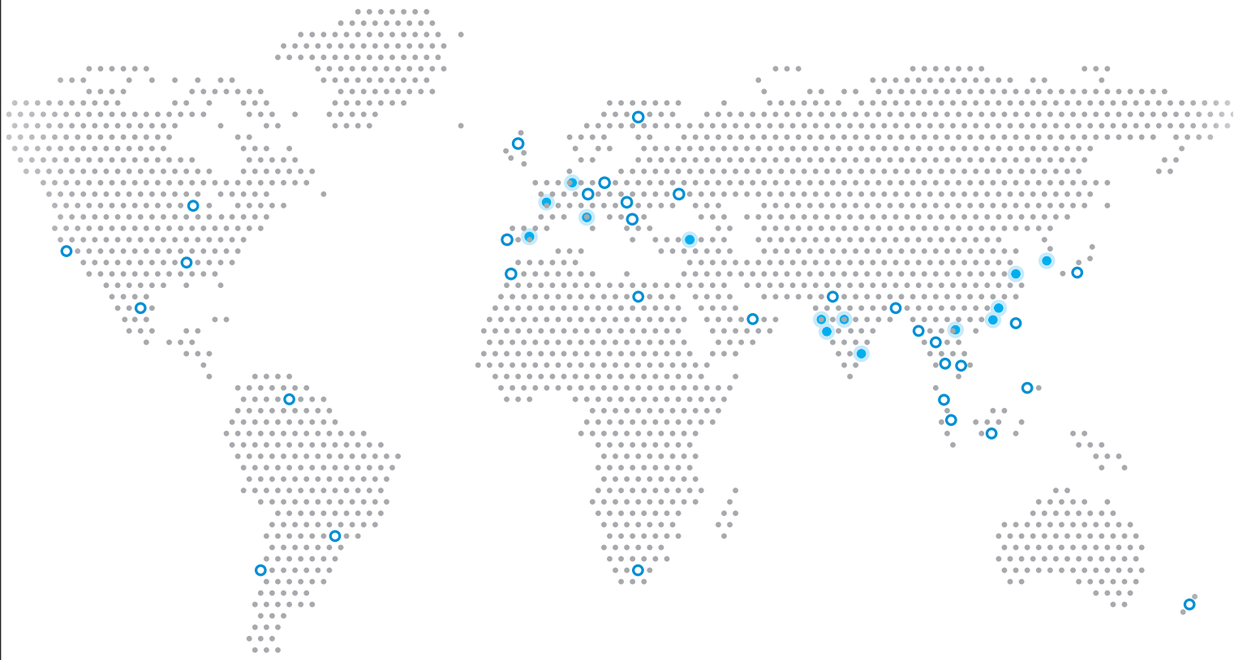


Advancing industrial technology, for a better world

www.inovance.eu

Enquires: info@inovance.ind.in

Shenzhen Inovance Technology Co., Ltd.
Suzhou Inovance Technology Co. Ltd.
4000-300124
info@inovance.com
service@inovance.com

Hong Kong SAR
International Export Office
+852 2751 6080
info@inovance.eu

INOVANCE

FOLLOW US

Germany-Stuttgart
+49 (0) 7144 8990
sales.de@inovance.eu

France-Bordeaux
+33 (0) 5594 01050
sales.fr@inovance.eu

Spain-Barcelona
+34 93 504 94 48
sales.es@inovance.eu

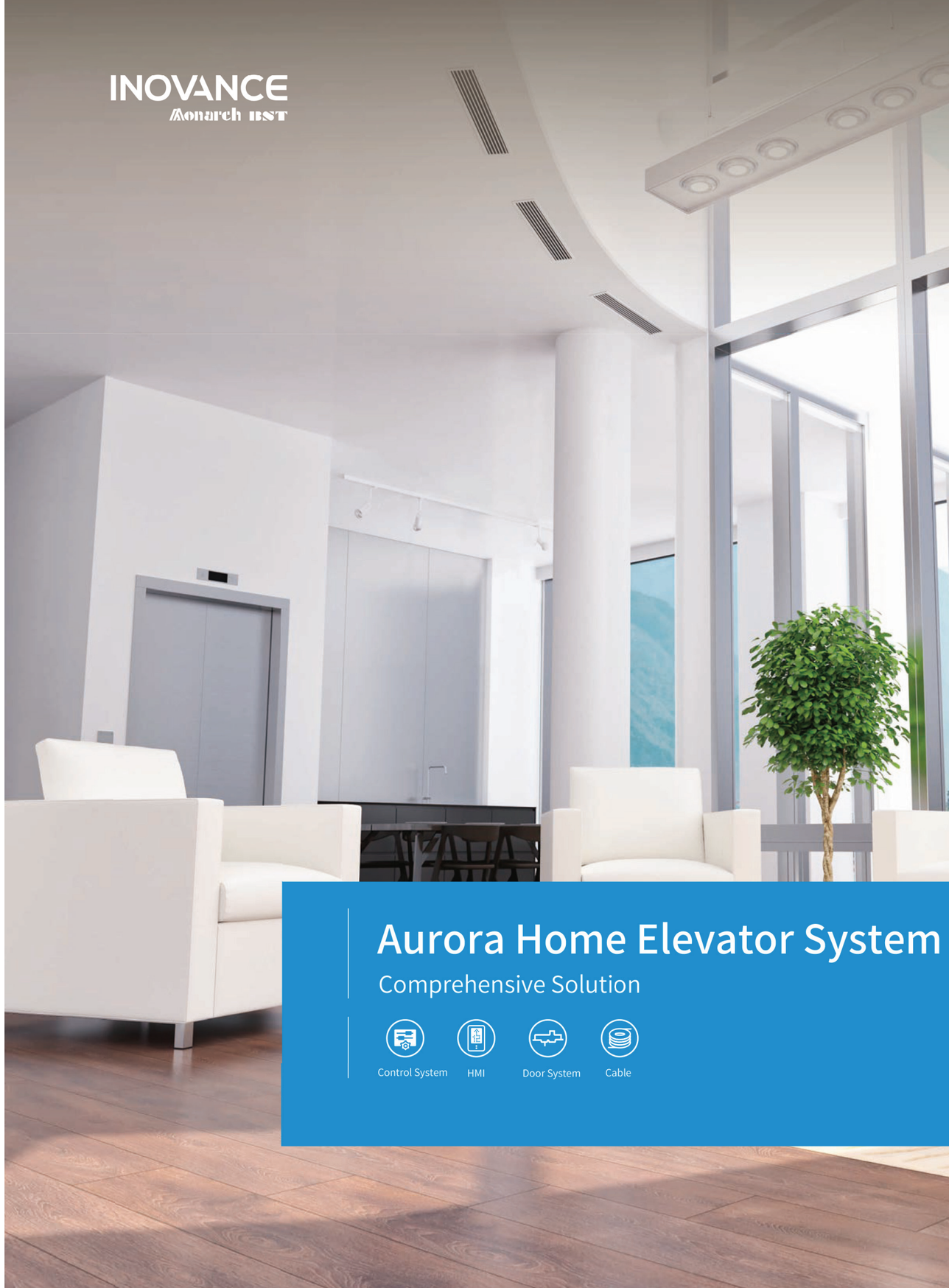
Italy-Milano
+39 (0) 2268 22318
sales.it@inovance.eu

Turkey-Istanbul
+90 (216) 466 7600
sales.tr@inovance.eu

South Korea-Seoul
+82 (0) 10 7428 5732
sales.kr@inovance.eu

India
Head Office Chennai | +91 (0) 44 4380 0201
Ahmedabad | +91 (0) 79 40034274
Mumbai | +91 (0) 22 4516 6255
Noida | +91 (0) 120 402 8235
Hyderabad | +91 (0) 40 4951 6431
Surat | +91 93846 65692
Sales Network
Kolkata, Bengaluru, Pune, Coimbatore, Visakhapatnam, Vadodara, Jaipur
info@inovance.ind.in

INOVANCE
Monarch RST



Aurora Home Elevator System

Comprehensive Solution

Control System | HMI | Door System | Cable

Introduction to the Aurora Home Elevator System

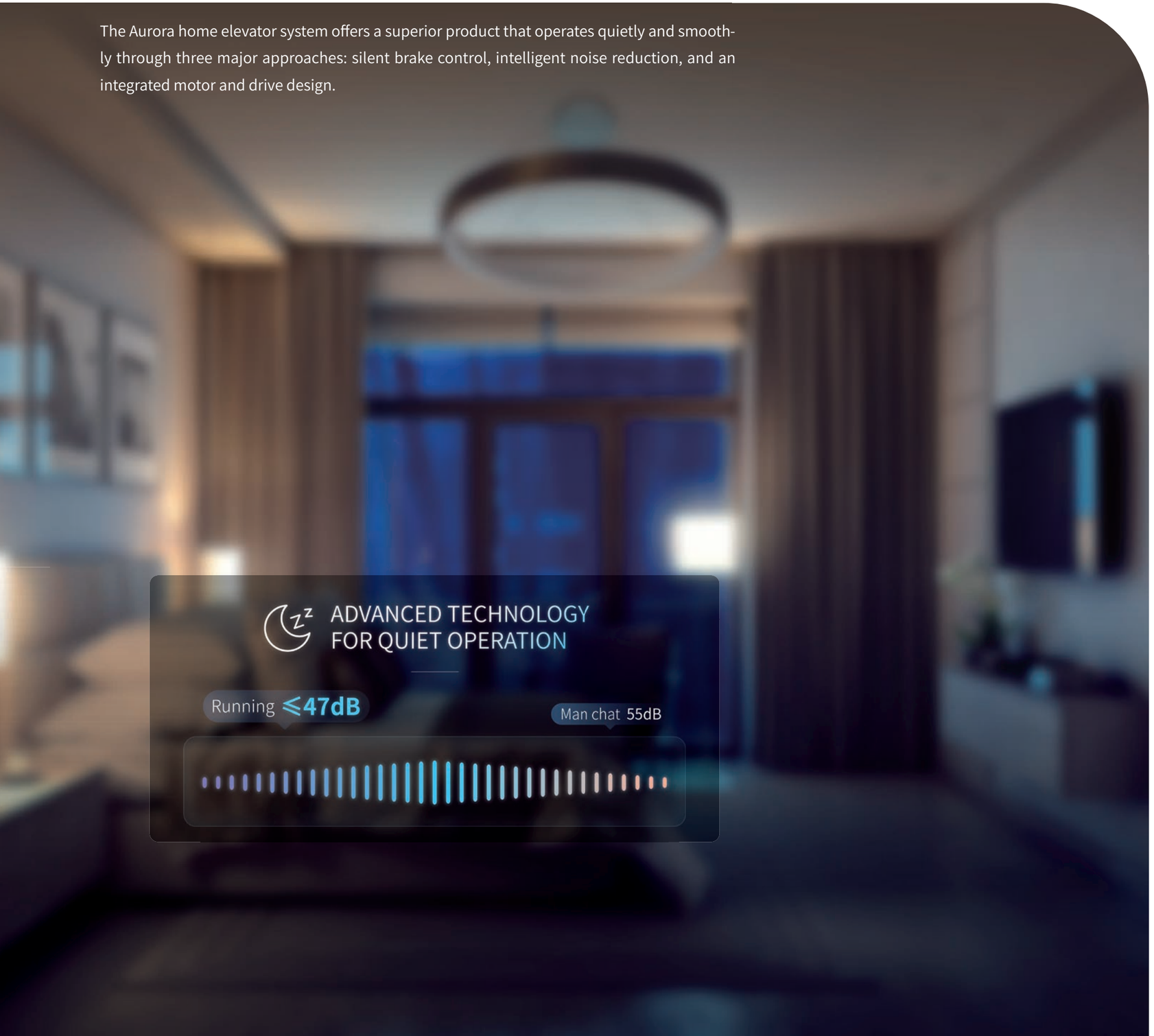
Aurora Home Elevator System

4 Highlights

Quiet | Energy-saving | Intelligent | Elegant

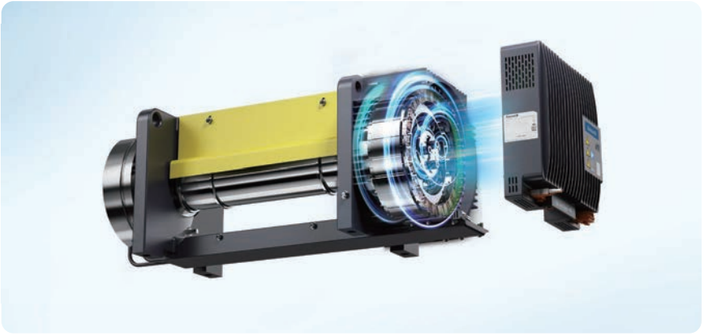
Quiet

The Aurora home elevator system offers a superior product that operates quietly and smoothly through three major approaches: silent brake control, intelligent noise reduction, and an integrated motor and drive design.



Integrated Design of the Motor and Drive

The integration of the motor and drive in its design ensures perfectly matched driving performance for smooth operation.

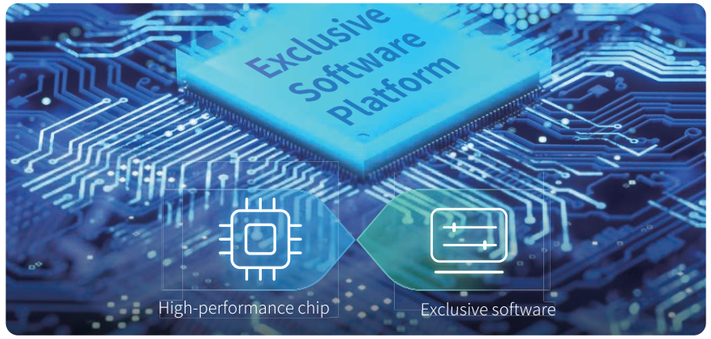


Silent Brake Control Technology

Low brake activation sound level **(⩽ 45 dB)**.

- **Air cooling and No Fan Noise**
- **High-performance chips**

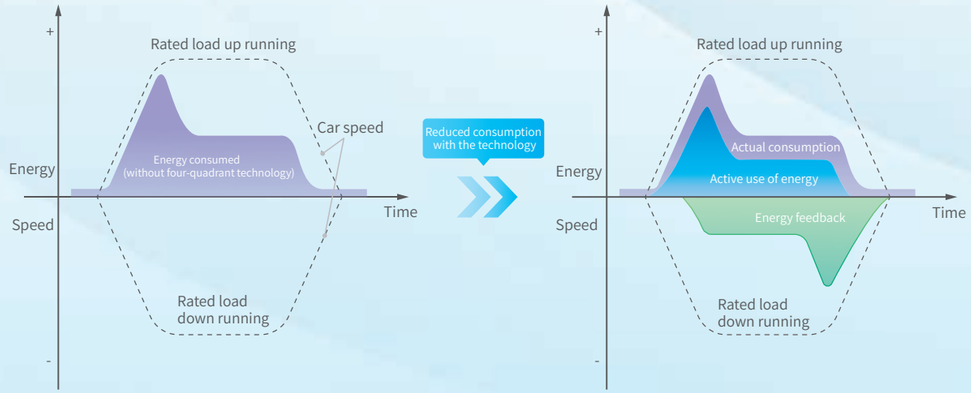
By utilizing high-performance chips with exclusive software, it produces low sound level **(⩽ 47 dB)** operating at high carrier frequencies.



Energy-saving

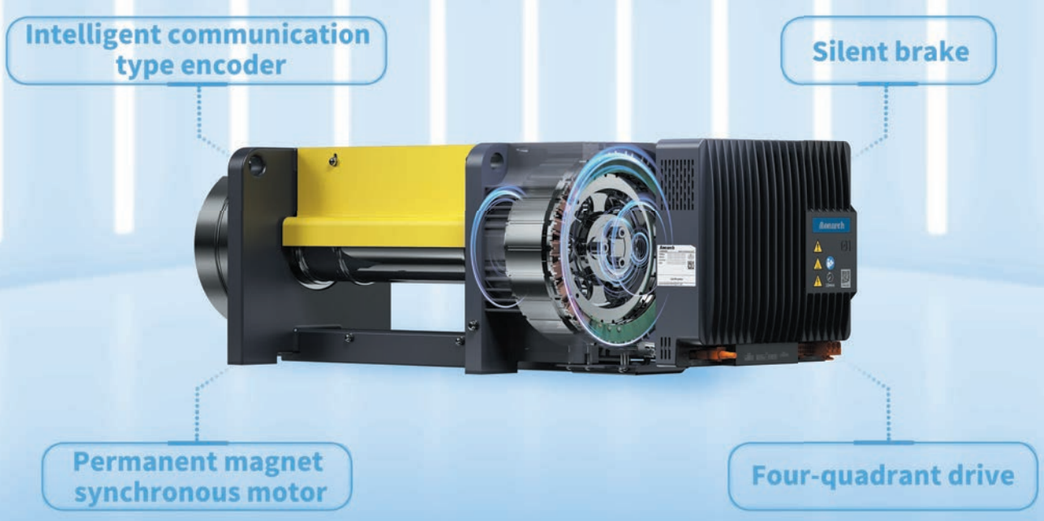
Four-quadrant Technology

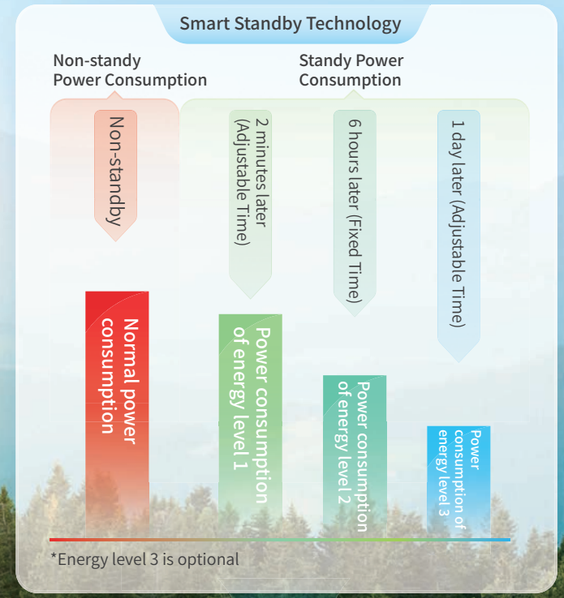
The four-quadrant technology can feed back excess energy generated during braking to the grid.



The more it is used, the more it saves.

High-performance Four-in-one Inner Rotor Motor





Energy-saving and environment-friendly

Average power consumption of only 1 kWh per day

Smart Standby Technology

Intelligent

Features like intelligent door lock detection, periodic self-inspection, and fault diagnosis enhance the operational efficiency and safety of home elevators.

Worry-free Operation

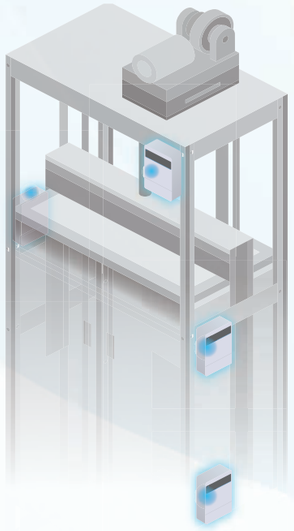
Includes regular automatic health checks and maintenance reminders.

Intelligent Protection

The door lock detection ensures the elevator running safety at all times.

Easy Maintenance

Faults can be diagnosed intelligently for quick identification;
Parameters can be copied with one click after control box replacement, simplifying maintenance.

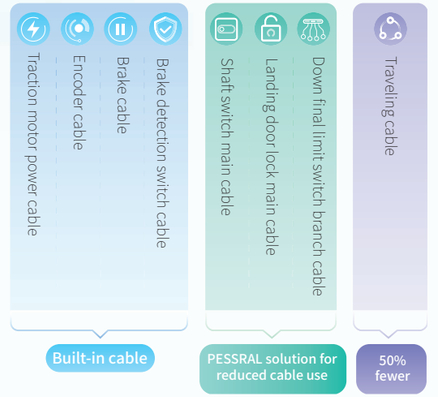


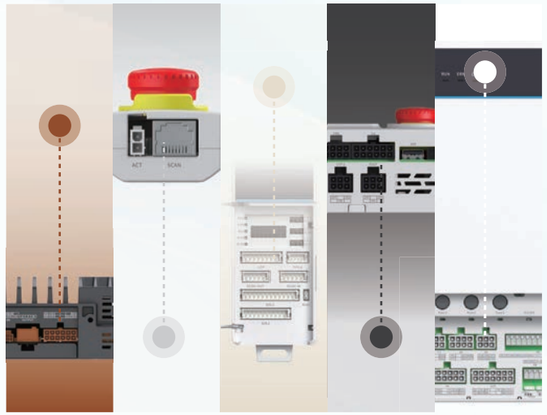
Easy Installation

The control cabinet, sized no larger than an A4 paper, can be installed anywhere conveniently.

Simplified Wiring

The SIL3 PESSRAL solution reduces cable usage by 50%, resulting in a simpler system.





Convenient Wiring

Easy connection with color-coded wiring prevents errors.

Elegant

- The elevator control cabinet is compact, allowing installation in any location.
- Color-coded wiring improves installation efficiency.
- Built-in cables and cable-free installation reduce cable usage by 50%, making installation work neater.

Aurora System Motor Steel Belt Technology

Simple Structure

The steel belt traction technology features a relatively simple structure, consisting of a traction motor, guide pulleys, and a steel belt. This design is easy to manufacture and install.

Stable Operation

The combination of an integrated motor and drive with steel belt traction technology can provide smooth elevator movement, ensuring riding comfort for passengers.

Low Noise

The steel belt traction technology generates relatively low noise during operation, which does not disturb the surrounding environment or passengers. Utilizing exclusive software and high carrier frequency technology, operational noise can be very low (⩽ 47 dB).

High Load Capacity

The steel belt used has a high load-bearing capacity, making it suitable for various types of elevator requirements.

Long Service Life

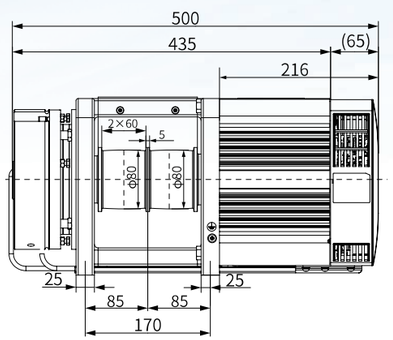
The steel belt is usually made from multiple strands of steel wire woven together with a long service life.

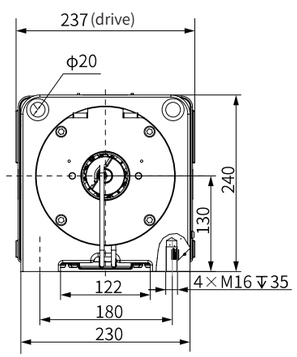
Traction Motor of Integrated Motor and Drive

Technical Specifications

Item	Specifications
Type	1:1 traction motor
Output power	1.6 kW
Output torque	100 N · m
Rated speed	150 rpm
Overload capacity	1.5 times
Duty cycle	S5-25%
Insulation class	F
Degree of protec-tion	IP41

Product Dimensions

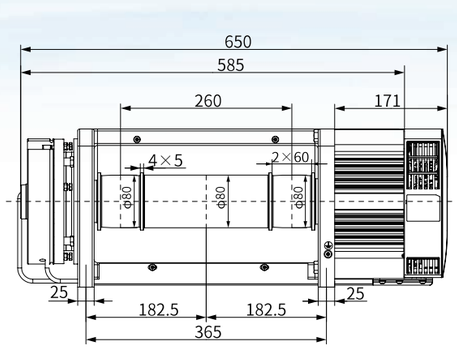


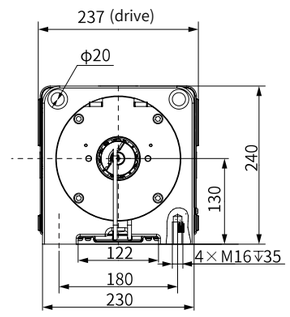


Technical Specifications

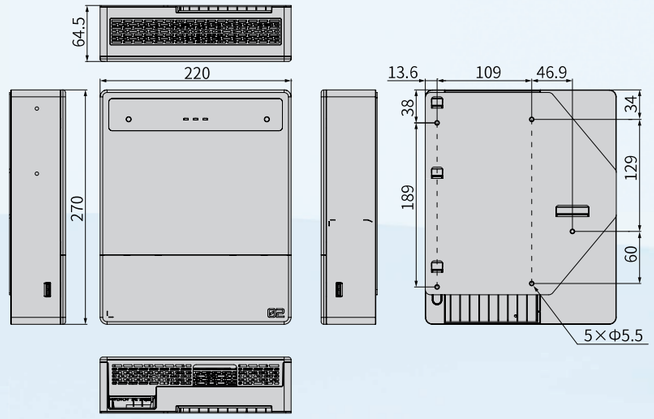
Item	Specifications
Type	2:1 traction motor
Output power	1.9 kW
Output torque	60 N · m
Rated speed	300rpm
Overload capacity	1.5 times
Duty cycle	S5-25%
Insulation class	F
Degree of protec-tion	IP41

Product Dimensions





Control Cabinet

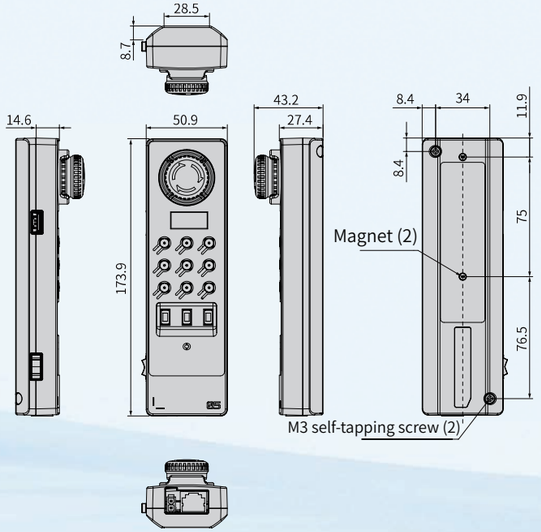


Technical Specifications

Item	Specifications
Input	
Grid voltage	220 VAC±15%, 1 ph
Recommended RCD	D32/30mA
Recommended power cable size	2.5 mm^2
Frequency	45 Hz to 66 Hz
Power-on frequency	Once every minute or less
Battery voltage	48 VDC
Output	
Brake power supply voltage	· Normal: 48 VDC±5% · Evacuation: 38 VDC to 50.4 VDC
Rated current of brake power supply	2 A x 2
Rated output power of brake power supply	192 W
Voltage of the ARD power supply for emergency evacuation	280 VDC±5% and DC output with transformer input of peripheral devices not supported (including light curtain and door operator)
ARD evacuation power	· BOOST: 390 W (for door operator, AC drive, sliding door open controller, electronic safety gear, and so on) · Brake: 192 W · System auxiliary power supply: 85 W
ARD evacuation distance/times	· Supports two consecutive rescues with a single rescue distance of 11 m (at 80% battery level). At an ambient temperature of 5° C and battery undervoltage threshold, it can achieve a single continuous rescue of 9 m
Battery charging time	8 h
Voltage of system 24 V power supply	26 VDC±5%
Rated current of system 24 V power supply	3.27 A
Rated power of system 24 V power supply	85 W

Item	Specifications
Control features	
Control mode	BUCK-BOOST voltage and current dual closed-loop control
Switching frequency	60 kHz
Battery operating temperature	
Charge	0°C to +45°C , max. 2 A
Discharge	–10°C to +60°C , 20 A (< 45°C)
Communication specifications	
SCAN communication	SCAN of MCB communication with other devices on the SCAN, with a maximum baud rate of 400 kbps
CAN1	Reserved CAN communication, with a maximum baud rate of 100 kbps
MOD1	Reserved MOD communication (IoT), with a maximum baud rate of 115200 bps
SCI1	Power supply board programming, with a maximum baud rate of 1 Mbps
SCI2	Communication between power supply board and MCB, with a maximum baud rate of 1 Mbps
Display	
Operating indicator	Power supply/fault/communication indicator
Environment	
IP rating	IP20

Operating Box



Technical Specifications

Item	Specifications
Input	
Voltage	24 VDC±10%
Rated current	0.125 A
Button detection	
Number of DI channels	Safety inputs: 7 channels Non-safety inputs: 3 channels
Level for active input for button action	High level
Current flowing through the button in energized state	⩾ 8 mA
Communication specifications	
CAN1 communication	PES communication with other devices on the CAN1 bus, with a maximum baud rate of 400 kdps
RS232 communication	Up to 1 Mbps
Display	
Commissioning information	Parameter display
Environment	
IP rating	IP20

Car Top Box

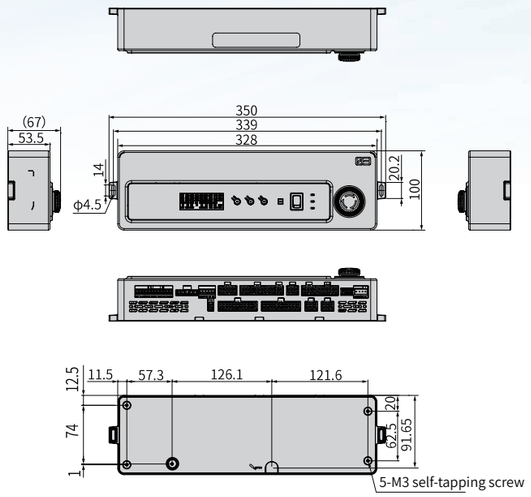
Scope of Control

Balustrade switch, up/down slow-down switch, final limit switch, car lighting + fan, load cell switch, safety gear switch, optical scale, and electronic safety gear

Technical Specifications

Item	Specifications
Input	
Grid voltage	220 VAC±10%, 1 ph
Grid current	207/208 (door operator): 1.1 A 507/508 (fan, lighting): 2 A
System 24 V power supply	Voltage: 18 VDC to 27 VDC Current: 1.5 A
Output	
System 24 V power supply	Voltage: 18 VDC to 27 VDC Current: 1 A
12 V power supply	Voltage: > 10 V Current: 1 A
DI test	
Number of DI channels	Safety inputs: 17 channels Non-safety inputs: 18 channels
Level for active input	High level
Voltage range for active input	10 V to 30 V
DO output	
Number of channels	Non-safety type: 18 channels Safety type: 2 channels (safety relay)
Output voltage class	4 channels, 220 V, high voltage output 14 channels, 24 V, low voltage dry contact type
Communication specifications	
CAN1 communication	The car top board and car top PES communication with other devices on the CAN1 bus, with a maximum baud rate of 400 kdps
CAN3 communication	Communication with the door operator, with a maximum baud rate of 50 kdps
RS485_4 communication	Smart display communication, with a maximum baud rate of 38400 bps
Environment	
IP rating	IP21 for horizontal placement IP20 for vertical placement

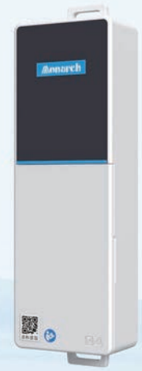
Product Dimensions



Landing Control Box

Scope of Control

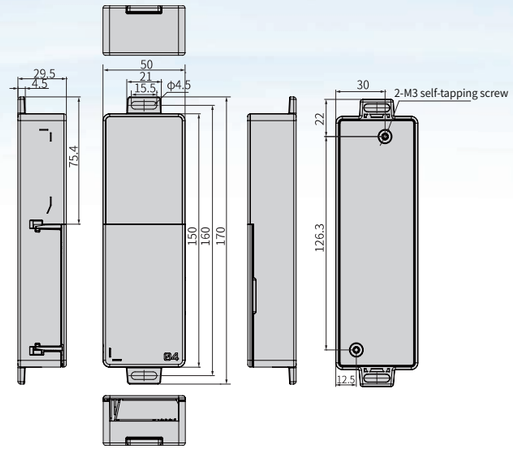
Motor side emergency stop, governor switch, landing door lock switch, hall call buttons, manually operated door/sliding door control, emergency stop at the pit, and tension pulley switch.



Technical Specifications

Item	Specifications
Input power supply	
Voltage	24 VDC±10%
Rated current	1 A
DI test	
Number of DI channels	Safety inputs: 5 channels Non-safety type: 4 channels
Level for active input	High level
Voltage range for active input	10 V to 30 V
DO output	
Number of channels	Non-safety type: 3 channels
Output voltage class	Triode output type: active low output Relay output type: dry contact output
Communication specifications	
CAN1 communication	PES communication with other devices on the CAN1 bus, with a maximum baud rate of 400 kdps
RS485_1 communication	Hall call communication, with speed up to 38400 bps
Environment	
IP rating	IP21

Product Dimensions



Main Product List

Product System List

Type	Name	Quantity	Unit	Model	Configuration	Description
Traction motor (2:1)	Aurora four-in-one motor integrated with drive	1	/	MH10-080A-0450-063T-2S	1 out of 2	The wider spacing of the steel belts makes it suitable for installations with limited top space and where diversion sheaves are located at the bottom of the car.
Traction motor (1:1)	Aurora four-in-one motor integrated with drive	1	/	MH10-080A-0400-063N-2S		Suitable for limited pit depth and sufficient top space, use with platform lifts.
Control cabinet	Aurora control cabinet	1	/	H10X-2S2P2-S	Standard	/
Operating box	Aurora operating box	1	/	MCTC-PES-B1	Standard	/
Car top box	Aurora car top box	1	/	MCTC-CTW-E	Standard	/
Landing control box	Aurora landing control box	N	/	MCTC-PES-A1-FS1	1 out of 2	Suitable for general door operators and not for manually operated door/sliding door
	Aurora landing control box	N	/	MCTC-PES-A1-FS2		Suitable for floor-based electromagnetic lock control of manually operated door/sliding door
Steel strip	Steel strip	N	m	30 mm x 3 mm (Width x Thickness)	/	Prepared by customer
Shaft electrical components-D	Load weighing device	1	/	MBT-LWD-SW7/ MBT-LWD-AN7	Optional	Reserved cables to be joined together on-site
	Shaft lighting	N	/	MBT-HL-A10	Optional	7 m spacing
	Optoelectronic switch	1	/	MBT-LS-A1	Optional	Reserved cables for the door zone switch to be joined together on-site
	Magnetic switch	2	/	MCTC-SM31-B (BS03-BI)	Optional	Reserved cables for the up/down slow-down switch to be joined together on-site
	Magnetic switch	1	/	MCTC-SM31-B (BS03-BI)	Optional	Reserved cables for the final limit switch to be joined together on-site
	Motor emergency stop box	1	/	MBT-MSB-D3	Optional	Reserved cables to be joined together on-site
	Door operator AC drive	N	/	AD20-2SP2-CI/NICE-D-A-S0P2/4/7	Optional	Separately ordered NICE900/AD20 door operator AC drive (1 for single door, 2 for through-type door)
	Light curtain	N	/	RCE04 series	Optional	Weton light curtain
	Optical Scale	1	/	ELA30N-101AN30Y3-P+EN-LS+ N1-C CTB cable	Optional	Inovance optical scale scheme (reader head, relay module, electronic safety gear) with cable connection method to be confirmed
	One-touch call device	1	/	MCTC-IPHONE	Optional	MCTC-IPHONE (4G connection)
	Power distribution box	/	/	/	/	Prepared by customer

List of Cables

List of Cables for Aurora System							
No.	Sub-product name	Sub-product model	Sub-product code	No.	Sub-product name	Sub-product model	Sub-product code
1	Woven polypropylene bag	Woven polypropylene bag	MBT36001F1	21	5-layer PES communication cable	RVVP (2×2)P×0.3	MBT243BES5
2	Cable carton	550×550×350	MBT36001A2	22	Shaft lighting cable	RVV 2×0.5	MBT243BGU1
3	Export packaging carton	Export packaging carton	MBT36001A3	23	Power supply box cable for sliding door	RVV 2×0.5+1×0.5	MBT243BGU2
4	Cable wooden crate	Cable wooden crate	MBT36001D1	24	Top floor landing door lock cable	RVV 2×0.5+1×0.5	MBT243BGV1
5	Export packaging wooden crate	Export packaging wooden crate	MBT36001D2	25	Top floor landing door locking cable	RVV 2×0.5+1×0.5	MBT243BGV2
6	Carton + Woven polypropylene bag	Carton + Woven polypropylene bag	MBT36001E1	26	Overspeed governor cable	RVV 2×0.5+1×0.5	MBT243BGV3
7	Export packaging carton + Woven polypropylene bag	Export packaging carton + Woven polypropylene bag	MBT36001E2	27	Motor emergency stop/Steel belt breakage detection cable	RVV 2×0.5	MBT243BGV4
8	Fan power supply cable	RVV 2×0.5+1×0.5	MBT271PX1	28	Middle floor landing door lock cable	RVV 2×0.5+1×0.5	MBT243BGW1
9	Lighting power cable	RVV 2×0.5+1×0.5	MBT271PX2	29	Middle floor landing door locking cable	RVV 2×0.5+1×0.5	MBT243BGW2
10	Display activation communication cable	RVV 2×0.75+CAT6	MBT252AKX1	30	Bottom floor landing door lock cable	RVV 2×0.5+1×0.5	MBT243BGX1
11	Hall communication cable	RVV (2×2P)×0.3	MBT243BET1	31	Bottom floor landing door locking cable	RVV 2×0.5+1×0.5	MBT243BGX2
12	Brake power supply communication cables	RVV 6×0.5+(2×2P)×0.3	MBT252AKS1	32	Tension pulley cable	RVV 2×0.5+1×0.5	MBT243BGX3
13	Main drive power supply cable	RVV 3×2.5	MBT252AKU1	33	Pit stop cable	RVV 2×0.5	MBT243BGX4
14	Main power supply cable	RVV 3×2.5	MBT252AKV1	34	Door controller signal cable	RVV 6×0.5	MBT243BGY1
15	Traveling cables	TVVBP 10×0.75+2×1.5+2×2P×0.5	MBT12017WU1	35	Position switch cable	RVV 2×0.5	MBT243BGY2
16	Lighting power cable	RVV 2×0.75	MBT252AKW1	36	Machine room analog load cell cable	RVV 3×0.5	MBT252AND1
17	1-layer PES communication cable	RVVP (2×2)P×0.3	MBT243BES1	37	Overspeed governor test/reset cable	RVV 4×0.5	MBT252ANE1
18	2-layer PES communication cable	RVVP (2×2)P×0.3	MBT243BES2	38	Steel belt power cable	RVV 2×0.5	MBT252ANE2
19	3-layer PES communication cable	RVVP (2×2)P×0.3	MBT243BES3	39	Main air switch feedback cable	RVV 2×0.5	MBT252ANF1
20	4-layer PES communication cable	RVVP (2×2)P×0.3	MBT243BES4	40	Switch cable for sliding door	RVV 2×0.5	MBT252ANF2
41	Manually operated door cable (single door)	RVV 2×0.5	MBT271BAM1	61	Car top up slow-down cable	RVV 2×0.5	MBT271BKE8
42	Manually operated door cable (double doors)	RVV 4×0.5	MBT271BAM2	62	Car top down slow-down cable	RVV 2×0.5	MBT271BKE9
43	Electronic safety gear power cable	RVV 2×0.5+1×0.5	MBT271BKB1	63	Leveling cable	RVV 4×0.5	MBT271BKF1
44	Front door operator signal cable	RVV 6×0.5	MBT271BKC1	64	Load cell cable (digital)	RVV 4×0.5	MBT271BKG1
45	Front door operator power cable	RVV 2×0.5+1×0.5	MBT271BKC2	65	Load cell cable (analog)	RVV 3×0.5	MBT271BKG2
46	Front door light curtain power and light curtain signal cable (EDP1)	RVV 6×0.5+1×0.5	MBT271BKC3	66	Safety latch pin cable	RVV 2×0.5	MBT271BKH1
47	Front door light curtain fault feedback cable	RVV 2×0.5	MBT271BKC4	67	Light curtain cable	RVV 2×0.5	MBT271BKH2
48	Front door operator overtemperature cable	RVV 2×0.5	MBT271BKC5	68	Balustrade cable	RVV 4×0.5+1×0.5	MBT271BKJ1
49	Rear door operator signal cable	RVV 6×0.5	MBT271BKD1	69	Mechanical blocking cable	RVV 4×0.5+1×0.5	MBT271BKJ2
50	Rear door operator power cable	RVV 2×0.5+1×0.5	MBT271BKD2	70	Elevator call branch cable (front door)	RVVP (2×2)P×0.5	MBT243BNS1
51	Rear door light curtain power and light curtain signal cable (EDP2)	RVV 6×0.5+1×0.5	MBT271BKD3	71	Elevator call branch cable (front door)	RVVP (2×2)P×0.5	MBT243BNS3
52	Rear door light curtain fault feedback cable	RVV 2×0.5	MBT271BKD4	72	Elevator call branch cable (rear door)	RVVP (2×2)P×0.5	MBT243BNS2
53	Rear door operator overtemperature cable	RVV 2×0.5	MBT271BKD5	73	Elevator call branch cable (rear door)	RVVP (2×2)P×0.5	MBT243BNS4
54	Door zone cable	RVV 3×0.5	MBT271BKE1	74	Elevator call branch cable (front door)	RVVP (2×2)P×0.5	MBT243BNS5
55	Optical scale/safety gear detection cable	RVV 2×0.5	MBT271BKE2	75	Elevator call branch cable (rear door)	RVVP (2×2)P×0.5	MBT243BNS6
56	Optical scale limit detection cable	RVV 2×0.5	MBT271BKE3	76	Elevator call branch cable (front door)	RVVP (2×2)P×0.5	MBT243BNS7
57	Front car door cable	RVV 2×0.5+1×0.5	MBT271BKE4	77	Elevator call branch cable (rear door)	RVVP (2×2)P×0.5	MBT243BNS8
58	Rear car door cable	RVV 2×0.5+1×0.5	MBT271BKE5	78	Power supply main cable for sliding door	RVV 2×0.5	MBT243BUE1
59	Safety gear cable	RVV 2×0.5+1×0.5	MBT271BKE6	79	Power supply branch cable for sliding door	RVV 2×0.5	MBT243BUF1
60	Car top limit cable	RVV 2×0.5+1×0.5	MBT271BKE7				

2026

Excellence in Glocalization Strategy

Inovance of the World

Inovance Offices 11

Service Partners 60

Spare Part Centres 20

Maintenance Centres 16

Chinese Engineers 20+

Local Engineers 65+

Driving Global Growth

Since 2012, Inovance has been deeply committed to its global strategy. In 2024, the company experienced rapid growth in international markets, with annual overseas revenue exceeding RMB 2 billion, representing a year-over-year increase of over 90%.

Inovance has established six R&D centers and **eleven subsidiaries and offices worldwide.** The company has also built a robust service network, consisting of more than 650 authorized distributors and nearly 600 service centers, covering over 100 countries.

Through its "**Industry Line Internationalization**" and "**Leverage Global Partners**" strategies, Inovance has successfully brought its leading domestic products and solutions to the international market, continuously expanding its global influence