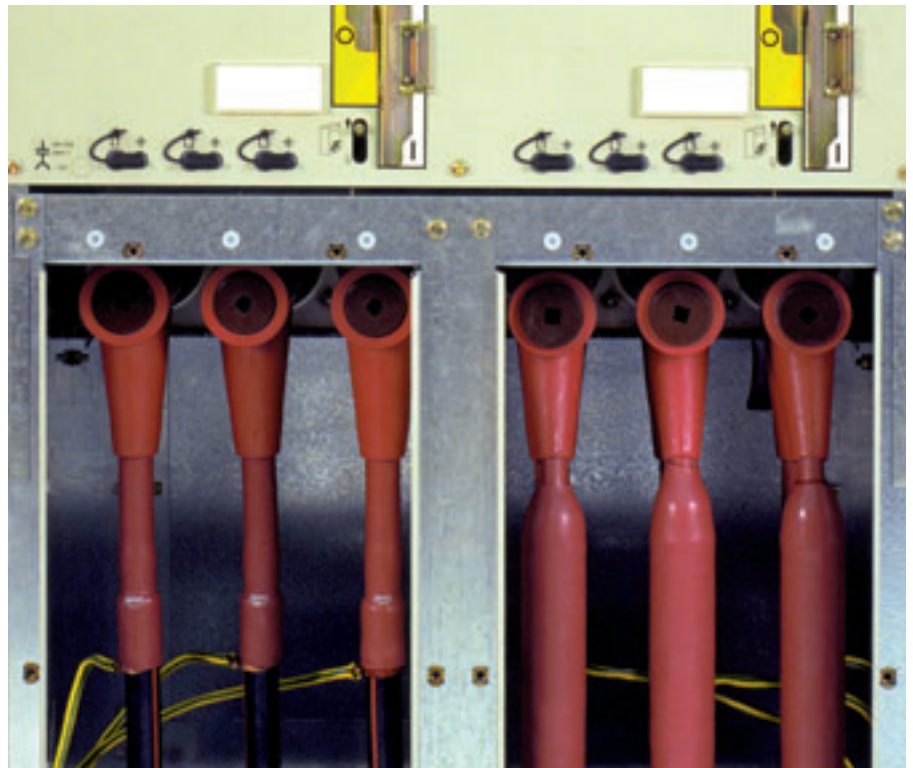


**tyco**

*Electronics*

## **RICS**

**Insulated adapter termination system for  
SF<sub>6</sub>-insulated switchgear up to 24 kV**



**enia**  
energy networks & industrial applications

6 Pagaiou Str., Nea Filothei  
Athens, Greece, GR- 15123  
Tel: +30 210 6754801, Fax: +30 210 6754804

[info@enia.gr](mailto:info@enia.gr)

[www.enia.gr](http://www.enia.gr)

**ENERGY DIVISION**

## **RICS – Insulated adapter termination system for SF<sub>6</sub>-insulated switchgear up to 24 kV**

The increasing popularity of gas insulated switchgear called for the development of an appropriate connection to the bushing.

The Tyco Electronics Energy Division has developed two systems for this purpose. The RICS insulating adapter (630 A) is compatible with all Raychem terminations and can thus be used to connect any type of cable, irrespective of whether it is paper or plastic insulated or has one or three cores.

### **Simplified installation**

The compact design of the adapters and their clear cut profiles simplify installation. The electrical connection with the aid of a stud renders additional fastening systems unnecessary.

### **Reliability**

Tyco Electronics Energy Division has several decades of experience in the field of hermetically insulated termination systems for medium voltage applications.

The adapters are water tight and guarantee uninterrupted operation, even under extreme environmental conditions with severe pollution.

### **Tests**

The adapters conform to IEC 540, VDE 0278 and ANSI IEEE 386 specifications, as well as to the Raychem specification PPS 3013.

The test requirements and results are summarized in Raychem Test Report PPR 1106, which is available on request.

### **Different cables...**

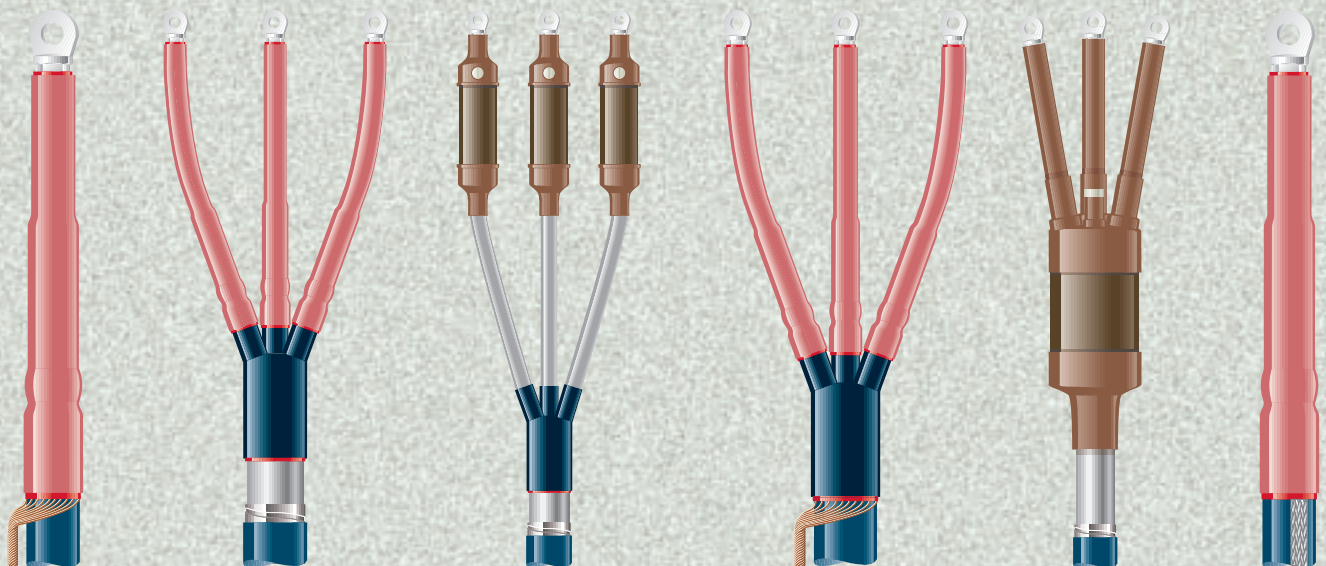
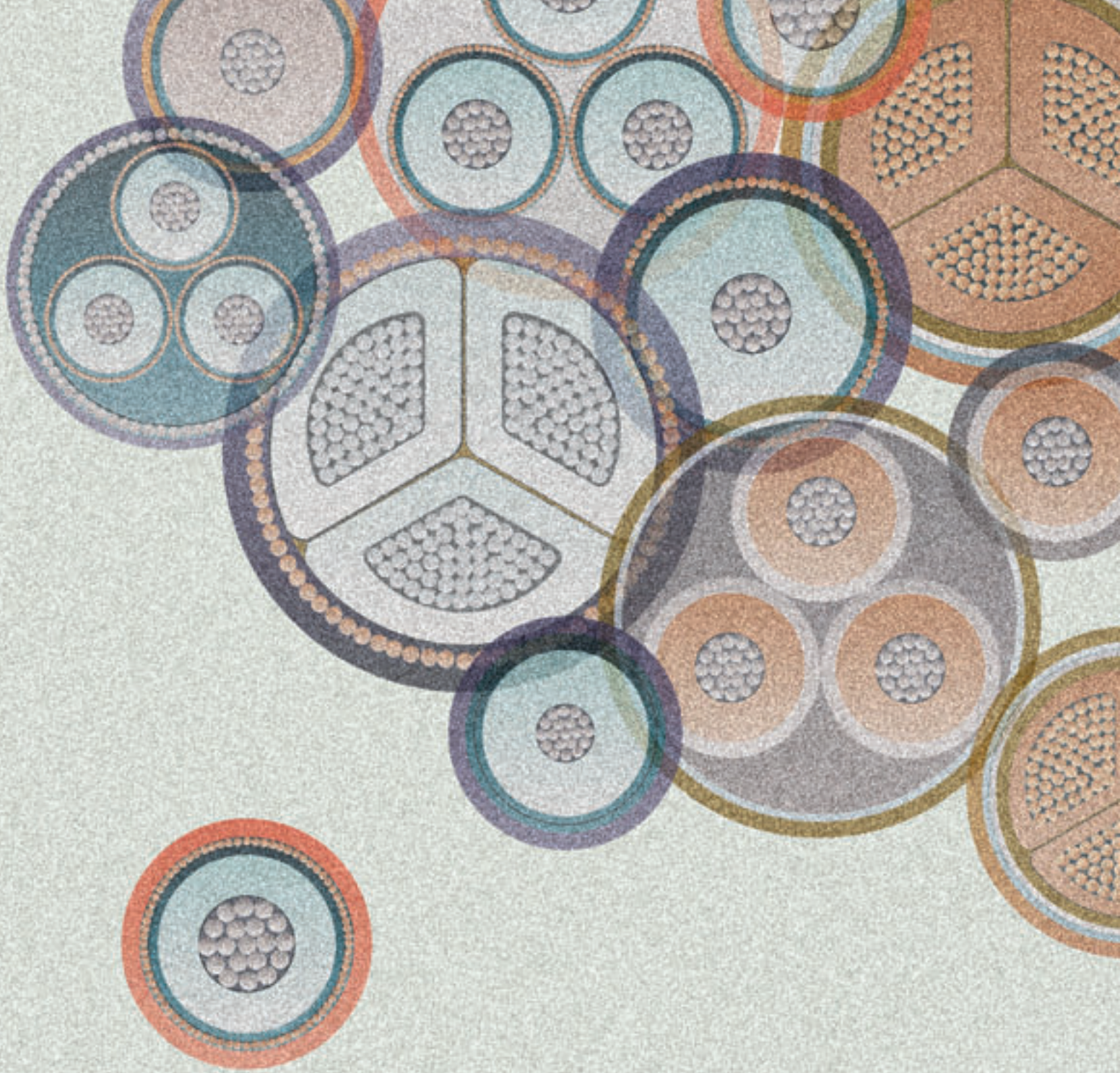
New materials and new production methods have changed the face of medium voltage cables completely over the years, resulting in increased complexity. Paper and plastic insulated cables with one or three cores, round or sector shape, and many different types of shielding, water blocking systems, as well as varying insulation thickness can be found in today's networks.

### **...need different terminations...**

Catering for a wide range of cables with as few fittings as possible, while optimising the products for specific applications and maximising their reliability, was the logical consequence.

### **...or Tyco Electronics Energy Division flexibility.**

Heat-shrink technology makes it possible to use a single size of fittings for a large number of cable cross sections and types. This universal technology not only reduces the requirement for jointer training but also the installation time, at the same time increasing the reliability, irrespective of the type of cable used in the network.



## RICS – Insulated adapter termination system for SF<sub>6</sub>-insulated switchgear up to 24 kV

The insulated adapter termination system provides perfect sealing, electrical insulation and an electrical connection between Raychem terminations and SF<sub>6</sub>-insulated switchgear up to 24 kV.

Its lead-in insulator (630 A) conforms to DIN 47636 and ANSI IEEE 386.

The cable box of the switchgear must be provided with suitable protection against electric shock.

The insulating adapter is compatible with all Raychem terminations.

Details of the terminations can be found in the cable accessories catalogue.

### T-adapter with or without surge arrester

#### Design

Thick walled insulator made of high quality elastomer with sealing face over the termination, bushing cone and plug.

The electrical connection is made with a terminal stud and the cable lug of the termination. Two cable connection is possible. A special plug which allows cable testing without disconnecting the adapter is also offered. The design of the adapter for connecting the surge arrester is basically identical. The elastomer insulator has an additional lead-in duct for the surge arrester. Details of the surge arresters can be found in the brochure EPP 0533.

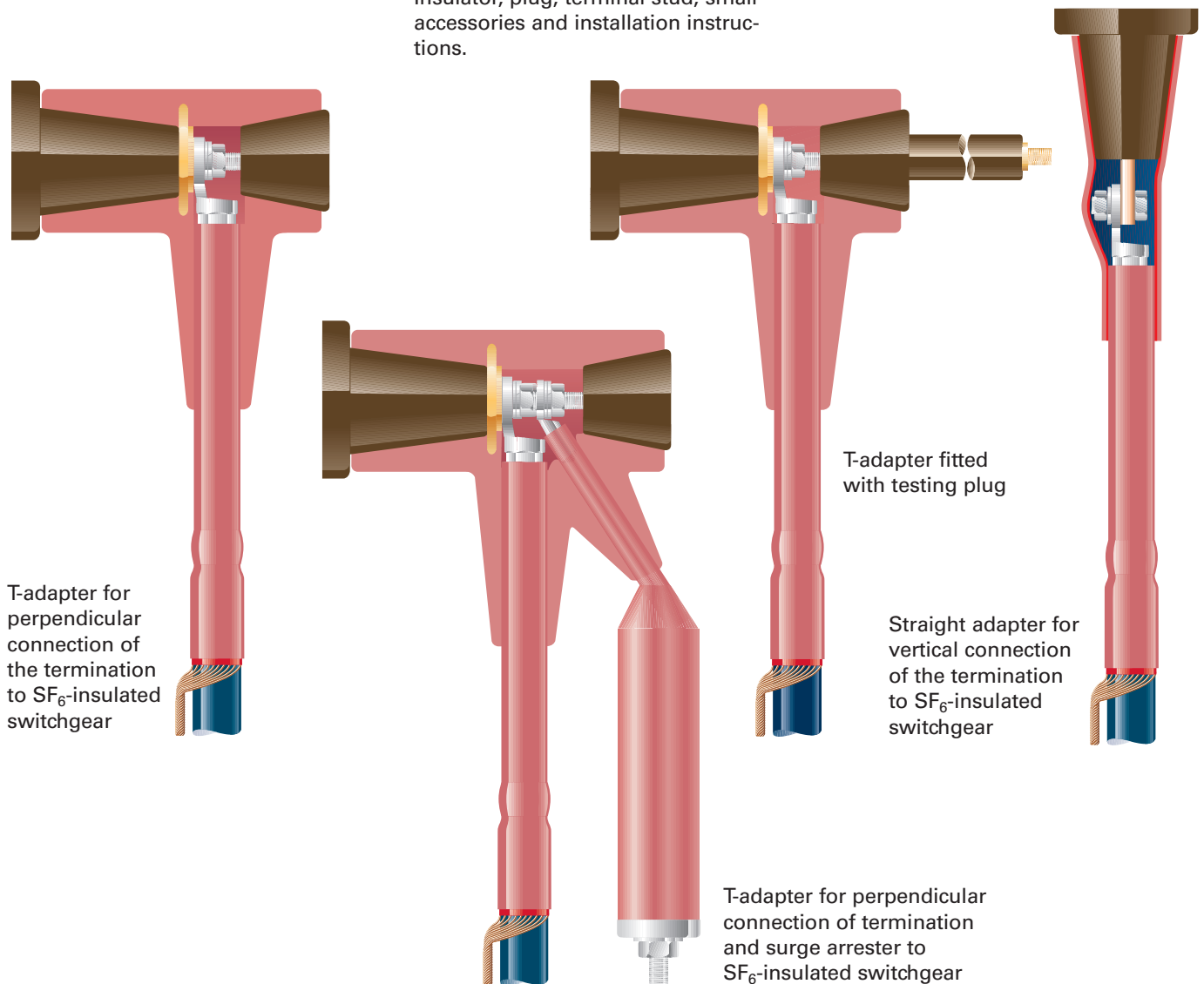
Scope of supply (for three phases)  
Insulator, plug, terminal stud, small accessories and installation instructions.

### Straight adapter

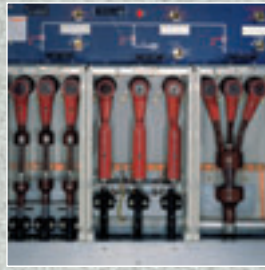
#### Design

A thick walled, heat-shrinkable insulating sleeve provides a hermetic seal over the cone of the bushing and the termination. The adapter area is smoothed with a meltable filler strip.

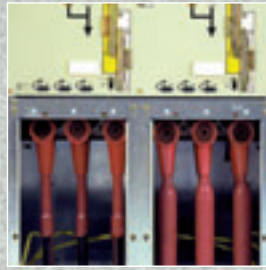
Scope of supply (for three phases)  
Heat-shrinkable insulating sleeving, filler strip, small accessories and installation instructions. Terminal stud and lug must be enclosed.



**Merlin Gerin RM6+**



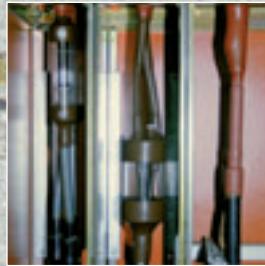
**Siemens 8DJ10**



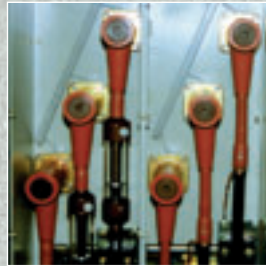
**Calor Emag Z L4**



**Driescher Minex C**



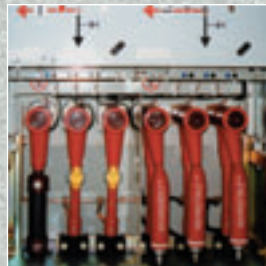
**Felten & Guillaume GA**



**AEG FBA**



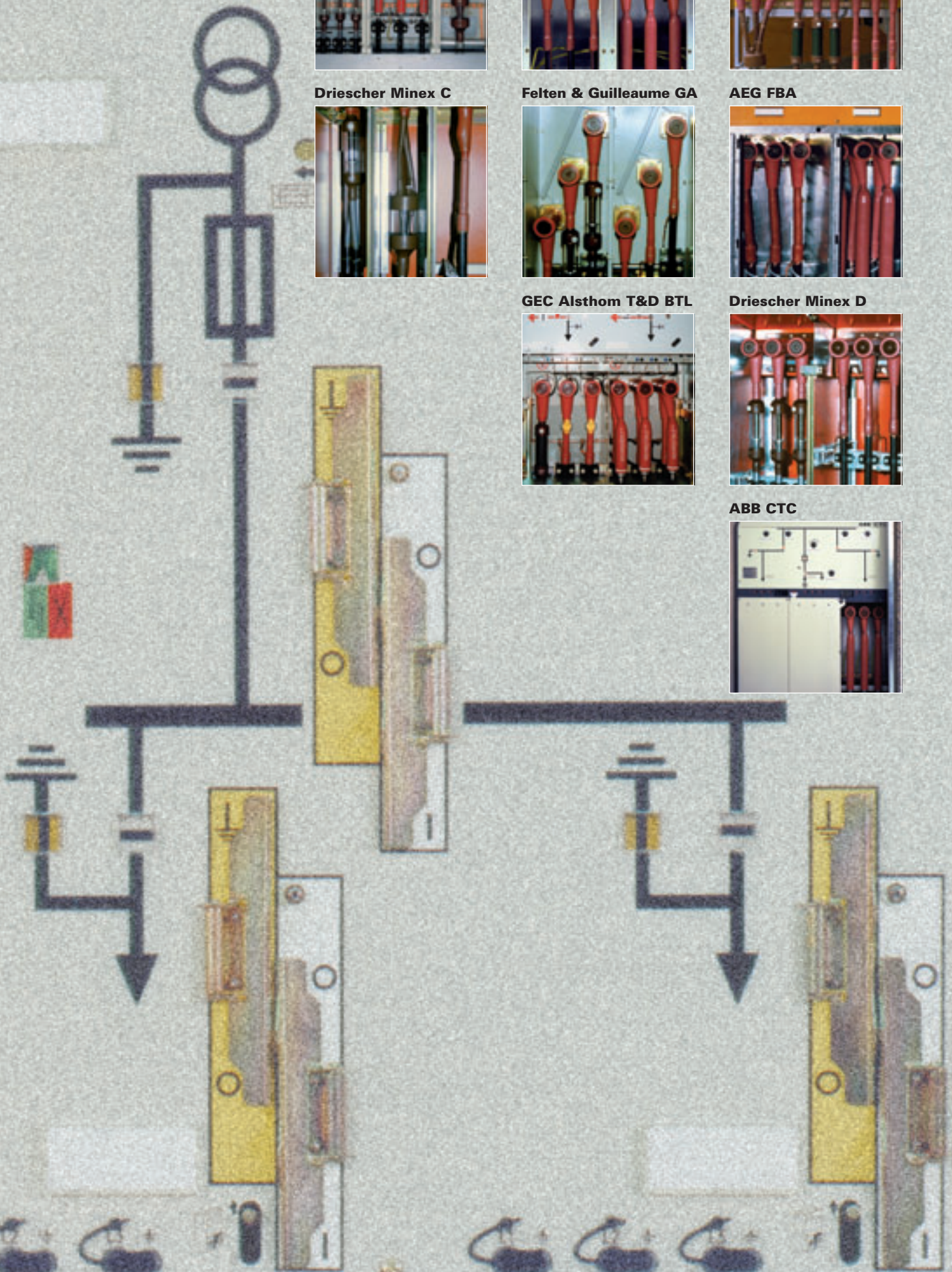
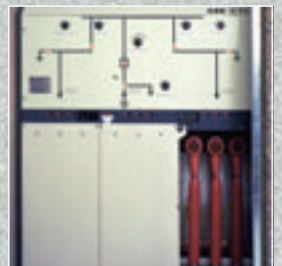
**GEC Alstom T&D BTL**



**Driescher Minex D**



**ABB CTC**



**Raychem**

**tyco**  
Electronics

Tyco Electronics Raychem GmbH  
Finsinger Feld 1, 85521 Ottobrunn/Munich, Germany  
Phone: +49-89-6089-0, Fax: +49-89-6096345  
<http://energy.tycoelectronics.com>

*a vital part of your world*

© Tyco Electronics EPP 0532 7/06



6 Pagiou Str., Nea Filothei  
Athens, Greece, GR- 15123  
Tel: +30 210 6754801, Fax: +30 210 6754804  
[info@enia.gr](mailto:info@enia.gr)  
[www.enia.gr](http://www.enia.gr)

All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance of any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for these products is set forth in our standard terms and conditions of sale. RAYCHEM is a trademark.

**Energy Division – economical solutions for the electrical power industry: cable accessories, connectors & fittings, electrical equipment, instruments, lighting controls, insulators & insulation enhancement and surge arresters.**