



We bring good things to life.

## GE Power Controls in Europe

GE Power Controls is the European arm of GE Industrial Systems, one of the ten core businesses of the General Electric Company (USA), known internationally for its positive approach to its customers, its people and the world we all live in.

GE Power Controls is a top class European supplier of low-voltage products including wiring devices, residential and industrial electrical distribution components, general purpose control products, enclosures and switchboards. Most of the global demand for the company's products comes from OEMs, wholesalers, installers and panel-board builders worldwide.

So, these are the facts, now the story behind them. GE Power Controls' name is synonymous with technical expertise, quality of products and services, and the broadness of its range. But this is not enough, in a constantly changing and competitive environment we have to offer all this and more. Over the next few years our product range will be dramatically expanded and renewed.

The goal we have set for quality ensures no less than constant progress, as part of GE's company-wide Six Sigma product and service excellence initiative. This applies not only to our products and services but also to our business conduct, where only the highest standards are good enough. We believe that our most important asset is the trust our customers put in us. We earn it by our continuing quest for improvement on every front and our strong commitment to integrity and reliability.

Now on the net!  
[www.gepowercontrols.com](http://www.gepowercontrols.com)

**GE Power Controls**

**GE POWER CONTROLS Ltd.**  
Hornhouse Lane,  
Knowsley Business Park  
Liverpool  
Merseyside, L33 7YQ  
United Kingdom  
Tel. 0151/524 1122  
Fax 0151/524 6247  
E-mail: [gepcuk@gepc.ge.com](mailto:gepcuk@gepc.ge.com)

**AEG Niederspannungstechnik**  
Berliner Platz 2-6  
D-24534 Neumünster  
Germany  
Tel. +49/4321 201-295  
Fax +49/4321 201-619

Ed. 02



GE Power Controls

## New Pan-European metalclad low voltage system



**GEA plus 2.0**

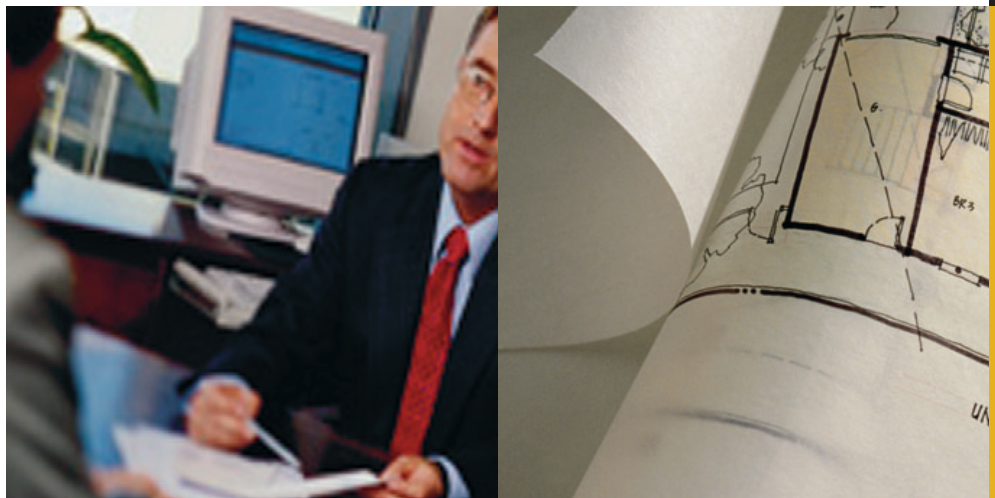


# GEAplus 2.0

---

***Designed with electrical and engineering contractors for the process industry, telecom and infrastructure markets***

When GE Power Controls designed the new modular GEApplus system, our customers were involved right from the beginning. Based on customer needs assessed from the derived target market segments, the new GEApplus provides significantly increased flexibility, reliability, availability and value for money you can not ignore whatever your application. GEApplus type tested factory built assemblies are designed and manufactured in accordance with the highest quality of the internationally recognised standards applicable to low voltage equipment.



Due to the smart and simple design of the GEApplus "lead times" are reduced significantly. The comprehensive range of GEApplus system applications varies from withdrawable and fixed Power Centres with air circuit breakers, Distribution Panels in plug-in fixed versions with moulded case circuit breakers and switch fuses to Motor Control Centres in plug-in or fixed technique for fuse/fuseless motor starter applications. Special adapters in different sizes enable combinations of fused load break switch units and motor starter applications in one column. The equipment can be executed with a four or five phase busbar system fully shrouded to ensure maximum safety level for the operator.

*GEA plus 2.0*



*Designed with electrical contractors for electrical contractors*

## *Buildings, machinery and processes*

### **Commercial**

- Small and large offices
- Warehouses
- Shopping malls
- Schools
- Hospitals
- Airports

### **Industrial**

- Printing
- Machinery
- Pharmaceutical
- Automotive, paper & pulp
- Chemical industry
- Marine

### **Utilities**

- Water treatment plants
- Waste management
- Energy distribution (electricity, gas)
- Telecommunications
- Cable providers
- Public transport





## Technical data

### Electrical Data

Rated operational voltage  
 Rated frequency  
 Rated insulation voltage  
 Rated current horizontal busbars  
 Rated current vertical busbars  
 Rated shorttime withstand current busbar system  
 Rated impulse withstand current busbar system

Ue 690Vac / 600Vdc  
 40-60 Hz  
 Ui 1000V  
 1000 up to 4000A  
 850 up to 1900A  
 Icw Max. 80kA 1s  
 Ipk Max. 176kA

### Mechanical Data

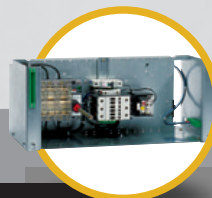
Dimensions

Height 2200 mm *(other on request)*  
 Depth 600, 800 mm  
 Width 400, 500, 600, 800 and 1000 mm

Modularity in height of functional units  
 Standard module sizes  
 Maximum stacking density per column

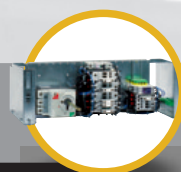
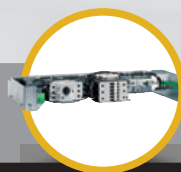
In steps of 25 mm = (E)  
 4E up to 36E  
 80E

## Standard applications Control Center



### Functions with fuses [DIN] at 400Vac

Motor starter DOL		Motor starter Reverse		Motor starter Star/Delta		Feeder [3 pole]		Feeder [4 pole]	
Max.load in [kW]	Module size in [E]	Max.load in [kW]	Module size in [E]	Max.load in [kW]	Module size in [E]	Current in [A]	Module size in [E]	Current in [A]	Module size in [E]
18.5	5	11	5	37	8	160	2	160	4
37	8	37	8	55	12	250	3	250	6
90	18	45	12	90	18	400	6	400	10
132	24	55	18	200	30	630	6	630	10
220	36	90	24	220	36				
		132	30						
		220	36						



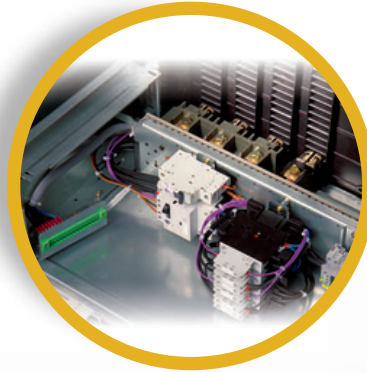
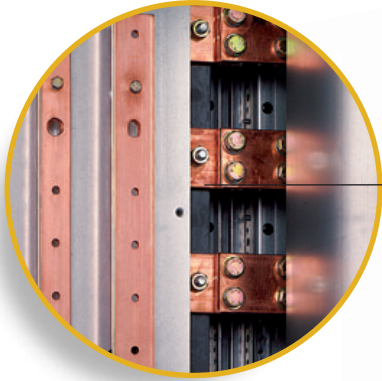
### Functions with circuit breaker at 400Vac

Motor starter DOL		Motor starter Reverse		Motor starter Star/Delta		Feeder [3 pole]		Feeder [4 pole]	
Max.load in [kW]	Module size in [E]	Max.load in [kW]	Module size in [E]	Max.load in [kW]	Module size in [E]	Current in [A]	Module size in [E]	Current in [A]	Module size in [E]
30	4	30	4	30	4	63	4	63	8
37	5	55	8	55	8	160	8	160	8
55	8	90	18	90	18	400	10	400	10
220	18	110	24	110	24	800	18	800	18
		220	30	200	30				

## Great benefits

### Easy commissioning at site

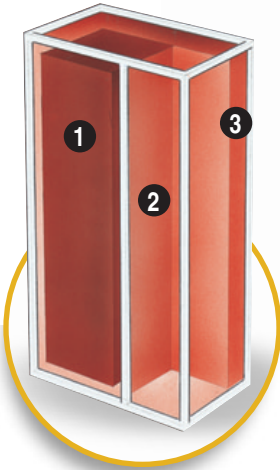
- Main busbar separation links are accessible from the front



### For your safety

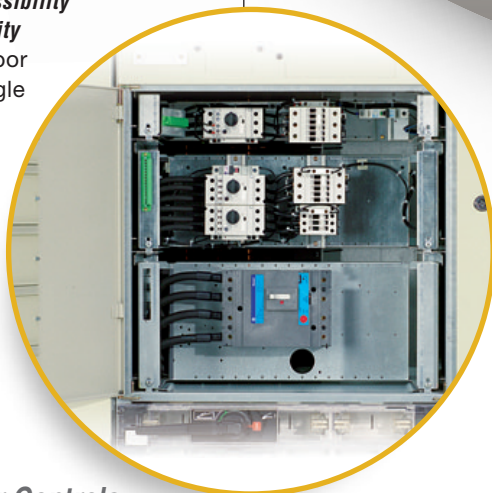
- Short-circuit proof and fatigue free self-aligning stabs secure a high safety level during operation.

1. Equipment zone
2. Cable zone
3. Busbar zone



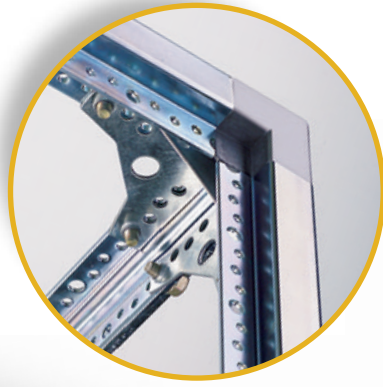
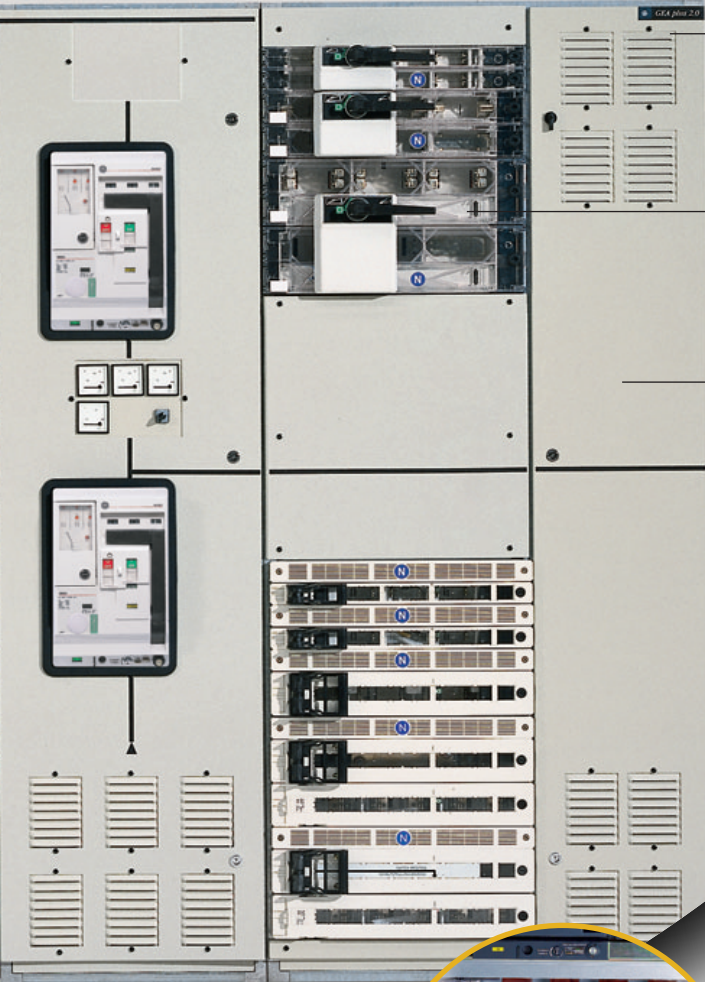
### Optimum accessibility and surveyability

- 135/180° door opening angle

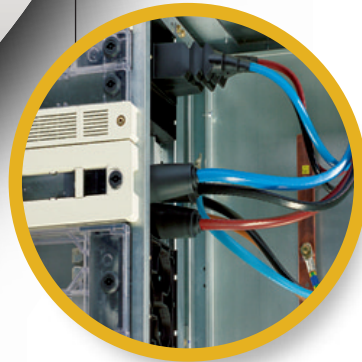
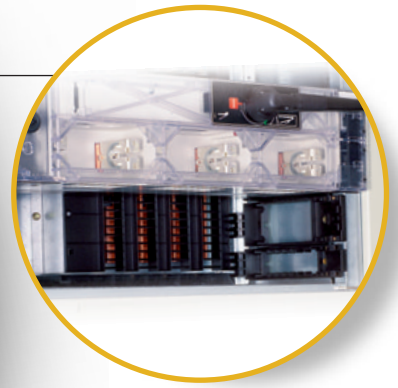


### For your safety

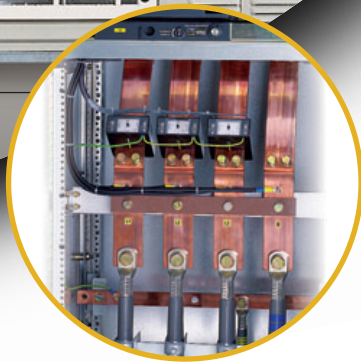
- Finger proof shrouds and barriers prevents accidental contact with hazardous parts.



- Rigid frame construction**
- Non welded self supporting construction made out of just 3 basic parts
  - Zinc-plated
  - No sharp edges
  - Doors and covers in 2mm sheet steel powder painted



- Fast and easy cabling**
- Through pre-configured copper links or directly to the switchgear or terminal strips
  - Cable trays for servicing of all cables are provided as standard
  - Vertical PE/PEN bar
  - Special cable requirement up to Form 4b Typical 7 as per BSEN 60439-1 (termination for each functional unit with own integral glanding facility)





### **Flexibility**

- Adjustable module separation sheets enables simple upgrade of the Form of segregation of the functional units.



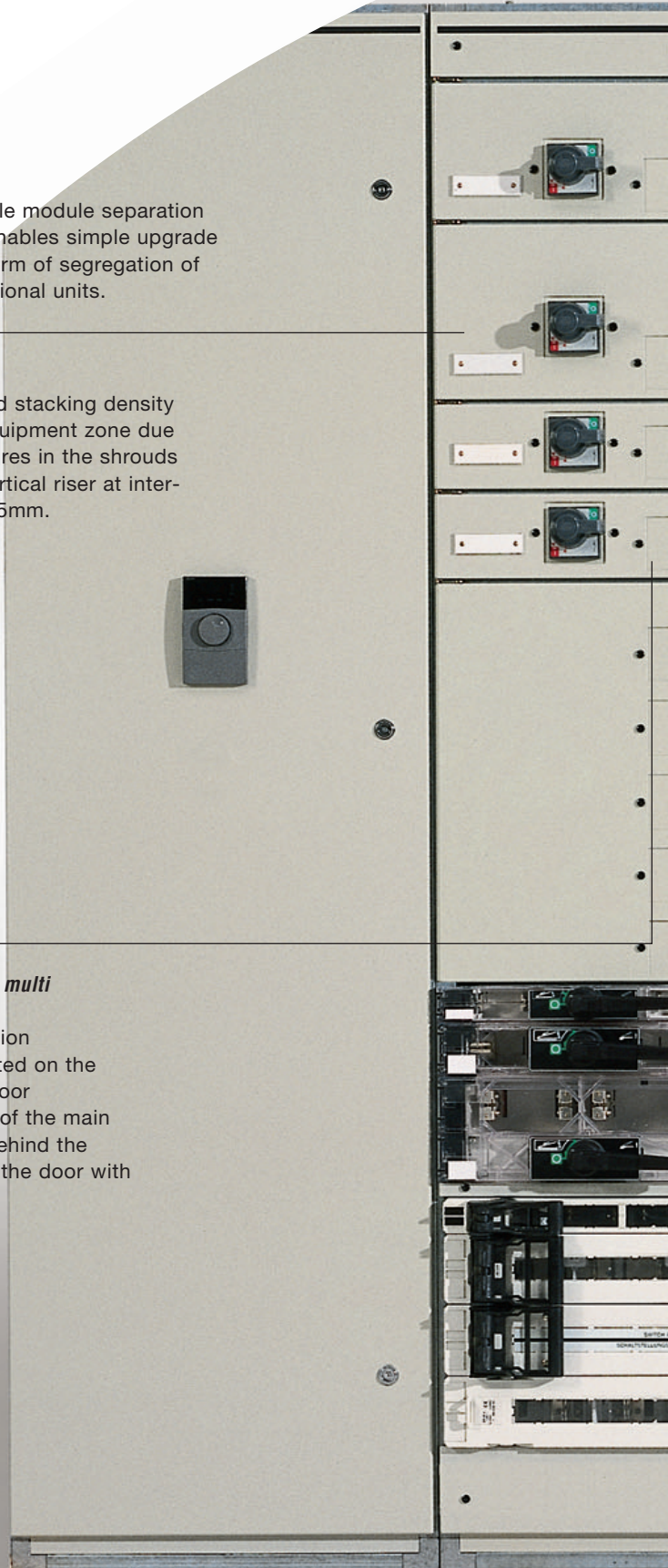
### **Modularity**

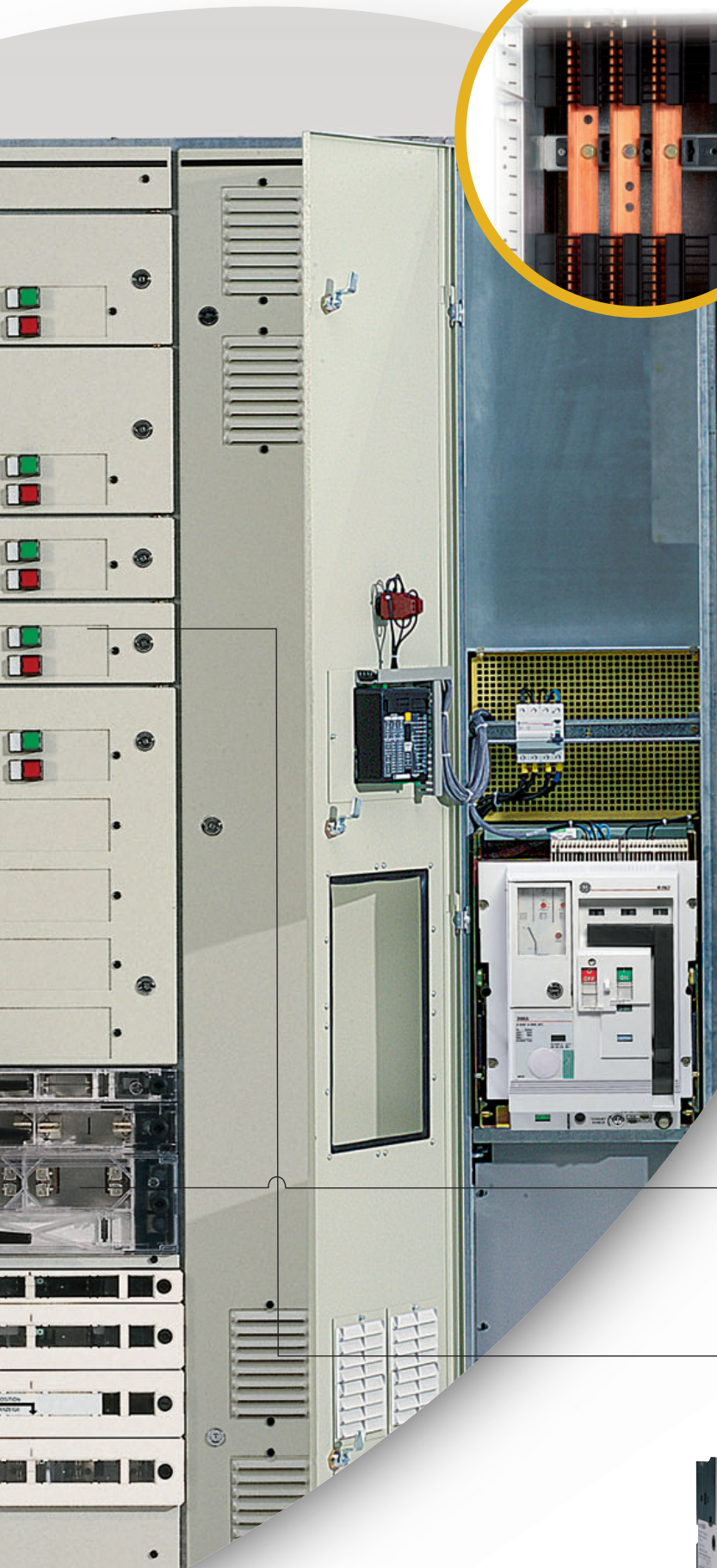
- Increased stacking density in the equipment zone due to apertures in the shrouds of the vertical riser at intervals of 25mm.



### **Modules with single or multi compartment door**

- Control and indication components mounted on the instrument in the door
- Operating handles of the main isolating devices behind the door or on front of the door with interlocking facility



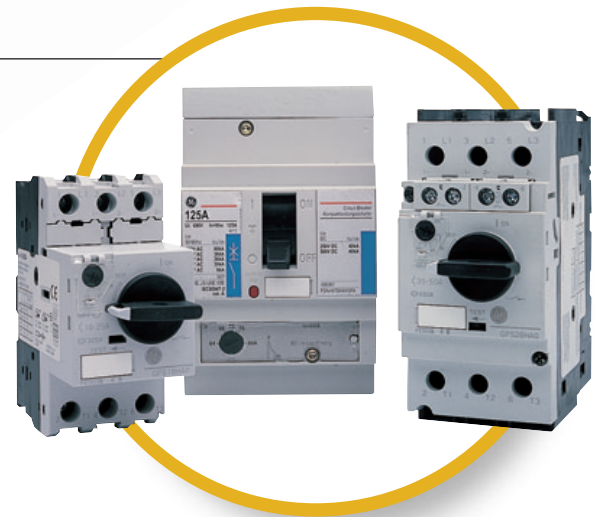
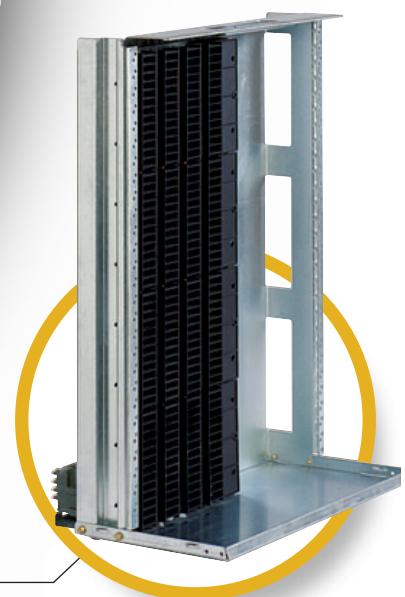


**Increased short circuit strength of the vertical riser system**

- Fully rated 3 and 4 pole system match to the fault rating of the main horizontal busbar system

**Distribution and Control applications in one column**

- Standard adapters in 2 different heights ensures combinations of standard 3 and 4 pole fuse load break switch units and motor starters in one column.



**Complete system integration**

- Functional units match with the new range of IEC 947 designed and tested, and rated industrial components.

## Why GEA plus?



### *Test and standards*

Four pole type-tested assembly as per IEC 439-1/EN 60439-1 certified by KEMA

**Enables a boundaryless environment**

boundaryless



### *Dust and waterproof*

IP30 up to IP54 as per IEC 529-1

**Enables the erection of the equipment in a production environment**

production environment



### *Internal form of separation*

Up to Form 4B as per IEC 439-1

**Enables safe modification under energised conditions**

safe modifications



### *Compact*

**Increase functional floor space in building services**

functional floor space



### *Smart and simple design*

**Secure fast deliveries**

fast delivery



### *Durable surface protection*

Shock and scratch resistant

**Minimise damages during transportation**

resistant



### *Maintenance free busbar system*

**Lower investment costs**

lower investment



### *Ready for the e-commerce take-off*

With the interactive CD-Rom you have the ability to compose and customise your own GEAplus Power Centres, Distribution Boards and Motor Control Centres (design, calculate general arrangement drawings and purchase order tool).

e-commerce