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## Cerberus - Version 11.0

**Product Information** 

With newly developed features, which amongst others include the analysis of the unbalanced load flow and the integration of standard load profiles, **Adapted Solutions** has extended the capabilities of its network calculation software **CERBERUS** in the current version 11.0.

## **Analysis of Unbalanced Load Flow**

Extensions in the calculation kernel of **CERBERUS** do now allow for the inclusion of single-phase connected loads and generators in the grid model and their consideration in the load flow analysis and the determination of the maximum possible generator power or load.

The grid connection of all loads and generators can be freely selected.



## **Integration of Standard Load Profiles**

The **CERBERUS** load model has been extended with the option of selecting a standard load profile.



The calculation of the load flow can therefore take into account inputs for the season and time as well as the weekday to be considered.

A load profile analysis allows for the calculation and graphic display of the voltage profile of the network nodes for a day in a 15-minute grid.

Additional analyses can be performed using scripts and the **CERBERUS** OLE interface.

## **Expanded Functionalities**

Further innovations in CERBERUS 11.0 include a model of a cable section, the inclusion of harmo-

nics in the determination of the load capacity of cables according to DIN 0100-520 and the dimensioning of household loads according to DIN 18015-1. To reduce the computation times required for simulations in the time domain, an "RMS simulation" was implemented in which the calculation of short-term transient processes is suppressed. The database of protection devices provided with **CERBERUS** has been extended as well as the module for the analysis of the selectivity of the protection concept.



CERBERUS 11.0 is fully compatible with previous versions. The software supports the operating systems Windows<sup>®</sup> 7, Windows<sup>®</sup> 8 and Windows<sup>®</sup> 10.