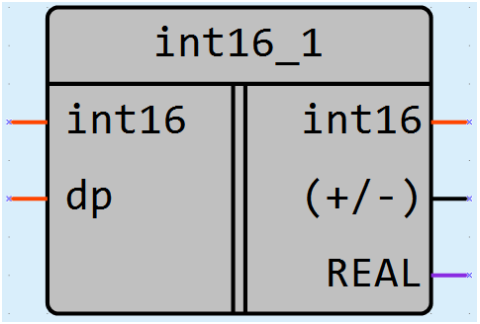
Conversion from int16 to INT and REAL

INT16_



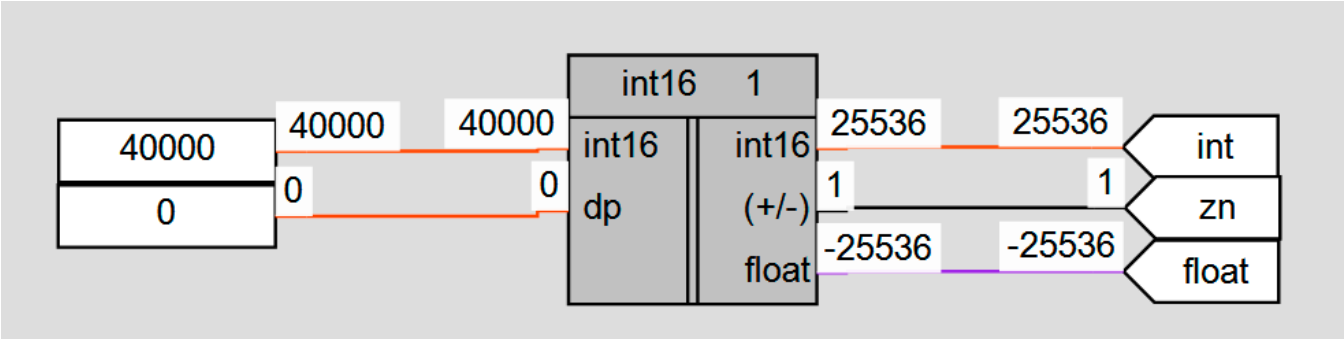
Input	Data type	Description	Area
int16	INT	Number int16 in additional code	0…65535
dp	INT	Position of the decimal point	0…5
Output	**Data type**	**Description**	**Area**
int16	INT	Conversion value in int	0…32768
(+/-)	BOOL	Sign of the converted number	0/1
REAL	REAL	Conversion value in REAL	-32768…32767

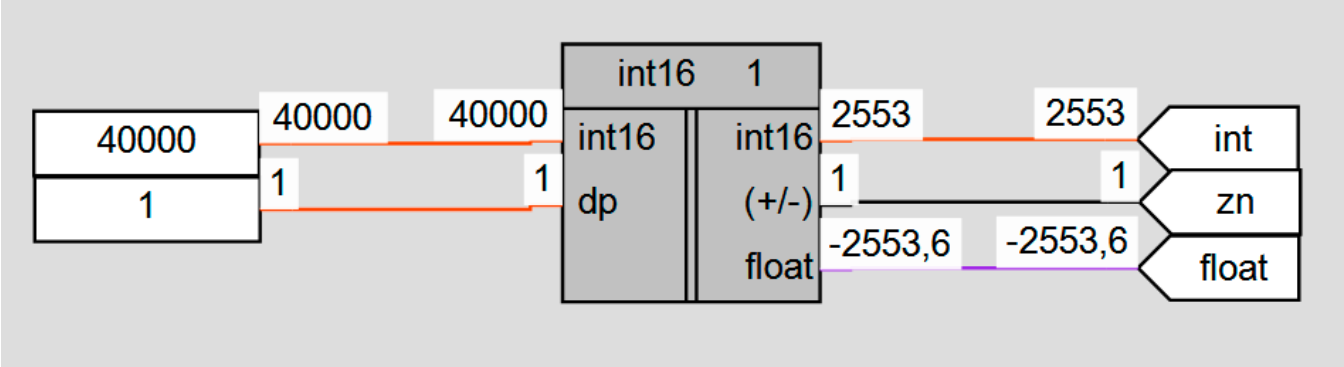
Function

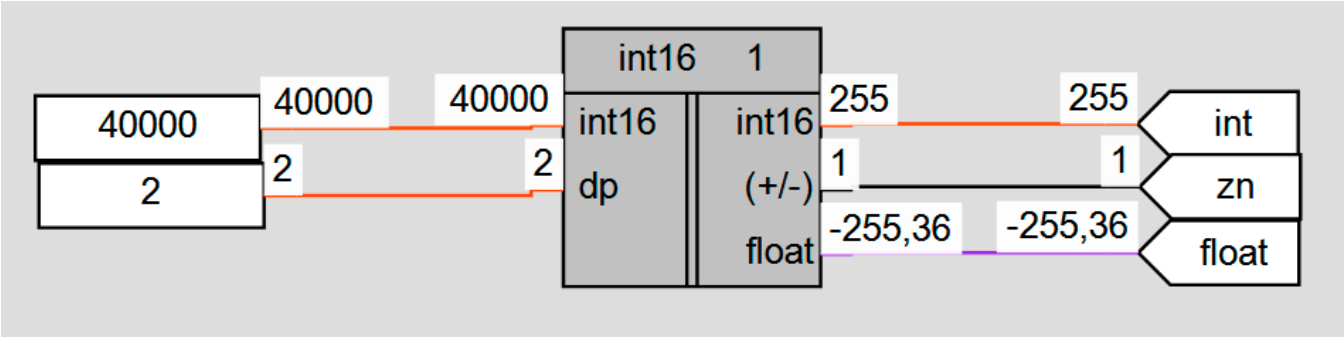
The macro converts the Int16 numbers shown in the additional code into REAL. Additionally there is an output in Int, the output value is a calculated value considering the number of decimal places without remainder and rounding. Since the Int value can only take positive values in Akytec ALP, the output(+/-) is used to encode the negative value of the converted number, in the case of a negative number the output is "1". This output can be used when a signed integer value is output to a programmable relay using the "boolean" control for the sign.

Sample project

The following 3 figues show example of a macro that converts the number 40000 into an additional code with a different multiplier value (number of decimal places).







Macro application areas:

1) For network communication with devices that support negative integer values
2) Conversion and display of negative Int values

Devices	PR200, SMI200
Version	1.0
Last modification	06.06.2020