VEICHI

CH310E series elevator drive



About us



VEICHI Electric (stock code: 688698) has always been dedicated to the field of electrical drive and industrial control since its establishment, and now it is a high-tech enterprise engaged in R&D, production, and sales of industrial automation products in one. With R&D and production bases in Suzhou, Shenzhen and Xi'an, and a wholly-owned subsidiary in India, VEICHI now is capable of conducting its business to many countries and regions with competitive, safe and reliable products and services to customers all over the world.

Plentiful products cover AC drives, servo systems and control systems, which are widely used in heavy industry, light industry, high-end equipment and more to facilitate the intellectualized transformation of the manufacturing industry with solutions customized to different scenarios. In the meanwhile, along the development trend of the times, VEICHI is extending its place to the emerging fields such as robotics, new energy, and medical care, and has developed products such as coreless motors, frameless motors, photovoltaic AC drives, and surgical power systems, which have deeply empowered the impressively promising industries.

On long-term and persistent independent R&D and innovation, VEICHI has successfully cultivated a series of patented technologies with independent intellectual property rights, and has mastered the core technologies of motor control such as vector control of PMSM, high-frequency pulse injection control, field-weakening control for higher speed, scalar V/F control and vector control etc., and of silicon carbide application, motor parameter tuning and identification, motor control and protection, and motor speed tracking and start-up control. As of June 30, 2023, a total of 163 patents have been granted, including 43 patents for inventions.

VEICHI has been developing step by step over the past 18 years with abundant honorary awards and certificates from the state and competent authorities, including "the Third Batch of Special and Sophisticated 'Small Giant' Enterprises That Produce Novel and Unique Products" "High-tech Enterprises", "Jiangsu Provincial Engineering Technology Research Center", "Jiangsu Provincial Enterprise Technology Center", "Jiangsu Provincial Industrial Internet Development Demonstration Enterprise (Benchmarking Factory Category)" and others.

In the future, VEICHI Electric will continue to uphold the business philosophy of " guided by market demand and driven by technological innovation", strengthen the key core technology research and product iteration, and constantly expand its high-performance, high-quality, high-reliability applications, contributing to the development of electrical drive and industrial control with might and main.

2005

- Beginning of entrepreneurship in Shenzhen
- First-generation of AC drive successfully launched

2013

- Suzhou VEICHI Electric Co., Ltd established
- First generation of servo system successfully developed

2014

- First stage of Suzhou VEICHI project groundbreaking and put into construction

2016

- First stage of Suzhou VEICHI project put into operation
- First generation of motion control system launched

2019

- Indian subsidiary established
- Restructure to a company limited by shares

2020

- A-share of science and technology innovation board landing
- Awarded as provincial Specialized and Sophisticated "Small Giant" Firms That Produce New and Unique Products

2021

- A Veichi controlled subsidiary established
- Awarded as the third patch of Specialized and Sophisticated "Small Giant" Firms That Produce New and Unique Products

2022

- Xi'an R&D Center established
- VEICHI Digital Energy subsidiary established

2023

- Suzhou VEICHI Phase II project put into operation
- Suzhou VEICHI Phase III Project put into construction
- VEICHI Medical Equipment subsidiary established

CH310E series

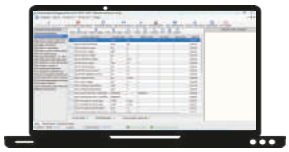
Elevator Drive





For Gearless & Geared Applications

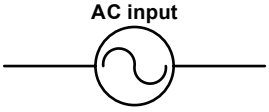
PC tools debugging



Wide voltage design

323~528V AC

AC input



LCD keypad

Language support:
English,
Russian,
Turkish



LED keypad





Application Features

- 4 independent S-ramp
- Smooth ride performance
- Light load detection for synchronous motor during evacuation mode
- ASR PI optimization
- Safety brake control
- Contactor management
- 220Vac UPS



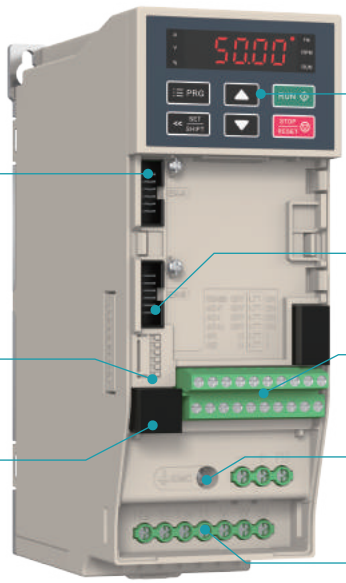
Product Features

- All series built-in dynamic braking unit
- All series support IM geared machine & PMSM gearless machine
- Anti-rollback function for PMSM gearless machine
- Super open phase detection performance (within 200ms)
- ATB function
- Brake resistor check
- Evacuation mode
- Fault trip lock





Structural Characteristics



SPI-A expansion interface
Any expansion card can be connected

Terminal resistance, input/output selection via the dial switch

RJ45 network interface
Extend with network cables

Panel keyboard
The indicator light is integrated with the five-digit digital tube

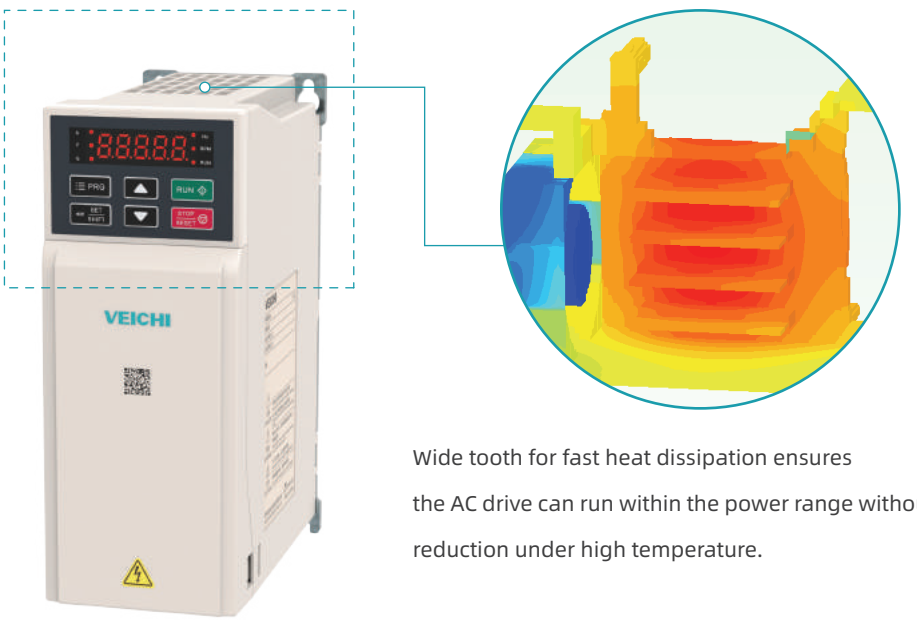
SPI-B expansion interface
Any expansion card can be connected

Control terminals

EMC terminal
Quick disconnection to ground

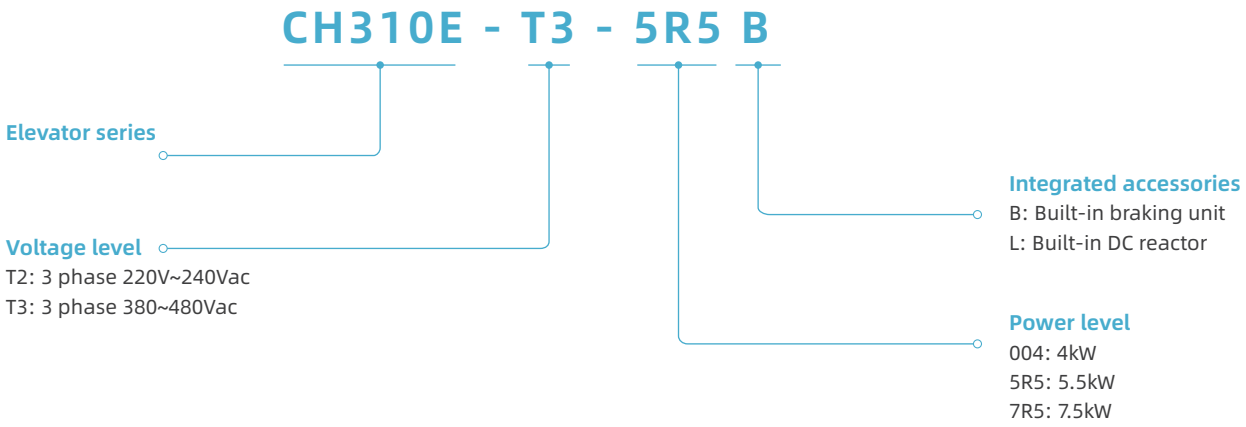
Main terminal

Electronic devices are separated from the radiator air duct while capacitors, MOS tubes, relays are designed with stronger protection and both sides of the machine are sealed to raise environmental resistance.



Wide tooth for fast heat dissipation ensures the AC drive can run within the power range without any capacity reduction under high temperature.

Model Description



Closed Loop Elevator Drive

General specifications

380V~480V AC

Model	Input current (A)	Output current (A)	Applicable motor (kw)	Dimension (mm)			Dynamic resistor			Weight (kg)
				Width	Height	Depth	Min(Ω)	Max(Ω)	Min recommended power (W)	
CH310E-T3-004B	13.3	10	4	100	242	155	130	170	1100	1.9
CH310E-T3-5R5B	17.2	13	5.5				90	115	1600	1.9
CH310E-T3-7R5B	22.2	17	7.5	116	320	175	65	85	2500	3.5
CH310E-T3-011B	32.2	25	11				43	55	3500	3.5
CH310E-T3-015B	40.7	32	15	142	383	225	32	43	4500	5.9
CH310E-T3-018B	47.6	38	18.5				25	34	5500	5.9
CH310E-T3-022B	55.7	45	22				22	24	6500	5.9
CH310E-T3-030B	69.6	60	30	172	430	225	16	20	9000	10.6
CH310E-T3-037B	87	75	37				14	18	11000	10.9

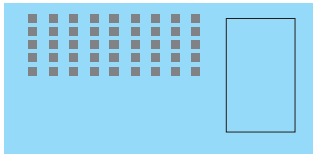
C2 EMC filter & AC input Reactor specification

Model	Input current (A)	Optional external C2 EMC filter	Optional AC input Reactor
CH310E-T3-004B	13.3	JL-NFI-4-010	VC-ACL-C-0009A-T3-1M85
CH310E-T3-5R5B	17.2	JL-NFI-4-016	VC-ACL-C-0013A-T3-1M56
CH310E-T3-7R5B	22.2	JL-NFI-4-016	VC-ACL-C-0018A-T3-1M00
CH310E-T3-011B	32.2	JL-NFI-4-025	VC-ACL-C-0024A-T3-M520
CH310E-T3-015B	40.7	JL-NFI-4-035	VC-ACL-C-0034A-T3-M400
CH310E-T3-018B	47.6	JL-NFI-4-050	VC-ACL-C-0038A-T3-M350
CH310E-T3-022B	55.7	JL-NFI-4-050	VC-ACL-C-0050A-T3-M260
CH310E-T3-030B	69.6	JL-NFI-4-065	VC-ACL-C-0060A-T3-M240
CH310E-T3-037B	87	JL-NFI-4-080	VC-ACL-C-0075A-T3-M235

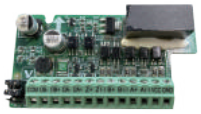
General Configuration



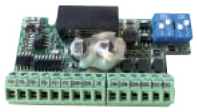
CH310E series
4kw~37kw



Elevator control station



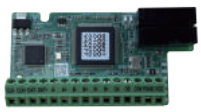
AC300PG01
5V/12V PG card



AC300RT1
Resolver PG card



CH310IO1
Elevator IO option card



CH310PG01
Absolute encoder card



Incremental encoder



Resolver



SSI SMRS64-xxx



SINCOS Endat2.1/ 2.2
ECN 413/1313



SINCOS ERN1387

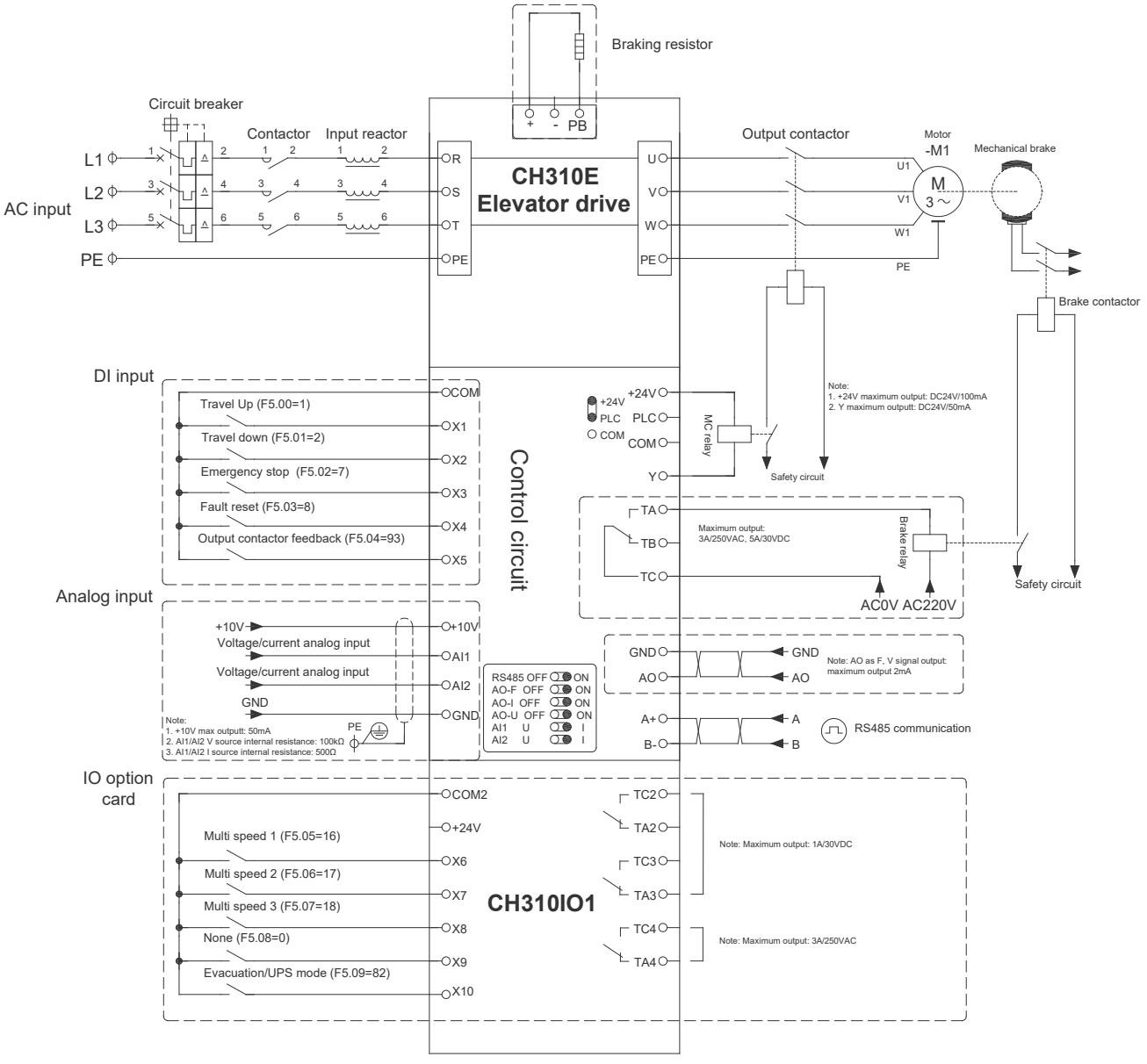


IM geared



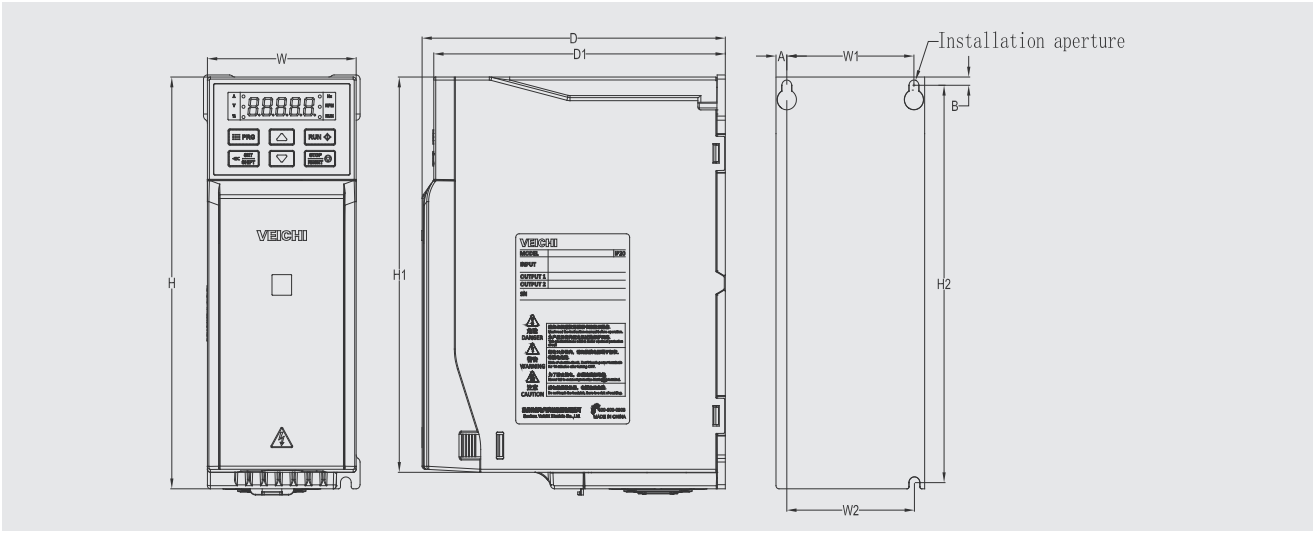
PMSM gearless

Connection Diagram

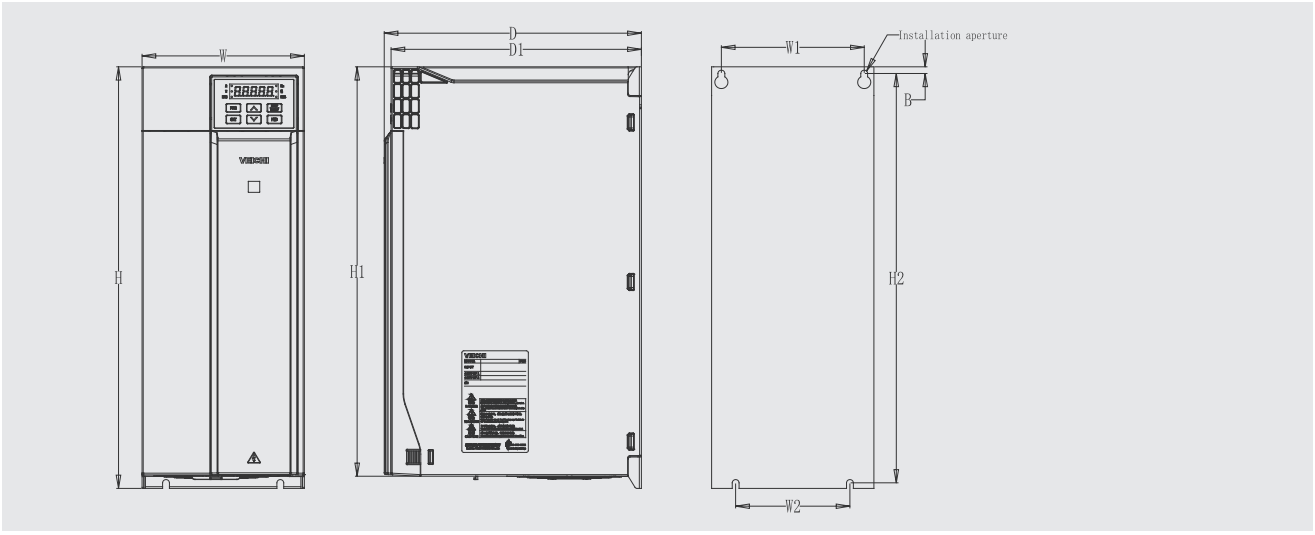


Installation Dimensions

Dimensions of Inverter (Plastic)



Inverter Model	Overall Dimension (mm)					Installation Dimension (mm)					Installation aperture
	W	H	H1	D	D1	W1	W2	H2	A	B	
CH310E-T3-004B	100	242	231	155	149	84	86.5	231.5	8	5.5	3-M4
CH310E-T3-5R5B											
CH310E-T3-7R5B	116	320	307.5	175	169	98	100	307.5	9	6	3-M5
CH310E-T3-011B											



Inverter Model	Overall Dimension (mm)					Installation Dimension (mm)					Installation aperture
	W	H	H1	D	D1	W1	W2	H2	A	B	
CH310E-T3-015B	142	383	372	225	219	125	100	372	8.5	6	4-M5
CH310E-T3-018B											
CH310E-T3-022B											
CH310E-T3-030B	172	430	415	225	219	150	150	416.5	11	7.5	4-M5
CH310E-T3-037B											

VEICHI

Suzhou VEICHI Electric Co., Ltd

No.1000 Songjia Road, Guoxiang street, Wuzhong Economic and Technological Development Zone, Suzhou

Tel: +86-512-6617 1988

Facebook: https://www.facebook.com/veichigroup

Whatsapp: +86- 138 2881 8903

Https://www.veichi.com/

Official Website

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