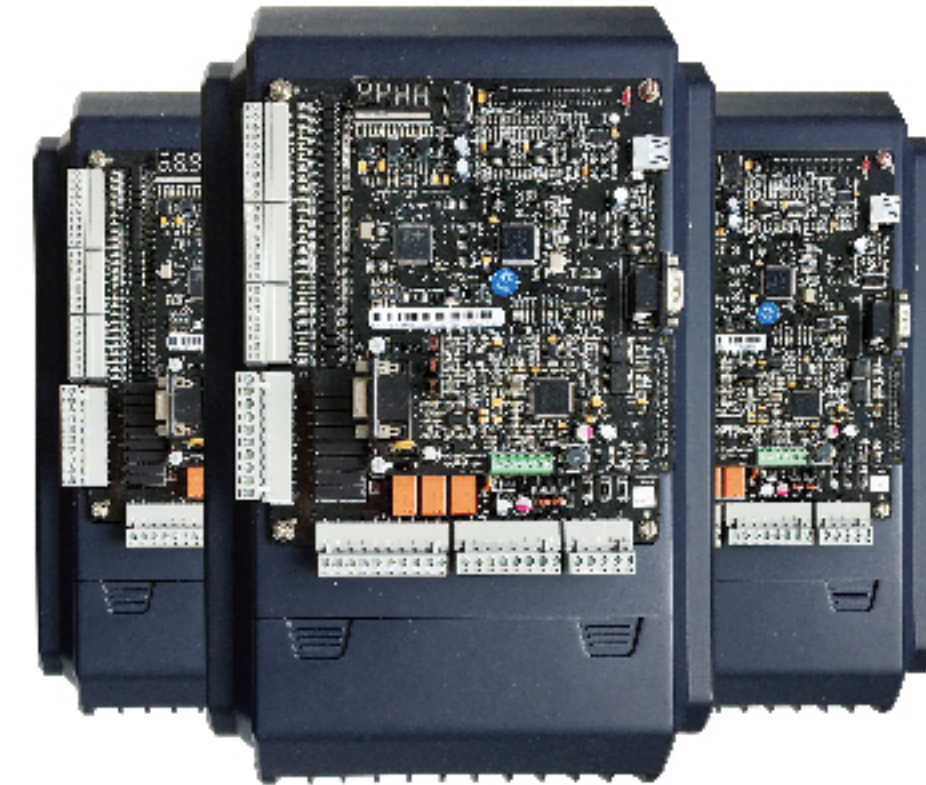
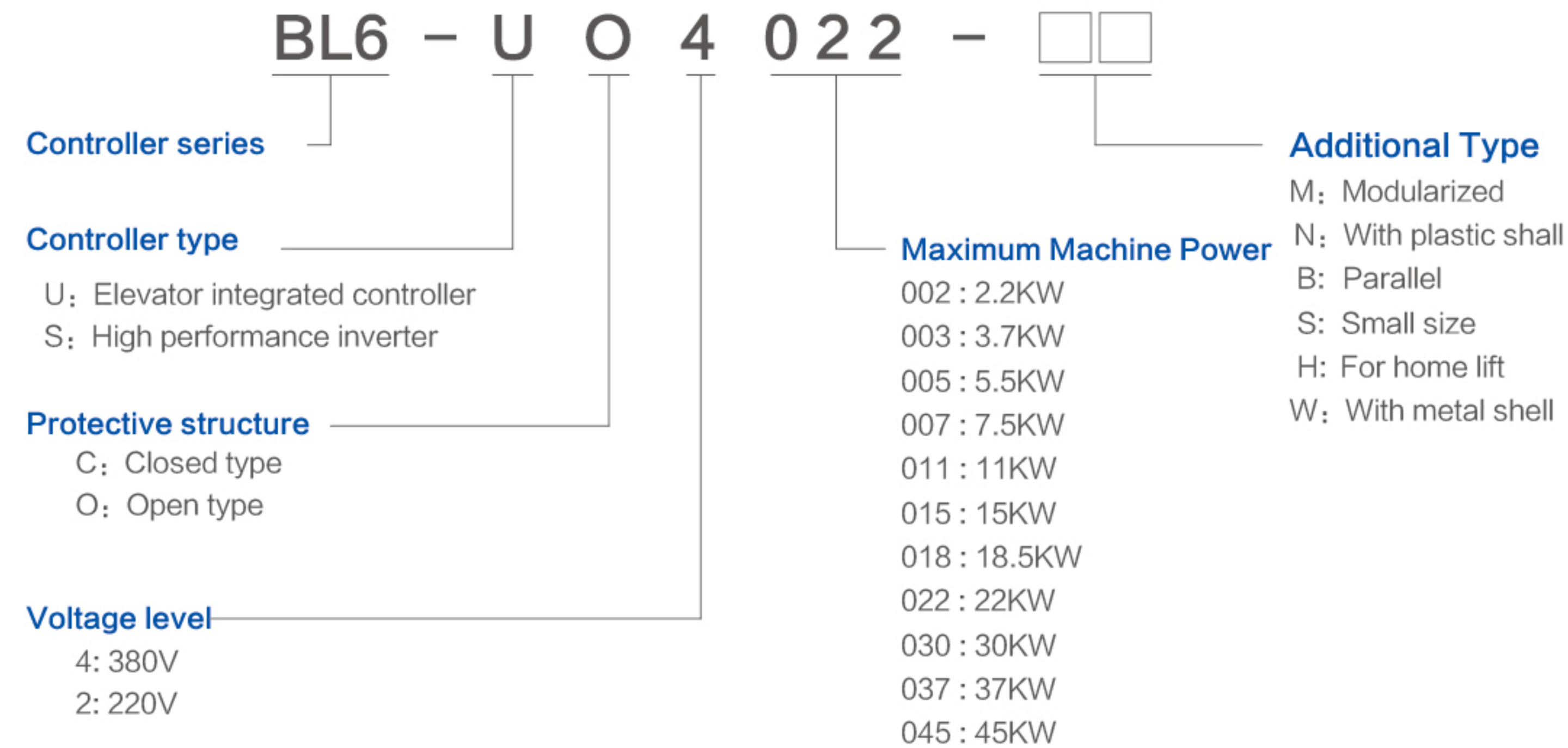


iBL6

Elevator Integrated Controller 01



Model Description



Intelligent Control Leads the Future

iBL6 is the new generation intelligent elevator integrated controller. It perfectly combines the functions of logical control and variable frequency drive. It has Advanced Technology, Optimal Performance, High Reliability, Easy to Use and many more properties.

1. Advanced Technology

- Perfectly combine intellectual logic control and high performance VVVF drive control to achieve completely integration.
- Advanced vector control technology, demodulates motor with high precision, takes full advantage of motor capacity, improves elevator performance and riding comfort.
- Adopts advanced space vector PWM control method, improves great efficiency than traditional sine/cosine PWM method and saves more energy.

2. Optimal Performance

- Generates optimized speed curve based on target floor to make lift direct-stop with high precision and efficiency.
- CAN BUS technology satisfies serial communication in high speed and reliability. Simplifies system for wiring and extension.
- Adopts wireless/LAN remote control interface, convenient for long distance control, maintenance and elevator monitoring.

3. Easy to Use

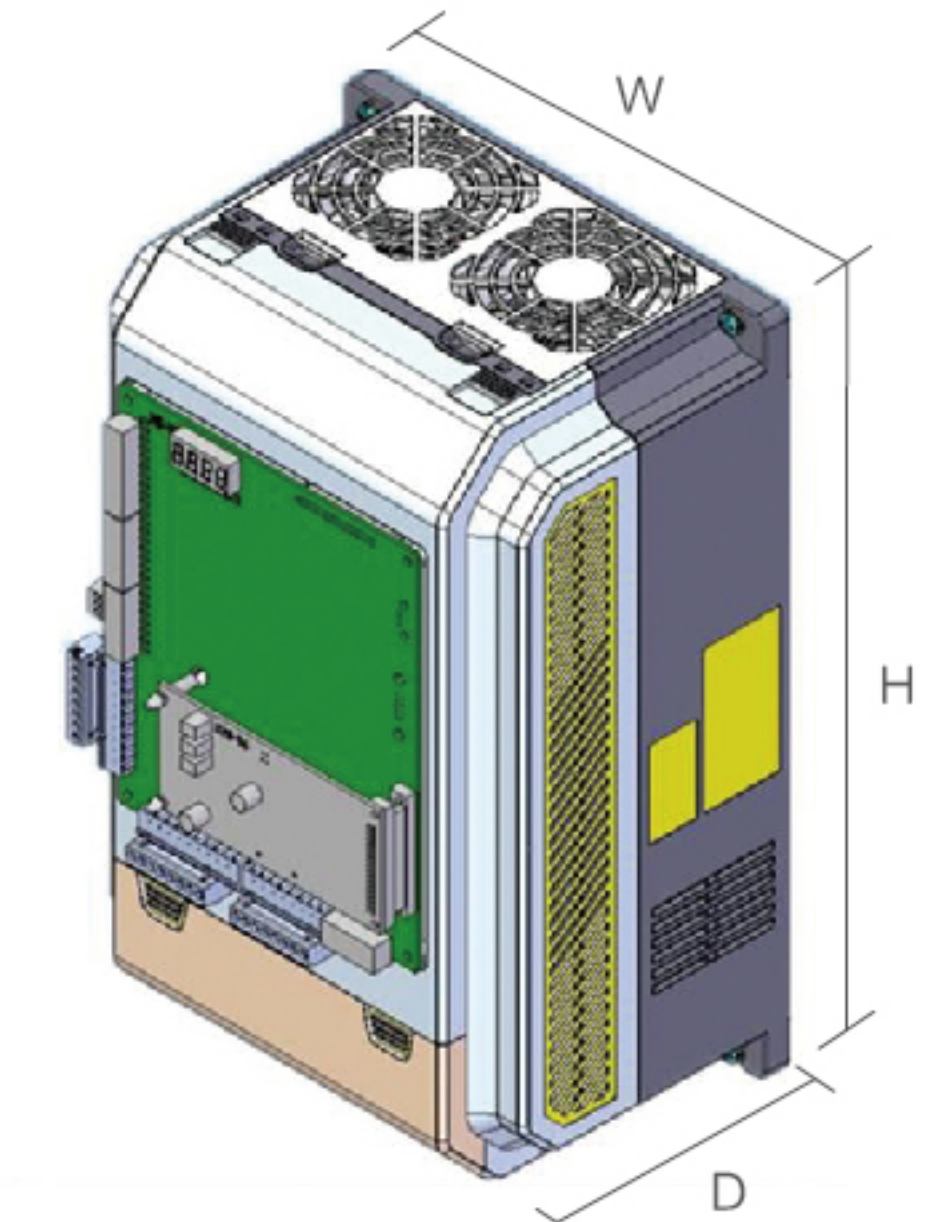
- Supports two types auto-tuning (self-learn) methods, Rotating and Static, to compute motor parameters and initial angle.
- Fuzzy logic control with non-load-compensator for easy lift start-up. Excellent comfort feeling even without lift weighting device.
- When working with Bluelight Synchronous traction machine, controller can pre-define the machine type and automatically save the data. Spares the process of machine parameter inputting and auto-tuning, improves the tuning efficiency and maximize machine performance.

4. High Reliability

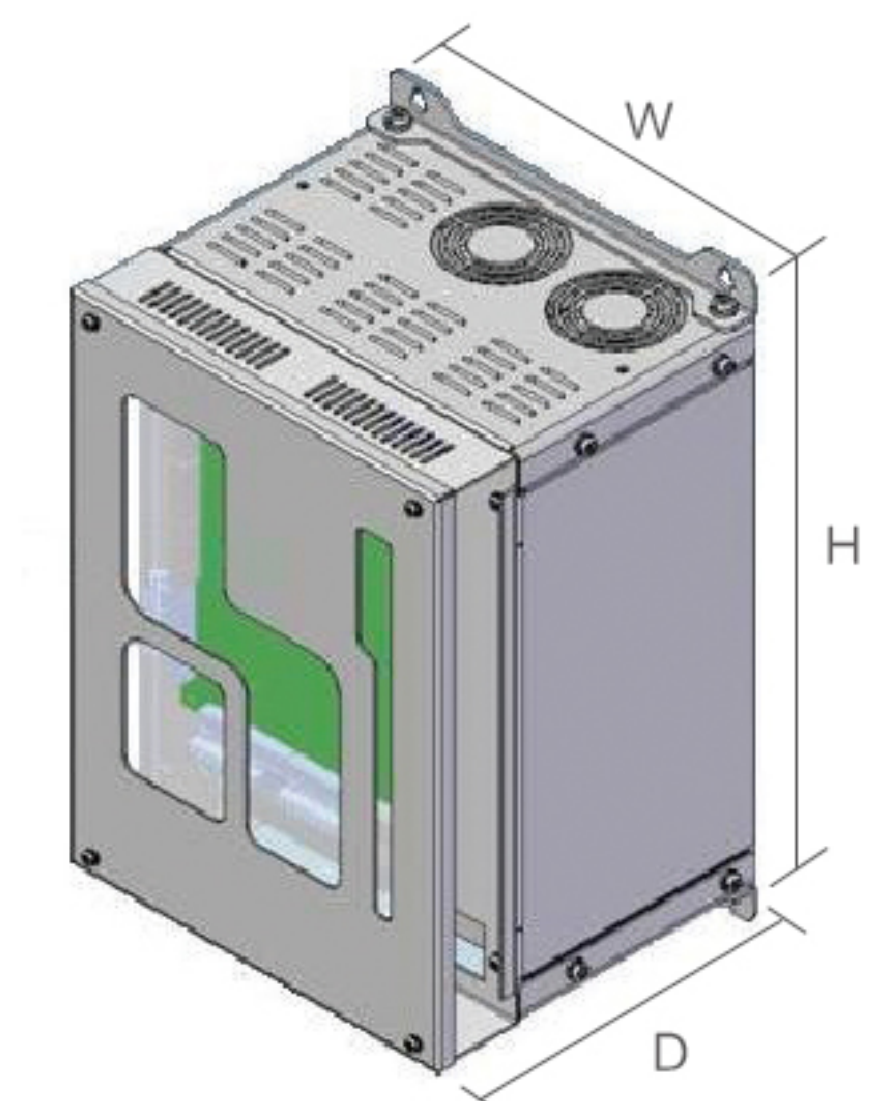
- Advanced double 32bit CPU and FPGA for complete elevator control to ensure high elevator safety and reliability.
- Redundancy design and full software-hardware protection to guarantee elevator safety and reliability.
- Professional EMC tested, fully enhance anti-electromagnetic interference ability and suitable for complicated job site.
- Monitoring the cutting current from controller to main motor every time when elevator stops.

M Series Integrated Controller Dimension Table (400 v)

Controller Model	Exterior Dimension		
	W	H	D
BL6-UO4007-NM			
BL6-UO4011-NM	222	348	200
BL6-UO4015-NM			



Controller Model	Exterior Dimension		
	W	H	D
BL6-UO4002-MW			
BL6-UO4003-MW	200	290	180
BL6-UO4005-MW			
BL6-UO4007-MW			
BL6-UO4011-MW	225	348	200
BL6-UO4015-MW			
BL6-UO4018-MW			
BL6-UO4022-MW	280	418	210



● Specifications

型号BL6-U□40□□-□□	4002	4003	4005	4007	4011	4015	4018	4022	4030	4037	4045	4055	4075	
max motor power(kw)	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75	
Rated output	rated output capacity(KVA)	4.0	5.9	9	12	18	22	27	32	43	53	63	78	106
	rated output current(A)	5.5	9	14	18	27	34	41	48	65	80	96	128	165
	max output voltage(V)	3-phase, AC380 (Corresponding to the input voltage)												
	rated frequency(Hz)	50												
	max output frequency(Hz)	120												
	Input power	rated voltage (V)	3-phase, AC380											
rated frequency (Hz)		50												
rated input current (A)		10	12	17	22	32	41	49	58	78	96	115	147	190
allowable voltage fluctuation		± 15%												
allowable freq fluctuation		± 5%												
型号BL6-U□20□□-□□	2002	2003	2005	2007	2011	2015	2018	2022						
Max motor power(KW)	2.2	3.7	5.5	7.5	11	15	18.5	22						
Rated output	rated output capacity(KVA)	4	7	10	14	20	27	33	40					
	rated output current(a)	11	17	25	33	49	66	80	96					
	max output voltage(v)	3-phase, AC220 (Corresponding to the input voltage)												
	rated frequency(hz)	50												
Input power	max output frequency(hz)	120												
	rated voltage (v)	3-phase, AC220												
	rated frequency (hz)	50												
	rated input current (a)	15	21	27	40	52	68	92	110					
	allowable voltage fluctuation	+10%, -15%												
Basic features	allowable freq fluctuation	± 5%												
	elevator control mode	Simplex Collective, Duplex Collective, 3-8 units Group Control												
	elevator speed range	0.25 ~ 4m/s												
	applicable highest floor	64												
	applicable elevator type	Passenger, Hospital, Panoramic, Goods, Villa Elevator												
	applicable motor	Gear Traction Machine, Gearless Traction Machine												
	communication mode	CAN Bus serial communication												
leveling accuracy	≤3mm													
Drive features	control mode	Space vector PWM(SVPWM) Closed loop vector control												
	carrier frequency	8KHz (6~15KHz Adjustable)												
	speed control range	1:1000												
	speed control accuracy	± 0.05% (25℃ ± 10℃)												
	speed response	30Hz												
	torque limit	Yes (Set by parameter)												
	torque accuracy	± 5%												
	frequency control range	0~120Hz												
	frequency accuracy	Digital Ref: ± 0.01%(-10℃ ~+40℃)												
	frequency ref resolution	Digital Ref: 0.01Hz												
	output freq resolution	0.01Hz												
	overload capacity	150% rated current 60s; 180% rated current 10s												
	start up torque	180% rated current 0Hz												
	accel/decel time	0.001-600s												
main control function	Start without load compensation, battery operation, Auto tuning, Load compensation, Cooling fan control, Base block, Torque limit, CAN communication Ref, Acceleration/ Deceleration time, S curve acceleration/ deceleration, Monitor of main machine for which electric current can be effectively interdict or not when the car stop, Internal brake,PGfreq dividing output, Automatic fault retry, Automatic fault reset, Parameter copy													

● Specifications (Cont' d)

Control input/output	oc input control power	Isolated external DC24V
	relay output power	Isolated internal DC24V
	low opto-isolated inputs	26-channel switches: rated load: 7mA/DC24V, upper freq100Hz
	high opto-isolated inputs	3-channel switches: rated load: 8mA/AC110V, upper freq100Hz
	programmable relay output	12-channel switches
		9 channels: 1NO, contactor capacity: 5A/30VDC, 5A/250VAC 3 channels: 1NO, contactor capacity: 8A/30VDC, 10A/250VAC
	CAN communication interface	2channels: Duplex/ group control, HOP/COP, remote Wireless monitoring
RS-232 communication interface	1channel: Digital operator/ PC monitoring/ Programmable interface	
Display	digital operator	LCD display in Chinese/English
	monitoring software interface	Display parameters, elevator running status, digital wave
Main protection function	over current	Stop when current exceed 200% rated output current
	FUSE	Stop at fuse brake at main circuit
	overload protection	Stop at 150% rated current 60s/180% rated current 10s
	overvoltage protection	Stops at DC bus voltage over 720V(400V drive) or 410V(200V DRIVE)
	undervoltage protection	Stops at DC bus voltage under 380V(400V drive) or 190V(200V drive)
	heatsink overheat protection	Protect by themistors
	igbt internal protection	IGBT over current/ overheat/ short circuit/under voltage protection
	Main protection function	motor protection
impact restraining circuit		Protect by contactor feedback
over speed protection		Protect at speed exceed the maximum allowable setting
speed deviation protection		Protect at speed deviation exceeds allowable value
pg fault protection		Protect at PG disconnection/ phase error
auto-tuning protection		Protect at auto-tuning fault.
open-phase protection		Protect at input/output phase lost
door interlock fault		Protect at door interlock circuit open when running
safety circuit fault		Protect at safety circuit open when running
brake circuit fault		No brake open feedback signal after output brake open command
leveling zone fault		Protect at leveling zone signal fault
output contactor fault		Protect at output contactor fault
running time protection		Protect at signal running time exceeds limit
floor counting fault		Protect at floor counter fault
Structure	Communication interference fault	Protect at communication interference fault
	Hoistway parameter learning fault	Hoistway parameter learning fault protection
	protection degree	C: Closed IP20; O: Open IP00
Using ambience	cooling	Forced air cooling
	installation	Hanging installation
	ambient temperature	-10℃~+40℃
	humidity	5-95%RH, non-condensing
	storage temperature	-20℃~+60℃
	application situation	In doors, without direct sunlight, dust, corrosive/explosive gases, oil fog, vapor, water dripping, or salty substances
	altitude	1000M以下
vibration	10~20Hz, <9.8m/S ² ; 20~50Hz, <2m/S ² ;	