Library of the electrical elements of the user's interface mnemonic schemes

Name:	ElectroEls
Founded:	June 2009.
Version:	0.2.0
State:	Open (GPL)
Author:	Maxim Lysenko
Description:	Provides the electrical elements library.
Source:	DB with the electrical elements library: SQLite.ElectroEls.wlb_ElectroEls (ElectroEls.db.gz)

Contents table

About the library

The library is created to provide mnemonic elements of the user interface. The library is built on the basis primitives of widgets and JavaLikeCalc module, allowing to create calculations on the Java-like language.

It is possible to connect the library of mnemonic elements of user interface to the project of the OpenSCADA station by downloading the attached file of the database, placing it in in the database directory of the station's project and creating the database object for the DB module "SQLite", indicating the database file in the configuration.

The library contains about twenty widgets, often sought after in the mnemonic schemes' formation of the user interface of process control in the electricity sector. Names of elements are available in three languages: English, Russian and Ukrainian.

By default, all widgets have the scale on both axes, equal to "1", and their rotation angle - "0" degrees. There is the ability to rotate, and scale of these widgets to specify the desired proportions.

1. Dynamic items

Below, in Fig. 1, the list of different types circuit breakers and switches is provided.

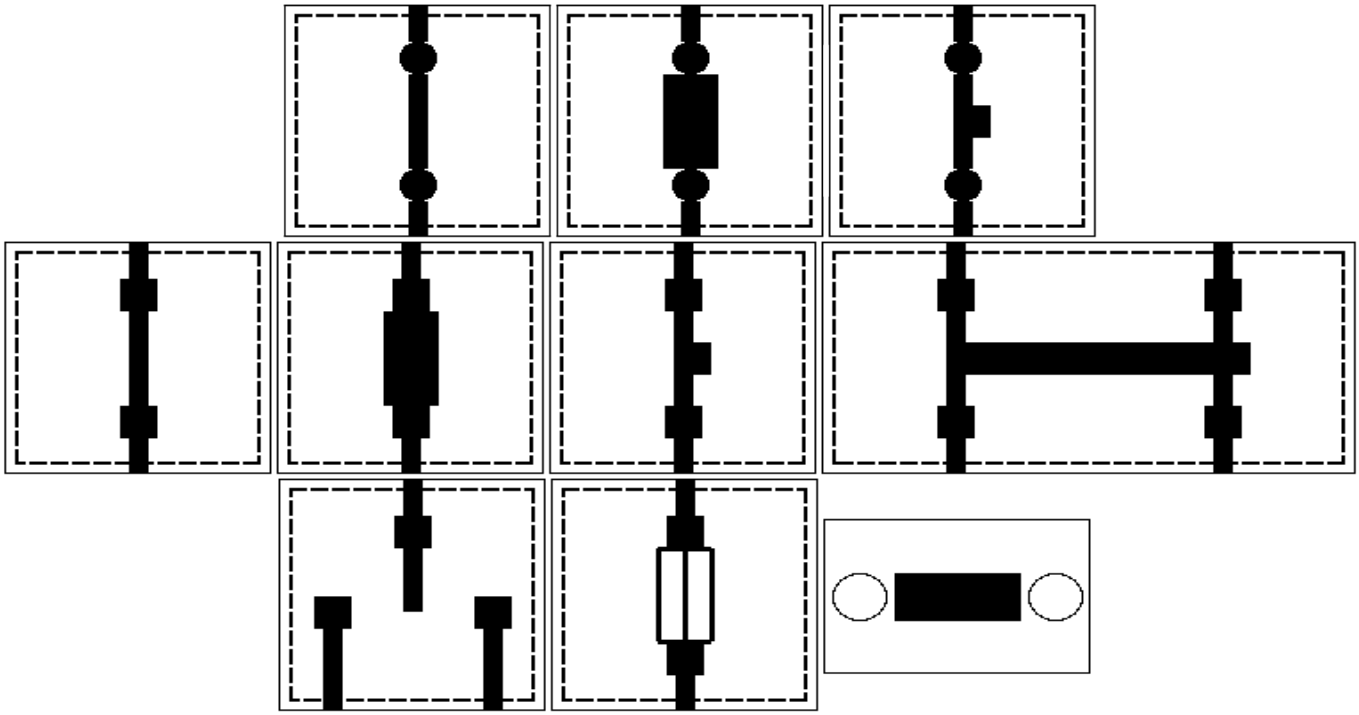

Fig.1. Elements from left to right from top to bottom: "Switch plank(circle)", "Fuse-switch(circle)", "Automatic switch plank(circle)", "Switch plank", "Fuse-switch", "Automatic switch plank", "Automatic dual band switch", "Switch with the neutral central position", "Fuse-switch 2", "Switch".

Linking parameters

ID	Parameter	Data type	Config	Config template	Description
Widgets: "Switch plank(circle)" (El_Key_1), "Fuse-switch(circle)" (El_Key_2), "Automatic switch plank(circle)" (El_Key_3)					
val	Value	Boolean	Input link	Parameter|val	
Widgets: "Switch plank" (El_KeySqr_1), "Fuse-switch" (El_KeySqr_2), "Automatic switch plank" (El_KeySqr_3), "Automatic dual band switch" (El_KeySqr_4), ""Fuse-switch 2" (El_KeySqr_6)					

ID	Parameter	Data type	Config	Config template	Description
val	Value	Boolean	Input link	Parameter|var	
DESCR	Description	String	Input link	Parameter|DESCR	
st	Error state	Boolean	Input link	Parameter|st	
Widget "Switch with the neutral central position" (El_KeySqr_5)					
val	Value	Boolean	Input link	Parameter|var	
val1	Value 1	Boolean	Input link	Parameter|var	
st	Error state	Boolean	Input link	Parameter|st	
Widget "Switch" (El_Key_h)					
val	Value	Boolean	Input link	Parameter|val	

Figure 2 shows examples of the same elements in the off position except the "Switch with the neutral central position" widget.

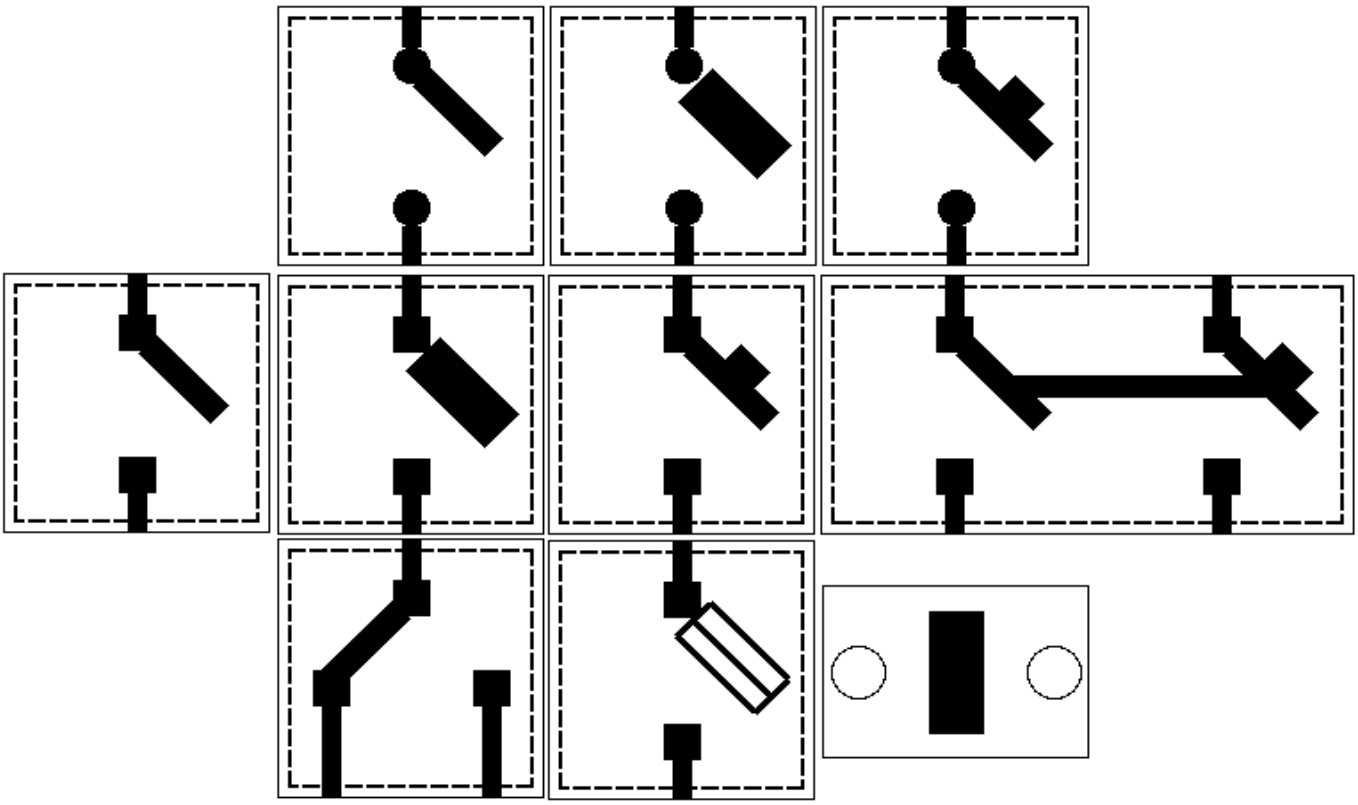

Fig.2. Elements from left to right from top to bottom: "Switch plank(circle)", "Fuse-switch(circle)", "Automatic switch plank(circle)", "Switch plank", "Fuse-switch", "Automatic switch plank", "Automatic dual band switch", "Switch with the neutral central position", "Fuse-switch 2", "Switch".

2. Static elements

Below, Fig. 3, Fig. 4 shows the static at the moment the elements of the library.

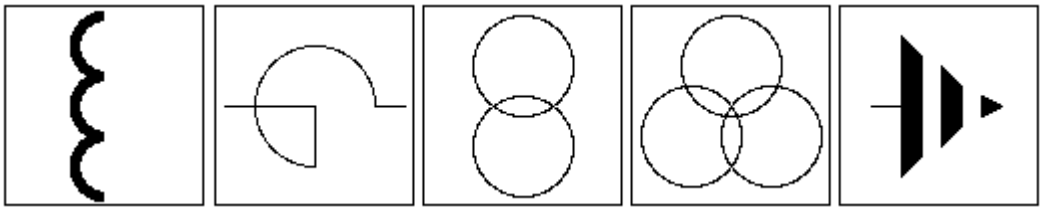

Fig.3. Static elements from left to right: "Coil", "Reactor", "Transformer", "Transformer with two secondary windings", "Ground".

Fig.4. Static elements from left to right: "Battery", "Rectifier", "Direct current converter".