

VEICHI

Integrated Hydraulic Servo



VEICHI

Suzhou Veichi Electric Co., Ltd.

No.1000 Songjia road, Wuzhong Economic and Technological
Development Zone, Suzhou, China

Tel: +86-512-6617 1988
Fax: +86-512-6617 3610

E-mail: overseas@veichi.com

Facebook: <https://www.facebook.com/veichiglobal/>

Whatsapp: +86-138 2881 8903 [Http://www.veichi.org](http://www.veichi.org)



Wechat Official Account

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Company Profile

Veichi Electric is a national high-tech enterprise with the ability of R&D, manufacturing and selling of industrial automation products. Since establishment, Veichi Electric always focused on the field of electric drive and industrial control, and has won many titles as Jiangsu Provincial Enterprise Technology Center, Jiangsu Province Private Technology Enterprise, "Competitive Brand in Motion Control" and son on. The company has two R&D and production bases in Shenzhen & Suzhou, and has established a wholly-owned subsidiary in India. Now Veichi business have covered many countries and regions, providing competitive, safe and reliable products and services worldwide.

After years of self-dependent research and innovation, Veichi Electric has developed a series of independent intellectual property rights. Up to December 31, 2019, the company has obtained 91 authorized patents and 15 patents of that are invention patents. There are 29 patents more in the application process and 19 patents of that are invention patents. Moreover, 54 software copyrights have obtained.

Veichi Electric provides a wide range of products, including inverters from 0.4kW to 1,200kW, servo systems from 50W to 55kW, motion controllers, PLC and HMI, etc to customer in lifting and mining facilities, rail transportation, machine tools, compressors, plastics, solar pumping, building materials, robots or manipulator, printing and packaging, textile and chemical fiber, metallurgy, municipal administration, petroleum, chemical and other industries.

In the next 10 years, Veichi Electric will continue to adhere to the business philosophy of "oriented by market demand, driven by technological innovation", and strengthen the core business of inverters, servo systems and motion controllers, and intelligent IOT systems. We always stick to provide customers with excellent products and services, and spare no efforts to promote the development of electrical transmission and industrial control field.



Product series

EHS100 integrated servo

SD650 drive

EHS650 drive

Permanent magnet synchronous motor

Position closed loop card

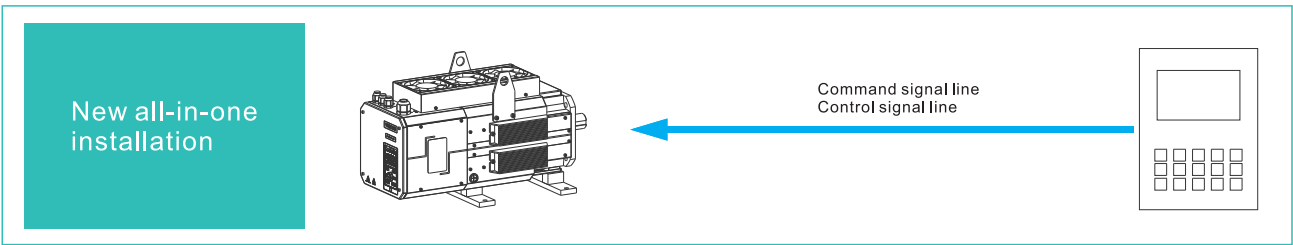
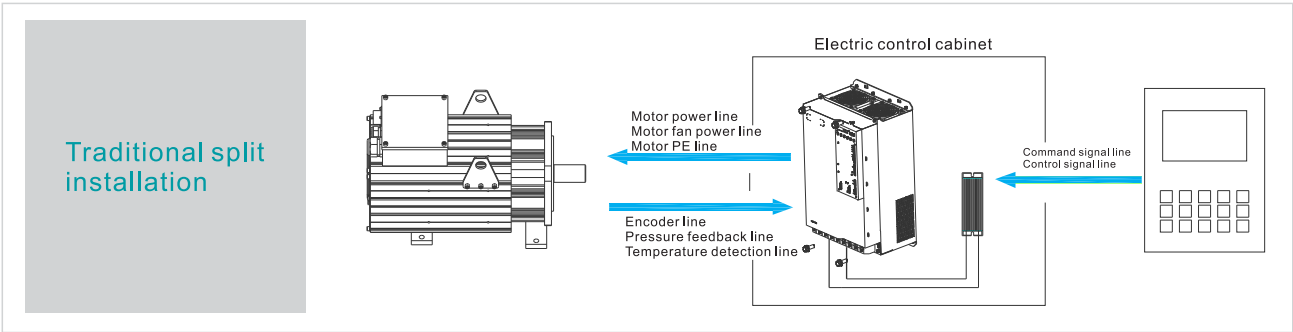
Signal conversion board

EHS100 integrated servo



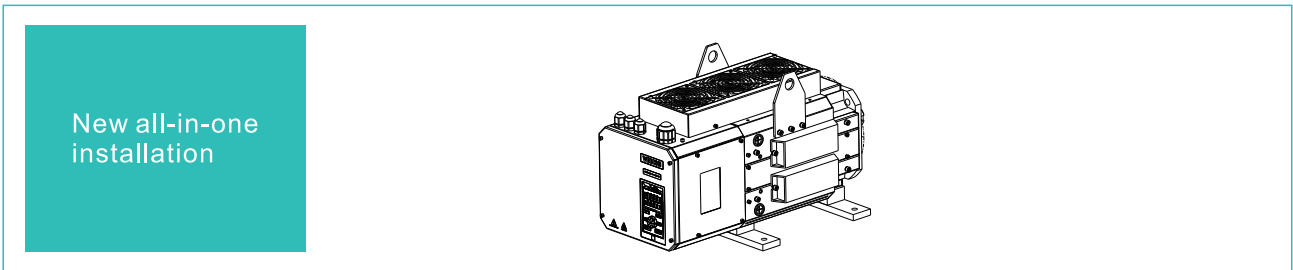
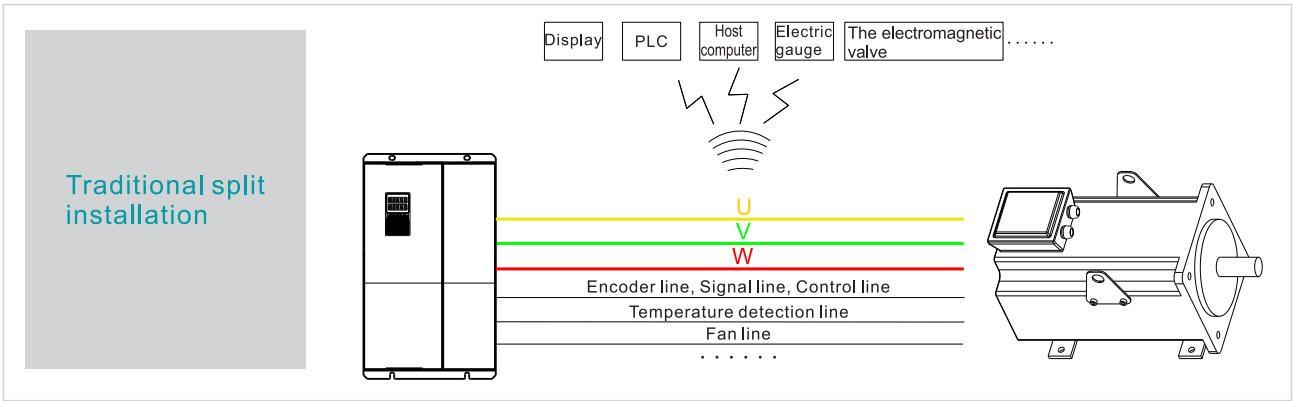
Performance features

Subvert tradition



The system is free of debugging, without self-learning, it can run after power on. Do not change the original motor installation size and method, reduce the drive cabinet. No need to connect the motor power line, fan power line, temperature detection line, encoder line, brake resistance line, motor PE line, etc.

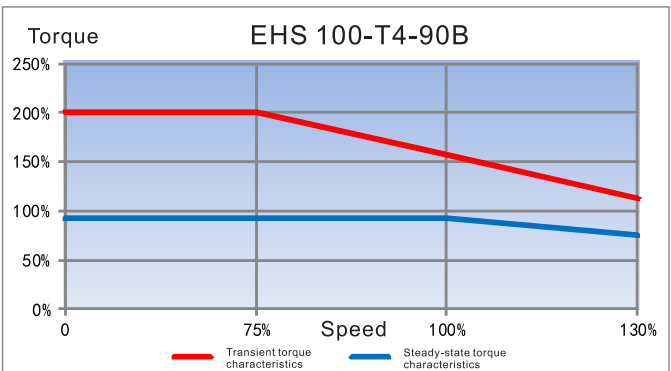
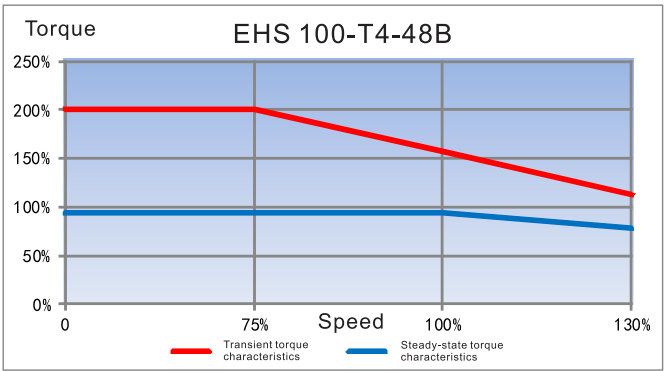
Reduce radiation and interference



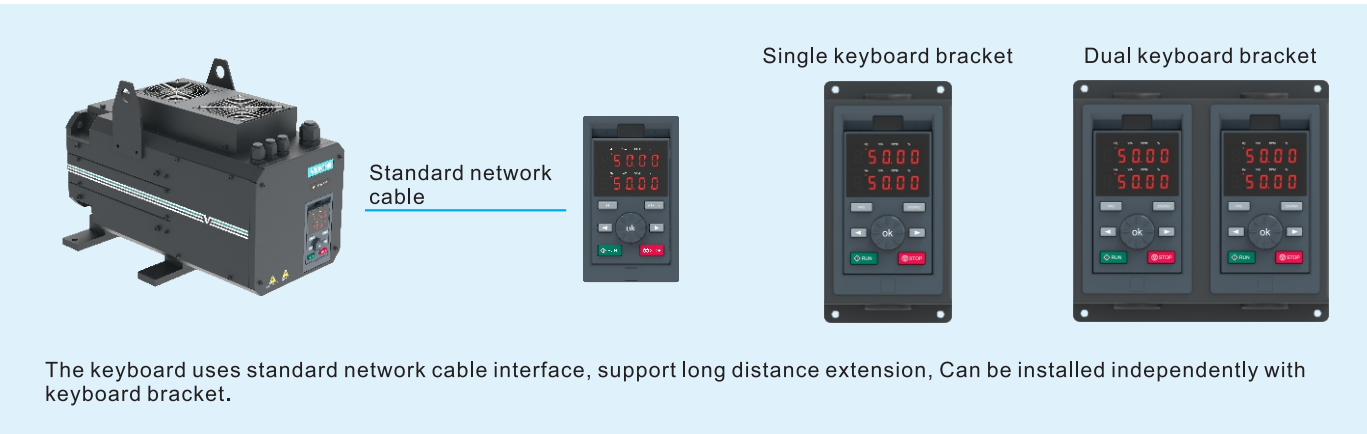
The internal wiring of the system, away from the electric control cabinet, independent installation, EMC grounding design, leakage current jumper selection design, help to improve the EMC electromagnetic compatibility of the system, reduce the distributed capacitance between the lines, greatly reduce interference, and improve system adaptability.

Permanent magnet synchronous power

IPM Embedded magnetic steel design, the temperature rise is low and the response is fast. Industry-leading field Weak magnetic algorithm with maximum twice torque design.

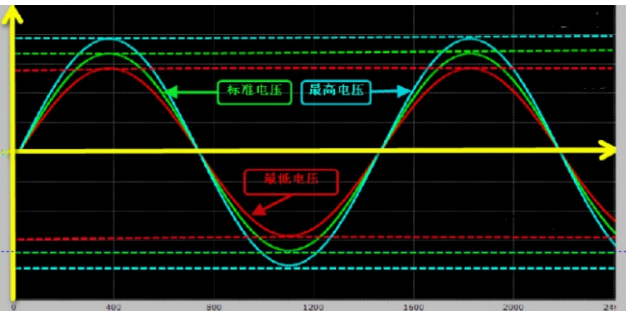


Mobile keyboard design



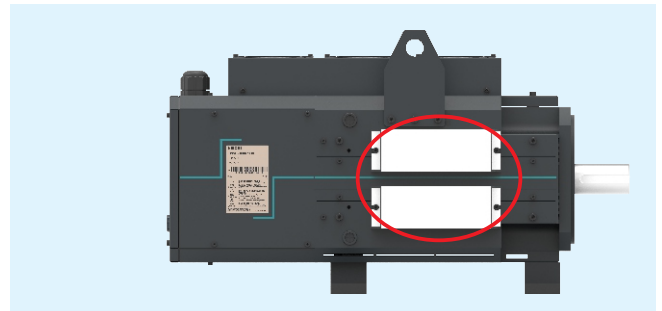
AC300V-AC480V Wide power input

Ultra-wide AC voltage input range, calmly respond to various harsh power grid environments, and improve the scope of equipment under extreme working conditions



Integrated brake

Standard braking resistor in the whole series
Make assembly easy



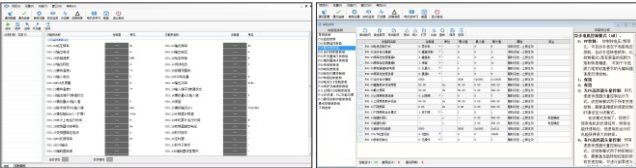
Intelligent temperature control

Dual independent air duct design, with 70,000-hour cooling fan (IP56 protection grade), combined with multi-point temperature monitoring and intelligent control, keep the system in the most suitable temperature area, improve stability and increase the service life of the fan, especially when the system is under low load or standby The effect is obvious under the working conditions.



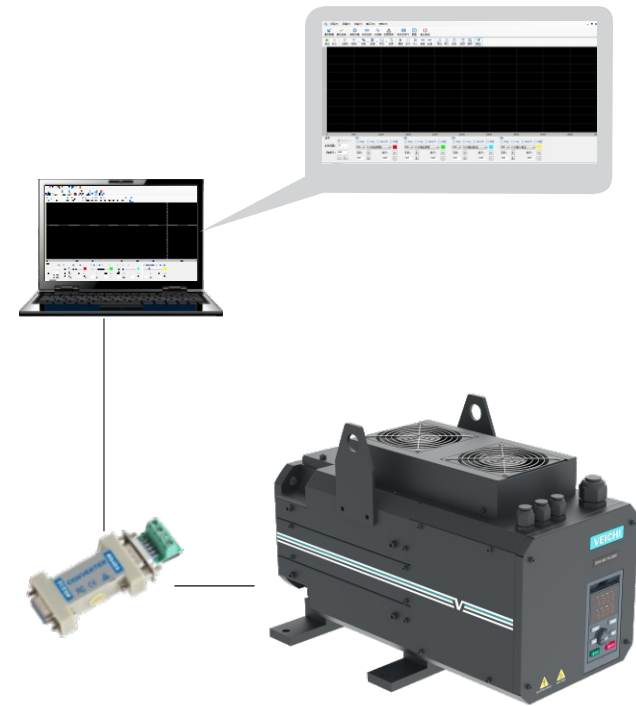
Powerful post-monitoring software

EHS100 has user-friendly PC software, easy to operate and configure parameters; users can use VCACSoft Ver1.3 for parameter setting, copying and monitoring in addition to the keyboard operation integrated machine. Even if it is convenient to provide users with all-in-one status information, it provides flexibility for debugging, setting, monitoring and troubleshooting. The software runs under WINDOWS and exchanges data via RS485 interface or field bus.

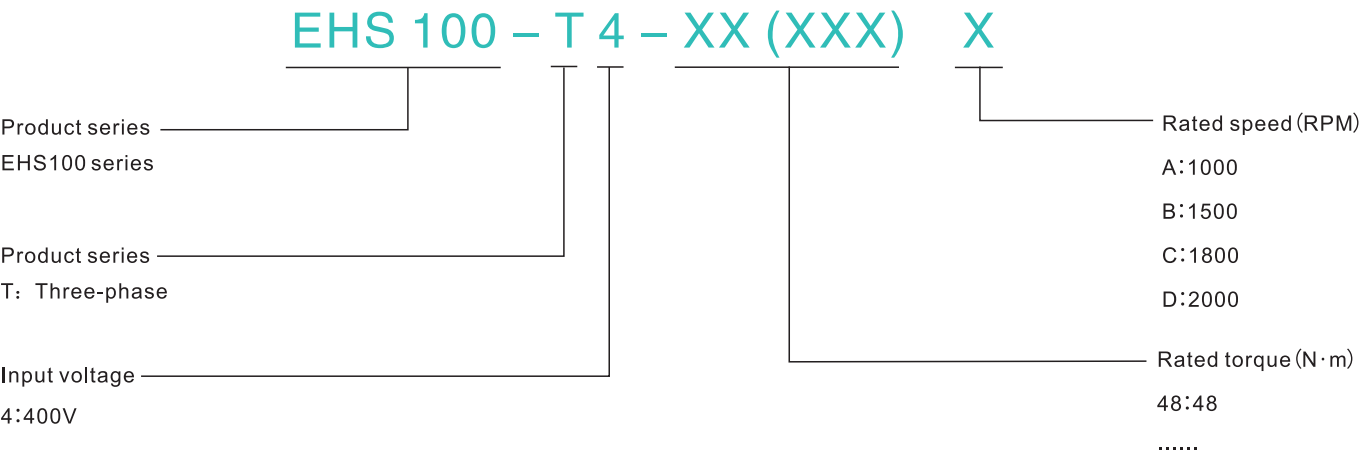


Position closed loop card

All-in-one dedicated position closed-loop card, combined with excellent position control algorithm. Adapt to various types of position sensors, accept analog signals and pulse signals, suitable for various industries.



EHS100 Model specification



Model	Rated torque (N·m)	Max torque (N·m)	Rated speed (RPM)	Rated current (A)	Rated power (kW)	Max power (kW)
EHS100-T4-9D	9	20	2000	3.5	2.0	4.0
EHS100-T4-14D	14	29	2000	5.4	2.9	6.0
EHS100-T4-21B	21	53	1500	6.4	3.3	8
EHS100-T4-21D	21	45	2000	8	4.4	9.4
EHS100-T4-26B	26	65	1500	7.9	4.4	10
EHS100-T4-26D	26	50	2000	11	5.5	11.7
EHS100-T4-35B	35	88.8	1500	10.6	5.5	13.9
EHS100-T4-35D	35	65	2000	14	7.5	13.9
EHS100-T4-48B	48	96	1500	14.5	7.5	15
EHS100-T4-48C	48	95	1800	17	9	22.5
EHS100-T4-70B	70	132	1500	19.0	10.4	20
EHS100-T4-70C	70	152	1800	23	13	28.9
EHS100-T4-90B	90	186	1500	27.5	14.6	29
EHS100-T4-90C	90	177	1800	32	17	34.3
EHS100-T4-105B	105	210	1500	30.0	16.5	33
EHS100-T4-105C	105	216	1800	36	20	41.2
EHS100-T4-145B	145	290	1500	41.0	22.7	45
EHS100-T4-145C	145	295	1800	52	27	54.9
EHS100-T4-185B	185	370	1500	53.5	29	58
EHS100-T4-185C	185	368	1800	67	35	69.6

EHS100 Specifications

Item		Specifications		
Power input	Rated voltage	Three-phase 380V 50/60Hz		
	Allowable input voltage range	AC300V~AC480V		
	Closing impulse current	Less than rated current		
Input/output	Max output speed	150% rated speed		
	Overload capacity	150% rated current 300s, 180% rated current 120s		
	Modulation	SVPWM		
	ACC/DEC curve	Linear ACC/DEC, S curve ACC/DEC		
	Automatic current limit	Automatically limit the current during operation, Prevent frequent overcurrent fault tripping		
	Standard function	Hydraulic closed-loop control, speed control, RS485 communication, CAN communication, Analog output.		
	Command setting channel	Keyboard number setting, Analog voltage terminal AI1, Analog voltage terminal AI2, Analog voltage/current		
	Feedback input channel	Voltage terminal AI1	voltage input range:0~10V	
		Voltage terminal AI2	voltage input range:-10V~+10V	
		Voltage/Current terminal PI	voltage/current input range:0-10V 0-20mA	
		Communication given	All the above channels support RS485 communication, CAN communication	
	Run command channel	Operation panel given, External terminal given, Communication given		
	Input command signal	Start, stop, Forward and Reverse, JOG, Multi-speed, free stop, Reset, ACC/DEC time		
	External output signal	Two relay outputs, Two analog outputs ,Voltage output range: 0-10V		
Protective function	Over-voltage, Undervoltage, Current limit, Over-current, Over-load, Overheat			
Keyboard display	LED display	Double line five digits tube display	Can control two state value	
	Status monitoring	Pressure command, Pressure feedback, Speed given, Speed feedback, Flow instruction, Output current, Output voltage, Output torque, Output power, Bus voltage, module temperature, Motor temperature, Input terminal X state etc		
	Fault alarm	Self-learning abnormality, Sensor feedback disconnection, Motor over-heat, Servo drive over-heat, Encoder fault, Communication fault, over-voltage, under-voltage, over-current, phase-loss, over-load, Stall, Current limiting, Operation state of current fault, Historical failure.		
Condition	Installation site	Indoor, the altitude is not more than 1000M, no corrosive gas and direct sunlight		
	temperature, humidity	-10℃~+40℃ ; 20%~95%RH (No dew)		
	Storage temperature	-25℃~ +60℃		
	Installation method	Flange installation		
	cooling method	cooling methodForced air cooling		

EHS100 Standard wiring diagram

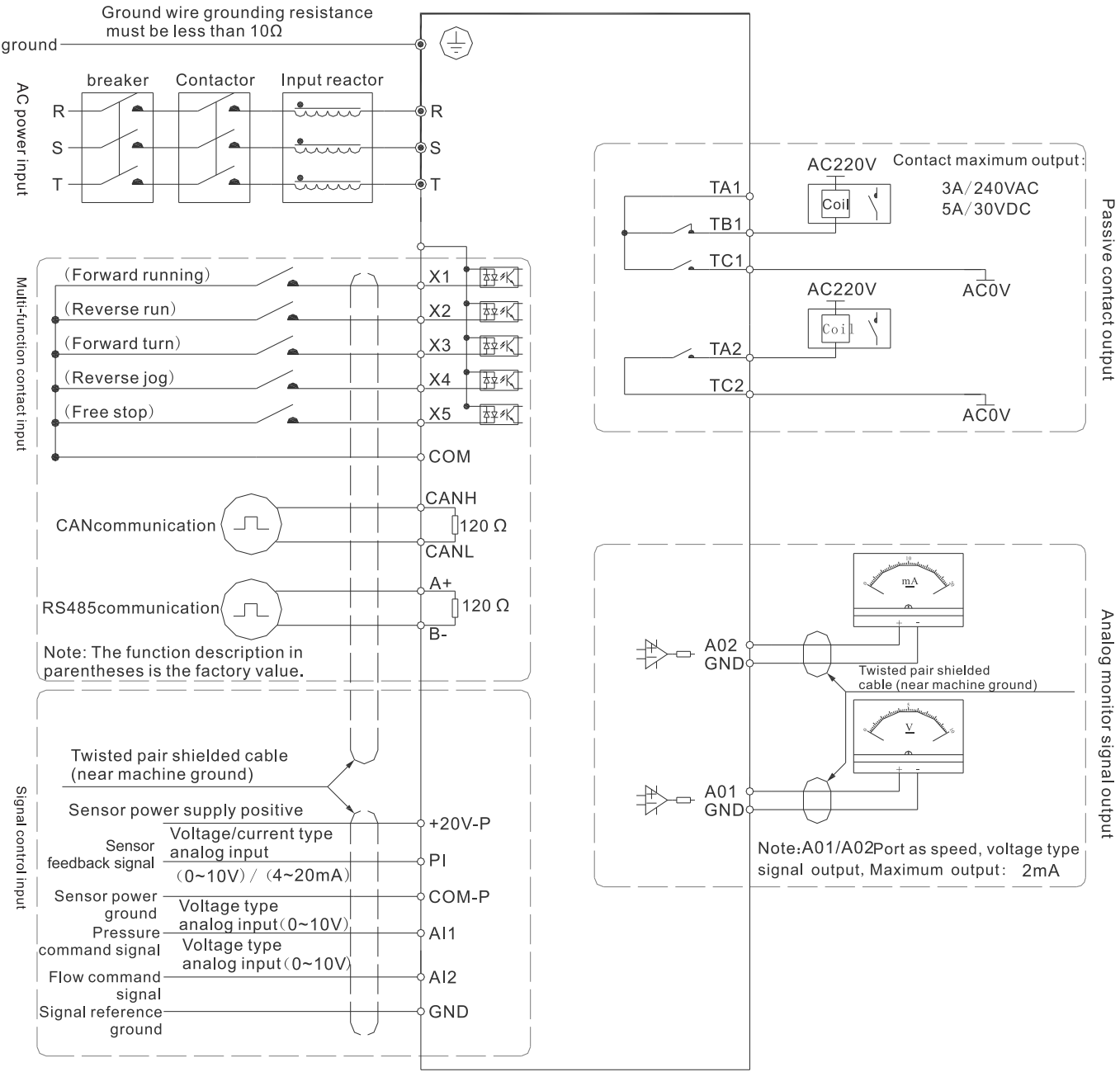
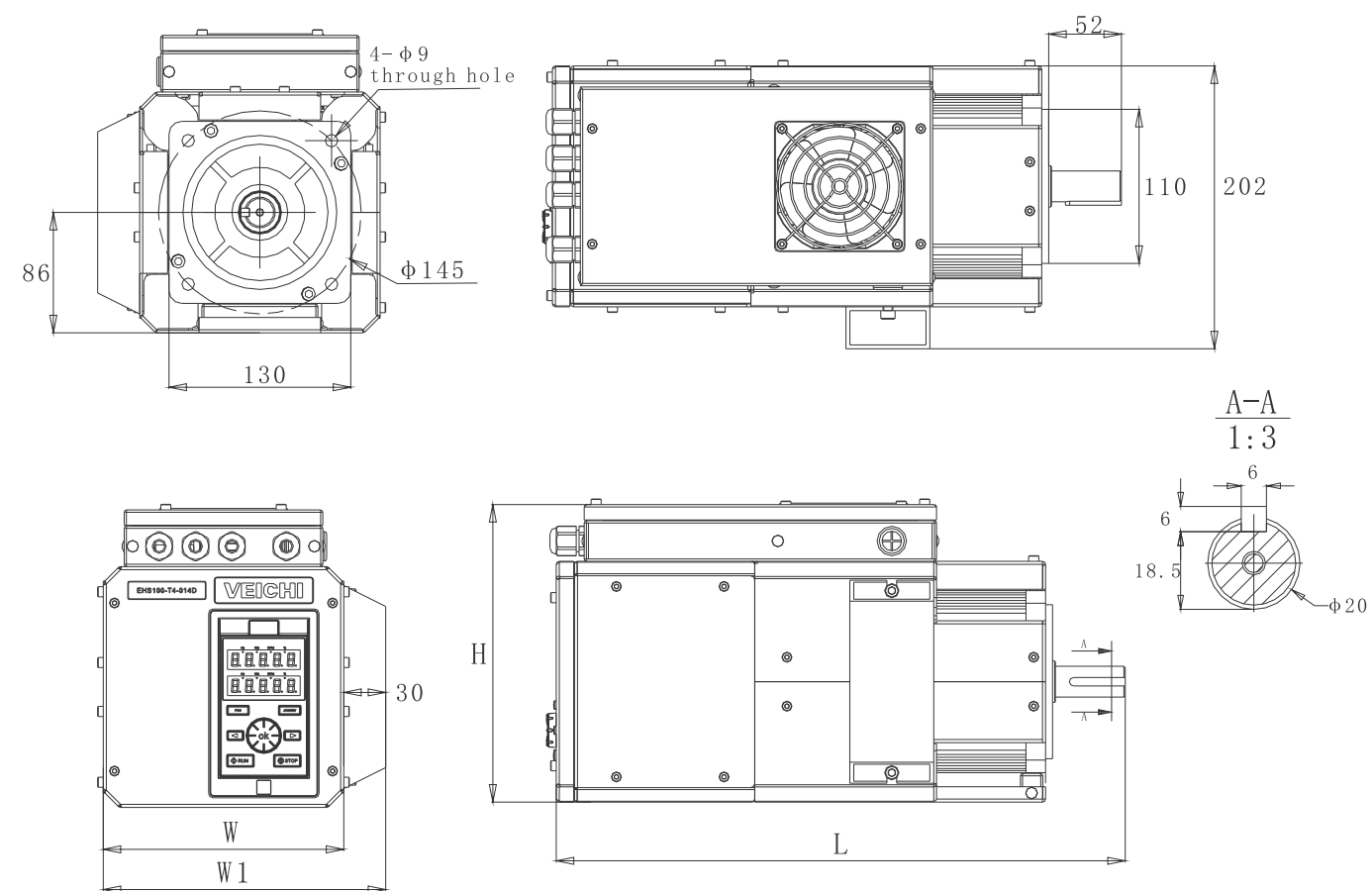
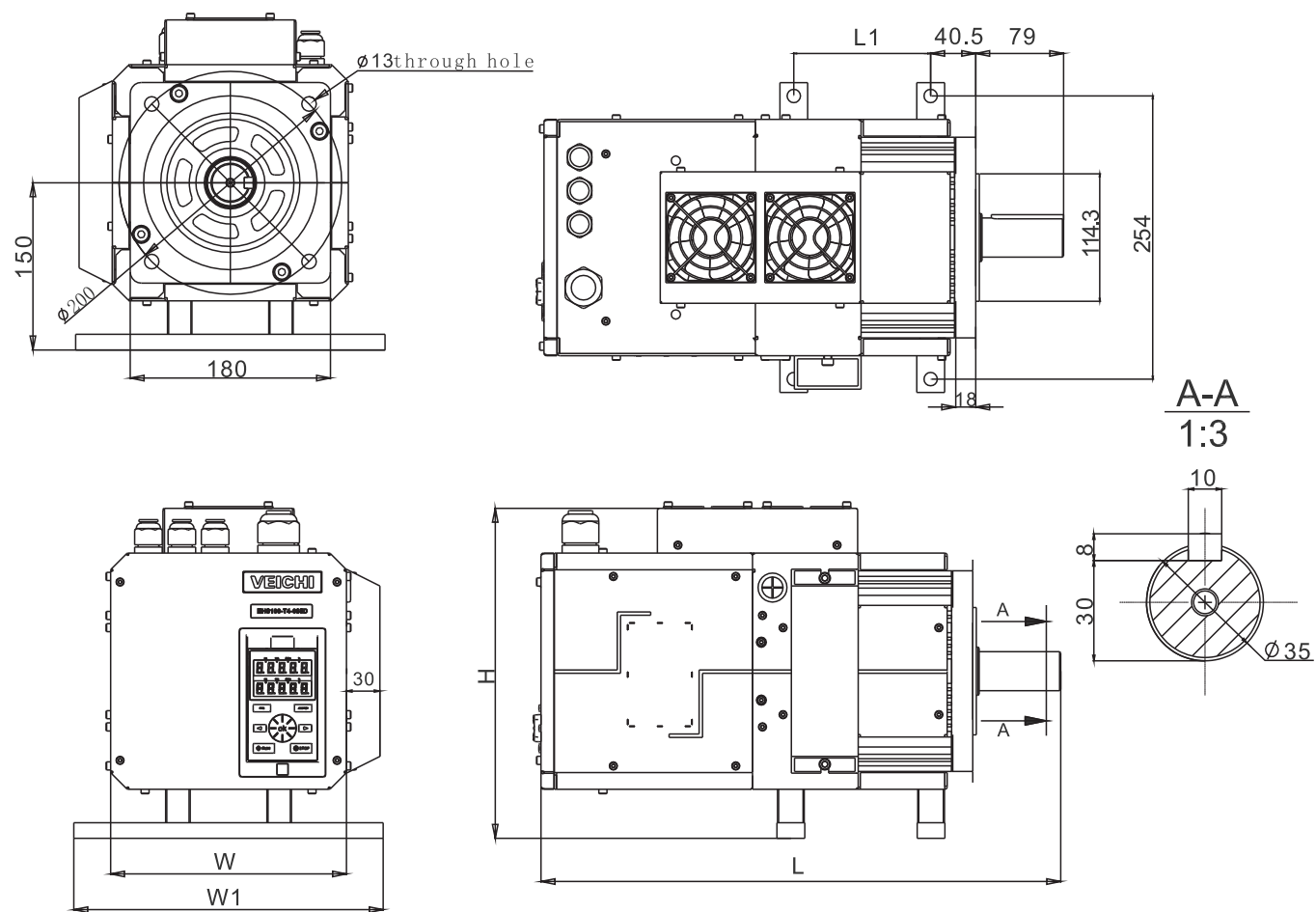


Figure:
symbol ● Represents the main circuit terminal ;
symbol ○ Represents the control circuit terminals.

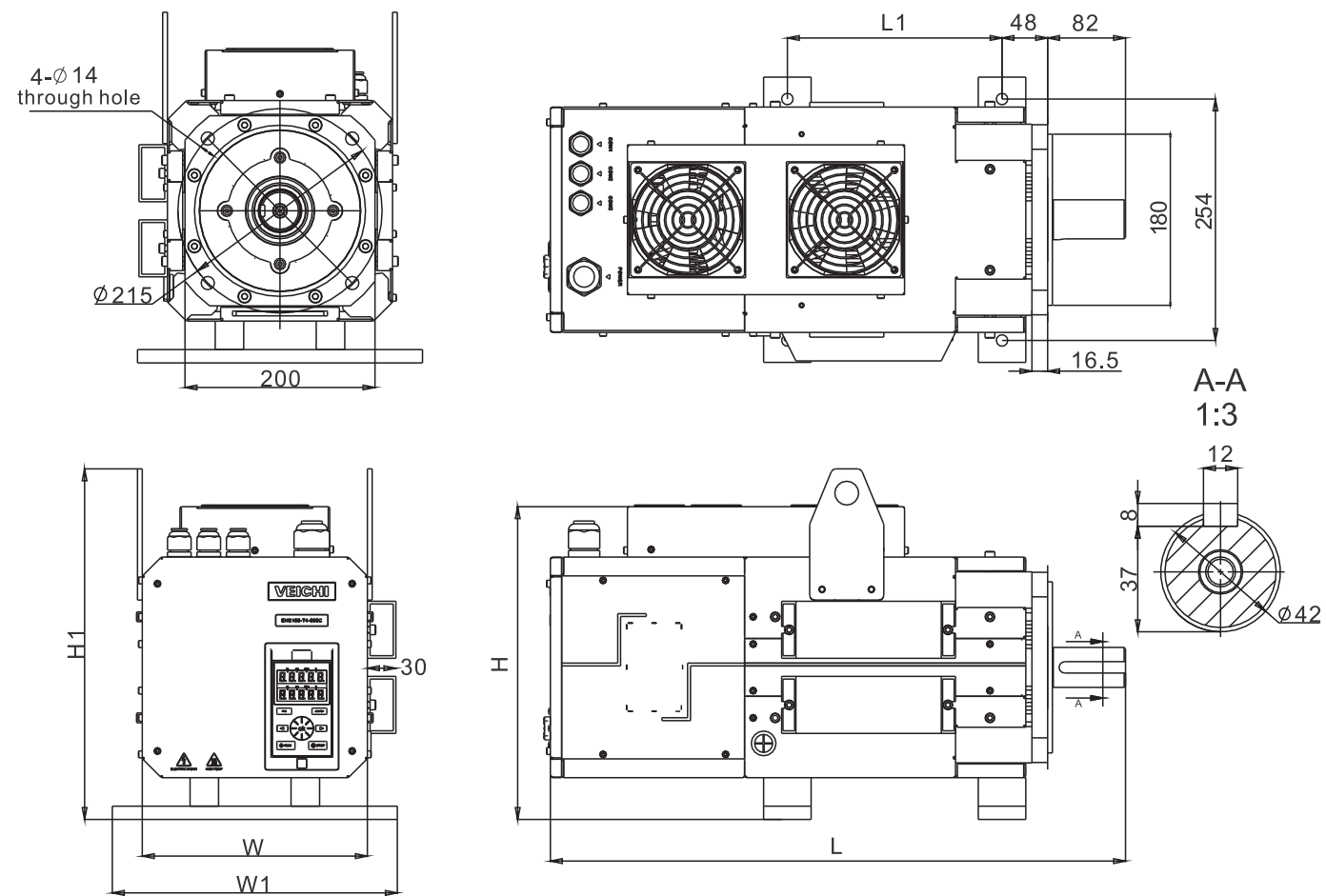
EHS100 Installation dimension



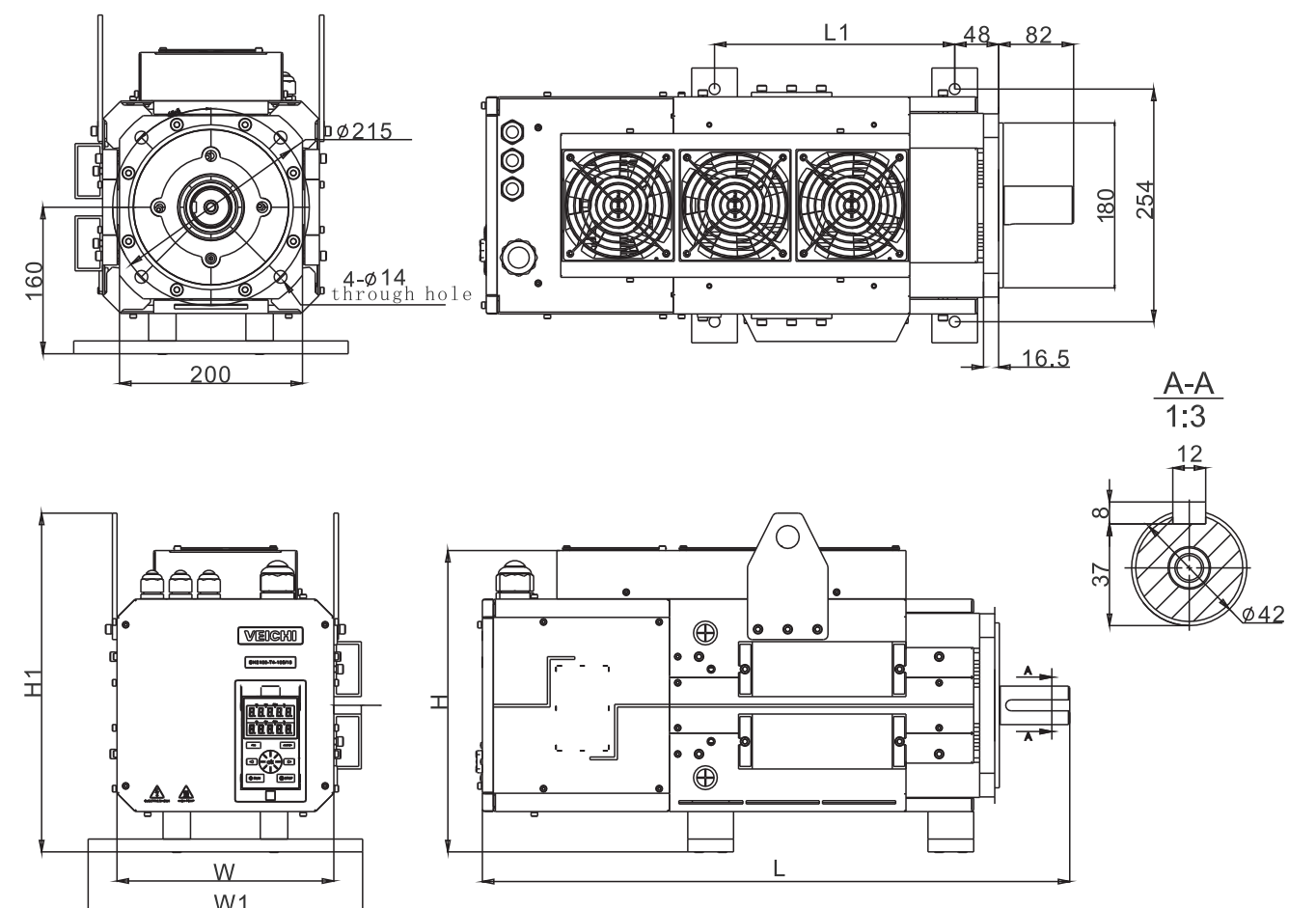
Model	Dimensions				Flange mounting aperture
	L	W	W1	H	
EHS100-T4-9D	407	172	202	212.5	Φ9
EHS100-T4-14D					



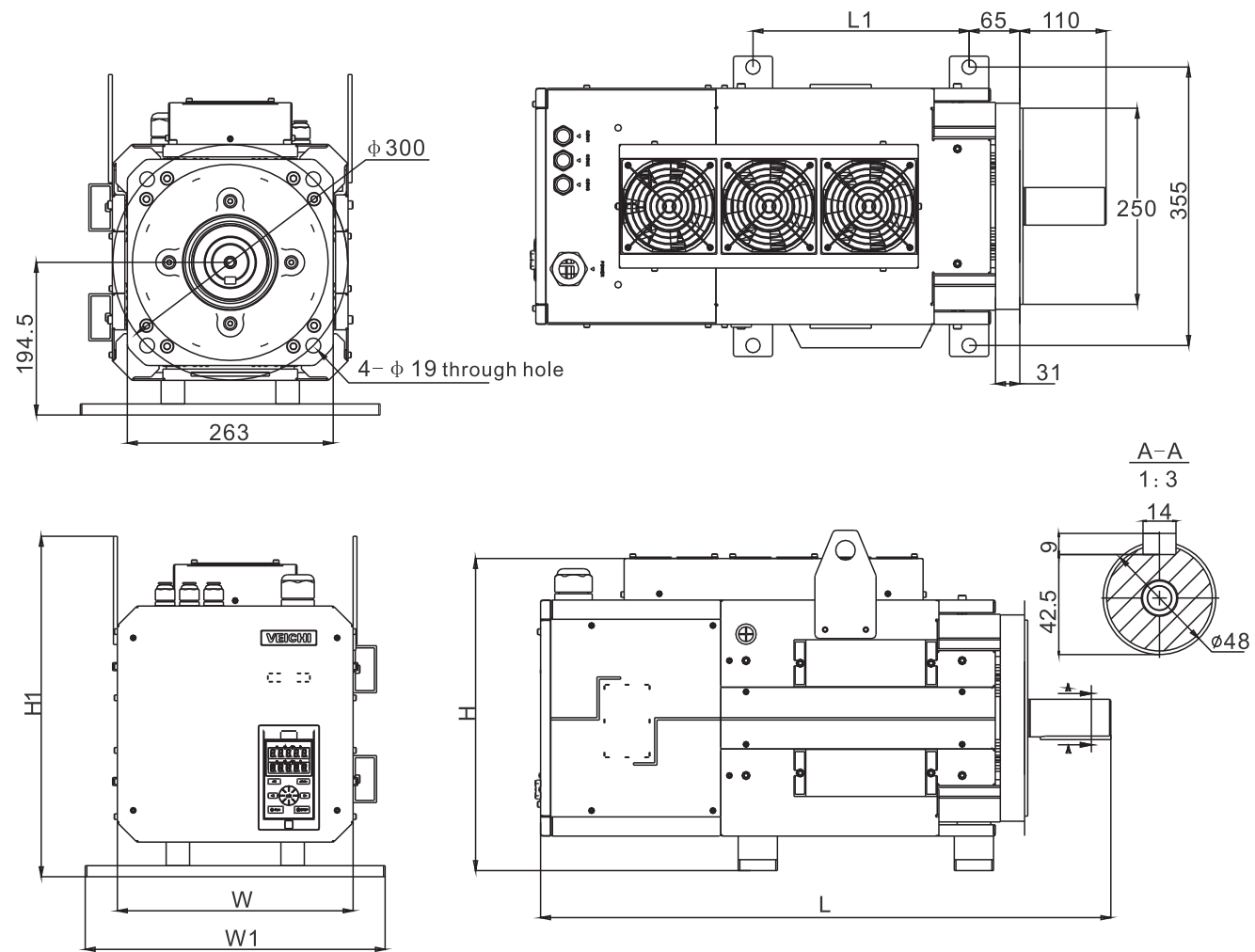
Model	Dimensions					Flange mounting aperture
	L	W	W1	H	L1	
EHS100-T4-21(B/D)	430	214	278	298	83	Φ12
EHS100-T4-26(B/D)	430				83	
EHS100-T4-35(B/D)	467				120	



Model	Dimensions						Flange mounting aperture
	L	W	W1	H	H1	L1	
EHS100-T4-48(B/C)	532.5	233	278	330	371	150	Ø12
EHS100-T4-70(B/C)	569					186.5	
EHS100-T4-90(B/C)	605.5					223	



Model	Dimensions						Flange mounting aperture
	L	W	W1	H	H1	L1	
EHS100- T4-105(B/C)	642	233	278	330	370	259.5	Ø12



SD650 Drive



Model	Dimensions						Flange mounting aperture
	L	W	W1	H	H1	L1	
EHS100- T4-145(B/C)	684.5	299	383	401	439	225.5	$\phi 18.5$
EHS100-T4-185(B/C)	728					269	

Performance features

- ◎ Built in brake unit.
- ◎ Built in CAN communication, RS485 communication function.
- ◎ Strong overload capacity: 150% rated current 60s, 180% rated current 5s.
- ◎ Various protection methods such as phase loss, short circuit and overheat detection.
- ◎ High-performance servo control: vector control + weak magnetic control + PID control.
- ◎ Support 0~10V DC/4~20mA direct analog signal input.
- ◎ Using isolated terminal wiring, fast and safe.
- ◎ Support 0~1000 mA analog signal input (With our special signal conversion board) .
- ◎ Starting torque:0Hz, 180%; Stable speed accuracy:±0.2%;Torque control accuracy: ±0.2%.
- ◎ Support multiple signal given methods (Analog, CAN communication, RS485 communication, internal command, terminal command).

High energy saving

Electro-hydraulic servo system adopts double closed-loop control of pressure and flow, saving energy by 20%~80%.

High Precision

Multiple control modes of speed loop, current loop and pressure loop to ensure high precision repeatability.

High efficiency

0~100bar Oil pressure response Time 0.04s

Intelligence

Adaptive PID algorithm
Adapt to different equipment conditions

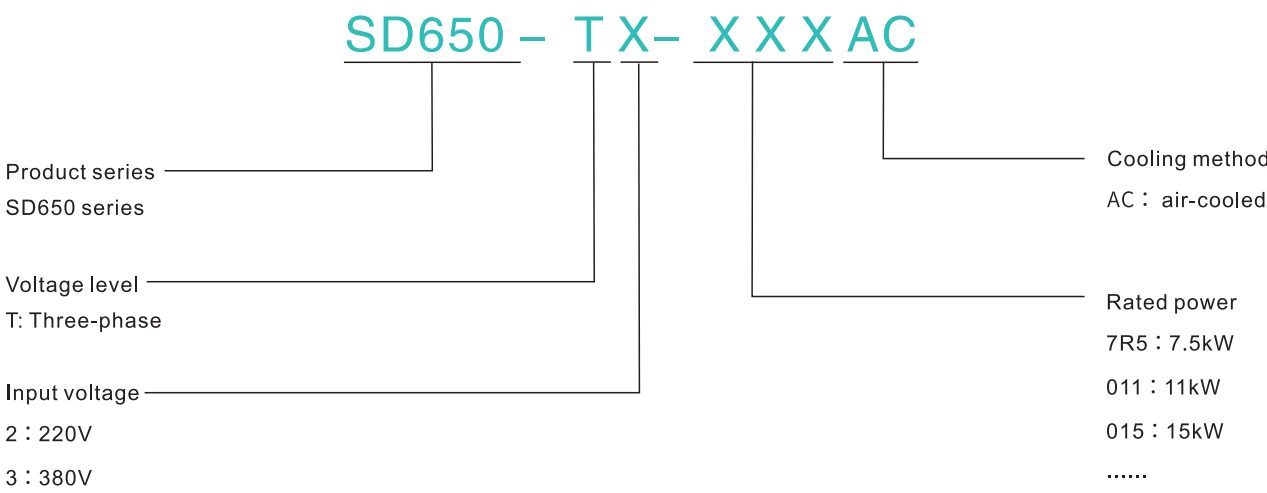
Noise reduction

The noise of the hydraulic system is less than 65dB
Improve equipment usage environment

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SD650 Model specification



Specification model

Three-phase 220V

Model	Maximum adaptable synchronous motor	Rated current	Model	Maximum adaptable synchronous motor	Rated current
SD650-T2-7R5AC	7.5kW	30A	SD650-T2-030AC	30kW	110A
SD650-T2-011AC	11kW	42A	SD650-T2-037AC	37kW	130A
SD650-T2-015AC	15kW	55A	SD650-T2-045AC	45kW	160A
SD650-T2-018AC	18kW	70A	SD650-T2-055AC	55kW	200A
SD650-T2-022AC	22kW	80A	SD650-T2-075AC	75kW	260A

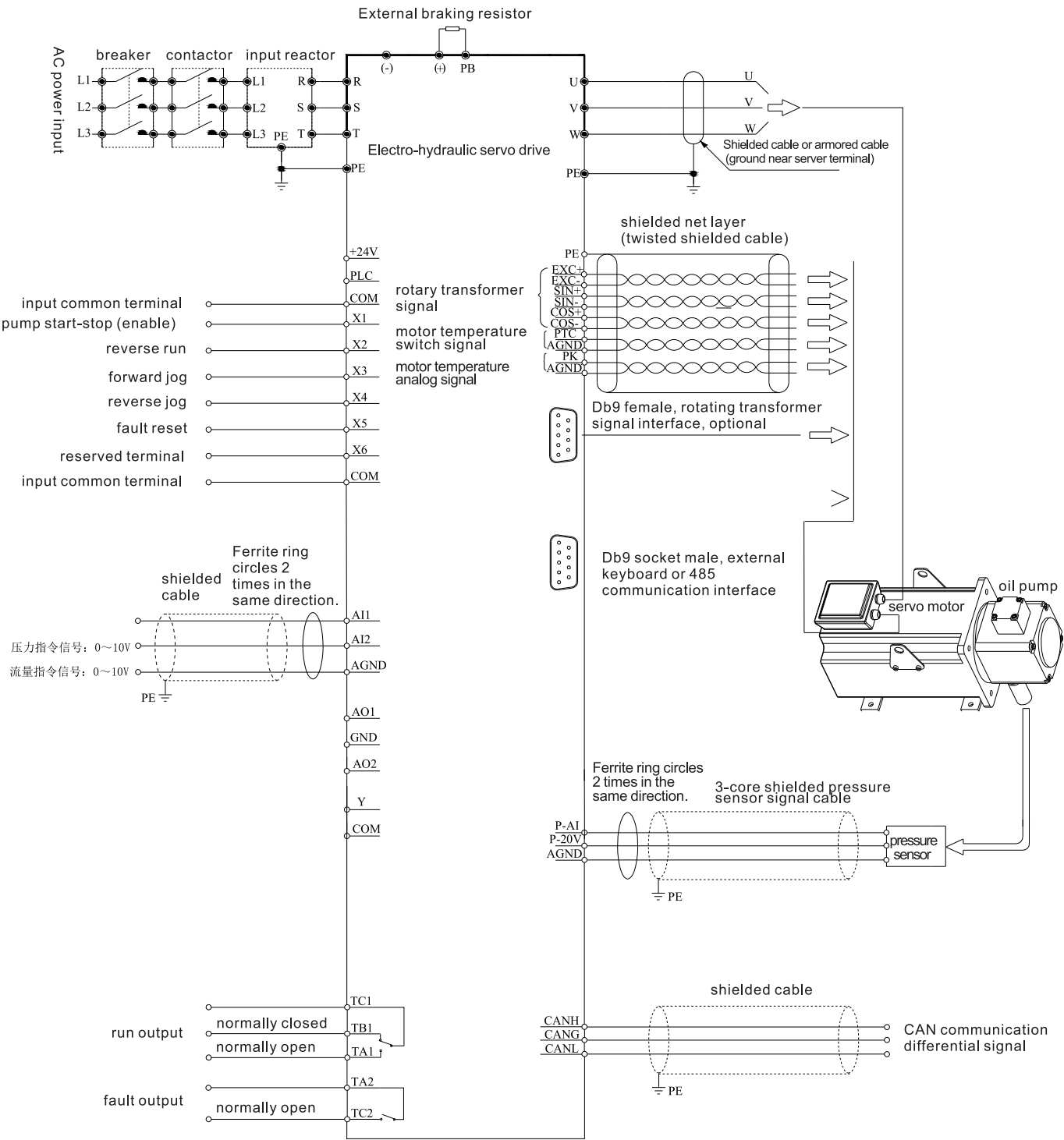
Three-phase 380V

Model	Maximum adaptable synchronous motor	Rated current	Model	Maximum adaptable synchronous motor	Rated current
SD650-T3-7R5AC	7.5kW	17A	SD650-T3-037AC	37kW	75A
SD650-T3-011AC	11kW	25A	SD650-T3-045AC	45kW	90A
SD650-T3-015AC	15kW	32A	SD650-T3-055AC	55kW	110A
SD650-T3-018AC	18kW	38A	SD650-T3-075AC	75kW	150A
SD650-T3-022AC	22kW	45A	SD650-T3-090AC	90kW	180A
SD650-T3-030AC	30kW	60A	SD650-T3-110AC	110kW	210A

SD650 Specifications

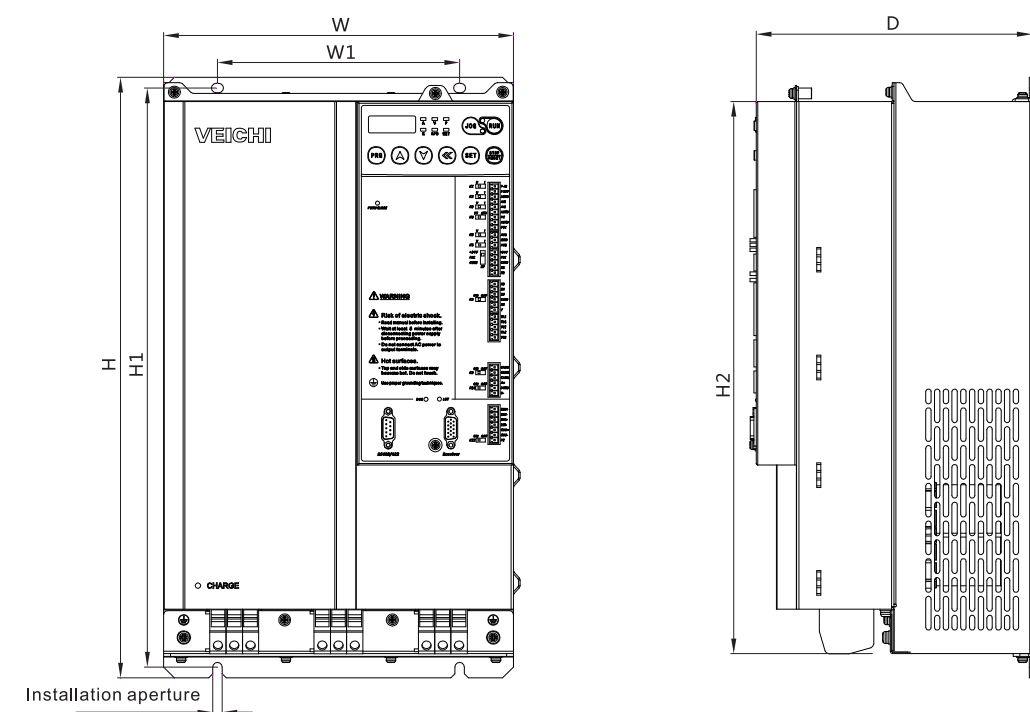
Item		Specification
Power input	Voltage, frequency	Three-phase 380V,220V 50/60Hz
	Allowable fluctuation	Voltage:±15%;Frequency:±5% Distortion rate meets the requirements of IEC61800-2
	Closing impulse current	Less than rated current
	Power factor	≥0.94 (With DC reactor)
	Drive efficiency	≥96%
Output	Output voltage	Output under rated conditions:three-phase,0~input voltage , Error is less than 5%.
	Output frequency range	Max output frequency:320Hz
	Output speed accuracy	±0.1%
	Overload capacity	150% rated current 60s, 180% rated current 5s
	Modulation	SVPWM
	Carrier frequency range	2.0~8.0kHz (determined by model)
	Speed accuracy	Digital setting: Max speed *±0.01% Analog setting: Max frequency*±0.2%
	Speed resolution	Digital setting:1rpm Analog setting: Max speed*±0.05%
	ACC/DEC curve	linear ACC/DEC, S Curve ACC/DEC
	Automatic energy-saving	Automatically optimize output voltage according to load conditions to achieve energy-saving operation
	Automatic current limit	Automatically limit the current during operation to prevent frequency overcurrent fault trip
	Standard function	Oil pressure closed-loop control, speed control, RS485, analog output
	Speed setting channel	Keyboard digital setting, analog voltage/current terminal AI1, analog voltage/current terminal AI2, pseudo voltage/current terminal P-AI, communication setting and multi-channel terminal selection, main and auxiliary
	Feedback input channel	Voltage/current terminal AI1, voltage/current terminal AI2, voltage/current terminal P-AI, communication given
	Run command channel	Operation panel given, external terminal given, communication given
	Input command signal	Start, stop, forward and reverse, jog, multi-speed, free stop, reset, acceleration and deceleration time selection, speed setting channel selection, external fault alarm
	External output signal	Two relay outputs; one transistor output; two analog outputs, voltage output range 0~10V, current output range: 0~20mA
	Protection function	Over-voltage, under-voltage, current amplitude limit, over-current, over-load, over-heat, data protection
Keyboard display	LED display	Single line five digits tube display Can monitor a state quantity
	Status monitoring	Pressure command, pressure feedback, speed reference, speed feedback, flow command, output current, output voltage, output torque, output power, bus voltage, module temperature, motor temperature, input terminal X status, output terminal Y status etc
	Error alarm	Abnormal self-learning, sensor feedback disconnection, motor overheating, driver overheating, encoder failure, communication failure, overvoltage, under voltage, overcurrent, short circuit, phase loss, overload, stall, current limit, data protection is damaged, current Faulty operating conditions, historical faults
Environment	Installation site	Indoor, no more than 1000 meters above sea level, no corrosive gas and direct sunlight
	Temperature, humidity	-10 ~ +40℃ 20%~95%RH (No dew)
	Vibration	less than 0.5g
	Storage temperature	-25~+60 ℃
	Installation method	Wall-mounted, vertical cabinet
	Cooling method	Forced air cooling

SD650 Standard wiring diagram



Legend: 1. ◎ Stand for the main circuit terminal.
2. ○ Stand for the control circuit terminal.

SD650 Installation dimensions

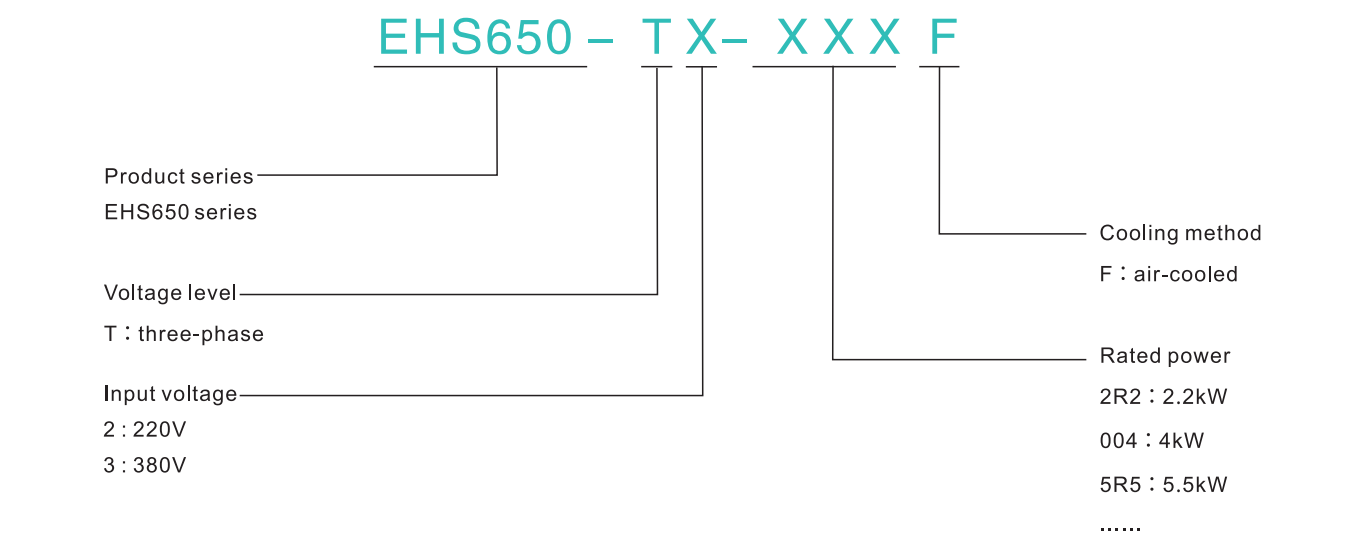


Model	W	W1	H	H1	H2	D	Installation aperture
SD650-T2-7R5AC	210	160	328	314	294	150	Φ7
SD650-T2-011AC	260	180	446	430	410	190	Φ7
SD650-T2-015AC							
SD650-T2-018AC							
SD650-T2-022AC	320	180	568	534	518	260	Φ10
SD650-T2-030AC							
SD650-T2-037AC							
SD650-T2-045AC	390	240	621	596	565	312	Φ11
SD650-T2-055AC							
SD650-T2-075AC							
SD650-T3-7R5AC	210	160	328	314	294	150	Φ7
SD650-T3-011AC							
SD650-T3-015AC							
SD650-T3-018SAC	260	180	446	430	410	190	Φ7
SD650-T3-018AC							
SD650-T3-022AC							
SD650-T3-030AC	320	180	568	534	518	260	Φ10
SD650-T3-037SAC							
SD650-T3-037AC							
SD650-T3-045AC	380	240	620	595	564	290	Φ11
SD650-T3-055AC							
SD650-T3-075SAC							
SD650-T3-075AC	380	240	620	595	564	290	Φ11
SD650-T3-090AC							
SD650-T3-110AC							

EHS650 Drive



EHS650 Model specification



Specification model

Three-phase 220V

Model	Maximum adaptable synchronous motor	Rated current	Model	Maximum adaptable synchronous motor	Rated current
EHS650-T2-2R2F	2.2kW	10A	EHS650-T2-022F	22kW	80A
EHS650-T2-004F	4.0kW	16A	EHS650-T2-030F	30kW	110A
EHS650-T2-5R5F	5.5kW	20A	EHS650-T2-037F	37kW	130A
EHS650-T2-7R5F	7.5kW	30A	EHS650-T2-045F	45kW	160A
EHS650-T2-011F	11kW	42A	EHS650-T2-055F	55kW	200A
EHS650-T2-015F	15kW	55A	EHS650-T2-075F	75kW	260A
EHS650-T2-018F	18kW	70A			

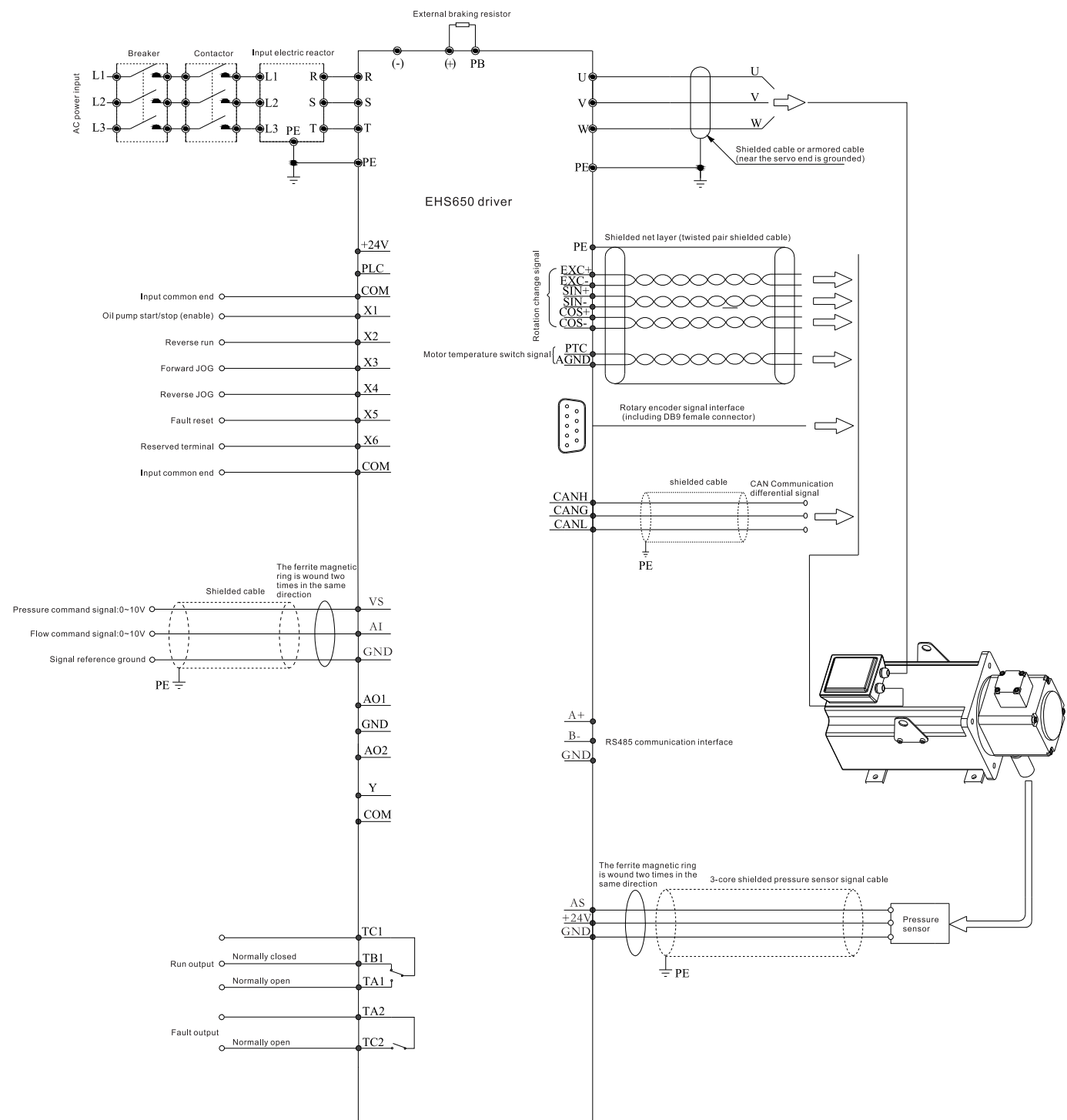
Three-phase 380V

Model	Maximum adaptable synchronous motor	Rated current	Model	Maximum adaptable synchronous motor	Rated current
EHS650-T3-2R2F	2.2kW	5A	EHS650-T3-090F	90kW	180A
EHS650-T3-004F	4.0kW	10A	EHS650-T3-110F	110kW	210A
EHS650-T3-5R5F	5.5kW	13A	EHS650-T3-132F	132kW	250A
EHS650-T3-7R5F	7.5kW	17A	EHS650-T3-160F	160kW	310A
EHS650-T3-011F	11kW	25A	EHS650-T3-185F	185kW	340A
EHS650-T3-015F	15kW	32A	EHS650-T3-200F	200kW	380A
EHS650-T3-018F	18kW	38A	EHS650-T3-220F	220kW	415A
EHS650-T3-022F	22kW	45A	EHS650-T3-250F	250kW	470A
EHS650-T3-030F	30kW	60A	EHS650-T3-280F	280kW	510A
EHS650-T3-037F	37kW	75A	EHS650-T3-315F	315kW	600A
EHS650-T3-045F	45kW	90A	EHS650-T3-355F	355kW	670A
EHS650-T3-055F	55kW	110A	EHS650-T3-400F	400kW	750A
EHS650-T3-075F	75kW	150A			

EHS650 Specifications

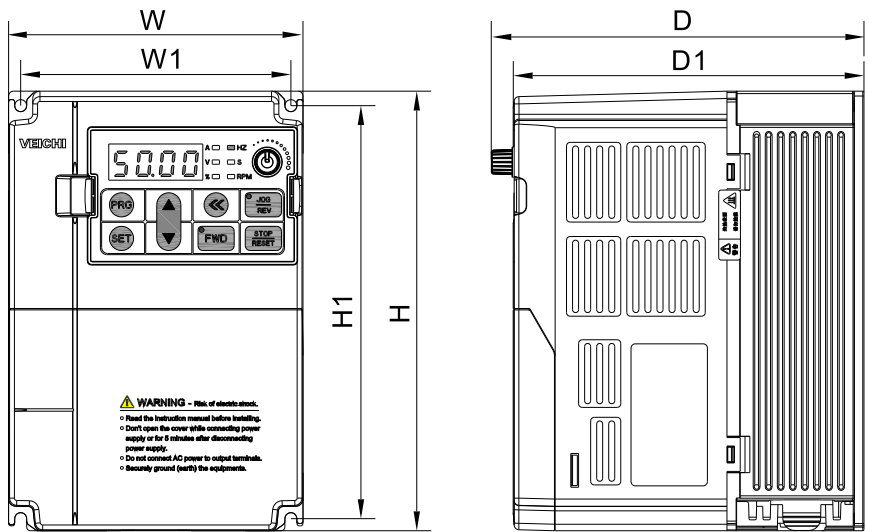
Item		Specification	
Power input	Voltage, frequency	Three-phase 380V,220V 50/60Hz	
	Allowable fluctuation	Voltage:±15%;Frequency:±5% Distortion rate meets the requirements of IEC61800-2	
	Closing impulse current	Less than rated current	
	Power factor	≥ 0.94 (With DC reactor)	
	Drive efficiency	≥96%	
Output	Output voltage	Output under rated conditions:three-phase,0~input voltage , Error is less than 5%	
	Output frequency range	Max output frequency:320Hz	
	Output speed accuracy	±0.1%	
	Overload capacity	150% rated current 60s, 180% rated current 5s	
	Modulation	SVPWM	
	Carrier frequency range	2.0~8.0kHz (determined by model)	
	Speed accuracy	Digital setting: Max speed *±0.01% Analog setting: Max frequency*±0.2%	
	Speed resolution	Digital setting: Irpm Analog setting: Max speed*±0.05%	
	ACC/DEC curve	linear ACC/DEC, S Curve ACC/DEC	
	Automatic energy-saving operation	Automatically optimize output voltage according to load conditions to achieve energy-saving operation	
	Automatic current limit	Automatically limit the current during operation to prevent frequency overcurrent fault trip	
	Standard function	Oil pressure closed-loop control, speed control, RS485, analog output	
	Command setting channel	Keyboard digital setting, analog voltage terminal VS, analog voltage/current terminal AI, Analog voltage AS, communication setting and multi-channel terminal selection, main and auxiliary channel selection	
	Feedback input channel	Voltage terminal VS, voltage/current terminal AI, analog voltage AS, communication given	
	Run command channel	Operation panel given, external terminal given, communication given	
	Input command signal	Start, stop, forward and reverse, jog, multi-speed, free stop, reset, acceleration and deceleration time selection, speed setting channel selection, external fault alarm	
	External output signal	Two relay outputs; one transistor output; two analog outputs, voltage output range 0~10V, current output range: 0~20mA	
	Protection function	Over-voltage, under-voltage, current amplitude limit, over-current, over-load, over-heat, data protection	
Keyboard display	LED display	Single line five digits tube display	Can monitor a state quantity
	Status monitoring	Pressure command, pressure feedback, speed reference, speed feedback, flow command, output current, output voltage, output torque, output power, bus voltage, module temperature, motor temperature, input terminal X status, output terminal Y status etc	
	Fault alarm	Abnormal self-learning, sensor feedback disconnection, motor overheating, driver overheating, encoder failure, communication failure, overvoltage, under voltage, overcurrent, short circuit, phase loss, overload, stall, current limit, data protection is damaged, current Faulty operating conditions, historical faults	
Environment	Installation site	Indoor, no more than 1000 meters above sea level, no corrosive gas and direct sunlight	
	Temperature, humidity	-10~+40℃ ; 20%~95%RH (No dew)	
	Vibration	less than 0.5g	
	Storage temperature	-25~+60 ℃	
	Installation method	Wall-mounted, vertical cabinet	
	Cooling method	Forced air cooling	

EHS650 Standard wiring diagram



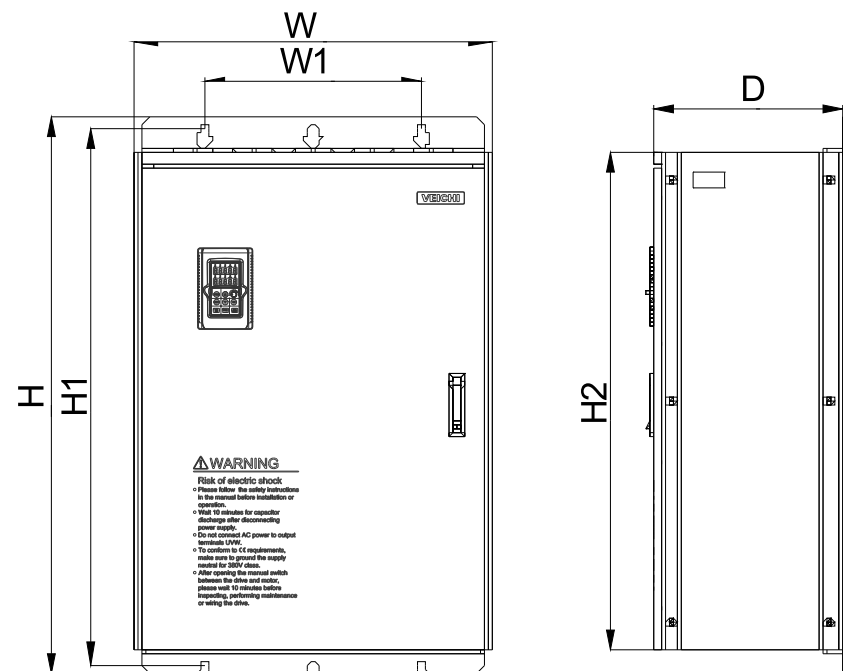
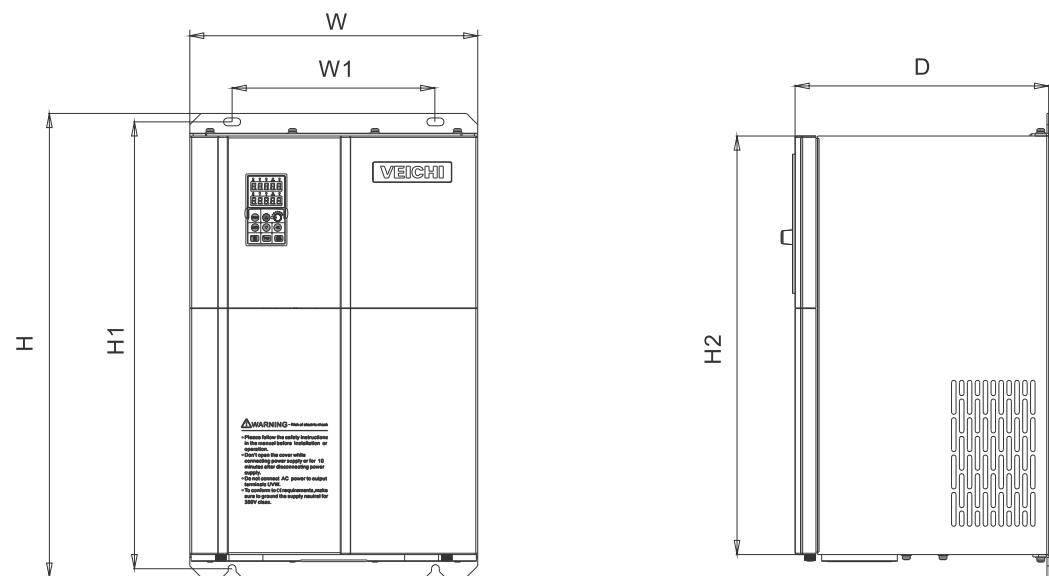
Note: 1, Symbol  represents the main circuit terminal
2, Symbol  represents the control circuit terminal

EHS650 Installation dimensions



Model	External dimensions						Installation aperture
	W	H	D	D1	W1	H1	
EHS650-T2-2R2F	159	246	157.5	148	147.2	236	φ5.5
EHS650-T2-004F							
EHS650-T2-5R5F							
EHS650-T2-7R5F	195	291	167.5	158	179	275	φ7
EHS650-T2-011F							
EHS650-T2-015F							
EHS650-T3-2R2F	122	182	154.5	145	112	171	φ5
EHS650-T3-004F							
EHS650-T3-5R5F							
EHS650-T3-7R5F	195	291	167.5	158	179	275	φ7
EHS650-T3-011F							
EHS650-T3-015F							
EHS650-T3-018F	230	330	200	190	208	315	φ7
EHS650-T3-022F							

EHS650 Installation dimensions



Model	External dimensions						Installation aperture
	W	H	D	D1	W1	H1	
EHS650-T2-018F	255	410	225	370	180	395	φ7
EHS650-T2-022F							
EHS650-T2-030F	305	570	260	522	180	550	φ9
EHS650-T2-037F							
EHS650-T2-045F	380	620	290	564	240	595	φ11
EHS650-T2-055F							
EHS650-T2-075F	255	410	225	370	180	395	φ7
EHS650-T3-030F							
EHS650-T3-037F	305	570	260	522	180	550	φ9
EHS650-T3-045F							
EHS650-T3-055F	380	620	290	564	240	595	φ11
EHS650-T3-075F							
EHS650-T3-090F	380	620	290	564	240	595	φ11
EHS650-T3-110F							

Wall-mounted installation dimensions

Model	External dimensions						Installation aperture
	W	H	D	D1	W1	H1	
EHS650-T3-132F	500	780	340	708	350	755	φ11
EHS650-T3-160F	650	1060	400	950	400	1023	φ16
EHS650-T3-185F							
EHS650-T3-200F	750	1170	400	1050	460	1128	φ18
EHS650-T3-220F							
EHS650-T3-250F	850	1280	450	1150	550	1236	φ20
EHS650-T3-280F							
EHS650-T3-315F	850	1280	450	1150	550	1236	φ20
EHS650-T3-355F							
EHS650-T3-400F	850	1280	450	1150	550	1236	φ20
EHS650-T3-400F							

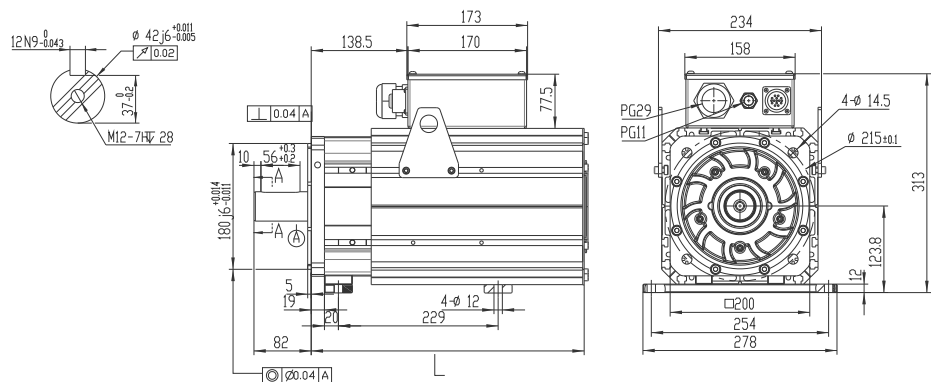
Model code structure for SMC-1000 series servo motor:

- SM**: Servo motor
- XX**: Base ID
 - 13: 130 seam allowance
 - 18: 180 seam allowance
 - 25: 250 seam allowance
- XXX**: Rated torque
 - 35: 35N·m
 - 110: 110N·m
 -
- X**: Cooling method
 - F: air-cooled
- XX**: Rated speed
 - 15: 1500rpm
 - 18: 1800rpm
 - 20: 2000rpm
- X**: Rated voltage
 - C: 220V AC
 - D: 380V AC
- X**: Encoder type
 - R: rotary encoder

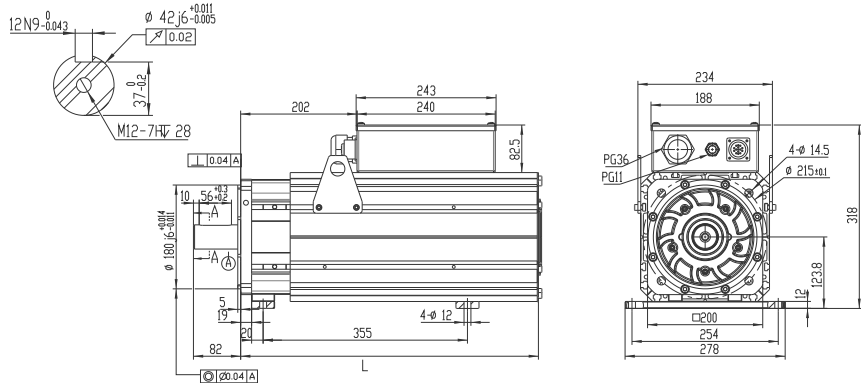
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-29-

SM18-220V



Motor model	Rated torque N · m	Rated speed RPM	Rated frequency Hz	Rated current A	Rated power kW	Rated voltage VAC	Moment of inertia kg.m ² ·10 ⁻³	Weight kg	Length mm	Counter electro- motive force V/Krpm	Torque constant kt N · m/A	Peak torque N · m	Peak current A
SM1855F15CR	55	1500	100.0	30.9	8.6	220	6.5	39	355	119	1.97	116	65.3
SM1855F17CR	55	1700	113.3	35.2	9.8	220	6.5	39	355	105	1.74	116	74.2
SM1855F20CR	55	2000	133.3	43.0	11.5	220	6.5	39	355	86	1.42	116	90.7
SM1870F15CR	70	1500	100.0	38.6	11.0	220	7.2	42	373	122	2.01	148	81.5
SM1870F17CR	70	1700	113.3	43.8	12.5	220	7.2	42	373	107	1.78	148	92.3
SM1870F20CR	70	2000	133.3	54.7	14.7	220	7.2	42	373	86	1.42	148	115.4
SM1880F15CR	80	1500	100.0	45.9	12.6	220	7.9	46	391	117	1.94	169	96.9
SM1880F17CR	80	1700	113.3	49.5	14.2	220	7.9	46	391	109	1.80	169	104.4
SM1880F20CR	80	2000	133.3	58.5	16.8	220	7.9	46	391	92	1.52	169	123.3
SM1890F15CR	90	1500	100.0	52.8	14.1	220	8.6	49	409	115	1.90	190	111.3
SM1890F17CR	90	1700	113.3	57.5	16.0	220	8.6	49	409	105	1.74	190	121.4
SM1890F20CR	90	2000	133.3	70.3	18.8	220	8.6	49	409	86	1.42	190	148.4



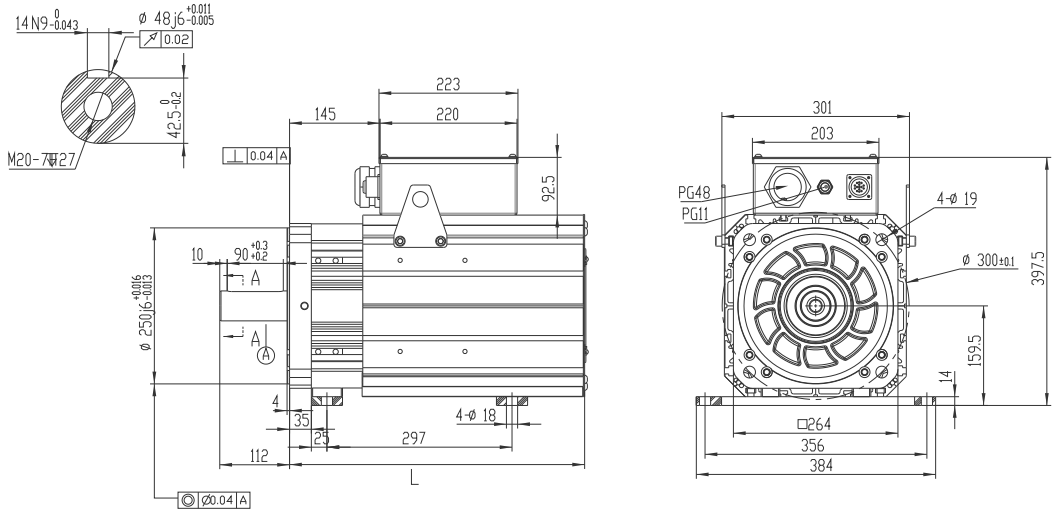
Motor model	Rated torque N · m	Rated speed RPM	Rated frequency Hz	Rated current A	Rated power kW	Rated voltage VAC	Moment of inertia kg.m ² ·10 ⁻³	Weight kg	Length mm	Counter electro- motive force V/Krpm	Torque constant kt N · m/A	Peak torque N · m	Peak current A
SM18110F15CR	110	1500	100.0	61.9	17.3	220	10.0	56	446	119	1.97	232	130.6
SM18110F17CR	110	1700	113.3	68.8	19.6	220	10.0	56	446	107	1.78	232	145.1
SM18110F20CR	110	2000	133.3	88.4	23.0	220	10.0	56	446	84	1.38	232	186.6
SM18135F15CR	135	1500	100.0	79.1	21.2	220	11.4	63	481	115	1.90	285	167.0
SM18135F17CR	135	1700	113.3	90.4	24.0	220	11.4	63	481	100	1.66	285	190.8
SM18135F20CR	135	2000	133.3	105.5	28.3	220	11.4	63	481	86	1.42	285	222.6
SM18140F15CR	140	1500	100.0	75.7	22.0	220	12.1	67	499	124	2.05	295	159.8
SM18140F17CR	140	1700	113.3	86.6	24.9	220	12.1	67	499	109	1.80	295	182.7
SM18140F20CR	140	2000	133.3	101.0	29.3	220	12.1	67	499	93	1.54	295	213.1
SM18150F15CR	150	1500	100.0	86.1	23.6	220	12.8	70	517	117	1.94	317	181.7
SM18150F17CR	150	1700	113.3	100.5	26.7	220	12.8	70	517	100	1.66	317	212.0
SM18150F20CR	150	2000	133.3	120.6	31.4	220	12.8	70	517	84	1.38	317	254.4

Continue to the table below

SM18-220V

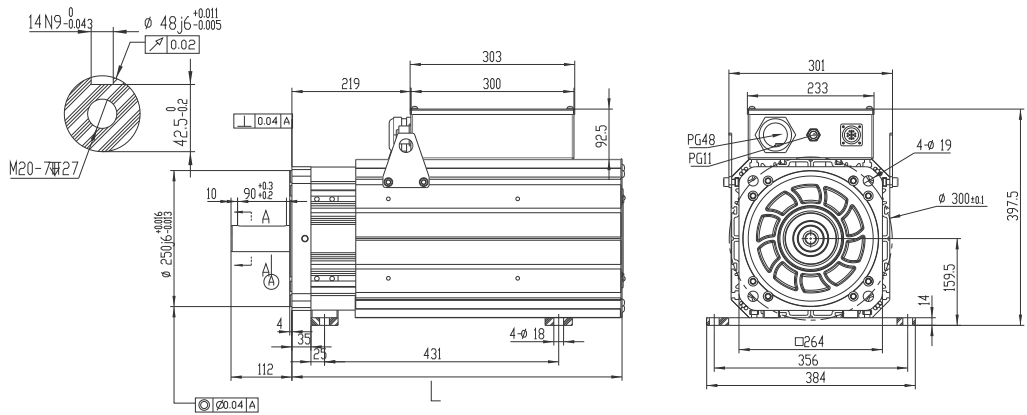
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Motor model	Rated torque N · m	Rated speed RPM	Rated frequency Hz	Rated current A	Rated power kW	Rated voltage VAC	Moment of inertia kg.m ² ·10 ⁻³	Weight kg	Length mm	Counter electro- motive force V/Krpm	Torque constant kt N · m/A	Peak torque N · m	Peak current A
SM18165F15CR	165	1500	100.0	96.7	25.9	220	14.2	77	553	115	1.90	348	204.1
SM18165F17CR	165	1700	113.3	116.1	29.4	220	14.2	77	553	96	1.58	348	244.9
SM18165F20CR	165	2000	133.3	121.8	34.6	220	14.2	77	553	91	1.48	348	257.0
SM18180F15CR	180	1500	100.0	112.5	28.3	220	15.6	84	589	107	1.78	380	237.4
SM18180F17CR	180	1700	113.3	117.4	32.0	220	15.6	84	589	103	1.68	380	247.7
SM18180F20CR	180	2000	133.3	140.7	37.7	220	15.6	84	589	86	1.42	380	296.8
SM18200F15CR	200	1500	100.0	114.0	31.4	220	17.0	91	625	119	1.97	422	240.5
SM18200F17CR	200	1700	113.3	137.6	35.6	220	17.0	91	625	96	1.58	422	290.4
SM18200F20CR	200	2000	133.3	160.8	41.9	220	17.0	91	625	84	1.38	422	339.2

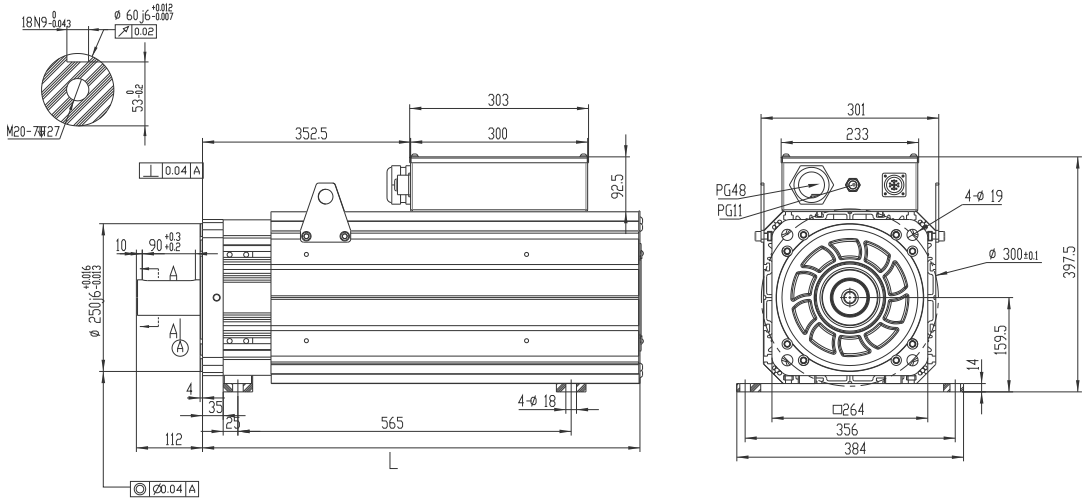


Motor model	Rated torque N · m	Rated speed RPM	Rated frequency Hz	Rated current A	Rated power kW	Rated voltage VAC	Moment of inertia kg.m ² ·10 ⁻³	Weight kg	Length mm	Counter electro- motive force V/Krpm	Torque constant kt N · m/A	Peak torque N · m	Peak current A
SM25160F15CR	160	1500	100.0	88.8	25.1	220	27	100	473.5	121	2.00	338	187.4
SM25160F17CR	160	1700	113.3	98.7	28.5	220	27	100	473.5	109	1.80	338	208.2
SM25160F20CR	160	2000	133.3	126.9	33.5	220	27	100	473.5	85	1.40	338	255.3
SM25185F15CR	185	1500	100.0	110.0	29.1	220	31	108	494.5	113	1.87	390	232.2
SM25185F17CR	185	1700	113.3	125.7	32.9	220	31	108	494.5	99	1.63	390	265.3
SM25185F20CR	185	2000	133.3	146.7	38.7	220	31	108	494.5	85	1.40	390	309.5
SM25215F15CR	215	1500	100.0	127.9	33.8	220	35	115	518	113	1.87	454	269.8
SM25215F17CR	215	1700	113.3	149.2	38.3	220	35	115	518	97	1.60	454	314.8
SM25215F20CR	215	2000	133.3	179.0	45.0	220	35	115	518	81	1.33	421	350.5

SM25-220V

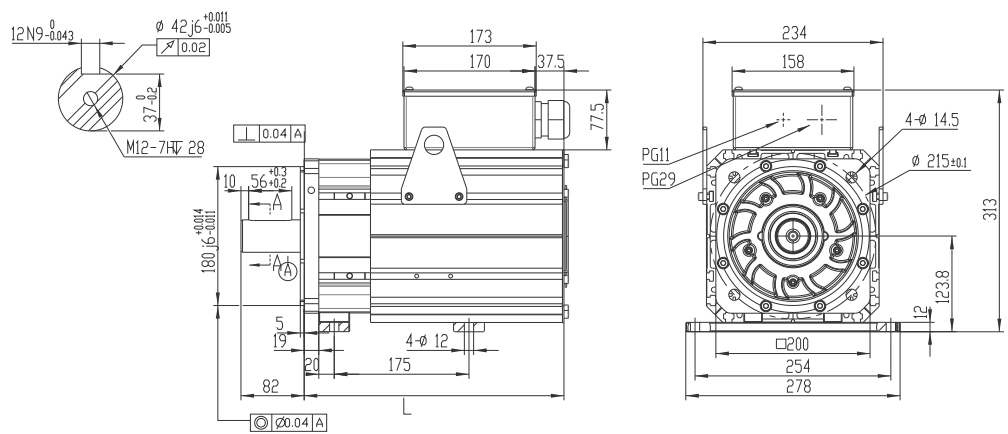


Motor model	Rated torque N · m	Rated speed RPM	Rated frequency Hz	Rated current A	Rated power kW	Rated voltage VAC	Moment of inertia kg.m ² ·10 ⁻³	Weight kg	Length mm	Counter electro- motive force V/Krpm	Torque constant kt N · m/A	Peak torque N · m	Peak current A
SM25265F15CR	265	1500	100.0	147.1	41.6	220	42	130	562.5	121	2.00	559	310.4
SM25265F17CR	265	1700	113.3	176.5	47.2	220	42	130	562.5	101	1.67	559	372.5
SM25265F20CR	265	2000	133.3	220.6	55.5	220	42	130	562.5	81	1.33	559	465.6
SM25310F15CR	310	1500	100.0	172.1	48.7	220	50	145	607.5	121	2.00	654	363.1
SM25310F17CR	310	1700	113.3	215.1	55.2	220	50	145	607.5	97	1.60	654	453.9
SM25310F20CR	310	2000	133.3	245.8	64.9	220	50	145	607.5	85	1.40	654	518.7
SM25360F15CR	360	1500	100.0	214.1	56.5	220	57	160	652	113	1.87	760	451.8
SM25360F17CR	360	1700	113.3	244.7	64.1	220	57	160	652	99	1.63	760	516.3
SM25360F20CR	360	2000	133.3	285.5	75.4	220	57	160	652	85	1.40	695	551.1

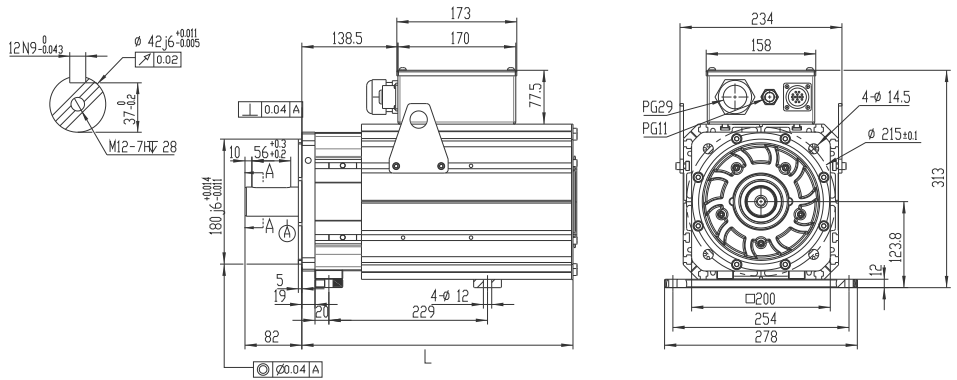


Motor model	Rated torque N · m	Rated speed RPM	Rated frequency Hz	Rated current A	Rated power kW	Rated voltage VAC	Moment of inertia kg.m ² ·10 ⁻³	Weight kg	Length mm	Counter electro- motive force V/Krpm	Torque constant kt N · m/A	Peak torque N · m	Peak current A
SM25400F15CR	400	1500	100.0	237.9	62.8	220	64	175	696.5	113	1.87	844	502.0
SM25400F17CR	400	1700	113.3	282.8	71.2	220	64	175	696.5	97	1.60	844	596.8
SM25400F20CR	400	2000	133.3	319.9	83.8	220	64	175	696.5	86	1.42	778	674.9
SM25450F15CR	450	1500	100.0	272.3	70.7	220	72	190	741	109	1.80	950	574.6
SM25450F17CR	450	1700	113.3	305.3	80.1	220	72	190	741	97	1.60	950	644.3
SM25450F20CR	450	2000	133.3	333.1	94.2	220	72	190	741	91	1.50	778	575.8
SM25500F15CR	500	1500	100.0	277.5	78.5	220	80	205	789.5	121	2.00	1055	585.6
SM25500F17CR	500	1700	113.3	312.2	89.0	220	80	205	789.5	108	1.78	1055	658.8
SM25500F20CR	500	2000	133.3	416.3	104.7	220	80	205	789.5	81	1.33	1055	878.4

SM18-380V

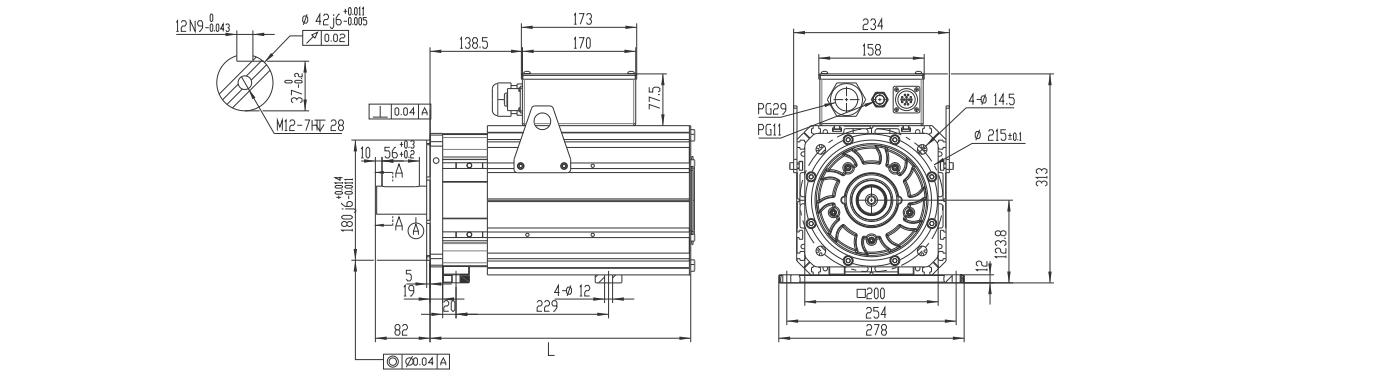


Motor model	Rated torque N · m	Rated speed RPM	Rated frequency Hz	Rated current A	Rated power kW	Rated voltage VAC	Moment of inertia kg.m ² ·10 ⁻³	Weight kg	Length mm	Counter electro- motive force V/Krpm	Torque constant kt N · m/A	Peak torque N · m	Peak current A
SM1835F15DR	35	1500	100.0	11.7	5.5	380	5.1	32	319	201	3.32	74	24.7
SM1835F17DR	35	1700	113.3	13.1	6.2	380	5.1	32	319	179	2.96	74	27.7
SM1835F20DR	35	2000	133.3	15.6	7.3	380	5.1	32	319	150	2.49	74	33.0
SM1845F15DR	45	1500	100.0	15.1	7.1	380	5.8	35	337	201	3.32	95	31.8
SM1845F17DR	45	1700	113.3	16.7	8.0	380	5.8	35	337	181	3.00	95	35.1
SM1845F20DR	45	2000	133.3	19.8	9.4	380	5.8	35	337	153	2.53	95	41.7



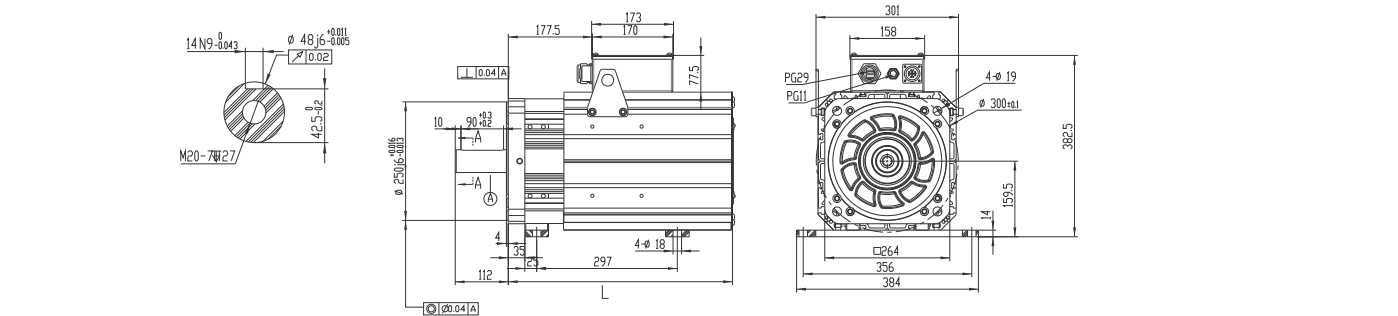
Motor model	Rated torque N · m	Rated speed RPM	Rated frequency Hz	Rated current A	Rated power kW	Rated voltage VAC	Moment of inertia kg.m ² ·10 ⁻³	Weight kg	Length mm	Counter electro- motive force V/Krpm	Torque constant kt N · m/A	Peak torque N · m	Peak current A
SM1855F15DR	55	1500	100.0	18.2	8.6	380	6.5	39	355	203	3.36	116	38.4
SM1855F17DR	55	1700	113.3	20.6	9.8	380	6.5	39	355	179	2.96	116	43.5
SM1855F20DR	55	2000	133.3	23.8	11.5	380	6.5	39	355	155	2.57	116	50.2
SM1870F15DR	70	1500	100.0	23.4	11.0	380	7.2	42	373	201	3.32	148	49.5
SM1870F17DR	70	1700	113.3	26.3	12.5	380	7.2	42	373	179	2.96	148	55.4
SM1870F20DR	70	2000	133.3	31.3	14.7	380	7.2	42	373	150	2.49	148	66.0
SM1880F15DR	80	1500	100.0	26.8	12.6	380	7.9	46	391	201	3.32	169	56.5
SM1880F17DR	80	1700	113.3	29.2	14.2	380	7.9	46	391	184	3.04	169	61.7
SM1880F20DR	80	2000	133.3	35.7	16.8	380	7.9	46	391	150	2.49	169	75.4
SM1890F15DR	90	1500	100.0	30.1	14.1	380	8.6	49	409	201	3.32	190	63.6
SM1890F17DR	90	1700	113.3	33.3	16.0	380	8.6	49	409	181	3.00	190	70.3
SM1890F20DR	90	2000	133.3	39.6	18.8	380	8.6	49	409	153	2.53	190	83.5
SM18110F15DR	110	1500	100.0	36.4	17.3	380	10.0	56	446	203	3.36	232	76.8
SM18110F17DR	110	1700	113.3	41.3	19.6	380	10.0	56	446	179	2.96	232	87.1
SM18110F20DR	110	2000	133.3	47.6	23.0	380	10.0	56	446	155	2.57	232	100.5

SM18-380V



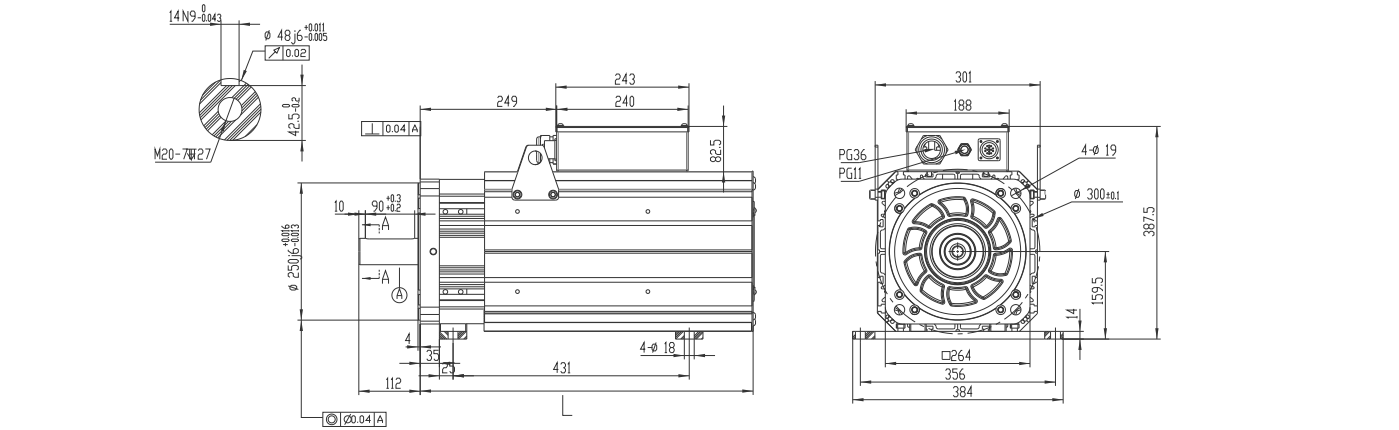
Motor model	Rated torque N · m	Rated speed RPM	Rated frequency Hz	Rated current A	Rated power kW	Rated voltage VAC	Moment of inertia kg·m²·10 ⁻³	Weight kg	Length mm	Counter electro- motive force V/Krpm	Torque constant kt N · m/A	Peak torque N · m	Peak current A
SM18135F15DR	135	1500	100.0	45.2	21.2	380	11.4	63	481	201	3.32	285	95.4
SM18135F17DR	135	1700	113.3	48.7	24.0	380	11.4	63	481	186	3.08	285	102.7
SM18135F20DR	135	2000	133.3	57.5	28.3	380	11.4	63	481	158	2.61	285	121.4
SM18140F15DR	140	1500	100.0	46.6	22.0	380	12.1	67	499	202	3.34	295	98.4
SM18140F17DR	140	1700	113.3	50.5	24.9	380	12.1	67	499	186	3.08	295	106.5
SM18140F20DR	140	2000	133.3	60.6	29.3	380	12.1	67	499	155	2.57	295	127.9
SM18150F15DR	150	1500	100.0	50.2	23.6	380	12.8	70	517	201	3.32	317	106.0
SM18150F17DR	150	1700	113.3	54.8	26.7	380	12.8	70	517	184	3.04	317	115.6
SM18150F20DR	150	2000	133.3	67.0	31.4	380	12.8	70	517	150	2.49	317	141.3
SM18165F15DR	165	1500	100.0	52.8	25.9	380	14.2	77	553	210	3.48	348	111.3
SM18165F17DR	165	1700	113.3	64.5	29.4	380	14.2	77	553	172	2.84	348	136.0
SM18165F20DR	165	2000	133.3	72.5	34.6	380	14.2	77	553	153	2.53	348	153.0
SM18180F15DR	180	1500	100.0	62.5	28.3	380	15.6	84	589	193	3.20	380	131.9
SM18180F17DR	180	1700	113.3	70.3	32.0	380	15.6	84	589	172	2.84	380	148.4
SM18180F20DR	180	2000	133.3	80.4	37.7	380	15.6	84	589	150	2.49	380	169.6
SM18200F15DR	200	1500	100.0	70.3	31.4	380	17.0	91	625	191	3.16	422	148.4
SM18200F17DR	200	1700	113.3	80.4	35.6	380	17.0	91	625	167	2.76	422	169.6
SM18200F20DR	200	2000	133.3	93.8	41.9	380	17.0	91	625	143	2.37	422	197.9

SM25-380V

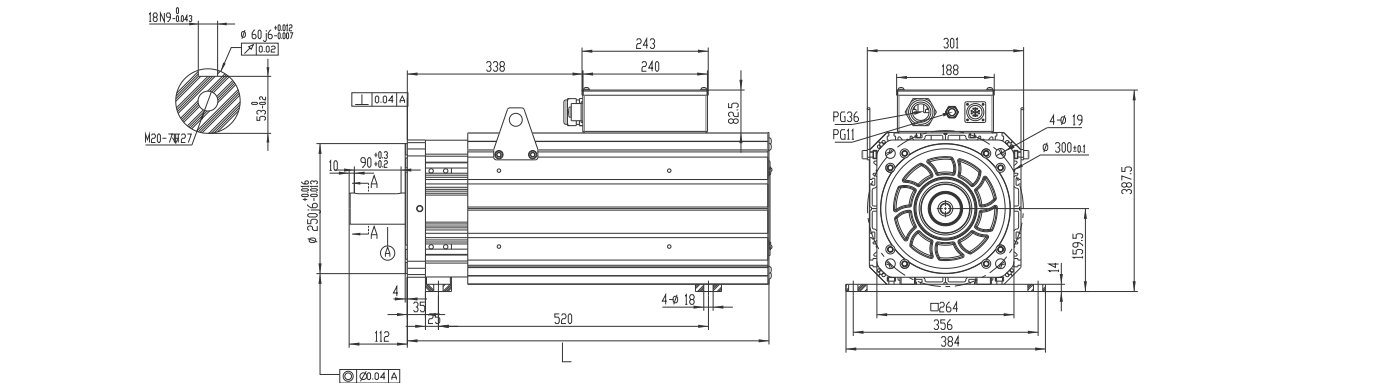


Motor model	Rated torque N · m	Rated speed RPM	Rated frequency Hz	Rated current A	Rated power kW	Rated voltage VAC	Moment of inertia kg·m ² ·10 ⁻³	Weight kg	Length mm	Counter electro- motive force V/krpm	Torque constant kt N · m/A	Peak torque N · m	Peak current A
SM25160F15DR	160	1500	100.0	52.2	25.1	380	27	100	473.5	206	3.40	338	110.2
SM25160F17DR	160	1700	113.3	59.2	28.5	380	27	100	473.5	182	3.00	338	124.9
SM25160F20DR	160	2000	133.3	68.3	33.5	380	27	100	473.5	157	2.60	338	137.5
SM25185F15DR	185	1500	100.0	58.7	29.1	380	31	108	494.5	212	3.50	390	123.8
SM25185F17DR	185	1700	113.3	67.7	32.9	380	31	108	494.5	184	3.04	390	142.9
SM25185F20DR	185	2000	133.3	80.3	38.7	380	31	108	494.5	155	2.56	390	169.4

SM25-380V



Motor model	Rated torque N · m	Rated speed RPM	Rated frequency Hz	Rated current A	Rated power kW	Rated voltage VAC	Moment of inertia kg·m ² ·10 ⁻³	Weight kg	Length mm	Counter electro- motive force V/Krpm	Torque constant kt N · m/A	Peak torque N · m	Peak current A
SM25215F15DR	215	1500	100.0	68.9	33.8	380	35	115	518	210	3.47	454	145.3
SM25215F17DR	215	1700	113.3	81.4	38.3	380	35	115	518	178	2.94	454	171.7
SM25215F20DR	215	2000	133.3	99.5	45.0	380	35	115	518	145	2.40	421	194.7
SM25265F15DR	265	1500	100.0	88.3	41.6	380	42	130	562.5	202	3.34	559	186.2
SM25265F17DR	265	1700	113.3	98.1	47.2	380	42	130	562.5	182	3.00	559	206.9
SM25265F20DR	265	2000	133.3	110.3	55.5	380	42	130	562.5	161	2.67	559	232.8
SM25310F15DR	310	1500	100.0	107.5	48.7	380	50	145	607.5	194	3.20	654	226.9
SM25310F17DR	310	1700	113.3	122.9	55.2	380	50	145	607.5	169	2.80	654	259.3
SM25310F20DR	310	2000	133.3	143.4	64.9	380	50	145	607.5	145	2.40	654	302.6
SM25360F15DR	360	1500	100.0	122.3	56.5	380	57	160	652	198	3.27	760	258.2
SM25360F17DR	360	1700	113.3	142.7	64.1	380	57	160	652	169	2.80	760	301.2
SM25360F20DR	360	2000	133.3	171.3	75.4	380	57	160	652	141	2.34	695	330.7

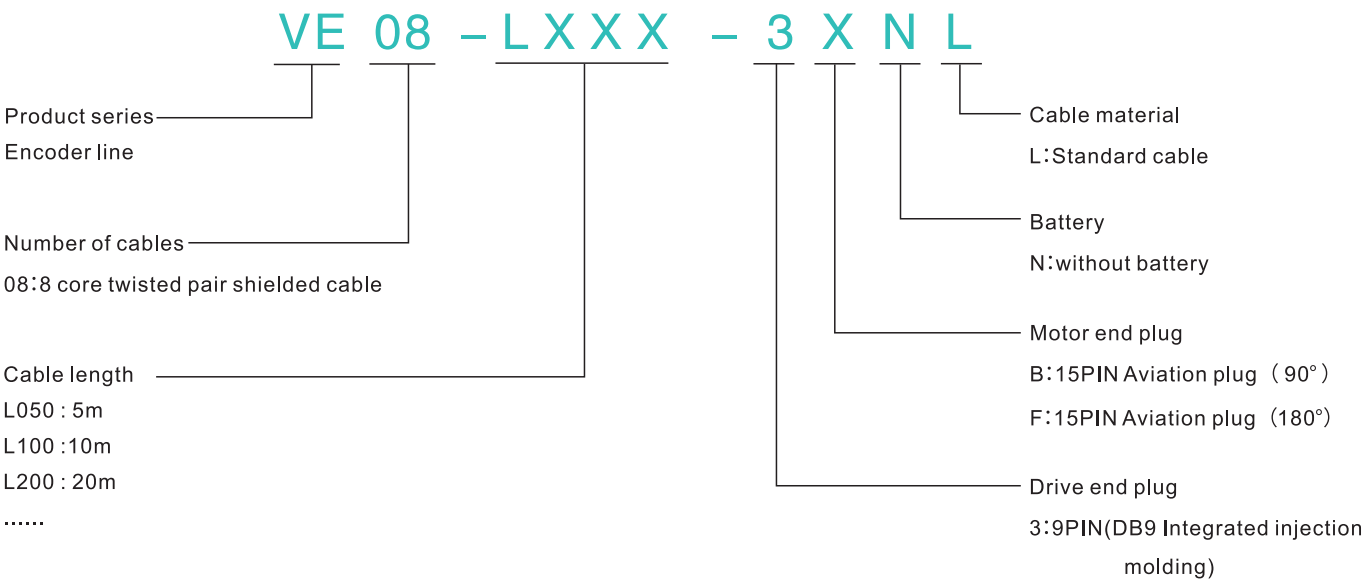


Motor model	Rated torque N · m	Rated speed RPM	Rated frequency Hz	Rated current A	Rated power kW	Rated voltage VAC	Moment of inertia kg.m ² ·10 ⁻³	Weight kg	Length mm	Counter electro- motive force V/Krpm	Torque constant kt N · m/A	Peak torque N · m	Peak current A
SM25400F15DR	400	1500	100.0	138.8	62.8	380	64	175	696.5	194	3.20	844	292.8
SM25400F17DR	400	1700	113.3	166.5	71.2	380	64	175	696.5	161	2.67	844	351.4
SM25400F20DR	400	2000	133.3	173.4	83.8	380	64	175	696.5	155	2.57	778	365.8
SM25450F15DR	450	1500	100.0	140.6	70.7	380	72	190	741	215	3.60	950	296.7
SM25450F17DR	450	1700	113.3	167.9	80.1	380	72	190	741	180	3.00	950	354.3
SM25450F20DR	450	2000	133.3	205.6	94.2	380	72	190	741	147	2.40	778	433.9
SM25500F15DR	500	1500	100.0	164.6	78.5	380	80	205	789.5	204	3.34	1055	347.4
SM25500F17DR	500	1700	113.3	208.2	89.0	380	80	205	789.5	161	2.67	1055	439.2
SM25500F20DR	500	2000	133.3	212.6	104.7	380	80	205	789.5	158	2.56	1055	448.5

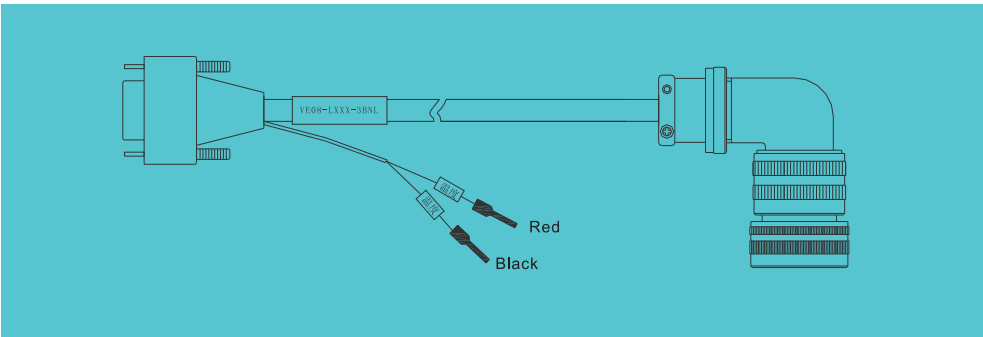
Accessories

Encoder line

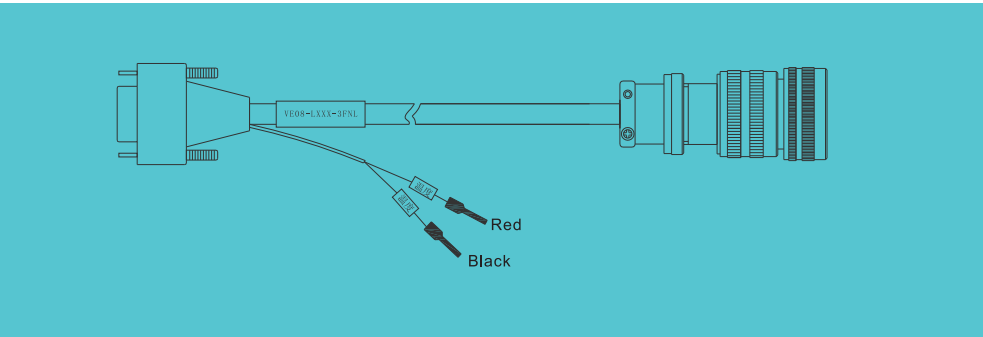
Model specification



Specification Model

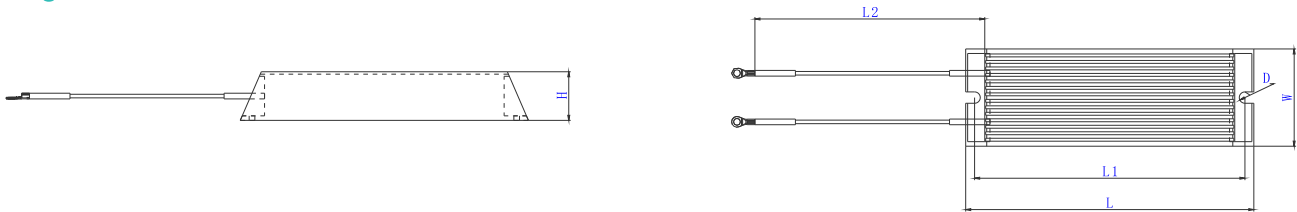


Model
VE08-L050-3BNL
VE08-L100-3BNL
VE08-L200-3BNL



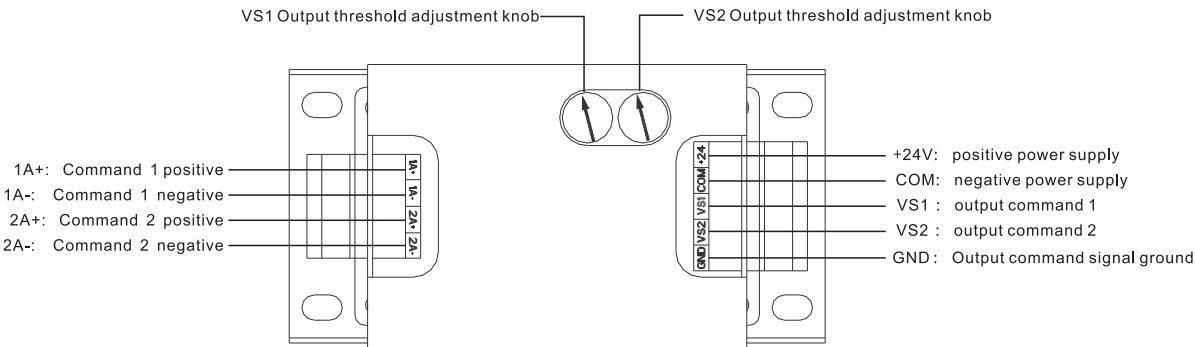
Model
VE08-L050-3FNL
VE08-L100-3FNL
VE08-L200-3FNL

Braking resistor



Model	External dimensions					
	L	L1	L2	H	W	Mounting holes
RXLG-0800W40RJ-335MM	335	318	1000	30	60	6.5
RXLG-1000W30RJ-335MM	335	318	1000	30	60	6.5
RXLG-2500W15RJ-450MM	450	435	1200	60	60	6.5
RXLG-3000W10RJ-530MM	530	515	1200	60	60	6.5

Signal conversion board



Wiring specification

	Input signal	Output signal
	1A+ command 1 positive	+24V positive power supply
	1A- command 1 negative	COM negative power supply
	2A+ command 2 positive	VS1 voltage type command output 1
	2A- command 2 negative	VS2 voltage type command output 2
		GND voltage type output signal ground