

Case Study

Reset lever for circuit-breakers made of Pocan® DP 4035



Figure 1 Reset lever for circuit-breakers

The international [Legrand Group](#) is a leading supplier of products and system solutions for electrical installations and information networks for the housing construction, commercial and industrial sectors. Some 33,000 employees provide services for more than 130,000 products in over 60 countries. Legrand places great emphasis on innovative growth, with almost 5 % of the company revenue being invested in research and development each year. Another of the Group's core activities focuses on making its products and production facilities as ecologically sound as possible through energy savings, product selection and recycling.

For example, environmentally-friendly, halogen-free thermoplastics are used in the production of circuit-breakers. Among other things, these products must meet standardized requirements for fire behavior. Glass fiber- or mineral-reinforced polyamides are normally used for the housing. Now, the reset lever

Material: Pocan® DP 4035

Manufacturer: Legrand - BTicino GmbH

Industry: Electrical/Electronics

of Legrand's circuit-breakers is also being manufactured from a newly-developed halogen-free, flame-retardant polyester from LANXESS.

Pocan® DP 4035 meets the stringent requirements of the Legrand Group in terms of mechanical, rheological and flame-retardant properties. The material is a PBT blend reinforced with 30 % glass fibers. It achieves a UL (Underwriters Laboratories) 94V-2 flammability classification class in all colors. Halogen-free flame retardants are already being used today in response to the trend towards avoiding halogen-containing substances in products. However, the product characteristics also benefit from the new flame-retardancy. For instance, electrical properties such as tracking resistance (CTI: 1) and high-voltage arc tracking rate (HVTR: 0), which are also based on UL guidelines, offer significantly better values than polyesters containing halogen.

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.

Trial Products (grade designations beginning with the codes DP, TP, KL or KU)

This is a Sales Product at the developmental stage (a Trial Product). For this reason, no assurances can be given as to type conformity, processability, long-term performance characteristics or other production or application parameters. No definitive statements can be made regarding the behavior of the product during processing or use. The purchaser/user uses the product entirely at his own risk. The marketing and continued supply of this material are not assured and may be discontinued at any time.

© = LANXESS Deutschland GmbH 2008, SCP Business Unit | all rights reserved

www.pocan.com

Page 2 of 2, Edition 06.02.2007, TI 2007-028 EN

