



## Servo System

Version 2024



NINGBO HAITIAN DRIVE SYSTEMS CO., LTD.

NINGBO HAITIAN DRIVE TECHNOLOGY CO., LTD.

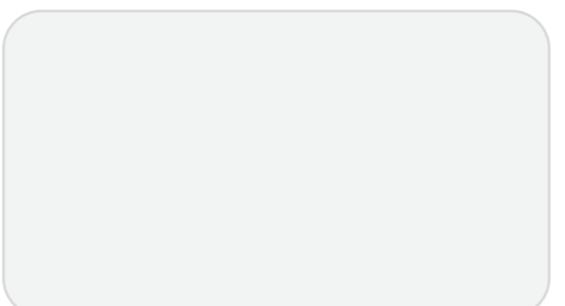
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Haitian Drive Sales Branch



2024/04

Sample parameters are subject to update without prior notice.  
The Company reserves the right of final interpretation for sample parameter update.

[www.haitiandrive.com](http://www.haitiandrive.com)

**DRIVE YOUR EXCELLENCE**



## PROFILE

### About Haitian Drive

Ningbo Haitian Drive Systems Co., Ltd. is one of the six pillar industries of Haitian Group. Relying on the platform advantage of Haitian Group, Haitian Drive Systems produces products covering servo control systems (servo motor, servo drive and controller), hydraulic transmission (hydraulic motor, hydraulic pump, hydraulic valve and hydraulic system) and automation (functional components such as servo operator, robot, magnetic template and linear guide pair). Focusing on the transformation and upgrading of the manufacturing industry and the electrification of non-road mobile machinery, Haitian Drive Systems gives full play to the integrated advantages of complete products and independent R&D and manufacturing, and provides partners with efficient, energy-saving, and precise core components and hydromechatronics solutions.

### Haitian Drive Systems: DRIVE YOUR EXCELLENCE

Drive your products:

Through efficient and energy-saving servo control system; stable and precise functional components; and flexible hydraulic motor with high-power density, make your products more stable and efficient.

Drive your equipment:

We are a professional electric drive system supplier, providing intelligent and electrified non-road mobile machinery solutions, making your products more environmentally friendly, efficient and intelligent, and jointly promoting the realization of the national carbon peak and carbon neutrality goals.

Drive your production:

We are a professional manufacturer of servo operators and electronically controlled permanent magnet products, providing automation solutions around machinery. We are here to create a stable, efficient and flexible intelligent production line for you.



## BRAND

### Professional servo system supplier in China

Haitian Drive Systems is committed to becoming a professional manufacturer of high-end servo systems, providing customers with efficient, stable and precise energy-saving power products. At present, Haitian Drive Systems produces 120,000 sets of medium and high power servo systems annually, and so far, the total supply has exceeded 1 million sets. Its technical level and manufacturing strength are leading in China.

### Technology and R&D strength

The power of the servo drive produced by the Company covers 5.5kW-355kW, the rated power of AC permanent magnet servo motor covers 0.4kW-500kW, the rated torque covers 2.2Nm-50,000Nm, and the rated speed covers 10rpm-20,000rpm. At present, all series of servo systems have been widely used in injection molding, die casting, aluminum extrusion and hydraulic fields.

DRIVE YOUR EXCELLENCE



Imported Automatic Stator Production Line



Automatic Rotor Module Production Line

## Production Equipment

The main plant (put into operation in July 2015) of Haitian Drive Systems for servo products covers an area of 21,000m<sup>2</sup>. Equipped with the leading domestic manufacturing technology and equipment. The annual output of the motor is 120,000 units, and that of drives is 60,000 units. The plant with more than 800 employees takes a front rank in China.



Automatic Robot Paint Spraying Assembly Line



Epoxy resin vacuum pouring automatic line



Vacuum dip paint production line



Robot shell hot sleeve assembly line

## Introduction to the Servo System of Haitian Drive Systems

Haitian Drive Systems is a professional manufacturer with independent intellectual property rights in China. In 2004, the first set of hydraulic servo system was successfully developed and quickly applied to the injection molding machine industry. Haitian Drive Systems has been committed to providing first-class servo system solutions in different fields such as electro-hydraulic servo, electric servo and precision motion control. The combination of components such as servo motors, drives and oil pumps is rich and flexible, which can meet different needs such as economical, high-performance, cost-effective, and professional customization.

## Servo system features

## [ Complete Specifications ]

## [ Specialized Breakdown ]

[ Stable and Reliable ]



伺服系统

[ Flexible Selection ]

**4** The multi-function drive supports a variety of encoders, including resolvers, optical encoders, sine cosine encoders, absolute encoders, etc., and can be equipped with high-speed buses such as EtherCAT and CANBUS, and the servo system has strong expansion capabilities.

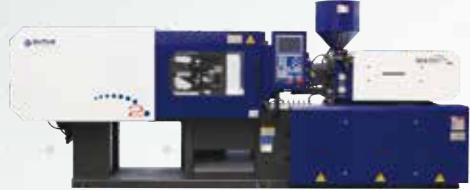
[ Networking ]

3

## [ Outstanding Performance ]

## Industry Application

### Electro-hydraulic



### Injection Molding Machine

The special servo power system for injection molding machine covers the power range of 5.5-160kW, and the system pressure covers 14MPa, 17.5MPa, 21MPa, etc. Substantial increase of equipment system pressure (up to 20MPa or more), rich bus interface and optimized control scheme make the whole system realize faster speed, higher precision and more reliable and stable performance. The system can meet the performance requirements of different types of injection molding machines, such as high-speed machines (with an injection acceleration >0.5g. When unloaded, the speed is 0-2,000rpm and the acceleration time is 25ms and when loaded, the speed is 450-2000rpm and the acceleration time is up to 50ms), all-electric injection molding machines, oil-electric hybrid (all series of electric pre-molding servo power system).



### Aluminum Extruder

For the aluminum extruder industry, Haitian Drive Systems has launched a hydraulic servo power system consisting of high-pressure internal gear pumps, high-performance embedded servo motors, and a full series of liquid cooling/air-cooled high-power servo drives, which is characterized by high system pressure, high efficiency, low cost, high degree of standardization, high fouling resistance, low noise, and high reliability, and enables the extruders to operate more efficiently (up to 5%-15% increase in production efficiency), save electricity and energy (energy saving rate up to 30% or more), and greatly reduce the noise of equipment operation and the scrap rate of aluminum, etc. Able to greatly shorten the supply cycle and improve the response speed of after-sales service, the highly standardized configuration solution (the best system solution in China at present) of Haitian Drive Systems provides strong guarantee for equipment manufacturers and equipment users.

### Die Casting Machine

For the die-casting machine industry with relatively harsh working conditions and high ambient temperatures, Haitian Drive Systems can provide liquid cooling inline servo motors for die-casting machines from 130mm-445mm (10-3000N.m), covering liquid cooling servo motors with different structures, such as parallel key, spline, single- and double-outlet shafts, etc. The inline structure greatly improves the motor's weak-magnetic over-speed performance, anti-demagnetization capability, and overload characteristics (short-term overloads can be up to 3 times higher at speeds below 80% of the rated speed) to ensure that the die-casting machine operates with high efficiency, high precision, high response, high reliability and other advantages.



### Hydraulic Press

For the hydraulic press industry, it can provide complete system-level solutions, including customizable human-machine interaction interface, special hydraulic press motion controller and expansion module, high-performance hydraulic servo power system feedback components, and remote Internet of Things system, which can realize pressure control accuracy up to 1 bar and position control accuracy of 0.05mm on different types of hydraulic press equipment, and support a variety of pressing modes (sheet stamping, drawing, counter-drawing, precision stamping, etc.). With the Internet of Things system of Haitian Drive Systems, the Press can also realize remote equipment monitoring, remote data collection and analysis, remote maintenance and other remote service functions. The Press currently serves many large hydraulic equipment manufacturers and hydraulic equipment users in China, and has been unanimously recognized in the industry.

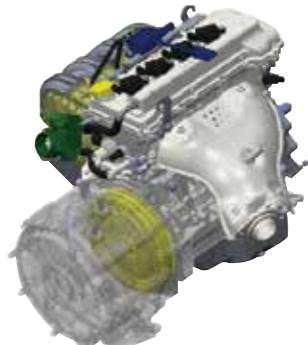
### Electric Drive



### Servo Punch

For the punch industry, Haitian Drive Systems can provide a complete system-level solution, including customizable human-computer interaction interface, special motion controller and expansion module for punch, high-performance electric drive servo power system, feedback components and remote Internet of Things system, Haitian Drive Systems can greatly reduce the impact of equipment operation, reduce equipment operation noise, improve equipment production efficiency and reduce energy consumption compared with the traditional ordinary punch power system scheme. With the punch servo system of Haitian Drive Systems, a variety of forming curves (punching, pressure holding, vibration, embossing, etc.) have been planned, which greatly improves production efficiency while improving the quality of finished products.

### New Energy Vehicle Motor



### New Energy Vehicle Motor

For the extended-range new energy vehicle industry, Haitian Drive Systems has launched the extended-range starter generator designed in high efficiency and light Mass, which is perfectly matched with the engine and gas mechanically. The peak efficiency reaches over 96%, with high efficiency zone accounting for over 80%. In addition to the best-in-class continuous output power density and peak power density, the product has invention patent technology support, suitable for the process structure design of automated production. After professional and systematic product development, verification and quality control, it has excellent product quality and life. It provides energy-efficient, high-comfort, compact and beautiful starting power generation system for matching vehicle models.

### Non-road Mobile Machinery



### Permanent Magnet Power System

(permanent magnet motor + drive + vehicle controller)

In addition to system solutions for the non-road mobile machinery industry, Haitian Drive Systems can carry out in-depth customization of products and output of application solutions according to the functional requirements of customers. With a professional permanent magnet motor and electronic control design and development team, as well as complete test equipment and test site, Haitian Drive Systems can match the permanent magnet motor and electronic control in depth to ensure that the permanent magnet power system plays high-efficiency and energy-saving features. According to the product characteristics of the non-road mobile machinery, Haitian Drive Systems has senior application engineers to provide unique product consulting and product application services. At present, the permanent magnet power system of Haitian Drive Systems has been used in stacker trucks, pallet trucks, counterbalanced forklifts, loaders and other products, and has been recognized by many domestic OEMs in off-road mobile machinery industry.

## Servo Motor

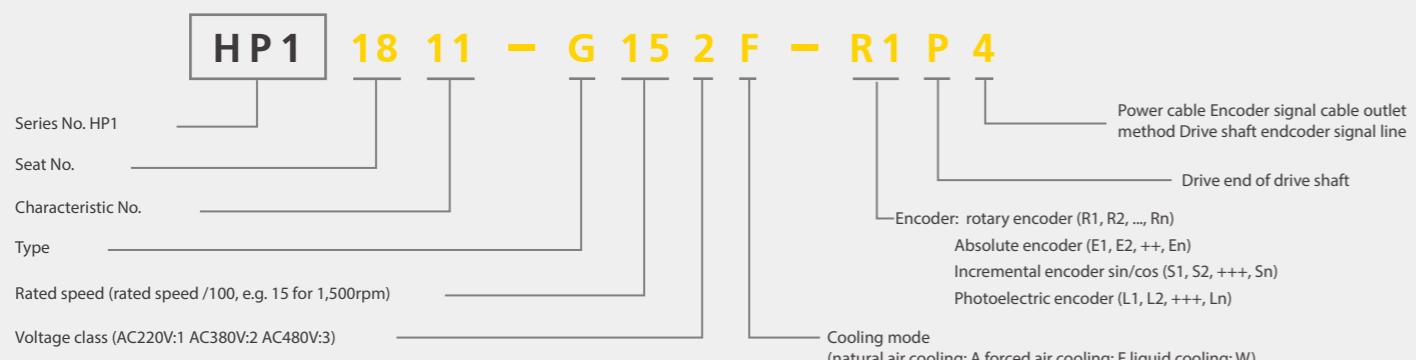


### Characteristics

The servo motor of Haitian Drive Systems has completely independent intellectual property rights. Characterized by high efficiency, high response, high precision, rich varieties, etc., it meets the power output, precision positioning, fast response, energy saving and other different needs of various industries. Meanwhile, Haitian Drive Systems can customize special motors according to the customer's needs. The motor can be widely used in servo motion control, air compressor, new energy and other occasions. The product characteristics are as follows:

- > Wide range, with frame covering 13, 18, 20, 25, 29, 30 and 45, including natural cooling, air cooling and liquid cooling;
- > Imported bearings, high-performance silicon steel sheets, high-performance magnets, high-temperature-resistant enameled wires, and high-precision feedback components;
- > The patented built-in structure technology with strong ability to weaken the magnetic field and overspeed and resist demagnetization reduces the eddy current and temperature of the rotor and improves the reliability of the rotor at high speed;
- > Low cogging torque and torque pulsation, high control accuracy;
- > 2.3-3.0 times of short-term overload below 80% of rated speed, and 1.6-2.0 times of short-term overload of rated speed;
- > Overspeed to more than 2 times the rated speed of operation;
- > High efficiency and wide efficiency area;
- > Large torque-to-moment inertia ratio, fast response speed and strong rigidity (0-2,000rpm no-load acceleration time 10-20ms);
- > Patent technology of integrated air-cooled casing, high heat dissipation efficiency, compact and beautiful structure;
- > Lean production and comprehensive quality control, excellent product quality and long life.

### Model naming rules



## Technical Parameters

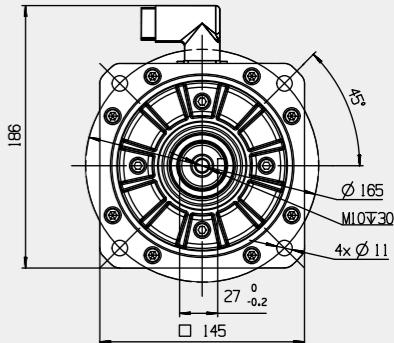
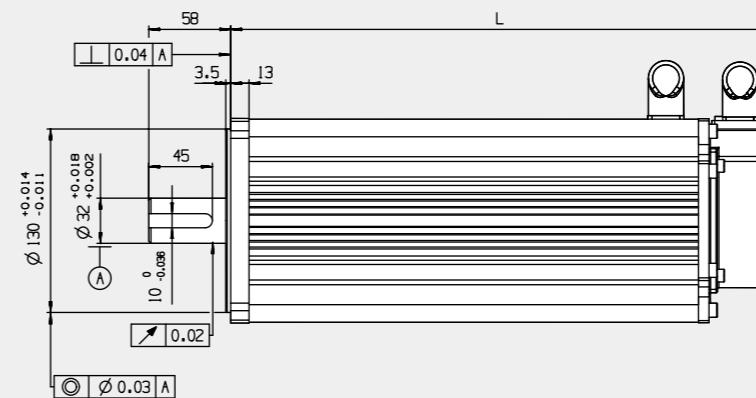
### HP113-A

Model	Rated torque (Nm)	Rated current (A)	KT (Nm/A)	Rated power (kW)	Rated speed (rpm)	EMK (V)	Voltage class (V)	Rated frequency f(Hz)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP11309-G152A- □□□□	10.5	3.7	2.8	1.6	1500	304	380	100	1.29	16
HP11312-G152A- □□□□	14	4.8	2.9	2.2	1500	305	380	100	1.62	18
HP11315-G152A- □□□□	17.5	6.2	2.8	2.7	1500	304	380	100	1.96	20
HP11318-G152A- □□□□	21	7.0	3.0	3.3	1500	310	380	100	2.3	22
HP11321-G152A- □□□□	24.5	8.2	3.0	3.8	1500	318	380	100	2.64	24
HP11324-G152A- □□□□	28	9.7	2.9	4.4	1500	303	380	100	2.98	26
HP11309-G202A- □□□□	10	4.6	2.2	2.1	2000	307	380	133.3	1.29	16
HP11312-G202A- □□□□	13.5	6.0	2.2	2.8	2000	309	380	133.3	1.62	18
HP11315-G202A- □□□□	16.5	7.7	2.1	3.5	2000	304	380	133.3	1.96	20
HP11318-G202A- □□□□	20	9.2	2.2	4.2	2000	304	380	133.3	2.3	22
HP11321-G202A- □□□□	23.5	10.5	2.2	4.9	2000	311	380	133.3	2.64	24
HP11324-G202A- □□□□	26	12.0	2.2	5.4	2000	307	380	133.3	2.98	26
HP11309-G302A- □□□□	9	6.2	1.5	2.8	3000	304	380	200	1.29	16
HP11312-G302A- □□□□	12	8.3	1.4	3.8	3000	305	380	200	1.62	18
HP11315-G302A- □□□□	15	10.3	1.5	4.7	3000	304	380	200	1.96	20
HP11318-G302A- □□□□	18	12.3	1.5	5.7	3000	310	380	200	2.3	22
HP11321-G302A- □□□□	21	14.0	1.5	6.6	3000	318	380	200	2.64	24
HP11324-G302A- □□□□	24	16.0	1.5	7.5	3000	315	380	200	2.98	26
HP11309-G352A- □□□□	8.5	7.0	1.2	3.1	3500	301	380	233.3	1.29	16
HP11312-G352A- □□□□	11	8.5	1.3	4.0	3500	314	380	233.3	1.62	18
HP11315-G352A- □□□□	14	11.5	1.2	5.1	3500	302	380	233.3	1.96	20
HP11318-G352A- □□□□	17	13.0	1.3	6.2	3500	319	380	233.3	2.3	22
HP11321-G352A- □□□□	19.5	15.0	1.3	7.1	3500	322	380	233.3	2.64	24
HP11324-G352A- □□□□	22	17.3	1.3	8.1	3500	311	380	233.3	2.98	26

Operating conditions: switching frequency of driver≥4kHz

### Test condition:

- > Motor tested in horizontal position in free still air, ambient temperature 30°C
- > Motor flanged (Tflange = 30°C)
- > Typical data tolerance ±10%
- > Threshold of built in PTC 130°C
- > Switching frequency 8kHz



Motor Code	HP11309	HP11312	HP11315	HP11318	HP11321	HP11324
L	250	276	302	328	354	380

## Technical Parameters

### HP118-A

Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP11803-H152A-□□□□□	26	7	3.5	4.1	1500	100	380	330	5.3	30
HP11804-H152A-□□□□□	39	12	3.3	6.1	1500	100	380	315	7.5	36
HP11805-H152A-□□□□□	52	15	3.5	8.2	1500	100	380	330	9.6	42
HP11807-H152A-□□□□□	65	20	3.3	10.2	1500	100	380	300	11.8	48
HP11808-H152A-□□□□□	78	24	3.3	12.3	1500	100	380	315	13.9	54
HP11803-H182A-□□□□□	26	9	2.8	4.9	1800	120	380	324	5.3	30
HP11804-H182A-□□□□□	39	14	2.8	7.4	1800	120	380	324	7.5	36
HP11805-H182A-□□□□□	52	19	2.8	9.8	1800	120	380	324	9.6	42
HP11807-H182A-□□□□□	65	23	2.8	12.3	1800	120	380	315	11.8	48
HP11808-H182A-□□□□□	78	28	2.8	14.7	1800	120	380	324	13.9	54
HP11803-H202A-□□□□□	26	10	2.6	5.4	2000	133.3	380	320	5.3	30
HP11804-H202A-□□□□□	39	15	2.5	8.2	2000	133.3	380	300	7.5	36
HP11805-H202A-□□□□□	52	21	2.5	10.9	2000	133.3	380	320	9.6	42
HP11807-H202A-□□□□□	65	26	2.5	13.6	2000	133.3	380	300	11.8	48
HP11808-H202A-□□□□□	78	31	2.5	16.3	2000	133.3	380	300	13.9	54

Operating conditions: Drive switching frequency  $\geq 4\text{kHz}$

#### Test condition:

- > Motor tested in horizontal position in free still air, ambient temperature 30°C
- > Motor flanged (Tflange = 30°C)
- > Typical data tolerance  $\pm 10\%$
- > Threshold of built in PTC 130°C
- > Switching frequency 8kHz

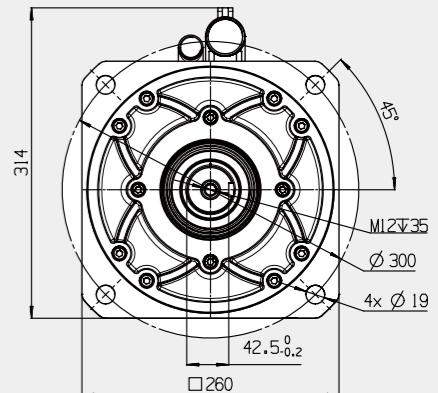
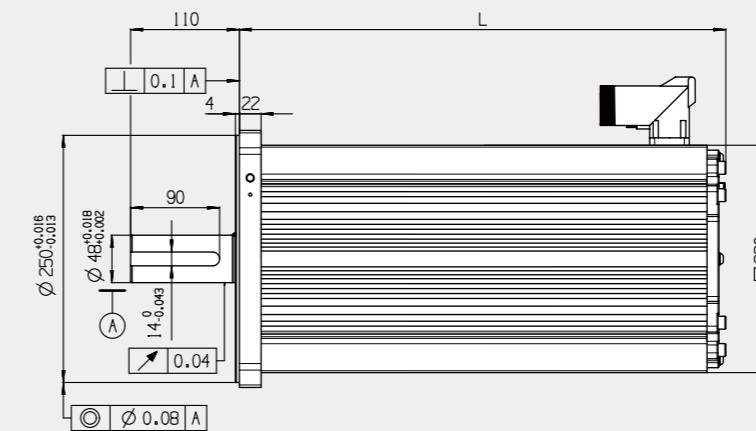
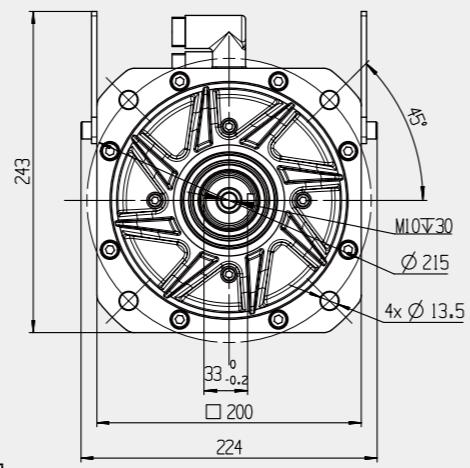
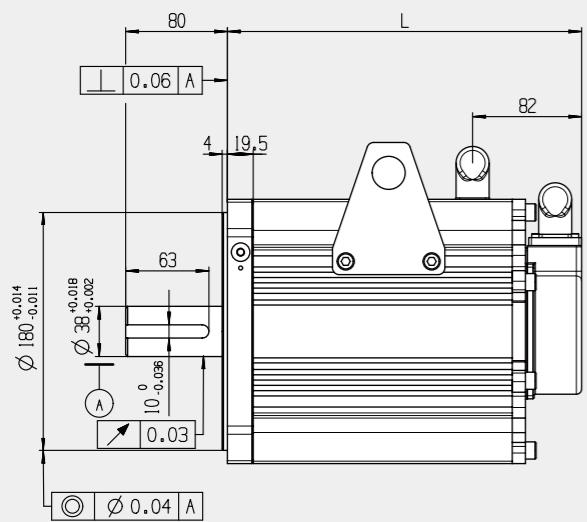
### HP120-A

Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP12008-H152A-□□□□□	50	15	3.3	7.9	1500	100	380	307	15	57
HP12012-H152A-□□□□□	75	23	3.3	11.8	1500	100	380	307	21	70
HP12016-H152A-□□□□□	100	31	3.3	15.7	1500	100	380	307	26	83
HP12020-H152A-□□□□□	125	37	3.4	19.6	1500	100	380	320	32	93
HP12024-H152A-□□□□□	150	46	3.3	23.6	1500	100	380	307	37	106
HP12008-H182A-□□□□□	50	18	2.7	9.4	1800	120	380	307	15	57
HP12012-H182A-□□□□□	75	26	2.8	14.1	1800	120	380	323	21	70
HP12016-H182A-□□□□□	100	37	2.7	18.8	1800	120	380	307	26	83
HP12020-H182A-□□□□□	125	46	2.7	23.6	1800	120	380	307	32	93
HP12024-H182A-□□□□□	150	53	2.8	28.3	1800	120	380	323	37	106
HP12008-H202A-□□□□□	50	21	2.4	10.5	2000	133.3	380	307	15	57
HP12012-H202A-□□□□□	75	31	2.4	15.7	2000	133.3	380	307	21	70
HP12016-H202A-□□□□□	100	41	2.4	20.9	2000	133.3	380	307	26	83
HP12020-H202A-□□□□□	125	49	2.5	26.2	2000	133.3	380	320	32	93
HP12024-H202A-□□□□□	150	62	2.4	31.4	2000	133.3	380	307	37	106

Operating conditions: Drive switching frequency  $\geq 4\text{kHz}$

#### Test condition:

- > Motor tested in horizontal position in free still air, ambient temperature 30°C
- > Motor flanged (Tflange = 30°C)
- > Typical data tolerance  $\pm 10\%$
- > Threshold of built in PTC 130°C
- > Switching frequency 8kHz



Motor Code	HP11803	HP11804	HP11805	HP11807	HP11808
L	268	304	340	376	412

Motor Code	HP12008	HP12012	HP12016	HP12020	HP12024
L	342	392	442	492	542

## Technical Parameters

### HP125-A

Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP12513-G152A- □□□□□	84	26	3.2	13.2	1500	100	380	307	29.4	80
HP12517-G152A- □□□□□	104	32	3.3	16.3	1500	100	380	317	37.8	92
HP12521-G152A- □□□□□	120	39	3.1	18.8	1500	100	380	310	46.2	103
HP12525-G152A- □□□□□	132	42	3.1	20.7	1500	100	380	304	54.6	115
HP12513-G182A- □□□□□	78	28	2.8	14.7	1800	120	380	328	29.4	80
HP12517-G182A- □□□□□	96	36	2.7	18.0	1800	120	380	326	37.8	92
HP12521-G182A- □□□□□	110	42	2.6	20.7	1800	120	380	305	46.2	103
HP12525-G182A- □□□□□	120	45	2.7	22.6	1800	120	380	324	54.6	115
HP12513-G202A- □□□□□	72	30	2.4	15.0	2000	133.3	380	319	29.4	80
HP12517-G202A- □□□□□	88	38	2.3	18.5	2000	133.3	380	302	37.8	92
HP12521-G202A- □□□□□	100	43	2.3	21.0	2000	133.3	380	301	46.2	103
HP12525-G202A- □□□□□	108	46	2.3	22.6	2000	133.3	380	315	54.6	115

Operating conditions: Drive switching frequency  $\geq 4\text{kHz}$

#### Test condition:

- > Motor tested in horizontal position in free still air, ambient temperature 30°C
- > Motor flanged (Tflange = 30°C)
- > Typical data tolerance  $\pm 10\%$
- > Threshold of built in PTC 130°C
- > Switching frequency 8kHz

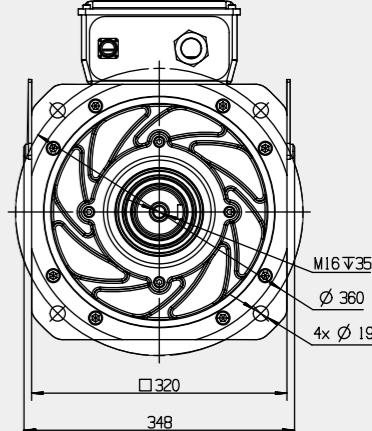
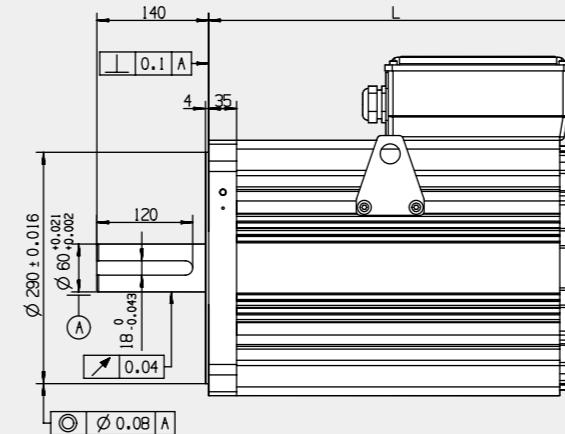
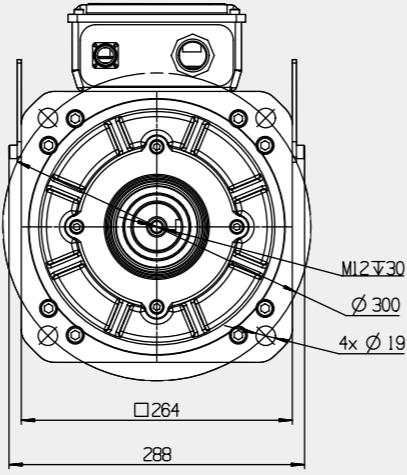
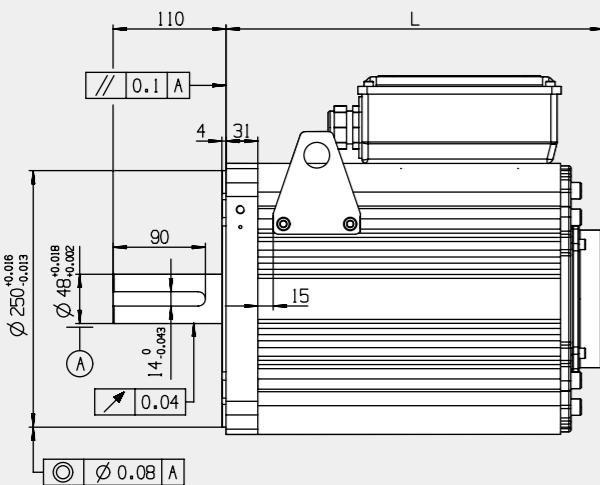
### HP129-A

Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP12927-G152A- □□□□□	150	46	3.3	24	1500	150	380	311	0.125	117
HP12936-G152A- □□□□□	200	65	3.1	31	1500	150	380	290	0.163	137
HP12945-G152A- □□□□□	250	75	3.3	39	1500	150	380	311	0.200	156
HP12954-G152A- □□□□□	300	91	3.3	47	1500	150	380	311	0.239	180
HP12927-K182A- □□□□□	150	51	3.0	28	1800	180	380	335	0.125	117
HP12936-G182A- □□□□□	200	76	2.6	38	1800	180	380	298	0.163	137
HP12945-G182A- □□□□□	250	91	2.8	47	1800	180	380	311	0.200	156
HP12954-K182A- □□□□□	300	101	3.0	57	1800	180	380	336	0.239	180
HP12927-G202A- □□□□□	150	61	2.5	31	2000	200	380	311	0.125	117
HP12936-K202A- □□□□□	200	76	2.6	42	2000	200	380	331	0.163	137
HP12945-G202A- □□□□□	250	101	2.5	52	2000	200	380	311	0.200	156
HP12954-G202A- □□□□□	300	130	2.3	63	2000	200	380	290	0.239	180

Operating conditions: Drive switching frequency  $\geq 4\text{kHz}$

#### Test condition:

- > Motor tested in horizontal position in free still air, ambient temperature 30°C
- > Motor flanged (Tflange = 30°C)
- > Typical data tolerance  $\pm 10\%$
- > Threshold of built in PTC 130°C
- > Switching frequency 8kHz



Motor Code	HP12513	HP12517	HP12521	HP12525
L	368	408	448	488

Motor Code	HP12927	HP12936	HP12945	HP12954
L	379	424	469	529

## Technical Parameters

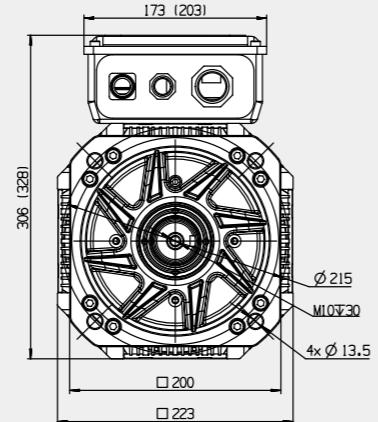
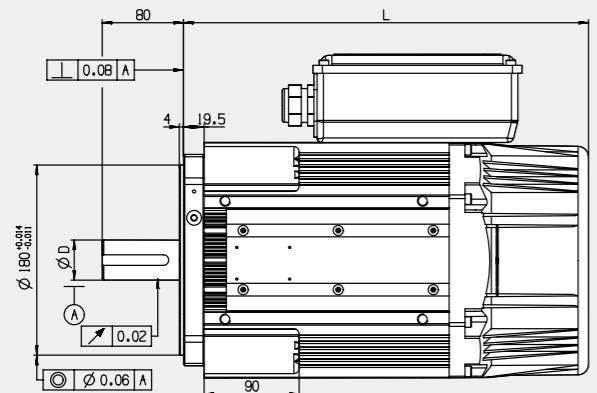
### HP118-F

Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)	
HP11803-H152F-□□□□□	49	14	3.5	7.7	1500	100	380	330	5.3	33
HP11804-H152F-□□□□□	73.5	22	3.3	11.5	1500	100	380	315	7.5	40
HP11805-H152F-□□□□□	98	28	3.5	15.4	1500	100	380	330	9.6	45
HP11807-H152F-□□□□□	122.5	37	3.3	19.2	1500	100	380	300	11.8	53
HP11808-H152F-□□□□□	147	45	3.3	23.1	1500	100	380	315	13.9	59
HP11810-H152F-□□□□□	171.5	51	3.4	26.9	1500	100	380	315	16	66
HP11811-H152F-□□□□□	196	60	3.3	30.8	1500	100	380	300	18.2	73
HP11812-H152F-□□□□□	220.5	67	3.3	34.6	1500	100	380	304	20.3	81
HP11814-N152F-□□□□□	245	70	3.5	38.5	1500	100	380	338	22.5	87
HP11803-H182F-□□□□□	49	18	2.8	9.2	1800	120	380	324	5.3	33
HP11804-H182F-□□□□□	73.5	26	2.8	13.9	1800	120	380	324	7.5	40
HP11805-H182F-□□□□□	98	35	2.8	18.5	1800	120	380	324	9.6	45
HP11807-H182F-□□□□□	122.5	44	2.8	23.1	1800	120	380	315	11.8	53
HP11808-H182F-□□□□□	147	53	2.8	27.7	1800	120	380	324	13.9	59
HP11810-H182F-□□□□□	171.5	62	2.8	32.3	1800	120	380	315	16	66
HP11811-H182F-□□□□□	196	70	2.8	36.9	1800	120	380	324	18.2	73
HP11812-H182F-□□□□□	220.5	79	2.8	41.6	1800	120	380	324	20.3	81
HP11814-H182F-□□□□□	245	89	2.8	46.2	1800	120	380	315	22.5	87
HP11803-H202F-□□□□□	49	19	2.6	10.3	2000	133.3	380	320	5.3	33
HP11804-H202F-□□□□□	73.5	29	2.5	15.4	2000	133.3	380	300	7.5	40
HP11805-H202F-□□□□□	98	39	2.5	20.5	2000	133.3	380	320	9.6	45
HP11807-H202F-□□□□□	122.5	49	2.5	25.7	2000	133.3	380	300	11.8	53
HP11808-H202F-□□□□□	147	59	2.5	30.8	2000	133.3	380	300	13.9	59
HP11810-H202F-□□□□□	171.5	69	2.5	35.9	2000	133.3	380	315	16	66
HP11811-H202F-□□□□□	196	77	2.5	41.0	2000	133.3	380	320	18.2	73
HP11812-H202F-□□□□□	220.5	88	2.5	46.2	2000	133.3	380	315	20.3	81
HP11814-H202F-□□□□□	245	98	2.5	51.3	2000	133.3	380	300	22.5	87

Operating conditions: Drive switching frequency ≥ 4kHz

#### Test condition:

- > Motor tested in horizontal position in free still air, ambient temperature 30°C
- > Motor flanged (Tflange = 30°C)
- > Typical data tolerance ±10%
- > Threshold of built in PTC 130°C
- > Switching frequency 4kHz



Motor Code	HP11803	HP11804	HP11805	HP11807	HP11808	HP11810	HP11811	HP11812	HP11814
L	348	383	419	455	491	527	563	599	635
D	38k6	38k6	38k6	38k6	38k6	38k6	42k6	42k6	42k6
Parallel key size	C10×63	C10×63	C10×63	C10×63	C10×63	C10×63	C12×63	C12×63	C12×63

### HP120-F

Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)	
HP12008-H152F-□□□□□	100	31	3.3	15.7	1500	100	380	307	15	70
HP12012-H152F-□□□□□	150	46	3.3	23.6	1500	100	380	307	20.6	83
HP12016-H152F-□□□□□	200	62	3.3	31.4	1500	100	380	307	26.2	96
HP12020-H152F-□□□□□	250	74	3.4	39.3	1500	100	380	320	31.8	109
HP12024-H152F-□□□□□	300	92	3.3	47	1500	100	380	307	37.4	122
HP12028-H152F-□□□□□	350	105	3.3	55	1500	100	380	314	43	135
HP12032-H152F-□□□□□	400	123	3.3	62.8	1500	100	380	307	48.6	148
HP12036-H152F-□□□□□	450	134	3.4	70.7	1500	100	380	317	54.2	161
HP12040-H152F-□□□□□	500	148	3.4	78.5	1500	100	380	320	59.8	174
HP12008-H182F-□□□□□	100	37	2.7	18.8	1800	120	380	307	15	70
HP12012-H182F-□□□□□	150	53	2.8	28.3	1800	120	380	323	20.6	83
HP12016-H182F-□□□□□	200	74	2.7	37.7	1800	120	380	307	26.2	96
HP12020-H182F-□□□□□	250	92	2.7	47	1800	120	380	307	31.8	109
HP12024-H182F-□□□□□	300	105	2.8	56.5	1800	120	380	323	37.4	122
HP12028-H182F-□□□□□	350	123	2.8	66	1800	120	380	323	43	135
HP12032-H182F-□□□□□	400	148	2.7	75.4	1800	120	380	307	48.6	148
HP12036-H182F-□□□□□	450	164	2.7	84.8	1800	120	380	311	54.2	161
HP12040-H182F-□□□□□	500	185	2.7	94.2	1800	120	380	307	59.8	174
HP12008-H202F-□□□□□	100	41	2.4	21	2000	133.3	380	307	15	70
HP12012-H202F-□□□□□	150	62	2.4	31.4	2000	133.3	380	307	20.6	83
HP12016-H202F-□□□□□	200	82	2.4	42	2000	133.3	380	307	26.2	96
HP12020-H202F-□□□□□	250	98	2.5	52.4	2000	133.3	380	320	31.8	109
HP12024-H202F-□□□□□	300	123	2.4	62.8	2000	133.3	380	307	37.4	122
HP12028-H202F-□□□□□	350	134	2.6	73.3	2000	133.3	380	329	43	135
HP12032-H202F-□□□□□	400	164	2.4	83.8	2000	133.3	380	307	48.6	148</

## Technical Parameters

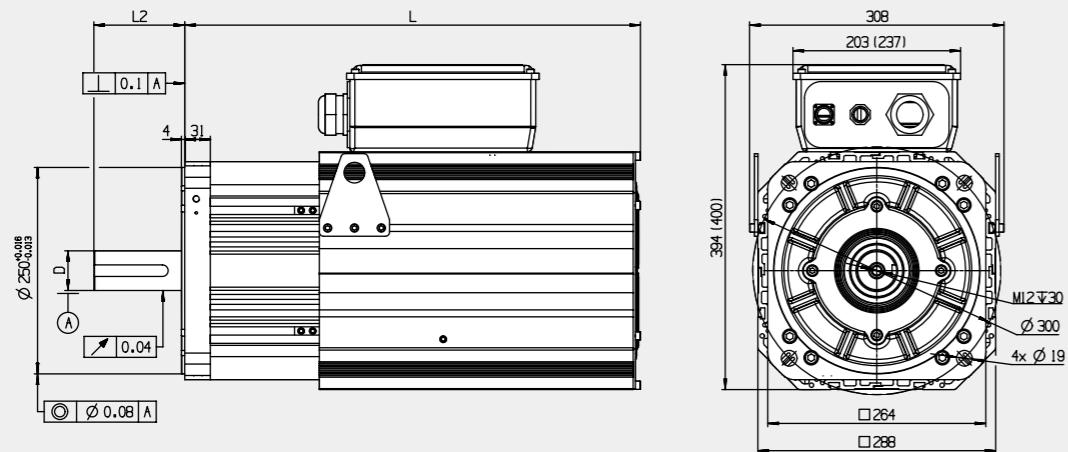
### HP125-F

Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP12513-G152F-□□□□	171	52	3.29	27	1500	100	380	307	29.4	90
HP12517-G152F-□□□□	228	67	3.40	36	1500	100	380	317	37.8	104
HP12521-G152F-□□□□	285	86	3.31	45	1500	100	380	310	46.2	116
HP12525-G152F-□□□□	342	105	3.26	53.5	1500	100	380	304	54.6	130
HP12529-G152F-□□□□	399	118.5	3.37	62.5	1500	100	380	315	62.9	143
HP12533-G152F-□□□□	456	128	3.56	71.5	1500	100	380	314	71.4	158
HP12538-G152F-□□□□	513	149.5	3.43	80.5	1500	100	380	321	80.1	178
HP12542-G152F-□□□□	570	163	3.50	89.5	1500	100	380	326	88.6	200
HP12546-G152F-□□□□	627	179.5	3.49	98.5	1500	100	380	326	97	222
HP12550-G152F-□□□□	684	199.5	3.43	107.5	1500	100	380	321	105.4	232
HP12555-G152F-□□□□	741	224	3.31	116.5	1500	100	380	309	113.9	246
HP12513-G182F-□□□□	168	57.5	2.92	31.5	1800	120	380	328	29.4	90
HP12517-G182F-□□□□	224	77	2.91	42.5	1800	120	380	326	37.8	104
HP12521-G182F-□□□□	280	103	2.72	53	1800	120	380	305	46.2	116
HP12525-G182F-□□□□	336	116	2.90	63.5	1800	120	380	324	54.6	130
HP12529-G182F-□□□□	392	133	2.95	74	1800	120	380	330	62.9	143
HP12533-G182F-□□□□	448	147	3.05	84.5	1800	120	380	323	71.4	158
HP12538-G182F-□□□□	504	176.5	2.86	95	1800	120	380	321	80.1	178
HP12542-G182F-□□□□	560	196	2.86	105.5	1800	120	380	321	88.6	200
HP12546-G182F-□□□□	616	220.5	2.79	116	1800	120	380	313	97	222
HP12550-G182F-□□□□	672	252	2.67	126.5	1800	120	380	299	105.4	232
HP12555-G182F-□□□□	728	252	2.89	137	1800	120	380	324	113.9	246
HP12513-G202F-□□□□	166.5	65	2.56	35	2000	133.3	380	319	29.4	90
HP12517-G202F-□□□□	222	91.5	2.43	46.5	2000	133.3	380	302	37.8	104
HP12521-G202F-□□□□	277.5	115	2.41	58	2000	133.3	380	301	46.2	116
HP12525-G202F-□□□□	333	131.5	2.53	67	2000	133.3	380	315	54.6	130
HP12529-G202F-□□□□	388.5	154	2.52	81.5	2000	133.3	380	315	62.9	143
HP12533-G202F-□□□□	444	159	2.79	93	2000	133.3	380	329	71.4	158
HP12538-G202F-□□□□	499.5	194	2.57	104.5	2000	133.3	380	321	80.1	178
HP12542-G202F-□□□□	555	218.5	2.54	116	2000	133.3	380	317	88.6	200
HP12546-G202F-□□□□	610.5	249.5	2.45	128	2000	133.3	380	305	97	222
HP12550-G202F-□□□□	666	249.5	2.67	139.5	2000	133.3	380	330	105.4	232
HP12555-G202F-□□□□	721.5	291	2.48	151	2000	133.3	380	309	113.9	246

Operating conditions: Drive switching frequency ≥ 4kHz

#### Test condition:

- > Motor tested in horizontal position in free still air, ambient temperature 30°C
- > Motor flanged (Tflange = 30°C)
- > Typical data tolerance ±10%
- > Threshold of built in PTC 130°C
- > Switching frequency 4kHz



Motor Code	HP12513	HP12517	HP12521	HP12525	HP12529	HP12533	HP12538	HP12542	HP12546	HP12550	HP12555
L	512	552	592	632	672	712	752	807	857	897	927
L2	110	110	110	110	110	110	140	140	140	140	140
D	48k6	48k6	48k6	48k6	48k6	48k6	60k6	60k6	60k6	60k6	60k6
Parallel key size	C14×90	C14×90	C14×90	C14×90	C14×90	C14×90	C18×120	C18×120	C18×120	C18×120	C18×120

### HP125-F

Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP12513-H152F-□□□□	171	49	3.53	26.9	1500	100	380	313	34.3	91
HP12517-H152F-□□□□	228	65	3.51	35.8	1500	100	380	325	44.1	104
HP12521-H152F-□□□□	285	81	3.52	44.8	1500	100	380	319	53.7	115
HP12525-H152F-□□□□	342	96	3.56	53.7	1500	100	380	330	63.3	126
HP12529-H152F-□□□□	399	111	3.58	62.7	1500	100	380	325	73.1	137
HP12533-H152F-□□□□	456	127	3.58	71.6	1500	100	380	325	82.7	151
HP12538-H152F-□□□□	513	146	3.51	80.6	1500	100	380	313	93.4	170
HP12542-H152F-□□□□	570	160	3.56	89.5	1500	100	380	319	101.9	188
HP12546-H152F-□□□□	627	176	3.56	98.5	1500	100	380	319	111.3	206
HP12550-H152F-□□□□	684	196	3.50	107.4	1500	100	380	313	120.7	215
HP12555-N152F-□□□□	741	201	3.69	116.4	1500	100	380	339	130.3	225
HP12513-N182F-□□□□	168	55	3.05	31.7	1800	120	380	334	34.3	91
HP12517-N182F-□□□□	224	74	3.03	42.2	1800	120	380	334	44.1	104
HP12521-H182F-□□□□	280	92	3.03	52.8	1800	120	380	330	53.7	115
HP12525-H182F-□□□□	336	115	2.92	63.3	1800	120	380	313	63.3	126
HP12529-H182F-□□□□	392	134	2.93	73.9	1800	120	380	317	73.1	137
HP12533-N182F-□□□□	44									

## Technical Parameters

### HP129-F

Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP12927-G152F-□□□□	300	91	3.3	47	1500	150	380	311	0.125	140
HP12936-G152F-□□□□	400	129	3.1	63	1500	150	380	290	0.163	160
HP12945-G152F-□□□□	500	150	3.3	79	1500	150	380	311	0.200	181
HP12954-G152F-□□□□	600	181	3.3	94	1500	150	380	311	0.239	205
HP12963-G152F-□□□□	700	228	3.1	110	1500	150	380	290	0.276	228
HP12972-G152F-□□□□	800	258	3.1	126	1500	150	380	290	0.314	268
HP12981-G152F-□□□□	900	300	3.0	141	1500	150	380	280	0.352	282
HP12990-G152F-□□□□	1000	308	3.2	157	1500	150	380	312	0.389	305
HP12927-K182F-□□□□	300	101	3.0	57	1800	180	380	335	0.125	140
HP12936-G182F-□□□□	400	151	2.6	75	1800	180	380	298	0.163	160
HP12945-G182F-□□□□	500	181	2.8	94	1800	180	380	311	0.200	181
HP12954-K182F-□□□□	600	202	3.0	113	1800	180	380	336	0.239	205
HP12963-G182F-□□□□	700	259	2.7	132	1800	180	380	305	0.276	228
HP12972-G182F-□□□□	800	302	2.6	151	1800	180	380	298	0.314	268
HP12981-K182F-□□□□	900	302	3.0	170	1800	180	380	336	0.352	282
HP12990-G182F-□□□□	1000	362	2.8	188	1800	180	380	311	0.389	305
HP12927-G202F-□□□□	300	121	2.5	63	2000	200	380	311	0.125	140
HP12936-K202F-□□□□	400	152	2.6	84	2000	200	380	331	0.163	160
HP12945-G202F-□□□□	500	202	2.5	105	2000	200	380	311	0.200	181
HP12954-G202F-□□□□	600	259	2.3	126	2000	200	380	290	0.239	205
HP12963-G202F-□□□□	700	303	2.3	147	2000	200	380	290	0.276	228
HP12972-K202F-□□□□	800	303	2.6	168	2000	200	380	332	0.314	268
HP12981-G202F-□□□□	900	363	2.5	188	2000	200	380	311	0.352	282
HP12990-K202F-□□□□	1000	364	2.7	209	2000	200	380	346	0.389	305

Operating conditions: Drive switching frequency  $\geq 4\text{kHz}$

#### Test condition:

- > Motor tested in horizontal position in free still air, ambient temperature 30°C
- > Motor flanged (Tflange = 30°C)
- > Typical data tolerance  $\pm 10\%$
- > Threshold of built in PTC 130°C
- > Switching frequency 4kHz

### HP118-W

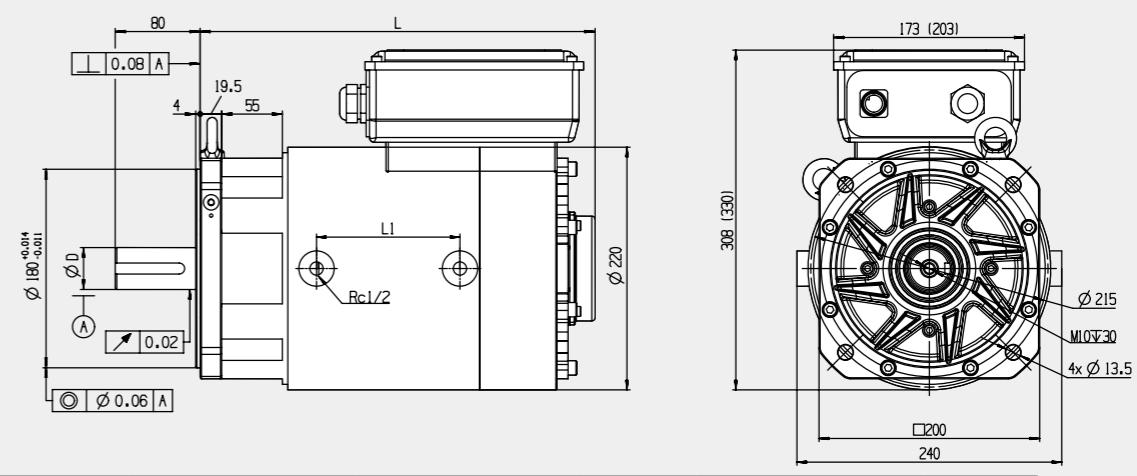
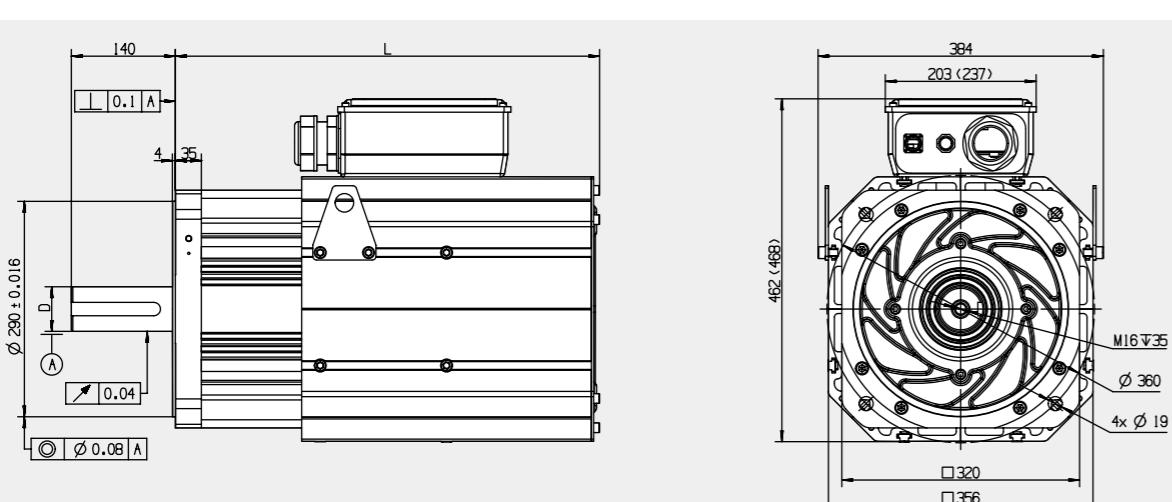
Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP11803-H152W-□□□□	49	14	3.5	7.7	1500	100	380	330	5.3	31
HP11804-H152W-□□□□	73.5	22	3.3	11.5	1500	100	380	315	7.5	35
HP11805-H152W-□□□□	98	28	3.5	15.4	1500	100	380	330	9.6	41
HP11807-H152W-□□□□	122.5	37	3.3	19.2	1500	100	380	300	11.8	46
HP11808-H152W-□□□□	147	45	3.3	23.1	1500	100	380	315	13.9	53
HP11810-H152W-□□□□	171.5	51	3.4	26.9	1500	100	380	315	16	60
HP11811-H152W-□□□□	196	60	3.3	30.8	1500	100	380	300	18.2	67
HP11812-H152W-□□□□	220.5	67	3.3	34.6	1500	100	380	304	20.3	74
HP11814-N152W-□□□□	245	70	3.5	38.5	1500	100	380	338	22.5	82
HP11803-H182W-□□□□	49	18	2.8	9.2	1800	120	380	324	5.3	31
HP11804-H182W-□□□□	73.5	26	2.8	13.9	1800	120	380	324	7.5	35
HP11805-H182W-□□□□	98	35	2.8	18.5	1800	120	380	324	9.6	41
HP11807-H182W-□□□□	122.5	44	2.8	23.1	1800	120	380	315	11.8	46
HP11808-H182W-□□□□	147	53	2.8	27.7	1800	120	380	324	13.9	53
HP11810-H182W-□□□□	171.5	62	2.8	32.3	1800	120	380	315	16	60
HP11811-H182W-□□□□	196	70	2.8	36.9	1800	120	380	324	18.2	67
HP11812-H182W-□□□□	220.5	79	2.8	41.6	1800	120	380	324	20.3	74
HP11814-H182W-□□□□	245	89	2.8	46.2	1800	120	380	315	22.5	82
HP11803-H202W-□□□□	49	19	2.6	10.3	2000	133.3	380	320	5.3	31
HP11804-H202W-□□□□	73.5	29	2.5	15.4	2000	133.3	380	300	7.5	35
HP11805-H202W-□□□□	98	39	2.5	20.5	2000	133.3	380	320	9.6	41
HP11807-H202W-□□□□	122.5	49	2.5	25.7	2000	133.3	380	300	11.8	46
HP11808-H202W-□□□□	147	59	2.5	30.8	2000	133.3	380	300	13.9	53
HP11810-H202W-□□□□	171.5	69	2.5	35.9	2000	133.3	380	315	16	60
HP11811-H202W-□□□□	196	77	2.5	41.0	2000	133.3	380	320	18.2	67
HP11812-H202W-□□□□	220.5	88	2.5	46.2	2000	133.3	380	315	20.3	74
HP11814-H202W-□□□□	245	98	2.5	51.3	2000	133.3	380	300	22.5	82

Use conditions: 1. drive switching frequency  $\geq 4\text{kHz}$ ;

2. cooling medium requirements: oil, flow  $\geq 8\text{L/min}$ , oil pressure  $\leq 0.6\text{Mpa}$ , inlet oil temperature  $\leq 50^\circ\text{C}$ .

#### Test condition:

- > Motor tested in horizontal position in free still air, ambient temperature 30°C
- > Motor flanged (Tflange = 30°C)
- > Typical data tolerance  $\pm 10\%$
- > Threshold of built in PTC 130°C
- > Switching frequency 4kHz



Motor Code	HP12927	HP12936	HP12945	HP12954	HP12963	HP12972	HP12981	HP12990
L	526	571	616	676	721	766	811	856
D	60k6	60k6	60k6	65k6	6			

## Technical Parameters

### HP120-W

Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP12008-H152W-□□□□	100	31	3.3	15.7	1500	100	380	307	15
HP12012-H152W-□□□□	150	46	3.3	23.6	1500	100	380	307	20.6
HP12016-H152W-□□□□	200	62	3.3	31.4	1500	100	380	307	45
HP12020-H152W-□□□□	250	74	3.4	39.3	1500	100	380	320	108
HP12024-H152W-□□□□	300	92	3.3	47	1500	100	380	307	124
HP12028-H152W-□□□□	350	105	3.3	55	1500	100	380	314	140
HP12032-H152W-□□□□	400	123	3.3	62.8	1500	100	380	307	156
HP12036-H152W-□□□□	450	134	3.4	70.7	1500	100	380	317	172
HP12040-H152W-□□□□	500	148	3.4	78.5	1500	100	380	320	188
HP12008-H182W-□□□□	100	37	2.7	18.8	1800	120	380	307	15
HP12012-H182W-□□□□	150	53	2.8	28.3	1800	120	380	323	76
HP12016-H182W-□□□□	200	74	2.7	37.7	1800	120	380	307	92
HP12020-H182W-□□□□	250	92	2.7	47	1800	120	380	307	108
HP12024-H182W-□□□□	300	105	2.8	56.5	1800	120	380	323	124
HP12028-H182W-□□□□	350	123	2.8	66	1800	120	380	323	140
HP12032-H182W-□□□□	400	148	2.7	75.4	1800	120	380	307	156
HP12036-H182W-□□□□	450	164	2.7	84.8	1800	120	380	311	172
HP12040-H182W-□□□□	500	185	2.7	94.2	1800	120	380	307	188
HP12008-H202W-□□□□	100	41	2.4	21	2000	133.3	380	307	15
HP12012-H202W-□□□□	150	62	2.4	31.4	2000	133.3	380	307	76
HP12016-H202W-□□□□	200	82	2.4	42	2000	133.3	380	307	92
HP12020-H202W-□□□□	250	98	2.5	52.4	2000	133.3	380	320	108
HP12024-H202W-□□□□	300	123	2.4	62.8	2000	133.3	380	307	124
HP12028-H202W-□□□□	350	134	2.6	73.3	2000	133.3	380	329	140
HP12032-H202W-□□□□	400	164	2.4	83.8	2000	133.3	380	307	156
HP12036-H202W-□□□□	450	185	2.4	94.2	2000	133.3	380	307	172
HP12040-N202W-□□□□	500	186	2.7	104.7	2000	133.3	380	341	188

Use conditions: 1. drive switching frequency ≥ 4kHz;

2. cooling medium requirements: oil, flow ≥ 8L/min, oil pressure ≤ 0.6Mpa, inlet oil temperature ≤ 50°C .

#### Test condition:

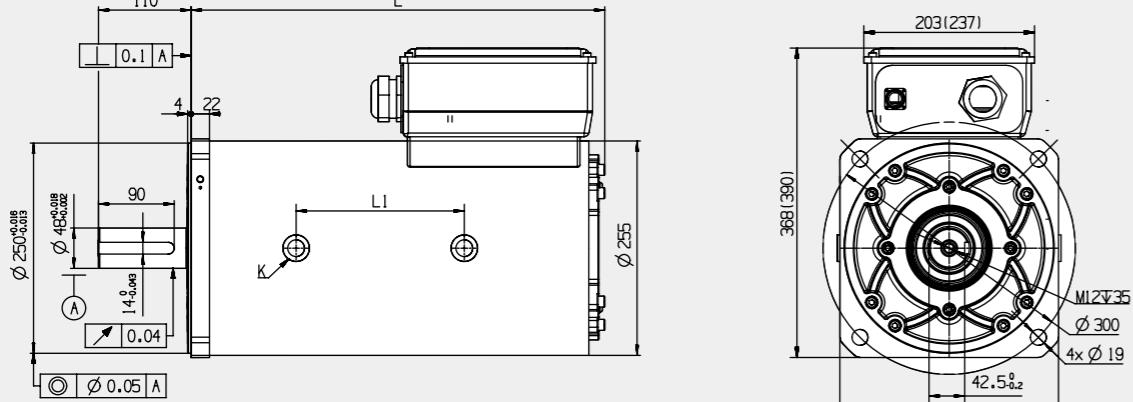
> Motor tested in horizontal position in free still air, ambient temperature 30°C

> Motor flanged (Tflange = 30°C)

> Typical data tolerance ±10%

> Threshold of built in PTC 130°C

> Switching frequency 4kHz



# Technical Parameters

HP125-W

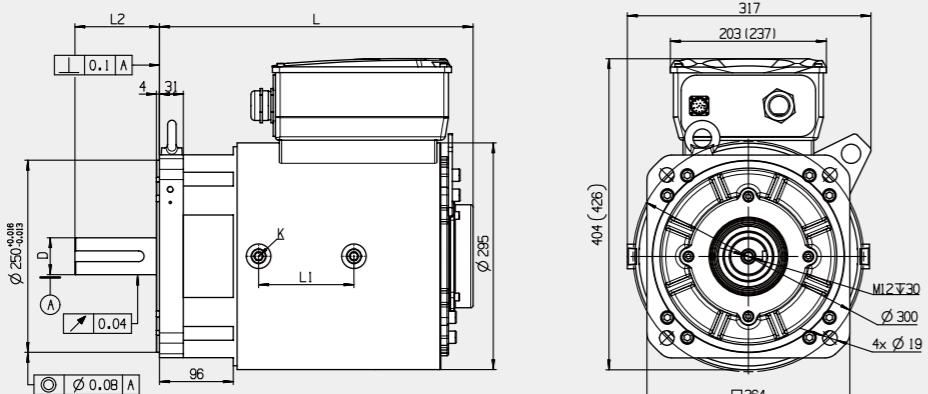
Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP12513-H152W-□□□□□	171	49	3.53	26.9	1500	100	380	313	34.3	91
HP12517-H152W-□□□□□	228	65	3.51	35.8	1500	100	380	325	44.1	104
HP12521-H152W-□□□□□	285	81	3.52	44.8	1500	100	380	319	53.7	115
HP12525-H152W-□□□□□	342	96	3.56	53.7	1500	100	380	330	63.3	126
HP12529-H152W-□□□□□	399	111	3.58	62.7	1500	100	380	325	73.1	137
HP12533-H152W-□□□□□	456	127	3.58	71.6	1500	100	380	325	82.7	151
HP12538-H152W-□□□□□	513	146	3.51	80.6	1500	100	380	313	93.4	170
HP12542-H152W-□□□□□	570	160	3.56	89.5	1500	100	380	319	101.9	188
HP12546-H152W-□□□□□	627	176	3.56	98.5	1500	100	380	319	111.3	206
HP12550-H152W-□□□□□	684	196	3.50	107.4	1500	100	380	313	120.7	215
HP12555-N152W-□□□□□	741	201	3.69	116.4	1500	100	380	339	130.3	225
HP12513-N182W-□□□□□	168	55	3.05	31.7	1800	120	380	334	34.3	91
HP12517-N182W-□□□□□	224	74	3.03	42.2	1800	120	380	334	44.1	104
HP12521-H182W-□□□□□	280	92	3.03	52.8	1800	120	380	330	53.7	115
HP12525-H182W-□□□□□	336	115	2.92	63.3	1800	120	380	313	63.3	126
HP12529-H182W-□□□□□	392	134	2.93	73.9	1800	120	380	317	73.1	137
HP12533-N182W-□□□□□	448	147	3.05	84.4	1800	120	380	334	82.7	151
HP12538-H182W-□□□□□	504	172	2.93	95.0	1800	120	380	313	93.4	170
HP12542-H182W-□□□□□	560	192	2.91	105.5	1800	120	380	313	101.9	188
HP12546-N182W-□□□□□	616	198	3.11	116.1	1800	120	380	345	111.3	206
HP12550-N182W-□□□□□	672	218	3.08	126.7	1800	120	380	334	120.7	215
HP12555-H182W-□□□□□	728	246	2.96	137.2	1800	120	380	316	130.3	225
HP12513-H202W-□□□□□	166.5	62	2.69	34.9	2000	133.3	380	325	34.3	91
HP12517-N202W-□□□□□	222	80	2.78	46.5	2000	133.3	380	340	44.1	104
HP12521-H202W-□□□□□	277.5	102	2.71	58.1	2000	133.3	380	328	53.7	115
HP12525-H202W-□□□□□	333	129	2.58	69.7	2000	133.3	380	325	63.3	126
HP12529-H202W-□□□□□	388.5	143	2.72	81.4	2000	133.3	380	325	73.1	137
HP12533-N202W-□□□□□	444	159	2.79	93.0	2000	133.3	380	340	82.7	151
HP12538-H202W-□□□□□	499.5	190	2.64	104.6	2000	133.3	380	313	93.4	170
HP12542-N202W-□□□□□	555	197	2.82	116.2	2000	133.3	380	348	101.9	188
HP12546-N202W-□□□□□	610.5	220	2.78	127.9	2000	133.3	380	340	111.3	206
HP12550-H202W-□□□□□	666	246	2.71	139.5	2000	133.3	380	325	120.7	215
HP12555-N202W-□□□□□	721.5	260	2.78	151.1	2000	133.3	380	351	130.3	225

Use conditions: 1. drive switching frequency  $\geq 4\text{kHz}$ ;

2. cooling medium requirements: oil, flow  $\geq$  8L/min, oil pressure  $\leq$  0.6Mpa, inlet oil temperature  $\leq$  50°C .

### Test condition:

- > Motor tested in horizontal position in free still air, ambient temperature 30°C
  - > Motor flanged ( $T_{flange} = 30^\circ\text{C}$ )
  - > Typical data tolerance  $\pm 10\%$
  - > Threshold of built in PTC 130°C
  - > Switching frequency 4kHz



Motor Code	HP12513	HP12517	HP12521	HP12525	HP12529	HP12533	HP12538	HP12542	HP12546	HP12550	HP12555
L	368	408	448	488	528	568	608	663	683	713	753
L1	106	124	164	204	244	284	300	360	390	424	464
L2	110	110	110	110	110	110	140	140	140	140	140
D	48k6	48k6	48k6	48k6	48k6	48k6	60k6	60k6	60k6	60k6	60k6
K	Rc1/2	Rc1/2	Rc1/2	Rc1/2	Rc3/4						
Parallel key size	C14×90	C14×90	C14×90	C14×90	C14×90	C14×90	C18×120	C18×120	C18×120	C18×120	C18×120

HP129-W

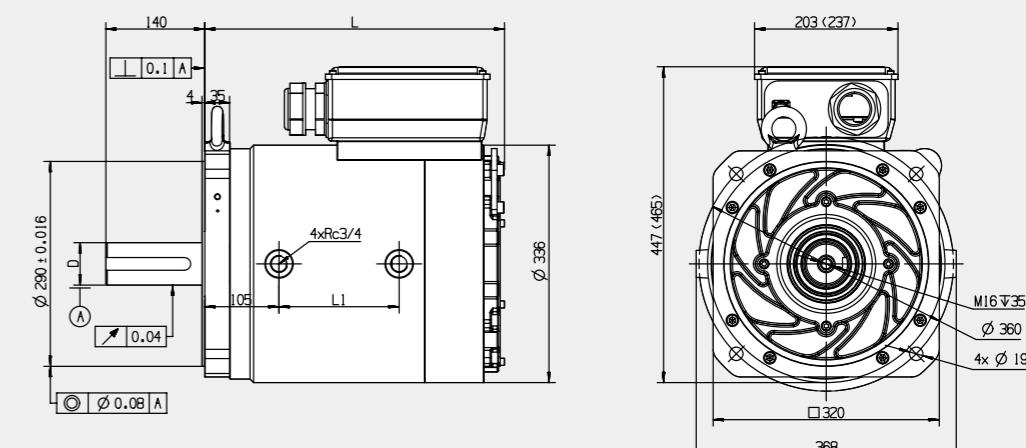
Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP12927-G152W-□□□□	300	91	3.3	47	1500	150	380	311	0.125	146
HP12936-G152W-□□□□	400	129	3.1	63	1500	150	380	290	0.163	171
HP12945-G152W-□□□□	500	150	3.3	79	1500	150	380	311	0.200	196
HP12954-G152W-□□□□	600	181	3.3	94	1500	150	380	311	0.239	225
HP12963-G152W-□□□□	700	228	3.1	110	1500	150	380	290	0.276	241
HP12972-G152W-□□□□	800	258	3.1	126	1500	150	380	290	0.314	290
HP12981-G152W-□□□□	900	300	3.0	141	1500	150	380	280	0.352	309
HP12990-G152W-□□□□	1000	308	3.2	157	1500	150	380	312	0.389	330
HP12927-K182W-□□□□	300	101	3.0	57	1800	180	380	335	0.125	146
HP12936-G182W-□□□□	400	151	2.6	75	1800	180	380	298	0.163	171
HP12945-G182W-□□□□	500	181	2.8	94	1800	180	380	311	0.200	196
HP12954-K182W-□□□□	600	202	3.0	113	1800	180	380	336	0.239	225
HP12963-G182W-□□□□	700	259	2.7	132	1800	180	380	305	0.276	241
HP12972-G182W-□□□□	800	302	2.6	151	1800	180	380	298	0.314	290
HP12981-K182W-□□□□	900	302	3.0	170	1800	180	380	336	0.352	309
HP12990-G182W-□□□□	1000	362	2.8	188	1800	180	380	311	0.389	330
HP12927-G202W-□□□□	300	121	2.5	63	2000	200	380	311	0.125	146
HP12936-K202W-□□□□	400	152	2.6	84	2000	200	380	331	0.163	171
HP12945-G202W-□□□□	500	202	2.5	105	2000	200	380	311	0.200	196
HP12954-G202W-□□□□	600	259	2.3	126	2000	200	380	290	0.239	225
HP12963-G202W-□□□□	700	303	2.3	147	2000	200	380	290	0.276	241
HP12972-K202W-□□□□	800	303	2.6	168	2000	200	380	332	0.314	290
HP12981-G202W-□□□□	900	363	2.5	188	2000	200	380	311	0.352	309
HP12990-K202W-□□□□	1000	364	2.7	209	2000	200	380	346	0.389	330

Use conditions: 1. drive switching frequency  $\geq$  4kHz;

2. cooling medium requirements: oil, flow  $\geq 8\text{L/min}$ , oil pressure  $\leq 0.6\text{MPa}$ , inlet oil temperature  $\leq 50^\circ\text{C}$ .

#### Test condition:

- > Motor tested in horizontal position in free still air, ambient temperature 30°C
  - > Motor flanged (Tflange = 30°C)
  - > Typical data tolerance ±10%
  - > Threshold of built in PTC 130°C
  - > Switching frequency 4kHz



Motor Code	HP12927	HP12936	HP12945	HP12954	HP12963	HP12972	HP12981	HP12990
L	379	424	469	529	574	619	664	709
L1	125	170	215	270	315	360	405	450
D	60k6	60k6	60k6	65k6	65k6	75k6	75k6	75k6
Parallel key size	C18×120	C18×120	C18×120	C18×120	C18×120	C20×125	C20×125	C20×125

## Technical Parameters

### HP130-W

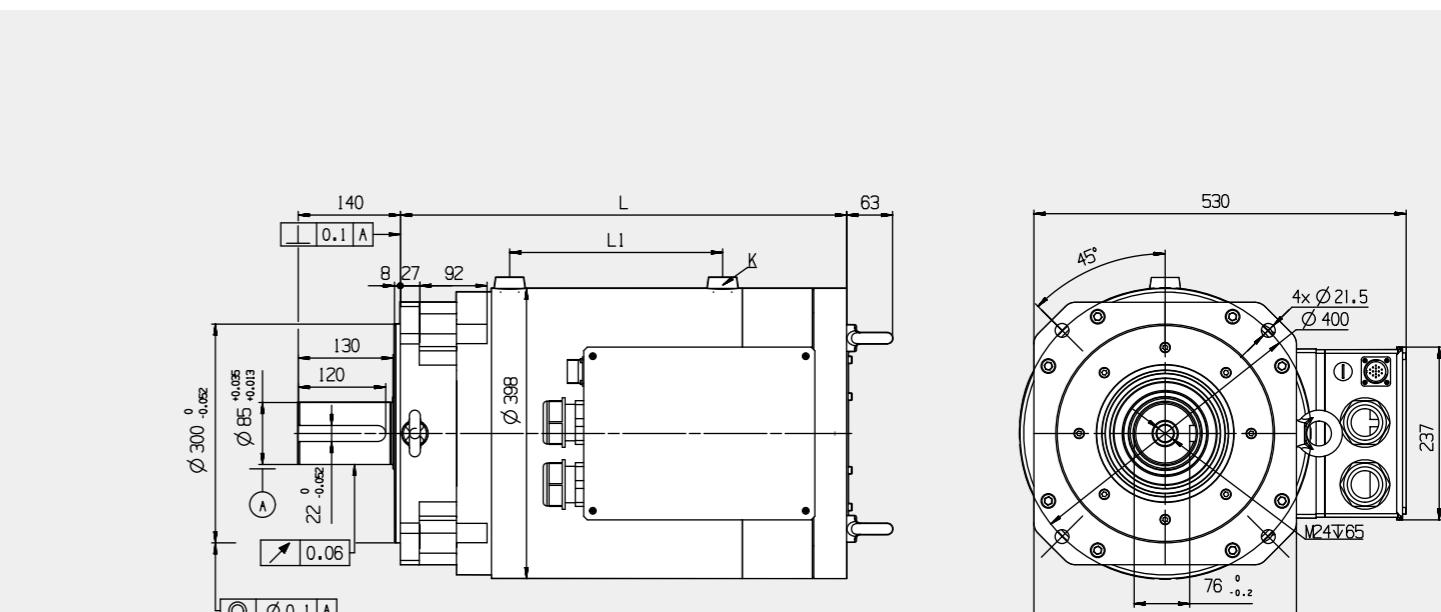
Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP13036-G102W-□□□□	480	91	5.3	50	1000	100	380	330	0.261	278
HP13048-G102W-□□□□	640	123	5.2	67	1000	100	380	326	0.34	330
HP13060-G102W-□□□□	800	154	5.2	84	1000	100	380	326	0.418	372
HP13072-G102W-□□□□	960	190	5.1	101	1000	100	380	318	0.494	410
HP13084-G102W-□□□□	1120	224	5.0	117	1000	100	380	314	0.57	443
HP13096-G102W-□□□□	1280	247	5.2	134	1000	100	380	326	0.648	482
HP130U1-G102W-□□□□	1440	274	5.3	151	1000	100	380	330	0.726	523
HP130U2-G102W-□□□□	1600	308	5.2	168	1000	100	380	326	0.799	570
HP130U3-G102W-□□□□	1760	352	5.0	184	1000	100	380	314	0.877	610
HP130U4-G102W-□□□□	1920	411	4.7	201	1000	100	380	293	0.955	657
HP13036-G122W-□□□□	465	109	4.3	58	1200	120	380	323	0.261	278
HP13048-G122W-□□□□	620	150	4.1	78	1200	120	380	313	0.34	330
HP13060-G122W-□□□□	775	184	4.2	97	1200	120	380	318	0.418	372
HP13072-G122W-□□□□	930	218	4.3	117	1200	120	380	323	0.494	410
HP13084-G122W-□□□□	1085	266	4.1	136	1200	120	380	308	0.57	443
HP13096-G122W-□□□□	1240	299	4.1	156	1200	120	380	313	0.648	482
HP130U1-G122W-□□□□	1395	342	4.1	175	1200	120	380	308	0.726	523
HP130U2-G122W-□□□□	1550	399	3.9	195	1200	120	380	293	0.799	570
HP130U3-G122W-□□□□	1705	399	4.3	214	1200	120	380	323	0.877	610
HP130U4-G122W-□□□□	1860	479	3.9	234	1200	120	380	293	0.955	657
HP13036-G152W-□□□□	450	129	3.5	71	1500	150	380	330	0.261	278
HP13048-G152W-□□□□	600	179	3.4	94	1500	150	380	318	0.34	330
HP13060-G152W-□□□□	750	232	3.2	118	1500	150	380	306	0.418	372
HP13072-G152W-□□□□	900	258	3.5	141	1500	150	380	330	0.494	410
HP13084-G152W-□□□□	1050	332	3.2	165	1500	150	380	299	0.57	443
HP13096-G152W-□□□□	1200	387	3.1	188	1500	150	380	293	0.648	482
HP130U1-G152W-□□□□	1350	387	3.5	212	1500	150	380	330	0.726	523
HP130U2-G152W-□□□□	1500	465	3.2	236	1500	150	380	306	0.799	570
HP130U3-K152W-□□□□	1650	465	3.6	259	1500	150	380	336	0.877	610
HP130U4-G152W-□□□□	1800	581	3.1	283	1500	150	380	293	0.955	657
HP13036-G182W-□□□□	435	150	2.9	82	1800	180	380	330	0.261	278
HP13048-G182W-□□□□	580	205	2.8	109	1800	180	380	323	0.34	330
HP13060-G182W-□□□□	725	250	2.9	137	1800	180	380	330	0.418	372
HP13072-G182W-□□□□	870	322	2.7	164	1800	180	380	308	0.494	410
HP13084-G182W-□□□□	1015	375	2.7	191	1800	180	380	308	0.57	443
HP13096-G182W-□□□□	1160	451	2.6	219	1800	180	380	293	0.648	482
HP130U1-G182W-□□□□	1305	451	2.9	246	1800	180	380	330	0.726	523
HP130U2-G182W-□□□□	1450	563	2.6	273	1800	180	380	293	0.799	570
HP130U3-G182W-□□□□	1595	563	2.8	301	1800	180	380	323	0.877	610
HP130U4-K182W-□□□□	1740	563	3.1	328	1800	180	380	352	0.955	657
HP13036-G202W-□□□□	420	168	2.5	88	2000	200	380	318	0.261	278
HP13048-G202W-□□□□	560	218	2.6	117	2000	200	380	326	0.34	330

Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP13060-G202W-□□□□	700	272	2.6	147	2000	200	380	326	0.418	372
HP13072-G202W-□□□□	840	363	2.3	176	2000	200	380	293	0.494	410
HP13084-G202W-□□□□	980	436	2.2	205	2000	200	380	285	0.57	443
HP13096-G202W-□□□□	1120	436	2.6	235	2000	200	380	326	0.648	482
HP130U1-G202W-□□□□	1260	545	2.3	264	2000	200	380	293	0.726	523
HP130U2-G202W-□□□□	1400	545	2.6	293	2000	200	380	326	0.799	570
HP130U3-K202W-□□□□	1540	545	2.8	323	2000	200	380	359	0.877	610
HP130U4-G202W-□□□□	1680	726	2.3	352	2000	200	380	293	0.955	657

Use conditions: 1. drive switching frequency  $\geq 4\text{kHz}$ ; 2. cooling medium requirements: oil, flow  $\geq 8\text{L/min}$ , oil pressure  $\leq 0.6\text{Mpa}$ , inlet oil temperature  $\leq 50^\circ\text{C}$ .

#### Test condition:

- > Motor tested in horizontal position in free still air, ambient temperature  $30^\circ\text{C}$
- > Motor flanged ( $T_{flange} = 30^\circ\text{C}$ )
- > Typical data tolerance  $\pm 10\%$
- > Threshold of built in PTC  $130^\circ\text{C}$
- > Switching frequency  $4\text{kHz}$



Motor Code	HP13036	HP13048	HP13060	HP13072	HP13084	HP13096	HP130U1	HP130U2	HP130U3	HP130U4
L	455	517	562	612	662	707	757	807	872	907
L1	143	219	235	292	342	392	442	492	542	594
K	Rc1/2	Rc1/2	Rc3/4							

## Technical Parameters

### HP145-W

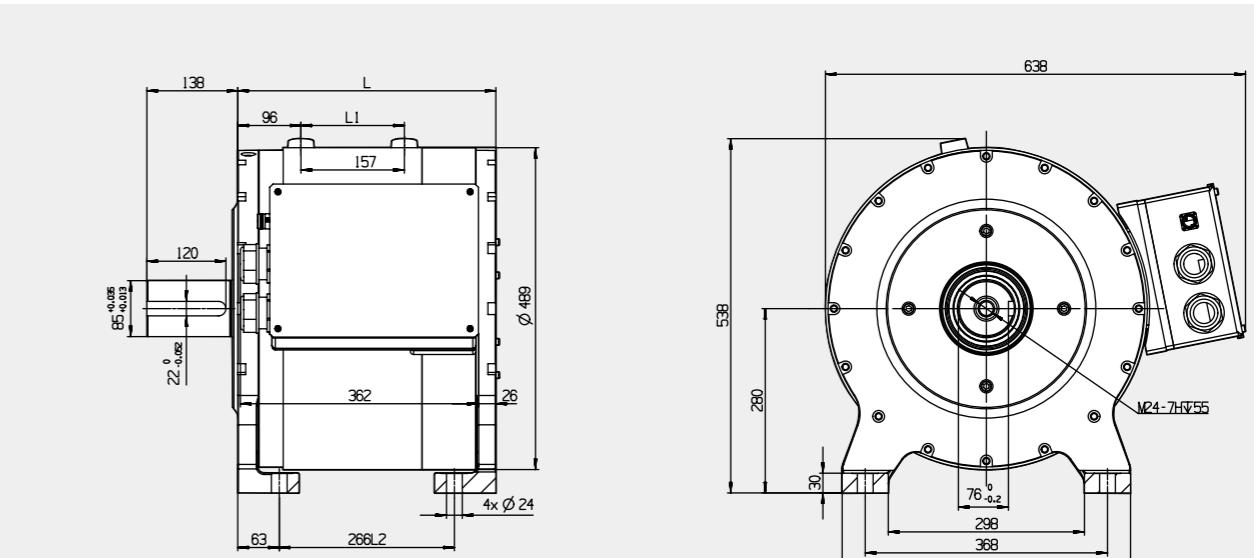
Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP14540-K102W- □□□□	450	89	5.06	47	1000	100	380	344	0.75	323
HP14540-G122W- □□□□	442	109	4.05	56	1200	120	380	330	0.75	323
HP14540-K152W- □□□□	434	129	3.38	68	1500	150	380	344	0.75	323
HP14540-G182W- □□□□	425	157	2.70	80	1800	180	380	330	0.75	323
HP14540-K202W- □□□□	416	165	2.52	87	2000	200	380	343	0.75	323
HP14560-K102W- □□□□	676	134	5.06	71	1000	100	380	344	0.9	380
HP14560-G122W- □□□□	663	164	4.05	83	1200	120	380	330	0.9	380
HP14560-K152W- □□□□	650	198	3.29	102	1500	150	380	335	0.9	380
HP14560-K182W- □□□□	638	229	2.78	120	1800	180	380	340	0.9	380
HP14560-K202W- □□□□	625	248	2.52	131	2000	200	380	343	0.9	380
HP14580-G102W- □□□□	900	190	4.72	94	1000	100	380	321	1.05	437
HP14580-G122W- □□□□	884	218	4.05	111	1200	120	380	330	1.05	437
HP14580-K152W- □□□□	867	257	3.38	136	1500	150	380	344	1.05	437
HP14580-G182W- □□□□	850	315	2.70	160	1800	180	380	330	1.05	437
HP14580-G202W- □□□□	833	353	2.36	174	2000	200	380	321	1.05	437
HP145U1-G102W- □□□□	1125	243	4.64	118	1000	100	380	315	1.2	494
HP145U1-K122W- □□□□	1105	262	4.22	139	1200	120	380	344	1.2	494
HP145U1-G152W- □□□□	1085	335	3.24	170	1500	150	380	330	1.2	494
HP145U1-K182W- □□□□	1063	378	2.81	200	1800	180	380	344	1.2	494
HP145U1-K202W- □□□□	1040	411	2.53	218	2000	200	380	344	1.2	494
HP145U2-K102W- □□□□	1350	267	5.06	141	1000	100	380	344	1.35	551
HP145U2-G122W- □□□□	1326	328	4.05	167	1200	120	380	330	1.35	551
HP145U2-G152W- □□□□	1302	428	3.04	205	1500	150	380	310	1.35	551
HP145U2-G182W- □□□□	1275	503	2.54	240	1800	180	380	310	1.35	551
HP145U2-K202W- □□□□	1248	493	2.53	261	2000	200	380	344	1.35	551
HP145U3-G102W- □□□□	1575	333	4.72	165	1000	100	380	321	1.5	608
HP145U3-K122W- □□□□	1547	374	4.13	194	1200	120	380	337	1.5	608
HP145U3-G152W- □□□□	1519	516	2.94	239	1500	150	380	300	1.5	608
HP145U3-K182W- □□□□	1488	505	2.94	280	1800	180	380	360	1.5	608
HP145U3-G202W- □□□□	1456	616	2.36	305	2000	200	380	321	1.5	608
HP145U4-G102W- □□□□	1800	381	4.72	188	1000	100	380	321	1.65	665
HP145U4-G122W- □□□□	1768	437	4.05	222	1200	120	380	330	1.65	665
HP145U4-K152W- □□□□	1736	514	3.38	273	1500	150	380	344	1.65	665
HP145U4-G182W- □□□□	1700	630	2.70	320	1800	180	380	330	1.65	665
HP145U4-K202W- □□□□	1664	616	2.70	348	2000	200	380	367	1.65	665
HP145U5-G102W- □□□□	2025	444	4.56	212	1000	100	380	310	1.8	750
HP145U5-G122W- □□□□	1989	523	3.80	250	1200	120	380	310	1.8	750
HP145U5-K152W- □□□□	1953	642	3.04	307	1500	150	380	310	1.8	750
HP145U5-G182W- □□□□	1913	835	2.29	360	1800	180	380	280	1.8	750
HP145U5-G202W- □□□□	1872	820	2.28	392	2000	200	380	310	1.8	750
HP145U6-K102W- □□□□	2250	444	5.06	236	1000	100	380	344	1.95	945
HP145U6-G122W- □□□□	2210	524	4.22	278	1200	120	380	344	1.95	945

Model	Rated torque Tn(Nm)	Rated current In(A)	KT (Nm/A)	Rated power Pn(kW)	Rated speed n(rpm)	Rated frequency f(Hz)	Power level (V)	EMK (V)	Inertia J(kg.m <sup>2</sup> .10 <sup>-3</sup> )	Mass (kg)
HP145U6-K152W- □□□□	2170	643	3.38	341	1500	150	380	344	1.95	945
HP145U6-G182W- □□□□	2125	838	2.54	401	1800	180	380	310	1.95	945
HP145U6-K202W- □□□□	2080	822	2.53	436	2000	200	380	344	1.95	945
HP145U7-G102W- □□□□	2475	534	4.64	259	1000	100	380	315	2.1	1000
HP145U7-G122W- □□□□	2431	654	3.72	305	1200	120	380	303	2.1	1000
HP145U7-K152W- □□□□	2387	672	3.55	375	1500	150	380	362	2.1	1000
HP145U7-K182W- □□□□	2338	841	2.78	441	1800	180	380	340	2.1	1000
HP145U7-G202W- □□□□	2288	987	2.32	479	2000	200	380	315	2.1	1000
HP145U8-K102W- □□□□	2700	533	5.06	283	1000	100	380	344	2.25	1057
HP145U8-G122W- □□□□	2652	655	4.05	333	1200	120	380	330	2.25	1057
HP145U8-G152W- □□□□	2604	856	3.04	409	1500	150	380	310	2.25	1057
HP145U8-G182W- □□□□	2550	945	2.70	481	1800	180	380	330	2.25	1057
HP145U8-G202W- □□□□	2496	1211	2.06	523	2000	200	380	280	2.25	1057

Use conditions: 1. drive switching frequency  $\geq 4\text{kHz}$ ;  
2. cooling medium requirements: oil, flow  $\geq 8\text{L/min}$ , oil pressure  $\leq 0.6\text{Mpa}$ , inlet oil temperature  $\leq 50^\circ\text{C}$ .

#### Test condition:

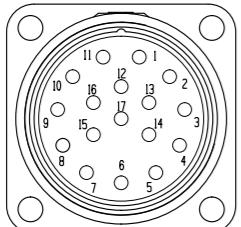
- > Motor tested in horizontal position in free still air, ambient temperature  $30^\circ\text{C}$
- > Motor flanged ( $T_{flange} = 30^\circ\text{C}$ )
- > Typical data tolerance  $\pm 10\%$
- > Threshold of built in PTC  $130^\circ\text{C}$
- > Switching frequency  $4\text{kHz}$



## Motor Wiring: Signal

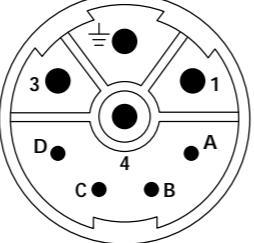
### Resolver:

M23-17 signal socket



Pin	Signal	Color
3	COS+	Red
4	COS-	Black
7	SIN+	Yellow
8	SIN-	Blue
12	REF+	Red/white
13	REF-	Yellow/white
14	KTY	Black
15	KTY	Black

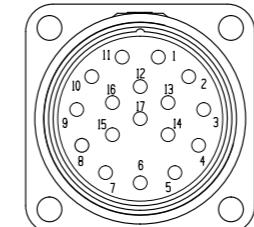
M23 (4+4) power socket



Pin	Signal	Color
1	U	Red
	GND	Grounding
3	V	Blue
4	W	Yellow
A	PTC1	Blue
B	PTC2	Blue
C	Break+	Red
D	Break-	Black

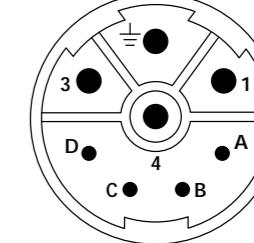
### EnDat/Sick:

M23-17 signal socket



Pin	Signal	Color
1	Us	Red
4	GND	Blue
5	KTY	Black
7	KTY	Black
12	SIN+	White
13	SIN-	Brown
14	DATA+	Gray
15	COS+	Pink
16	COS-	Black
17	DATA-	Green

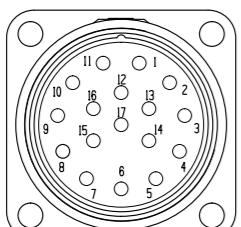
M23 (4+4) power socket



Pin	Signal	Color
1	U	Red
	GND	Grounding
3	V	Blue
4	W	Yellow
A	PTC1	Blue
B	PTC2	Blue
C	Break+	Red
D	Break-	Black

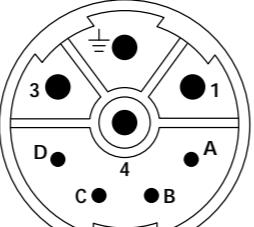
### EnDat/Heidenhein:

M23-17 signal socket



Pin	Signal	Color
1	+Vccsensor	Blue
4	0Vsensor	White
5	KTY	Black
6	KTY	Black
7	+Vcc	Brown/green
8	Clock+	Purple
9	Clock-	Yellow
10	0V	White/green
12	B+	Blue/black
13	B-	Red/black
14	DATA+	Gray
15	A+	Green/black
16	A-	Yellow/black
17	DATA-	Pink

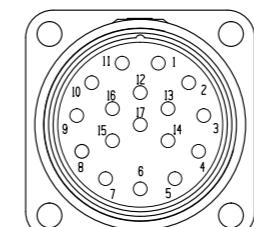
M23 (4+4) power socket



Pin	Signal	Color
1	U	Red
	GND	Grounding
3	V	Blue
4	W	Yellow
A	PTC1	Blue
B	PTC2	Blue
C	Break+	Red
D	Break-	Black

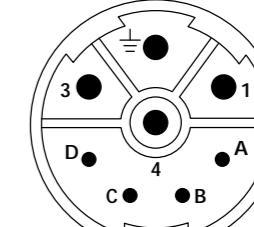
### SinCos/Heidenham:

M23-17 signal socket



Pin	Signal	Color
1	C-	Pink
2	D-	Purple
3	A-	Yellow/black
4	B-	Red/black
6	C+	Gray
7	D+	Yellow
8	A+	Green/black
9	B+	Blue/black
12	+5V	Brown/green
13	0V	White/green
14	R-	Black
15	R+	Red
16	KTY	Black
17	KTY	Black

M23 (4+4) power socket

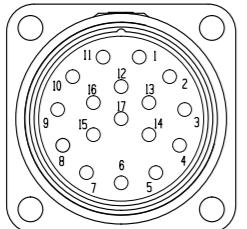


Pin	Signal	Color
1	U	Red
	GND	Grounding
3	V	Blue
4	W	Yellow
A	PTC1	Blue
B	PTC2	Blue
C	Break+	Red
D	Break-	Black

## Motor Wiring: Signal

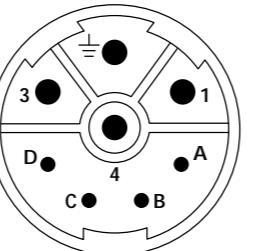
### Resolver:

M23-17 signal socket



Pin	Signal	Color
2	+Vcc	Red
3	0V	Black
4	A+	Blue
5	B+	Green
6	Z+	Yellow
7	A-	Blue/black
8	B-	Green/black
9	Z-	Yellow/black
10	U-	Brown/black
11	V-	Gray/black
12	W-	White/black
13	U+	Brown
14	V+	Gray
15	W+	White
16	KTY	Black
17	KTY	Black

M23 (4+4) power socket



Pin	Signal	Color
1	U	Red
	GND	Grounding
3	V	Blue
4	W	Yellow
A	PTC1	Blue
B	PTC2	Blue
C	Break+	Red
D	Break-	Black

## Motor Wiring: Power

SIZE A	<p>Rated current In&lt;0-60A&gt; Configurable rotary fasteners PG21(13-18mm) PG29(18-25mm)</p>	
SIZE B	<p>Rated current In&lt;60-200A&gt; Configurable rotary fasteners PG29(18-25mm) PG36(22-32mm) PG42(32-38mm) PG48(37-44mm)</p>	
SIZE C	<p>Rated current In&lt;200-400A&gt; Configurable rotary fasteners 2×PG36(22-32mm) 2×PG42(32-38mm) 2×PG48(37-44mm)</p>	
SIZE D	<p>Rated current In&lt;400-600A&gt; Configurable rotary fasteners 3×PG42(32-38mm)</p>	



Hi3\*\*series 5.5~350kW Servo Driver

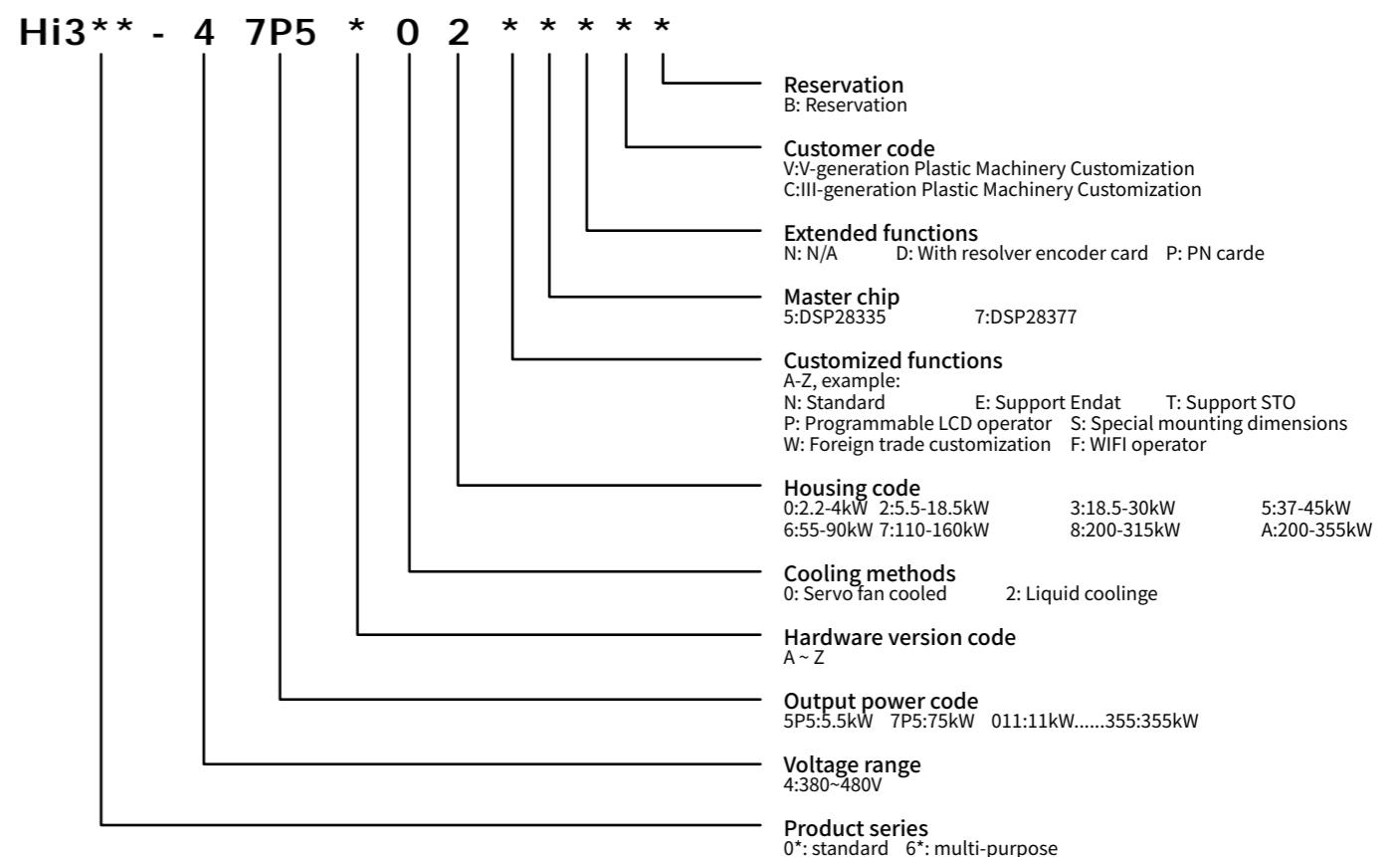
### Hi Drive Characteristics (3 \*\*)

- > Input voltage supporting 480V for wider voltage range
- > Support esolver, HEIDENHAIN ENDAT2.1/2.2, sine-cosine encoders
- > Support the output of the 2<sup>nd</sup> encoder and incremental encoder
- > Support multiple speed sources such as switch, analog, bus, etc.
- > Built-in pressure closed loop, multi-stage PID control
- > Support flexible deployment of IO ports, logical operations
- > MODBUS, CAN, EtherCAT and Profinet communication, compatible with international mainstream protocols.
- > Current response bandwidth is more than 1kHz during the weak field operation, and the motor control accuracy and dynamic performance are good
- > Pass CE and UL functional safety certification, making it safer and more reliable
- > Optional programmable LCD operator for secondary application development

## Hi Drive Ordering Codes



### Drive Model Ordering Code



### Functional Comparison between Hi300/Hi308 and Hi360

Series	Positioning	Control plate	Supported functions	Customizable functions (specify when placing an order)
Hi300/Hi308	Standard	Hi3-S1 Control plate	CAN bus Analog input and analog output KTY/PTC Digital IO Resolver encoder	Programmable LCD operator (1485 port supporting MODBUS, etc.; 1 x Ethernet high-speed debug port and 1 USB data supporting USB read-writing) ProfiNet expansion card 2 <sup>nd</sup> encoder expansion (incremental encoder, pulse + direction, SSI, encoder emulation)
Hi360	Multi-purpose	Hi3-P1 Control plate	CAN bus Analog input and analog output KTY/PTC Digital IO Resolver encoder EtherCAT bus Heidenhain encoder Incremental TTL encoder sine-cosine encoder	Programmable LCD operator (1485 port supporting MODBUS, etc.; 1 x Ethernet high-speed debug port and 1 USB data supporting USB read-writing) ProfiNet expansion card 2 <sup>nd</sup> encoder expansion (incremental encoder, pulse + direction, SSI, encoder emulation) STO
		Hi3-P2 Control plate	CAN bus Analog input and analog output KTY/PTC Digital IO Resolver encoder EtherCAT bus Heidenhain encoder Incremental TTL encoder sine-cosine encoder High speed IO	Programmable LCD operator (1485 port supporting MODBUS, etc.; 1 x Ethernet high-speed debug port and 1 USB data supporting USB read-writing) ProfiNet expansion card 2 <sup>nd</sup> encoder expansion (incremental encoder, pulse + direction, SSI, encoder emulation) STO

## Hi3\*\* series

### Hi5.5-7.5-11-15-18.5 Air Cooling

Model Hi3XX-4 □□□ XXX	5P5	7P5	011	015	
Housing code	2#				
Maximum applicable motor power (kW)	5.5	7.5	11	15	
Output	Rated output capacity (kVA)	8.3	11	17	23
	Rated output current (A)	12	16.5	24	33
	Overload capacity	150%, 60s 200%, 1s (switching frequency 2kHz)			
	Maximum voltage range (V)	3 phases, 380 ~ 480 (following input voltage)			
	Maximum output frequency (Hz)	400			
Input	Power supply equipment capacity (kVA)	14	19	26	36
	Voltage range (V)	3 phases, 380 ~ 480			
	Allowable frequency fluctuation (Hz)	50/60 ± 5%			
	Allowable voltage fluctuation	-15% ~ +10%			
	Rated input current (A)	17	23	31	43

Note 1: When the grid voltage is 480V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

If the switching frequency is increased, the output capability of the drive will decrease.

## Hi3\*\* series

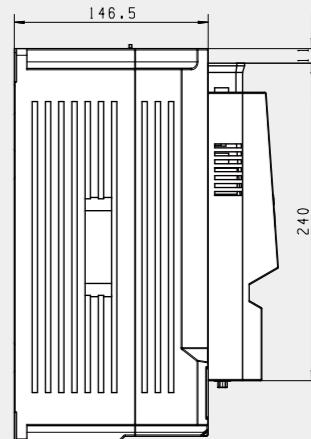
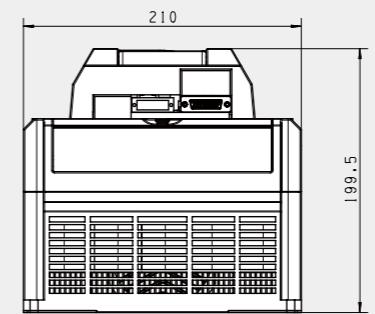
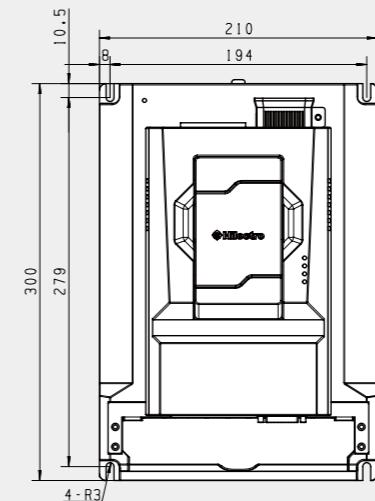
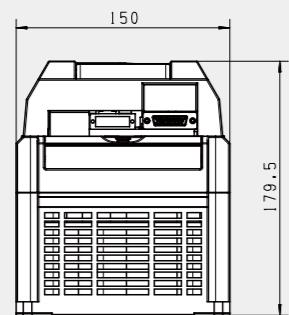
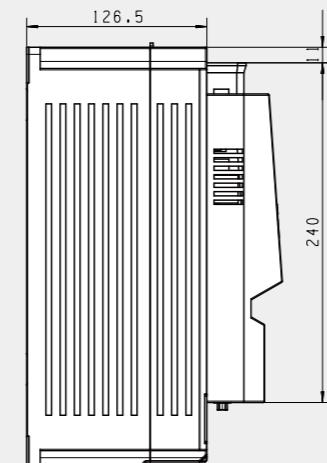
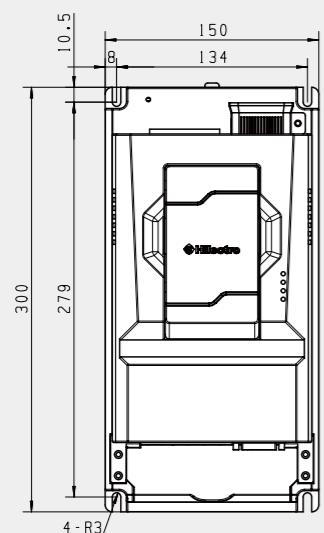
### Hi18.5-22-30 Air Cooling

Model Hi3XX-4 □□□ XXX	018	022	030	
Housing code	3#			
Maximum applicable motor power (kW)	18.5	22	30	
Output	Rated output capacity (kVA)	26	32	42
	Rated output current (A)	37	45	60
	Overload capacity	150%, 60s 200%, 1s (switching frequency 2kHz)		
	Maximum voltage range (V)	3 phases, 380 ~ 480 (following input voltage)		
	Maximum output frequency (Hz)	400		
Input	Power supply equipment capacity (kVA)	38	42	50
	Voltage range (V)	3 phases, 380 ~ 480		
	Allowable frequency fluctuation (Hz)	50/60 ± 5%		
	Allowable voltage fluctuation	-15% ~ +10%		
	Rated input current (A)	45	50	66

Note 1: When the grid voltage is 480V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

If the switching frequency is increased, the output capability of the drive will decrease.



**Hi3\*0 series**  
**Hi37-45 Air Cooling**

Model Hi300/360-4 □□□ XXX	037	045
Housing code		5#
Maximum applicable motor power (kW)	37	45
Output	Rated output capacity (kVA)	50
	Rated output current (A)	75
	Overload capacity	150%, 60s 200%, 1s (switching frequency 2kHz)
	Maximum voltage range (V)	3 phases, 380 ~ 480 (following input voltage)
	Maximum output frequency (Hz)	400
Input	Power supply equipment capacity (kVA)	69
	Voltage range (V)	3 phases, 380 ~ 480
	Allowable frequency fluctuation (Hz)	50/60 ± 5%
	Allowable voltage fluctuation	-15% ~ +10%
	Rated input current (A)	83
		99

Note 1: When the grid voltage is 480V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

If the switching frequency is increased, the output capability of the drive will decrease.

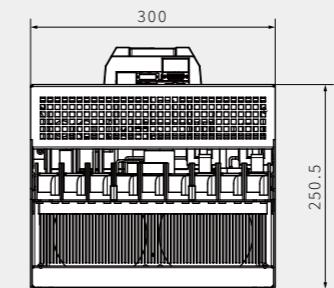
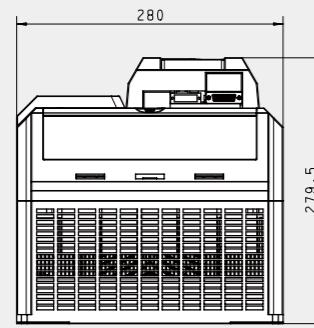
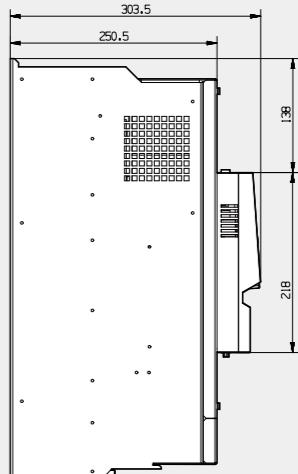
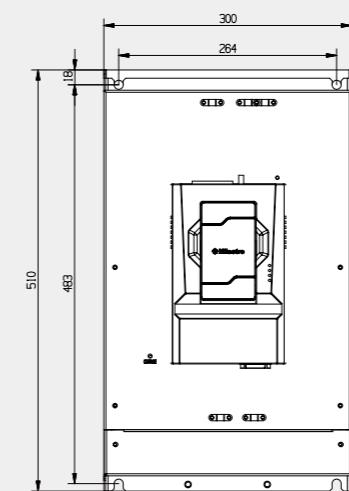
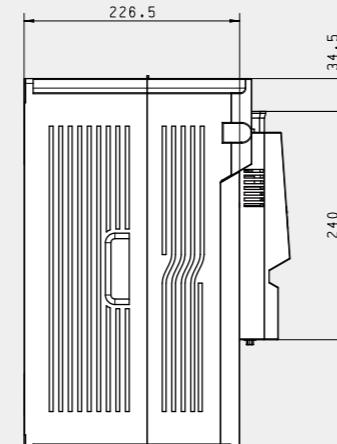
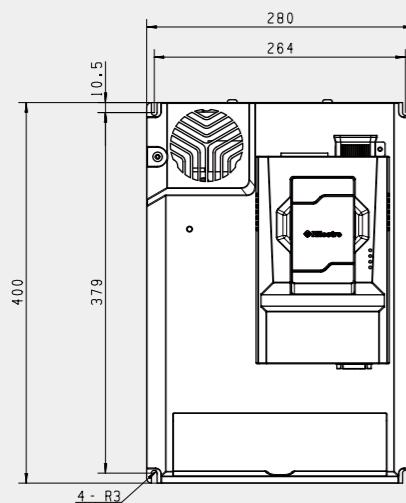
**Hi3\*0 series**  
**Hi55-75-90 Air Cooling**

Model Hi300/360-4 □□□ XXX	055	075	090
Housing code		6#	
Maximum applicable motor power (kW)	55	75	90
Output	Rated output capacity (kVA)	80	104
	Rated output current (A)	115	150
	Overload capacity	150%, 60s 200%, 1s (switching frequency 2kHz)	
	Maximum voltage range (V)	3 phases, 380 ~ 480 (following input voltage)	
	Maximum output frequency (Hz)	400	
Input	Power supply equipment capacity (kVA)	106	137
	Voltage range (V)	3 phases, 380 ~ 480	
	Allowable frequency fluctuation (Hz)	50/60 ± 5%	
	Allowable voltage fluctuation	-15% ~ +10%	
	Rated input current (A)	127	165
			198

Note 1: When the grid voltage is 480V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

If the switching frequency is increased, the output capability of the drive will decrease.



## Hi3\*0 series

### Hi110-132-160 Air Cooling

## Hi3\*0 series

### Hi200 Air Cooling

Model Hi3**-4 □□□ XXXX	110	132	160	
Housing code		7#		
Maximum applicable motor power (kW)	110	132	160	
Output	Rated output capacity (kVA)	139	165	198
	Rated output current (A)	210	250	300
	Overload capacity	150%, 60s		
	Maximum voltage range (V)	3 phases, 380 ~ 480 (following input voltage)		
	Maximum output frequency (Hz)	400		
Input	Power supply equipment capacity (kVA)	177	210	252
	Voltage range (V)	3 phases, 380 ~ 480		
	Allowable frequency fluctuation (Hz)	50/60 ± 5%		
	Allowable voltage fluctuation	-15% ~ +10%		
	Rated input current (A)	231	275	330

Note 1: When the grid voltage is 480V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

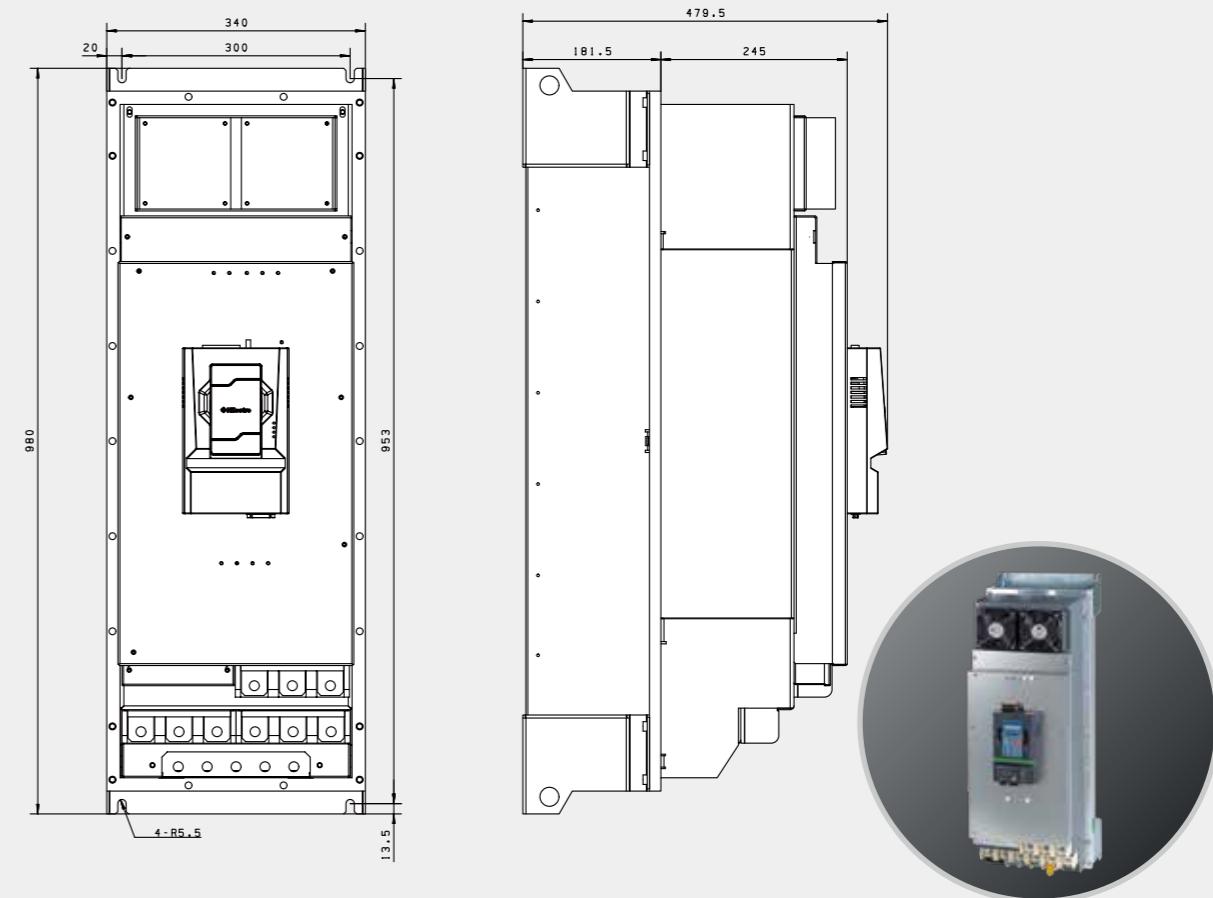
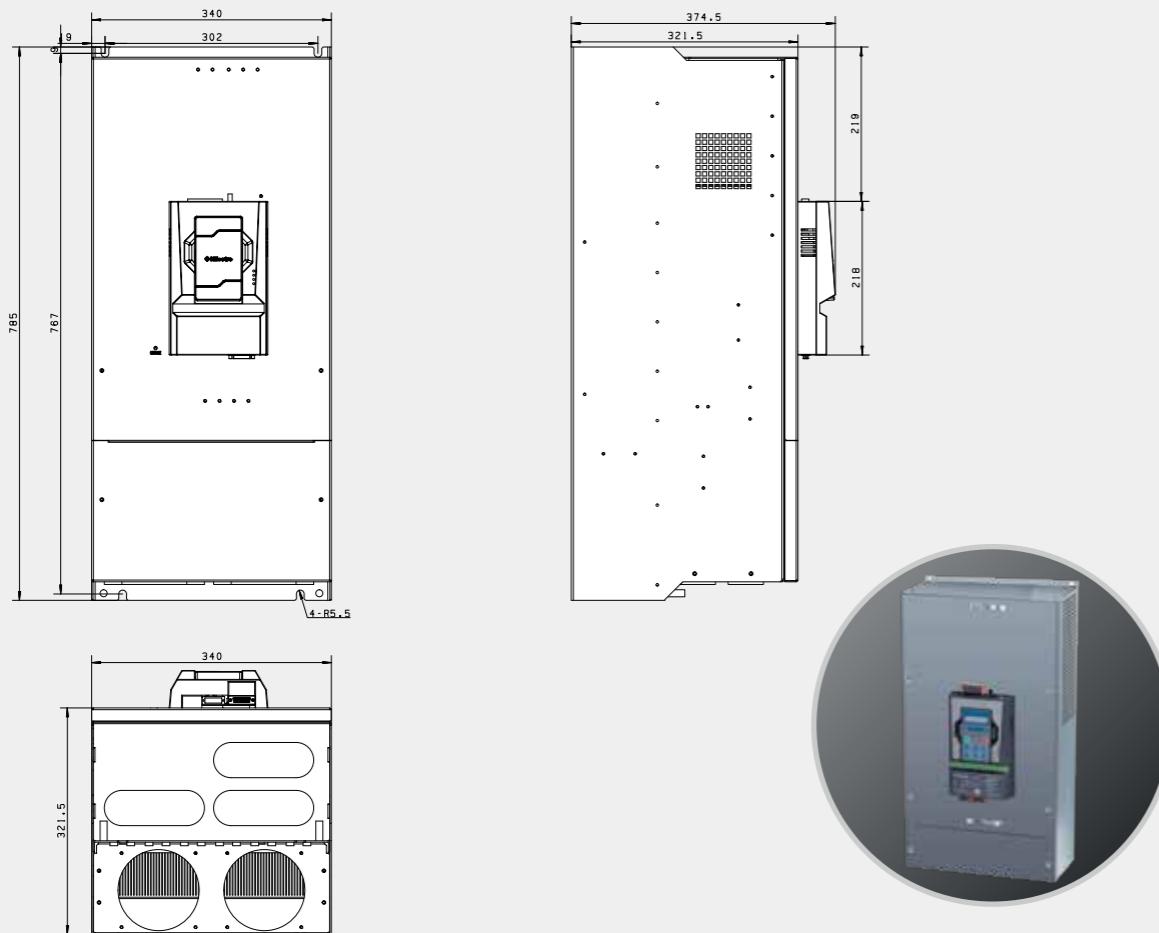
If the switching frequency is increased, the output capability of the drive will decrease.

Model Hi3**-4 □□□ XXXX	200
Housing code	8# A
Maximum applicable motor power (kW)	200
Output	Rated output capacity (kVA)
	256
	Rated output current (A)
	370
	Overload capacity
Input	Maximum voltage range (V)
	3 phases, 380 ~ 440 (following input voltage)
	Maximum output frequency (Hz)
	400
	Power supply equipment capacity (kVA)
Input	294
	Voltage range (V)
	3 phases, 380 ~ 440
	Allowable frequency fluctuation (Hz)
	50/60 ± 5%
Input	Allowable voltage fluctuation
	-15% ~ +10%
Input	Rated input current (A)
	385

Note 1: When the grid voltage is 440V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

If the switching frequency is increased, the output capability of the drive will decrease.



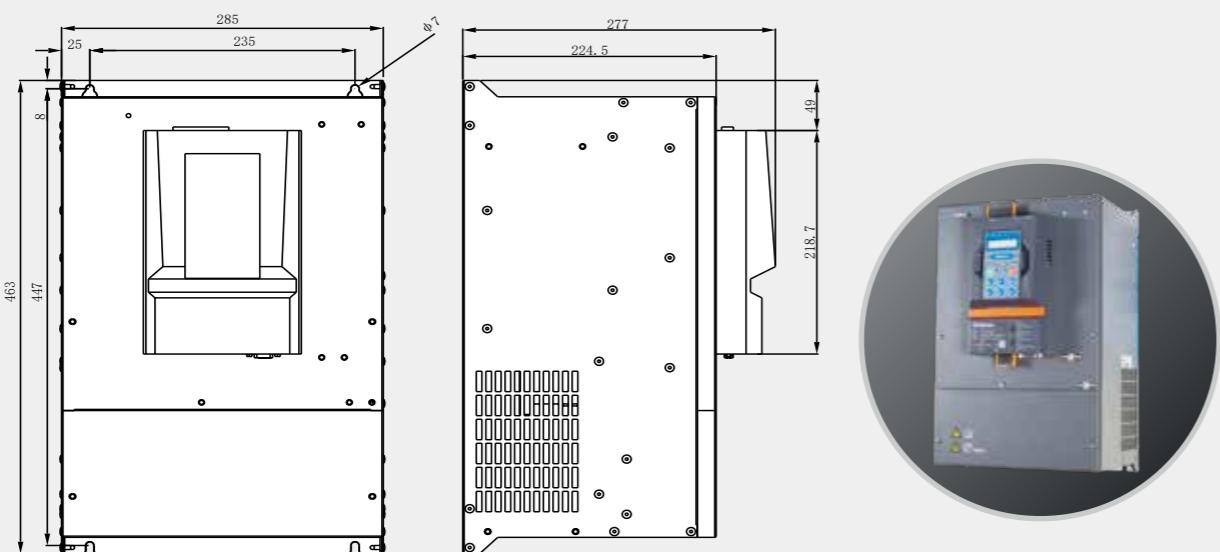
**Hi3\*8 series**  
**Hi37-45 Air Cooling**

Model Hi308-4 □□□ XXX	037	045
Housing code	5#	
Maximum applicable motor power (kW)	37	45
Output	Rated output capacity (kVA)	50
	Rated output current (A)	75
	Overload capacity	150%, 60s 200%, 1s (5Hz 以上)
	Maximum voltage range (V)	3 phases, 380 ~ 480 (following input voltage)
	Maximum output frequency (Hz)	400
Input	Power supply equipment capacity (kVA)	63
	Voltage range (V)	3 相, 380 ~ 480
	Allowable frequency fluctuation (Hz)	50/60 ± 5%
	Allowable voltage fluctuation	-15% ~ +10%
	Rated input current (A)	76
		92

Note 1: When the grid voltage is 480V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

If the switching frequency is increased, the output capability of the drive will decrease.

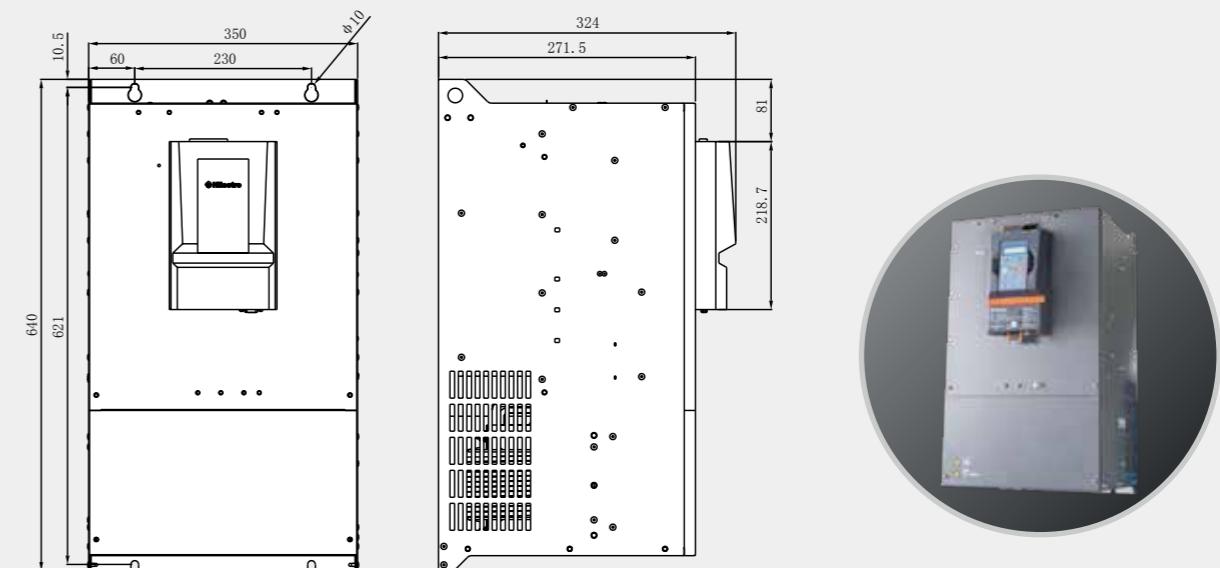


Model Hi308-4 □□□ XXX	055	075	090
Housing code	6#		
Maximum applicable motor power (kW)	55	75	90
Output	Rated output capacity (kVA)	80	104
	Rated output current (A)	115	150
	Overload capacity	150%, 60s 200%, 1s (5Hz 以上)	
	Maximum voltage range (V)	3 phases, 380 ~ 480 (following input voltage)	
	Maximum output frequency (Hz)	400	
Input	Power supply equipment capacity (kVA)	97	127
	Voltage range (V)	3 相, 380 ~ 480	
	Allowable frequency fluctuation (Hz)	50/60 ± 5%	
	Allowable voltage fluctuation	-15% ~ +10%	
	Rated input current (A)	119	157
		185	

Note 1: When the grid voltage is 480V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

If the switching frequency is increased, the output capability of the drive will decrease.



## Hi3\*8 series

### Hi110-132-160 Air Cooling

Model Hi308-4 □□□ XXXX		110	132	160
Housing code		7#		
Maximum applicable motor power (kW)		110	132	160
Output	Rated output capacity (kVA)	145	173	208
	Rated output current (A)	210	250	300
	Overload capacity	150%, 60s (switching frequency 2kHz)		
	Maximum voltage range (V)	3 phases, 380 ~ 480 (following input voltage)		
	Maximum output frequency (Hz)	400		
Input	Power supply equipment capacity (kVA)	179	220	263
	Voltage range (V)	3 phases, 380 ~ 480		
	Allowable frequency fluctuation (Hz)	50/60Hz ± 5%		
	Allowable voltage fluctuation	-15% ~ +10%		
	Rated input current (A)	216	257	309

Note 1: When the grid voltage is 480V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

If the switching frequency is increased, the output capability of the drive will decrease.

## Hi3\*0 series

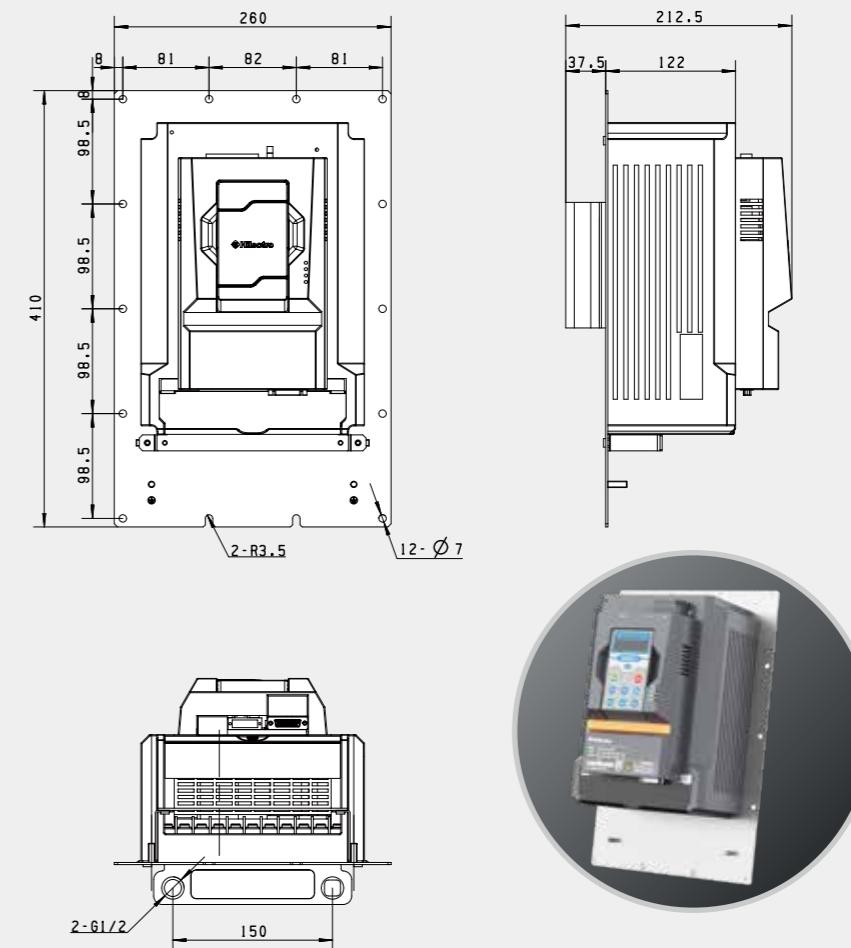
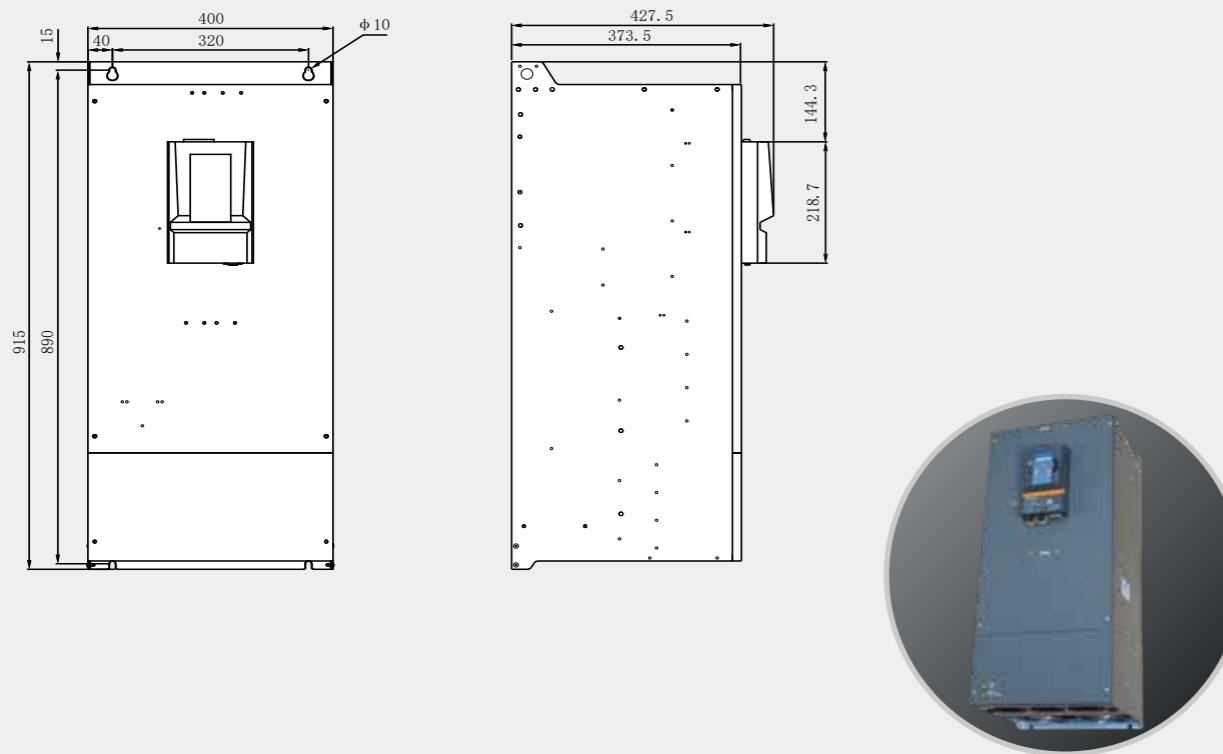
### Hi18.5-22-30 Liquid Cooling

Model Hi300/360-4 □□□ XXX		018	022	030
Housing code		3#		
Maximum applicable motor power (kW)		18.5	22	30
Output	Rated output capacity (kVA)	26	32	42
	Rated output current (A)	37	45	60
	Overload capacity	150%, 60s 200%, 1s (switching frequency 2kHz)		
	Maximum voltage range (V)	3 phases, 380 ~ 480 (following input voltage)		
	Maximum output frequency (Hz)	400		
Input	Power supply equipment capacity (kVA)	38	42	50
	Voltage range (V)	3 phases, 380 ~ 480		
	Allowable frequency fluctuation (Hz)	50/60 ± 5%		
	Allowable voltage fluctuation	-15% ~ +10%		
	Rated input current (A)	45	50	66

Note 1: When the grid voltage is 480V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

If the switching frequency is increased, the output capability of the drive will decrease.



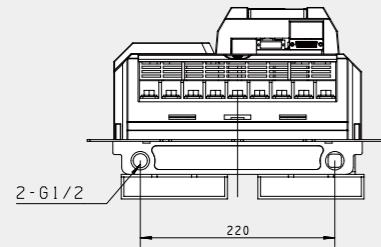
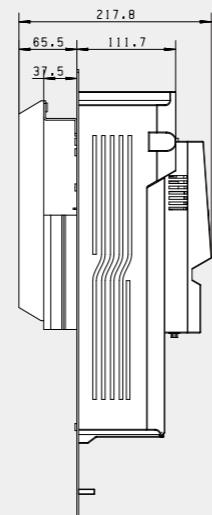
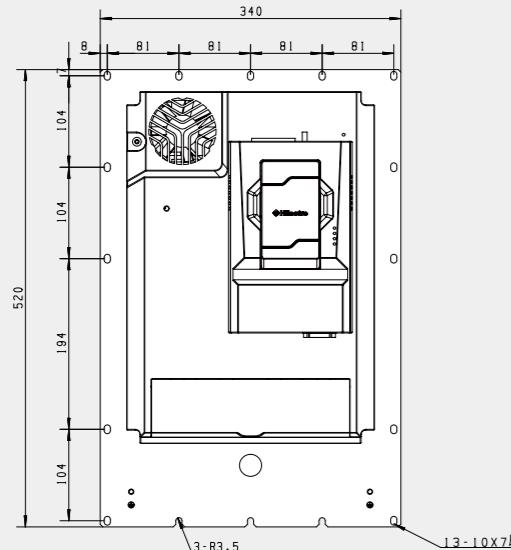
**Hi3\*0 series**  
**Hi37-45 Liquid Cooling**

Model Hi300/360-4 □□□ XXX		037	045
Housing code		5#	
Maximum applicable motor power (kW)		37	45
Output	Rated output capacity (kVA)	50	63
	Rated output current (A)	75	90
	Overload capacity	150%, 60s 200%, 1s (switching frequency 2kHz)	
	Maximum voltage range (V)	3 phases, 380 ~ 480 (following input voltage)	
	Maximum output frequency (Hz)	400	
Input	Power supply equipment capacity (kVA)	69	83
	Voltage range (V)	3 phases, 380 ~ 480	
	Allowable frequency fluctuation (Hz)	50/60 ± 5%	
	Allowable voltage fluctuation	-15% ~ +10%	
	Rated input current (A)	83	99

Note 1: When the grid voltage is 480V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

If the switching frequency is increased, the output capability of the drive will decrease.

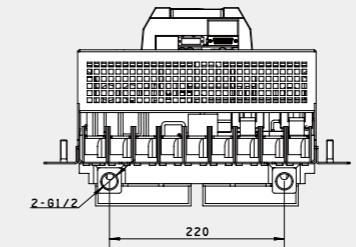
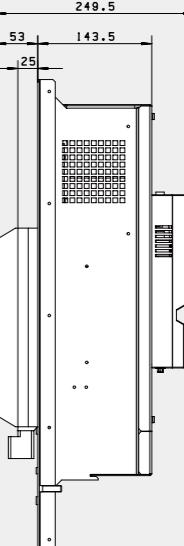
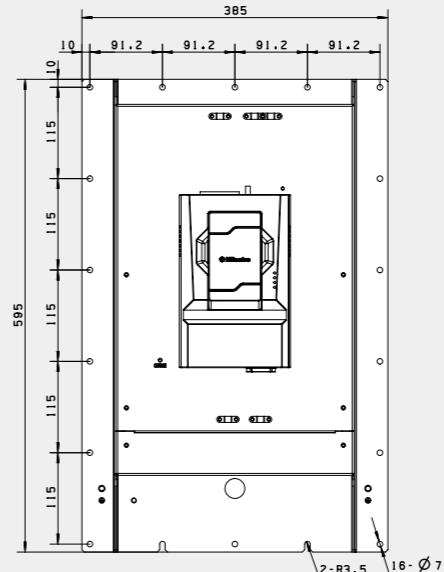


Model Hi300/360-4 □□□ XXX		055	075	090
Housing code		6#		
Maximum applicable motor power (kW)		55	75	90
Output	Rated output capacity (kVA)	80	104	125
	Rated output current (A)	115	150	180
	Overload capacity	150%, 60s 200%, 1s (switching frequency 2kHz)		
	Maximum voltage range (V)	3 相, 380 ~ 480 (following input voltage)		
	Maximum output frequency (Hz)	400		
Input	Power supply equipment capacity (kVA)	106	137	165
	Voltage range (V)	3 phases, 380 ~ 480		
	Allowable frequency fluctuation (Hz)	50/60 ± 5%		
	Allowable voltage fluctuation	-15% ~ +10%		
	Rated input current (A)	127	165	198

Note 1: When the grid voltage is 480V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

If the switching frequency is increased, the output capability of the drive will decrease.



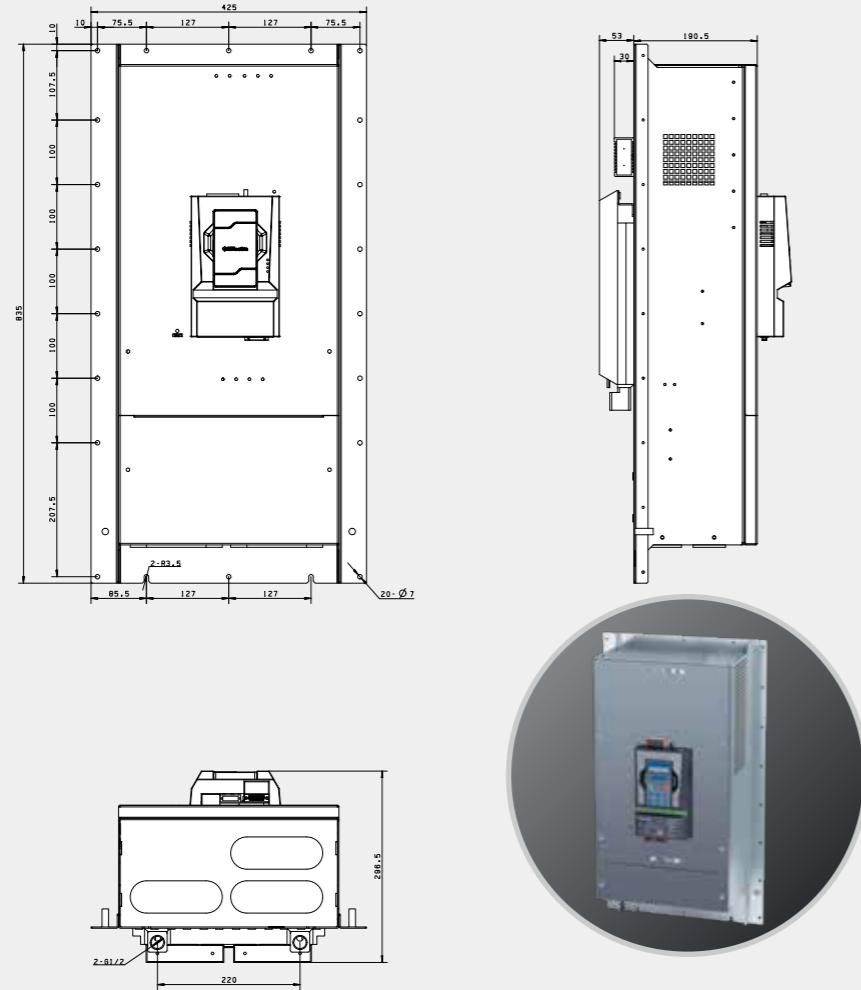
**Hi3\*0 series**  
**Hi110-132-160 Liquid Cooling**

Model Hi3**-4 □□□ XXXX	110	132	160	
Housing code		7#		
Maximum applicable motor power (kW)	110	132	160	
Output	Rated output capacity (kVA)	139	165	198
	Rated output current (A)	210	250	300
	Overload capacity	150%, 60s		
	Maximum voltage range (V)	3 phases, 380 ~ 480 (following input voltage)		
	Maximum output frequency (Hz)	400		
Input	Power supply equipment capacity (kVA)	177	210	252
	Voltage range (V)	3 phases, 380 ~ 440		
	Allowable frequency fluctuation (Hz)	50/60 ± 5%		
	Allowable voltage fluctuation	-15% ~ +10%		
	Rated input current (A)	231	275	330

Note 1: When the grid voltage is 480V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

If the switching frequency is increased, the output capability of the drive will decrease.



Model Hi3**-4 □□□ XXXX	200	250	315	
Housing code		8# A		
Maximum applicable motor power (kW)	200	250	315	
Output	Rated output capacity (kVA)	256	319	395
	Rated output current (A)	370	460	570
	Overload capacity	125%, 60s		
	Maximum voltage range (V)	3 phases, 380 ~ 440 (following input voltage)		
	Maximum output frequency (Hz)	400		
Input	Power supply equipment capacity (kVA)	294	369	456
	Voltage range (V)	3 phases, 380 ~ 440		
	Allowable frequency fluctuation (Hz)	50/60 ± 5%		
	Allowable voltage fluctuation	-15% ~ +10%		
	Rated input current (A)	385	483	598

Note 1: When the grid voltage is 440V, the rated drive current requires derating to 85%.

Note 2: The above table shows the drive ratings at a switching frequency of 4kHz.

If the switching frequency is increased, the output capability of the drive will decrease.

