	-	-	315	-	PG13,5	124,5	140	170	35	160	192	11	2"	1"½	33,2	
MATRIX 18-6T/4	2	652	-	160,5	253,5	100	200	241	-	-	352,5	-	PG13,5	124,5	140	170	35	160	192	11	2"	1"½	34,2	

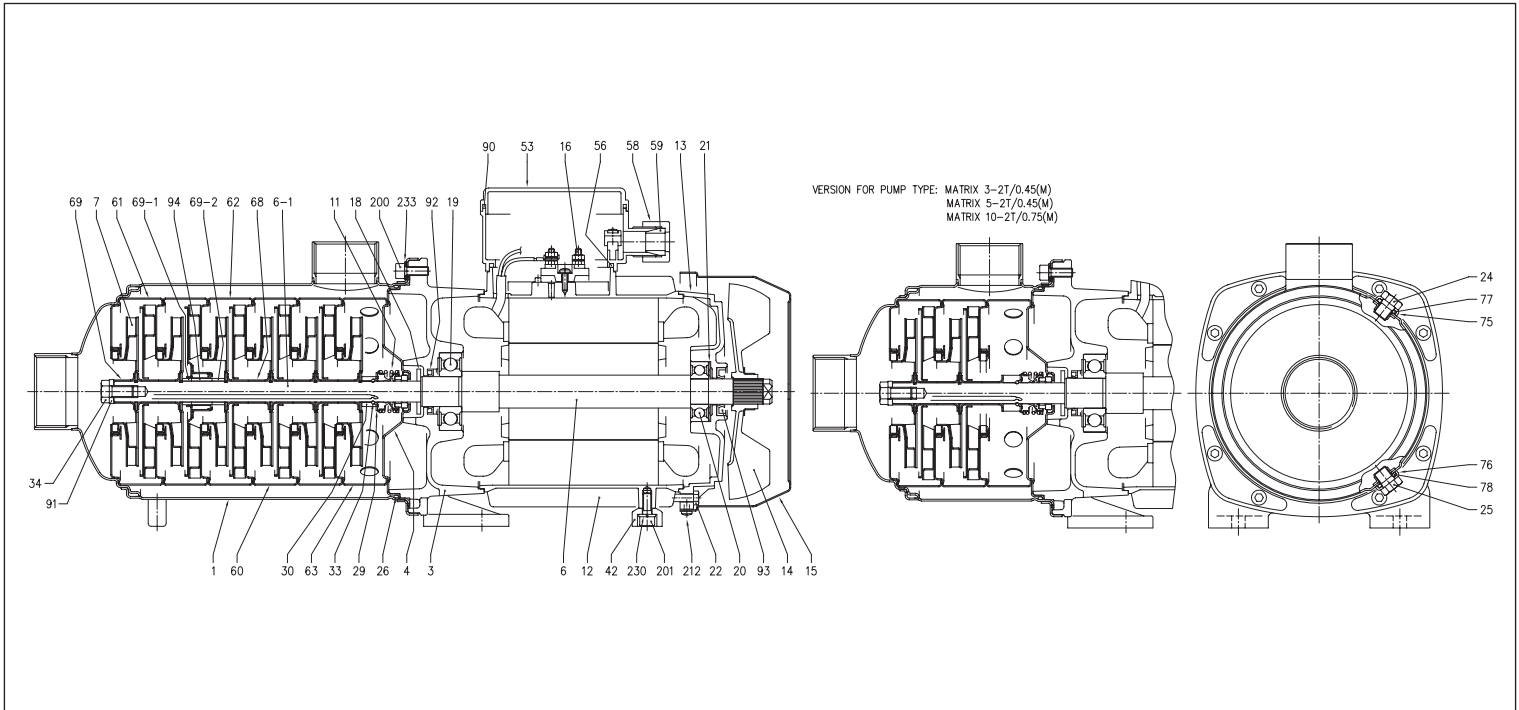
[1]= Three phase only

[2]= Single phase only

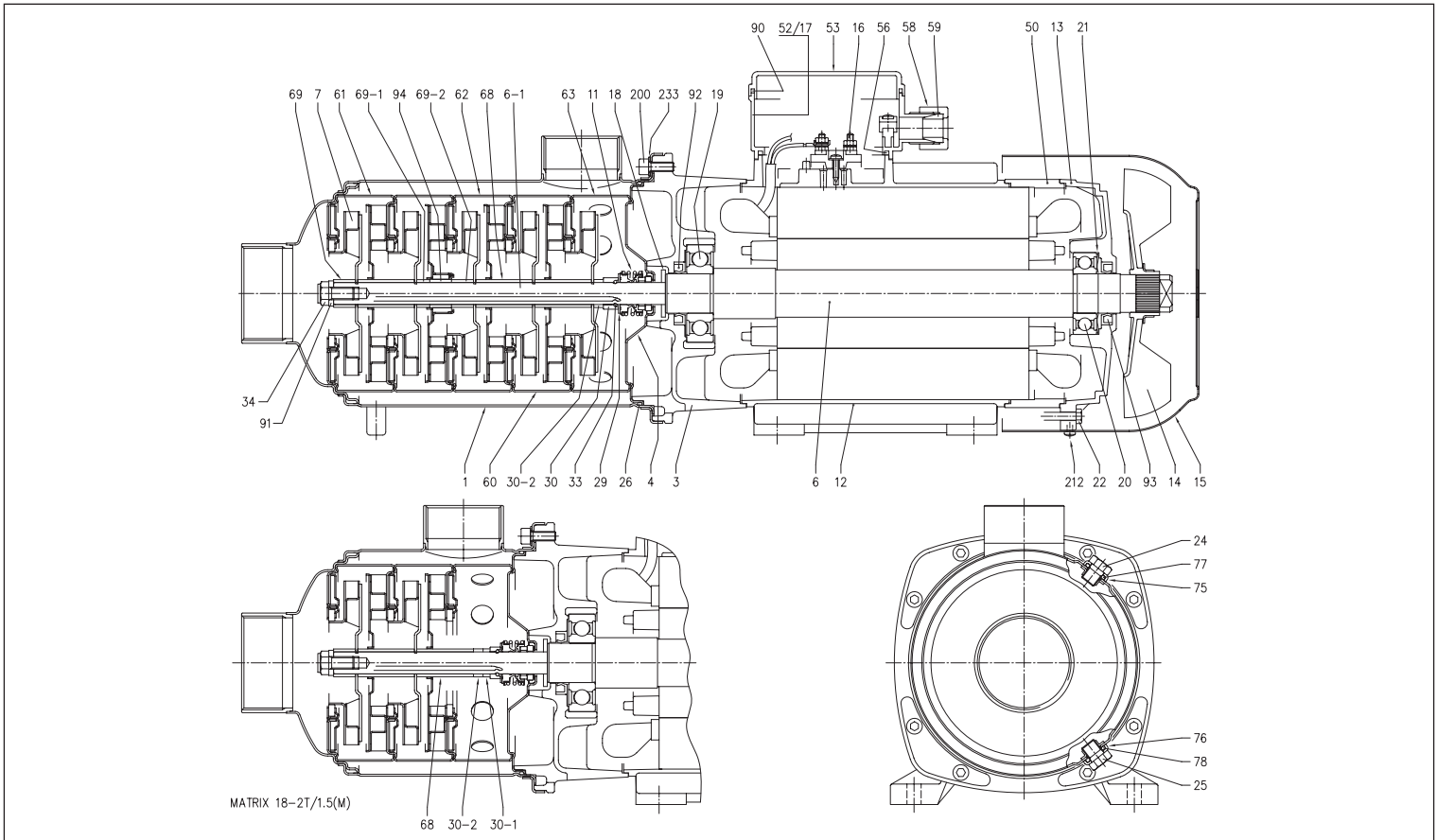
# MATRIX

## HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS in AISI 304

### MATRIX 3-5-10 SECTIONAL VIEW



### MATRIX 18 SECTIONAL VIEW



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## HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

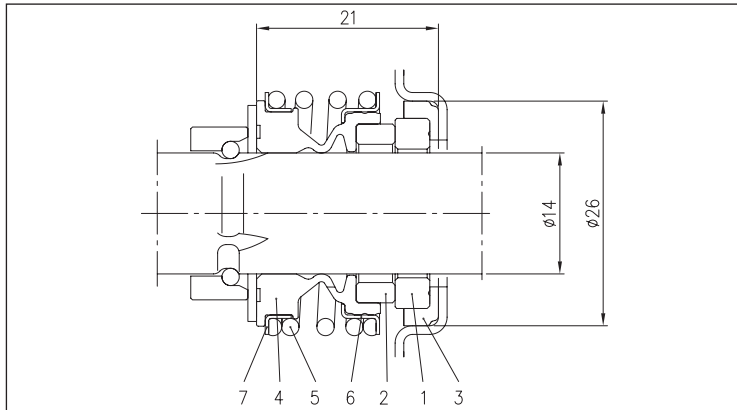
### MATERIALS TABLE

Ref.	Name	Material	Ref.	Name	Material
1	Pump body	EN 1.4301 (AISI 304)	42	Foot	Aluminium
3	Motor support	EN AB-AISI11Cu2(Fe)	50	Motor spacer [2]	Aluminium
4	Seal housing disc	EN 1.4301 (AISI 304)	52	Capacitor-holder box [1]	ABS
6	Rotor shaft	-	53	Capacitor-holder box cover [1]	ABS
6-1	Pump shaft	EN 1.4301 (AISI 304)	56	Box gasket	NBR
7	Impeller	EN 1.4301 (AISI 304)	58	Nut ring	-
11	Mechanical seal	Ceramic/Carbon/EPDM	59	Conic gasket	NBR
12	Motor case	-	60	Intermediate stage	EN 1.4301 (AISI 304)+PTFE
13	Motor cover	Aluminium	61	Intermediate stage (suction)	EN 1.4301 (AISI 304)+PTFE
14	Fan	PA	62	Intermediate stage (bearing)	EN 1.4301 (AISI 304) + PTFE + Ceramic
15	Fan cover	Galvanised Fe P04	63	Intermediate stage (discharge)	EN 1.4301 (AISI 304) + PTFE
16	Terminal box	-	68	Shaft casing (intermediate)	EN 1.4301 (AISI 304)
17	Terminal box cover	Aluminium	69	Impeller spacer	EN 1.4301 (AISI 304)
18	Spray protector ring	NBR	69-1	Shaft casing (adapter)	EN 1.4301 (AISI 304)
19	Bearing (pump side)	-	69-2	Shaft casing (adapter)	EN 1.4301 (AISI 304)
20	Bearing (motor side)	-	75	Washer	EN 1.4301 (AISI 304)
21	Adjusting ring	Steel C70	76	Washer	EN 1.4301 (AISI 304)
22	Tie-rod	Galvanised Fe 42	77	O-Ring	EPDM
24	Filler cap	EN 1.4301 (AISI 304)	78	O-Ring	EPDM
25	Drain plug	EN 1.4301 (AISI 304)	90	Terminal box cover [1]	NBR
26	O-Ring	EPDM	91	Shaft washer	EN 1.4301 (AISI 304)
29	Washer	EN 1.4301 (AISI 304)	92	Sealing ring	-
30	Holding ring	EN 1.4301 (AISI 304)	93	Sealing ring	-
30-1/2	Shaft casing	EN 1.4301 (AISI 304)	94	Guide bush	WC - Tungsten carbide
33	Ring	EN 1.4301 (AISI 304)	200	Screw (Pump body)	EN 1.4301 (AISI 304)
34	Screw	EN 1.4301 (AISI 304)	233	Plate	EN 1.4301 (AISI 304)

[1]= Single phase only

[2]= MATRIX 18-5T/4 and MATRIX 18-6T/4 only

### MECHANICAL SEAL standard



### MATERIALS TABLE standard

Ref.	Name	Material
1	Fixed part	Ceramic
2	Rotating part	Carbon
3	Gasket	EPDM
4	Diaphragm	EPDM
5	Spring	EN 1.4402 (AISI 316)
6	Structure/frame	EN 1.4402 (AISI 316)
7	Retainer ring	EN 1.4402 (AISI 316)

### SPECIAL MECHANICAL SEALS (on request)

Ref.	Name	Material			
		Version TE	Version H	Version HS	Version U3Q1EGG
1	Fixed part	Ceramic	Carbon	SiC	Tungsten carbide
2	Rotating part	Carbon	Ceramic	SiC	SiC
3	Gasket	EPDM	FPM	FPM	EPDM
4	Diaphragm	EPDM	FPM	FPM	EPDM
5	Spring	EPDM	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)
6	Structure/frame	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)
7	Retainer ring	EN 1.4402 (AISI 304)	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)

## HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

### ELECTRIC DATA TABLE

Model		P <sub>2</sub>		Efficiency		Capacitor		Efficiency			P <sub>1</sub>		Absorbed Current [A]		
Single phase 230V	Three phase 230/400V	[HP]	[kW]	Single phase	Three phase	Single phase µF	V <sub>c</sub>	Three phase			Single phase [kW]	Three phase [kW]	Single phase 230V	Three phase	
								50%	75%	100%				230V	230V
MATRIX 3-2T/0.45M	MATRIX 3-2T/0.45	0,6	0,45	-	-	12,5	450	-	-	-	0,73	0,72	3,2	2,3	1,3
MATRIX 3-3T/0.65M	MATRIX 3-3T/0.65	0,9	0,65	-	-	16	450	-	-	-	0,97	0,85	4,5	2,8	1,6
MATRIX 3-4T/0.65M	MATRIX 3-4T/0.65	0,9	0,65	-	-	16	450	-	-	-	0,97	0,85	4,5	2,8	1,6
MATRIX 3-5T/0.75M	MATRIX 3-5T/0.75	1,0	0,75	-	IE2	25	450	77,2	80,9	81,3	1,14	0,92	5,4	3,0	1,7
MATRIX 3-6T/0.9M	MATRIX 3-6T/0.9	1,2	0,9	-	IE2	31,5	450	79,0	81,7	81,6	1,28	1,35	5,7	4,3	2,5
MATRIX 3-7T/1.3M	MATRIX 3-7T/1.3	1,8	1,3	-	IE2	35	450	79,7	82,5	83,0	1,75	1,80	7,8	5,6	3,2
MATRIX 3-8T/1.3M	MATRIX 3-8T/1.3	1,8	1,3	-	IE2	35	450	79,7	82,5	83,0	1,75	1,80	7,8	5,6	3,2
MATRIX 3-9T/1.5M	MATRIX 3-9T/1.5	2,0	1,5	-	IE2	40	450	78,6	83,0	84,2	1,95	1,78	8,7	6,3	3,7
MATRIX 5-2T/0.45M	MATRIX 5-2T/0.45	0,6	0,45	-	-	12,5	450	-	-	-	0,73	0,72	3,2	2,3	1,3
MATRIX 5-3T/0.65M	MATRIX 5-3T/0.65	0,9	0,65	-	-	16	450	-	-	-	0,97	0,85	4,5	2,8	1,6
MATRIX 5-4T/0.9M	MATRIX 5-4T/0.9	1,2	0,9	-	IE2	31,5	450	79,0	81,7	81,6	1,28	1,35	5,7	4,3	2,5
MATRIX 5-5T/1.3M	MATRIX 5-5T/1.3	1,8	1,3	-	IE2	35	450	79,7	82,5	83,0	1,75	1,80	7,8	5,6	3,2
MATRIX 5-6T/1.3M	MATRIX 5-6T/1.3	1,8	1,3	-	IE2	35	450	79,7	82,5	83,0	1,75	1,80	7,8	5,6	3,2
MATRIX 5-7T/1.5M	MATRIX 5-7T/1.5	2,0	1,5	-	IE2	40	450	78,6	83,0	84,2	1,95	1,78	8,7	6,3	3,7
MATRIX 5-8T/2.2M	MATRIX 5-8T/2.2	3,0	2,2	-	IE2	50	450	83,0	84,4	83,8	2,92	2,63	13,0	8,2	4,7
MATRIX 5-9T/2.2M	MATRIX 5-9T/2.2	3,0	2,2	-	IE2	50	450	83,0	84,4	83,8	2,92	2,63	13,0	8,2	4,7
MATRIX 10-2T/0.75M	MATRIX 10-2T/0.75	1,0	0,75	-	IE2	25	450	77,2	80,9	81,3	1,14	0,92	5,4	3,0	1,7
MATRIX 10-3T/1.3M	MATRIX 10-3T/1.3	1,8	1,3	-	IE2	35	450	79,7	82,5	83,0	1,75	1,80	7,8	5,6	3,2
MATRIX 10-4T/1.5M	MATRIX 10-4T/1.5	2,0	1,5	-	IE2	40	450	78,6	83,0	84,2	1,95	1,78	8,7	6,3	3,7
MATRIX 10-5T/2.2M	MATRIX 10-5T/2.2	3,0	2,2	-	IE2	50	450	83,0	84,4	83,8	2,92	2,63	13,0	8,2	4,7
MATRIX 10-6T/2.2M	MATRIX 10-6T/2.2	3,0	2,2	-	IE2	50	450	83,0	84,4	83,8	2,92	2,63	13,0	8,2	4,7
MATRIX 18-2T/1.5M	MATRIX 18-2T/1.5	2,0	1,5	-	IE2	40	450	78,6	83,0	84,2	1,95	1,78	8,7	6,3	3,7
MATRIX 18-3T/2.2M	MATRIX 18-3T/2.2	3,0	2,2	-	IE2	50	450	83,0	84,4	83,8	2,92	2,63	13,0	8,2	4,7
-	MATRIX 18-4T/3	4,0	3	-	IE2	-	-	85,0	86,7	86,3	-	3,48	-	10,6	6,1
-	MATRIX 18-5T/4	5,5	4	-	IE2	-	-	84,3	87,2	87,8	-	4,56	-	15,1	8,7
-	MATRIX 18-6T/4	5,5	4	-	IE2	-	-	84,3	87,2	87,8	-	4,56	-	15,1	8,7

### NOISE DATA TABLE

Model		P <sub>2</sub>		L <sub>PA</sub> - dB(A)*
Single phase 230V	Three phase 230/400V	[HP]	[kW]	
				MATRIX 3-2T/0.45M
MATRIX 3-3T/0.65M	MATRIX 3-3T/0.65	0,9	0,65	62
MATRIX 3-4T/0.65M	MATRIX 3-4T/0.65	0,9	0,65	
MATRIX 3-5T/0.75M	MATRIX 3-5T/0.75	1,0	0,75	64
MATRIX 3-6T/0.9M	MATRIX 3-6T/0.9	1,2	0,9	
MATRIX 3-7T/1.3M	MATRIX 3-7T/1.3	1,8	1,3	
MATRIX 3-8T/1.3M	MATRIX 3-8T/1.3	1,8	1,3	64
MATRIX 3-9T/1.5M	MATRIX 3-9T/1.5	2,0	1,5	
MATRIX 5-2T/0.45M	MATRIX 5-2T/0.45	0,6	0,45	61
MATRIX 5-3T/0.65M	MATRIX 5-3T/0.65	0,9	0,65	62
MATRIX 5-4T/0.9M	MATRIX 5-4T/0.9	1,2	0,9	
MATRIX 5-5T/1.3M	MATRIX 5-5T/1.3	1,8	1,3	64
MATRIX 5-6T/1.3M	MATRIX 5-6T/1.3	1,8	1,3	
MATRIX 5-7T/1.5M	MATRIX 5-7T/1.5	2,0	1,5	
MATRIX 5-8T/2.2M	MATRIX 5-8T/2.2	3,0	2,2	65
MATRIX 5-9T/2.2M	MATRIX 5-9T/2.2	3,0	2,2	
MATRIX 10-2T/0.75M	MATRIX 10-2T/0.75	1,0	0,75	62
MATRIX 10-3T/1.3M	MATRIX 10-3T/1.3	1,8	1,3	64
MATRIX 10-4T/1.5M	MATRIX 10-4T/1.5	2,0	1,5	
MATRIX 10-5T/2.2M	MATRIX 10-5T/2.2	3,0	2,2	65
MATRIX 10-6T/2.2M	MATRIX 10-6T/2.2	3,0	2,2	
MATRIX 18-2T/1.5M	MATRIX 18-2T/1.5	2,0	1,5	64
MATRIX 18-3T/2.2M	MATRIX 18-3T/2.2	3,0	2,2	65
-	MATRIX 18-4T/3	4,0	3	68
-	MATRIX 18-5T/4	5,5	4	69
-	MATRIX 18-6T/4	5,5	4	

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

Body insulation casing



For application with refrigerant liquids or liquids with high thermal difference that may generate condensate.