### **INVT Elevator Products Catalog**









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### **GD200L Series Elevator AC Drive**

### About the Product

GD200L is INVT newly-designed AC drive based on years of industry experience on motor drive, dedicated for elevator with asynchronous motor. By applying the most advanced speed-sensorless vector control technology as well as simple closed loop vector control and optimized DSP control algorithm, GD200L has outstanding reliability and performance to meet the requirement of low-cost application of elevator with asynchronous motor.



### Main Features

- support geared motor, open loop control mode and closed loop control mode with DC24V incremental encoder
- Compact design to save the space, easy to install, low cost
- Support the emergency rescue running function with single phase UPS.
- Easy Debugging and very small parameter list
- Optimized S-curve algorithm and running & brake contactor control

Model	Input voltage	Output power (kW)	Input current (A)	Output current (A)	Braking unit	Braking resistor
GD200L-004G-4		4	13.5	9.5		75Ω/1200W
GD200L-5R5G-4		5.5	19.5	14		55Ω/1500W
GD200L-7R5G-4		7.5	25	18.5	Ruilt in	50Ω/2000W
GD200L-011G-4		11	32	25	Built-III	40Ω/4000W
GD200L-015G-4	AC 3PH 380V	15	40	32		32Ω/4500W
GD200L-018G-4	(+10%)	18.5	47	38		28Ω/5000W
GD200L-022G-4		22	56	45		22Ω/7000W
GD200L-030G-4		30	70	60		20Ω/10000W
GD200L-037G-4		37	80	75	DBU100H-060-4	16Ω/10000W
GD200L-045G-4		45	94	92		13Ω/12000W
GD200L-055G-4		55	128	115	DB010011-110-4	12Ω/15000W
GD200L-004G-2		4	17	16		35Ω/1200W
GD200L-5R5G-2		5.5	21	20	Ruilt in	25Ω/1500W
GD200L-7R5G-2		7.5	31	30	Built-III	20Ω/2000W
GD200L-011G-2	AC 3PH 220V	11	43	42		15Ω/4000W
GD200L-015G-2	(-15%) ~ 240V (+10%)	15	56	55		10Ω/4500W
GD200L-018G-2	(	18.5	71	70	DBU100H-060-2	8Ω/5000W
GD200L-022G-2		22	81	80		6Ω/7000W
GD200L-030G-2		30	112	110	DB0100H-110-2	5Ω/8000W

#### Configuration

Appearance and Installation Dimensions



0.75-15kW wall mounting





-W2-

18.5-30kW wall mounting



37-110kW wall mounting

Input voltage	Output power (kW)	W1 (mm)	H1 (mm)	D1 (mm)	H2 (mm)	W2 (mm)	Installation hole (d:mm)
AC 3PH 380V(-15%) ~ 440V (+10%)	4kW~5.5kW	146	256	181	243.5	131	6
	7.5kW~15kW	170	320	216	303.5	151	6
	18.5kW	230	342	216	311	210	6
	22kW~30kW	255	407	245	384	237	7
	37kW~55kW	270	555	325	540	130	7
	4kW~7.5kW	170	320	216	303.5	151	6
220V(-15%) ~ 240V	11kW~15kW	255	407	245	384	237	7
(+10%)	18kW~30kW	270	555	325	540	130	7

### **GD300L Series Elevator AC Drive**

### About the Product

The GD300L series is INVT's mature and competitive elevator-specific AC drive, developed on the company's latest and most advanced drive platform. Utilizing DSP and advanced vector control technology, the GD300L series achieves significant improvements in safety, reliability, control performance, and functionality, making it an ideal solution for modern elevator systems.



### **Main Features**

- Supports both open & closed loop vector control for asynchronous and PM synchronous motors
- Integrates forced deceleration to prevent top/bottom overtravel during running
- Enables emergency rescue operation with AC220V UPS and light-load direction search
- Advanced torque compensation algorithm (with/without load cell) prevents rollback and ensures smooth starting
- Compatible with multiple encoder types: incremental, SIN/COS, absolute, and UVW encoders
- Optional external LCD keypad with multi-language support

#### Configuration

Model	Input voltage	Rated Power(kW)	Input Current(A)	Output Current(A)	Braking unit	Braking resistor
GD300L-2R2G-S2	AC 1PH 220V (-15%) ~ 240V (+10%)	2.2	23	10		100Ω/1000W
GD300L-004G-2		4	17	16	Built-in	35Ω/1200W
GD300L-5R5G-2	AC 3PH	5.5	21	20		25Ω/1500W
GD300L-7R5G-2	220V (-15%) ~ 240V	7.5	31	30		20Ω/2000W
GD300L-011G-2	(+10%)	11	43	42		15Ω/4000W
GD300L-015G-2		15	56	55	DB0100H-000-2	10Ω/4500W
GD300L-004G-4		4	13.5	9.5		75Ω/1200W
GD300L-5R5G-4		5.5	19.5	14		55Ω/1500W
GD300L-7R5G-4		7.5	25	18.5	Built-in	50Ω/2000W
GD300L-011G-4	AC 3PH	11	32	25		40Ω/4000W
GD300L-015G-4	(+10%) ~ 440V	15	40	32		32Ω/4500W
GD300L-018G-4	(11070)	18.5	47	38		28Ω/5000W
GD300L-022G-4		22	56	45	DBU100H-060-4	22Ω/7000W
GD300L-030G-4		30	70	60		20Ω/10000W

Note: Please contact INVT if any other model is required.

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### Appearance and Installation Dimensions







Wall mounting diagram for 2.2 kW~15 kW

Wall mounting diagram for 18.5 kW~30 kW

Input voltage	Output power (kW)	W1 (mm)	H1 (mm)	D1 (mm)	H2 (mm)	W2 (mm)	Installation hole (d:mm)
AC 1PH 220V (-15%) ~ 240V (+10%)	2.2kW	220	320	180	305.5	206	6
AC 3PH 220V (-15%) ~ 240V	2.2kW	160	250	175	237.5	147.5	5
	4kW~7.5kW	220	320	180	305.5	206	6
(+10%)	11kW~15kW	290	470	220	455.5	176	6.5
AC 3PH 380V (-15%) ~ 440V (+10%)	2.2kW~5.5kW	160	250	175	237.5	147.5	5
	7.5kW~15kW	220	320	180	305.5	206	6
	18kW~30kW	290	470	220	455.5	176	6.5

### Expansion Card

Model	Material code	Picture	Category	Description			
EC-PG101-05	11023-00014	-		5V Incremental PG card			
EC-PG101-12	11023-00003	PG card for asynchronous motor PG card PG card PG card PG card PG card	Special for incremental encoder, power supply output :-05(4.75~7V) -12(11 75~16V) -24(24V+5%)				
EC-PG101-24	11023-00004		motor	24V Incremental PG card	12(11.10 100), 24(2402070)		
EC-PG102-05-T	11023-00092	8	PG card for	Sin/Cos PG card	Special for SIN/COS encoder like ERN1387, power supply output 5V±5%, 300mA		
EC-PG106-05-T EC-PG106-05-S	11023-00093 11023-00152		motor	Absolute encoder PG card	Special for ENDAT/SSI encoder like ECN1313, power supply output 5V±5%, 300mA		

### **Braking Unit**





Model	W(mm)	H(mm)	D(mm)	H1(mm)	W1(mm)	W2(mm)
DBU100H-060-2	120	260	162	246	65	65
DBU100H-060-4	130	200	105	240	05	05
DBU100H-110-2	150	340	248	326	75	100
DBU100H-110-4						100

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### **GD390L Series Elevator AC Drive**

#### **About the Product**

GD390L is a new generation of high-performance, elevator-specific AC drives that integrates drive technology, control systems, and network communication. It features essential safety functions including STO (Safe Torque Off), electronic star-point sealing, C2 filtering, and an LCD keypad, making it suitable for various elevator applications. The drive delivers reliable performance with enhanced safety features and flexible customization options to meet different operational requirements.



### **Main Features**

- STO (SIL3 certified) with synchronous motor star-point locking for safety
- Dual-CPU (MCU+DSP) design enables strong scalability and flexible customization
- Enhanced EMC filtering performance with optional built-in C2 filter
- Built-in incremental encoder input, and PG card expansion for incremental, sin/cos, Endat, and SSI absolute encoders
- Configurable MCU board for secondary integration and development
- Advanced S-curve algorithm improves dynamic response and ride comfort
- Load cell-free start/stop compensation for smooth running
- Automatic light-load detection in emergency mode reduces backup power consumption
- Expandable I/O terminals with standard LCD and optional LED keypad

### Configuration

Model	Power supply	Rated Power(kW)	Input Current(A)	Output Current(A)	Net Weight(kg)	Braking Unit	Braking Resistor
GD390L-2R2G-S2	AC 1PH 220V (-15%) ~ 240V (+10%)	2.2	24	10	3.6		100Ω/1000W
GD390L-2R2G-2		2.2	12	10	3.4		50Ω/1000W
GD390L-004G-2		4	21	18.5	3.6		35Ω/1200W
GD390L-5R5G-2	AC 3PH	5.5	30	27	4.6		25Ω/1500W
GD390L-7R5G-2	220V (-15%) ~ 240V	7.5	38	34	4.8		20Ω/2000W
GD390L-011G-2	(+10%)	11	52	48	/		15Ω/4000W
GD390L-015G-2		15	65	60	15.7		10Ω/4500W
GD390L-018G-2		18.5	78	75	15.8	Built-in	12Ω/6400W
GD390L-004G-4		4	14	10	3.5	Bait	75Ω/1200W
GD390L-5R5G-4		5.5	19	14	3.5		55Ω/1500W
GD390L-7R5G-4		7.5	24	18.5	3.8		50Ω/2000W
GD390L-011G-4	AC 3PH	11	32	27	4.6		40Ω/4000W
GD390L-015G-4	380V (-15%) ~ 440V	15	40	34	4.8		32Ω/4500W
GD390L-018G-4	(+10%)	18.5	47	40	/		28Ω/5000W
GD390L-022G-4		22	54	48	/		22Ω/7000W
GD390L-030G-4		30	70	60	16.2		20Ω/10000W
GD390L-037G-4		37	80	75	16.5		12Ω/12000W

### Appearance and Installation Dimensions



Input voltage	Output power (kW)	W1 (mm)	H1 (mm)	D1 (mm)	H2 (mm)	W2 (mm)
AC 1PH 220V (-15%) ~ 240V (+10%)	2.2kW	200	347	190	334.5	150
	2.2kW~4kW	200	347	190	334.5	150
220V (-15%) ~ 240V	5.5kW~7.5kW	200	347	197.5	334.5	150
(+10%)	15kW~18kW	270	455	218	436	225
	4kW~7.5kW	200	347	190	334.5	150
380V (-15%) ~ 440V	11kW~15kW	200	347	197.5	334.5	150
(+10%)	30kW~37kW	270	455	218	436	225

### Expansion Card

Model	Material code	Picture	Category	Description			
EC-PG101-05	11023-00014	-		5V Incremental PG card			
EC-PG101-12	11023-00003		PG card for asynchronous	PG card for asynchronous	asynchronous	PG card for asynchronous motor PG card PG card PG card PG card PG card PG card PG card for supply outp -12(11/25, 16/2)	Special for incremental encoder, power supply output :-05(4.75~7V), -12(11.75~16\0, -24(24)/+5%)
EC-PG101-24	11023-00004		motor	24V Incremental PG card	12(11.73-104), 24(2441070)		
EC-PG102-05-T	11023-00092	Ř	PG card for	Sin/Cos PG card	Special for SIN/COS encoder like ERN1387, power supply output 5V±5%, 300mA		
EC-PG106-05-T EC-PG106-05-S	11023-00093 11023-00152	4° 4 8	motor	Absolute encoder PG card	Special for ENDAT/SSI encoder like ECN1313, power supply output 5V±5%, 300mA		

### **GD290L Series Escalator AC Drive**

### **About the Product**

GD290L is a multifunctional AC drive dedicated for escalators, supporting both synchronous and asynchronous motors with advanced vector control for stable performance in complex conditions. Its rugged design features independent air ducts and enhanced circuit board coating for harsh environments, ensuring long-term reliability and reduced maintenance. With multi-protocol communication (CAN/PROFINET) and excellent EMC performance, it integrates seamlessly with control systems. The compact high-power design reduces installation costs while maintaining operational stability in complex conditions.



#### **Main Features**

- Customized designs specifically for escalator applications
- Advanced vector control technology ensures stable operation under various working conditions
- Optimized hardware circuits guarantee reliable performance in complex electromagnetic environments
- Supports seamless switching between industrial and frequency conversion modes
- Capable of reduced-capacity operation to lower escalator failure rates
- Wide voltage range design (AC 3PH 380V[-15%]~440V[+10%]) adapts to harsh power grid conditions
- Features built-in PLC card with 16K program storage for customer secondary development
- Pre-configured scenarios available to meet customized demands and reduce implementation costs

### Configuration

Model	Input voltage	Output power (kW)	Input current (A)	Output current (A)
GD290L-004G-4-C2		4	15	9.5
GD290L-5R5G-4-C2		5.5	20	13
GD290L-7R5G-4-C2		7.5	27	17
GD290L-011G-4-C2		11	35	25
GD290L-015G-4-C2	AC 3PH	15	44	32
GD290L-018G-4-C2	380V (-15%) ~ 440V	18.5	46	38
GD290L-022G-4-C2	(+10%)	22	54	45
GD290L-030G-4-L1		30	56	60
GD290L-037G-4-L1		37	69	75
GD290L-045G-4-L1		45	101	92
GD290L-055G-4-L1		55	117	115

### Appearance and Installation Dimensions



W2









-d

Input voltage	Model	W1 (mm)	H1 (mm)	D1 (mm)	H2 (mm)	W2 (mm)	Installation hole (d:mm)
	4kW	89	231	193	221	70	5
	5.5kW~7.5kW	89	259	211.5	248	70	
	11kW~15kW	145	280	207	268	130	
AC 3PH 380V( 15%) ~ 440V (+10%)	18.5kW~22kW	169	320	214	308	154	
(+10%)	30kW~37kW	200	341	214	328.5	185	б
	45kW	250	400	228	380	230	
	55kW	282	560	264	542	160	

### Expansion Card

Name	Model	Material code	Function
Mains Synchronization & Acquisition Card	EC-PD101-01	11023-00191	Voltage Acquisition (2 channels): Load-side voltage at the output reactor of the inverter, Grid-connected side voltage Current Sampling (3 channels): Load-side current at the output reactor of the inverter
Mains Synchronization & Voltage Divider Card	EC-PD101-02	11023-00190	Step-down the high-voltage signal to a reduced signal of approximately 5Vmax and transmit it to the acquisition card.

### **EC90B Series Open Loop Elevator Integrated Controller**

#### **About the Product**

EC90B represents a new generation of intelligent elevator open-loop control system that incorporates integrated drive, control, and network communication technologies. Integrating advanced variable frequency vector control technology, intelligent control algorithms, and networked communication capabilities, it seamlessly integrates elevator drive, control, and management functions, and delivers significant improvements in safety, reliability, operational convenience, cost-effectiveness, and design customization.



#### **Main Features**

- Supports up to 15 floors (with floor expansion board), max speed 1.0 m/s (open loop), 1.5 m/s (closed loop)
- Compatible with both geared motors and PM motors
- Operates in open/closed loop modes (PG card required for closed loop)
- Supports parallel/semi-serial communication
- Multiple commissioning tools: external LCD keypad, built-in keypad, Bluetooth-enabled phone app
- Emergency rescue operation with UPS power supply
- Built-in RTC circuit enables date/time-based lock function
- Custom protocol prevents unauthorized spare part replacement

#### Configuration

Model	Input voltage	Rated power(kW)	Input current (A)	Output current (A)	Braking unit	Braking resistor
EC90B-004-4	3PH AC380V±15%	4.0	13.5	9.5	Built-in	75Ω/1200W
EC90B-5R5-4		5.5	19.5	14.0	Built-in	55Ω/1500W

### Appearance and Installation Dimensions



Model	W (mm)	H (mm)	D (mm)	A (mm)	B (mm)	Diameter of mounting hole(mm)	Mounting bolt
EC90B-004-4	180	290	180	148	274	Φ6	M5
EC90B-5R5-4	180	290	180	148	274	Φ6	M5

### Floor Expansion Card



Note: optional for floor expansion up to 15 floors.

Medel	Motorial and	Appearance	Appearance dimensions		Installation dimension			
wodei	Material code	L(mm)	W(mm)	L(mm)	W(mm)	Diameter of mounting hole(mm)		
EC-EBA	11023-00178	130	79	121	70	Φ5		

### **EC160A/EC160B Series Elevator Integrated Controller**

#### About the Product

The EC160A/EC160B series elevator integrated controller is an advanced intelligent control system that combines drive, control, and network communication technologies. Utilizing closed-loop vector control, smart elevator control, and network communication, it ensures efficient integration of elevator control, drive, and management functions.

### Note: EC160A: Control board includes an integrated terminal block for inputs.

EC160B: Uses a dedicated plug-in board (see page 18) for inputs, connected to the control board via a flat cable.



EC160A

EC160B

CE

### **Main Features**

- Full compliance with EN81-20/50 safety standards
- Maximum speed 6m/s, maximum capacity 64 floors
- Integrated phase sequence detection eliminates control panel phase relay
- Advanced group control supports simultaneous operation of 8 elevators
- High-performance load cell-free starting compensation technology
- Emergency rescue operation with AC220V UPS and automatic light-load detection
- Space-saving highly integrated design optimizes control panel layout
- Multiple debugging options including mobile app, LCD keypad and integrated control panel
- Continuous safety monitoring for brake force and door lock circuit protection
- Innovative PWM dead zone compensation reduces motor noise and energy loss
- Standard built-in PG card supports SIN/COS and incremental encoders, with optional plug-in card for Endat/SSI absolute encoders

#### **Comprehensive Technical Parameters**

Item	Name	Description
	Input voltage range	AC 3PH 400V±15% AC 3PH 220V±15%
	Input frequency range	47~63Hz
Electrical specification	Output voltage range	0~rated input voltage
	Output frequency range	0~400Hz
	Low-voltage digital input	24 digital inputs, 9~30V
	Safety & door lock detection input	5 high voltage detection inputs, 110V/220V
Peripheral I/O	Digital output	Standard: 6 relay NO outputs, 5A/250 VAC
specification	Communication interface	2 groups of CANbus, 2 groups of Modbus
	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
	Overload capacity	150% of the rated current: 60s, 180% of the rated current: 10s, 200% of the rated current: 1s
Performance	Starting Torque	Sensorless vector control: 0.5Hz/150% (SVC); PG vector control: 0Hz/180% (VC)
specification	Speed control accuracy	Sensorless vector control: $\pm 0.5\%$ of the Max. speed; PG vector control: $\pm 0.1\%$ of the Max. speed
	Carrier frequency	1.0~16kHz, adjust carrier frequency automatically according to load characteristics, default value: 6kHz

### Configuration

Model (EC160A)	Model (EC160B)	Input Voltage	Rated power (kW)	Output current (A)	Braking unit	Braking resistor
EC160-2R2-S2(A)	/	AC 1PH 220V±15%	2.2	11.0		100Ω/1000W
EC160-004-2(A)	/		4.0	18.5		35Ω/1200W
EC160-5R5-2(A)	EC160-5R5-2(B)		5.5	27.0	<b>Duilt</b> in	25Ω/1500W
EC160-7R5-2(A)	EC160-7R5-2(B)		7.5	34.0	Built-III	20Ω/2000W
EC160-011-2(A)	EC160-011-2(B)	AC 3PH 220V±15%	11.0	46.0		15Ω/4000W
EC160-015-2(A)	EC160-015-2(B)		15.0	62.0		10Ω/4500W
EC160-018-2(A)	EC160-018-2(B)		18.5	75.0		8Ω/5000W
EC160-022-2(A)	EC160-022-2(B)		22.0	92.0	DBU100H-060-2	7Ω/6500W
EC160-004-4(A)	/		4.0	11.0		75Ω/1200W
EC160-5R5-4(A)	EC160-5R5-4(B)		5.5	13.0		55Ω/1500W
EC160-7R5-4(A)	EC160-7R5-4(B)		7.5	18.5	5.001	50Ω/2000W
EC160-011-4(A)	EC160-011-4(B)		11.0	27.0		40Ω/4000W
EC160-015-4(A)	EC160-015-4(B)		15.0	34.0	Built-In	32Ω/4500W
EC160-018-4(A)	EC160-018-4(B)	AC 3PH 400V±15%	18.5	38.0		28Ω/5000W
EC160-022-4(A)	EC160-022-4(B)		22.0	46.0		22Ω/7000W
EC160-030-4(A)	EC160-030-4(B)		30.0	62.0		20Ω/10000W
EC160-037-4(A)	EC160-037-4(B)		37.0	75.0	DBU100H-060-4	14Ω/11100W
EC160-045-4(A)	EC160-045-4(B)		45.0	92.0		11Ω/13500W
EC160-055-4(A)	EC160-055-4(B)		55.0	115	0001001-110-4	9Ω/16500W

Appearance and Installation Dimensions





Input voltage	Power(kW)	W(mm)	H(mm)	D(mm)	A(mm)	B(mm)	C(mm)	Mounting bolt
AC 3PH 220V±15%	4~7.5	223	347	169	150	334.5	Φ7	M6
	11~15	290	426	233	235	410	Φ7	M6
	4~5.5	223	347	168	150	334.5	Φ7	M6
	7.5~15	223	347	169	150	334.5	Φ7	M6
AC 3PH 400V±15%	18.5~30	290	426	233	235	410	Φ7	M6
	37-55	270	555	325	130	540	Φ7	M6

### **EC300 Series Four-quadrant Elevator Integrated Controller**

#### About the Product

The EC300 elevator integrated controller is a new-generation 4-quadrant intelligent control system featuring integration design that combines drive, control, energy feedback and network communication functions. Through its integrated 4-quadrant drive technology and optimized application for elevator potential energy conditions, it delivers comprehensive improvements in energy efficiency, operational safety and reliability, user-friendly operation, and cost-effectiveness.



#### **Main Features**

- Maintains all elevator functions identical to EC160A integrated controller
- Utilizing four-quadrant frequency control technology, the system regenerates elevator mechanical energy (potential & kinetic) into grid power (>80% efficiency, <5% harmonics, 30% energy savings) instead of dissipating through braking resistors, while meeting IEC61000-3-2 standards for Grade A energy certification
- Features TI dual-core DSP control chip with high-speed communication, rapid curve tracking response, precision control and enhanced EMI resistance
- Integrated data black box monitors and records real-time elevator operation status
- Automatic fault diagnosis control chip identifies and logs transient faults in memory



### Configuration

Model	Input Voltage	Rated Power (kW)	Input Current (A)	Output Current (A)	Input Reactor Model
EC300-7R5-4(B)(NR)	AC 3PH //00\/+15%	7.5	25	18.5	ERL20A10504
EC300-011-4(B)(NR)		11	32	27	ERL20A10504
EC300-015-4(B)(NR)		15	40	34	ERL35A06004
EC300-018-4(B)		18.5	47	37	ERL45A04704
EC300-022-4(B)		22	56	46	ERL45A04704
EC300-030-4(B)		30	70	62	ERL60A03504

### Comprehensive Technical Parameters

Item	Name	Description				
	Input voltage range	AC 3PH 400V±15%				
Fleetrical	Input frequency range	47~63Hz				
specification	Output voltage range	0~rated input voltage				
	Output frequency range	0~400Hz				
	Low-voltage digital input	24 digital inputs, 9~30V				
	Safety & door lock detection input	5 high voltage detection inputs, 110V/220V				
Peripheral I/O	Digital output	Standard: 6 relay NO outputs, 5A/250 VAC				
specification	Communication interface	2 groups of CANbus,2 groups of Modbus,Ethernet				
	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				
	Overload capacity	150% of the rated current: 60s, 180% of the rated current: 10s, 200% of the rated current: 1s				
Performance	Starting Torque	Sensorless vector control: 0.5Hz/150% (SVC); PG vector control: 0Hz/180% (VC)				
specification	Speed control accuracy	Sensorless vector control: $\pm 0.5\%$ of the Max. speed; PG vector control: $\pm 0.1\%$ of the Max. speed				
	Carrier frequency	1.0~16kHz, adjust carrier frequency automatically according to load characteristics, default value: 6kHz				

Appearance and Installation Dimensions



<u></u>	41 11				Constant			
Input voltage	Power(kW)	W(mm)	H(mm)	D(mm)	A(mm)	B(mm)	C(mm)	Mounting bolt
AC 3PH	7.5-15	223	347	181	150	334.5	Φ7	M 6
400V±15%	18.5-30	290	426	225	235	410	Φ7	M 6

### **EC600 Elevator Integrated Control Panel**

#### About the Product

EC600 integrates advanced variable frequency vector control with intelligent elevator management and networked communication systems, combining drive, control, and supervisory functions into a unified platform that delivers enhanced safety, operational reliability, and user convenience.



#### **Main Features**

- Advanced variable-frequency vector control enables direct landing, automatic multi-speed curve generation, and intelligent short-floor recognition
- Eco-friendly structural design features optimized material selection and component layout for improved aesthetics
- Silent operation maintains noise levels below 50dB for passenger comfort
- Standard STO (SIL3 certified) with synchronous motor electronic star-point locking ensures safety compliance
- Intelligent integration of drive, control and management systems provides secure, reliable and user-friendly operation
- Compact household-style design reduces cabinet volume by 32% and internal cabling by 45%
- Optimized interfaces and simplified design minimize traveling cables for easier maintenance
- Compatible with both AC asynchronous and permanent magnet synchronous motors
- Dedicated LED monitoring card allows hoistway installation of control panel
- Mobile APP enables quick debugging with Bluetooth adaptor

#### **Comprehensive Technical Parameters**

Item	Name	Description
Electrical specification	Input voltage range	AC 1PH 220V (-15%) ~ 240V (+10%) AC 3PH 380V(-15%) ~ 440V(+10%)
	Input frequency range	47~63Hz
	Output voltage range	0~rated input voltage
	Output frequency range	0~200Hz
	Low-voltage digital input	24 Channels, DC24V / 4.5~8mA
Peripheral I/O	Safety & door lock detection input	4 Channels, AC/DC110V
	Digital output	8 relays, AC250V/5A,DC30V/5A
specification	Communication interface	2 CAN bus, 1 RS485
	Encoder interface	Built-in encoder interfaces for NPN/push-pull outputs, and expandable support for sin/cos, Endat, UVW, and SSI absolute encoders.
	Control mode	PG Vector Control
Derfermense	Overload capacity	60s for 150%, 10s for 200%, 1s for 200%Closed-loop vector control: 0Hz/200%
specification	Starting Torque	0Hz/200%
	Speed control accuracy	±0.5% of the max speed
	Carrier frequency	1 0-16kHz

### Configuration

Model	Input voltage	Rated power(kW)	Output current(A)	Braking resistor position	Braking resistor	
EC600-MR2-7R5-4-B-S		7 6	10 5		2500/1//650	
EC600-MR2-7R5-4-B-S-D2	AC 3PH 380V(-15%) ~ 440V (+10%)	AC 3PH	C. 1	10.0	External	220000/0202
EC600-MR2-015-4-B-S		(+10%) ~ 440v	+10%)	0.4		4500\\\/400
EC600-MR2-015-4-B-S-D2		15	34		450000/4002	

Appearance and Installation Dimensions



Model	Power (kW)	H (mm)	w (mm)	D (mm)	H1 (mm)	W1 (mm)	W2 (mm)	W3 (mm)	Diameter of mounting hole(mm)					
EC600-MR2-7R5-4-B-S	7.5													
EC600-MR2-7R5-4-B-S-D2	7.5	7.5	7.5	400	490	490	480	560	190	450	507	107	205	ф7
EC600-MR2-015-4-B-S	15	400	500	102	450	521	107	205	Ψ					
EC600-MR2-015 -4-B-S-D2	15													

### **Bluetooth & Phone APP**

### **Product Features**

- Convenient carrying of Bluetooth adaptor
- Fully functional and easy to use
- Quick operation of mobile phone touch screen
- Simple debugging of multiple sets of parameters
- Simple remote upgrade
- Online authorization for easy management
- Convenient fast and slow car debugging
- Support Android and iOS device







E-Debug Pro Android

E-Debug Pro IOS





Android

Phone APP

LCD Keypad

- Support car debugging
- Support for manufacturer parameter settings
- Support for multiple languages
- Full text display on 2.5 inch screen
- Can download and upload all parameters
- Different password for access permission to the parameter like inquiry, debug and factory setting







### **EC-KCB-H3 Plug-in Board**

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00559	265*155	245*135	Φ5

### **Product Features**

- The plug-in board comes with an error prevention function
- Separate design of high and low voltage circuits
- Assembled and modular design to improve production efficiency of control panel
- Independent detection for front and rear landing and car door lock short circuit
- Reduce engineering installation wiring and reduce wiring error rate
- Design of built-in short circuit and grounding protection fuse
- Accord with design requirements of EN81-20/50, such as creepage distance and electrical clearance

#### Installation position

Installed in the control panel and is compatible with the EC160B

### **EC-CTB-C Car Top Control Board**

Material code	Appearance dimension (mm)	Installation dimension (mm)	Hole size (mm)
11055-00506	162*125	152*115	Φ4

#### **Product Features**

- CANBUS communication
- RS485 communication available, provides standard RS485 communication protocol for connecting with third-party multimedia displays and voice announcer
- Analog and digital weighing signal input available
- Up to 64 floors control
- Arrival bell output
- Double-door control
- Independent energy-saving control of fan and lighting
- Supports comfort ride optimization and leveling parameter debugging

### Installation position

Installed in the control panel and is compatible with the EC160A





### EC-CTB-K2 Car Top Control Board EC-CTB-J4 Car Top Plug-in Board

Model	Material code	Appearance dimension (mm)	Installation dimension (mm)	Hole size (mm)
EC-CTB-K2	11055-00571	200*100	190*90	Φ5
EC-CTB-J4	11055-00586	240*200	230*190	Φ5

#### **Product Features**

- CANBUS communication
- RS485 communication available, provides standard RS485 communication protocol for connecting with third-party multimedia displays and voice announcer
- Analog and digital weighing signal input available
- Up to 64 floors control
- Arrival bell output
- Double-door control
- Independent energy-saving control of fan and lighting
- Supports comfort ride optimization and leveling parameter debugging

#### **Installation Position**

Installed in the car top inspection box and compatible with EC160B



EC-CTB-K2



EC-CTB-J4

### **EC-CCB** Car Operation Board

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00505	158*79	148*68	Φ4

#### **Product Features**

- One board for each elevator at least, the first CCB supports 16 floors, the cascading CCBs support 20 floors
- Attendant, independent, bypass or non-stop switch, attendant direction reverse, door open holding delay button input etc.

**Application Range** 

used with car top control board

Installation Position

Car operation panel



### **EC-PI Parallel Control Board**

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00552	130 * 120	123 * 113	Φ4

### **Product Features**

- EC-PI is the serial-to-parallel IO board for EC series integrated controller
- One board supports maximum 8 floors under full collective mode, 16 floors under down collective mode, and supports cascade to extension
- Programmable input/output: 3 relays, 13 optocouplers, 35 low-voltage inputs
- CANbus communication, flexible installation

### **Installation Position**

Car top inspection box or control panel

### LM11-K1-A Elevator Voice Station Reporting Device

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11023-00182	104*120*28	90*92	Φ5.5

### **Product Features**

- Announce the running direction when the elevator is about to run
- Announce the floor when the elevator is about to arrive at the stop
- Play the background music
- Comfort the passengers during fault or fire running
- When the elevator arrives at a floor, play the advertising music specified at the current floor after announcing the floor
- Support users to freely change all the music in LM11, including advertising music, background music and stop announcing music
- Use SD card to store MP3, easy to change

### Installation Position

Car top or COP-Car operation panel





### **EC-DF Destination Dispatch System**

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00588	166*150	148*68	Φ4

#### **Product Features**

- Support group control up to 8 elevators
- Integrate various advanced dispatch technologies such as expert systems, fuzzy logic, neural networks, etc
- Automatic identification of up/down peak hours, zoned pick-up and drop off, improving elevator operation efficiency
- Real time statistics of passenger flow, achieving decentralized elevator dispatch, providing passengers a better elevator experience
- Flexible and versatile configuration, supporting special functions such as VIP and disabled people

#### Installation Position

Control panel or independent DDS panel



### **GCB-01D Elevator Group Controller**

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00519	122*76	111* 64	Φ4

#### **Product Features**

- GCL group control system support max 8 elevators
- GCL group control system operation mode: up passenger-flow rush hour down passenger-flow rush hour, normal, idle
- Optimized dispatch, optimized running elevator
- Shortest and longest waiting time
- Calling control of long time waiting
- Passenger-flow rush hour service, self-running
- Energy-saving and group control fire fighting operation
- Group control spare power operation
- Decentralized processing control

#### **Installation Position**

Elevator control panel



### **EC-UCM V2.0 UCMP Control Board**

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00531	105*100	97 * 92	Φ4

**Product Features** 

- Adopting safety relays and high reliability design
- Supports the detection of unintended car movement for the elevator with synchronous or asynchronous motor
- Supports advance door open and releveling functions



**Installation Position** 

Control panel

### **EC-UCM-A1 UCMP Control Board**

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00554	155*78*27	141* 63.5	Φ5

**Product Features** 

- For applications with single-door synchronous motor elevator
- Elevator re-leveling function eliminates safety risks caused by uneven car/ landing door sill heights
- Advanced door opening function improves elevator operation efficiency
- Door contact short-circuit detection function prevents safety hazards from faulty contacts or manual bypassing
- UCMP detection and braking activation function safely stops the car when unintended movement outside the landing zone is detected, protecting passenger safety



### Installation Position

Control panel

### **EC-UCM-D1 UCMP Control Board**

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00555	155*78*27	141* 63.5	Φ5

### **Product Features**

- For applications with double-door or asynchronous motor elevator
- Elevator re-leveling function eliminates safety risks caused by uneven car/ landing door sill heights
- Advanced door opening function improves elevator operation efficiency
- Door contact short-circuit detection function prevents safety hazards from faulty contacts or manual bypassing
- UCMP detection and braking activation function safely stops the car when unintended movement outside the landing zone is detected, protecting passenger safety



### Installation Position

Control panel

### **DC-03ES-K1** Pit inspection Board

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00516	87*63	62* 45	Φ4

#### **Product Features**

- Support CAN communication mode
- Inspection signal input, include up signal input, down signal input, water inflow signal input, inspection reset signal input, etc
- Equipped with status indicator lights for more intuitive display



Installation Position

Pit inspection box

### **DSC-CTB Series Car Top inspection box**





- CAN bus communication
- Wiring connection with connector instead of terminal, easy to install and maintain
- Use of EC-CTB-A/EC-CTB-C/EC-CTB-K2/EC-CTB-J4, simplify the wiring connection for the inspection box

### **INVT Series COP**

#### **Product Features**

- Standard 6.4-inch segment LCD display with black background and white characters (optional dot matrix display, segment LCD display with white characters on blue background, TFT display)
- Split structure with full hairline stainless steel panel (optional colored, mirror finish, etc.)
- Stainless steel round buttons with red light transmission (optional blue light transmission, with Braille, etc.)
- Can be equipped with IC card, voice announcer, etc.

#### Dimensions

Floor	Panel (L×W mm)	Bottom Box (L×W×D mm)
2-12	1200*180*2	1180*157*60
13-20	1380*180*2	1360*157*60
21-28	1560*180*2	1540*157*60
29-36	1560*210*2	1540*187*60
Customized	Customized	Customized



INVT-420

#### **Product Features**

- Standard 6.4-inch segment LCD display with black background and white characters (optional dot matrix display, segment LCD display with white characters on blue background, TFT display)
- Split structure with black acrylic light-transmitting plate + 304 hairline stainless steel panel (optional titanium gold, mirror finish, etc.)
- Stainless steel square buttons with white light transmission (optional round buttons, backlight color, Braille, etc.)
- Can be equipped with IC card, voice announcer, etc.

#### **Dimensions**

Floor	Panel (L×W mm)	Bottom Box (L×W×D mm)
2-16	1390*180*13	1360*157*60
17-33	1380*190*13	1360*177*70
Customized	Customized	Customized

\*More models are available, feel free to contact us.



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LOP-C320

### **C** Series LOP





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LOP-C310

LOP-C210

LOP-C220



Туре	Appearance(L×W×D mm)
C210	310*90*12
C220	337*92*15
C310	380*100*15
C320	330*98*13

### Installation

Wall-mounted



### DSC160A/DSC160B Series Control Panel



- DSC160A: CAN bus communication, terminal wiring installation
- DSC160B: RS485 and CAN bus communication, installation of plug-in board + flat cable
- Support simplex, duplex and group control
- Maximum speed 6m/s, maximum floor 64 floors
- The door controller can be controlled by the mainboard or car top board
- Conform to EN81 Standard
- Adopting EC series elevator integrated controller(integration of drive and control)

### DC-03B/L-A2 Dot-matrix LED Display

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00537	144*70*12	134* 56	Φ4

**Product Features** 

- 32-bit processor, CANbus communication
- Red round dot-matrix LED, high brightness, scrolling display
- 10mm ultra-thin design, suitable for the wall-mounted landing operation panel(LOP)
- Elevator status displaying like overload, full load, fault and maintenance
- All ASCII characters can be displayed
- Hall call, lock and fire service function



### DC-03S(0) Dot-matrix LED Display

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00471	85*50*14.1	72.44*42	Φ4

- CANbus communication
- Red round dot-matrix LED, scrolling display
- Suitable for the wall-mounted landing operation panel(LOP)
- Elevator status displaying like overload, full load, fault and maintenance
- All ASCII characters can be displayed
- Hall call, lock and fire service function



### DC-03S-W/DC-03S-O Dot-matrix LED Display

Model	Material code	Appearance dimension (mm)	Installation dimension (mm)	Hole size (mm)
DC-03S-W	11055-00580	93*60*10	72.6*42	Φ4
DC-03S-0	11055-00581	93*60*10	72.6*42	Φ4

### **Product Features**

- CANbus communication
- White/orange round dot-matrix LED optional, scrolling display
- Ultra-thin design, suitable for the wall-mounted landing operation panel(LOP)
- Elevator status displaying like overload, full load, fault and maintenance
- All ASCII characters can be displayed
- Hall call, lock and fire service function
- Support up/down arrival lantern



DC-03S-W

DC-03S-0

### **DC-03I Dot-matrix LED Display**

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00525	144*70*12.5	134*56	Φ4

- 32-bit processor, CANbus communication
- White round dot-matrix LED, scrolling display
- Ultra-thin design, suitable for the wall-mounted landing operation panel(LOP)
- Elevator status displaying like overload, full load, fault and maintenance
- All ASCII characters can be displayed
- Hall call, lock and fire service function



### **DC-03HS-A Dot-matrix LED Display**

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00500	144*70*11.6	134* 56	Φ4

### **Product Features**

- 32-bit processor, CANbus communication
- Red and white square dot-matrix LED optional, scrolling display
- Arrival lantern or chime output
- All ASCII characters can be displayed
- Hall call, lock and re service function
- Elevator status displaying like overload, full load, fault and maintenance



### **DC-09A Segment LED Display**

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00529	129*118*14	109*88	Φ4

- 32-bit processor, CANbus communication
- 6.4 inches, white segment LED on black background
- Common ASCII characters can be displayed
- Running display like floor number, direction arrow
- Elevator status displaying like overload, full load, fault and maintenance



### **DC-07P-D3 Segment LED Display**

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00499	131*72*6.5	118*60	Φ4

### **Product Features**

- 32-bit processor, CANbus communication
- White segment LED on black background
- 6.5mm ultra-thin design, suitable for the wall-mounted landing operation panel(LOP)
- All ASCII characters can be displayed
- Hall call, lock and fire service function
- Elevator status displaying like overload, full load, fault and maintenance



### **DC-05H Series Segment LCD**

Material code	Appearance dimension	Installation dimension	Hole size
	(mm)	(mm)	(mm)
11055-00311	141*94*19	125*77	Φ4

### **Product Features**

- 5-inch, white segment LED on black background
- CANBUS communication
- Function for hall call, parking, fire
- Display for overload, full load, maintenance



DC-05H

### DC-07K-B3 Segment LCD

Material code	Appearance dimension	Installation dimension	Hole size	LCD size
	(mm)	(mm)	(mm)	(inch)
11055-00482	141*79.5*14.5	118*60	Φ4	4.3

### **Product Features**

- 32-bit processor, CANbus communication
- White segment LCD on blue background
- Common ASCII characters can be displayed
- Hall call, lock and fire service function
- Elevator status displaying like overload, full load, fault and maintenance



### DC-07D/DC-07S Segment LCD

Model	Material code	Appearance dimension (mm)	Installation dimension (mm)	Hole size (mm)	LCD size (inch)
DC-07D	11055-00587	178*130*18	160*105	Φ4	6.4
DC-07S	11055-00329	178*130*18	160*105	Φ4	6.4

- 32-bit processor, RS485 communication
- 6.4-inch, white segment LCD on blue (07D) / black (07S) background
- Common ASCII characters can be displayed
- Elevator status displaying like overload, full load, fault and maintenance



### LM21 Series Multimedia Picture Machine



Model	LM21-043	LM21-070	LM21-104	LM21–121
Size of LCD(inch)	4.3	7	10.4	12.1
LCD Resolution(Pixels)	640*480	800*480	640*480	800*600

- Display the floor, running direction, overload, fire alarm, full load, fault and inspection information
- Floor reporting and background music playing. The display will be off automatically if standby over 10 minutes
- Display the date, clock, LOGO of customers and words;
- Color pictures used for corporate identify and commercial advertising;
- The user can use Micro SD to update the display images and audio files, change the display interfaces and modes. Horizontal and vertical installation are available.

Model	Material code	W (mm)	H (mm)	D (mm)	W1 (mm)	H1 (mm)	Installation hole (d:mm)
LM31-104-CT	11055-00561	156	253.2	29	120	200	Φ7

### LM31-104-C Touchscreen Car Operation Panel

#### **About the Product**

Elevator touch screen control box, with a screen resolution of 1280\*800 and a screen size of 10.1 inches, supports CAN communication mode

#### **Product Features**

- Car call registration, elevator status display
- Basic information display such as weather and time
- Music and picture player functions
- Fan and lighting control
- Voice reassurance function
- Automatic demonstration mode
- Replaceable LOGO and welcome message
- Phone call function and contact settings
- RGB ambient light control
- Elevator status display for overload, fault, fire, etc.







Model	Material code	W (mm)	H (mm)	D (mm)	W1 (mm)	H1 (mm)	Installation hole (d:mm)
LM31-104-C	11055-00565	165.8	247.2	30	120	200	Φ7

\*More models are available, feel free to contact us.



### **TBox Industrial Internet Data Transmission Terminal**

#### **About the Product**

The Invt TBox series industrial Internet data transmission terminal is an intelligent 4G wireless data terminal for the Internet of Things, which is convenient.

It conveniently realizes remote data collection, remote program upload and download, and remote debugging, and provides users with services through public operator networks.

The long-distance data transmission function of the line has stability and reliability that meet the requirements of industrial application scenarios.



- The intelligent data terminal can enter the data transmission state immediately upon power-on
- Standard guide rail installation
- Standard RS485 interface, which can be directly connected to serial port devices for data acquisition
- Standard RJ45 network port. The WAN/LAN ports can be switched through a dip switch. The LAN
  port can be directly connected to the network port device for data collection, and the WAN port can
  be accessed to the upper-level network
- Real-time monitoring of the operating status enables maintenance personnel to immediately understand the health condition of the elevator and take targeted measures



### Local Monitoring System

#### **About the Product**

The local monitoring system is a local management systemspecially designed for the elevator management in a small range. Integrating Ethernet, CANbus, RS485 communication technologies, it can realize the local real-time monitoring of the elevator in the community, collect and analyze the running data and fault records to improve the efficiency of elevator management.

- Dynamic real-time monitoring of elevator running and early warning, data-saving in server, black box function
- Easy installation: only a home router and a computer can set up the monitoring center
- Support monitoring of maximum 128 elevators



### **EC20 Series Elevator Door Controller**

#### About the Product

EC20 Series Elevator Door Controller adopts advanced vector control algorithm, can drive asynchronous motors, supports speed control mode, distance control mode 1 and 2, and it is widely used in automatic doors for elevators, shopping malls and supermarkets.

#### **Technical Features**

## 

#### Excellent control performance

Sensorless vector control and closed loop control for induction door motor

#### • Various control modes

Available speed control mode, distance control mode 1 and 2, improving application range

Mini structure design

Smaller size, saving installation space

- Various interfaces and strong functions Standard embedded CAN communication interface
- Multiple mounting methods

Compatible with wall mounting and rail mounting, easy to install

• Easy to use and maintain

The fan can be assembled and disassembled separately, easy to maintain

### Specification

Model	Rated output power (W)	Rated input current (A)	Rated output current (A)	Gross weight (Kg)	Dimension (mm)
EC20-0R4G-S2	400	6.5	2.5	1.1	215*125*180
EC20-0R7G-S2	750	9.3	4.2	1.1	215*125*180

### Dimension



### **EC30 Series Elevator Door Controller**

### About the Product

EC30 elevator door controller is a dedicated for elevator door systems. It's designed with smaller appearance structure, lightweight and compact size, ultra-thin plastic shell so that it can be easier to install. It also has a wide range of applications and meets the needs of various elevator door control.

#### **Technical Features**

- Support induction and PM motors
- Support incremental and absolute encoders
- Support software upgrade and debug by phone app
- Optional CAN/485 communication function, supports to protocol customization
- Intelligent handle while Full pulse mode and pulse loss
- One-button debugging, obstacles detection, auto demonstration, and self-adaptation to working conditions

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88888

• Auto speed curve generation without parameter adjustment

#### **Specification**

Model	Rated Power(W)	Rated input current (A)	Rated output current (A)	Gross weight (Kg)	Dimension (mm)
EC30- 0R2-S2	200	2	1.3	1.1	255*144*43
DM30-1.1A-01	50	1.1	-	-	139.49*140.2*76.5

#### Dimension





### ARD (Automatic Rescue Device) 5.5~15kW (AC380V±10%)

To prevent passengers from being trapped in elevators during power outages—avoiding both physical risks and psychological distress—INVT provides an efficient and safe solution for emergency elevator rescue. In the event of a power failure, INVT ARD automatically activates within a preset time, supplying backup power to the elevator control system. This enables the elevator car to move smoothly to the nearest landing, open the doors, and safely release passengers.





#### Features

- The intelligent and professional rescue function design is compatible with any elevator control system
- During emergencies, the smart micrprocessor instantly checks the power supply system and performs safe leveling
- Except for electrolytic capacitors, the service life of the equipment shall be no less than 10 years

#### Application

During a power outage, INVT ARD automatically provides backup power to the elevator control system, enabling smooth movement to the nearest landing for safe passenger evacuation.

### Appearance and Installation Dimensions



Model	H (mm)	W (mm)	D (mm)	H1 (mm)	W1 (mm)	W2 (mm)	Diameter of mounting hole(mm)
5.5~7.5kW	407	327	137	238	377	354	Φ5
11~15kW	407	327	120	192	378	355	Φ5

### Specification

Model	ARD-3PG						
Load (kW)	5.5 7.5 11 1						
AC input range		AC 380\	/ ± 10%				
DC voltage		36VDC/48VDC					
Battery performance	1. Low resistance a 2. Metal container, s 3. Can be rechar	<ol> <li>Low resistance and small internal resistance, capable of supplying large currents to the load.</li> <li>Metal container, sturdy and durable, enhancing memory function and preventing overdischarge.</li> <li>Can be recharged 500 times, suitable for use in environments with temperatures ranging         from -10°C to 60°C, and has a service life of over 3 years.</li> </ol>					
Dimensions (Length×Width×Depth)	407*327*137mm						
Protection	Output ov	verload and short-circuit prote	ection, DC output low/high p	protection.			

### HTC Series Tower Online UPS 1-3kVA (220V/230V/240V)

HTC series is an online double-conversion UPS with fully digital control technology. This fully upgraded new generation of UPS not only has an ultra-high input and output power factor, but also increases the efficiency on the basis of the original 5%. HTC11 with adjustable 12A charger is a perfect choice for PC and other sensitive devices request longer backup time.





### Features

- Wide range of input voltage while input PF>0.99
- Output PF of 1, upgraded overload capability
- Full protection of over-voltage and short-circuit
- Multiple communication interface: RS232, RS485, AS400, dry contact, USB and SNMP card
- LCD/LED display, monitoring all the operation status
- Auto fan speed adjustment
- External environment and battery temperature sensor
- 1-12A adjustable charger with more flexibility
- Support Lithium battery

### Application

IDC (Internet Data Center), network, servers and workstations, control system, communication system, office, PC etc.

### Specification

Model			HT1101CL	HT1101CS	HT1102CL	HT1102CS	HT1103CL	HT1103CS		
System Capacity			1kVA 2kVA 3kVA							
	Phase	Phase		Single Phase in, Single Phase out						
Input	Input Volatge Range		110VAC~300VAC 176VAC~276VAC for 100% load; 276VAC~300VAC for 50% load; 110VAC~176VAC load decrease linearly from 100%~50%							
	Input Power Factor		≥0.99							
	Input Frequency		50/60±5Hz (Default) +1Hz/+3Hz/+10Hz (settable)							
	Input Frequency Range		40Hz~70Hz							
	Frequency Adaptable		Settable							
	OutputVoltage		200/208/220/240VAC							
	Voltage Regulation		±1%							
	Rate Frequer	юу			50/6	60Hz				
	Frequency Range				±0.	.1%				
	Output THDu		≤2% THD, linear load; ≤ 5% THD, non-linear load							
Output	Output PF		1(0.9 for 200VACfor 200VAC/208VAC)							
	Crest Factor		3:1							
	Dynamic Res	ponse	<5% (0% - 100% -0%)							
	Dynamic Recovery		≤40ms (0% - 100% -0%)							
	Overlagd	Inverter	102%~110% for 30mins; 110%~125% for 10mins; 125%~150% for 30s							
	Capability	Battery	102%~110% for 1min; 110%~125% for 10s; 125%~150% for 5s							
	Bypass		<130%: long term operation; <150% for 10mins; <180% for 5s							
	DC Voltage		36	VDC	72\	/DC	96\	/DC		
	Number/Type		External	12V, 7Ah*3	External	12V, 7Ah*6	External	12V, 7Ah*6		
Battery	Charging Voltage		Settable							
	Max Charging Current		1-12A	1A	1-12A	1A	1-12A	1A		
	Battery Cold Start		Standard							
		Normal Mode	94.5%@-	100% load	95.5%@1	00% load	95.5%@100% load			
	Efficiency	ECO Mode	96%		97%		97%			
		Battery Mode	89.5%@100% load		91.5%@100% load		91.5%@100% load			
System	Noise (1m away)		<43dB@<60%load <50dB@<60%load <47dB@>60%load <55dB@>60%load			<50dB@<60%load <55dB@>60%load				
	Display		LED+LCD							
	Interface		RS232, input socket (IEC C14 for 1K, C20 for 2-3K) output socket (2 National standard sockets for 1K, 4 National standard sockets for 2K 3 National standard sockets+1 20A connecting terminal for 3K)							
	Optional		RS485, USB, AS400 Dry Contact, SNMP Card, EPO External Battery Temperature, RJ45 Surge Protection, Dust net							
	W*D*H(mm)		144*354*224	144*354*224	144*410*223	190*405*330	144*410*223	190*405*330		
Physical	W*D*H(mm)(F	W*D*H(mm)(Package size)		240*448*320	240*510*320	285*520*406	240*510*320	285*520*406		
Physical	Net Weight (KG)		4.3	10.3	5.8	21.1	6.2	25.5		
	Gross Weight (kg)		5.6	11.6	7.1	23	7.5	27.5		

### HRC11 Series Tower Online UPS 1-3kVA (220V/230V/240V)

HRC series, range from 1kVA to 10kVA, is double conversion online rack UPS with fully digital control technology. This upgraded new generation of UPS is compatible with lithium batteries, and charging current can be increased up to 12A. With its compact design of high density (Output PF =1) in 2U height, HRC series makes it deal choice for computers, telecommunication equipment and other sensitive device.



#### Features

- Wide range of input voltage while input PF>0.99
- Output PF of 1, upgraded overload capability
- 19" standard cabinet and battery cabinet
- Multiple communication interface: RS232, RS485, AS400, dry contact, USB and SNMP card
- Auto fan speed adjustment

- LCD/LED display, monitoring all the operation status
- External environment and battery temperature sensor
- 1-12A adjustable charger with more flexibility
- Intelligent charging management, effectively improving the life time of battery
- Support Lithium battery

### Application

IDC (Internet Data Center), network, servers and workstations, control system, communication system, office, PC etc.

### Specification

Model			HR1101CL	HR1101CS	HR1102CL	HR1102CS	HR1103CL	HR1103CS		
System Capacity			1kVA 2kVA 3kVA							
Input	Phase		Single Phase in, Single Phase out							
				110VAC~300VAC						
	Input Volatge Range		176VAC~276VAC for 100% load; 276VAC~300VAC for 50% load; 110VAC~176VAC load decrease linearly from 100%~50%							
	Input Power Factor		≥0.99							
	Input Frequency		50/60±5Hz (Default), ±1Hz/±3Hz/±10Hz (settable)							
	Input Frequency Range		40Hz~70Hz							
	Frequency Adaptable		Settable							
	OutputVoltage				200/208/220	/230/240VAC				
	Voltage Regu	lation			±1	1 %				
	Rate Frequency		50/60Hz							
	Frequency Range		±0.1%							
	Output THDu		${\leq}2\%$ THD, linear load; ${\leq}5\%$ THD, non-linear load							
Outout	Output PF		1(0.9 for 200VACfor 200VAC/208VAC) 0.9							
Output	Crest Factor		3:1							
	Dynamic Response		≤5% (0% - 100% -0%)							
	Dynamic Rec	overy	≤40ms (0% - 100% -0%)							
		Inverter	102%~110% for 30mins; 110%~125% for 10mins; 125%~150% for 30s							
	Overload Capability	Battery	102%~110% for 1min; 110%~125% for 10s; 125%~150% for 5s							
		Bypass	<130%: long term operation; <150% for 10mins; <180% for 5s							
	DC Voltage		36V/48Vdc	36Vdc	72V/96Vdc	72Vdc	96Vdc	72Vdc		
	Number/Type		External	12V, 7Ah*3	External	12V, 7Ah*6	External	12V, 7Ah*6		
Battery	Charging Voltage		Settable							
	Max Charging Current		1-12A	1A	1-12A	1A	1-12A	1A		
	Battery Cold Start		Standard							
		Normal Mode	94.5%@100% load		95.5%@100% load		95.5%@100% load			
	Efficiency	ECO Mode	98%		98%		98%			
		Battery Mode	89.5%@100% load		91.5%@100% load		91.5%@100% load			
System	Noise (1m away)		<43dB@ <47dB@	<60%load >60%load	<50dB@<60%load <55dB@>60%load		<50dB@<60%load <55dB@>60%load			
·	Display	Display		LED+LCD						
	Interface		RS232, input socket (IEC C14 for 1K, C20 for 2-3K) output socket (4 National standard sockets)							
	Optional		RS485, USB, AS400 Dry Contact, SNMP Card, EPO External Battery Temperature, RJ45 Surge Protection, Dust net							
Physical	W*D*H(mm)		440*377*86	440*427*86	440*427*86	440*577*86	440*427*86	440*577*86		
	Net weight(KG)		5.5	12.5	7	21.9	7.3	24.9		

### Brake Power Supply EC-PWR-A1

#### About the Product

EC-PWR-A1 is a dual-channel AC/DC power supply dedicated for elevator, it features a compact design, high voltage stability, and reliable performance, also includes short-circuit and overcurrent protection, with excellent EMI compliance and adherence to safety standards.

### **Technical Features**

- Customized for the elevator industry to better meet on-site application requirements
- Engineered for extreme conditions: Operates reliably at -20°C~70°C | 10%~95% humidity | <5000m altitude
- Strong anti-vibration and anti-shock capabilities
- Wide voltage input range, 176~264Vac
- Dynamic power margin with powerful output characteristic curve, reliable and durable

Appearance and Installation Dimensions



Model	W (mm)	H (mm)	W1 (mm)	H1 (mm)	Diameter of mounting hole(mm)
EC-PWR-A1	160	134	135	115	Ф6



### Configuration

	Projec	ct	Parameter		Unit	Remarks
	AC Input Voltage Range		176-264		Vac	Can start and work normally
	Rated Voltage		200~240		Vac	Safety voltage range
Input	Input Frequency		50/60		Hz	Range 47-63Hz
characteristics	Efficiency		≥88		%	Vin=220Vac, rated load
	Input Current		≤15		А	Vin=176Vac, rated load
	Leakage Current		≤1		mA	264Vac input
	Rated output	ut	V1(110V)	V2(24V)		
	Output voltage		106~114	23.5~24.5	Vdc	
	Output current range		0~5	0~6	А	110V adjustable voltage (60/80/90V). When adjusting voltage:
	Output accuracy		±4	±2	%	$60V/\ge 0.4A$ $80V/\ge 0.54A$ $90V/\ge 0.6A$ The output voltage takes more than 3 seconds to switch to the set
Output	Line regulation		±2	±1	%	value after adjustment. When the output current is <0.1A, the output voltage reverts to 110V.
characteristics	Load regulation		±2		%	
	Maximum output power		694		W	
	Output ripple noise		≤2000	≤200	mV	/
	In-rush overshoot (at startup)		≤5%		Vo	/
	V1/5A hold-up time		14~18		min	/
	Output	V1	5.5~	5.5~11		V1: intermittent output mode. Can self-recover after fault clearance
	limiting protection	V2	6.6~	·10	A	V2: Requires cutting offAC power and restarting to restore output.
	V1 output overvoltage protection		/		Vdc	Circuit open-loop, automatic lockout.
	V2 output overvoltage protection		27~30		Vdc	Constant voltage mode
Protection characteristics	Output short-circuit protection		Yes		/	V1: Intermittent output mode. Can self- recover after fault clearance. V2: Requires cutting offAC power and restarting to restore output.
	Input undervoltage protection		176~140		Vac	V1, V2: Output off
	Input overvoltage protection		264~290		Vac	V1, V2: Output off, disconnect L1 output. No damage when input is 380Vac.
	Over-temperature protection		132		°C	V1: Over-temperature protection intermittent mode. Can self-recover after fault clearance.

### Your trusted industry automation solution provider



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