Features

- Part of the apparatus control function
- General blocking function for bay and apparatus
- Return to the state it had prior to an auxiliary power interruption

Application

The complete apparatus control function handles open and close commands of high voltage apparatuses and their status indications in a bay. Permission to operate is granted after that several conditions are evaluated, such as interlocking status, synchro-check, operator mode or other external conditions.

The purpose of this function block BLKCON is to be used for different kinds of blockings. The status of the function will return after a power interruption to the state it had before.

Design

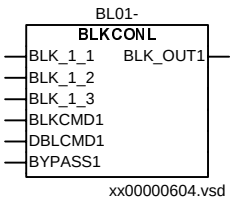
The apparatus control function consists of totally four main types of standardized function blocks BAYCON, COMCON, SWICON and BLKCON, all to be configured to reflect the switchyard arrangement. The number and type of blocks used in the terminal depends on the number and type of apparatuses to control.

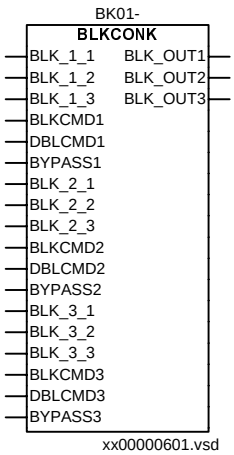
This main type BLKCON is available in two variants:

BLKCONK: Normally used per bay.

BLKCONL: Normally used per apparatus.

Function block





Input and output signals

Table 1: Input signals for the BLKCONL (BLnn-) function block

Signal	Description
BLK_1_1	First blocking input for the blocking function
BLK_1_2	Second blocking input for the blocking function
BLK_1_3	Third blocking input for the blocking function
BLKCMD1	Setting of the blocking function (pulse input)
DBLCMD1	Resetting of the blocking function (pulse input)
BYPASS1	Bypass input for the blocking inputs i.e. sets the output to 0 (false) if activated

Table 2: Output signals for the BLKCONL (BLnn-) function block

Signal	Description
BLK_OUT1	Blocking output for the blocking function

Table 3: Input signals for the BLKCONK (BKnn-) function block

Signal	Description
BLK_1_1	First blocking input for the first blocking function
BLK_1_2	Second blocking input for the first blocking function
BLK_1_3	Third blocking input for the first blocking function
BLKCMD1	Setting of the first blocking function (pulse input)
DBLCMD1	Resetting of the first blocking function (pulse input)
BYPASS1	Bypass input for the blocking inputs i.e. sets the first output to 0 (false) if activated
BLK_2_1	First blocking input for the second blocking function
BLK_2_2	Second blocking input for the second blocking function
BLK_2_3	Third blocking input for the second blocking function
BLKCMD2	Setting of the second blocking function (pulse input)
DBLCMD2	Resetting of the second blocking function (pulse input)
BYPASS2	Bypass input for the blocking inputs i.e. sets the second output to 0 (false) if activated
BLK_3_1	First blocking input for the third blocking function
BLK_3_2	Second blocking input for the third blocking function
BLK_3_3	Third blocking input for the third blocking function
BLKCMD3	Setting of the third blocking function (pulse input)
DBLCMD3	Resetting of the third blocking function (pulse input)
BYPASS3	Bypass input for the blocking inputs i.e. sets the third output to 0 (false) if activated

Table 4: Output signals for the BLKCONK (BKnn-) function block

Signal	Description
BLK_OUT1	Blocking output for the first blocking function
BLK_OUT2	Blocking output for the second blocking function
BLK_OUT3	Blocking output for the third blocking function

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