

Case Study

Socket combination unit housing made of (PBT+PC) blend – dimensionally stable and chemically resistant



Socket combination unit

ABL SURSUM, with its extensive, high-quality product range, is one of the leading independent manufacturers of electrical products in Germany. The company's innovative inventions, such as the SCHUKO earthed plug and socket system and the first screw-in circuit breaker with electromagnetic tripping, provided the basis for the subsequent technological development of ABL SURSUM's present product range. With around 7,000 products, the company always has the right solution for wiring systems in buildings and industry and for other electrical systems and switchgear.

True to the motto "if you don't go forwards you go backwards", the new generation of housings for switch and socket combination units is made of Pocan[®], a tailor-made plastic developed by LANXESS. It is a blend of polybutadiene terephthalate and

Material: Pocan[®] (PBT+PC) blend

Manufacturer: ABL SURSUM; Germany

polycarbonate (PBT+PC) that cleverly combines the advantages of its two individual components to make the product ideal for coping with extremely complex stresses and loads.

The good flow properties of the blend mean that it can be used without any problems to manufacture the relatively large housing sections. The parts have a smooth, easy-to-clean surface, and this is where the plastic's good chemical resistance proves invaluable.

Particular attention was paid to good low-temperature impact resistance, which makes the parts less sensitive to knocks and blows.

Other advantages of the new Pocan[®] material include its high dimensional stability, which is achieved through low, approximately isotropic



shrinkage, its minimal warpage tendency and low water absorption. The combination of these properties and the structure of the housing allows IP44 classification, which means that it can also be used,

for example, in applications with high atmospheric humidity, splashing water or wide temperature fluctuations. Typical areas of application are commercial kitchens, car washes and laundromates.

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