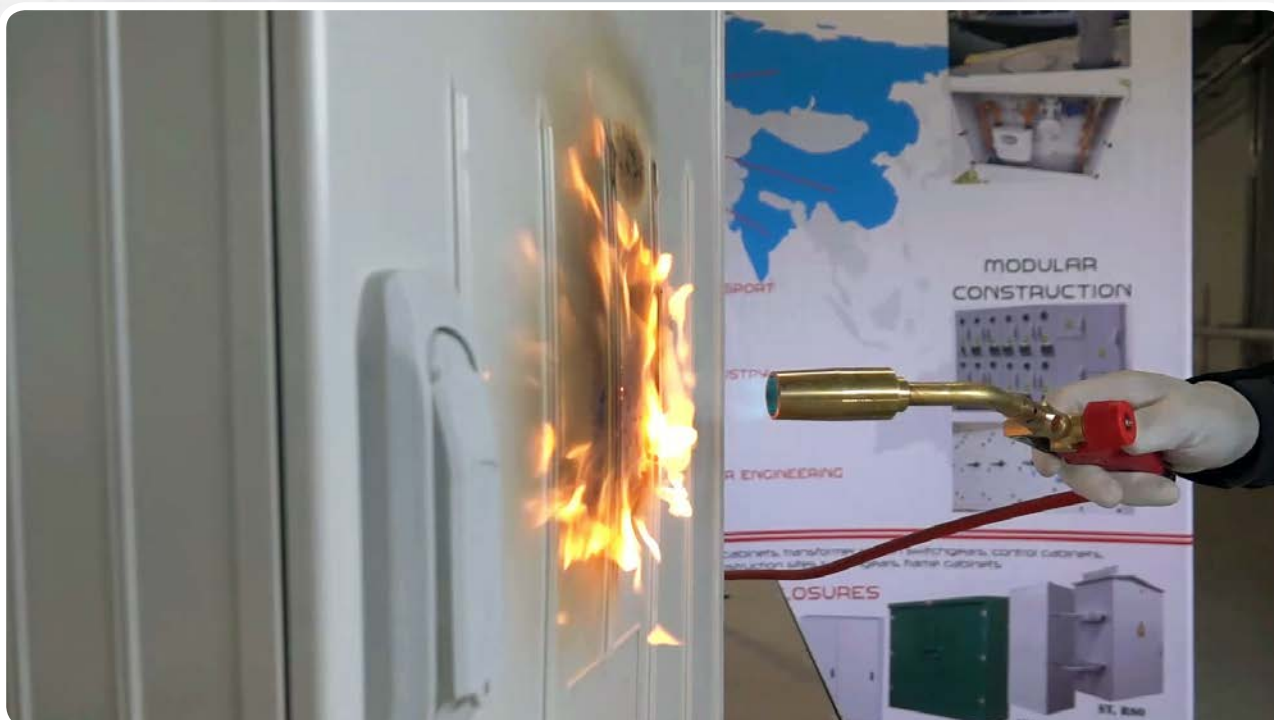


Cabinets made of glass-fibre reinforced polyester (GRP)

<p>T1</p> <p>↙ 245</p>  <p>IP44 IP54 (option)</p> <p>OS · OSZ · OSi · OSzi</p>	<p>T2</p> <p>↙ 320</p>  <p>IP44 IP54 (option)</p> <p>KS · KSZ · KSi · KSzi</p>	<p>T3</p> <p>↙ 320</p>  <p>IP44 / IP54</p> <p>DC · DCB · DCWE · DCWEB · DCZ · DCZB · DCWEZ · DCWEZB</p>	<p>T4</p> <p>↙ 640</p>  <p>IP44</p> <p>STT · STTK · STTF · STO · STOK · STOF</p>
<p>T5</p>  <p>IP44</p> <p>MZG · MZZ</p>	<p>T6</p> <p>↙ 115 / 211 / 222</p>  <p>IP44 / IP54 / IP65 / IP66</p> <p>LILA</p>	<p>T7</p> <p>↙ 204 / 214 / 252 / 323</p>  <p>IP65 / IP66</p> <p>HYDRA</p>	<p>T8</p> <p>↙ 138</p>  <p>IP54</p> <p>KH</p>

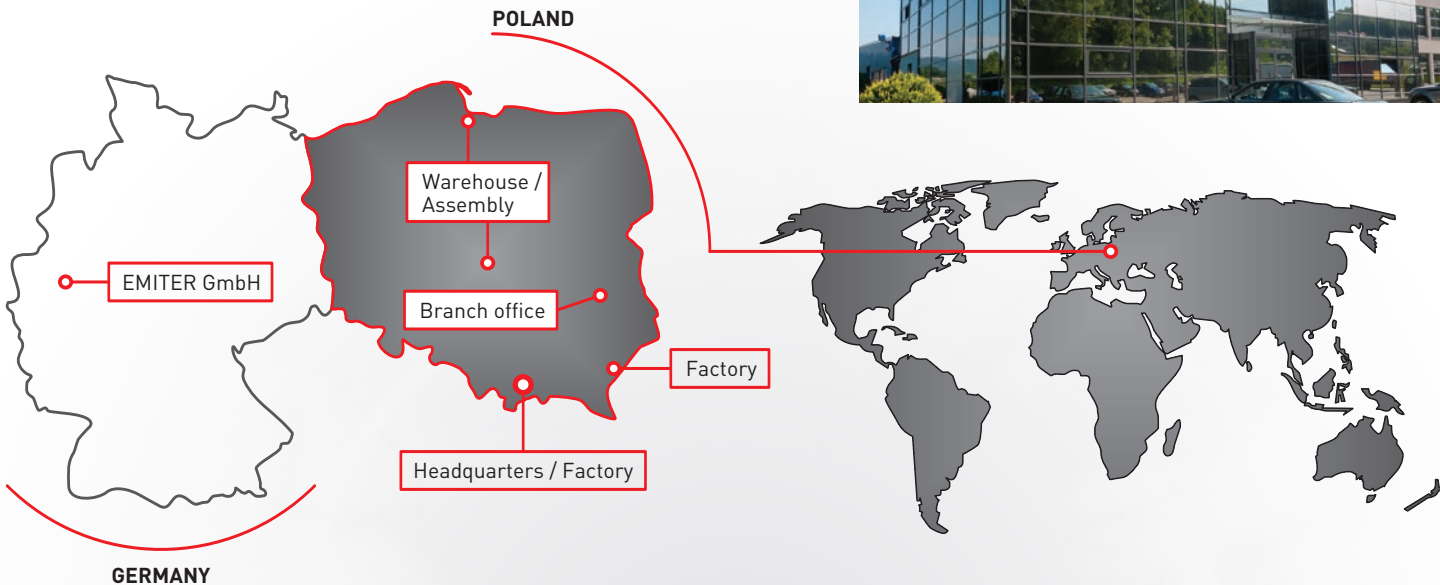
<p>IK10</p> <p>Impact resistance</p>	<p>ISO</p> <p>9001</p>	<p>IP 44/54/65/66</p> <p>Protection grade</p>	<p></p> <p>Halogen free</p>	<p>CE</p>	<p></p> <p>GSM transparency</p>	<p></p> <p>UV resistance</p>
<p></p> <p>Protection class II</p>	<p></p> <p>Flame resistance</p>	<p></p> <p>Recyclable</p>	<p></p> <p>Long life</p>	<p></p> <p>Corrosion resistance</p>	<p></p> <p>UL standard</p>	

Divides energy, multiplies solutions!



About us

EMITER is a company with 100% Polish capital, present on the market for over 30 years. Company place itself among the leaders in his industry. Our team currently consists of over 500 employees, our main specialization is designing, production and distribution of polyester and metal enclosures, also prefabrication of electrical switchgears. We export our products to all European countries, to Asia, Africa and beyond. From year to year, we expand our range and distribution network, while maintaining the high quality of our products.



Our possibilities

We have several branches, a large and modern machine park operated by qualified staff, thanks to which we are always ready to cooperate within the range of our activities.



Quality and logistics

- The entire production process takes place in our company, which guarantees efficient execution of orders.
- All our products are tested in certified research centers in the country and abroad to meet the requirements of standards covering enclosures for switchgears and electrical switchgears.
- Taking care of the constant construction and technological progress of our products, we additionally conduct research on our own. We publish the results of some of our observations as an articles in professional press.
- ISO 9001 Quality Management System helps us to improve the management of individual processes and maintain the quality of our products at a high level.



Polyester enclosures manufactured by Emiler are made of a flame-retardant, self-extinguishing composite: polyester + glass fiber (SMC).

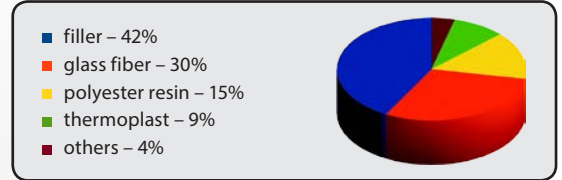
SMC - characteristics

SMC (Sheet Molding Compound) is a composite of unsaturated polyester resin reinforced with glass fiber (12–50 mm long) as well as mineral filler and other additives. It has the form of a 1,5 m wide and a few mm thick rolled mat. It is designed for processing by hot pressing. Polyester belongs to the group of duroplasts and it is a thermosetting material.



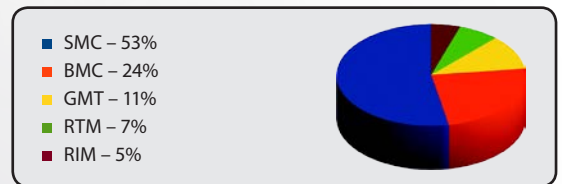
A material similar to SMC is BMC (Bulk Molding Compound), which occurs in the form of a shapeless mass or loose granulate. It can be processed by injection method. In this case, the fiber has a length of 6–12 mm.

In addition to basic components such as polyester resin, fiberglass and filler, SMC contains various additives in the form of: thickeners, anti-adhesive agents, flame retardants, etc.



SMC Market share

Thanks to the use of fillers and enriching additives, SMC gains an advantage over other composites, which is reflected in the share of individual materials on the European market.



Advantages of SMC application

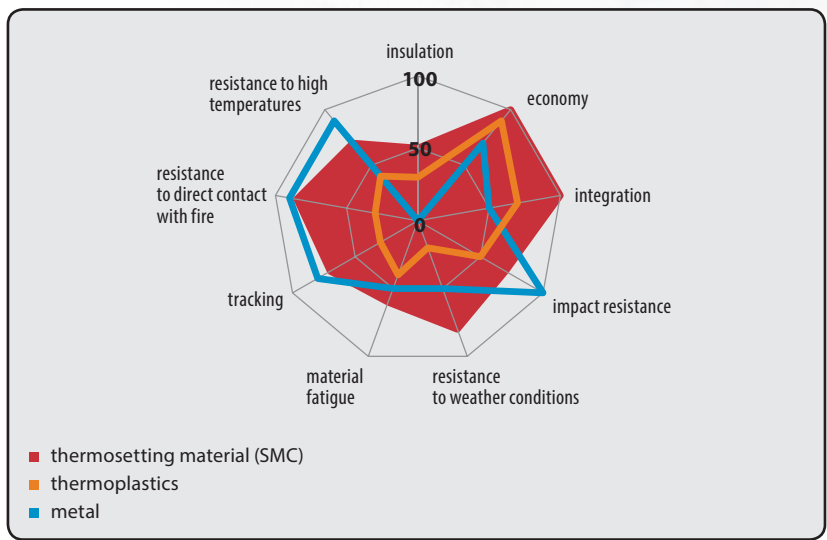
The use of SMC as the main component in the production of elements offers many advantages:

- reduces material costs;
- reduces unfavorable material shrinkage during processing;
- gives molding compounds specific processing features (e.g. ease of forming, low shrinkage);
- the possibility of obtaining a thickness in the range of 1,1–60 mm in the forming process;
- provides the products with the desired functional characteristics (e.g. favorable fire properties, impact resistance, insulation properties, etc.);
- enables easy mechanical processing of finished elements (e.g. cutting holes, milling);
- does not contain halogens;
- recyclable.



Material comparison

Comparison of the properties of basic materials used in electric and electronic fields (higher value means better properties).



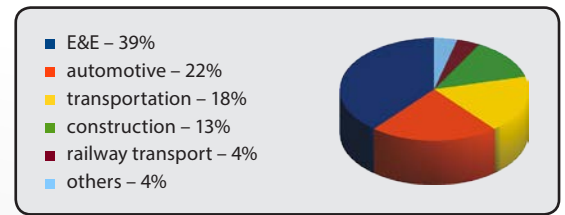
A sample of the GRP (SMC) composite after treatment showing the structure of the material's reinforcement with glass fiber.



Application of SMC

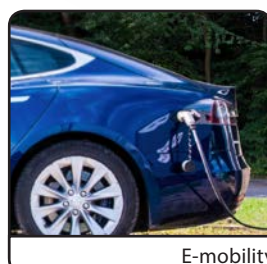
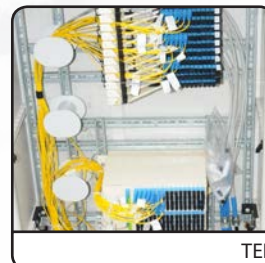
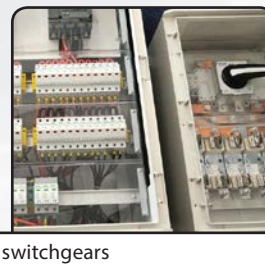
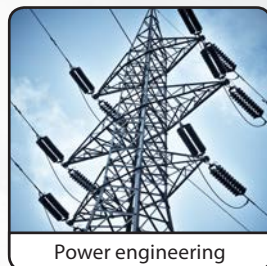


Due to its advantages, SMC has been widely used in various fields for over 50 years.



Cabinets

Universal application of polyester cabinets



Properties of polyester cabinets (advantages)



Corrosion resistance

Resistant to weather conditions, chemicals and solvents

UV resistance

Protection class II

Protection against direct and indirect contact

Flame resistance

Flame-retardant, self-extinguishing material
Flammability category V0

Impact resistance

IK10

Ingress protection

IP44, IP54, IP65, IP66

Easy to machine

Possibility of cutting holes, milling, etc.

Modular design

Easy replacement of individual elements

GMS Transparency

Electromagnetic compatibility
GSM transparent

Economical transportation

Possibility of sending elements for self-assembly in a package (flat-pack)

Long life

More than 40 years

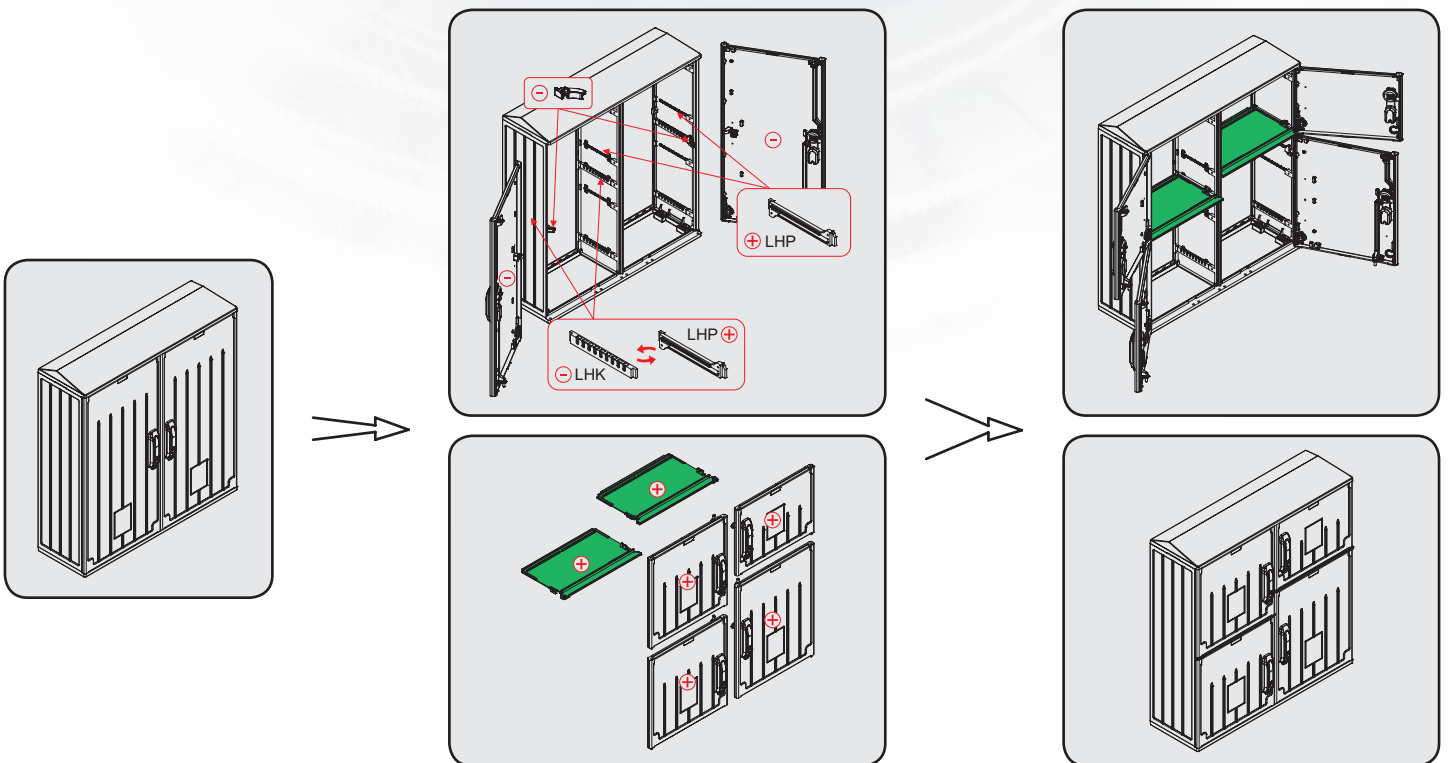
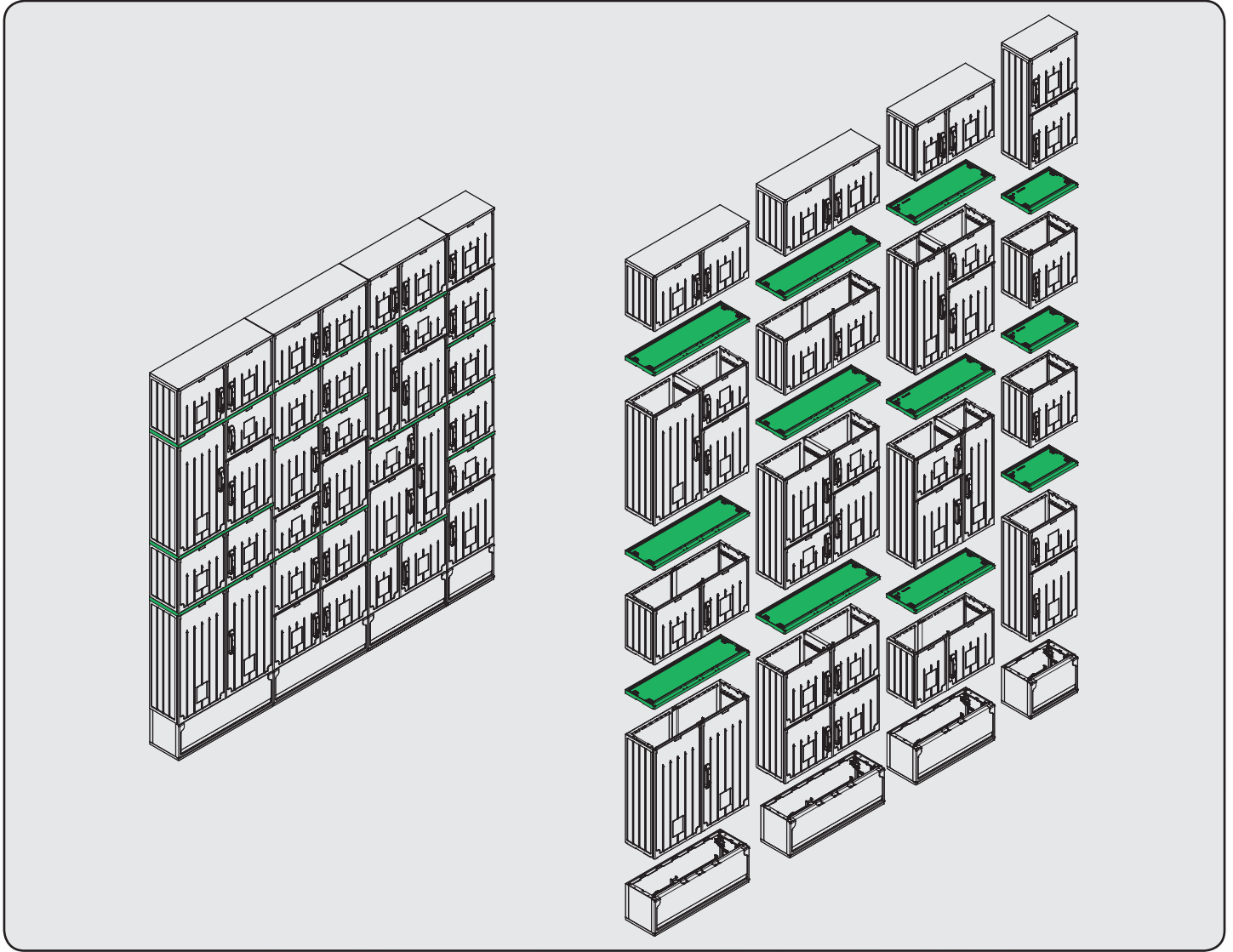
Temperature operating conditions

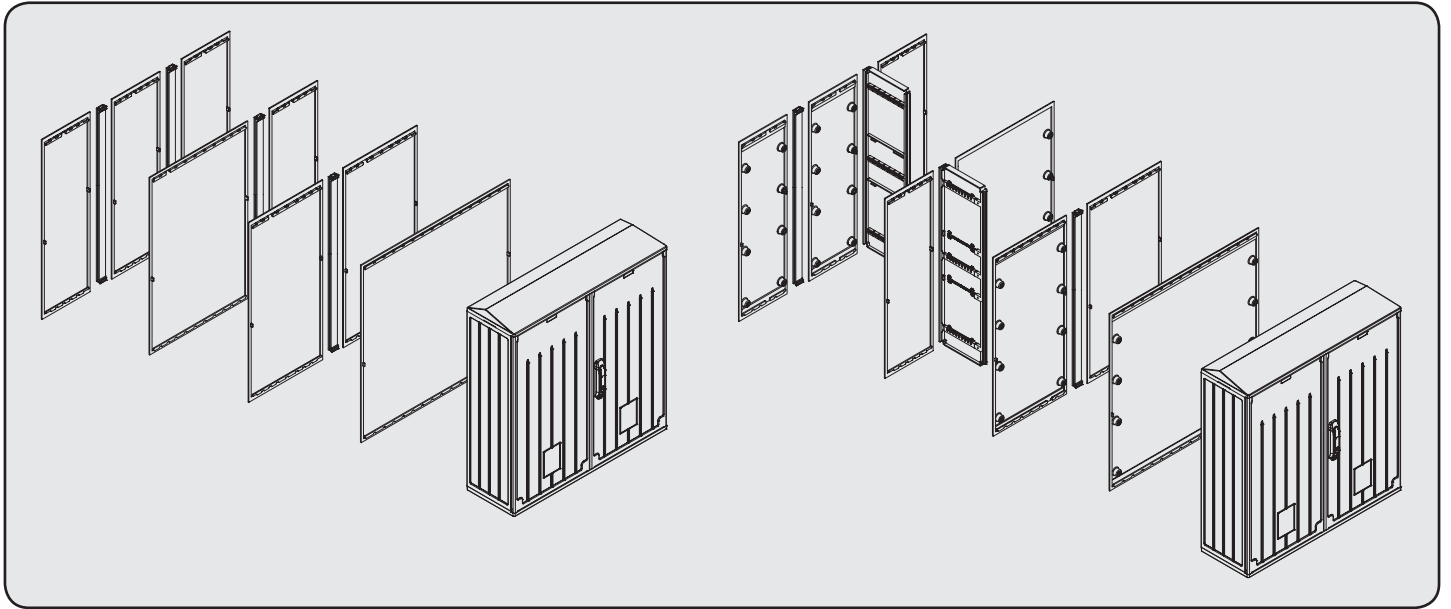
-50 – 85°C

Lightweight construction

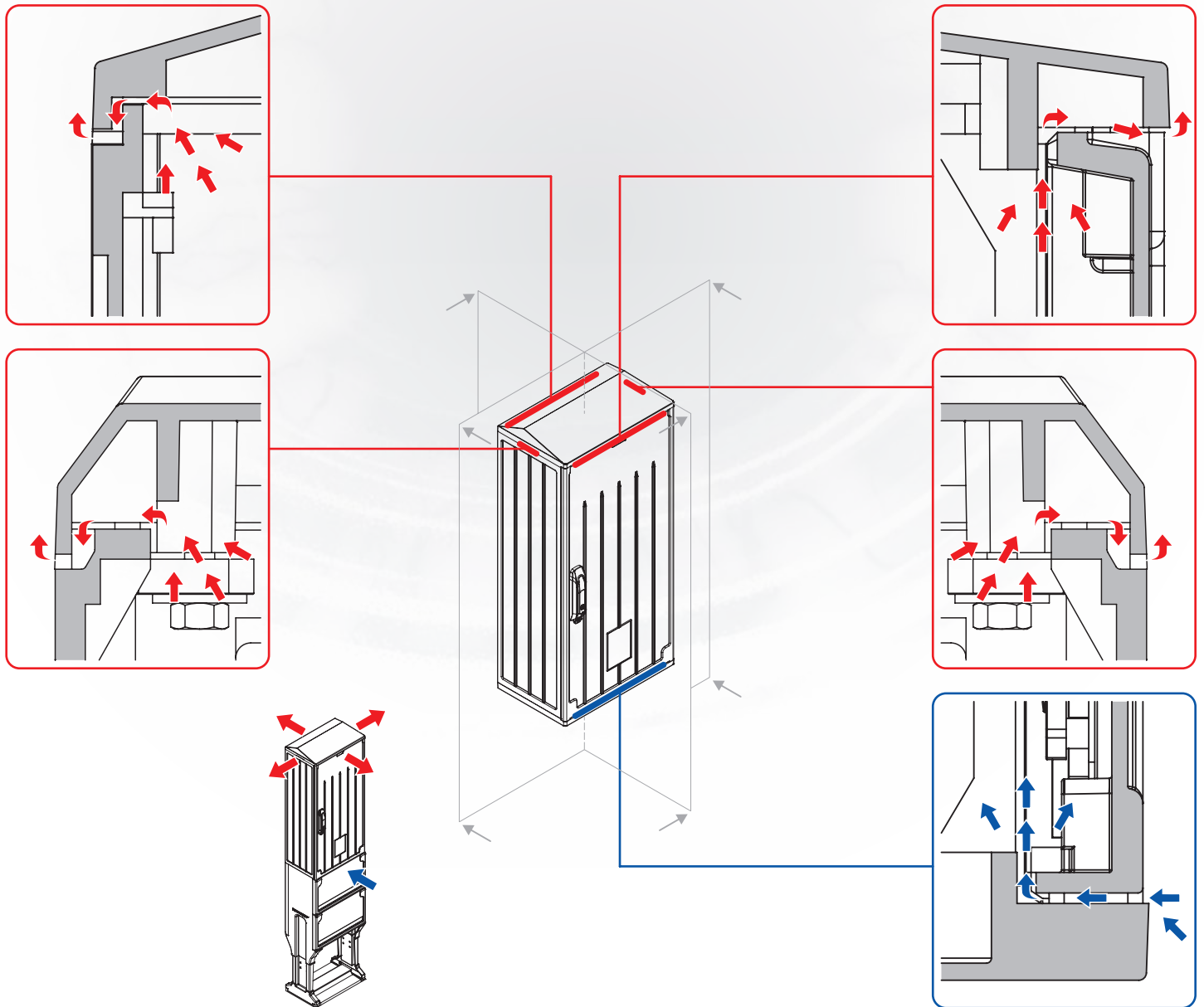
Recyclable

Wide configuration options



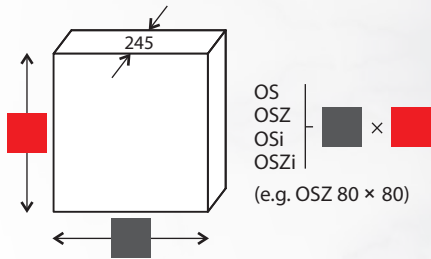


Ventilation system

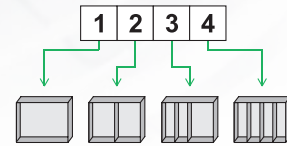
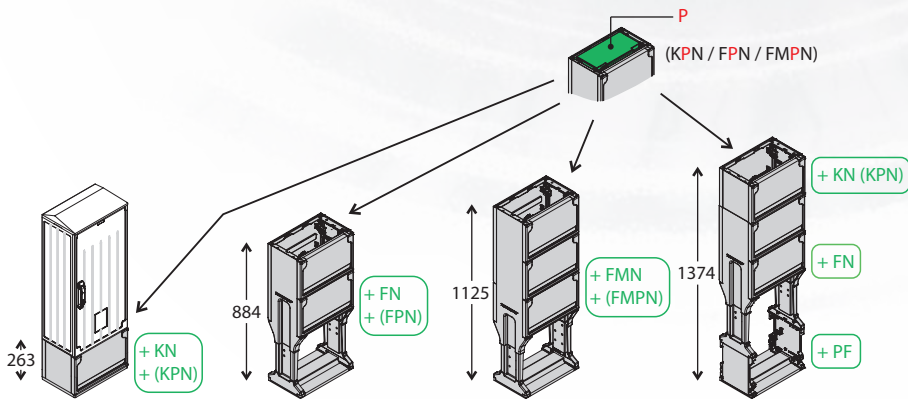
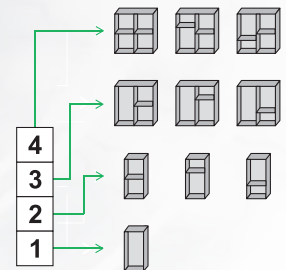


Cabinet types

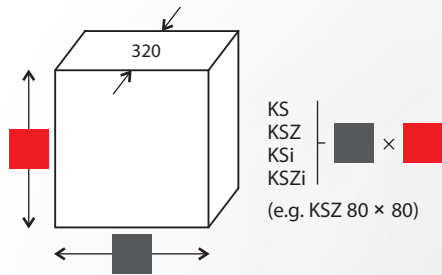
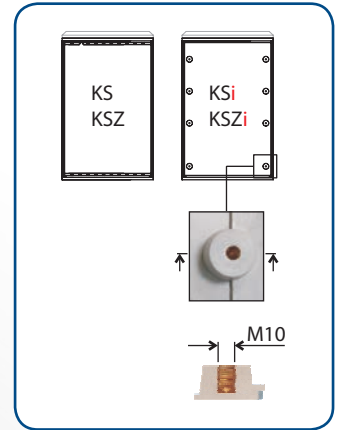
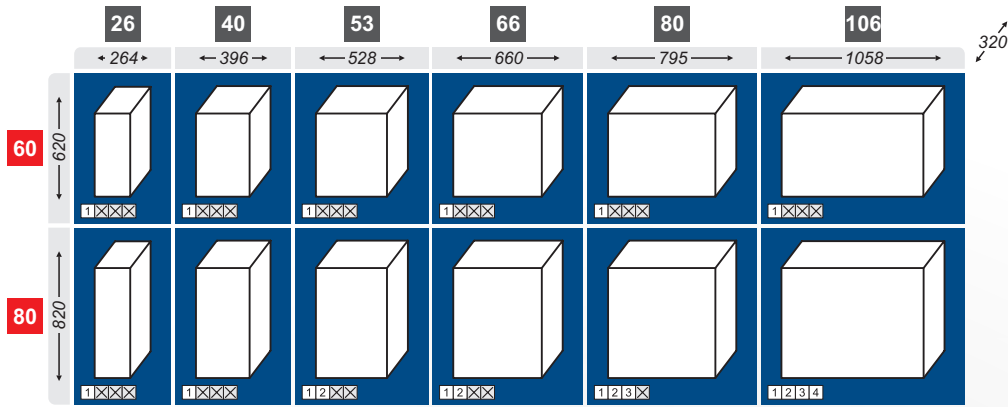
OS • OSZ • OSi • OSZi



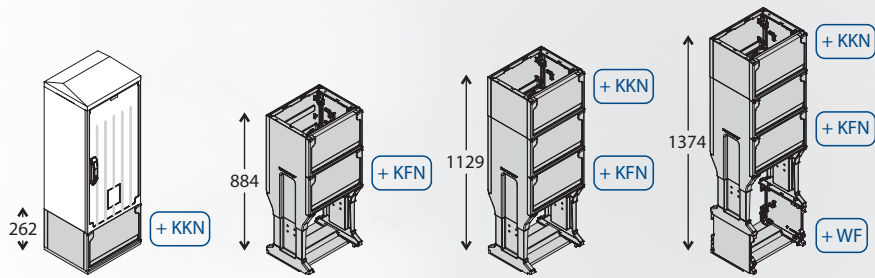
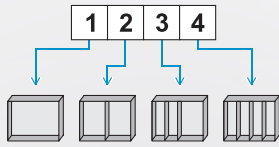
IP44
IP54 (option)



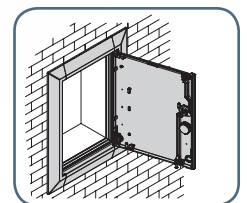
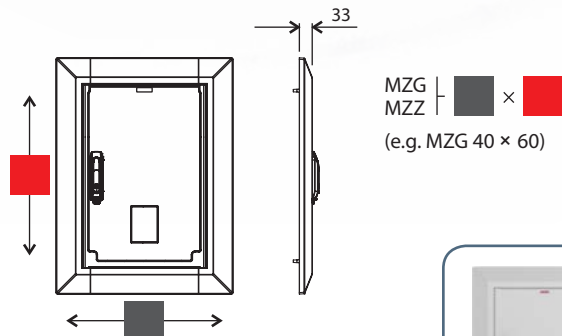
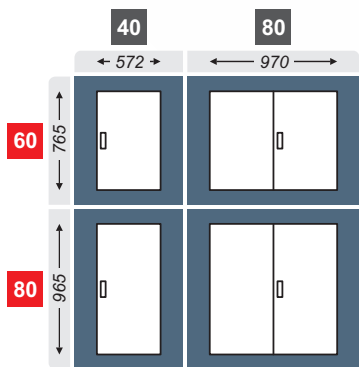
KS • KSZ • KSi • KSZi



IP44
IP54 (option)



MZG • MZZ
Masking frames

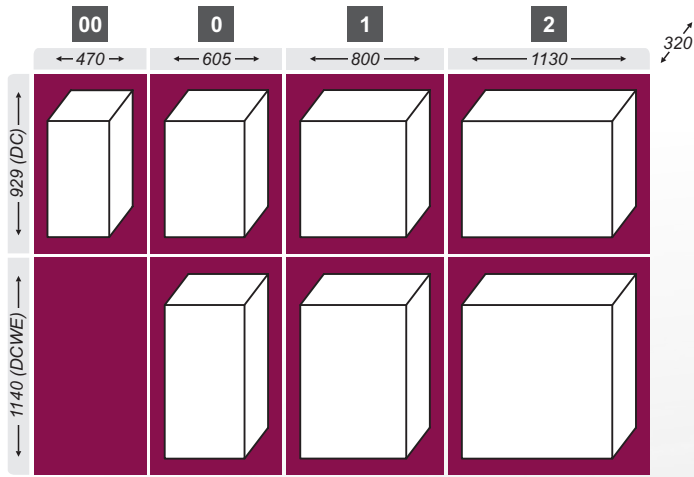


IP44

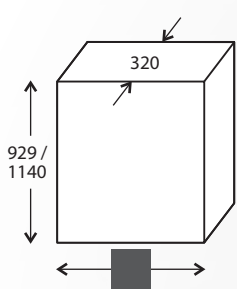


DC • DCB • DCWE • DCWEB (DIN)

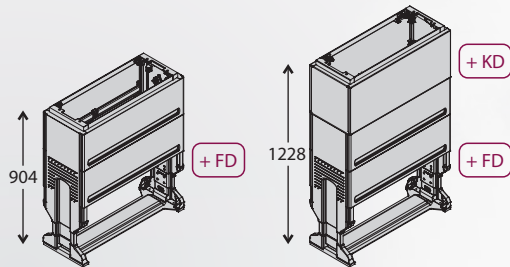
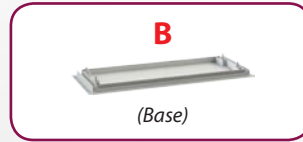
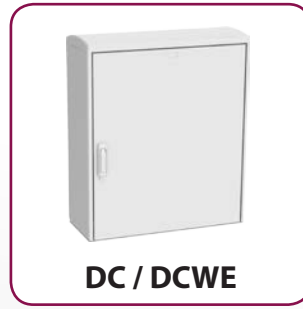
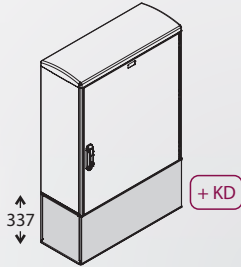
Smooth surface



IP44 / IP54

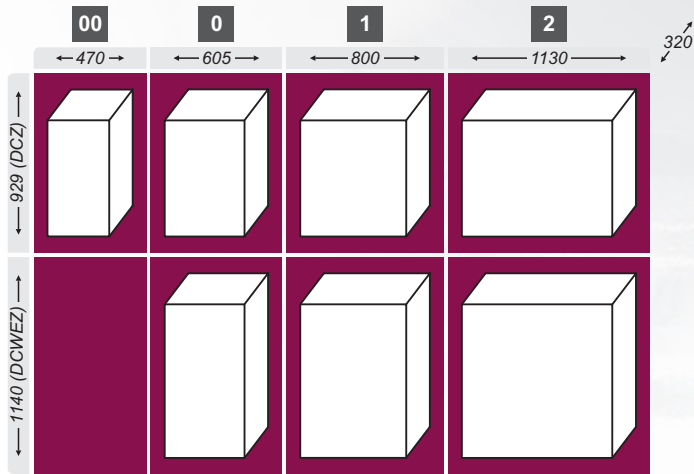


44 IP44
54 IP54
DC
DCB
DCWE
DCWEB
(e.g. DC 144)

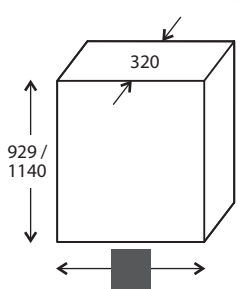


DCZ • DCZB • DCWEZ • DCWEZB (DIN)

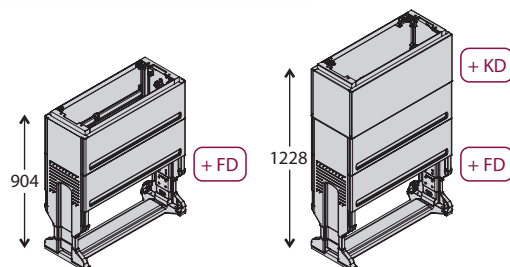
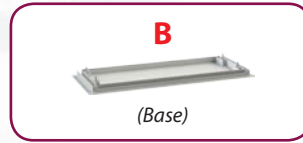
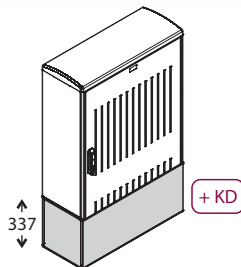
Ribbed surface



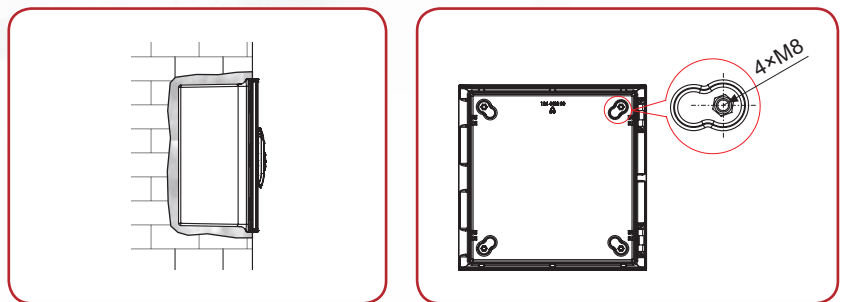
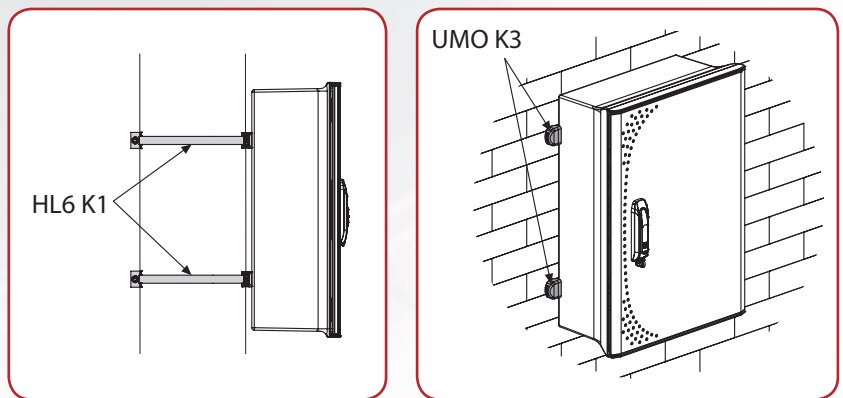
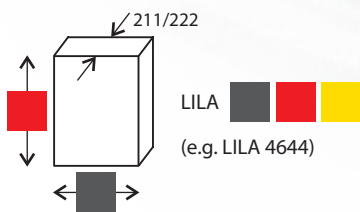
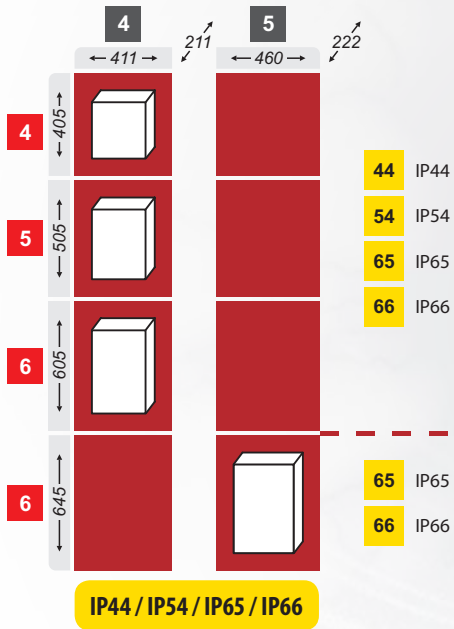
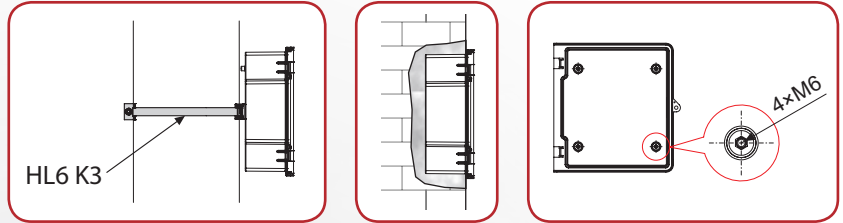
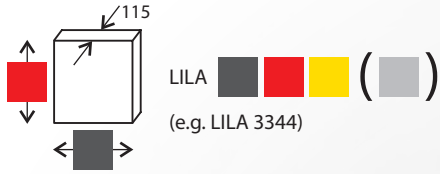
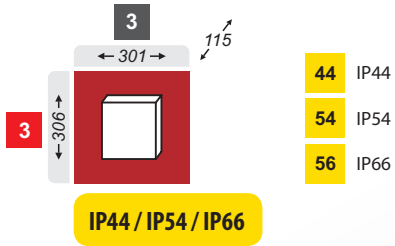
IP44 / IP54



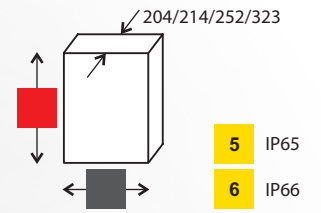
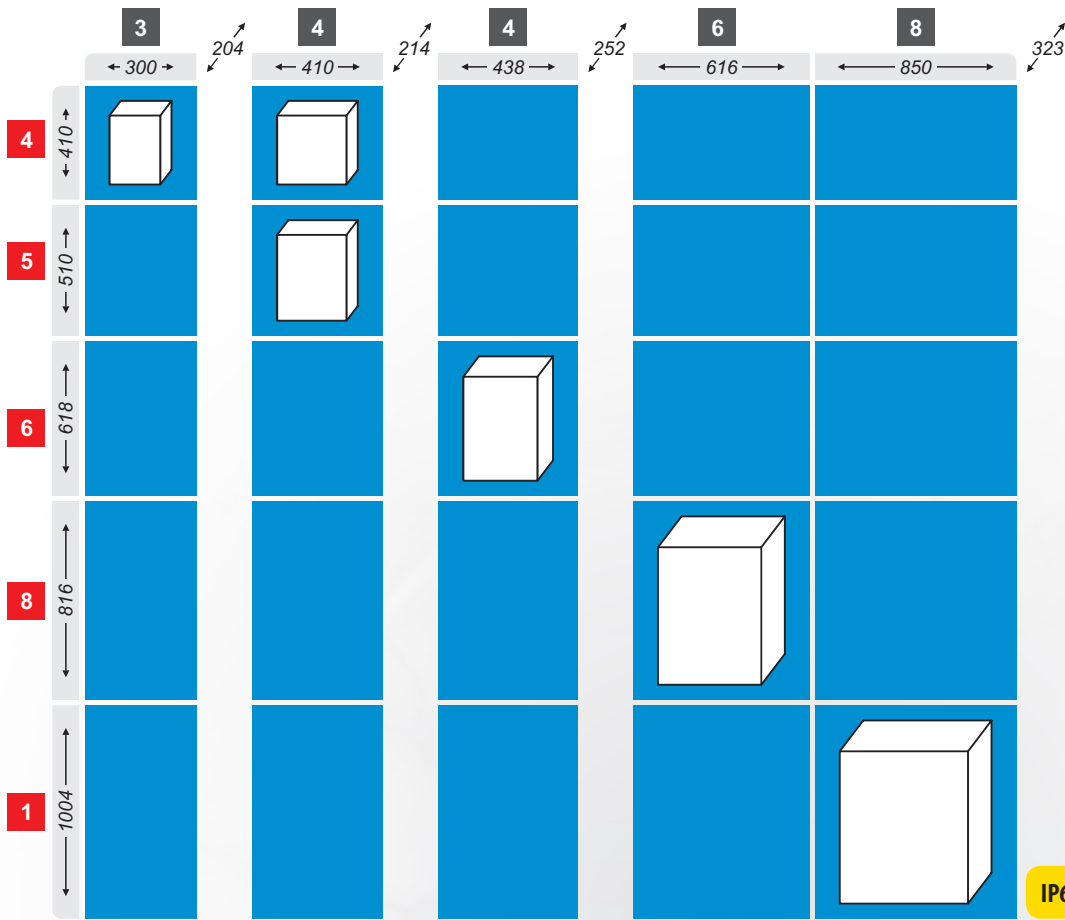
44 IP44
54 IP54
DCZ
DCZB
DCWEZ
DCWEZB
(e.g. DCZ 144)



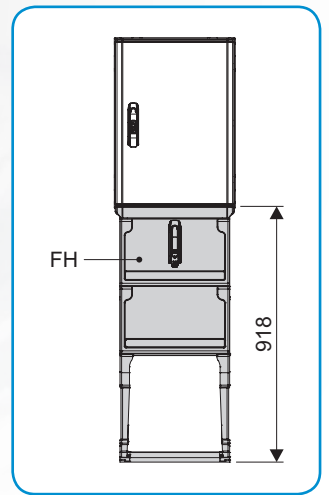
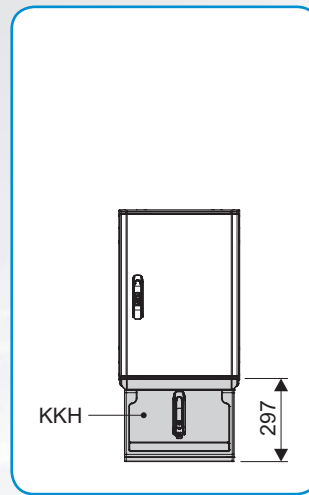
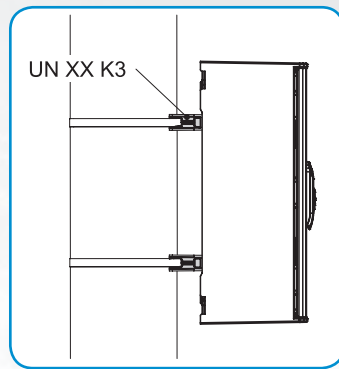
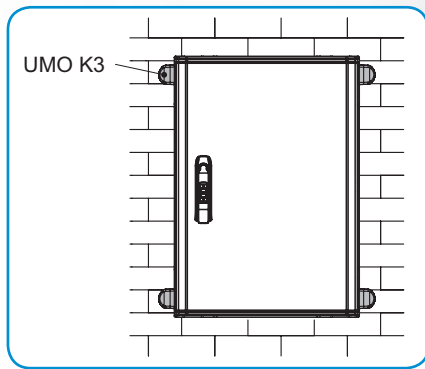
LILA



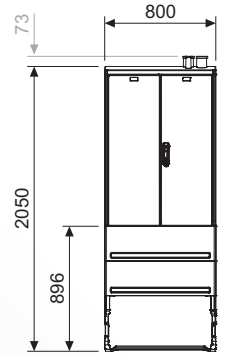
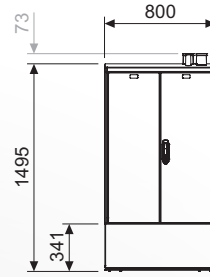
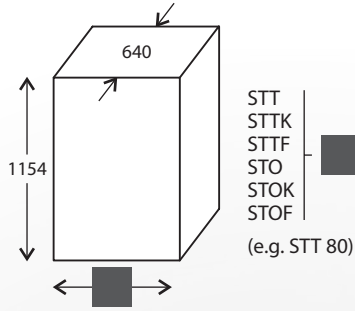
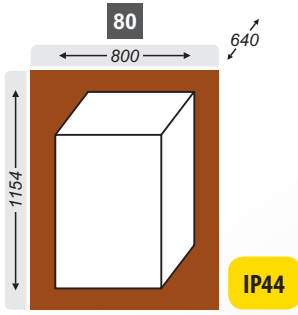
HYDRA



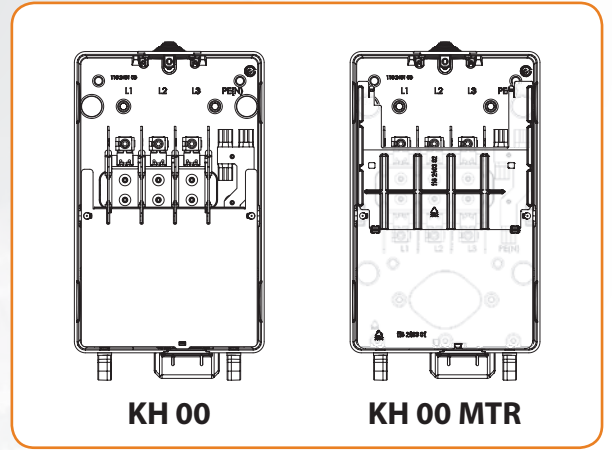
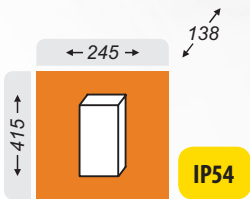
HYDRA
(e.g. HYDRA 686)



STT • STTK • STTF • STO • STOK • STOF



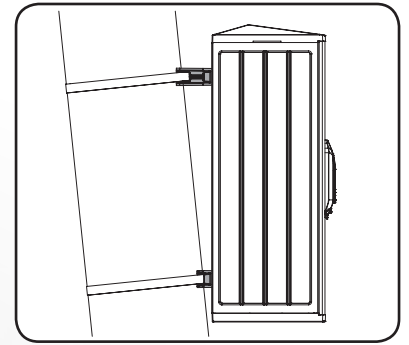
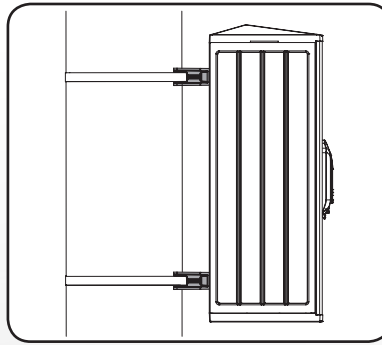
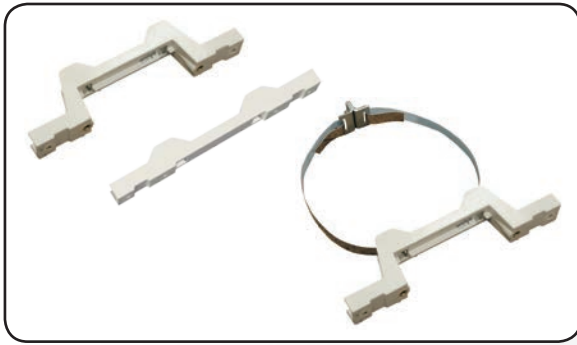
KH 00



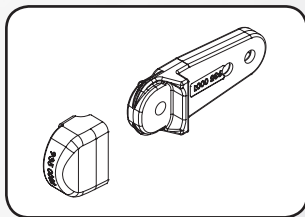
KH 00

KH 00 MTR

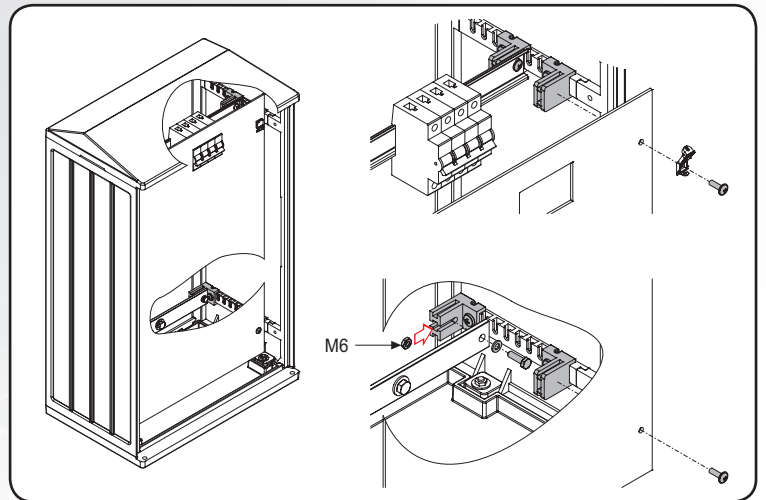
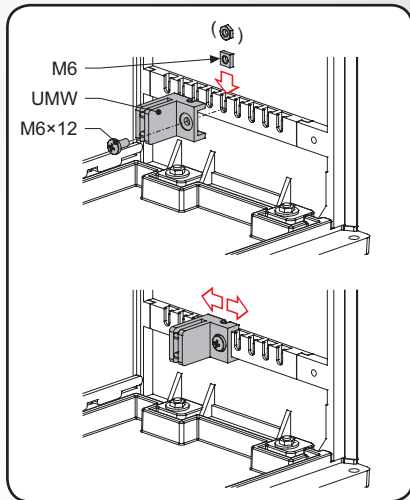
UN • UPN • KUN • KUPN



UM0



UK • UM • UMW



Metal enclosures and cabinets



Low Voltage switchgears



Transformer stations



EV charging stations

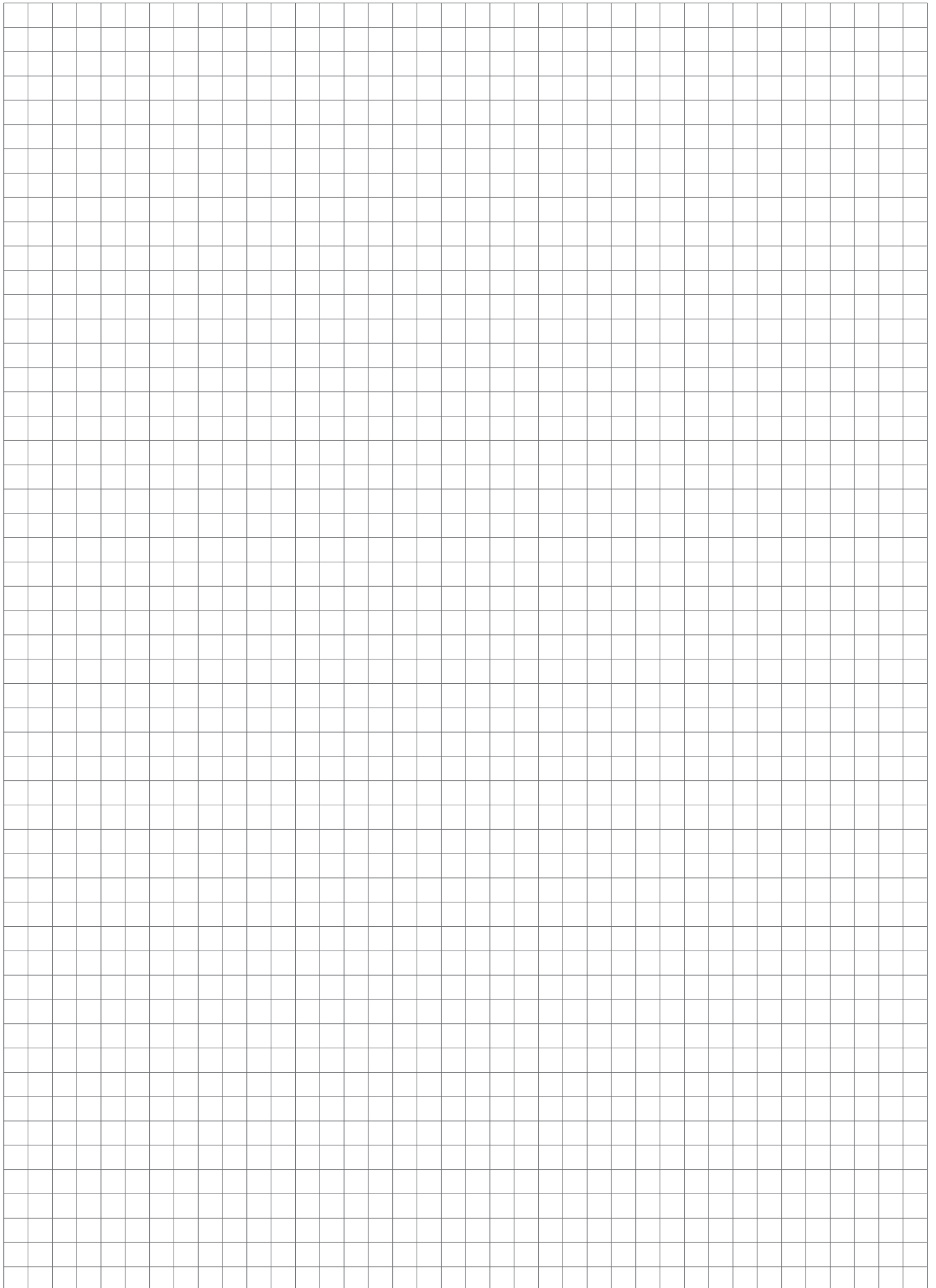


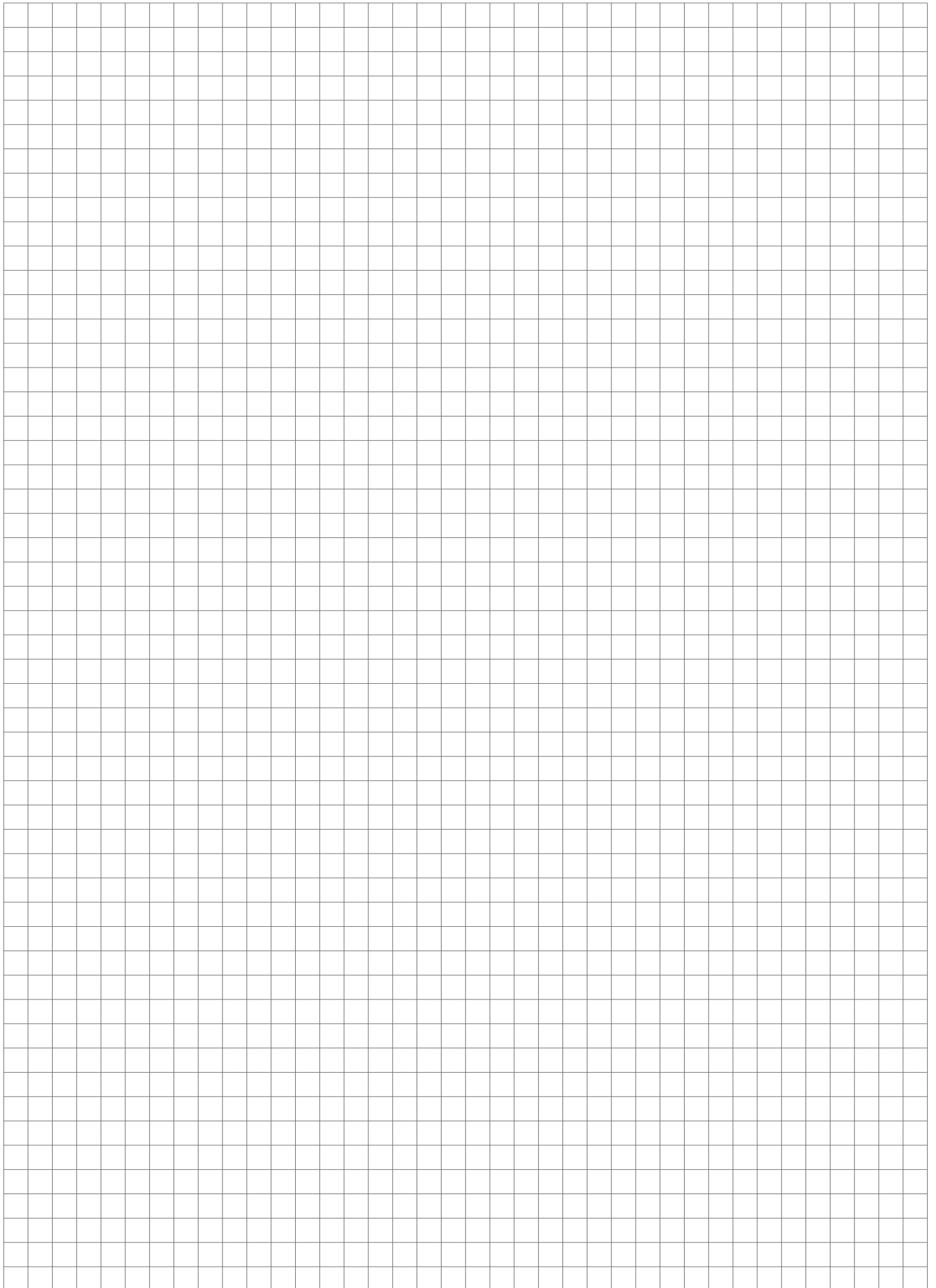
LV current transformers

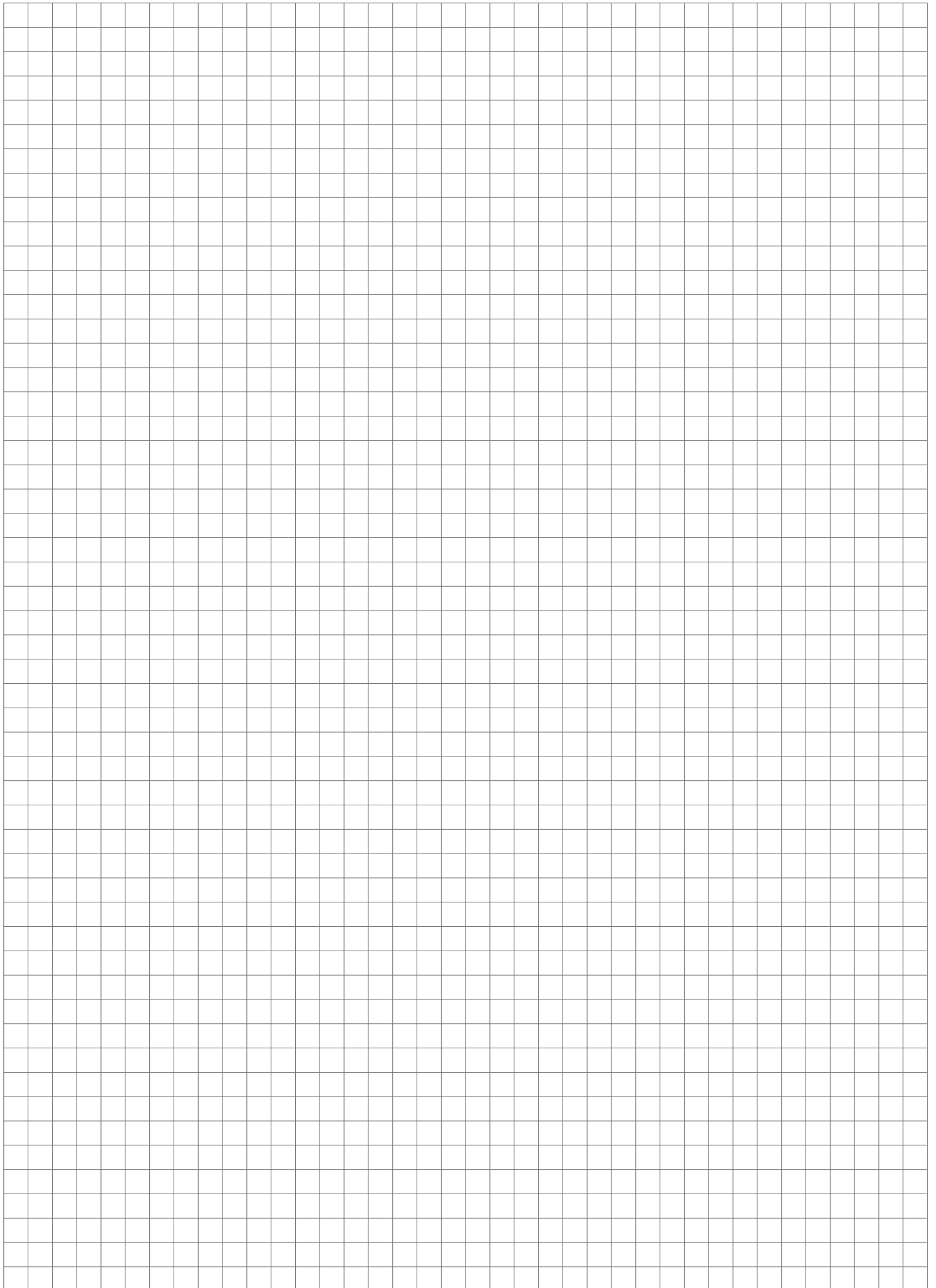


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www.emiter.com