

EC160 Series Elevator Integrated Controller

About the Product

EC160 series elevator integrated controller is a new elevator intelligent control system developed under the design concept that integrates drive, control and network communication together. It adopts advanced closed loop vector control technology, elevator intelligent control technology and network communication technology, integrating elevator drive, control and management together.



Main Features

- Resources reducing in elevator installation, debugging, operation and management
- Max. speed: 6m/s, Max floor: 64
- Intelligent network group control can control 8 elevators at the same time
- Embedded high-performance starting compensation technology of non-weighing sensor
- CANBUS for communication in the car, MODBUS or CANBUS for external communication
- Low voltage emergency rescue mode of AC220V single-phase UPS, light load direction search
- Safety enabling hardware input conform to EN81 standards



Special Functions

- Integrated with control and I/O interface, the compact structure saves installation space for control cabinet
- The integration of encoder interfaces of synchronous and asynchronous motors satisfies stock generalization
- Hand terminal: independent HMI, online Chinese-English help system, functions of debugging permission management, debugging trace management, parameters uploading/downloading and computer data copying
- Add TCP/IP internet module for remote debugging or control
- Support TCP/IP protocol remote monitor
- Support both serial and parallel communication
- Built-in PG card, support both SIN/COS and incremental encoder

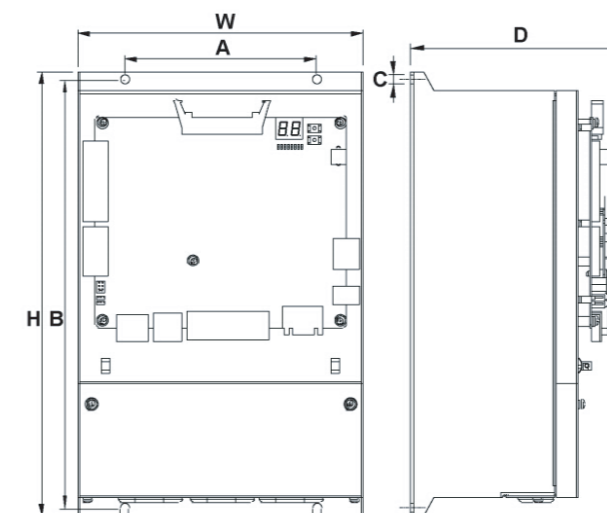
Comprehensive Technical Parameters

Item	Name	Description
I/O characteristics	Input voltage range	3PH AC380V±15% 3PH AC220V±15%
	Input frequency range	47~63Hz
	Output voltage range	0~rated input voltage
	Output frequency range	0~400Hz
Peripheral interface characteristics	Digital low voltage input	24 digital inputs, 9~30V
	High voltage detection input	3 high voltage detection inputs, 110V/220V
	Switch output	Standard: 6 relay NO outputs, 5A/250 VAC
	Communication interface	2 groups of CANbus, 2 groups of Modbus
Technical control characteristics	Encoder interface	Standard: SIN/COS, UVW, incremental encoder interface Optional: Endat 2.1, rotary PG card
	Control mode	V/F, open loop vector, close loop vector
	Speed control accuracy	Sensorless vector control: ±0.5% of the Max. speed; PG vector control: ±0.1% of the Max. speed
	Starting torque	Sensorless vector control: 0.5Hz/150% (SVC); PG vector control: 0Hz/180% (VC)
	Overload capacity	150% of the rated current: 60s, 180% of the rated current: 10s, 200% of the rated current: 1s
Carrier frequency	1.0~16kHz, adjust carrier frequency automatically according to load characteristics, default value: 6kHz	

Configuration

Model	Input Voltage	Output power (kW)	Output current (A)	Braking unit	Min.Braking Resistor
EC160-2R2-S2	Single-phase 220V±15%	2.2	11.0	Built-in	100Ω/1000W
EC160-004-2	3PH AC220V±15%	4.0	18.5	Built-in	35Ω/1200W
EC160-5R5-2		5.5	27.0	Built-in	25Ω/1500W
EC160-7R5-2		7.5	34.0	Built-in	20Ω/2000W
EC160-011-2		11.0	46.0	Built-in	15Ω/4000W
EC160-015-2		15.0	62.0	Built-in	10Ω/4500W
EC160-018-2		18.5	75.0	DBU-055-2	8Ω/5000W
EC160-004-4	3PH AC380V±15%	4.0	11.0	Built-in	75Ω/1200W
EC160-5R5-4		5.5	13.0	Built-in	55Ω/1500W
EC160-7R5-4		7.5	18.5	Built-in	50Ω/2000W
EC160-011-4		11.0	27.0	Built-in	40Ω/4000W
EC160-015-4		15.0	34.0	Built-in	32Ω/4500W
EC160-018-4		18.5	38.0	Built-in	28Ω/5000W
EC160-022-4		22.0	46.0	Built-in	22Ω/7000W
EC160-030-4		30.0	62.0	Built-in	20Ω/10000W

Appearance and Installation Dimensions



Installation Dimensions

Input voltage	Power(kW)	W(mm)	H(mm)	D(mm)	A(mm)	B(mm)	C(mm)	Installation STUD
3PH AC220V	4~7.5	223	347	169	150	334.5	Φ7	M6
	11~15	290	426	233	235	410	Φ7	M6
3PH AC380V	4~5.5	223	347	168	150	334.5	Φ7	M6
	7.5~15	223	347	169	150	334.5	Φ7	M6
	18.5~30	290	426	233	235	410	Φ7	M6