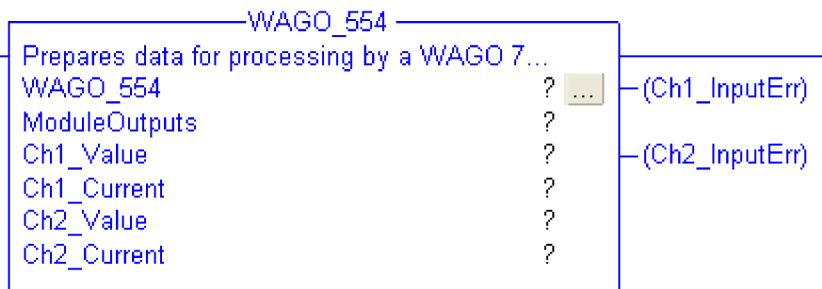


WAGO\_554 v1.0

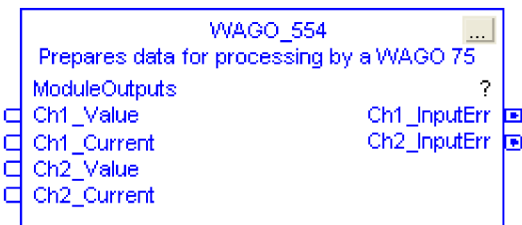
Prepares data for processing by a WAGO 750-554 2-Channel 4-20mA Analog Output Module.

**Available Languages**

Relay Ladder



Function Block



Structured Text

WAGO\_554(ModuleOutputs);

**Parameters**

Required	Name	Data Type	Usage	Description
X	WAGO_554	WAGO_554	InOut	Prepares data for processing by a WAGO 750-554 2-Channel 4-20mA Analog Output Module.
	EnableIn	BOOL	Input	
	EnableOut	BOOL	Output	
X	ModuleOutputs	SINT	InOut	Output process image of WAGO 750-554 module.
	Ch1_Value	DINT	Input	Channel 1 Current Expressed as Numerical Value from 0 to 32767
	Ch1_Current	DINT	Input	Channel 1 Current in mA (x100)
	Ch1_InputErr	BOOL	Output	Channel 1 Value or Current Input Invalid
	Ch2_Value	DINT	Input	Channel 2 Current Expressed as Numerical Value from 0 to 32767
	Ch2_Current	DINT	Input	Channel 2 Current in mA (x100)
	Ch2_InputErr	BOOL	Output	Channel 2 Value or Current Input Invalid

**Extended Description**

The WAGO\_554 instruction prepares data for processing by a WAGO 750-554 2-Channel 4-20mA Analog Output Module. When then 'Enable' input is TRUE, the instruction monitors the Value and Current input values for each channel and makes the following determination:

- If Value  $\geq 0$  and Current = 0, then the channel output will be determined by the Value input.
- If Current  $> 0$  and Value = 0, then the channel output will be determined by the Current input.
- If Value  $> 0$  and Current  $> 0$ , then the input value is considered invalid, and the channel output will be 4mA.
- If Value = 0 and Current = 0, then the output will be 4mA.

If using the Value input, a number from 0-32767 must be entered. The instruction will use this number to produce a linear scaled output from 4-20mA.

If using the Current input, a number from 400 to 2000 must be entered, representing the desired mA output of the module (x100).

The 'ModuleOutputs' array must be mapped to the 4-byte (SINT) output process image of the respective WAGO 750-554 2-Channel 4-20mA Analog Output Module.

Use the Copy (COP) instruction to copy the 750-554 module's 4-byte (SINT) output process image (see 'Controller Tags') from a SINT[4] array for passing data from the 'ModuleOutputs' InOut array. Perform this operation after calling the 750\_554 Add-On Instruction.

The outputs Ch1\_InputErr & Ch2\_InputErr provide the following indication:

- Off (FALSE) : Value and Current input parameters are within the permissible range.
- On (TRUE) : Value or Current input parameters exceed the permissible range, or are both  $> 0$ .

Consult the WAGO 750-554 Product Manual for further information about the 2-Channel 4-20mA Analog Output Module.

**Execution**

<u>Condition</u>	<u>Description</u>
EnableIn is true	

**Revision v1.0 Notes**