RAKZB

Most of the ASEA RAKZBfeatures are supported by the Power Factory model.
At the moment only the 1 Amp and the 5 amp rated current versions are supported in the model.
Due to the current PowerFactory structure and data management approach the relay settings are spread in many functional blocks.
Please note that the same relay setting can be present in many blocks of the Power Factory model so the same value must be entered everywhere.

Relationship between the relay settings and the Power Factory RAZFE model variables:

In the "real" device the A,B, D settings are used to set the Zf and the Zr values accordingly with the following formulas:

$Zf = 0.2 * (fn/In) * (A/B)$
$Zr = -D * Zf$

In the Power Factory model the Zf and the Zr values must be entered directly.
Zf is the "Replica impedance" variable in the "Trip circle 1" block and in the "Trip circle 2" block.
Zr is the "impedance" variable ("offset" frame) in the "Trip circle 1" block and in the "Trip circle 2" block.

If the mho circular characteristic is selected the "Trip circle 2" block must be disabled and the "Character. angle" variable in the "Trip circle 1" blockmust be set equal to 90. The Zf and the Zr values calculated using the A,B and D setting must be inserted in the "Trip circle 1" block.

If the mho lenticular characteristic is selected both the "Trip circle 1" block and the "Trip circle 2" block must be enabled. the "Character. angle" variable in the "Trip circle 1" blockmust be set equal to 130.
The Zf and the Zr values calculated using the A,B and D setting must be inserted both in the "Trip circle 1" block and in the "Trip circle 2" block. the