



ZS

50Hz

Stainless Steel Horizontal Single-stage Centrifugal Pump



Nanfang Pump Industry Co., Ltd.

CNP Headquarter

Address: Renhe Town, Hangzhou, China

Post code: 311107

Tel: +86 571 88637351, +86 571 86397872

Fax: +86-571-86397809

E-mail: info@nanfang-pump.com

[Http://www.cnppump.com](http://www.cnppump.com)

E150304
309010100031
subject to amendments



Stock code: 300145

Pumping Water Pumping Honor



Company profile



Nanfang Pump Industry Co.,Ltd (CNP),as a subsidiary of Nanfang Zhongjin Environment Co.,Ltd, was founded in 1991,and listed on Shenzhen Stock Exchange on December 9,2010 with stock code 300145.

In 2019, CNP's annual output exceeded 900,000 units/set with nearly 3 billion sales revenue, continuing to maintain high growth. As a national enterprise technology center, CNP has flagship ultra-high efficient product -new generation CDM (F) light vertical multistage centrifugal pump, MEI≥ 0.7. Same series high temperature pump products are developed in 2019 to satisfy high temperature applications. All light stainless steel pump product series grow stably.Advanced frequency conversion water supply equipment has been innovated to the 6th generation. Fire pump and diesel engine have obtained UL certification.TD in-line pump, NIS/NISO end suction pump, NSC split casing pump, WQ sewage pump, PQ stainless steel fountain submersible pump, BP silent tube pump, pool pump, non-blocking self-priming sewage pump, metering pump, oil pump and other pump products, can meet various application needs of different fields.

CNP has a complete sales network both in domestic and overseas market,exporting to over 60 countries and regions, maintaining long<g relationship with our clients. CNP pumps have been widely applied in various fields like water treatment, water supply and drainage、 HVAC、 industrial application、 seawater desalination、 energy and power etc.

CNP, a green water expert beside you.

Content

General Data

Introduction	1
Definition of model	1
Application	1
Minimum inlet pressure NPSH	2
Installation requirements	3
Curves	3
Operating condition	3
Motor	3
Section drawing	4
Material	4
Scope of performance 50Hz	5
Scope of performance 60Hz	6
Product range 50Hz	7
Product range 60Hz	8

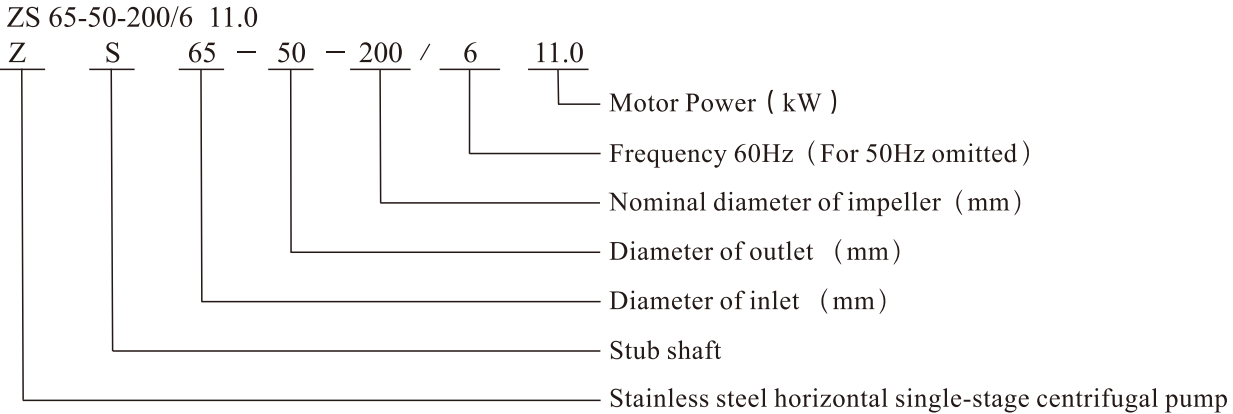
Technical Data

ZS50- 32 50Hz	9
ZS65- 40 50Hz	10
ZS65- 50 50Hz	11
ZS80- 65 50Hz	12
ZS100-80 50Hz	13
ZS50- 32 60Hz	14
ZS65- 40 60Hz	15
ZS65- 50 60Hz	16
ZS80- 65 60Hz	17
ZS100-80 60Hz	18
Installation Sketch	19
Size and weight 50Hz	19
Size and weight 60Hz	20

Introduction

ZS Stainless steel horizontal single-stage centrifugal pump is made by advanced techniques such as pressing bulging welding of corrosion resistant plate. It is a new generation centrifugal pump initiated in China and may replace traditional IS pump and common corrosion proof pump. It features beautiful appearance, light and handy structure, high efficiency and energy saving, durable, corrosion proof, low noise, etc.

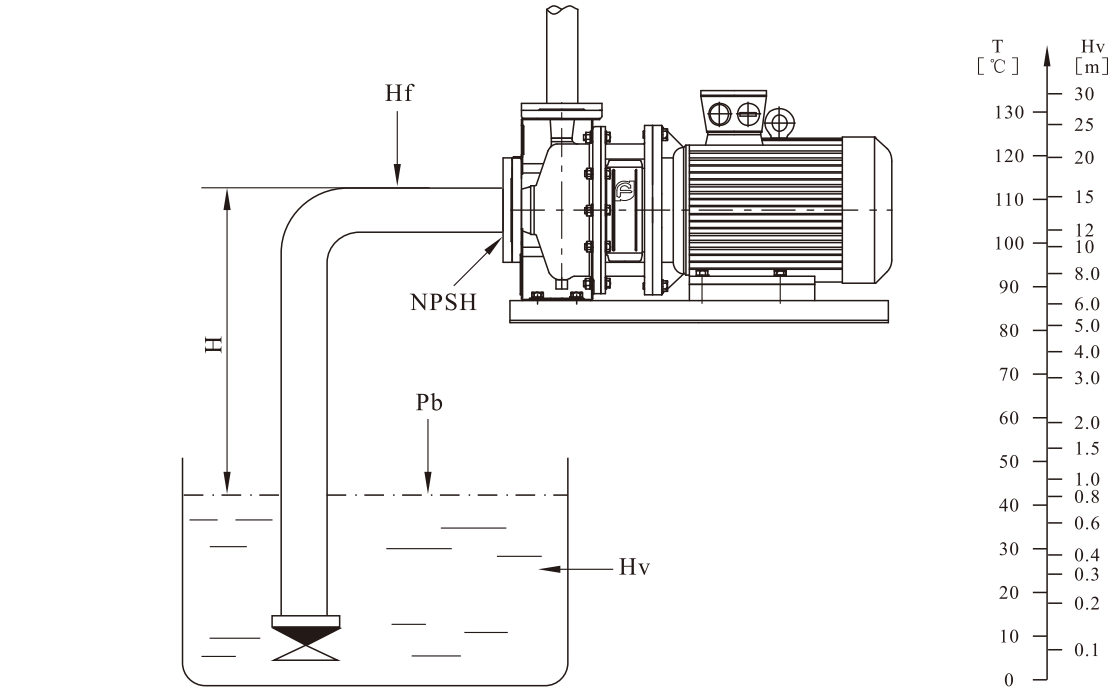
Definition of model



Application

ZS Stainless steel horizontal single-stage centrifugal pump is a sort of multifunction product with wide application. It may transmit various mediums including water or industrial liquid and is suitable for different temperature, flow rate and range of pressure. Its typical application mainly includes the following aspects:

- Water supply: filtration in water works, transportation and subarea water carriage, pressurization of main duct;
- Industrial pressurization: flow wetting system, cleaning system;
- Transportation of industrial liquid: water supply of boiler, condensed system, cooling and air conditioning system, machine tool support, light acid and alkali transportation;
- Water treatment: distilled water system or separator, swimming pool, etc.;
- Farmland irrigation, medicine and sanitation, etc.



Minimum inlet pressure NPSH

In case that the pressure in pump is lower than the steam pressure used to convey liquid, the cavitations will occur. To avoid cavitations, a minimum pressure at the inlet side of the pump shall be guaranteed. The maximum suction stroke can be calculated with following formula:

$$H = P_b \times 10.2 - NPSH - H_f - H_v - H_s$$

Pb – Atmosphere pressure (bar)

In a closed system, Pb means system pressure (bar)

NPSH – Net positive suction head (m)

It can be read from the point of Max. flow rate shown on NPSH curve.

Hf – Pipeline loss at the inlet (m)

It is in accordance with pipeline possible Max. Flow.

Hv – Steam pressure (m)

It depends on liquid temperature and steam pressure value.

Hs – Safety margin (m)

Minimum 0.5m delivery head.

If the calculated result H is negative, the pump may run under the Max. Suction head H. In case the calculated result H is negative, a delivery head of Min. Inlet pressure is necessary.

Note: Normally, the above calculation will not be done. H is calculated in the following conditions:

- 1、The liquid temperature is comparatively higher;
- 2、Liquid flow exceeds rated value;
- 3、Suction head is comparatively large or inlet pipeline long;
- 4、System pressure is too low;
- 5、Bad inlet condition.

Installation requirements

The shaft connection type of ZS pump is direct connection. The pump is composed of pump, shaft and stand-ard motor.

- The pump shall be installed on the ventilating and anti-freezing place;
- The installation of the pump shall ensure that the pump will not be forced by the tension of the pipeline;
- If the pump is installed outdoor, suitable outer cover must be used to prevent electric elements from water inflow or coagulating dew;
- To facilitate inspection and maintenance, enough space must be left around the machine group;
- Electric wiring device shall guarantee that the pump will not be damaged by lack of phase, unstable vol-tage, current leakage and overload;
- The pump shall be installed on the base horizontally. Horizontal direction is the inlet for the pump, and ve-rtical direction is the outlet for the pump;
- The flange connection dimension are in conformity with the related provisions PN16 in GB/T 17241.6 or ISO7005-2/DIN 2501.

Curves

Following conditions are suitable for the performance curves shown bellow:

- 1、 Curve tolerance in conformity to ISO9906:2012 Grade 3B.
- 2、 All curves are based on the measured value of motor 3×380V, 50Hz: under the constant speed of 2900rpm or 2950rpm; 60Hz:under the constant speed of 3450rpm or 3500rpm.
- 3、 The test medium is clear 20℃ water without any solid impurity.
- 4、 Pumps should not work if the flow is beyond the minimum or the maximum flow in the curves.
- 5、 The motor power shall be adjusted if the viscosity or density of medium is different from water.

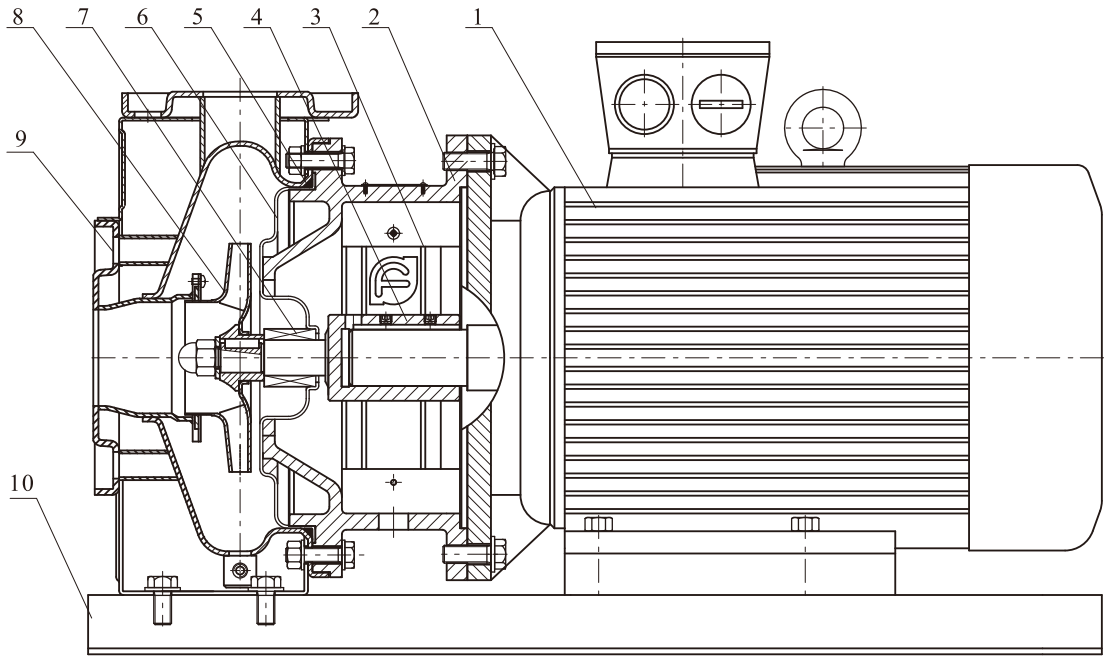
Operating condition

- Clean, thin, non-flammable and explosive, not containing the liquid with solid particle and fibe;
- Liquid temperature: -20℃ ~+100℃ ;
- Ambient temperature: up to +40℃ ;
- Altitude: up to 1000m;
- Max. pressure of the system is 10 bar.

Motor

- TEFC motor, 2-pole;
- Protection class:IP55;
- Insulation class :F;
- Standard voltage:50Hz 1 × 220V
3 × 380V
- Standard voltage:60Hz 1 × 220V
3 × 220V
3 × 380V
3 × 460V

Section drawing

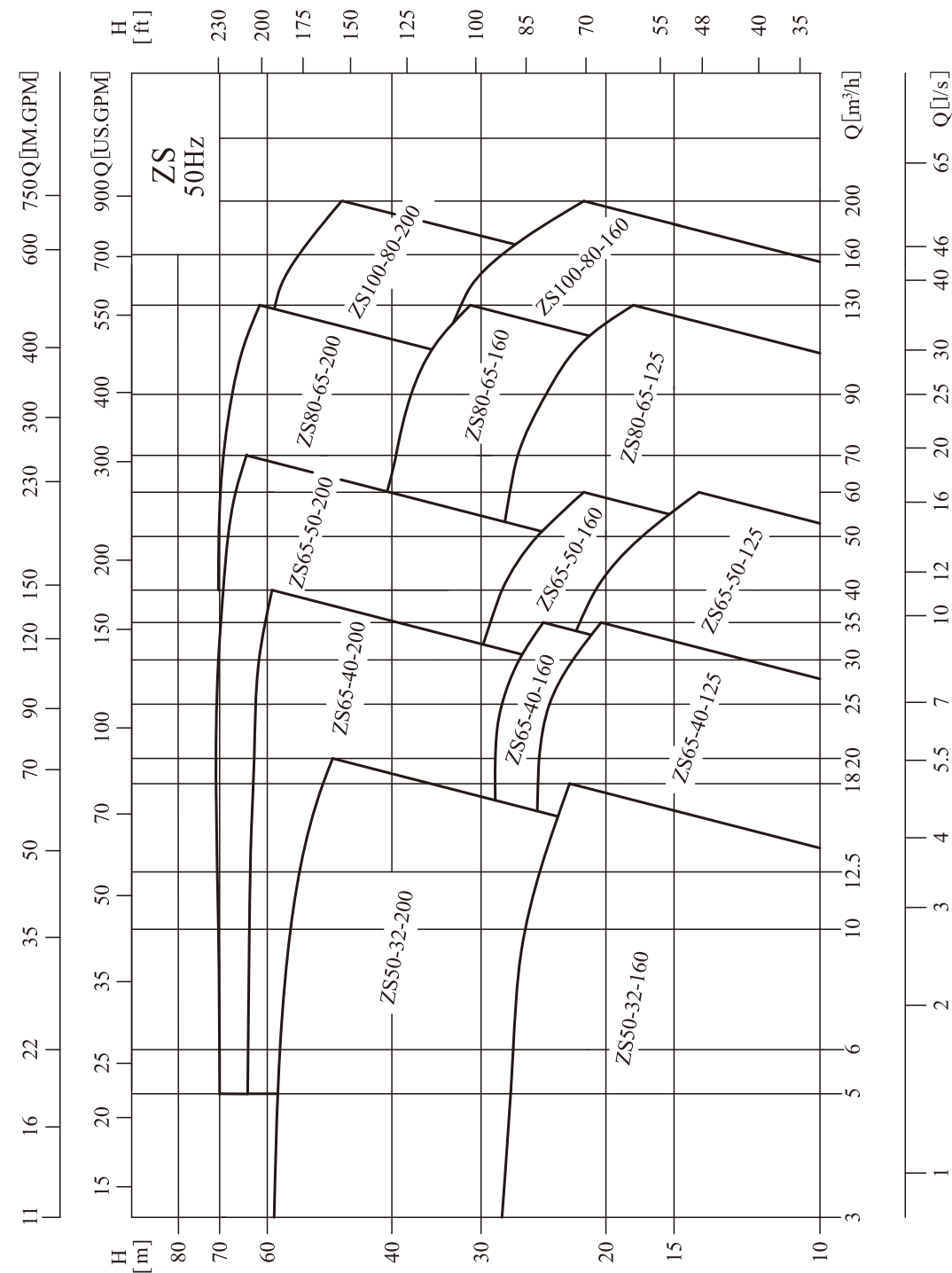


Material

NO.	Parts	Material	AISI/ASTM
1	Motor		
2	Pump head	HT 200	ASTM25B
3	Guard plate	06Cr19Ni10	AISI304
4	Shaft	20Cr13/06Cr19Ni10	AISI420/ AISI304
5	O ring	NBR	
6	Lining of pump head	06Cr19Ni10	AISI304
7	Mechanical seal	Carbon/Silicon Carbide	
8	Impeller	06Cr19Ni10	AISI304
9	Casing	06Cr19Ni10	AISI304
10	Base plate	Q235	ASTMA570

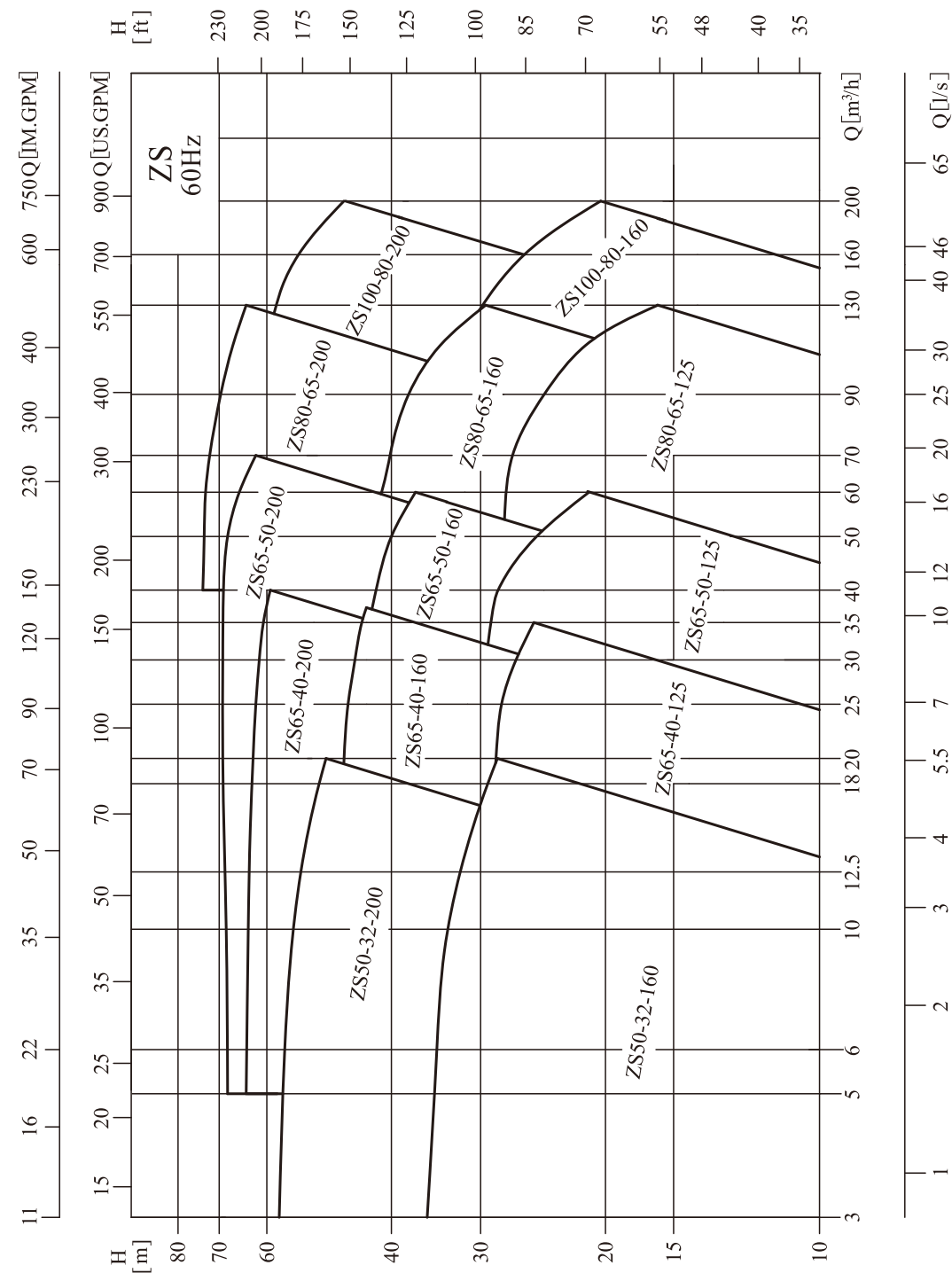
Scope of performance

50Hz



Scope of performance

60Hz



Product range

50Hz

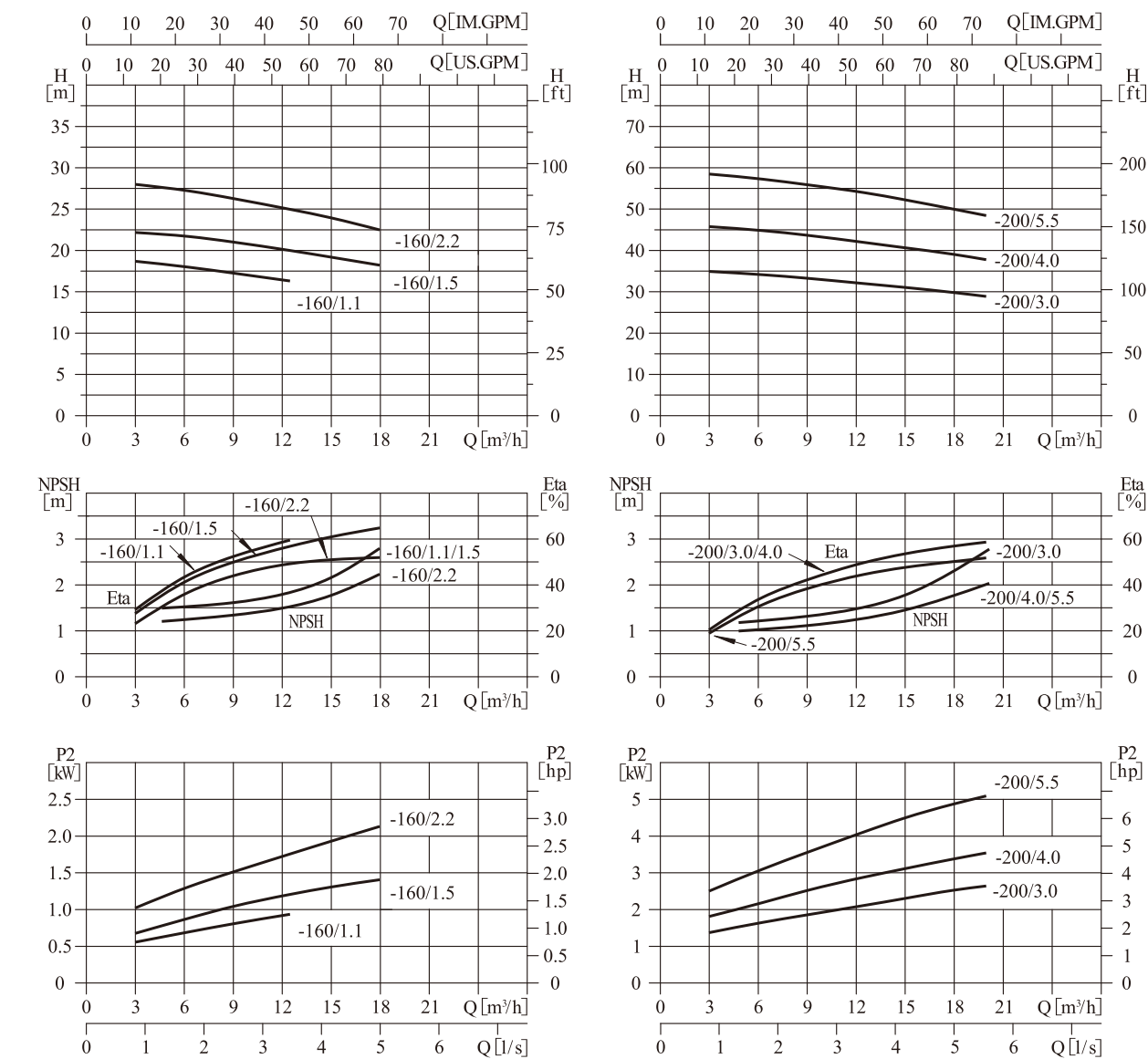
NO.	Model	Q (m³/h)	H (m)	n (r/min)	Standard voltage (V)	
					1×220V	3×380V
					P ₂ (kW)	P ₂ (kW)
1	ZS50-32-160/1.1	6.3	18	2900	1.1	1.1
2	ZS50-32-160/1.5	12.5	20		1.5	1.5
3	ZS50-32-160/2.2	12.5	25		2.2	2.2
4	ZS50-32-200/3.0	12.5	32			3
5	ZS50-32-200/4.0	12.5	42			4
6	ZS50-32-200/5.5	12.5	54			5.5
7	ZS65-40-125/1.5	25	13		1.5	1.5
8	ZS65-40-125/2.2	25	18		2.2	2.2
9	ZS65-40-125/3.0	25	24			3
10	ZS65-40-160/4.0	25	28			4
11	ZS65-40-200/5.5	25	36			5.5
12	ZS65-40-200/7.5	25	46			7.5
13	ZS65-40-200/11.0	25	62	2950		11
14	ZS65-50-125/3.0	50	13	2900		3
15	ZS65-50-125/4.0	50	18			4
16	ZS65-50-160/5.5	50	25			5.5
17	ZS65-50-200/7.5	50	32			7.5
18	ZS65-50-200/9.2	50	40			9.2
19	ZS65-50-200/11.0	50	48	2950		11
20	ZS65-50-200/15.0	50	58			15
21	ZS65-50-200/18.5	50	68			18.5
22	ZS80-65-125/5.5	100	13	2900		5.5
23	ZS80-65-125/7.5	100	18			7.5
24	ZS80-65-125/9.2	100	23			9.2
25	ZS80-65-160/11.0	100	27	2950		11
26	ZS80-65-160/15.0	100	36			15
27	ZS80-65-200/18.5	100	45			18.5
28	ZS80-65-200/22.0	100	53			22
29	ZS80-65-200/30.0	100	66			30
30	ZS100-80-160/11.0	160	15			11
31	ZS100-80-160/15.0	160	22			15
32	ZS100-80-160/18.5	160	28			18.5
33	ZS100-80-200/22.0	160	33			22
34	ZS100-80-200/30.0	160	45			30
35	ZS100-80-200/37.0	160	54			37

Product range

60Hz

NO.	Model	Q (m³/h)	H (m)	n (r/min)	Standard voltage (V)	
					1×220V	3×380V
					P ₂ (kW)	P ₂ (kW)
1	ZS50-32-160/6 1.1	6.3	18	3450	1.1	1.1
2	ZS50-32-160/6 1.5	12.5	20		1.5	1.5
3	ZS50-32-160/6 2.2	12.5	25		2.2	2.2
4	ZS50-32-160/6 3.0	12.5	32			3
5	ZS50-32-200/6 4.0	12.5	42			4
6	ZS50-32-200/6 5.5	12.5	54			5.5
7	ZS65-40-125/6 1.5	25	13		1.5	1.5
8	ZS65-40-125/6 2.2	25	18		2.2	2.2
9	ZS65-40-125/6 3.0	25	24			3
10	ZS65-40-125/6 4.0	25	28			4
11	ZS65-40-160/6 5.5	25	36			5.5
12	ZS65-40-160/6 7.5	25	46			7.5
13	ZS65-40-200/6 11.0	25	62	3500		11
14	ZS65-50-125/6 3.0	50	13	3450		3
15	ZS65-50-125/6 4.0	50	18			4
16	ZS65-50-125/6 5.5	50	25			5.5
17	ZS65-50-160/6 7.5	50	32			7.5
18	ZS65-50-160/6 9.2	50	40			9.2
19	ZS65-50-200/6 11.0	50	48	3500		11
20	ZS65-50-200/6 15.0	50	58			15
21	ZS65-50-200/6 18.5	50	68			18.5
22	ZS80-65-125/6 5.5	100	12.5	3450		5.5
23	ZS80-65-125/6 7.5	100	18			7.5
24	ZS80-65-125/6 9.2	100	23			9.2
25	ZS80-65-160/6 11.0	100	27	3500		11
26	ZS80-65-160/6 15.0	100	36			15
27	ZS80-65-200/6 18.5	100	45			18.5
28	ZS80-65-200/6 22.0	100	53			22
29	ZS80-65-200/6 30.0	100	68			30
30	ZS100-80-160/6 15.0	160	20			15
31	ZS100-80-160/6 18.5	160	26			18.5
32	ZS100-80-200/6 22.0	160	33			22
33	ZS100-80-200/6 30.0	160	45			30
34	ZS100-80-200/6 37.0	160	54			37

ZS50-32 50Hz

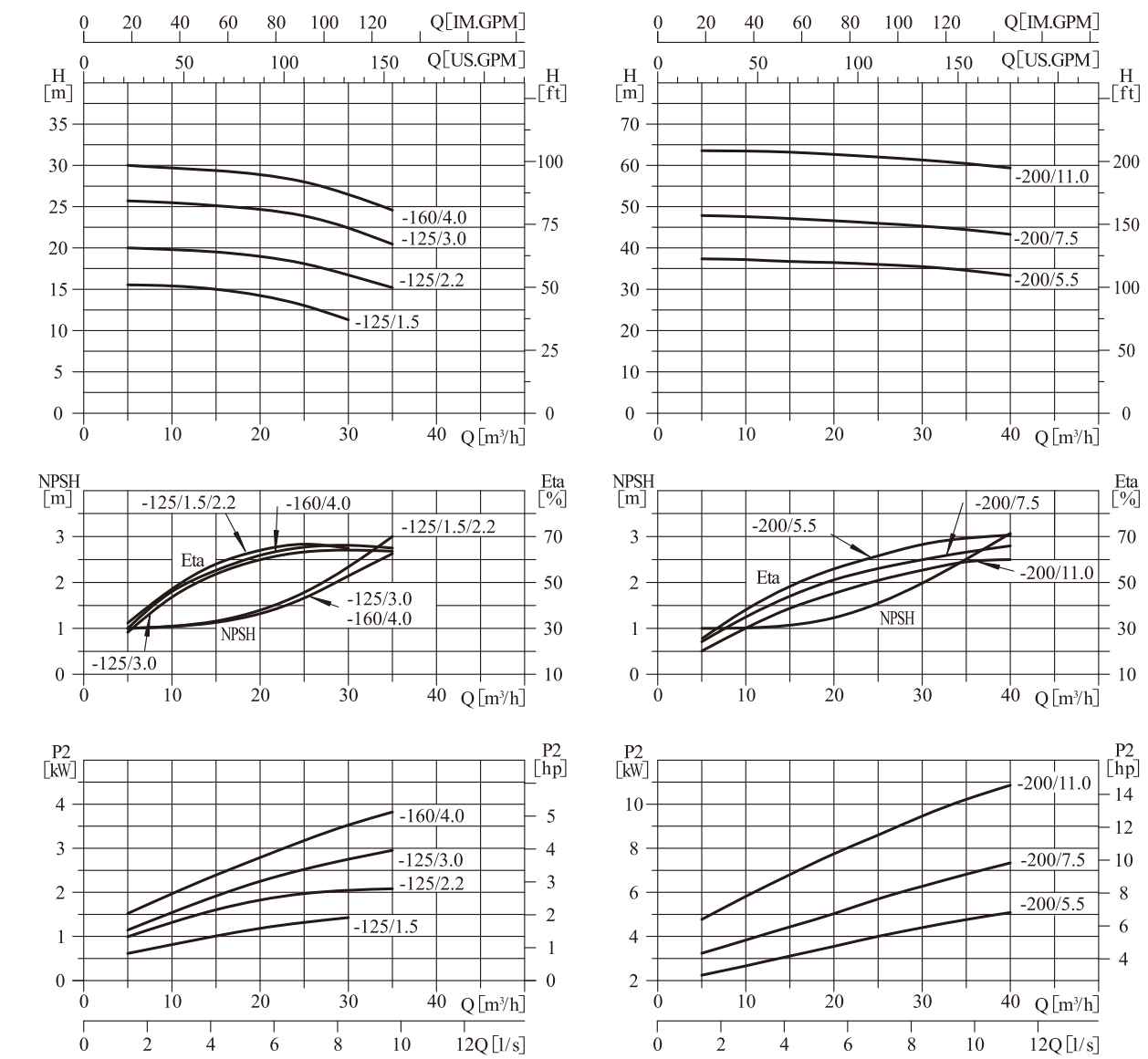


Performance table

Model	Driving motor		Q (m³/h)	3	6.3	9	12.5	15	18	20
	(kW)	(hp)								
ZS50-32-160/1.1	1.1	1.5	H (m)	18.7	18	17.2	16.4			
ZS50-32-160/1.5	1.5	2		22.5	22	21	20	19	18	
ZS50-32-160/2.2	2.2	3		28	27	26.3	25	24	22.5	
ZS50-32-200/3.0	3	4		34.9	34.1	33.3	32	31	29.8	28.9
ZS50-32-200/4.0	4	5.5		45.7	44.8	43.7	42	40.7	39	37.7
ZS50-32-200/5.5	5.5	7.5		58.5	57.2	56	54	52.5	50	48.5

ISO9906 Annex A

ZS65-40 50Hz



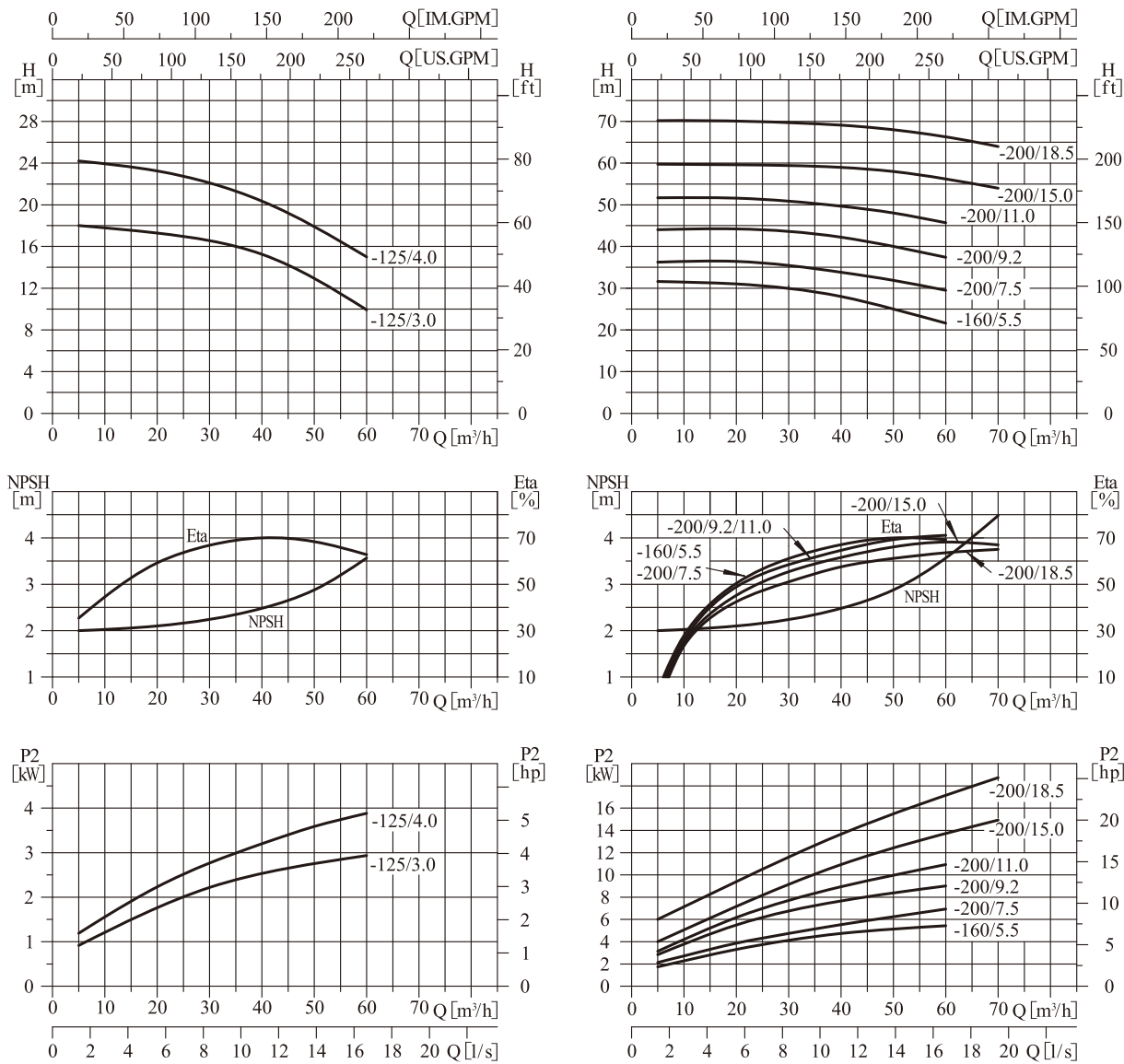
Performance table

Model	Driving motor		Q (m³/h)	5	10	15	20	25	30	35	40
	(kW)	(hp)									
ZS65-40-125/1.5	1.5	2	H (m)	15.5	15.4	15	14.4	13	11.3		
ZS65-40-125/2.2	2.2	3		20	19.7	19.5	19	18	16.7	15.2	
ZS65-40-125/3.0	3	4		25.7	25.3	25.1	24.8	24	22.3	20.3	
ZS65-40-160/4.0	4	5.5		30	29.7	29.3	28.9	28	26.5	24.5	
ZS65-40-200/5.5	5.5	7.5		37.4	37.2	36.7	36.4	36	35.5	34.6	33.3
ZS65-40-200/7.5	7.5	10		48	47.5	47	46.6	46	45.2	44.5	43.3
ZS65-40-200/11.0	11	15		64	63.5	63	62.5	62	61.5	60.5	59

ISO9906 Annex A

ZS65-50 50Hz

ISO9906 Annex A

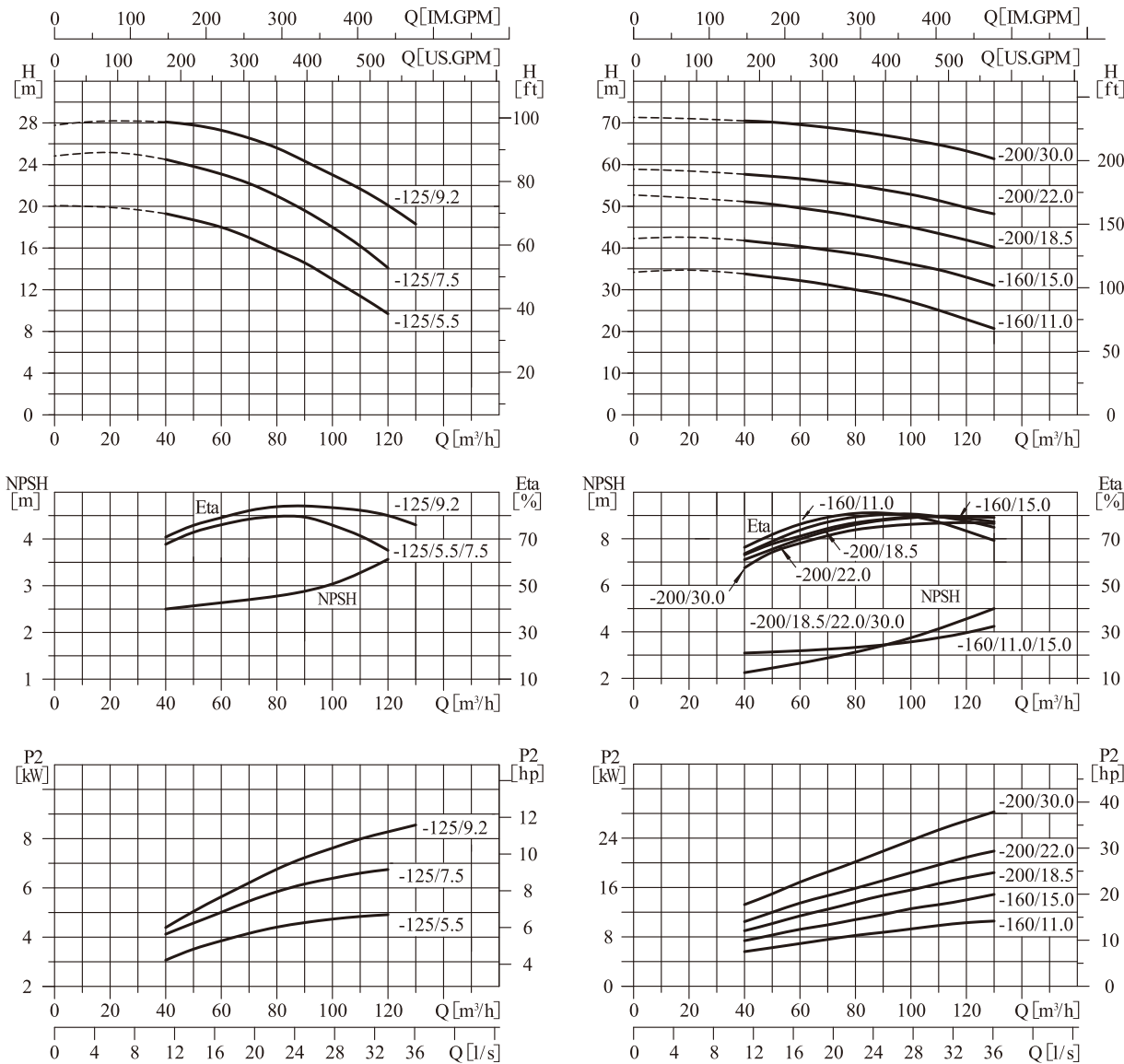


Performance table

Model	Driving motor		Q (m³/h)	5	10	20	30	40	50	60	70
	(kW)	(hp)									
ZS65-50-125/3.0	3	4	H (m)	18	17.8	17.2	16.4	15.1	13	10	
ZS65-50-125/4.0	4	5.5		24.2	24.2	23.6	22.6	20.7	18	14.8	
ZS65-50-160/5.5	5.5	7.5		31.6	31.5	31	30	28	25	21.5	
ZS65-50-200/7.5	7.5	10		36.3	36.6	36.4	35.6	34.1	32	29.6	
ZS65-50-200/9.2	9.2	12.5		43.5	43.5	43.5	43	42	40	37.5	
ZS65-50-200/11.0	11	15		51.5	51.5	51	50	49.3	48	45.6	
ZS65-50-200/15.0	15	20		59.7	59.7	59.6	59.5	59	58	56.2	53
ZS65-50-200/18.5	18.5	25		70.2	70.2	70.1	70	69.1	68	66.4	64

ZS80-65 50Hz

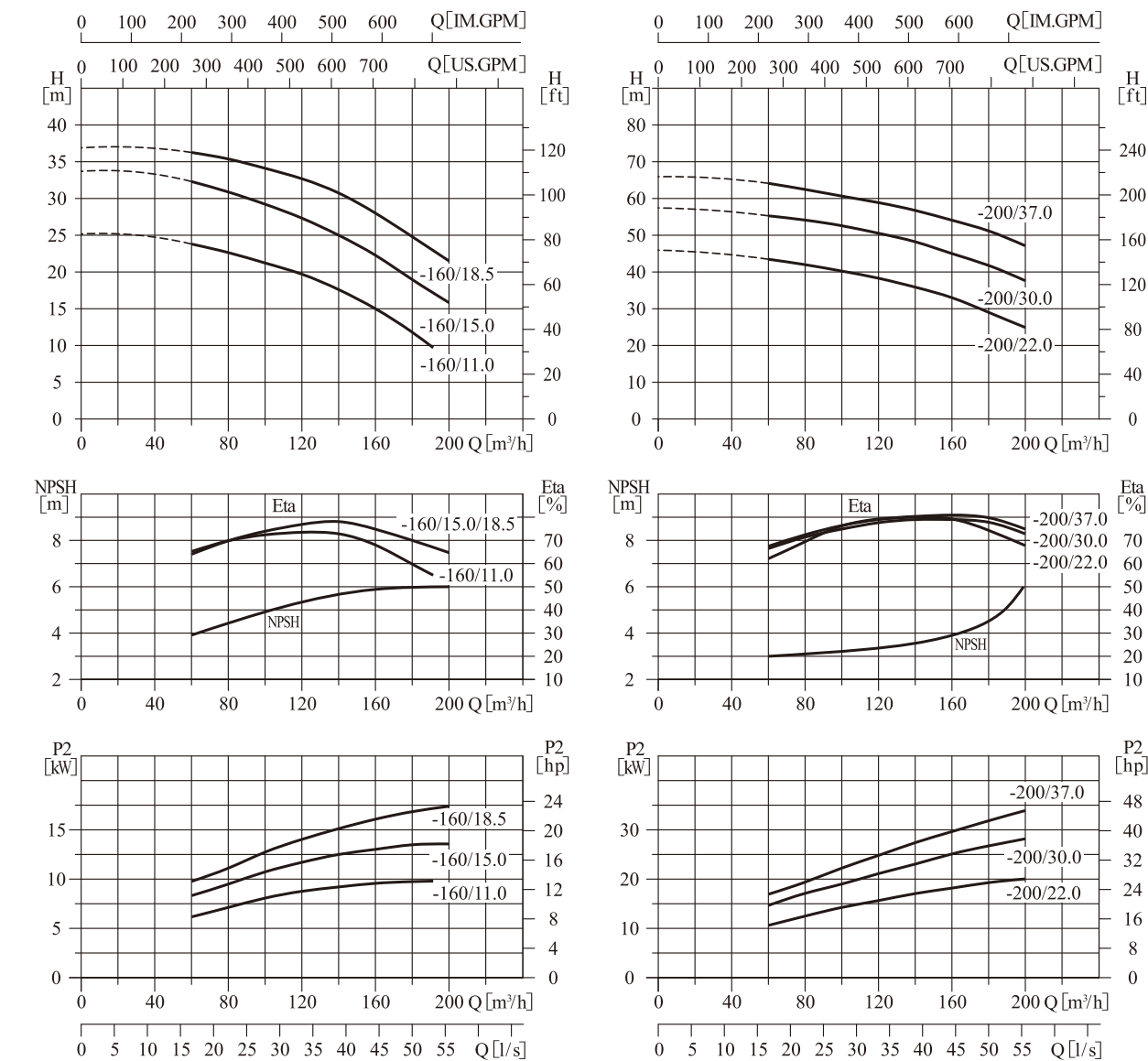
ISO9906 Annex A



Performance table

Model	Driving motor		Q (m³/h)	40	50	60	70	80	90	100	110	120	130
	(kW)	(hp)											
ZS80-65-125/5.5	5.5	7.5	H (m)	19.3	18.7	18	17	15.8	14.8	13	11.4	9.7	
ZS80-65-125/7.5	7.5	10		24.5	23.8	23.1	22.2	21	19.6	18	16.2	14.1	
ZS80-65-125/9.2	9.2	12.5		28.1	27.8	27.3	26.6	25.7	24.3	23	21.8	20.1	18.3
ZS80-65-160/11.0	11	15		33.9	33	32.2	31.3	29.9	28.8	27	25.1	22.9	20.7
ZS80-65-160/15.0	15	20		41.8	41.1	40.4	39.5	38.6	37.6	36	34.8	33	31
ZS80-65-200/18.5	18.5	25		51	50.5	49.6	48.7	47.6	46.3	45	43.5	42.2	40.2
ZS80-65-200/22.0	22	30		57.7	57.2	56.8	55.9	55.1	54	53	51.6	49.7	48.2
ZS80-65-200/30.0	30	40		70.2	70.2	69.6	68.9	68.2	67.1	66	64.6	63.3	61.4

ZS100-80 50Hz

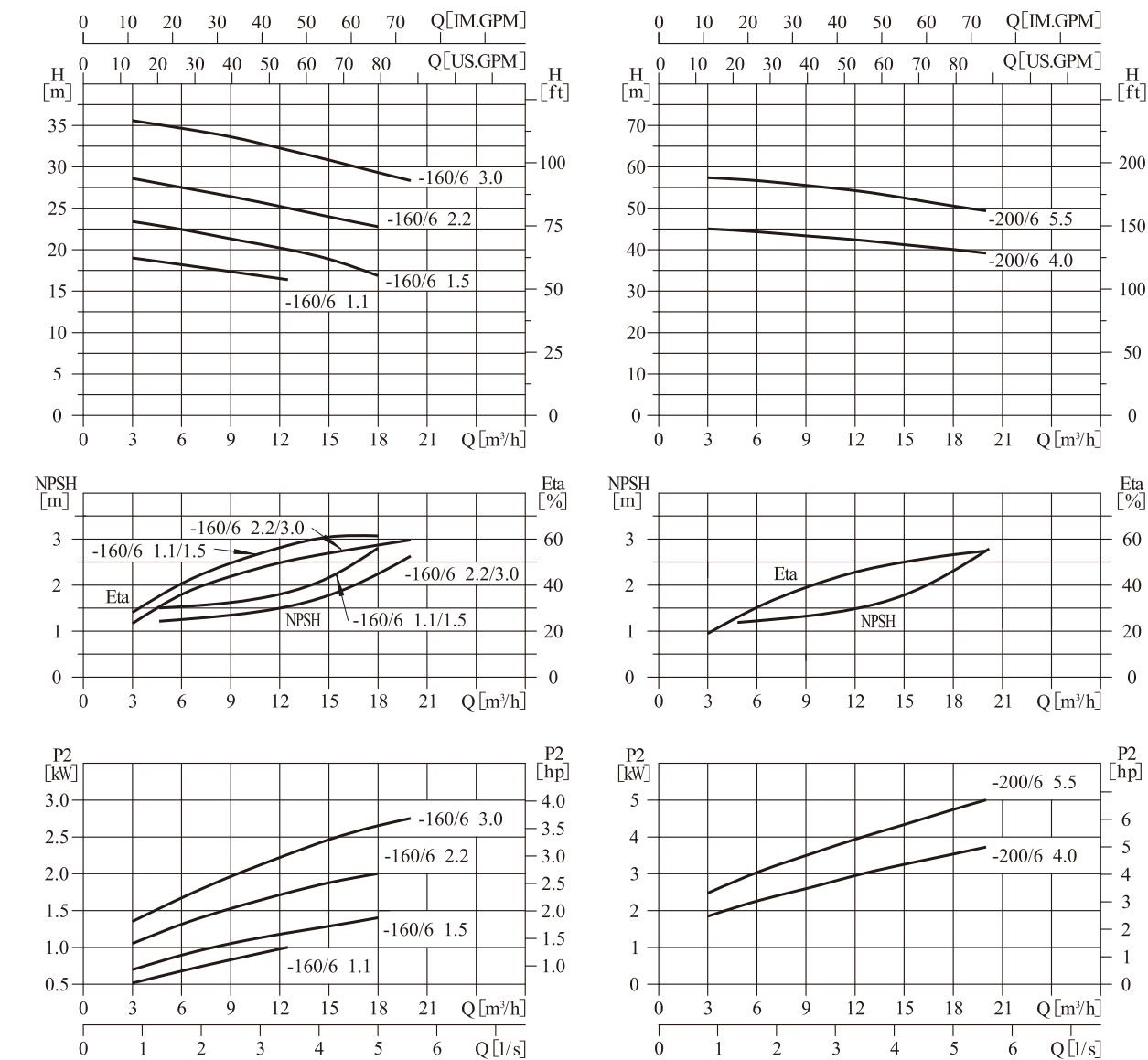


Performance table

Model	Driving motor		Q (m³/h)	60	80	100	120	140	160	180	192	200
	(kW)	(hp)										
ZS100-80-160/11.0	11	15	H (m)	23.8	22.7	21.1	19.7	17.6	15	11.8	9.7	
ZS100-80-160/15.0	15	20		32.3	30.8	29.1	27.2	25.1	22	18.8		16.1
ZS100-80-160/18.5	18.5	25		36.2	35.2	33.8	32.7	31	28	24.8		21.5
ZS100-80-200/22.0	22	30		43.5	42	39.7	38.3	35.9	33	29		24.9
ZS100-80-200/30.0	30	40		55.4	54.1	52.6	50.5	48.2	45	41.9		37.6
ZS100-80-200/37.0	37	50		64.1	62.5	61	59	57.4	54	51.2		47.1

ISO9906 Annex A

ZS50-32 60Hz



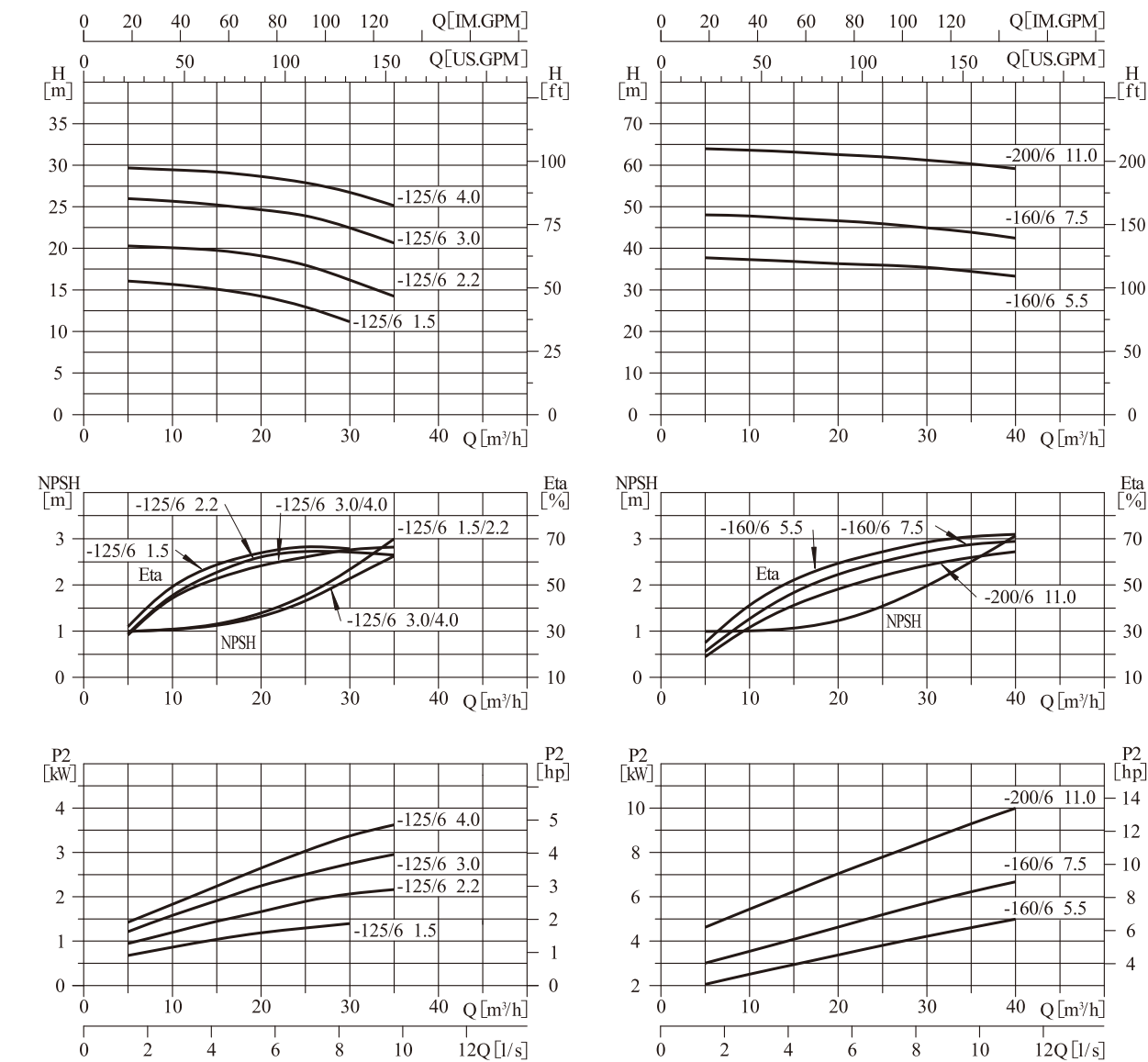
Performance table

Model	Driving motor		Q (m³/h)	3	6.3	9	12.5	15	18	20
	(kW)	(hp)								
ZS50-32-160/6 1.1	1.1	1.5	H (m)	19	18	17.3	16.4			
ZS50-32-160/6 1.5	1.5	2		23.4	22.2	21.2	20	18.8	16.8	
ZS50-32-160/6 2.2	2.2	3		28.6	27.4	26.4	25	24	22.8	
ZS50-32-160/6 3.0	3.0	4		35.6	34.5	33.7	32	30.8	29.3	28.4
ZS50-32-200/6 4.0	4.0	5.5		45	44.1	43.3	42	41.2	40	39.1
ZS50-32-200/6 5.5	5.5	7.5		57.5	56.5	55.7	54	52.5	50.5	49.4

ISO9906 Annex A

ZS65-40 60Hz

ISO9906 Annex A

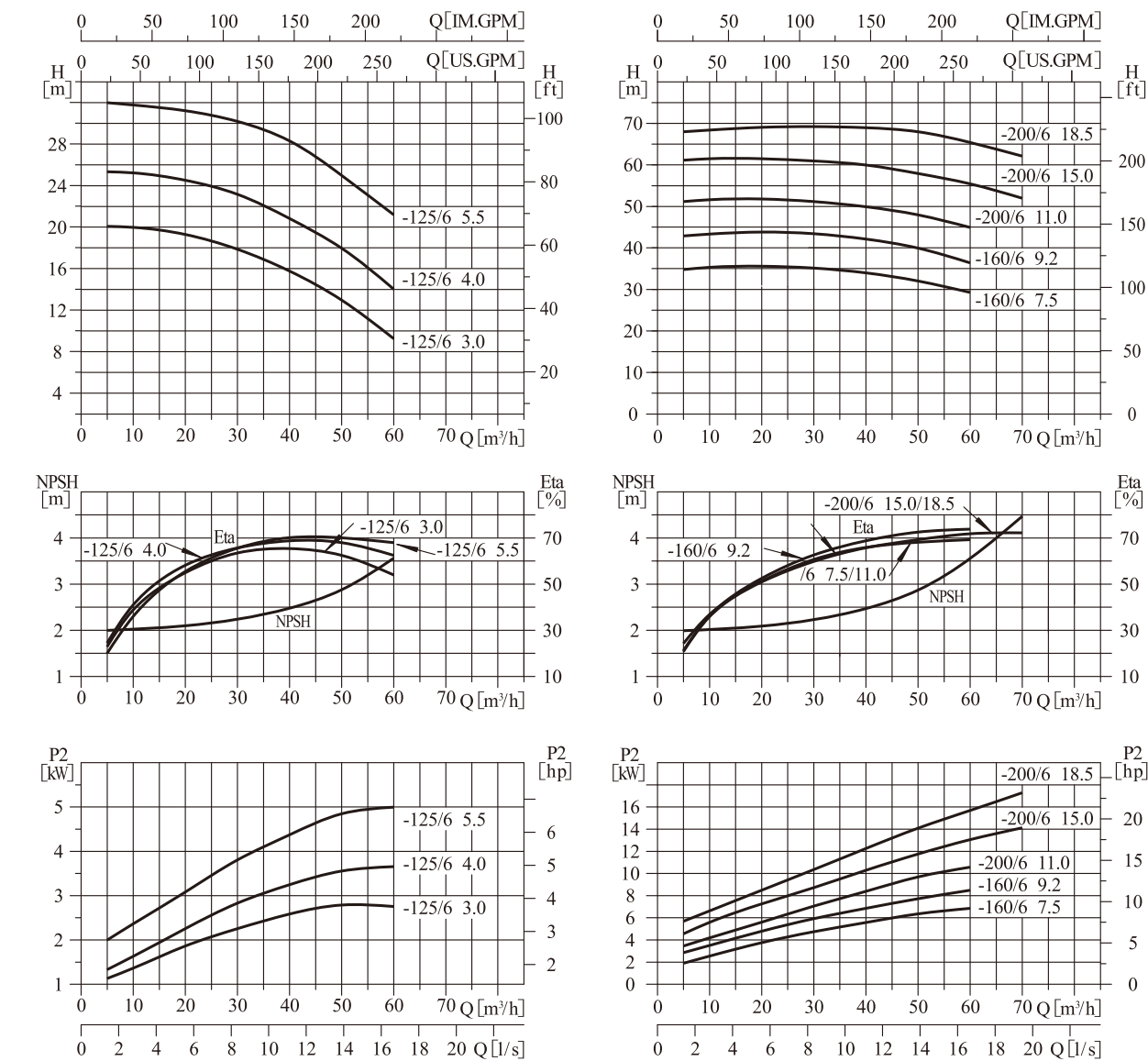


Performance table

Model	Driving motor		Q (m³/h)	5	10	15	20	25	30	35	40
	(kW)	(hp)									
ZS65-40-125/6 1.5	1.5	2	H (m)	16.1	15.6	15.1	14.2	13	11.2		
ZS65-40-125/6 2.2	2.2	3		20.3	20	19.7	19.1	18	16.2	14.3	
ZS65-40-125/6 3.0	3	4		26	25.6	25.2	24.6	24	22.5	20.7	
ZS65-40-125/6 4.0	4	5.5		29.6	29.4	29.1	28.5	28	26.7	25.2	
ZS65-40-160/6 5.5	5.5	7.5		37.8	37.3	36.8	36.3	36	35.5	34.5	33.2
ZS65-40-160/6 7.5	7.5	10		48	47.8	47.2	46.6	46	45	44	42.5
ZS65-40-200/6 11.0	11	15		64	63.6	63.2	62.6	62	61.3	60.5	59.2

ZS65-50 60Hz

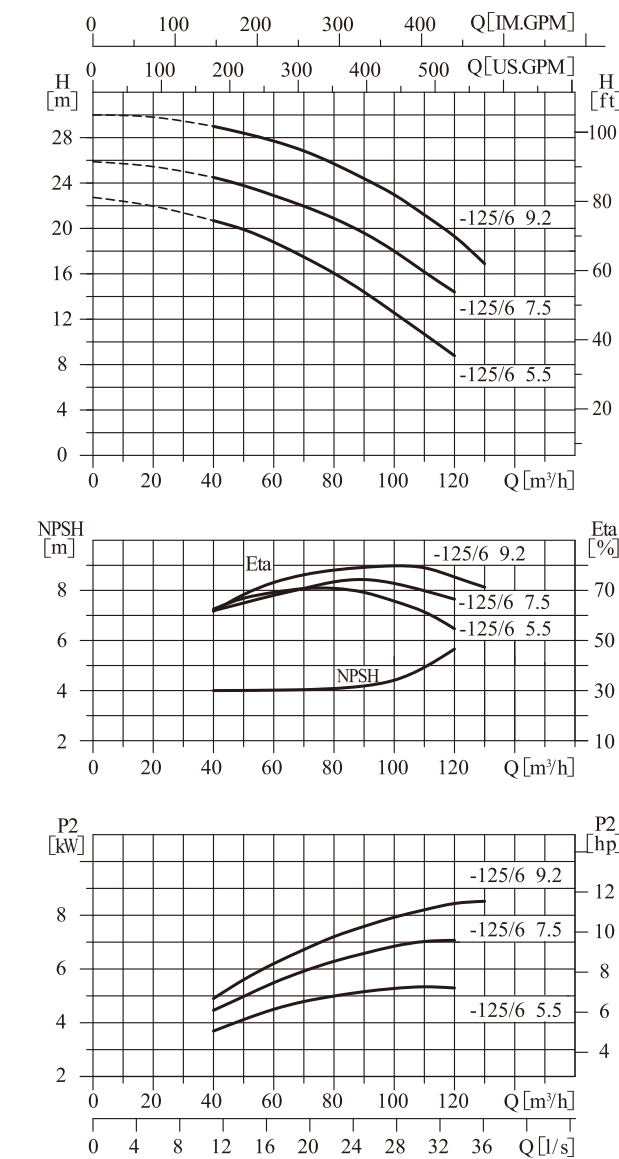
ISO9906 Annex A



Performance table

Model	Driving motor		Q (m³/h)	5	10	20	30	40	50	60	70
	(kW)	(hp)									
ZS65-50-125/6 3.0	3	4	H (m)	20.1	20	19.3	17.9	15.8	13	9.3	
ZS65-50-125/6 4.0	4	5.5		25.3	25.2	24.5	23.2	20.8	18	14.1	
ZS65-50-125/6 5.5	5.5	7.5		32	31.7	31.2	30.2	28.3	25	21.1	
ZS65-50-160/6 7.5	7.5	10		35	35.3	35.8	35.5	34.2	32	29.3	
ZS65-50-160/6 9.2	9.2	12.5		43	43.2	44	43.5	42	40	37	
ZS65-50-200/6 11.0	11	15		51.2	51.6	51.8	51.2	50	48	45	
ZS65-50-200/6 15.0	15	20		61	61.5	61.5	61.3	60	58	55.5	52
ZS65-50-200/6 18.5	18.5	25		68	68.3	69	69.2	68.9	68	65.4	62

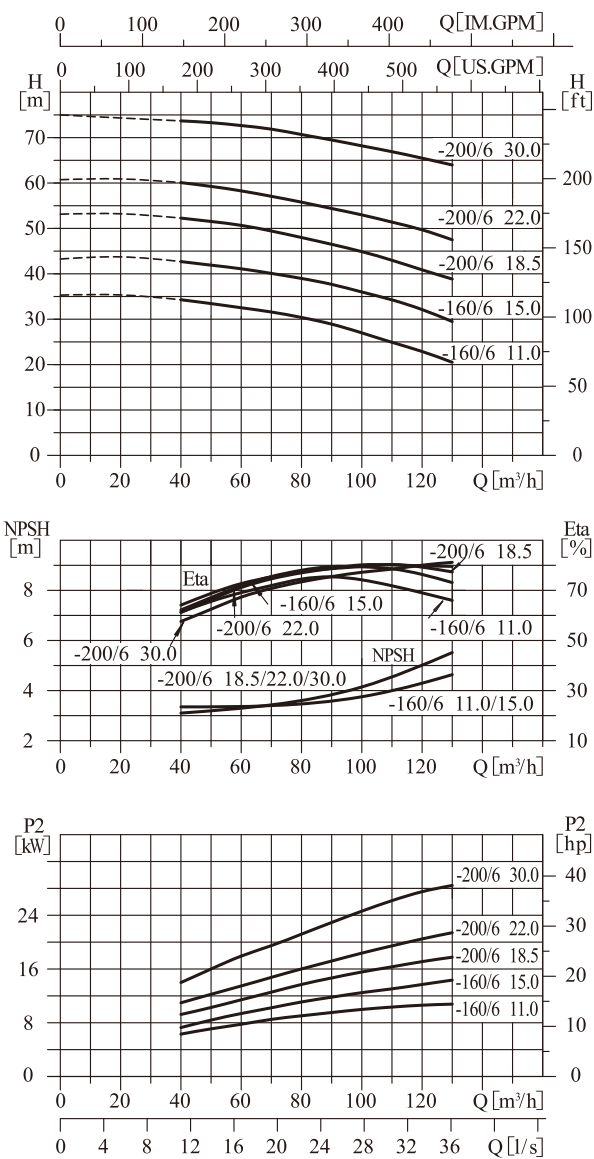
ZS80-65 60Hz



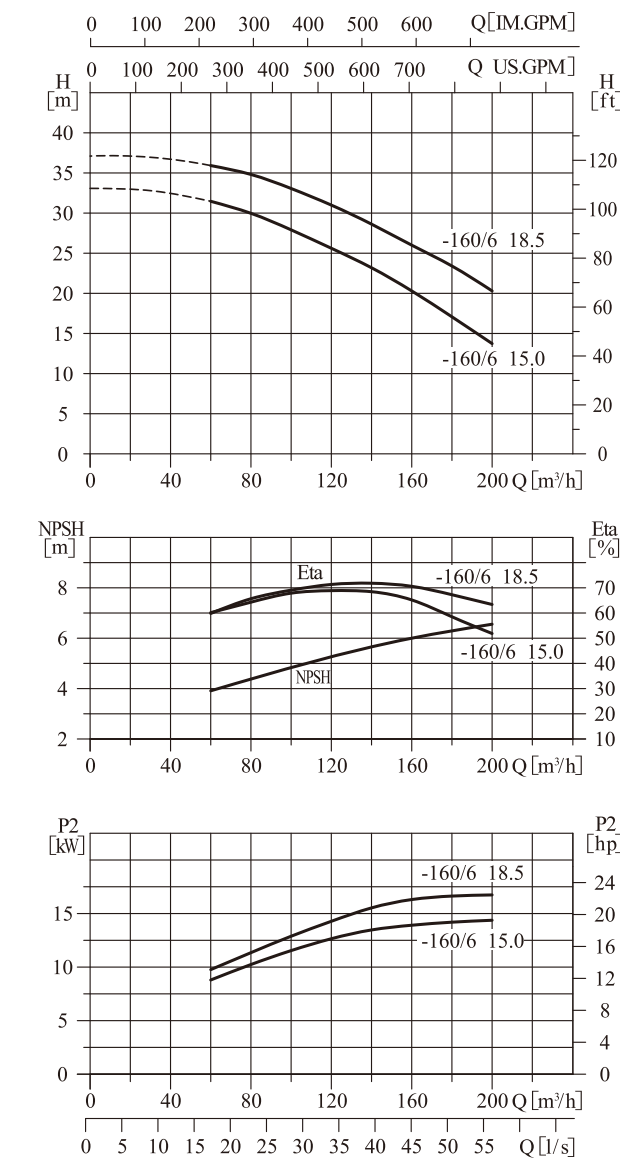
Performance table

Model	Driving motor		Q (m³/h)	40	50	60	70	80	90	100	110	120	130
	(kW)	(hp)											
ZS80-65-125/6 5.5	5.5	7.5	H (m)	20.6	20	18.8	17.4	16.1	14.4	12.5	11	8.8	
ZS80-65-125/6 7.5	7.5	10		24.5	23.7	22.9	22	20.9	19.5	18	15.8	14.4	
ZS80-65-125/6 9.2	9.2	12.5		29	28.4	27.7	27	25.8	24.4	23	21.3	19.3	16.9
ZS80-65-160/6 11.0	11	15		34.3	33.5	32.5	31.6	30.6	29	27	24.7	22.9	20.5
ZS80-65-160/6 15.0	15	20		42.7	41.8	41	40.2	38.8	37.8	36	34.1	32.2	29.5
ZS80-65-200/6 18.5	18.5	25		52.2	51.6	50.8	49.2	47.7	46.3	45	43	40.9	38.9
ZS80-65-200/6 22.0	22	30		60.1	59.2	58.3	57	55.8	54.4	53	51.4	49.7	47.5
ZS80-65-200/6 30.0	30	40		73.7	73.3	73	72.1	70.7	69.5	68	66.8	65.5	64

ISO9906 Annex A



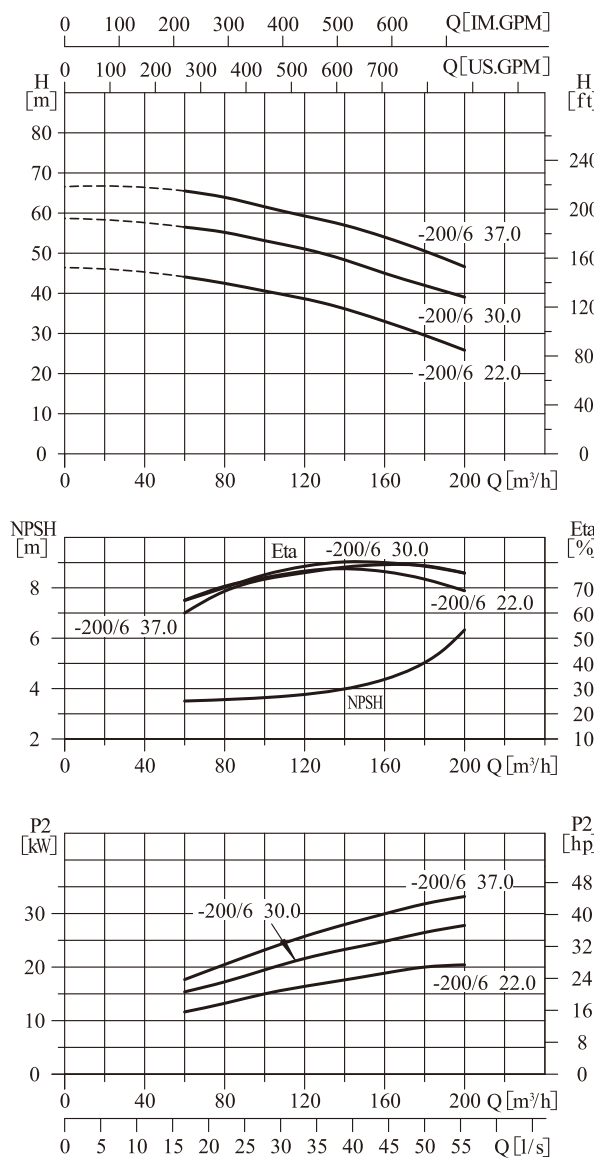
ZS100-80 60Hz



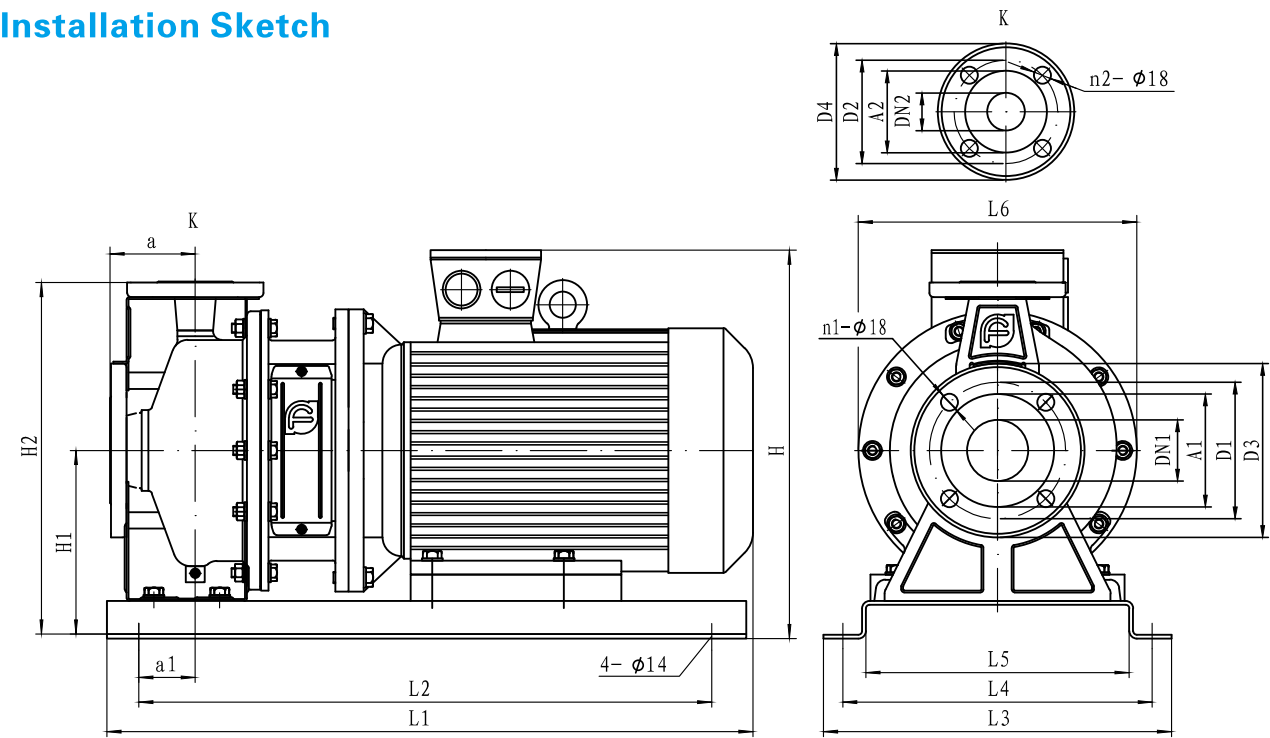
Performance table

Model	Driving motor		Q (m³/h)	60	80	100	120	140	160	180	200
	(kW)	(hp)									
ZS100-80-160/6 15.0	15	20	H (m)	31.5	30	28.4	25.3	23.4	20	16.5	13.7
ZS100-80-160/6 18.5	18.5	25		35.9	34.8	33.1	31	28.6	26	23.5	20.3
ZS100-80-200/6 22.0	22	30		44.1	42.5	40.3	38.5	35.8	33	29.6	25.8
ZS100-80-200/6 30.0	30	40		56.5	55.2	52.7	50.6	48.7	45	42	39.1
ZS100-80-200/6 37.0	37	50		65.5	63.9	61.6	59	57	54	50.5	46.6

ISO9906 Annex A



Installation Sketch



Size and weight

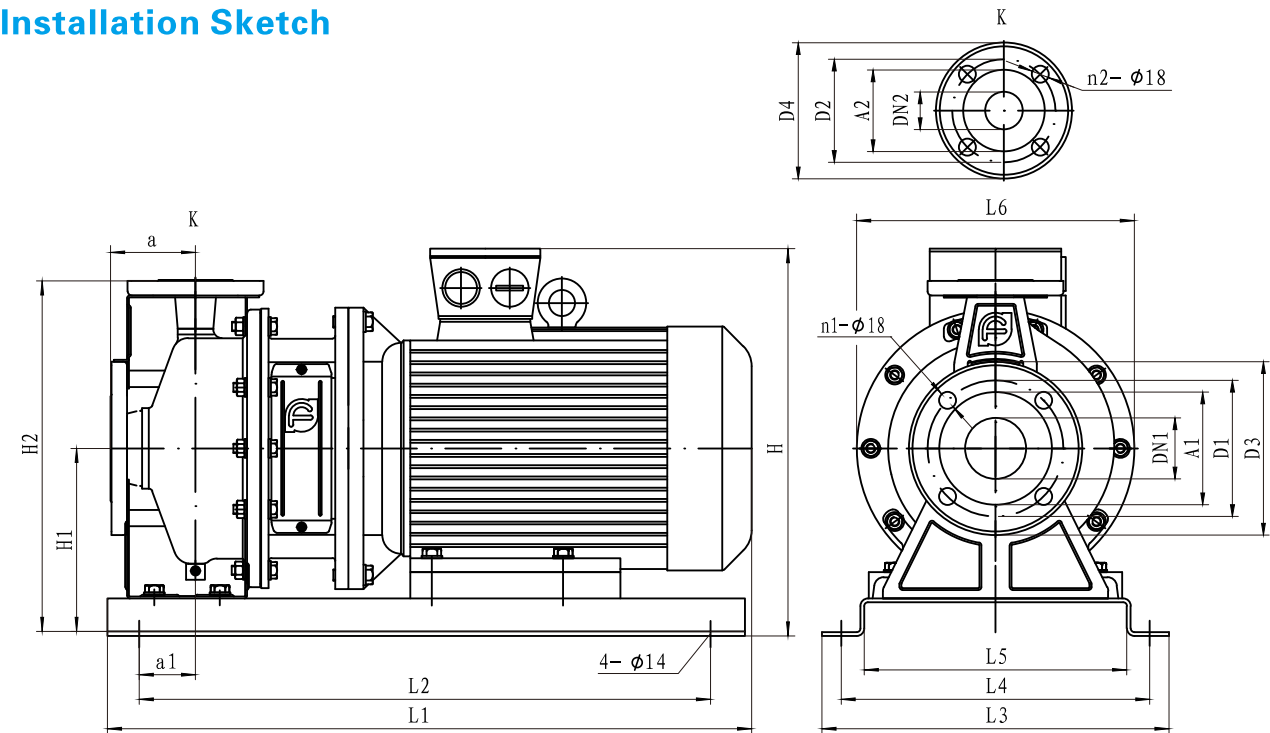
Model	Size (mm)																					Weight (kg)
	DN1	DN2	A1	A2	D1	D2	D3	D4	n1	n2	a	a1	H	H1	H2	L1	L2	L3	L4	L5	L6	
ZS50-32-160/1.1	50	32	98	75	125	100	160	139	4	4	80	32	290	152	296	470	370	280	240	192	210	31
ZS50-32-160/1.5	50	32	98	75	125	100	160	139	4	4	80	46	307	152	296	500	430	280	240	192	210	37
ZS50-32-160/2.2	50	32	98	75	125	100	160	139	4	4	80	46	307	152	296	500	430	280	240	192	210	39
ZS50-32-200/3.0	50	32	98	75	125	100	160	139	4	4	84	42	370	200	386	550	460	330	290	242	300	53
ZS50-32-200/4.0	50	32	98	75	125	100	160	139	4	4	84	47	393	200	386	560	480	330	290	242	300	58
ZS50-32-200/5.5	50	32	98	75	125	100	160	139	4	4	84	50	413	200	386	660	580	370	330	280	300	77
ZS65-40-125/1.5	65	40	118	84	145	110	185	145	4	4	80	45	307	152	294	502	430	280	240	192	210	33
ZS65-40-125/2.2	65	40	118	84	145	110	185	145	4	4	80	45	307	152	294	502	430	280	240	192	210	35
ZS65-40-125/3.0	65	40	118	84	145	110	185	145	4	4	80	45	322	152	294	532	460	300	260	212	250	47
ZS65-40-160/4.0	65	40	118	84	145	110	185	145	4	4	80	45	345	152	294	557	480	330	290	242	250	52
ZS65-40-200/5.5	65	40	118	84	145	110	185	145	4	4	100	50	413	200	380	680	580	370	330	280	300	78
ZS65-40-200/7.5	65	40	118	84	145	110	185	145	4	4	100	50	413	200	380	680	580	370	330	280	300	82
ZS65-40-200/11.0	65	40	118	84	145	110	185	145	4	4	100	50	456	200	380	790	690	420	380	330	350	161
ZS65-50-125/3.0	65	50	118	98	145	125	185	160	4	4	86	45	342	172	338	548	468	330	290	242	250	49
ZS65-50-125/4.0	65	50	118	98	145	125	185	160	4	4	86	45	365	172	338	570	490	330	290	242	250	54
ZS65-50-160/5.5	65	50	118	98	145	125	185	160	4	4	100	50	413	200	380	680	580	370	330	280	300	78
ZS65-50-200/7.5	65	50	118	98	145	125	185	160	4	4	100	50	413	200	380	680	580	370	330	280	300	82
ZS65-50-200/9.2	65	50	118	98	145	125	185	160	4	4	100	50	413	200	380	680	580	370	330	280	300	85
ZS65-50-200/11.0	65	50	118	98	145	125	185	160	4	4	100	50	456	200	380	790	690	420	380	330	350	161
ZS65-50-200/15.0	65	50	118	98	145	125	185	160	4	4	100	50	456	200	380	790	690	420	380	330	350	171
ZS65-50-200/18.5	65	50	118	98	145	125	185	160	4	4	100	50	456	200	380	830	730	420	380	330	350	188

Size and weight

50Hz

Model	Size (mm)																					Weight (kg)
	DN1	DN2	A1	A2	D1	D2	D3	D4	n1	n2	a	a1	H	H1	H2	L1	L2	L3	L4	L5	L6	
ZS80-65-125/5.5	80	65	130	118	160	145	200	185	8	4	100	50	413	200	380	690	590	370	330	280	300	79
ZS80-65-125/7.5	80	65	130	118	160	145	200	185	8	4	100	50	413	200	380	690	590	370	330	280	300	83
ZS80-65-125/9.2	80	65	130	118	160	145	200	185	8	4	100	50	413	200	380	690	590	370	330	280	300	87
ZS80-65-160/11.0	80	65	130	118	160	145	200	185	8	4	100	50	456	200	400	790	690	420	380	330	350	163
ZS80-65-160/15.0	80	65	130	118	160	145	200	185	8	4	100	50	456	200	400	790	690	420	380	330	350	173
ZS80-65-200/18.5	80	65	130	118	160	145	200	185	8	4	100	50	476	220	445	830	730	420	380	330	350	190
ZS80-65-200/22.0	80	65	130	118	160	145	200	185	8	4	100	50	500	220	445	880	780	455	415	365	350	220
ZS80-65-200/30.0	80	65	130	118	160	145	200	185	8	4	100	50	550	240	465	950	850	495	455	405	400	292
ZS100-80-160/11.0	100	80	150	130	180	160	220	200	8	8	125	75	476	220	445	830	730	420	380	330	350	163
ZS100-80-160/15.0	100	80	150	130	180	160	220	200	8	8	125	75	476	220	445	830	730	420	380	330	350	173
ZS100-80-160/18.5	100	80	150	130	180	160	220	200	8	8	125	75	476	220	445	870	770	420	380	330	350	185
ZS100-80-200/22.0	100	80	150	130	180	160	220	200	8	8	125	75	500	220	470	915	810	455	415	365	350	223
ZS100-80-200/30.0	100	80	150	130	180	160	220	200	8	8	125	75	550	240	490	985	880	495	455	405	400	295
ZS100-80-200/37.0	100	80	150	130	180	160	220	200	8	8	125	75	550	240	490	985	880	495	455	405	400	315

Installation Sketch



Size and weight

Model	Size (mm)																					Weight (kg)
	DN1	DN2	A1	A2	D1	D2	D3	D4	n1	n2	a	a1	H	H1	H2	L1	L2	L3	L4	L5	L6	
ZS50-32-160/6 1.1	50	32	98	75	125	100	160	139	4	4	80	32	290	152	296	470	370	280	240	192	210	31
ZS50-32-160/6 1.5	50	32	98	75	125	100	160	139	4	4	80	46	307	152	296	500	430	280	240	192	210	37
ZS50-32-160/6 2.2	50	32	98	75	125	100	160	139	4	4	80	46	307	152	296	500	430	280	240	192	210	39
ZS50-32-160/6 3.0	50	32	98	75	125	100	160	139	4	4	80	46	322	152	296	532	460	300	260	212	250	47
ZS50-32-200/6 4.0	50	32	98	75	125	100	160	139	4	4	84	47	393	200	386	560	480	330	290	242	300	58
ZS50-32-200/6 5.5	50	32	98	75	125	100	160	139	4	4	84	50	413	200	386	660	580	370	330	280	300	77
ZS65-40-125/6 1.5	65	40	118	84	145	110	185	145	4	4	80	45	307	152	294	502	430	280	240	192	210	33
ZS65-40-125/6 2.2	65	40	118	84	145	110	185	145	4	4	80	45	307	152	294	502	430	280	240	192	210	35
ZS65-40-125/6 3.0	65	40	118	84	145	110	185	145	4	4	80	45	322	152	294	532	460	300	260	212	250	47
ZS65-40-125/6 4.0	65	40	118	84	145	110	185	145	4	4	80	45	345	152	294	557	480	330	290	242	250	52
ZS65-40-160/6 5.5	65	40	118	84	145	110	185	145	4	4	100	50	413	200	380	680	580	370	330	280	300	78
ZS65-40-160/6 7.5	65	40	118	84	145	110	185	145	4	4	100	50	413	200	380	680	580	370	330	280	300	82
ZS65-40-200/6 11.0	65	40	118	84	145	110	185	145	4	4	100	50	456	200	380	790	690	420	380	330	350	161
ZS65-50-125/6 3.0	65	50	118	98	145	125	185	160	4	4	86	45	342	172	338	548	468	330	290	242	250	49
ZS65-50-125/6 4.0	65	50	118	98	145	125	185	160	4	4	86	45	365	172	338	570	490	330	290	242	250	54
ZS65-50-125/6 5.5	65	50	118	98	145	125	185	160	4	4	86	37	385	172	338	680	580	370	330	280	300	78
ZS65-50-160/6 7.5	65	50	118	98	145	125	185	160	4	4	86	37	385	172	338	680	580	370	330	280	300	82
ZS65-50-160/6 9.2	65	50	118	98	145	125	185	160	4	4	86	37	385	172	338	680	580	370	330	280	300	85
ZS65-50-200/6 11.0	65	50	118	98	145	125	185	160	4	4	100	50	456	200	380	790	690	420	380	330	350	161
ZS65-50-200/6 15.0	65	50	118	98	145	125	185	160	4	4	100	50	456	200	380	790	690	420	380	330	350	171
ZS65-50-200/6 18.5	65	50	118	98	145	125	185	160	4	4	100	50	456	200	380	830	730	420	380	330	350	188

Size and weight

Model	Size (mm)																					Weight (kg)
	DN1	DN2	A1	A2	D1	D2	D3	D4	n1	n2	a	a1	H	H1	H2	L1	L2	L3	L4	L5	L6	
ZS80-65-125/6 5.5	80	65	130	118	160	145	200	185	8	4	100	50	413	200	380	690	590	370	330	280	300	79
ZS80-65-125/6 7.5	80	65	130	118	160	145	200	185	8	4	100	50	413	200	380	690	590	370	330	280	300	83
ZS80-65-125/6 9.2	80	65	130	118	160	145	200	185	8	4	100	50	413	200	380	690	590	370	330	280	300	87
ZS80-65-160/6 11.0	80	65	130	118	160	145	200	185	8	4	100	50	456	200	400	790	690	420	380	330	350	163
ZS80-65-160/6 15.0	80	65	130	118	160	145	200	185	8	4	100	50	456	200	400	790	690	420	380	330	350	173
ZS80-65-200/6 18.5	80	65	130	118	160	145	200	185	8	4	100	50	476	220	445	830	730	420	380	330	350	190
ZS80-65-200/6 22.0	80	65	130	118	160	145	200	185	8	4	100	50	500	220	445	880	780	455	415	365	350	220
ZS80-65-200/6 30.0	80	65	130	118	160	145	200	185	8	4	100	50	550	240	465	950	850	495	455	405	400	292
ZS100-80-160/6 15.0	100	80	150	130	180	160	220	200	8	8	125	75	476	220	445	830	730	420	380	330	350	173
ZS100-80-160/6 18.5	100	80	150	130	180	160	220	200	8	8	125	75	476	220	445	870	770	420	380	330	350	185
ZS100-80-200/6 22.0	100	80	150	130	180	160	220	200	8	8	125	75	500	220	470	915	810	455	415	365	350	223
ZS100-80-200/6 30.0	100	80	150	130	180	160	220	200	8	8	125	75	550	240	490	985	880	495	455	405	400	295
ZS100-80-200/6 37.0	100	80	150	130	180	160	220	200	8	8	125	75	550	240	490	985	880	495	455	405	400	315

60Hz

MEMO

[illegible]

MEMO

[illegible]