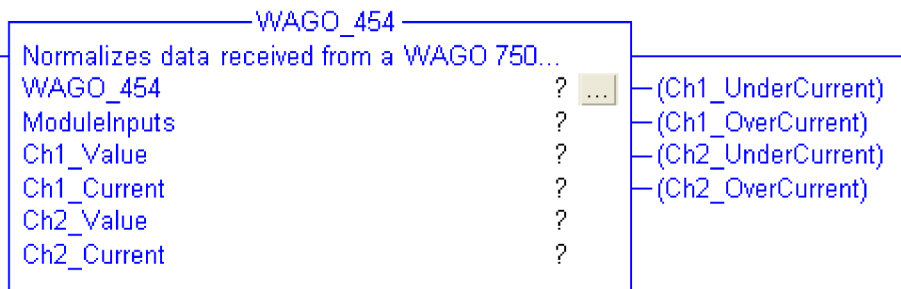


WAGO\_454 v1.0

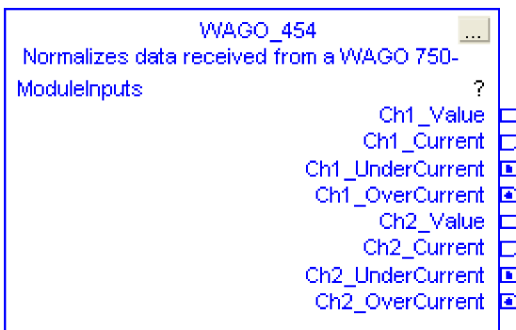
Normalizes data received from a WAGO 750-454 2-Channel 4-20mA Analog Input Module.

**Available Languages**

Relay Ladder



Function Block



Structured Text

WAGO\_454(ModuleInputs);

**Parameters**

Required	Name	Data Type	Usage	Description
X	WAGO_454	WAGO_454	InOut	Normalizes data received from a WAGO 750-454 2-Channel 4-20mA Analog Input Module.
	EnableIn	BOOL	Input	
	EnableOut	BOOL	Output	
X	ModuleInputs	SINT	InOut	Input process image of WAGO 750-454 module.
	Ch1_Value	DINT	Output	Channel 1 Current Expressed as Numerical Value from 0 to 32761
	Ch1_Current	DINT	Output	Channel 1 Current in mA (x100)
	Ch1_UnderCurrent	BOOL	Output	Channel 1 Under-Current or Broken Wire Detected
	Ch1_OverCurrent	BOOL	Output	Channel 1 Over-Current Detected
	Ch2_Value	DINT	Output	Channel 2 Current Expressed as Numerical Value from 0 to 32761
	Ch2_Current	DINT	Output	Channel 2 Current in mA (x100)
	Ch2_UnderCurrent	BOOL	Output	Channel 2 Under-Current or Broken Wire Detected
	Ch2_OverCurrent	BOOL	Output	Channel 2 Over-Current Detected

**Extended Description**

The WAGO\_454 instruction normalizes data received from a WAGO 750-454 2-Channel 4-20mA Analog Input Module. When then 'Enable' input is TRUE, the instruction provides the following information:

- Channel 1 current expressed as numerical value from 0 to 32760
- Channel 1 current in mA (x100)
- Channel 1 under-current or broken wire detection
- Channel 1 over-current detection

- Channel 2 current expressed as numerical value from 0 to 32760
- Channel 2 current in mA (x100)
- Channel 2 under-current or broken wire detection
- Channel 2 over-current detection

The 'ModuleInputs' array must be mapped to the 4-byte (SINT) input process image of the respective WAGO 750-454 2-Channel 4-20mA Analog Input Module.

Use the Copy (COP) instruction to copy the 750-454 module's 4-byte (SINT) input process image (see 'Controller Tags') to a SINT[4] array for passing data to the 'ModuleInputs' InOut array. Perform this operation before calling the 750\_454 Add-On Instruction.

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

- Off (FALSE) : Current reading is greater than or equal to the threshold value of 4mA.
- On (TRUE) : Current reading is less than the threshold value of 4mA.

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

- Off (FALSE) : Current reading is less than or equal to the threshold value of 20mA.
- On (TRUE) : Current reading is greater than the threshold value of 20mA.

This instruction will only work with the standard 750-454 module and the variation 750-454/000-001. Other variations of this module are not supported by this instruction.

Consult the WAGO 750-454 Product Manual for further information about the 2-Channel 4-20mA Analog Input Module.

**Execution**

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

**Revision v1.0 Notes**