2GPE 3M

FREKVENTNE HIDRO-STANICE

INDUSTRIAL PRESSURE BOOSTING

Units with two horizontal monobloc pumps derived from EN733 (FORMER DIN 24255) with stainless steel hydraulic parts.

PUMP FEATURES

FIELD OF USE

- Maximum working pressure: 10 bar
- Temperature of the liquid: -10°C ÷ +90°C

MATERIALS

- Pump body, impeller, seal housing disc and shaft in AISI 304
- Mechanical seal in Carbon/Ceramic/NBR (3 SERIES), in SiC/SiC/FPM (3L SERIES)
- H version mechanical seal in Carbon/Ceramic/Viton

TECHNICAL DATA

- Self-ventilated 2 and 4 pole asynchronous motor
- Class of insulation F
- IP55 Protection rating
- 230±10% 50Hz single phase voltage, 230/400V ± 10% 50Hz three phase voltage up to 4 kW included, 400/690V ± 10% 5.5 kW and over three phase voltage
- Protection under the user's responsibility

TYPICAL APPLICATIONS

The base of the group is in galvanised steel as are the manifolds. The discharge manifold is set-up to gather any two vertical type membrane reservoirs. Two pressure switches, the electric control panel and a pressure gauge are mounted on it. On suction, each electric pump has an isolating valve and a non-return valve, with the possibility of connection to an air supply unit and has another isolating valve in discharge mode. The electric control panel is sustained by a relevant support fixed to the base.

TECHNICAL FEATURES

The control panels control pump number one at variable speeds and automatically start any other pumps, allowing to adjust system pressure on constant values. These particulars allow to increase the level of comfort, minimise management costs and reduce all air pre-load accumulation reservoirs to a minimum.

The typical applications of the GPE range pressure boosters with control panels are:

- Water provisioning for condominium, school, hotel hospital distribution networks etc.
- Water provisioning for industry in general
- Irrigation of gardens, parks and sports fields

FUNCTIONING PRINCIPLES

- Functioning with PRESSURE-CONTROLLER: the unit responds to the control of the pressure transducer and the speed control via the pump number one inverter, maintaining the system pressure constant
- Double functioning possibility of every pump in AUTOMATIC, MANUAL OR pump EXCLUDED mode
- Pump motors protection against overloads, missing phase over/under voltage
- Pump protection against dry running
- Inverter protection against phase breakdowns, under/over voltage, earth faults, environment overheating
- Functioning of pump number one at variable speed via the inverter; automatic start-up via electro-mechanical contactors of the other pumps
- Automatic switch-over of functioning of pump number one and any other pumps, via electro-mechanical contactors and pressure switches, if the inverter should block
- Automatic switch-over every 24 hours of the powered pumps start-up order via electro-mechanical contactors

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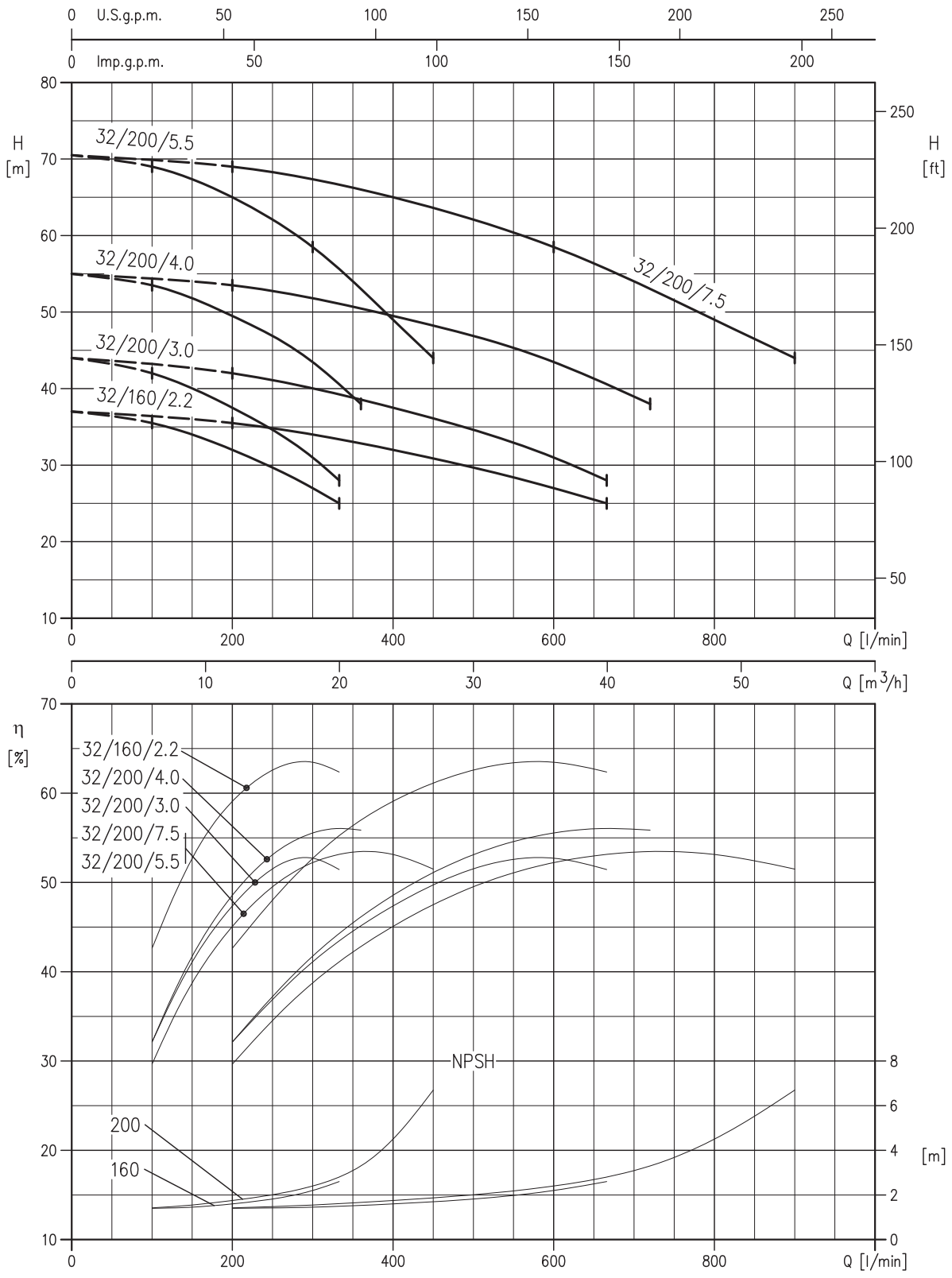
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H [ft]
32/200/5.5
32/200/4.0
32/200/3.0
32/160/2.2
32/200/7.5
Q [l/min]
Q [m3/h]
η [%]
32/160/2.2
32/200/4.0
32/200/3.0
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32/200/5.5
NPSH
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160
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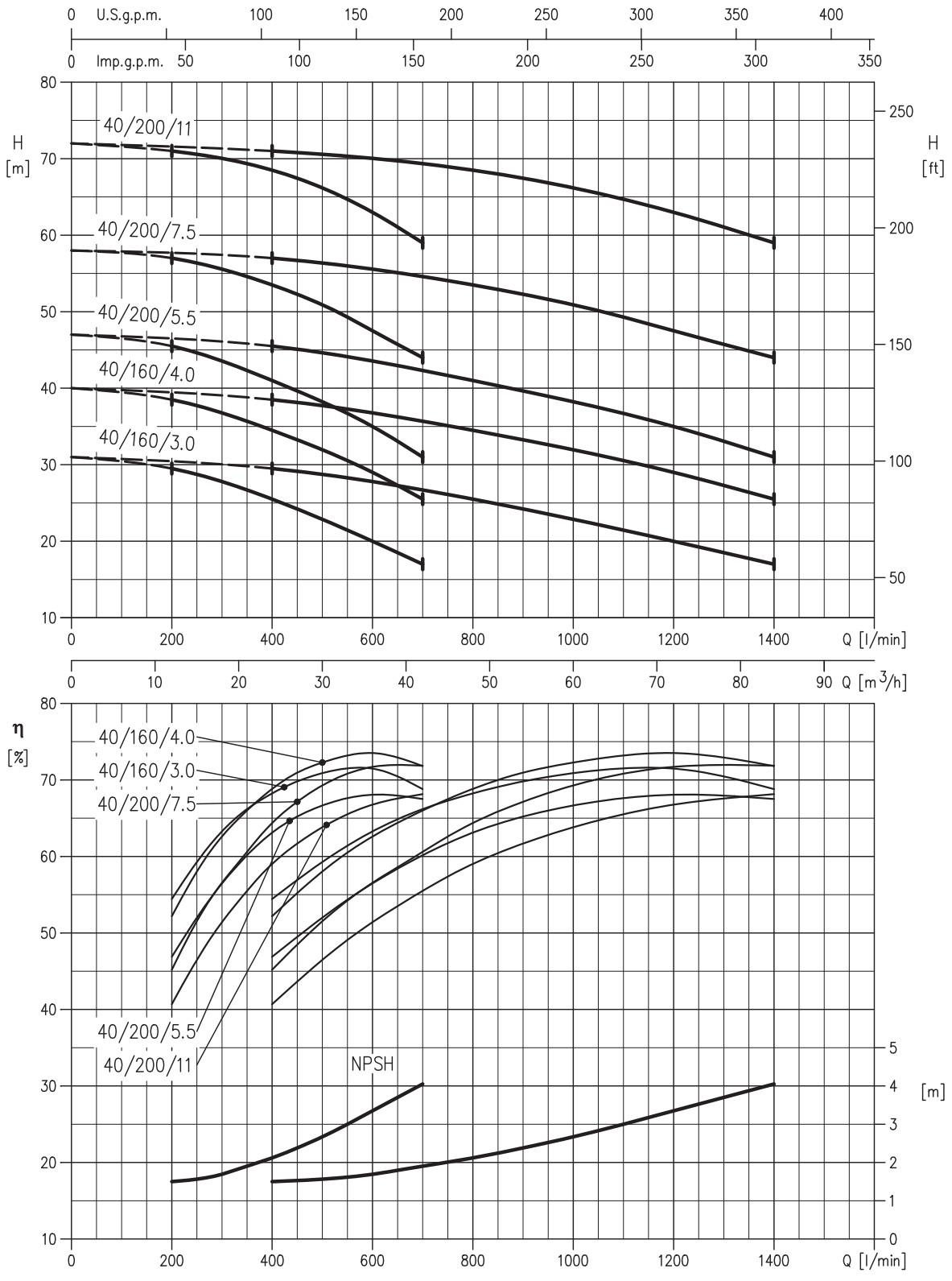
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H [m]
H [ft]
40/200/11
40/200/7.5
40/200/5.5
40/160/4.0
40/160/3.0
Q [l/min]
Q [m3/h]
η [%]
NPSH
[m]

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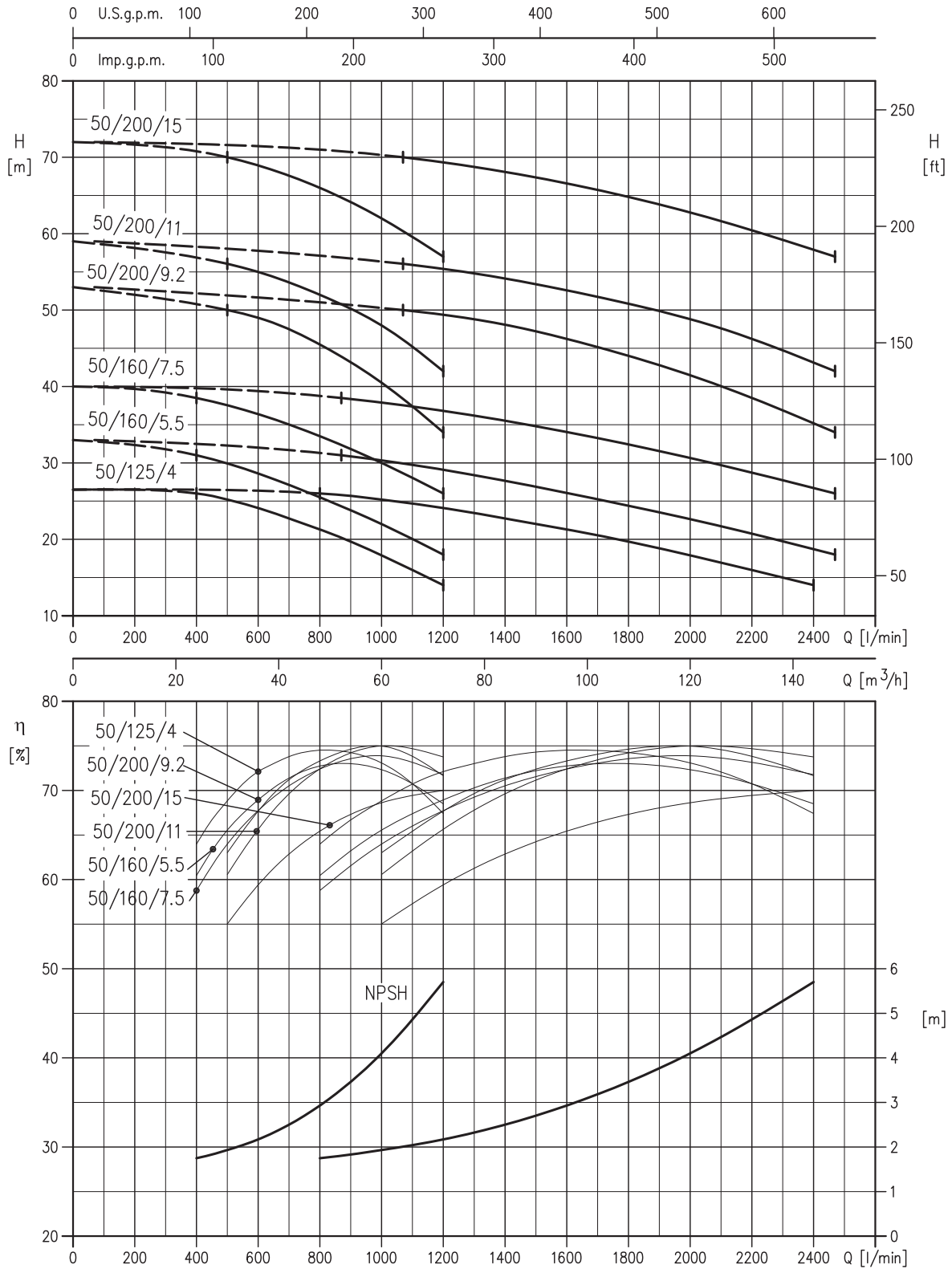

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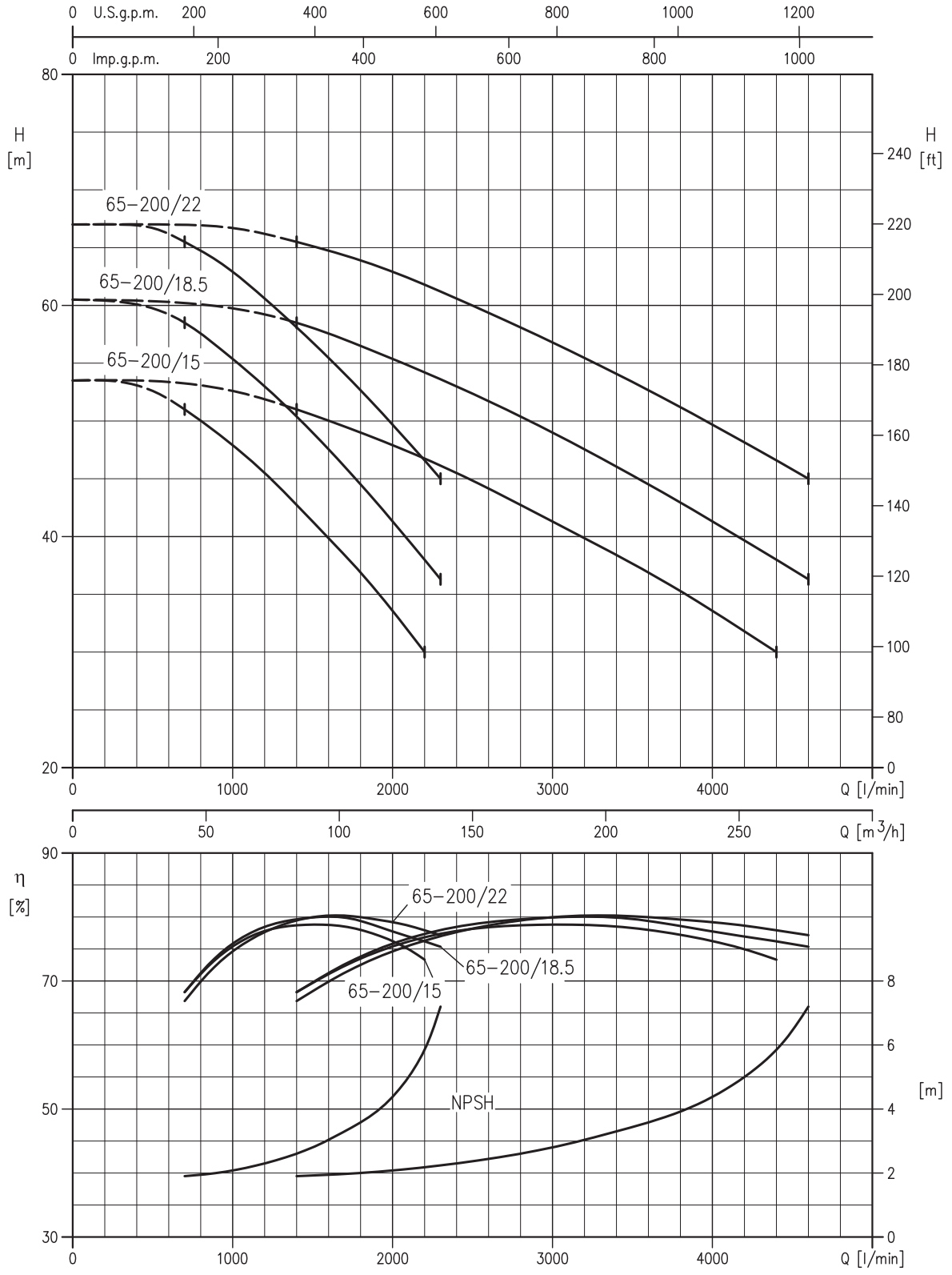
FREKVENTNE HIDRO-STANICE

INDUSTRIAL PRESSURE BOOSTING

2GPE 3M 65



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INDUSTRIAL PRESSURE BOOSTING

PERFORMANCE TABLE AND ELECTRIC DATA OF THE TWO PUMPS FUNCTIONING SIMULTANEOUSLY

Model Three phase 400V	[kW]	Max abs. [A] 400V Three phase	Q=Flow rate l/min	200	300	400	600	666	720	800	900	1000	1200	1400	1600	2000	2400
			m³/h	12	18	24	36	40	43,2	48	54	60	72	84	96	120	144
			H=Head [m]														
32-160/2.2	2,2+2,2	9,6		35,5	34,0	32,0	27,0	25,0	-	-	-	-	-	-	-	-	-
32-200/3.0	3+3	13		42,0	40,0	37,5	31,0	28,0	-	-	-	-	-	-	-	-	-
32-200/4.0	4+4	18,4		53,5	52,0	49,5	43,5	40,5	38,0	-	-	-	-	-	-	-	-
32-200/5.5	5,5+5,5	23,6		69,0	67,5	65,0	58,5	-	-	-	-	-	-	-	-	-	-
32-200/7.5	7,5+7,5	31,4		69,0	67,5	65,0	58,5	55,5	53,0	49,0	44,0	-	-	-	-	-	-
40-160/3.0	3+3	13		-	-	29,5	27,5	27,0	26,5	25,5	24,0	22,5	20,0	17,0	-	-	-
40-160/4.0	4+4	16,6		-	-	38,5	37,0	36,0	35,5	34,5	33,0	32,0	29,0	25,5	-	-	-
40-200/5.5	5,5+5,5	23,6		-	-	45,5	44,0	43,0	42,5	41,0	39,5	38,0	35,0	31,0	-	-	-
40-200/7.5	7,5+7,5	31,4		-	-	57,0	55,5	55,0	54,5	53,5	52,5	51,0	47,5	44,0	-	-	-
40-200/11	11+11	44		-	-	71,0	70,0	70,0	69,5	68,5	67,5	66,0	63,0	59,0	-	-	-
50-125/4	4+4	18,4		-	-	-	-	-	-	26,0	25,5	25,0	24,0	22,5	21,5	17,9	14,0
50-160/5.5	5,5+5,5	23,6		-	-	-	-	-	-	31,0	30,5	30,0	28,5	27,0	25,5	22,0	18,0
50-160/7.5	7,5+7,5	31,4		-	-	-	-	-	-	38,5	38,0	37,5	36,0	35,0	33,5	30,0	26,0
50-200/9.2	9,2+9,2	37,6		-	-	-	-	-	-	-	-	50,0	49,0	47,5	45,5	40,5	34,0
50-200/11	11+11	44		-	-	-	-	-	-	-	-	56,0	55,0	54,0	52,0	48,0	42,0
50-200/15	15+15	60		-	-	-	-	-	-	-	-	70,0	69,0	68,0	66,0	62,0	57,0

Model Three phase 400V	[kW]	Max abs. [A] 400V Three phase	Q=Flow rate l/min	1400	1800	2600	3000	3400	3800	4200	4400	4600
			m³/h	84	108	156	180	204	228	252	264	276
			H=Head [m]									
65-200/15	15+15	60		51,0	49,0	44,0	41,5	38,4	35,3	31,8	30,0	-
65-200/18.5	18,5+18,5	78		58,5	56,5	51,5	49,0	46,0	43,0	39,7	38,0	36,3
65-200/22	22+22	84,6		65,5	64,0	59,5	57,0	54,0	51,0	48,0	46,5	45,0

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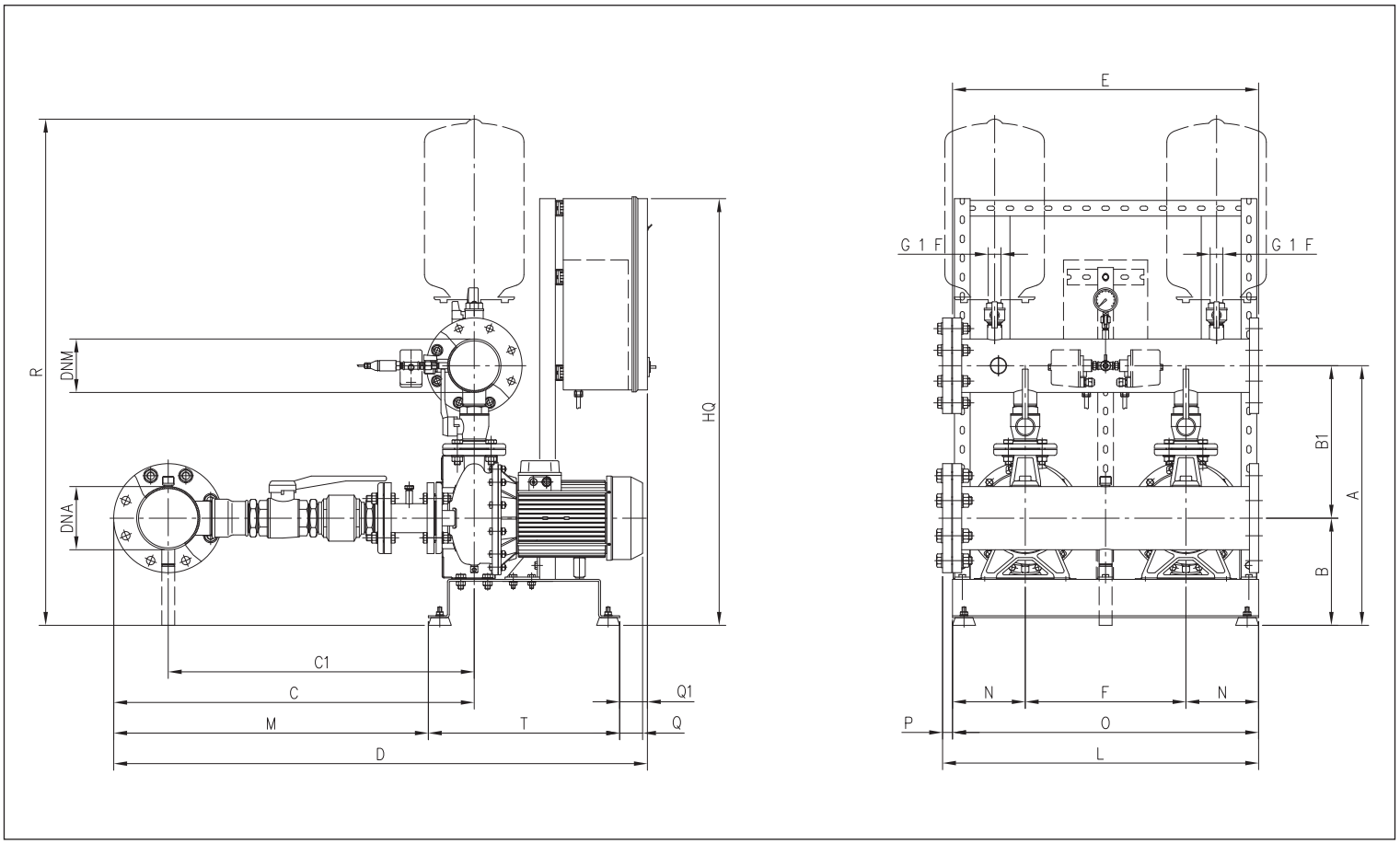
DIMENSIONS



DIMENSIONS TABLE

Model	Dimensions [mm]																				Weight
	A	B	B1	C	C1	D	DNA	DNM	E	F	HQ	L	M	N	O	P	Q	Q1	R	T	[kg]
2GPE 3M 32-160/2.2 (TWIN)	655	250	405	425	380	840	80	65	520	370	875	800	305	215	800	-	-	35	1280	500	128,0
2GPE 3M 32-200/3 (TWIN)	705	280	425	425	380	870	80	65	520	370	875	800	305	215	800	-	-	65	1330	500	143,0
2GPE 3M 32-200/4 (TWIN)	705	280	425	425	380	870	80	65	520	370	875	800	305	215	800	-	-	65	1330	500	158,0
2GPE 3M 32-200/5.5 (SP)	705	280	425	425	380	935	80	65	520	370	1180	800	305	215	800	-	15	130	1330	500	188,0
2GPE 3M 32-200/7.5 (SP)	705	280	425	425	380	935	80	65	520	370	1180	800	305	215	800	-	15	130	1330	500	188,0
2GPE 3M 40-160/3 (TWIN)	605	250	355	785	660	1230	125	100	800	420	875	825	665	190	800	25	-	65	1235	500	193,0
2GPE 3M 40-160/4 (TWIN)	605	250	355	785	660	1230	125	100	800	420	875	825	665	190	800	25	-	65	1235	500	208,0
2GPE 3M 40-200/5.5 (SP)	655	280	375	805	680	1280	125	100	800	420	1215	825	685	190	800	25	15	95	1285	500	249,0
2GPE 3M 40-200/7.5 (SP)	655	280	375	805	680	1320	125	100	800	420	1215	825	685	190	800	25	60	135	1285	500	263,0
2GPE 3M 40-200/11 (SP)	620	245	375	805	680	1370	125	100	800	420	1330	880	570	230	880	-	-	-	1250	800	348,0
2GPE 3M 50-125/4 (TWIN)	630	250	380	940	800	1380	150	125	800	420	875	825	820	190	800	25	-	60	1275	500	228,0
2GPE 3M 50-160/5.5 (SP)	680	280	400	940	800	1415	150	125	800	420	1215	825	820	190	800	25	15	95	1325	500	262,0
2GPE 3M 50-160/7.5 (SP)	680	280	400	940	800	1425	150	125	800	420	1215	825	820	190	800	25	60	105	1325	500	276,0
2GPE 3M 50-200/9.2 (SP)	665	245	420	940	800	1525	150	125	800	420	1330	880	700	230	880	-	-	25	1310	800	323,0
2GPE 3M 50-200/11 (SP)	665	245	420	940	800	1525	150	125	800	420	1330	880	700	230	880	-	-	25	1310	800	360,0
2GPE 3M 50-200/15 (SP)	665	245	420	940	800	1695	150	125	800	420	1360	880	855	230	880	-	-	40	1310	800	414,0
2GPE 3M 65-200/15 (SP)	950	265	685	1080	885	1820	250	200	800	400	1370	880	980	230	880	-	-	40	1635	800	450,0
2GPE 3M 65-200/18.5 (SP)	950	265	685	1080	885	1820	250	200	800	400	1370	880	980	230	880	-	-	40	1635	800	575,0
2GPE 3M 65-200/22 (SP)	950	265	685	1080	885	1920	250	200	800	400	1770	880	980	230	880	-	-	140	1635	800	622,0