

ACE8000 Series

ACE-L Integrated Elevator Controller



Lean integration

- Redefines a product model that integrates drive and control, providing IPXXB protection in compliance with the new national standard.
- Significantly improves the power density and adopts the size design and outlet mode that facilitate deployment of a machine-room-less elevator control cabinet.

Precise drive control

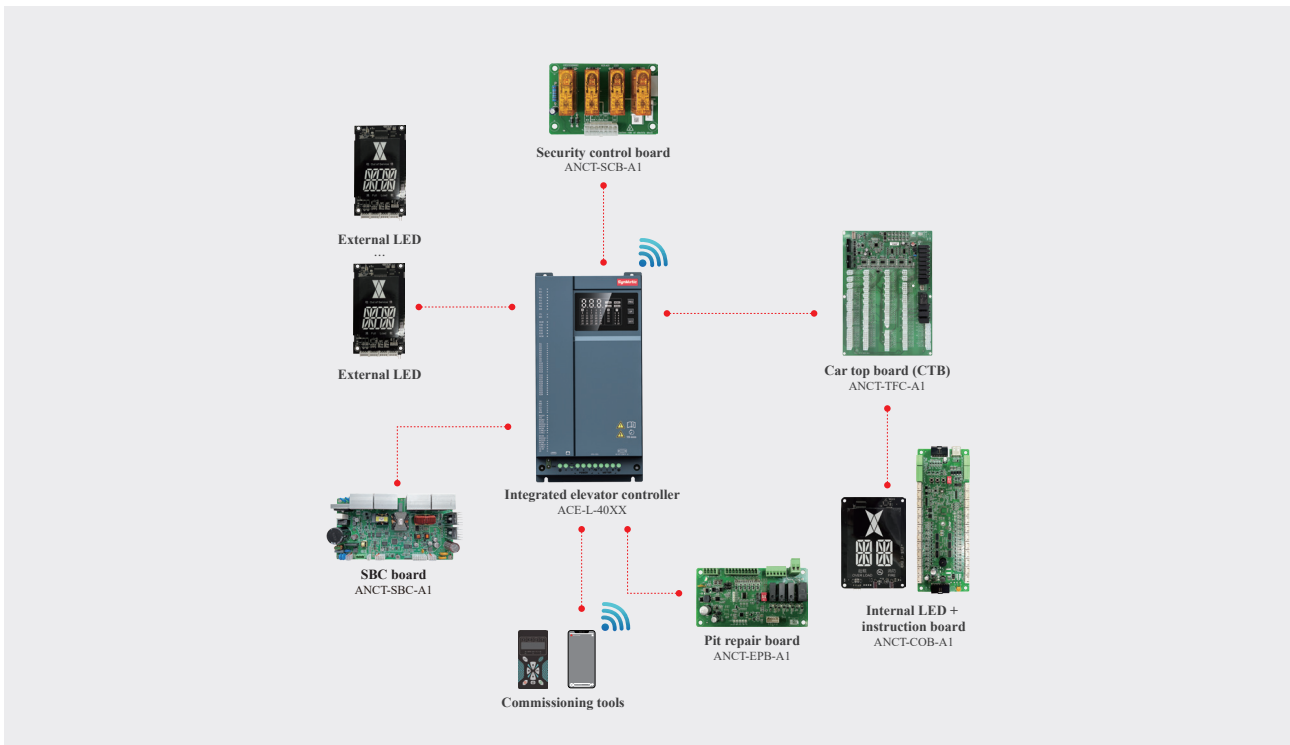
- Adopts leading control algorithms and high-performance drive control chips to make control more precisely.
- Supports a high-definition communication encoder to achieve higher resolution and more precise velocity measurement.

Efficient interaction

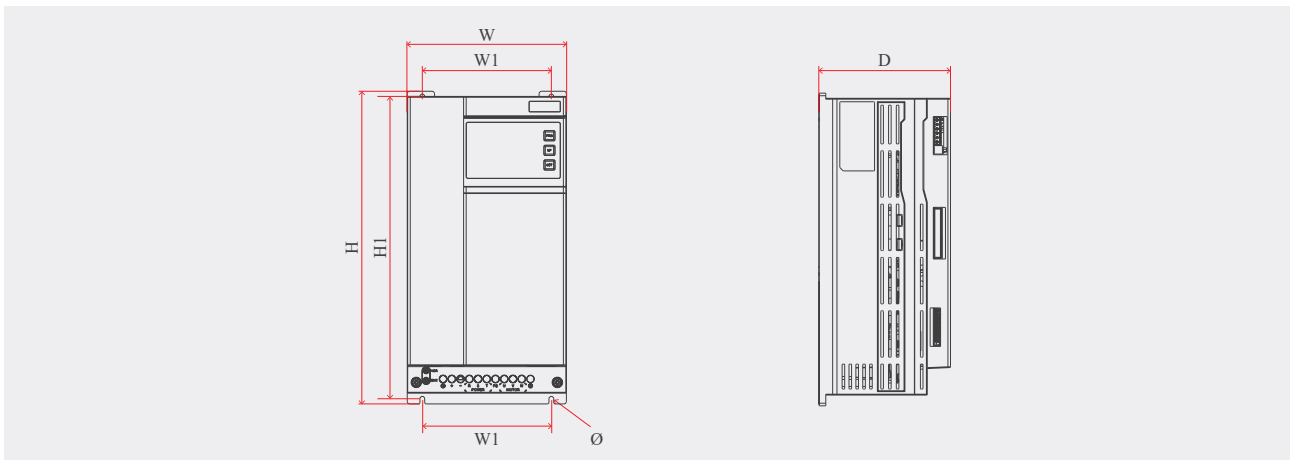
- Clearly displays the real-time status of input and output points on the LED to facilitate on-site troubleshooting.
- Provides an app for CLI-based commissioning, which displays system status and causes of exceptions in pop-up windows to improve the commissioning efficiency.

Functional safety

- Replaces the RUN contactor with an STO module that features lower cost, smaller size, lower noise, and faster response.
- Replaces the shorting motor stator contactor with high-speed electronic shorting motor stator at controllable current, without any harm to the host.



Product Dimensions



	Model	H	H1	W	W1	D	Ø
SIZE A	ACE-L-4005	363.5mm	351.5mm	185mm	150mm	153mm	5.5mm
	ACE-L-4007						
	ACE-L-4011						
	ACE-L-4015						
	ACE-L-4018						
	ACE-L-4022						
SIZE B	ACE-L-4030	425mm	409mm	190mm	174mm	202mm	5.5mm
	ACE-L-4037						
	ACE-L-4045						
SIZE C	ACE-L-4055	600mm	582mm	300mm	205mm	266mm	7mm
	ACE-L-4075						
	ACE-L-4090						
SIZE D	ACE-L-4110	760mm	737.5mm	300mm	220mm	265.5mm	9mm
	ACE-L-4132						

※ The figure shows the appearance of the ACE8000 series integrated elevator controller, using the **SIZE A** model as an example. For details, see the user guide.

■ Product Specifications

	Model	Power Capacity (kVA)	Rated Input Current (A)	Rated Output Current (A)	Applicable Motor (kW)
SIZE A	ACE-L-4005	8.9	14.8	13	5.5
	ACE-L-4007	11	20.5	18	7.5
	ACE-L-4011	17	29	27	11
	ACE-L-4015	21	36	33	15
	ACE-L-4018	24	41	39	18.5
	ACE-L-4022	30	49.5	48	22
SIZE B	ACE-L-4030	40	62	60	30
	ACE-L-4037	57	77	75	37
	ACE-L-4045	69	93	91	45
SIZE C	ACE-L-4055	62.5	125	112	55
	ACE-L-4075	83	160	150	75
	ACE-L-4090	97.5	190	176	90
SIZE D	ACE-L-4110	120	220	210	110
	ACE-L-4132	231	260	253	132

■ Technical Specifications

	Item	Specifications		
Power supply	Input voltage	Three-phase 380 V AC to 440 V AC, 50/60 Hz		
	Allowable voltage fluctuation	-15% to +10%		
	Allowable frequency fluctuation	-5% to +5%		
Basic features	Maximum number of floors	40		
	Elevator running speed	≤4.00 m/s		
	Commissioning mode	Keypad, operating panel, mobile app, and host computer software		
	Maximum number of parallel elevators	4		
Drive features	Maximum frequency	Vector control: 0 to 99 Hz		
	Carrier frequency	2.0 to 16 kHz;Automatically adjusted based on load characteristics		
	Set resolution of frequency	0.01 Hz		
	Control mode	Sensorless vector control (SVC)	Feedback vector control (FVC)	V/f control
	Starting torque	0.5 Hz / 180% (SVC);0 Hz / 200% (FVC)		
	Speed regulation range	1:100 (SVC)	1:1000 (FVC)	
	Speed stabilization accuracy	±0.5% (SVC)	±0.05% (FVC)	
	Torque control accuracy	±5% (FVC)		
	Overload capacity	60s for 150% of the rated current		
Input/Output signals	Input control power	Rated voltage: 24 V DC±10%, Input voltage range: 10 V DC to 30 V DC		
	Low-voltage digital input	24 inputs, valid range: 10 V DC to 30 V DC		
	High-voltage digital input	4 inputs, valid range: 70 V AC to 130 V AC		
	Analog input	One input, single-ended or differential, valid range: -10 V to + 10 V		
	Relay output	Eight outputs, four 5 A 250 V AC outputs and four 5 A 30 V DC outputs		
	CAN communication port	Two ports, for communication, parallel connection or group control of the top car		
	RS485 communication port	Two ports, for calling out, cell monitoring or connection to the IoT		
	USB port	One port, connected to the Bluetooth module for commissioning with the mobile app		
	RJ45 port	One port, connected to the operating panel for commissioning		
	DB15 port	One port, connected to the Sine/Cosine encoder		
	Communication encoder port	One port, connected to the RS485 communication encoder		
Environment	Pollution degree	PD2		
	IP rating	IP20		
	Applicable power grid	TN/TT		
	Cooling mode	Forced air cooling		