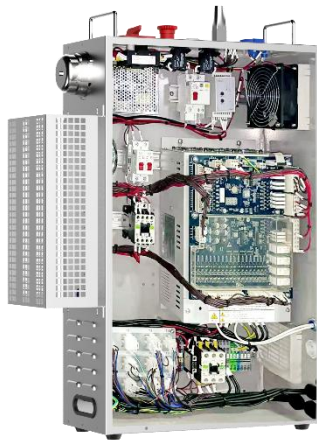# *IECB-II*

Escalator Products and Accessories
Selection Manual

Preface

Thank you for choosing IECB-II series elevator products

Notice

- In order to illustrate the details of the product, the illustrations in the manual sometimes show the state of removing the cover or safety cover.

- When using this product, please be sure to install the casing or cover as required, and operate according to the contents of the manual.

- Illustrations in this manual are for illustration only and may differ from the product you ordered.

- Due to product upgrades or specification changes, and for the convenience and accuracy of the manual, the contents of this manual will be changed in time.

- When you need to order manuals due to damage or loss, please contact the company's regional agents, or directly contact the company's customer service center.

- If you still have some unexplained problems during use, please contact our customer service center.

CATALOG

CATALOG

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1、IECB-II Escalator integrated control cabinet

| GC1501-A | IC1502-A | IC1503-A |

Naming rules

GC 1501 - A

→ Design version

→ Control cabinet series

→ Integrated control cabinet
(GC is power frequency,
IC is frequency conversion)
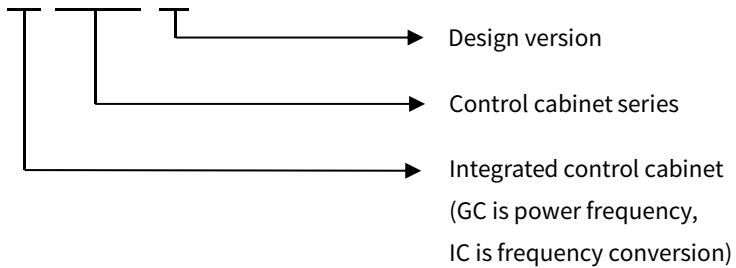
Features

★ The first security version logic board 2 in 1 in China

★ 32-bit processing chip

★ DC24V safety circuit, and passed PESSRAE certification, safe

★ IECB-II safety logic board integrates 9 sets of safety circuit monitoring points

and 3-digit digital display tube

★ Whole elevator parameter self-learning, simplify debugging operation

★ Certified by TUV and CE

★ Ultra-thin design, indoor control cabinet as thin as 210mm

★ There are rich expansion functions, expandable I/O: 76 input + 32 output

Product specification

Model	GC1501-A	IC1502-A	IC1503-A
Name	Power frequency control cabinet	Full frequency conversion control cabinet	Bypass frequency conversion control cabinet
Control method	Star-delta	Full frequency conversion	Bypass frequency conversion
Standards compliant	GB16899-2011；EN-61439-2:2011；EN12015:2014；EN12016:2013		
Speed	≤0.9m/s		
Power	≤18.5KW	≤30KW	≤18.5KW
Size（mm）	470*170*751	474*211*751	474*211*751

Input power

Phase number, voltage, frequency	3 phase：220V/380V/415V 50/60Hz	3 phase：380V/415V 50/60Hz
Three-phase unbalance factor	15%	15%
Voltage range	3 phase：220V±15% 3 phase：380V±15%	3 phase：340V~480V
Allow frequency fluctuation	15%	15%

Output voltage

Brake voltage	AC200V/AC110V/DC110V
Additional brake voltage	AC200V/AC110V/DC110V
Lighting voltage	AC220V/DC24V

Scalability

Function expansion board	EFEB board：10 input，8 output; Maximum number of extensions：2
Fault acquisition board	ETCB：18 input; Maximum number of extensions：2

Function configuration

Security function	9 PESSRAE certified functions
Logic function	38 standard; 10 optional
Safety circuit monitoring point	9 partition monitoring
Fault display/record	

For details, please refer to：《GC1501-A Control Cabinet User Manual》
《IC1502-A Control Cabinet User Manual》
《IC1503-A Control Cabinet User Manual》

2、LC1504-A Escalator Multifunction Display

Junction Boxes

Main control Cabinet   Drive Cabinet

Junction Box

Features

★Distributed system design of dual main boards + junction boxes, truss wiring efficiency increased by≥20%, and space requirements reduced by 20%

★Compared with common competing products in the industry, the integration level is increased by 100%, and the wiring harness in the cabinet is reduced by 30%

★Design according to T/CEA301-2019

★Standard configuration can cover≥99% of functional requirements

★21 harsh environmental simulation tests with a standardization rate of 99%

★-20°C~60°C ambient working temperature

Product specification

Model	LC1604-A
Name	Dedicated Control System for Heavy Escalators
Control method	Star-delta + Full frequency conversion
Standards compliant	B16899-2011 ； EN-61439-2:2011 ； EN12015:2014 ； EN12016:2013 T_CEA 301-2019
Speed	≤0.9m/s
Power	≤45KW
IP	IP55

Input power

Phase number, voltage, frequency	3 phase：220V/380V/415V、50/60Hz；
Three-phase unbalance factor	15%
Voltage range	3 phase：220V~480V
Allow frequency fluctuation	15%

Output voltage

Brake voltage	AC200V/AC110V/DC110V
Additional brake voltage	AC200V/AC110V/DC110V
Lighting voltage	AC220V/DC24V

Function configuration

Security function	9 PESSRAE certified functions
Logic function	97logic detection functions, ≥99% heavy duty escalator function coverage
Safety circuit monitoring point	54 sets of partition monitoring, 1 to 1 fault display
Fault display	Main board 3-digit segment code display & key switch box LCD display & multi-function display
Fault record	≥1000

For details, please refer to：《LC1604-A Control Cabinet User Manual》
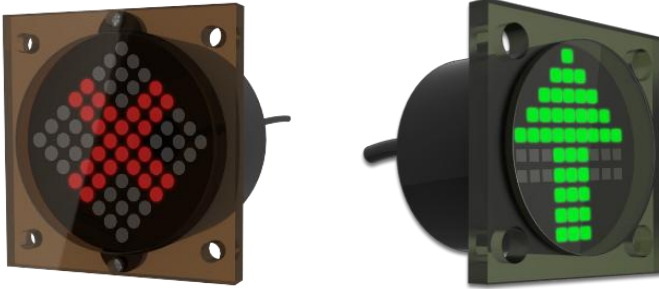
3、KB5-A Escalator Multifunction Display

Size（mm）	283*80*72.5
Display content	Running status, fault information, running direction
Historical fault query	Support 20000 historical fault query
Button	Up/down page key, return key, confirmation key
Protocol	485
Power Consumption	＜3W
IP	IP65
Voltage	DC24V±10%
Ambient working temperature	-20℃~+60℃

4、KB1-A key Switch Box

Size（mm）	220*37.2*78
Display content	Escalator status, running direction, fault code
Display Power Consumption	＜1W
Button	Two-way start key, stop key
Protocol	485
Power Consumption	＜3W
IP	IP65
voltage	DC24V±10%
Ambient working temperature	-20℃~+60℃

5、XL1-A1/A2 Traffic Lights

Size（mm）	85*82*50		61.5*61.5*40	
Display content	⬆ Run	❌ Stop	⬆ Run	❌ Stop
Display Power Consumption	＜1W			
Wiring	three-wire			
IP	IP65			
cable length	2m、6m、8m			
IP	IP65			
voltage	DC24V±10%			
Ambient working temperature	-20℃~+60℃			

6、TGSJ-LED24 Handrail Germicidal Lamps

Size (mm)	129*90*86.5
Best sterilization distance	＜15mm
Light	LED 3535 *12PC
Wavelength	270~285nm
Sterilization rate	＞99%
Power Consumption	＜3W
IP	IP65
Voltage	DC24V±10%
Ambient working temperature	-25℃~+60℃

7、IOT Gateway-B Data Gateway Device

Size（mm）	100*45*25
Signal interface	RS422\485（reserve）
Antenna interface	GSM
Network Type	NB、4G（In development）
Protocol	485
Installation method	Magnetic attraction/screw fixing
IP	IP65
Voltage	DC4.5V~5.5V
Ambient working temperature	-20℃~+60℃

Appendix version change record

Date	Changed Version	Changed Content
20211101	A00	First edition release