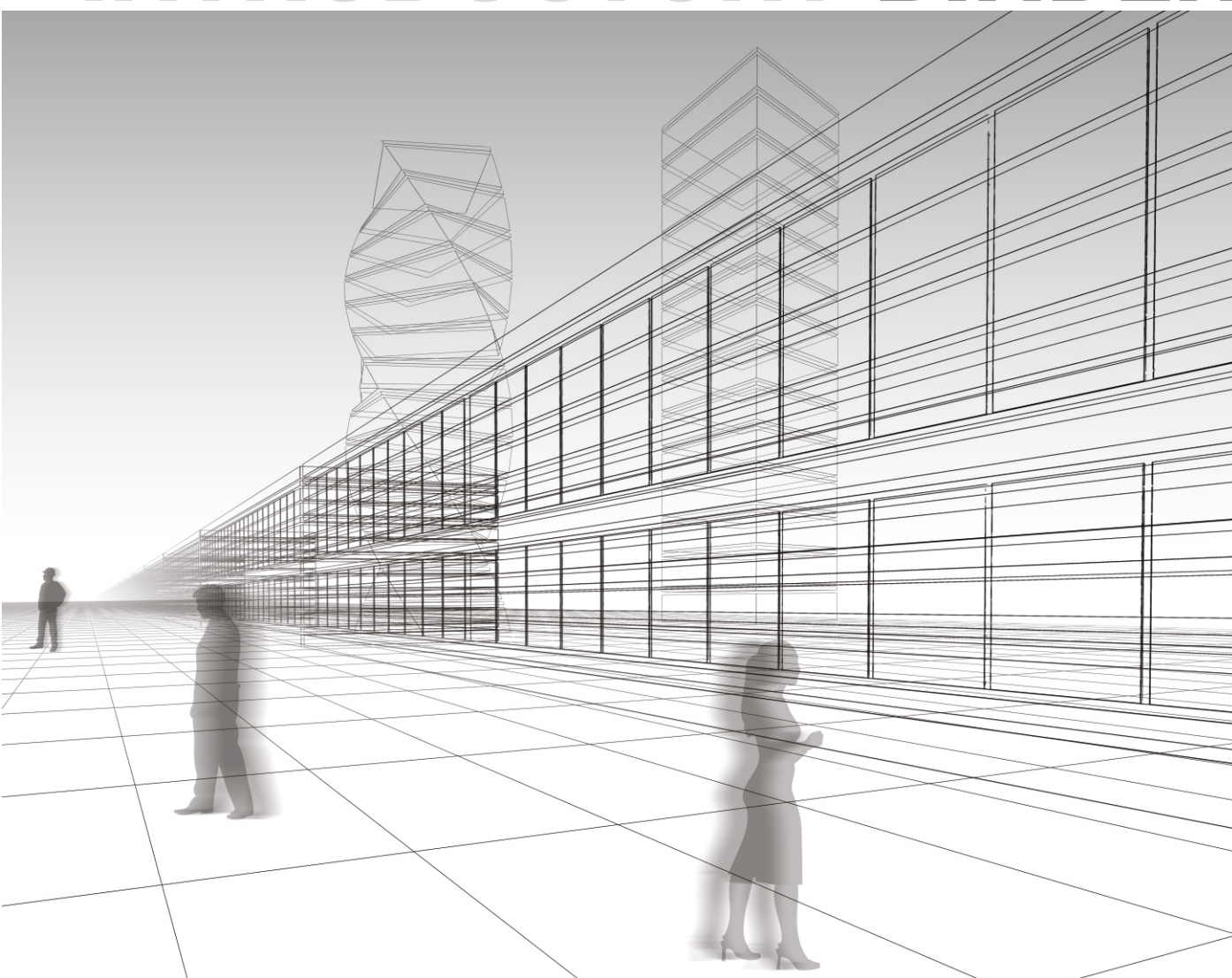




# EAE PRODUCTS INTRODUCTORY BINDER



# INTRODUCTORY **BINDER**





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**EAE Headquarters & Plant 1 Busbar Factory - Istanbul / TURKEY**



**Plant 2 Cable Tray Factory - Kocaeli / TURKEY**



**Plant 3 Rack Cabinet Factory - Istanbul / TURKEY**



**Plant 4 Busbar Factory - Kocaeli / TURKEY**



**Plant 5 Busbar & Lighting Factory- Aleksandrov / RUSSIA**



**Plant 6 LED Lighting Fixture Factory- Kocaeli / TURKEY**



# COMPANY PROFILE

## EAE Group

Founded in 1973, EAE Elektrik A.S. is a subsidiary of EAE Group - one of the largest manufacturers in Turkish electrical industry and is a worldwide marketer of electrical products.



### **EAE Elektrik A.S. (www.eaeelectric.com)**

Lighting and Power Busbar Energy Distribution Systems (25A upto 6300A) / Cable Tray&Ladder Systems / Underfloor Ducting Systems / Trolley Busbars.



### **EAE Aydinlatma A.S. (www.eaeaydinlatma.com)**

LED facade & street lighting / REVO High ceiling solutions.



### **EAE Elektrotechnik A.S. (www.eaeelektrotechnik.com)**

Modular Electrical Cabinets / Distribution Boxes / LV Panel Enclosures.



### **EAE Technology A.S. (www.eaetechnology.com)**

Lighting and Building Automation



### **OOO EAE Russia (www.eae.com.ru)**

Cable Trays and Lighting Luminaires



### **EAE Italia Srl. (www.eaeitalia.it)**

Europe Sales and Marketing Center of EAE Group Products



### **EAE Makine A.S. (www.eaemachinery.com)**

Sheet Steel Processing Machineries.

EAE Group has more than 2500 employees and 6 manufacturing facilities in Turkey and Russia with a closed manufacturing area of more than 270.000 m<sup>2</sup>. It operates in more than 100 countries with sales and marketing offices located in 14 countries. EAE Elektrik A.S. is the undisputed leader in its home market, Turkey, manufactures the products in compliance with ISO 9001, ISO 14001 and OHSAS 18001 Standards including; EAE Elektrik A.S. busbar products are certified by KEMA/DEKRA (Holland), KEMA – KEUR, UL classified laboratories as per IEC 61439-1/6 standards.

EAE has certification from TSE (Turkey), GOST (Russia), DEWA&ADDC (U.A.E.) and CPRI various local certificates for different countries too.

EAE's corporate vision is "Think Lean, Live Lean" as it passionately nurtures its global growth story with greener production, better utilization of natural resources and more sustainable business processes.

EAE products are approved and sold by his regional distributors all around the world.

## EAE is in more than 100 countries



### **EAE Offices**

Milano, Moscow, Dubai & Abu Dhabi, London & Birmingham, Duisburg, Bangalore, Mumbai & New Delhi, Chennai, Riyadh, Jeddah, Cairo, Ashgabat, Baku, France, Spain, Netherlands.

### **EAE Distributors**

UK, Belgium, Bulgaria, France, Germany, Greece, Hungary, Iceland, Italy, Luxembourg, Macedonia, The Netherlands, Norway, Poland, Romania, Serbia, Spain, Sweden, Switzerland, Denmark, Finland.

Algeria, Bahrain, Egypt, Ghana, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, S.Arabia, South Africa, U.A.E.

Azerbaijan, Belarus, Kazakhstan, Russia, Turkmenistan, Ukraine

Bangladesh, India, Indonesia, Pakistan, Singapore, Sri Lanka, Thailand, Vietnam.

Chile.

### **Contact Details:**

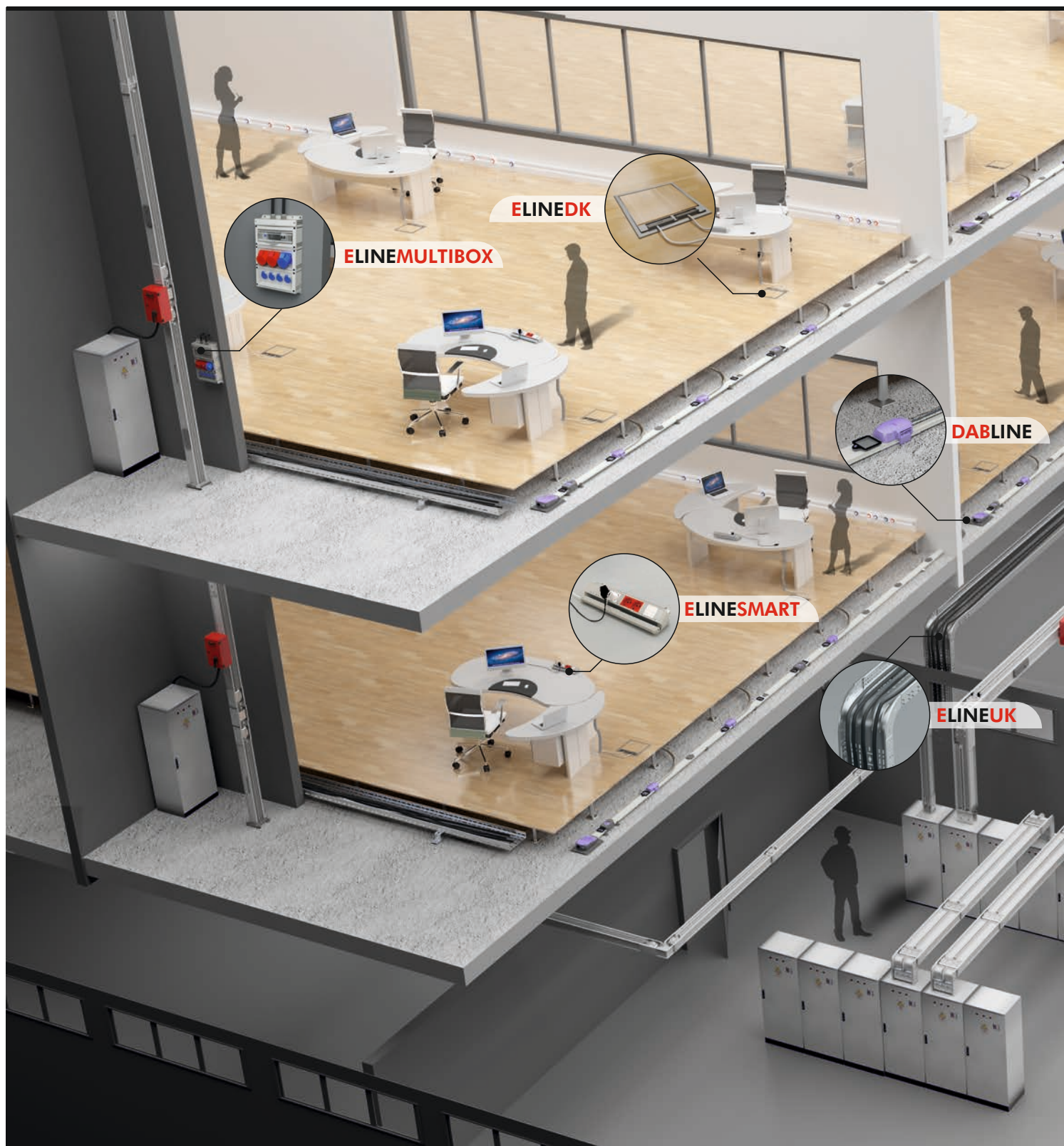
Akcaburgaz Mahallesi, 3114.Sokak No:10 , 34522 Esenyurt/ISTANBUL-TURKEY

Tel: 00 90 212 866 20 00(Pbx), Fax: 00 90 212 886 24 21

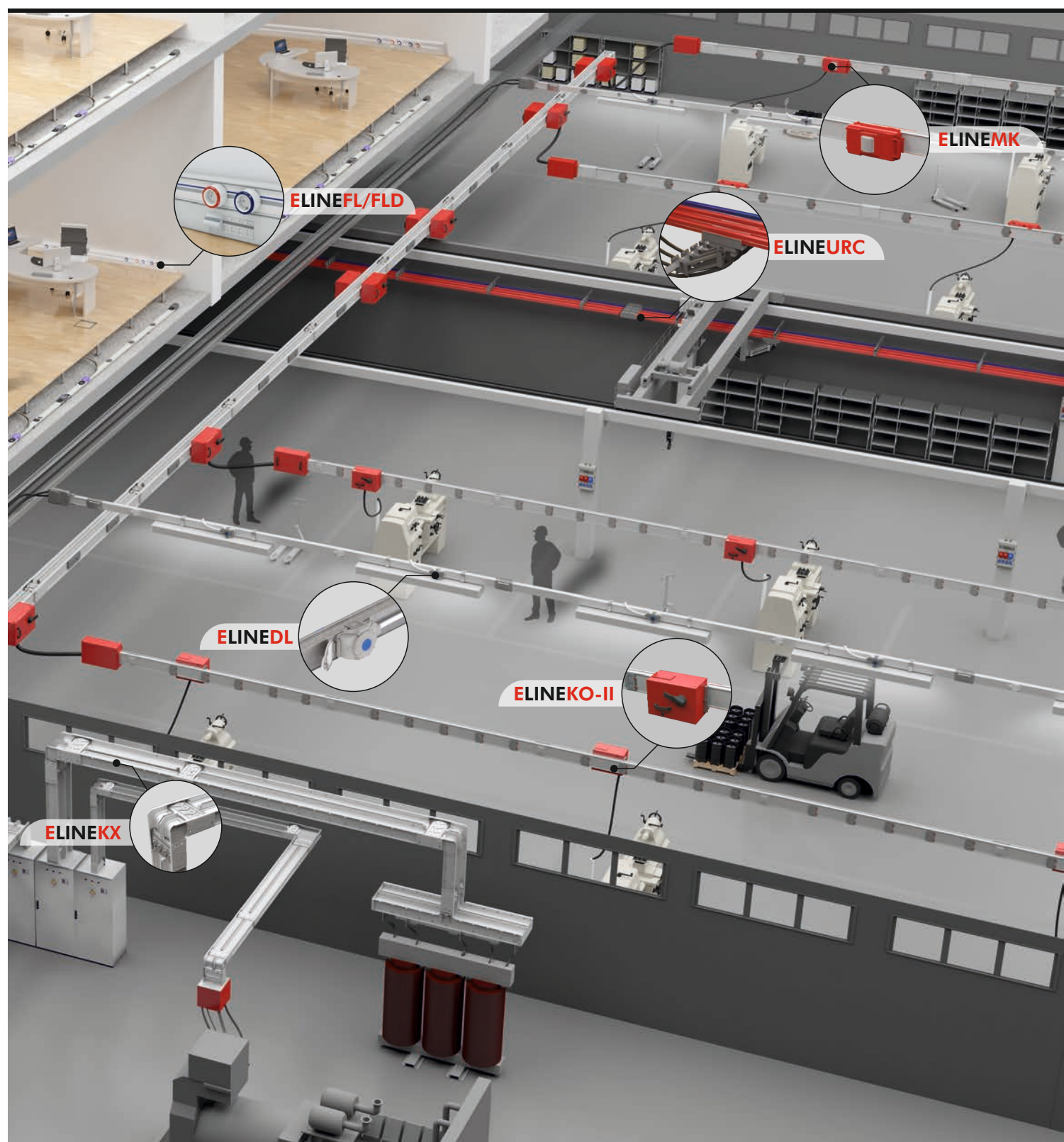
Web: www.eaeelectric.com Mail : info@eae.com.tr

## EAE Product Types

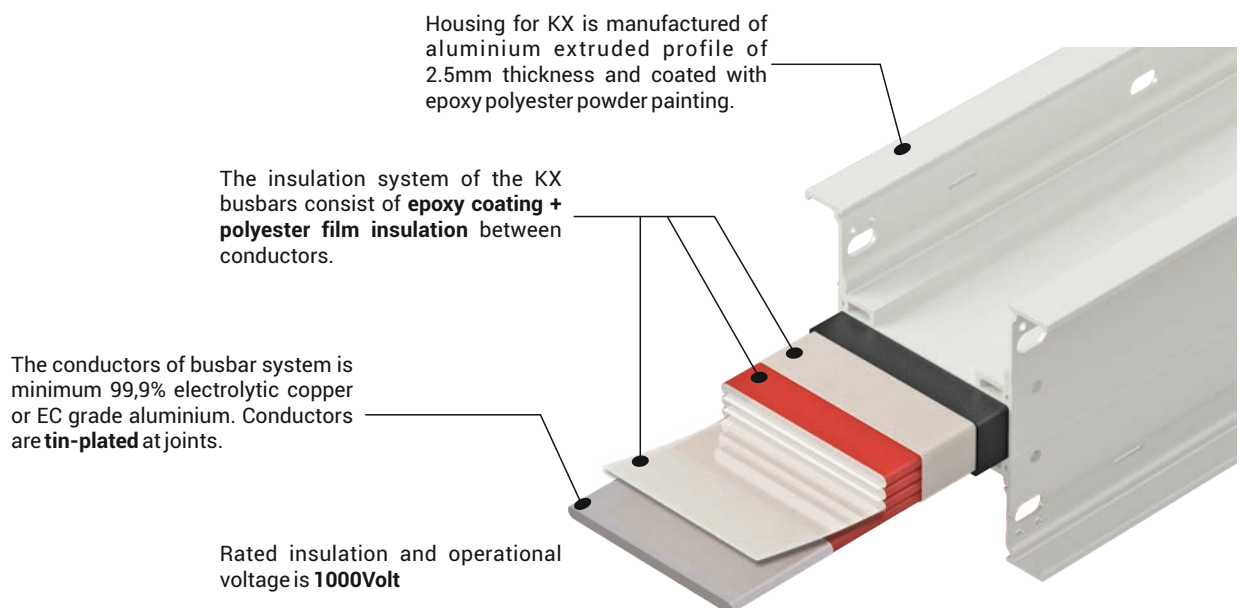
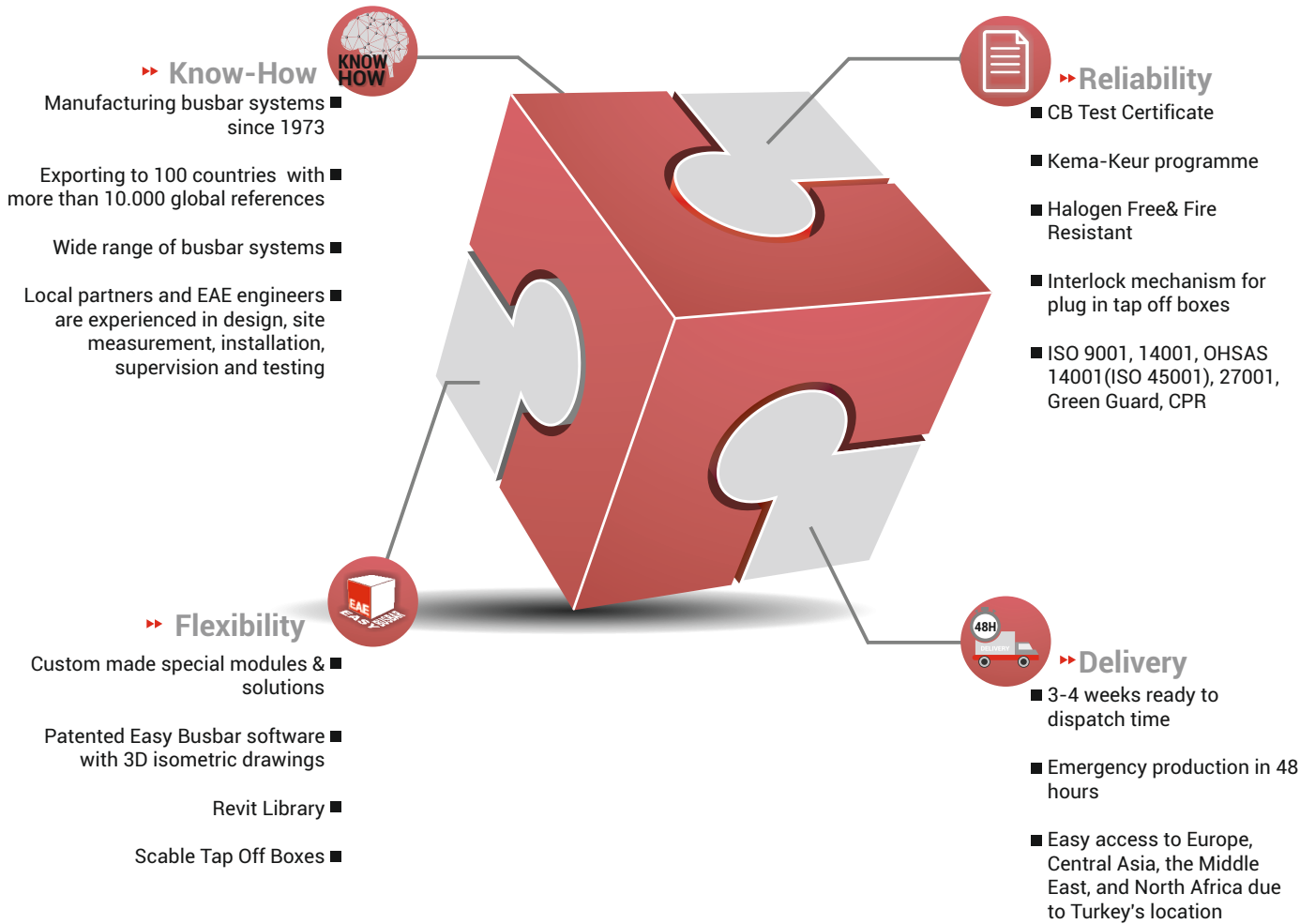
- Busbar Power Distribution Systems 25A....6300A
- Trolley Busbar Systems
- Fit-out Solutions
- Cable Management Systems











# WHY EAE BUSBAR SYSTEMS

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1. EAE has completed thousands of projects in many countries.
2. EAE has been manufacturing busbar systems since 1973 in Istanbul/Turkey and exporting to 100 countries. EAE manufactures busbar systems as per **ISO 9001 & 14001 & 27001 & OHSAS 18001** standards in 5 factories in Istanbul. EAE Group has a huge machinery facilities in 82,000m<sup>2</sup> in closed manufacturing area with modern and technological equipments for all accessories, modules and parts.
3. EAE can design any type of projects with 3D isometric drawings by using their patented Easy Busbar software which can be prepared our dealers as well. In addition EAE busbar modules are also available in Revit library.
4. EAE has the manufacturing capacity to provide **fastest delivery in 3-4 weeks time** from the factory as a first consignment.
5. EAE also has an emergency manufacturing team that can produce **in 48 hours for any immediate requirement** of a few pieces due to site held items or site damaged items during installation.
6. Each rating of EAE Busbars are tested according to **IEC 61439-1/6** individually for all required type tests and each rating is certified separately in last few years only by KEMA/DEKRA in Holland.
7. EAE KX compact busbar are also certified by KEMA/DEKRA in Holland as **CB Test Certificate** which combines all required type tests for each ratings in year 2010.
8. EAE KX compact busbars are **UL classified**.
9. The **KEMA -KEUR** program can be carried out at the EAE busbar factory.
10. EAE KX busbar systems are tested and certified against **fire resistance as per IEC 60331 and ISO 834**.
11. EAE power busbar products are Green Guard certified.
12. Rated insulation and operational voltage is **1000 Volt** for medium and high current power busbar systems.
13. Housing for KX is manufactured of aluminium extruded profile of 2.5mm thickness and coated with epoxy polyester powder painting.
14. The conductors of KX busbar system is minimum 99,9% electrolytic copper or EC grade aluminium. Conductors are **tin-plated** at joints in automated robotic inhouse plant with 20 steps of chemical treatments. Mill certificates of conductors from supplier (from France & Turkey) will be provided for every project's material.
15. The insulation system of the KX busbars consist of **epoxy coating + polyester film insulation** between conductors. The epoxy insulation is done with fully automated robotic plant at inhouse plant in same factory. Two different types and two layers of each insulation material protect the system securely for a long life operation.
16. IP protection of the housing is standard **IP55 min. IP 65 and IP67** products can also be manufactured for KX. KEMA/DEKRA test certificates for all IP ratings are available. EAE also manufactures the **IP 68** cast resin range (CR) 630A to 6300A.
17. EAE Tap Off boxes can be equipped with **any kind, brand and type of breakers** as per the consultant's specification. No need to depend on a certain brand. Dimensions of the tap Off boxes can also be changed as per site requirement.
18. Rating of plug-in type tap-off boxes is from 160A up to 630A. Plug-in type tap-off boxes have **electrical & mechanical interlock mechanism**, which ensures that tap-off box cannot be removed mechanically from the busbar when the box is at "ON" position. Jaws contacts of plug-in Tap Off box are silver-plated. Tap off boxes are manufactured of sheet steel and epoxy painted RAL 3020.
19. Plug-in point locations can be arranged at **any level/distance** of floor height precisely and any distance in millimeter of busbar pieces as per project's requirement. Tap Off boxes can be fixed at any precise height/distance required in electrical room, shaft or wherever required. Plug-in points have a hinged cover that provides IP55 protection on plug-in type busbars. A three meters standard plug-in busbar have 2 or 3 plug-in provisions in both sides. The cost of plug-in points (holes) are not priced separately and are included in the standard price.
20. EAE busbar systems are handled by our dealers with their experienced engineers in design, site measurement, installation supervision and testing.
21. All dealer's engineers have certificates from the EAE factory and authorised by EAE to provide all required services.

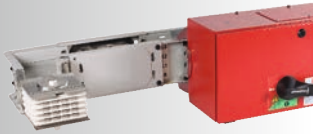


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**E-LINE MV**

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►► Medium Voltage Busbar Systems 12kV/24kV 950...5700 A



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**E-LINE KX**

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►► Compact Busbar Distribution System 400...6300 A

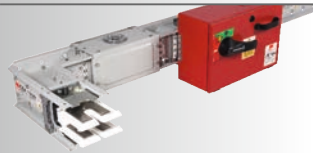


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**E-LINE CR**

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►► Compact Busbar Distribution System 630...6300 A



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**E-LINE KB**

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►► Compact Busbar Distribution System 800...6300 A



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**E-LINE KO-II**

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►► Plug-in Busbar Distribution System 160...800 A



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**E-LINE MK**

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►► Compact Busbar Distribution System 100-160-225 A

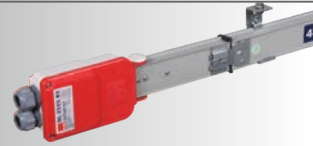


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**E-LINE KAP**

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►► Plug-in Busbar Distribution System 40-63 A



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**E-LINE DL**

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►► Lighting Busbar System 25-32-40 A



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**E-LINE FL/FLD**

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►► Indoor Busbar Distribution System 32 A



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**E-LINE TB**

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►► Multi Conductor Trolley Busbar System 35...250 A

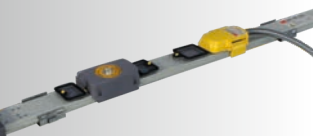


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**E-LINE DK**

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►► Underfloor Ducting Systems



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**DABLINE**

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►► Underfloor Busbar Systems 63-80 A



# BUSBAR CATALOGUES

## E-LINE MV ►► Medium Voltage Busbar System 12kV/24kV 950...5700 A

The E-Line MV Series Busbar Systems, as the newest addition to the busbar product range, is offered with 12 kV and 24 kV variants. It offers safe and efficient power transmission. MV CR is manufactured in a single body with Al or Cu conductors embedded in DURACOMP insulation which is a composite material of epoxy and pure silicon.

### Features;

- Products tested in accordance with the international standards
- Outdoor IP 68 level protection
- Corrosion-resistant
- Chemical-resistant
- Pest-resistant
- Usable in tropical environments
- High mechanical strength
- Without stack effect
- Highly resistant to short circuit
- Ensures less voltage drop in comparison with cabled systems
- UV-resistant
- No requirement for maintenance
- High short circuit resistance due to compact structure
- Special design to occupy minimum space based on the running amperage rank

### CURRENT RATINGS

#### ►► For 12kV Copper Conductors:

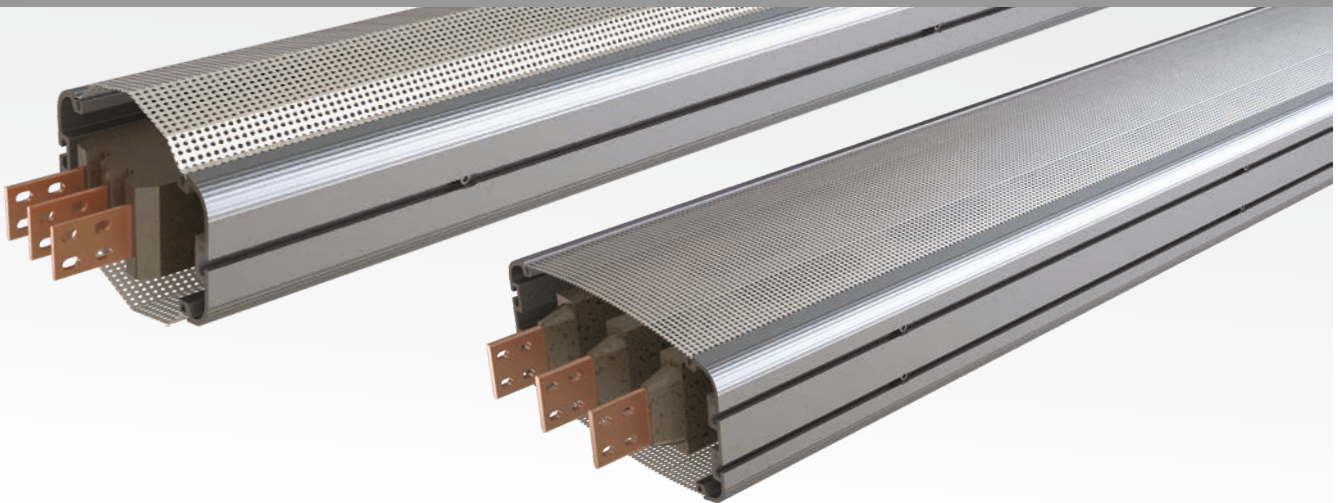
950A / 1150A / 1350A / 1650A / 2250A / 2750A

#### ►► For 24kV Aluminium Conductors:

1500A / 2000A / 2500A / 3000A

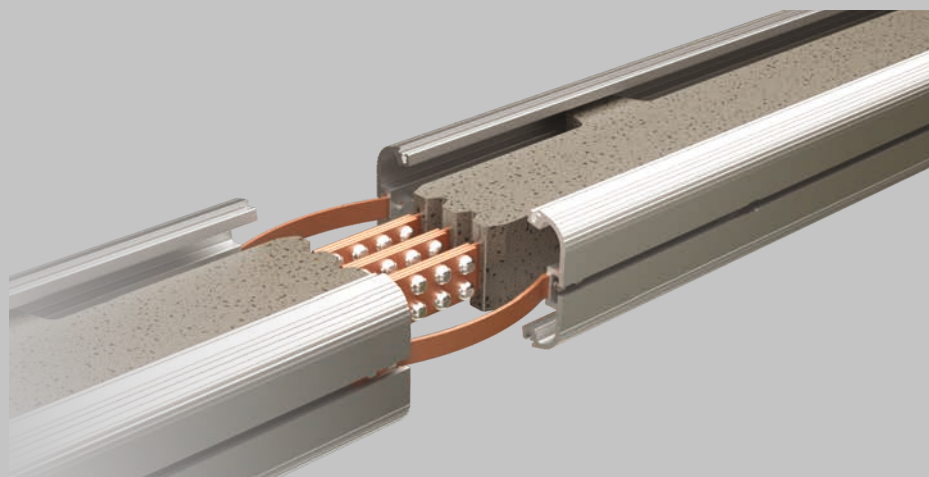
#### ►► For 24kV Copper Conductors:

1800A / 2100A / 3200A / 4000A / 5000A / 5700A



### Applications:

- Outdoors
- Industrial buildings
- Petrochemical Industry
- Areas with flood risk
- Oil and natural gas Industry
- Power Generation Industry
- Data centers



The perfect design for high current busbar systems is the compact structure where tin plated, insulated conductors are tightly placed into the sheet metal housing. The compact structure is reliable, robust and functional.

**Features;**

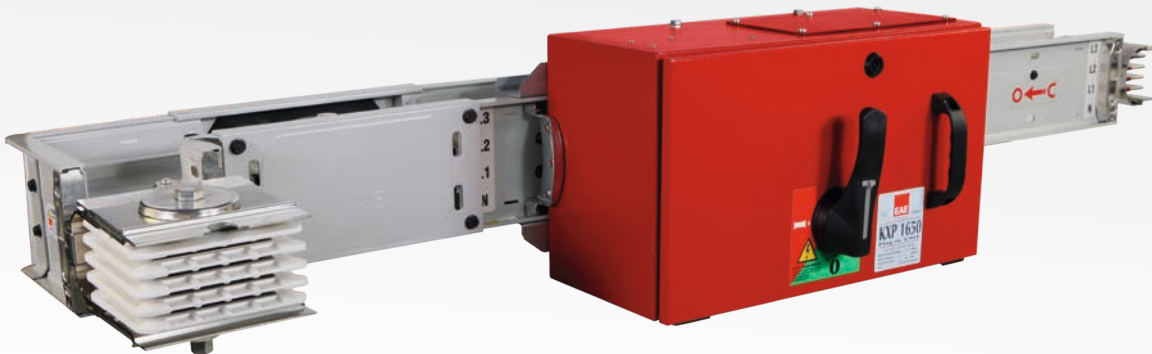
- Epoxy coated aluminium or copper conductors are tin plated and insulated with B class polyester film
- Fire resistance as per IEC 60331
- Epoxy polyester, RAL 7038, painted extruded aluminium housing
- 4, 4½, 5 or 6 conductors
- IP 55 / IP 65/ IP 67
- Ready-made standard components
- Ability to supply energy either from the joints or from the tap-off points (bolt-on or plug-in)
- High electrical and mechanical endurance
- Fast, easy and reliable installation by one bolt joint construction
- Low voltage drop
- Lower total installation cost
- Compact structure
- Silver plating and F/H class polyester film are available

**CURRENT RATINGS**►► **For Aluminium Conductors:**

400/500/630/800/1000/1250/1350/1600/2000/  
2500/3150/3200/4000/5000A

►► **For Copper Conductors:**

550/650/800/1000/1250/1350/1600/2000/2250/  
2500/3300/3600/4000/4250/5000/6300A

**Applications:**

- Airports
- All Industrial Premises
- High Rise Buildings
- Textile Industry
- Automobile Industry
- Hotels
- Shopping Malls
- Oil&Gas
- Hospitals
- Data Centres
- Railways
- Shipyards



# BUSBAR CATALOGUES

## E-LINE CR ►► Compact Busbar Distribution System 630...6300 A

The body of the CR busbar is formed using DURACOMP a composite material of epoxy resin with pure silicon minerals, has high temperature durability, mechanical work features and capability of protecting E-LINE CR busbar from external influences.

### Features;

- Tin plated conductors IP68 Protection Class
- 4/5 or 6 Conductors
- Clean Earth Option
- 3 Hours Circuit Integrity Under Fire, Qualified to IEC 60331-1
- Seismic Compliance; Qualified to IEC 60068-3-3; IEC 60068-2-5 and IEEE 693
- ATEX Certified

### CURRENT RATINGS

#### ►► For Aluminium Conductors:

630/800/1000/1250/1600/2000/2250/2500/  
3000/3200/3600/4000/5000A

#### ►► For Copper Conductors:

800/1000/1250/1600/2000/2500/3000/3200/  
3600/4000/5000/6300A



### Applications:

- Between Switch Boards & Transformer Galleries
- Petro-Chemical Plants
- Nuclear Plants
- Cement Plants
- Power Plants
- Harbours & Shipyards
- Food Industries
- Underpasses & Tunnels

IP55  
E-LINEKX  
400...6300A

IP68  
E-LINECR  
630...6300A

### E-LINE CR-KX Transition Module

CR-KX transition module offers the possibility of reducing cost and improving available substation roof space.



The perfect design for high current busbar systems is the compact structure where tin plated, insulated conductors are tightly placed into the sheet metal housing. The compact structure is reliable, robust and functional.

**Features;**

- Ready-made standard components
- Ability to supply energy either from the joints or from the tap-off points (Bolt-on or plug-in)
- High electrical and mechanical endurance
- Fast, easy and reliable installation by one bolt joint construction
- Low voltage drop
- Lower total installation cost
- Compact structure
- Aluminium or copper conductors are tin plated insulated with B class polyester film and extruded polypropylene sleeve polyester film
- IP 55
- 4, 4½ or 5 conductors

**CURRENT RATINGS**►► **For Aluminium Conductors:**

800/1000/1250/1600/2000/2500/3100/3200/  
4000/4250/5000A

►► **For Copper Conductors:**

1000/1250/1600/2000/2250/2500/3000/3600/  
4250/4400/5300/6300A

**Applications:**

- Industrial Premises
- High-rise buildings
- Textile Industry
- Car Industry
- Shipyards
- Hotels
- Shopping Centres
- Business Centres
- Transformer Panel Connections
- Main Panel to Sub-Panel
- Hospital
- Data Centres



# BUSBAR CATALOGUES

## E-LINE KO-II ►► Plug-in Busbar Distribution System 160...800 A

"E-Line KO Series" medium range busbar systems provide suitable solutions for electricity transmission and distribution in medium-sized buildings or industrial facilities. They can be used in horizontal or vertical applications. Tap off box solutions comprise sheet metal boxes with circuit breakers, or plastic boxes for small currents which are compatible with Miniature Circuit Breakers

### Features;

- Prefabricated modules
- Tap off points at every 25 cm.
- Aluminium or copper conductor
- 4, 4 1/2 or 5 conductors
- Tin plated aluminium or copper conductors
- Clean earth option
- IP 55 Protection level

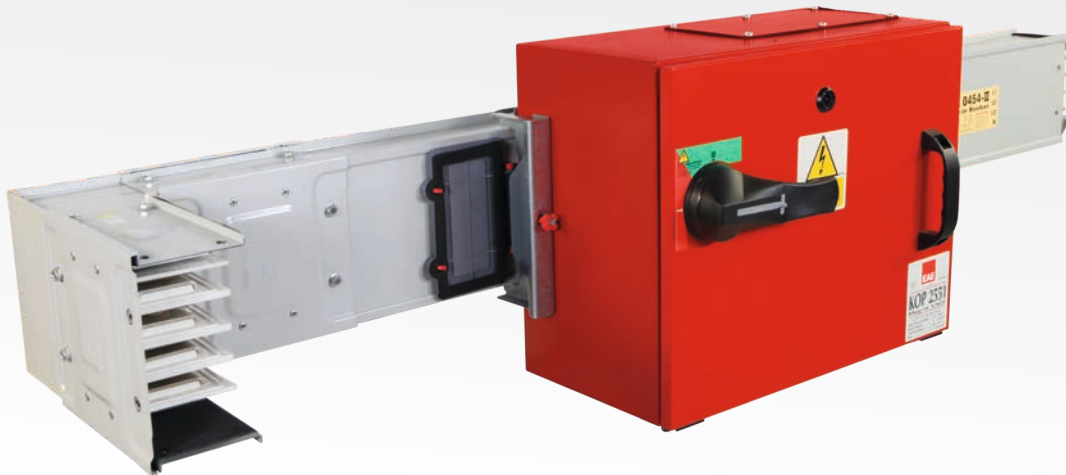
### CURRENT RATINGS

#### ►► For Aluminium Conductors:

160/250/315/400/500/600/630/800A

#### ►► For Copper Conductors:

250/315/400/600/800A



### Applications:

- Production areas in factories
- Textile factories
- Furniture factories
- Automotive factories
- Automotive sub-industries
- Malls
- Exhibition Areas
- High-rise buildings
- Hotels
- Hospitals
- Business Centres
- Data Centres



The small power range busbar systems of E-Line MK series provide flexible and cost-effective solutions for the transmission and distribution of electricity in small-sized enterprises, workshops and industrial facilities.

### Features;

- 4 and 5 conductors
- Clean earth option
- Tin plated aluminum or copper conductors
- Block joint
- Tap off points at every 25cm
- Hinged plug-in point IP covers
- Flexible, multi functional elbows
- IP 55 protection level

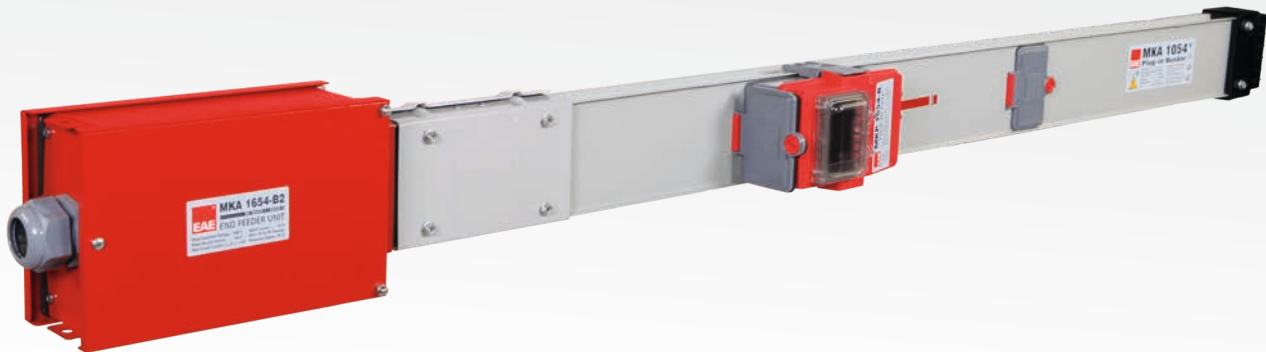
### CURRENT RATINGS

#### ▶▶ For Aluminium Conductors:

100/160A

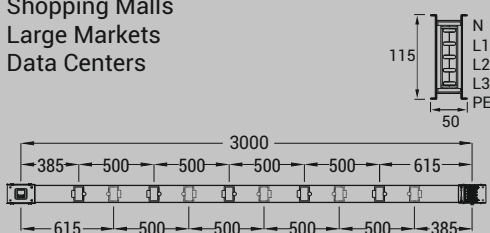
#### ▶▶ For Copper Conductors:

100/160/225A



### Applications:

- Small enterprises
- Local production areas in factories
- Workshops
- Textile facilities
- Automotive facilities
- Automotive sub-industries
- Small-sized industrial facilities
- Shopping Malls
- Large Markets
- Data Centers





# BUSBAR CATALOGUES

## E-LINE KAP ►► Plug-in Busbar Distribution System 40-63 A

Small power range busbar systems of E-Line KAP series provide economical solutions for the energy needs of small enterprises powering small machinery, sewing machines, hand tools, machine tools, etc.

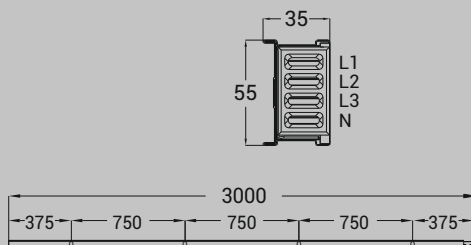
### Features;

- Electrolytic copper conductors are continuously tin plated and insulated along their full length. (Except tap-off positions) with a self extinguishing plastic sleeve.
- Quick, easy and reliable mounting.
- 5th conductor option.
- Plugs with phase indication
- Tap-off plugs and boxes; are designed to prevent improper use of busbar.
- Silver-plated joint contacts are designed to minimise joint contact resistance.
- Tap-off points at every 75cm (42cm on request).



### Applications:

- Small production areas in factories
- Ready-made clothing facilities
- Workshops
- Small industrial facilities
- Malls



## BUSBAR CATALOGUES

### E-LINE DL ►► Lighting Busbar System 25-32-40 A

#### E-LINE SL

#### E-LINE DL-DALI

#### E-LINE DL-DIM

DL Lighting busbar can be configured with more than one circuit. Utility and emergency lighting power supply can be distributed using only one busbar run

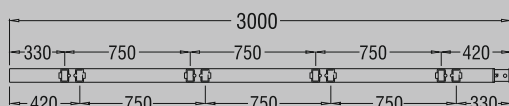
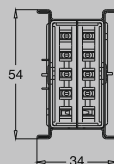
#### Features;

- Maximum number of conductors : (5+5)
- Clean earth and double neutral wiring configurations available
- Continuously tin plated electrolytic copper conductors
- Hinged plug-in point IP protection covers
- IP55 protection degree
- Jawed tap off contacts
- Plug-in points at every 75cm on both sides (8 in total)
- Robust structure
- Tap off plugs with phase indicators
- Continuously insulated conductors
- All ratings tested according to IEC 61439-6



#### Applications:

- Warehouses
- Workshops
- Car Parks
- Supermarkets
- Shopping Malls
- Raised Floor Applications



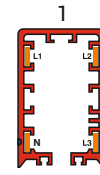
# BUSBAR CATALOGUES

## E-LINE TB ►► Multi Conductor Trolley Busbar System 35...250 A

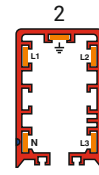
"E-Line TB Range Trolley Busbar Trunking Systems" are designed to provide power for moving machines. The busbar's brush (carbonized) trolley tap off box is mechanically connected to moving systems and provides uninterrupted power by moving with the machine.

### Features;

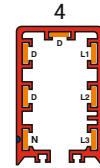
- Current ratings: 35A/63A/80A/100A/125A/160A/200A/250A
- Standard 4 or 7 conductor. 3, 5, 6 conductor (optional)
- Continuous copper conductors
- PVC enclosure
- 4m standard length



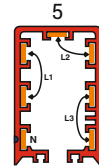
Standard  
4 conductor



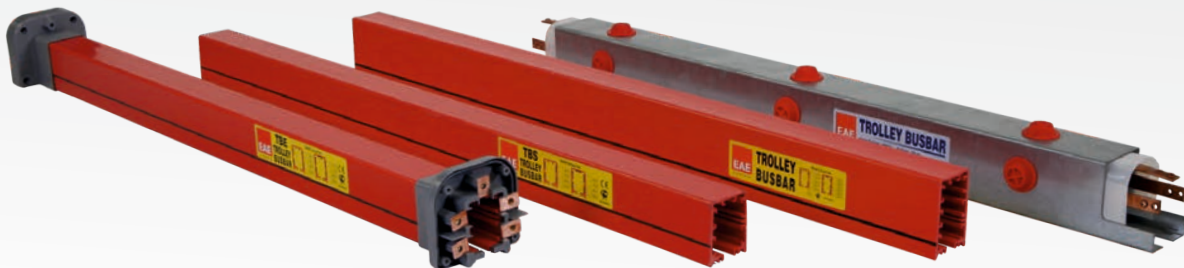
Optional  
5 conductor



Optional 7 conductor;  
3 phase + neutral +  
3 conductor for data



Standard 7 conductor;  
parallel 2 conductors  
per each phase + neutral



### Applications:

- Hoists and Overhead Cranes
- Textile industry
  - Cutting tables
  - Pastal machines
- Movable manufacturing Lines
- Automated stores
- Other similar areas



Aesthetic, safe, practical and flexible structure eliminating cable mess.

E-LINE FL Indoor Busbar Trunking Systems

E-LINE FL Indoor Busbar Trunking Systems can be mounted on any structure or surface using brackets. They can be used separately for power or UPS sockets requirements when needed.

Stylish and special UPS sockets with LED illumination and various colours can be installed in any position spot without the need for a hand tool.

**Features;**

- Power or UPS sockets; 16A, 250V (protected)
- FL Busbar; 32A, 250V Operating voltage
- IP2X Protection Class
- Use of sockets in various colours for mains or UPS circuits
- Single phase circuit (3 conductors); L+N+(PE) (65X28 mm)



**Applications:**

- Offices
- Workshops
- Stores
- Hospitals
- Laboratories
- Airports
- Schools





# BUSBAR CATALOGUES

## E-LINE DK ▶▶ Underfloor Ducting Systems

## DABLINE ▶▶ Underfloor Busbar Systems 63-80 A

Underfloor Power Distribution Systems provide aesthetic, safe and secure cable distribution by eliminating the cable clutter in offices and similar working environments. The system can easily be adapted to for relocations or capacity increases in offices and work places.

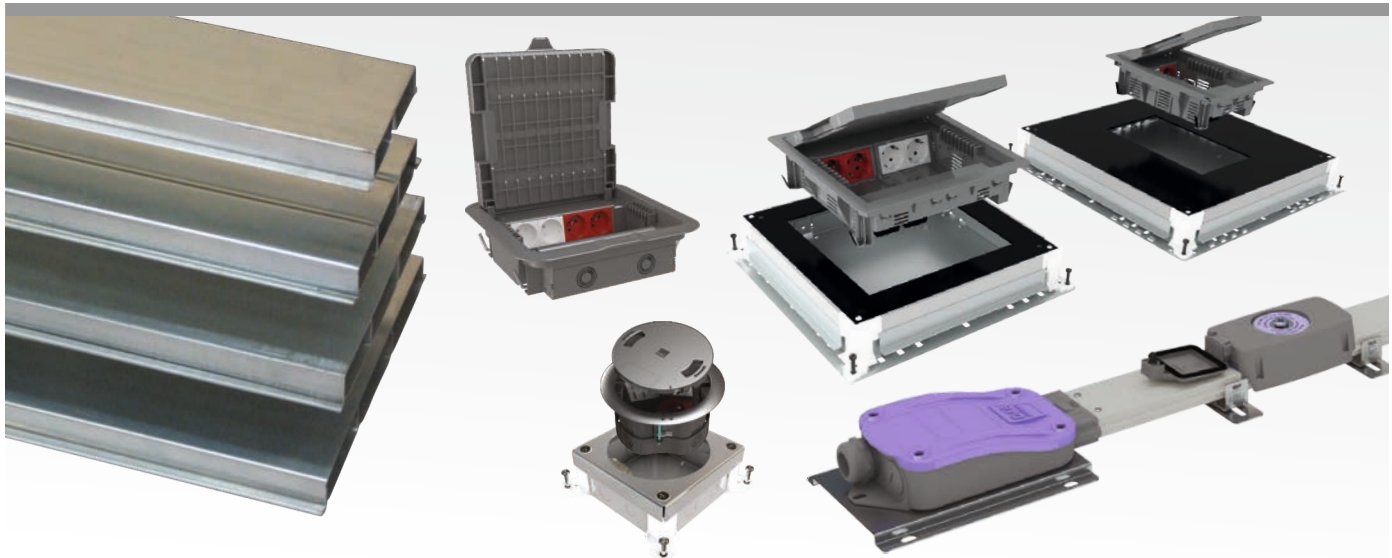
### Features;

- Easy Planning
- Possibility of multiple outlet
- Easy and quick cable ducting
- Robust construction
- User friendly design
- Reliable cable management

DABLINE busbar systems have colour coded conductor options , and are used for raised floor applications in offices. The small size of DABLINE makes it possible to install the system into very shallow voids down to 65mm floor height.

### Features;

- 1200 - 2400 - 3000 mm optional straight lengths
- Plug-in outlets every 300mm or 600mm option
- IP55 Protection Degree
- Halogen Free plastics up to 960 °C Fire rating
- Keyed Tap-off Plugs
- The spring contacts of busbar are silver plated
- In case of impact with the body of the busbar, safety of the system is ensured with the conductors being fully insulated along their whole length.
- Earthing continuity and installation at joint point are provided by using single bolt.
- Each busbar length is complete with integral floor fixing brackets.



### Applications:

- Banks
- Shopping Centres
- New Generation Offices
- Hotels
- Hospitals
- Conference Centres
- Educational Building
- Cinemas and theatres
- Tourist Facilities etc.



Products ensure high ease of use, depending on your personal needs and preferences with modular type power and low voltage sockets. Products are 7 different types, according to size in socket needs, universal and modular design makes it suitable to accept any brand of socket. Built-in type or free standing on the office desk and furniture; offers flexible and definitive solution for mains, UPS, data, telephone and multimedia needs.

### Features;

- The E-LINE SMART range offers comfort, style and
- functionality for users in living and working
- environments; available equipped or non- equipped to
- accept power and data sockets.
- Compatible structure with offices, meeting rooms, every
- desk and in specific work areas and
- open office furniture
- Energy and low-voltage sockets can be used optional wide cable terminations for today's office
- needs
- Modular structure and innovative design with anodized
- aluminium body and polycarbonate covers,
- 8, 10, 12, 14, 16 and 18 modules are standard production capacity. Aesthetics and high-performance products can be produce optional comfortable with special production opportunities in different sizes and equipment



### Applications:

- Banks
- Office and work places, administrative buildings
- Hotels
- Hospitals
- Schools, classrooms
- Shopping Malls
- Conference Halls
- Call Centres
- Trading Rooms
- Cinema and theatre buildings
- Industrial Plants



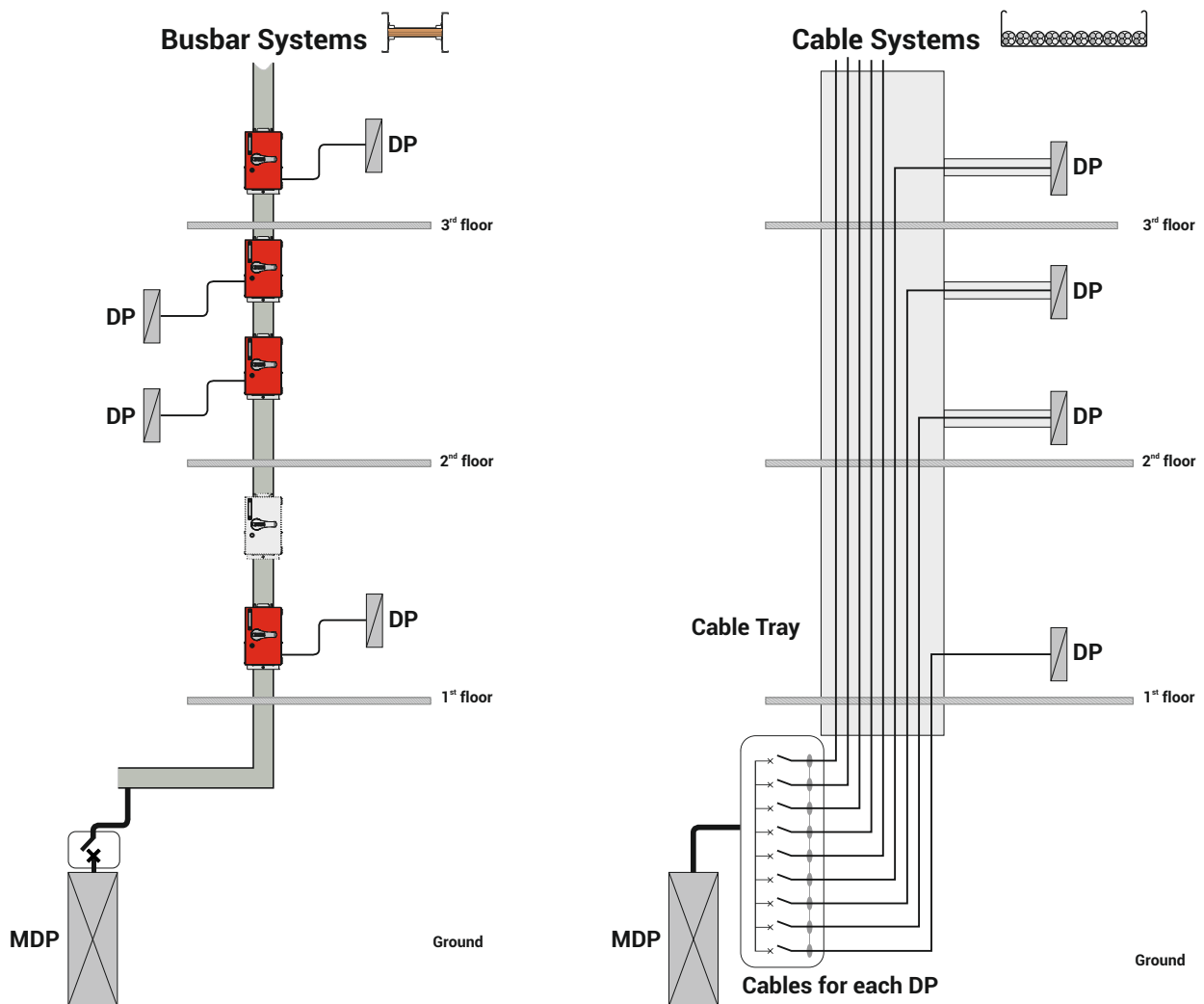
# BUSBAR VERSUS CABLE INSTALLATION

EAE Busbar systems are prefabricated electrical distribution systems consisting of protective enclosure, copper or aluminium conductors, insulation, fittings and tap off boxes equipped with devices and accessories

Today designers of electrical installations often have to manage challenges over and above that of the electrical installation design itself:

- Provide **cost effective** solutions
- Work with **less space** for the electrical distribution system
- Meet ever **increasing power** requirements
- Allow for **high current demand** relocating within buildings e.g. process expansion, IT upgrades, etc.
- Provide a **high integrity** supply

## CABLE - BUSBAR COMPARISON



**Busbar systems can be much more economical than Cable Systems;**

- **Busbar** can offer **lower** material costs than cable systems
- **Complete Busbar** run can be **installed in the time** it takes to install a single cable tray.
- **Cable** installation is more labour intensive
- **Semi-skilled** labour can be used to install busbar systems
- Support systems can be less robust due to **lower weight** of busbar
- Busbar systems are **fully demountable & recyclable**





**Panel Applications**



**Distribution Applications**



**Generator Applications**



**Transformer Applications**



**Outdoor Applications**



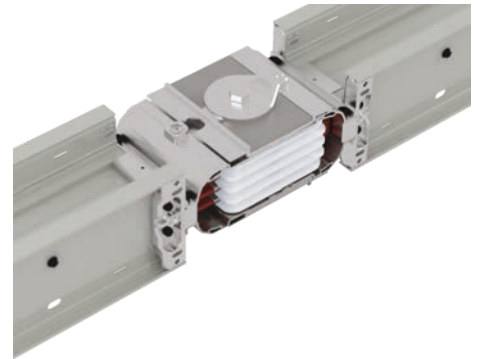


# EAE INSTALLATION MANUALS

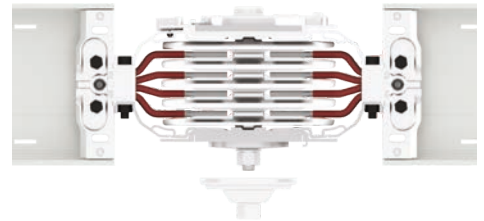
## Installation

Maintenance-free modular structure provides quick, low cost, safe and portable installation.

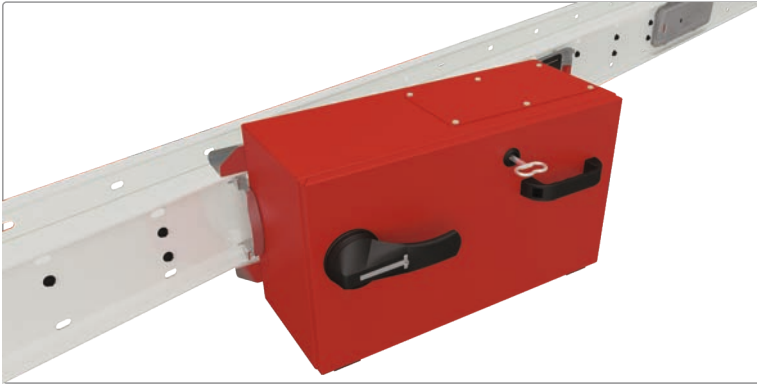
Self-aligning pin, ensures proper positioning of the joint for installation with no need to measure for alignment.



**SAFE AND RELIABLE  
ONE BOLT CONNECTION**



## TAP-OFF UNITS



Plug-in tap off box allows drawing power at any plug-in point without any interruption on the main busbar line.  
(See page 7, clause 19)



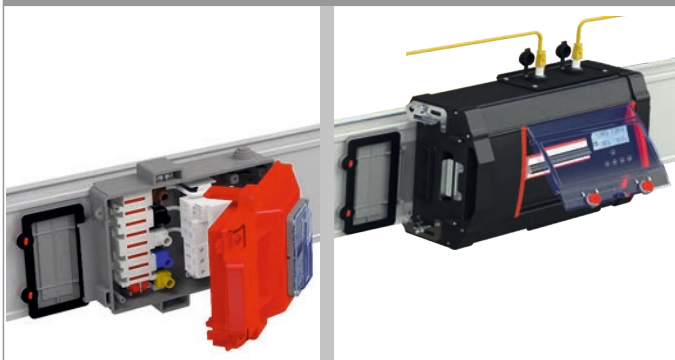
Bolt-on tap off is a unique technology to draw power up to 1000 A at block joints providing flexible solution.

EAE tap off boxes are compatible with World wide brands of circuit breakers and switches

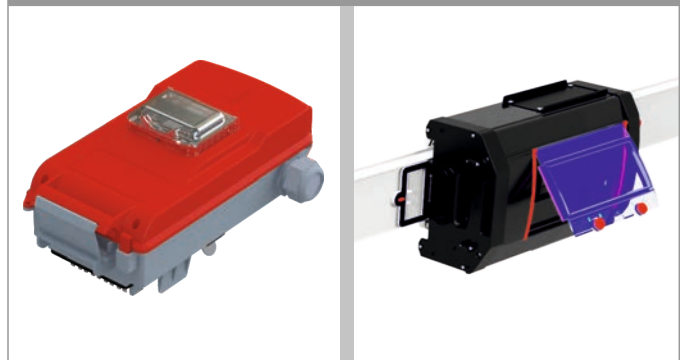
**All metal enclosure tap-off boxes can be supplied;**

- With any type, model, brand of breakers
- With any gland type or with a blank gland plate.
- Any required colour of housing
- Has an electrical interlock mechanism
- Has a mechanical interlock mechanism
- Has IP55 protection degree
- Has tulip contacts made of silver plated copper
- Can be tailor made to any size

### KO-II TAP OFF UNITS



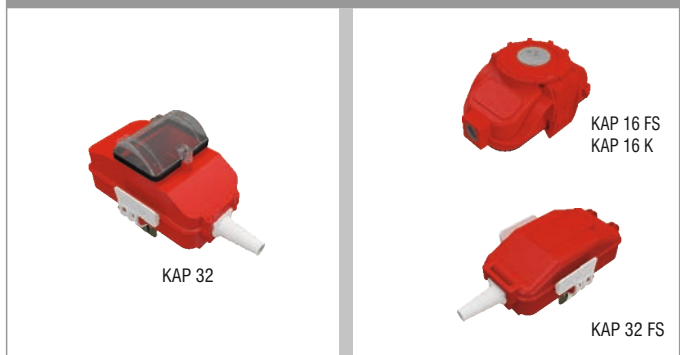
### MK TAP OFF UNITS



### DL TAP OFF UNITS



### KAP TAP OFF UNITS



# INTERNATIONAL CERTIFICATES

## Certification

IEC 61439 – 6 relates to Busbar systems, replacing and adding to requirements of IEC60439-2 such as resistance to corrosion, verification of thermal stability of enclosures, resistance to mechanical impact, electrical resistance tests, impulse withstand voltage and various other electrical tests such as fault loop impedance.

The IECEE CB Scheme is an international system for mutual acceptance of test reports and certificates dealing with the safety of electrical and electronic components, equipment and products. Busbar systems should have a CB Test Certificate, which combines all the required type tests for each ratings according to IEC 61439-6.







## ■ Fire Resistance Tests IEC 60331-1 (Circuit Integrity Under Fire for E-LINE KX)

- IEC 60331-1 1000°C-3 Hours - BRE, UK
- IEC 60331-1 950°C-3 Hours – TUV, Singapore
- IEC 60331-1 1000°C-2 Hours - DEKRA, Holland
- BS 8491 830°C-2 Hours - BRE, UK  
(Sprinkler Water+Mechanical Impact)
- EN 50399 Low Heat and Low Smoke Release  
B1/S1 dO – Dekra, Holland

## ■ Fire Resistance & Circuit Integrity Tests for E-Line KX with Plug in Tap Off Box

- IEC 60331-1 830 C - over 3 hours, Magnetic  
MCCB - DEKRA, Holland
- IEC 60331-1 830 C - over 3 hours, NH Fuses -  
DEKRA, Holland

## ■ Flame Propagation Test IEC 60332-3 (IEC 61439-6,10.101)

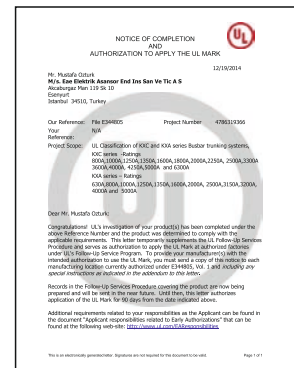
## ■ Fire Barrier Test - 2 Hours ISO 834-1 (IEC 61439-6,10.102)

## SEISMIC



- ▶▶ Seismic Test IEEE 693
- ▶▶ Seismic Test EN 60068-3-3
- ▶▶ Qualified in Zone 4 ( worst case  
seismic applications)

## UL Classification



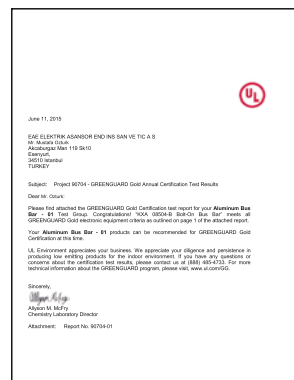
## KEMA KEUR - DEKRA



- ▶▶ Continuous production  
monitoring program.

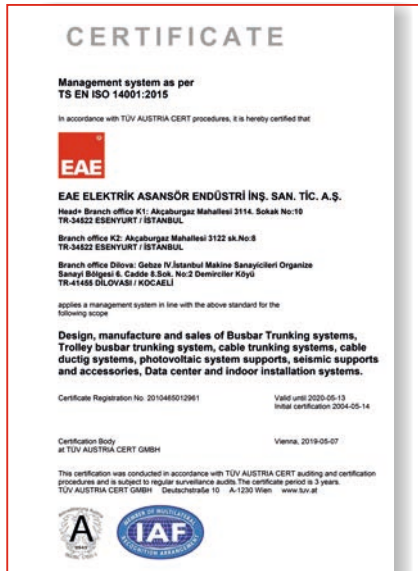
Acceptable for use in ◀◀  
environments such as  
schools and healthcare  
facilities.

## GREEN GUARD

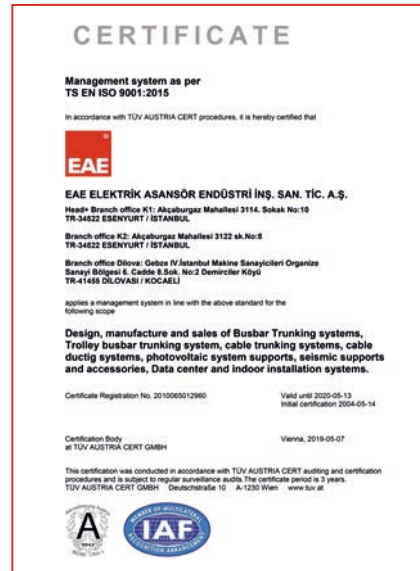




# QUALITY CERTIFICATES



ISO 14001 Management System



ISO 9001 Management System



ISO 27001 Management System



OHSAS 18001 Management System



Leed - GOLD Certificate

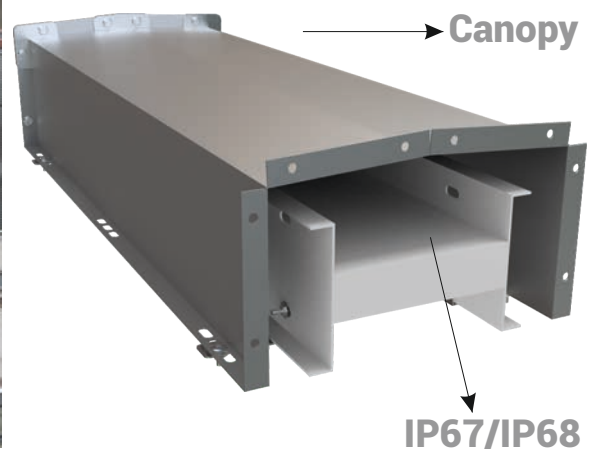


## Outdoor Applications

EAE Cast resin busbar is suitable for extreme conditions and outdoor applications. CR busbar offers a wide range of current ratings for horizontal or vertical mounting with IP 68 protection degree.

EAE- Line CR busbar is ex-proof, fire resistant, seismic compliant and suitable to connect with E-Line KX busbar systems by E-Line CR-KX Transition Module.

CR-KX transition module offers the possibility of reducing cost and improving available substation roof space.





# SEISMIC SUPPORT SYSTEMS & FIRE BARRIER

## Seismic Support Systems



EAE seismic support systems offer perfect solutions of installations for earthquake protection. Seismic supports which can be applied on all kinds of installations ensure easy and quick mounting. Thanks to the accessories designed for steel-beam and space frame connections.

## Busbar Fire Barrier

Fire barriers are used to prevent the transition of heat and smoke from one zone to another for a period determined by the related standards 60-90-120 minutes.

Main goal is to stop the heat and smoke passing from one area to another and to prevent the propagation of fire.

In this regard, EAE has designed and developed a special fire barrier module for wall and floor openings to protect fire & gas propagation.



Vertical Applications



Horizontal Applications

Test Report No. 7191048216-MEC12-ST  
dated 03 Dec 2012

TUV  
FIB Singapore

**RESULTS:**

Clause No.	Test Description	Results	Requirements
11.1	Resistance to fire alone - (Category C) Flame temperature : 950 ± 40°C Test Voltage : 1000V Test duration : 3 hours	Complied	No fuse shall be ruptured nor any lamp extinguished during the test.

**CONCLUSION:**  
Fire alone test  
The requirement of Clause 11.1 of BS 6387:1994 was met for category C for the EAE 1800A aluminium plug-in feeder busway, tested with conductor in a vertical orientation when taking into account the specified deviations from the test procedure.

**REMARKS:**

- The British Standard 6387:1994 is applicable to cable rated at voltages not exceeding 450/750V. The voltage applied to the test in this document were 1000V as requested and agreed by the client.
- BS 6387:1994 is a standard to test installed fire integrity of some sizes and types of electric cable. Aluminium plug-in feeder busway may be tested to BS 6387:1994 with appropriate deviations from the test procedure in order to accommodate the fundamental differences in the products.
- Testing performed on the Aluminium plug-in feeder busway was limited to conformity with clause 11.1 of BS 6387:1994 under category C. Alterations in supporting system were made as shown in photographs 1 and 2.

**TEST WITNESSES:**  
The test was witnessed by the following representatives:

SMB Hanwell Pte Ltd	Mr. Aw Eng Boon
	Mr. Kent Chia
Sharon Joo G Senior Engineer	Tan Kim Hong Assistant Vice President (Fire Property) Mechanical Centre

Page 3 of 6

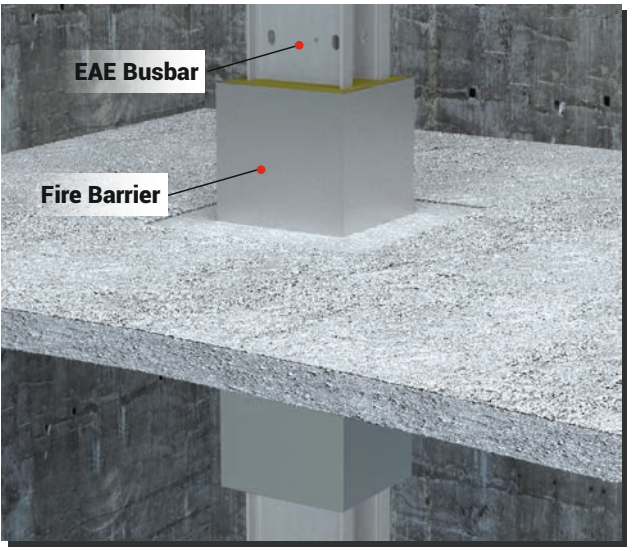


Figure 1



### **E-LINE TKS**

▶▶ Pre-galvanized or Painted Trunking System



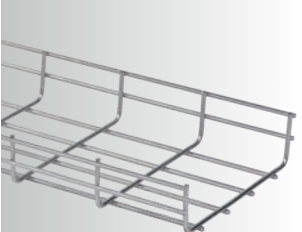
### **E-LINE CT**

▶▶ Range Hot-Dip Galvanized Cable Trays



### **E-LINE KC**

▶▶ Range Hot-Dip Galvanized Cable Trays



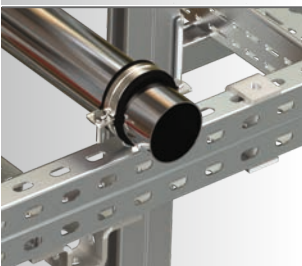
### **E-LINE TLS**

▶▶ Wire Mesh Cable Tray Systems



### **E-LINE AA**

▶▶ Support System & Accessories



### **E-LINE M-FIX**

▶▶ Electro-Mechanical Support and Suspension Systems

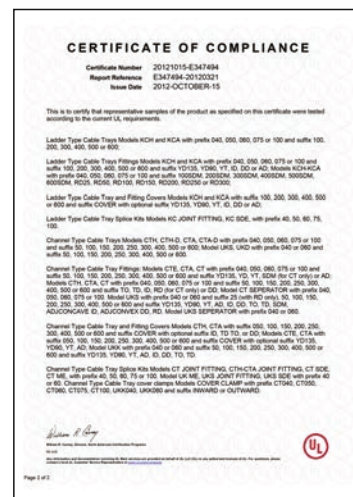


### **E-LINE KCA-OG**

▶▶ Oil&Gas&Industrial Cable Ladder Systems



# EAE CABLE MANAGEMENT SYSTEMS CERTIFICATES



■ ISO 9001 & 14001

■ SEISMIC TEST CERTIFICATE

■ FIRE E-90

■ TSE TSEK

■ KEMA

■ CE DECLARATION

■ GOST

■ UKRAINE STANDARDS

■ LEED-GOLD

■ UL

**EAE busbars are running succesfully in thousands of projects from different sectors in more than 100 countries.**

►► **Data Centres (EAE Business Unit)**

►► **Oil&Gas Industries (EAE Business Unit)**

►► **Industrial Plants**

Textile Industry / Automotive Industry / Manufacturing Facilities / Heavy Industry

►► **Energy Utilities**

Power Plants / Solar Plants / Cooling Plants

►► **Commercial Buildings**

Office Towers / Residential Towers / Hotels / Shopping Malls /

►► **Service Compounds**

Hospitals / Universities / Public Utilities / Government Buildings

►► **Transportation Infrastructure**

Highway Tunnels / Railway Tunnels / Metro Stations/ Airports

►► **Oil&Gas Industries (EAE Business Unit)**



SHAH GAS –ABU DHABI, U.A.E



MOZYR REFINERY , BELARUS

- |   |  |   |
|---|--|---|
| ➤ SONATRACH GAS PROCESSING FACILITY, ALGERIA      | ➤ CENTRALE A TURBINES A GAZ-MONAGUIA, TUNUSIA      | ➤ LUKOIL BOURGAS REFINARY, BULGARIA       |
| ➤ AL DHABBIYA GAS FACILITIES TR STATION, U.A.E    | ➤ MARINE XII BLOCK OFF SHORE PLATFORM, CONGO       | ➤ SLOVNAFT, SLOVAKIA                      |
| ➤ MOBIL OIL PETROCHEMICAL PLANT, UK               | ➤ SOCAR STATE OIL COMPANY HEAD OFFICE, AZERBAIJAN  | ➤ SICON OIL, LIBYA                        |
| ➤ ELF REFFENERIE, GERMANY                         | ➤ SOUTH YOLOTEN GAS FIELD PROJECT, TURKMENISTAN    | ➤ ADNOC HEAD QUARTER-ABU DHABI, U.A.E     |
| ➤ RAFFINADERJI SINES, PORTUGAL                    | ➤ TUPRAS KIRIKKALE HYDROPROCESSING UNIT, TURKEY    | ➤ TUPRAS ALIAGA REFINERY, TURKEY          |
| ➤ GAS PROCESSING PLANT TURKMENBASHI, TURKMENISTAN | ➤ AL RUMEITHA GAS FACILITIES TR STATION, U.A.E     | ➤ SIPCHEM, JUBAIL, SAUDI ARABIA           |
| ➤ SHAH GAS DEVELOPMENT PROJECT-ABU DHABI, U.A.E   | ➤ RABAB HARWEEL INTEGRATED PROJECT (ONGOING), OMAN | ➤ ABU DHABI PETROCHEMICAL REFINERY, U.A.E |
| ➤ MOZYR RAFINERY, BELARUS                         | ➤ PETKIM ALIAGA REFINERY, TURKEY                   | ➤ TUPRAS IZMIT REFINERY, TURKEY           |
| ➤ FRAMES VIURA, SPAIN                             |  | ➤ MOZYR REFINERY RTP-13&21, BELARUS       |
| ➤ BIDCO OIL, MADAGASGAR                           |  | ➤ TECHNIC, ITALY                          |
|   |  | ➤ TOTAL ANTVERPEN, BELGIUM                |
|   |  | ➤ CIVIL REFINARY-EMCO-ABU DHABI, U.A.E    |

# BUSBAR FUNCTIONAL AREAS & MAJOR REFERENCES

## ►►Data Center (EAE Business Unit)



**CISCO SYSTEMS-BRUSSELS, BELGIUM**

- T-MOBIL SERVER CENTER FRANKURT, GERMANY
- SOCIAL DATA CETRE-LULEA, SWEDEN
- TELECOMS ROSEBANK, SOUTH AFRICA
- BNP BAILLI ROMAINVILLER, FRANCE
- IBM TECHNO BASE BANGALORE, INDIA
- DSP 3' DATA CENTRE-MERCURY ENGINEERING, RUSSIA
- DIGIPLEX-OSLO, NORWAY
- FAREHAM DATA CENTER, UK
- ZENIUM DATA CENTRE-ISTANBUL, TURKEY
- CISCO-AMSTERDAM, HOLLAND



**DATA CENTER EQUINIX AMS3, HOLLAND**

- CITY BANK, THAILAND
- MUSCAT INTERNATIONAL AIRPORT MC3, OMAN
- IBM, SWITZERLAND
- DATACENTER DTO, MINISTRY OF DEFENCE, HOLLAND
- KHALIFA DATA CENTRE-ABU DHABI, U.A.E
- TELECOM APRILLA-ROME, ITALY
- HYDRO 66 DC, SWEDEN
- GREENWICH VIEW DATA CENTRE, LONDON, UK
- DATA CENTER VODAFONE, ARNHEM, HOLLAND
- IBM / PHOENIX, BELGIUM



**GALILEO DATA CENTER-LONDON, UK**

- BRITISH GAS, UK
- SEC DATA CENTER MUNICH, GERMANY
- CITY BANK, TAIWAN
- MALTA DATA CENTRE, MALTA
- INVESTMENT BANK, JORDAN
- GREEN DATA CENTER, SWITZERLAND
- TELECITY-PHASES 1&2-COURBEVOIE, FRANCE
- DATAPLEX DATA CENTER, HUNGARY
- HANNOVER DATA CENTER, GERMANY
- CED FIRENZE, ITALY-CED TOSCANA, ITALY
- MOBILY ABHUR JEDDAH, S.ARBABIA

## ►►Industrial Plants

### ►►Textile Industry / Oil&Gas Complexes / Automotive Industry / Manufacturing Facilities / Heavy Industry



**CALIK TEXTILE FACTORY, TURKMENISTAN**

- YOUTH GROUP, BANGLADESH
- TEXPRO / MLT, BRASIL
- LCWAIKIKI RUBYRED GARMENTS, EGYPT
- PAPIERFABRIK, GERMANY
- PAGE APPARELS, INDIA
- EAGLE OTTAWA-SZOLNOK, HUNGARY
- C&A, BUSCHS-AARAU, NORWAY
- UNITED ARYAN, KENIA
- RADICI MEXICO FACTORY, MEXICO
- RAMSTOR LENINGRADSKIY, RUSSIA
- TIMEX GARMENTS-KATUNAYAKE, SRI LANKA



**ARTISTIC MILINERS, PAKISTAN**

- AL HALEBI TEXTILE, SYRIA
- ARTISTIC MILLINERS PVT LTD(AM-8), PAKISTAN
- HAMPY CLOTH TEXTILE, LEBANON
- CBA-GAVINO GARMENT, ETHIOPIA
- FILANDA 1992, ITALY
- R&T KNIT TEXTILE, MARITIUOUS
- ZAMAN TEXTILE MILLS LTD, PAKISTAN
- POLY TEXTILE, LEBANON
- SMART SHIRTS LANKA LTD, SRI LANKA
- VIYELLATEX GROUP, BANGLADESH
- INDIAN DESIGNS, INDIA



**UNITEX INTERNATIONAL, INDIA**

- GOLDEN WEAR FACTORY, JORDAN
- SABRINA FACTORY, COMBODIA
- DIKTAS TEKSTIL(ORENBAYAN SPINNING MILLS), EGYPT
- GEA-ECOFLEX-SARSTEDT, GERMANY
- MARY TEXTILE AND SPINNING FACTORY, TURKMENISTAN
- CLASSIC FASHION, JORDAN
- EPIC DESIGNERS, VIETNAM
- ATG GLOVES, SIR LANKA
- FINE APPAREL FACTORY, JORDAN



## ►►Textile Industry / Automotive Industry / Manufacturing Facilities / Heavy Industry



**TOYOTA TMMT-ADAPAZARI-TURKEY**

- LINGOTTO, FIAT, ITALY
- VOLVO BRUSSELS ADMIN STATION BUILDING, BELGIUM
- REVOZ RENAULT CAR FACTORY, SLOVENIA
- ZAZ AUTOMOTIVE CAR FACTORY, UKRAINE
- JAGUAR LAND ROVER CAR PLANT-BROMWICH, UK
- PEUGEOT CITROEN PSA-KALUGA, RUSSIA
- LEAR CORPORATION(FACTORY), MOROCCO
- FIAT BIESLKO BIALA , POLAND
- OPEL AUTOMOTIVE FACTORY, IZMIR,



**RENAULT TANGER MED-MOROCCO**

- LADA EGYPT FACTORY, EGYPT
- KAMAZ TRUCK FACTORY, RUSSIA
- MAN BUS FACTORY, ANKARA, TURKEY
- VOLVO&RENAULT TRUCK FACTORY, RUSSIA
- FIAT TORINO, ITALY
- SUZUKI MARUTI CAR FACTORY, INDIA
- OPEL CARS ANTWERP (SOCOMEC), BELGIUM
- VOLVO, OLOFSTROM, SWEEDEN
- TOYOTA MIRAI AUTOMOTIVE FACTORY, RUSSIA
- TOYOTA ØKERN, NORWAY
- MERCEDES BENZ-ISTANBUL, TURKEY



**UNIPRESS (NISSAN) CAR PLANT-UK**

- FORD AUTOMOTIVE FACTORY, RUSSIA
- HYUNDAI-ASSAN AUTO. FACTORY-KOCAELI, TURKEY
- VAN HOOL BUS FACTORY-SKOPJE, MACEDONIA
- AVTOZAVOD CAR FACTORY CHERNIGOVSKY, UKRAINE
- GM OPEL AUTOMOTIVE FACTORY, RUSSIA
- OYAK RENAULT, BURSA, TURKEY
- IVECO CAR FACTORY, UZBEKISTAN
- VOLVO-GOTEBURG-SWEDEN
- HYUNDAI CAR FACTORY, TURKEY

## ►►Textile Industry / Automotive Industry / Manufacturing Facilities / Heavy Industry



**PHILIPS, POLAND**

- INDESIT RADOMSKO FACTORY, POLAND
- FIAT/FORD BRAKES MANUFACTURER, ITALY
- GLAXO SMITH-KLINE, HUNGARY
- PROLEMN-REGHIN, ROMANIA
- BRITISH AMERICAN TOBACCO FACTORY, RUSSIA
- SANOVEL, TURKEY
- PARTEX PLASTIC FACTORY, BANGLADESH
- LAURENT FACTORY, MARITIOUS
- KAZAN HELICOPTER MANUFACTURING FACTORY, RUSSIA
- DITZINGEN THALES, GERMANY
- CHEVRON, SINGAPUR



**SHARP, POLAND**

- CLEEVELAND BRIDGE STEEL FACTORY, S.ARBABIA
- GILLETTE FACTORY, POLAND
- NUROL STEEL FACTORY, QATAR
- COCA COLA-DUSHANBE, TAJIKISTAN
- ANSALDO TRASPORTI (TRAIN MANUFACTURER), ITALY
- PHILIP MORRIS TOBACCO FACTORY, UKRAINE
- DUNLOP SYSTEMS AND COMPONENTS-COVENTRY, UK
- TOBACCO MONOPOLY, THAILAND
- GUALA CLOURE FACTORY, INDIA
- BAKERY FACTORY KINSHASA, TANZANIA



**ARCELOR MITTAL STEEL ZELZATE, BELGIUM**

- TVS BRAKE INDIA-CHENNAI, INDIA
- STORA ENSO PAPER FACTORY, BELGIUM
- BOSCH ZF-LENKSTSTEME, HUNGARY
- COCA COLA BAKU ZAVODU, AZERBAIJAN
- BISCUIT PRINCE FACTORY-KINSHASA, CONGO
- STORA ENSO PAPER FACTORY, BELGIUM
- DONG PHUONG FACTORY, VIETNAM
- GREAT WALL CERAMIC, BANGLADESH
- REXAM METAL-COCA COLA PET BOXES, EGYPT
- PLATINUM FACTORY, KENIA
- GAMA PHARMECEUTICAL, SYRIA



# BUSBAR FUNCTIONAL AREAS & MAJOR REFERENCES

## ►►Energy Utilities

### ►►Power Plants / Solar Plants / Cooling Plants



ROKITA CHEMICAL PLANT-BRZEG DOLNY, POLAND



WASTE WATER TREATMENT PLANT-TRIBOLI, LEBANON

- |   |  |   |
|---|--|---|
| ➤ KUJUKHOVO POWER PLANT, RUSSIA                 | ➤ TENT A POWER PLANT, SERBIA               | BANGLADESH  |
| ➤ CHLOR ALKALI CHEMICAL PLANT, ALGERIA          | ➤ RAS AL KHAIR DESALINATION PLANT, S.ARBIA | ➤ GE GENERAL ELECTRIC PLANT, RUSSIA                 |
| ➤ DISTRICT COOLING PLANT JEBEL ALI-DUBAI, U.A.E | ➤ SULEYMANIYE POWER PLANT, IRAQ            | ➤ QURAYYAH POWER PLANT, S.ARBIA                     |
| ➤ SHATURA POWER PLANT, RUSSIA                   | ➤ MARY FERTILIZER COMPLEX, TURKMENISTAN    | ➤ EREN 1200MV POWER PLANT, TURKEY                   |
| ➤ WASTE TO ENERGY POWER PLANT-BAKU, AZERBAIJAN  | ➤ AL KHOMS POWER PLANT, LIBYA              | ➤ DISTRICT COOLING PLANT AL RAHA BEACH-DUBAI, U.A.E |
| ➤ BOCAMINA, CHILE                               | ➤ NAINAWA POWER PLANT, IRAQ                | ➤ DISTRICT COOLING PLANT RB02/RB03, U.A.E           |
| ➤ ANSALDO APRILIA, ITALY                        | ➤ LOTUS ENERGY, TURKMENISTAN               | ➤ AL KHAIRAT POWER PLANT, IRAQ                      |
| ➤ EMICOOOL DISTRICT COOLING PLANT-DUBAI, U.A.E  | ➤ CARRINGTON POWER PLANT, UK               | ➤ LOTOS, POLAND                                     |
| ➤ YENI ELEKTRIK CCPP POWER PLANT, TURKEY        | ➤ TONOLSK POLYMER LLC, RUSSIA              | ➤ ERBIL CCPP POWER PLANT, IRAQ                      |
|   | ➤ WAVE DISTRICT COOLING PLANT, OMAN        | ➤ SURGUTSKAYA POWER PLANT, RUSSIA                   |
|   | ➤ BESMAYA POWER PLANT, IRAQ                | ➤ ENERJISA POWER PLANT, TURKEY                      |
|   | ➤ SHAHJI BAZAR POWER PLANT,                | ➤ DISTRICT COOLING PLANT T07, U.A.E                 |

## ►►Commercial Buildings

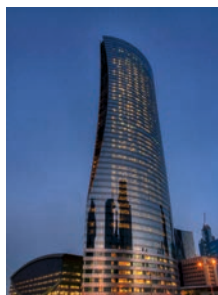
### ►►Office Towers / Residential Towers / Hotels / Shopping Malls



ALMAS TOWER  
UAE



NAFISSI TOWER  
KUWAIT



NAVIGATION TOWER  
QATAR



FLAME TOWERS  
AZERBAIJAN



MOSCOW CITY  
RUSSIA



TRUMP TOWER  
TURKEY

- |   |                                    |  |
|---|------------------------------------|--|
| ➤ CHANEL TOWER-HAMBURG, GERMANY         | ➤ PAVELETSKY TOWER-MOSCOW, RUSSIA  | ➤ CROYDON CURVE, UK                    |
| ➤ PROSTA TOWER-WARSZAWA, POLAND         | ➤ JAFF TOWER, IRAQ                 | ➤ ENVOY TOWER, BANGLADESH              |
| ➤ SOCAR TOWER-BAKU, AZERBAIJAN          | ➤ PARADISE TOWER, MARITIOUS        | ➤ LAKE POINT TOWER, NIGERIA            |
| ➤ BEIRUT TERRACES, LEBANON              | ➤ BARJEEL TOWER, QATAR             | ➤ TIARA RESIDENCE-PALM JUMEIRAH, U.A.E |
| ➤ LULU TOWER, KUWAIT                    | ➤ CORP GROUP TOWER, CHILI          | ➤ CITY OF CAPITALS, RUSSIA             |
| ➤ AL TADAMON TWIN TOWERS COMPLEX, LIBYA | ➤ SKY OFFICE-ZAGREB, CROATIA       | ➤ INDIGO TOWER, U.A.E                  |
| ➤ ROTTERDAM WORLD PORT CENTER, HOLLAND  | ➤ UBC TOWER, ROMANIA               | ➤ LOTUS 99 BUILDING, EGYPT             |
| ➤ AL BASSAM TOWER-MAKKAH, S. ARABIA     | ➤ BAHREIN FINANCIAL TOWER, BAHRAIN | ➤ SALAPURYA TOWERS, INDIA              |
| ➤ AMMAR TOWER, PALESTINE                | ➤ MOBIMO TOWER-ZURICH, SWITZERLAND | ➤ TALAN TOWERS, KAZAKHISTAN            |
|   | ➤ DUNA TOWER, BUDAPEST, HUNGARY    | ➤ UAP TOWER, KENIA                     |
|   | ➤ EXECUTIVE TOWER, U.A.E           | ➤ ISOZAKI TOWER-MILANO, ITALY          |
|   | ➤ HCBS BANK-ISTANBUL, TURKEY       |  |
|   | ➤ GULAN PARK OFFICE TOWER, IRAQ    |  |

## ►►Office Towers / Residential Towers / Hotels / Shopping Malls



**SWISSOTEL & FAIRMONT  
SINGAPORE**



**HILTON HOTEL -JEDDAH**



**SWISS HOTEL - MOSCOW**



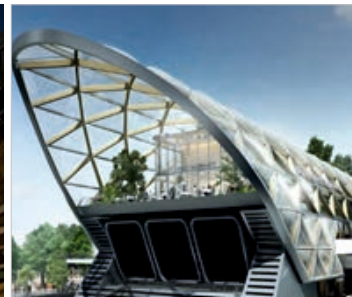
**WESTMINISTER PARK PLAZA  
HOTELUK**

- |   |  |  |
|---|--|--|
| ➤ HILTON HOTEL HEATHROW, UK               | ➤ GOLDEN PYRAMIDS PLAZA, EGYPT           | ➤ SLEEP IN HOTEL, TANZANIA               |
| ➤ OLD MILL-RADISSON BLUE-BELGRADE, SERBIA | ➤ HOTEL MAINPORT, ROTTERDAM, HOLLAND     | ➤ MALABO HILTON HOTEL, EQUATORIAL GUINEA |
| ➤ IBIS HOTEL REDUTA WARSZAWA, POLAND      | ➤ FIRST SITE HOTEL, BUDAPEST, HUNGARY    | ➤ ALNASR HOTEL-RIXOS PREMIUM, LIBYA      |
| ➤ RIXOS HOTEL PALM-DUBAI, U.A.E           | ➤ DIVAN HOTEL, IRAQ                      | ➤ ASHGABAT STADIUM HOTEL, TURKMENISTAN   |
| ➤ SHERATON HOTEL-DOHA, QATAR              | ➤ NOVOTEL PLATINIUM HOTEL, THAILAND      | ➤ GRAND HOTEL, STOCKHOLM, SWEDEN         |
| ➤ HOTEL PARK INN, NORWAY                  | ➤ FLAMINGO HOTEL & CASINO, MACEDONIA     | ➤ BLACK SEA HOTEL & RESIDANCE, GEORGIA   |
| ➤ RITZ CARLTON HOTEL-BERLIN, GERMANY      | ➤ SHERATON HOTEL, CAGLIARI, ITALY        | ➤ BERJAYA HOTEL, MAURITIUS               |
| ➤ INTERCONTINENTAL HOTEL, UZBEKISTAN      | ➤ MERIDIEN HOTEL-MAKKAH, S.ARABIA        | ➤ ROSA PARK HOTEL-SUDAN                  |
| ➤ İKOT EKPENE HOTEL, NIGERIA              | ➤ HILTON, CHENNAI-INDIA                  | ➤ ASTANA HOTEL, KAZAKISTAN               |
| ➤ BANADER ROTANA HOTEL, BAHRAIN           | ➤ FOUR SEASONS-S.PETERSBURG, RUSSIA      | ➤ KEMPINSKY HOTEL AQABA, JORDAN          |
|   | ➤ OCEAN PARADISE-CHITTAGONG, BANGLADESH  |  |
|   | ➤ JW MARRIOTT ABSHERON HOTEL, AZERBAIJAN |  |

## ►►Office Towers / Residence Towers / Hotels / Shopping Malls



**THE DUBAI MALL  
U.A.E.**



**CANARY WHARF SHOPPING CENTRE  
UK**



**GALERIA SHOPPING MALL  
RUSSIA**



**SIAM SQUARE ONE  
THAILAND**

- |  |   |  |
|--|---|--|
| ➤ MALL OF SCANDINAVIA, SWEDEN          | ➤ MAJIDI MALL SHOPPING CENTER, IRAQ         | ➤ TANGS PLAZA, SINGAPORE                     |
| ➤ ALDI SHOPPING CENTER, IRELAND        | ➤ MEDENI DINC SHOPPING CENTER, TURKMENISTAN | ➤ GANJLIK MALL-BAKU, AZERBAIJAN              |
| ➤ MALL OF QATAR (ONGOING), QATAR       | ➤ SCHLOSSGALERIE (SHOPPING MALL), HOLLAND   | ➤ PADOL CITY MALL, UKRAINE                   |
| ➤ SHOPPING CENTRE , WIESBADEN, GERMANY | ➤ SYLHET CITY CENTRE, BANGLADESH            | ➤ MEGA IKEA SHOPPING & FAMILY CENTER, RUSSIA |
| ➤ CITY SCAPE MAL, EGYPT                | ➤ MEGA BANGNA SHOPPING CENTRE, THAILAND     | ➤ RACETRACK MALL CITY CENTER, OMAN           |
| ➤ DECATHLON, HUNGARY                   | ➤ FORUM GLIWICE, POLAND                     | ➤ RUBY SHOPPING MALL, KRYGYZSTAN             |
| ➤ GALAXY SHOPPING MALL, INDIA          | ➤ COOP SHOPPING CENTRE, ITALY               | ➤ MAXI MARTIJ, AUSTRIA                       |
| ➤ MIGROS MVS, SUHR-AARAU, SWITZERLAND  | ➤ CAPITAL MALL, MACEDONIA                   | ➤ AKER BRYGGE, NORWAY                        |
| ➤ BAB TRABLUS SHOPPING MALL, LIBYA     | ➤ MADOU TOWER, BELGIUM                      | ➤ CITADEL MALL, MARITIOUS                    |
| ➤ BUCURESTI MALL, ROMANIA              | ➤ ARENA CENTRE, CROATIA                     | ➤ SETIF PARK MALL, ALGERIA                   |
| ➤ GARDEN CITY MALL-NAIROBI, KENIA      | ➤ CAPITOL PARK SABAC, SERBIA                | ➤ DREAM TOWN-KIEV, UKRANIA                   |



# BUSBAR FUNCTIONAL AREAS & MAJOR REFERENCES

## ►►Service Compounds

## ►►Hospitals / Universities / Public Utilities / Government Buildings



HOSPITAL OF VESOUL-FRANCE



UCLH HOSPITAL-LONDON, UK



RADIUM HOSPITAL-NORWAY

- WISMAR KRAKEN HOUSE , GERMANY
- KAROLINSKA HOSPITAL, SWEEDEN
- St. GIOVANNI HOSPITAL, ITALY
- St. ELISABET HOSPITAL, BELGIUM
- AGA KHAN HOSPITAL, KENIA
- ELCO / SERVITEC, LUXEMBURG
- NOV GORAD, RUSSIA
- St JAMES' UNIVERSITY HOSPITAL - LONDON, UK
- CLINICA ALEMANA, CHILE
- LUCCA MASSA HOSPITAL, ITALY
- THE WORLD MEDICAL CENTER, THAILAND

- ASHGABAT 6 HOSPITAL COMPLEX, TURKMENISTAN
- MAHRA HOSPITAL, AL MARJ, LIBYA
- TOSCANO HOSPITAL, ITALY
- BAKU MILLI SAGLAMLIK HOSPITAL, AZERBAIJAN
- SOUTHERN GENERAL HOSPITAL-GLASGOW, SCOTLAND
- Sh. KHALIFA HOSPITAL,RAS AL KHAIMA- U.A.E
- UCLH , LONDON, UK
- BOTINSKAYA HOSPITAL, RUSSIA
- LEWISHAM HOSPITAL, LONDON, UK
- SECURITY FORCE HOSPITAL-MAKKAH,

- WISMAR KRAKEN HOUSE , GERMANY
- KAROLINSKA HOSPITAL, SWEEDEN
- St. GIOVANNI HOSPITAL, ITALY
- St. ELISABET HOSPITAL, BELGIUM
- AGA KHAN HOSPITAL, KENIA
- ELCO / SERVITEC, LUXEMBURG
- NOV GORAD, RUSSIA
- St JAMES' UNIVERSITY HOSPITAL - LONDON, UK
- CLINICA ALEMANA, CHILE
- LUCCA MASSA HOSPITAL, ITALY
- THE WORLD MEDICAL CENTER, THAILAND

## ►►Hospitals / Universities / Public Utilities / Government Buildings



UNIVERSITY OF LONDON-SENATE HOUSE-UK



JUVENTUS STADIUM-TORINO-ITALY



RIJKSMUSEUM-HOLLAND

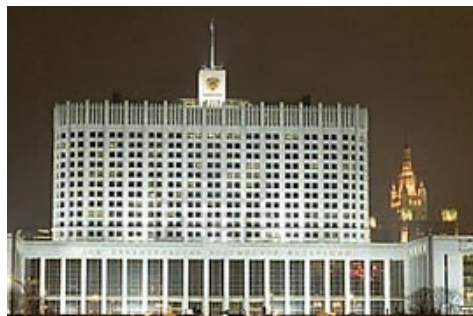
- AL WAHDA SPORT CITY, U.A.E
- MULTIFUNKIONS ARENA STADIUM, DUSSELDORF, GERMANY
- St JACOBS PARK STADIUM, BASEL, SWITZERLAND
- TOP GRACIOUS, KAUSHING BEYSBALL STADIUM, TAIWAN
- NARESUAN UNIVERSITY, THAILAND
- EXCEL EXHIBITION CENTER-LONDON, UK
- INTERNATIONAL HOUSE OF MUSIC, RUSSIA
- AL FATEH UNIVERSITY, LIBYA
- OMAN CONVENTION&EXHIBITION CENTRE, OMAN
- BAKU OLYMPIC STADIUM, AZERBAIJAN

- PUBLIC LIBRARY, AMSTERDAM , HOLLAND
- PALA LOTTOMATICA (BASKETBALL STADIUM), ROME, ITALY
- PARK OLYMPIQUE LYONNAIS STADIUM, FRANCE
- DONBASS ARENA, SHAKTAR DONETSK STADIUM, UKRAINE
- ROYAL OPERA HOUSE, OMAN
- DOHUK CULTURAL CENTER, IRAQ
- ROMA AUDITORIUM, ITALY
- LATVIAN NATIONAL LIBRARY, LATVIA
- NORTH LEBANON UNIVERSITY, LEBANON
- 2012 OLYMPIC STADIUM-LONDON, UK
- STADIO COMUNALE DI TORINO (STADIUM) , ITALY

- NATIONAL LIBRARY OF PARIS, FRANCE
- FTC STADIUM-BUDAPEST, HUNGARY
- IQRA UNIVERITY, PAKISTAN
- HAMBURG ARENA SPORT STADIUM, GERMANY
- AL SAAD SPORTS COMPLEX-DOHA, QATAR
- AGT THEATRE COMPLEX, TURKMENISTAN
- MOSCOW STATE UNIVERSITY, RUSSIA
- UNIVERSITY EINDHOVEN, HOLLAND
- UNIVERSITY OF BOLOGNA, ITALY
- KTH, UNIVERSITY, SWEEDEN
- UNIVERSITY OF WARSAW, CENT I – II, POLAND



## ►►Hospitals / Universities / Public Utilities / Government Buildings



**THE HOUSE OF GOVERNMENT-RUSSIA**

- INDIA EMBASSY TECHZONE, INDIA
- DAR EL EFTAA POWER HOUSE, EGYPT
- MINISTRY OF DEFENCE, HOLLAND
- CPWD-EXCISE BUILDING, INDIA
- INDIA TOWNHEMBASSY TECHZONE, INDIA
- THAI TAP WATER, TAIWAN
- TOWNHALL ASSEN, HOLLAND
- MINISTRY OF INTERIOR AFFAIRS, LONDON, UK
- MINISTRY OF INTERNAL AFFAIRS, HOLLAND
- MINISTRY BUILDING, TURKMENISTAN
- TRAFFIC CONTROL CENTER, AZERBAIJAN



**MINISTRY OF DEFENCE BUILDING-LONDON**

- WEIGHTLIFTING FEDERATION, BAHRAIN
- DUBAI CENTRAL PRISON, DUBAI
- SONATRACH HQ-ORAN, ALGERIA
- LAW COURTS, KENIA
- NATIONAL SECURITY BUILDING, AZERBAIJAN
- MOFA BUILDING (MINISTRY OF FOREIGN AFFAIRS), UK
- COURT OF JUSTICE, LUXEMBOURG
- MINISTRY OF INFRASTRUCTURE-DEN HAAG, HOLLAND
- DEPART. OF SOCIAL DEVEL. AND WELFARE, TAIWAN
- OLD PARLIAMENT MARTIOUS
- ALCUBAR INCOME TAX BUILDING, INDIA



**TRIBUNAL COURT BUILDING, ITALY**

- GAS MINISTRY BUILDING, TURKMENISTAN
- REKENCENTRUM POLITIE AMSTERDAM, HOLLAND
- CONDOMINIUM 8 FLOORS REGIMENT ROYAL GUARDS, THAILAND
- MINISTRY OF AGRICULTURE-DEN HAAG, HOLLAND
- TES-MILITAR COMPLEX, GERMANY
- SHASTRI BHAWAN, INDIA
- TOWNHALL ARNHEM, HOLLAND
- PALAIS DE JUSTICE LIÈGE, BELGIUM
- DAR EL EFTAA POWERHOUSE, EGYPT
- DUBAI POLICE FORCE H&Q, U.A.E

## ►►Transportation Infrastructure

### ►►Highway Tunnels / Railway Tunnels / Metro Stations/ Airports



**ABU DHABI INT. AIRPORT-U.A.E**

- LUFTHANSA AIRWAYS, GERMANY
- HEYDAR ALIYEV INTERNATIONAL AIRPORT, AZERBAIJAN
- CHANGI AIRPORT T3, SINGAPORE
- SKOPJE ALEXANDER THE GREAT AIRPORT, MACEDONIA
- MRC DELHI METRO, INDIA
- CANARY WHARF CROSS RAIL STATION, UK
- AIRBUS HAMBURG, GERMANY
- CENTRAL STATION ROTTERDAM, HOLLAND
- PULKOVO AIRPORT-ST.PETERSBURG, RUSSIA
- OSLO GARDERMOEN AIRPORT T2,



**TAIPEI METRO STATIONS-TAIWAN**

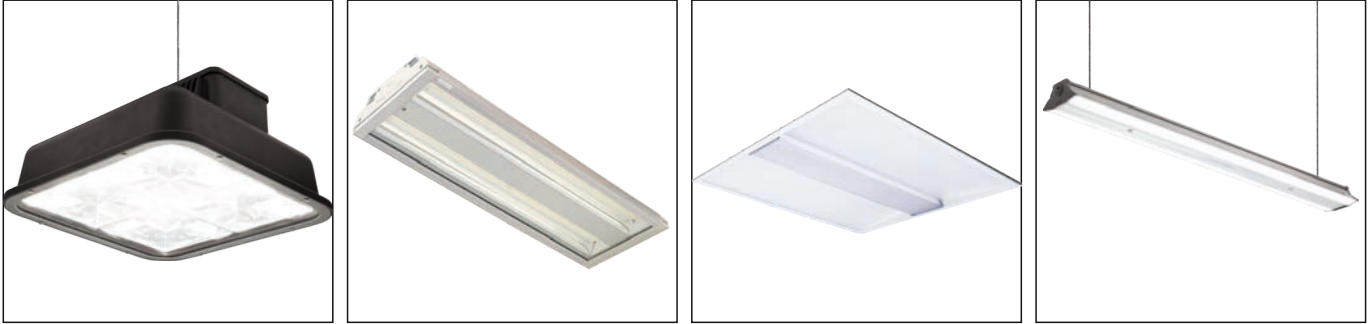
- NORWAY
- PRISTINA AIRPORT, ALBANIA
- MUSCAT INTERNATIONAL AIRPORT, OMAN
- TURKMENISTAN AIRPORT, TURKMENISTAN
- ASTANA AIRPORT, KAZAKHISTAN
- LONDON GATWICK AIRPORT-UK
- BIAC-ZAVENTEM AIRPORT, BELGIUM
- SCHIPOL AIRPORT, HOLLAND
- CIAMPINO AIRPORT-ROME, ITALY
- ISTANBUL ATATURK AIRPORT, TURKEY
- DUBAI INTERNATIONAL AIRPORT, U.A.E
- HARAMAIN RAILWAY-MADINAH, S.ARABIA
- LUXEMBOURG AIRPORT-LUXEMBOURG



**HEATHROW AIRPORT-LONDON**

- FIUMICINO CARGO CITY-ROME, ITALY
- CITYTUNNEL, SWEDEN
- SHEREMETYEVO 3 AIRPORT, RUSSIA
- ERBIL INTERNETIONAL AIRPORT, IRAQ
- WARSZAWA AIRPORT, POLAND
- BAHNHOF, SWEDEN
- KING KHALOD INT. AIRPORT T5, S.ARABIA
- IÉGE ARPT-HUSSEIN DEV, ALGERIA
- CAIRO METRO, EGYPT
- DUSHANBE AIRPORT, TAJIKISTAN
- TREVISO AIRPORT-VENICE, ITALY
- SCHIPOL AIRPORT, NETHERLAND

## EAE LIGHTING SYSTEMS PRODUCT RANGE



## EAE LIGHTING SYSTEMS HIGH BAY LUMINAIRES

### REVOLED - S

#### HIGH-BAY LED LUMINAIRES

- I. High thermal performance
- II. Natural cleaning
- III. Light weight
- IV. Glare minimizing optical reflector
- V. Very short ROI



### SROUND

#### ONE POINT PENDANT HIGH-BAY LED LUMINAIRE

- I. High Efficiency up to 162lm/W
- II. One point suspension
- III. Working ambient temperature in range of -35°C and +75°C
- IV. IK 09 impact strength
- V. 60° Arena 90° Lowbay 110° Low Lowbay and Asymetric reflectors
- VI. Provides dual-use to special design T profile



### LINA

#### BATTEN LED LUMINAIRE

- I. Robust housing
- II. High light output and efficacy
- III. Wide beam with high uniformity
- IV. Low glare
- V. Through wiring option



- High Bay Luminaries
- Indoor & Outdoor Lighting
- Linear Lighting Systems
- Office Lighting Systems
- Architectural & Store Lighting Systems

## EAE AUTOMATION SYSTEMS

### General Features

Simplex recognized in both residential and industrial areas, consistent with international standards, unlimited expandable, that can be flexible configured enough to meet customer's expectations and automation system supported by a large ecosystem independently of the main suppliers because of it uses open system protocols.



Use energy when necessary.



Use energy until needed.





**EKabin S** Modular Floor Standing Enclosures IP55

**EKabin D** Modular Floor Standing Enclosures IP41-55

**EKabin O** Monoblock Enclosures IP66

**EKabin E** Distribution Switchboard IP55

**EKabin K** Console Systems IP55

**EKabin T** Terminal Boxes IP67

**EKabin H** Outdoor Enclosures IP55-66

**EKabin X** Stainless Steel Enclosures IP55-67

**EKabin A** Aluminium Enclosures IP55-67

**EKabin B** Busbar Supports

## HIGHLIGHTS



### **EKabin X**

Our X Series Stainless Steel products consist of, IP55, IP41 XS Serie Indoor type, XH Serie Outdoor type Floor Standing Enclosures, IP66 XM Serie Monoblock Wall Mounted Enclosures, IP66 XT Serie Terminal Boxes and IP55 XK Series Consoles.

- ✓ Clean and Smooth Surface
- ✓ Optional Stainless Steel Lock
- ✓ Robust Hidden Hinge
- ✓ Identical E-Kabin Interior Accessories
- ✓ Foam-In-Place Polyurethane Gasket



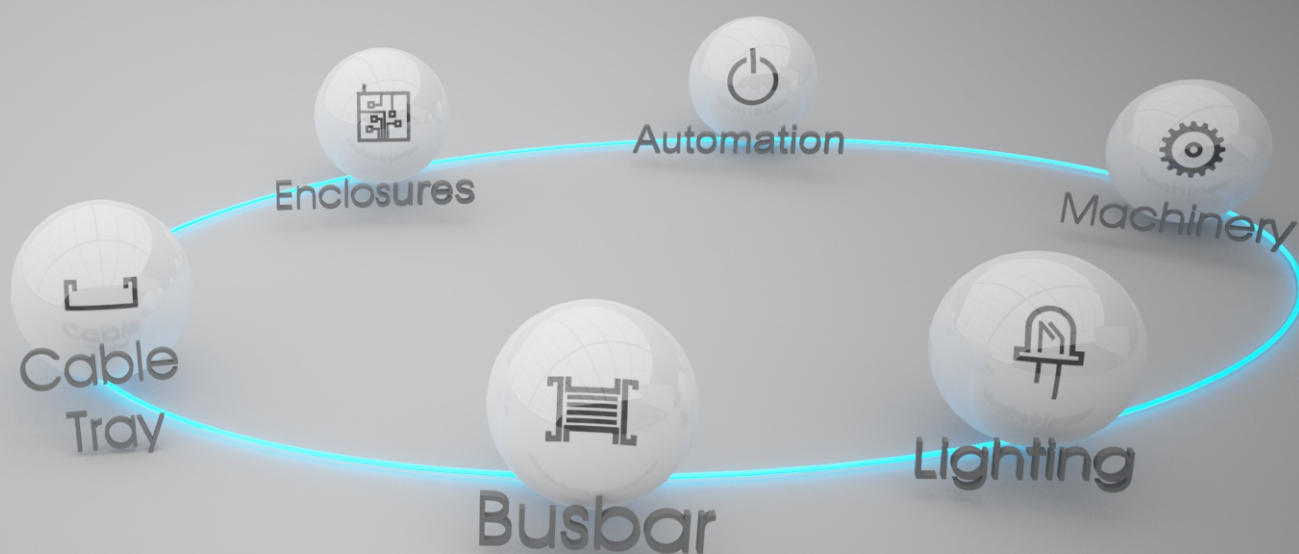
### **EKabin O**

E-Kabin O Series IP66 Monoblock Enclosures designed for indoor applications.

- ✓ Usefull Lock System
- ✓ Bidirectional door opening
- ✓ 180° Hinge Accessory
- ✓ Easy Mounting Bracket
- ✓ Foam-In-Place Polyurethane Gasket



# EAE GROUP PRODUCTS



This is only for introduction of EAE products. EAE reserves the right to modify any part of this binder. Please ask for detailed information for any specific product to EAE Headquarters.

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Fax: +90 (212) 886 24 20

**Binder** Eng /S.S / 12.01.2021  
1000 pcs

