

Short summary:

The objective of this thesis is to design and type test low-end prefabricated substation for distribution networks where the energy conversion is normally from medium-voltage to low-voltage. Prefabricated substations are used for distributing electrical energy to the loads by transforming electrical energy from medium-voltage to low-voltage or vice versa, depending on substation purpose. On this scope, substations usually include medium voltage solution, distribution transformer and low-voltage switchboard. Prefabricated substations are factory tested solutions that can be easily installed on site. This thesis covers the topics from collating requirement, designing and developing the solution including the validation. The product was released and it was presented in EBR Metod exhibition in May 2018.

Key words: Prefabricated substation, CSS, product development, master thesis.