

Manifold programming options

- Special programming / script language for the measurement devices UMG 604-PRO / UMG 605-PRO / UMG 509-PRO and UMG 512-PRO
- The user is no longer restricted to the functionalities integrated in the measurement device, but rather the device can be expanded to suit the individual's requirements
- Graphical programming supports the creation and configuration of mathematical functions and logical links
- The devices' own digital outputs can be set
- Digital inputs can be easily evaluated
- The processing and writing of registers belonging to external devices can be implemented via the Modbus
- Free configuration of threshold value infringements, timer functions or recording of special values can be implemented
- Programs created can be stored as files or transferred directly to the measurement device
- There are 7 memory spaces available, each with 128 kByte, for the saving of the programs
- Simultaneous operation of these 7 programs possible
- User-friendly, graphical programming
- Free programming of the Jasic® source code by the user

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1 SEN Storage für selected View, 0/Min,1/F BT,2/F BT, 3 0
2 SEN Low Mod = View A
3 SEN High Mod = View B
4 global (INT, _sel_selectedView,1,0,"",1)
5 SEN Same Selection Category
6 global (FLOAT, _sel_category,0,0,"",0)
7 SEN Storage für gelbe für effective energy BT
8 global (FLOAT, _sel_effEnergy_A,0,0,"out/AN",1)
9 SEN Storage für gelbe für effective energy BT
10 global (FLOAT, _sel_effEnergy_B,0,0,"out/AN",1)
11 SEN Storage für gelbe für reactive energy
12 global (FLOAT, _sel_reactiveEnergy_B,0,0,"out/AN",1)
13 SEN Makes LC device displayed and printed.
14 global (FLOAT, _sel_madePrint,0,0,"",1)
15 SEN In-Box reset
16 global (FLOAT, _sel_resetBox(0-30),0,0,"",0)
17 SEN Box switches, can't be changed after device starts.
18 global (INT, _sel_MadePrinter,1,0,"",1)
19 SEN Da den Lautsprecher nicht finden bei laut der zu informieren
20 global (INT, _sel_laut_spe,0,0,"",1)
21 SEN Deamonmod
22 global (INT, _sel_DeamonMod,0,0,"",0)
23 SEN Modbuswert zum die Abfragezeitung des UMG103 Messwerte 24 = 40960
24 global (FLOAT, _sel_val_UMG103,0,"",1)
25 SEN Makes ID IDG installed
26 global (FLOAT, _sel_IDG_installed,1,0,0,"",0)
    
```

Fig.: Jasic® source code

Palette

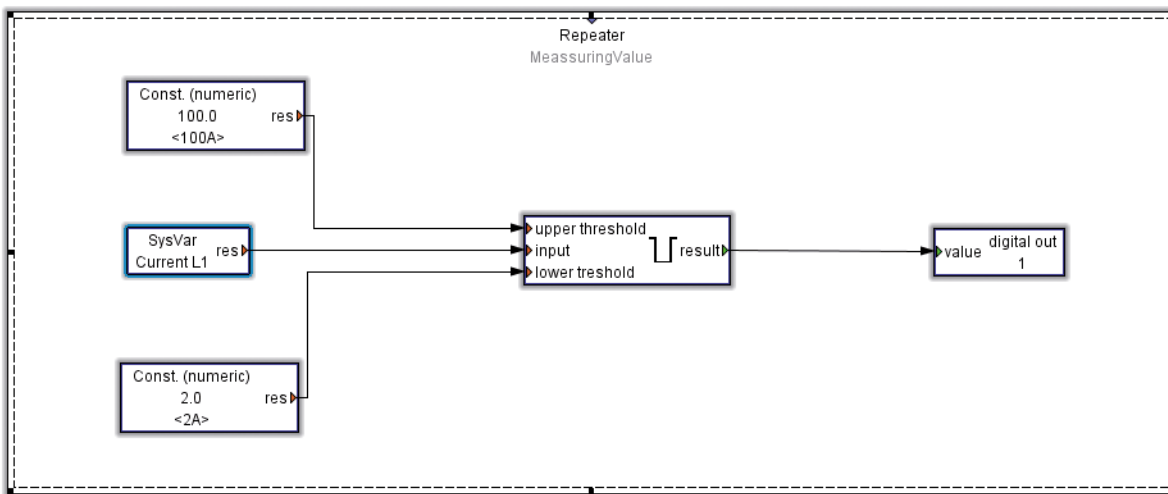
- In**
 - Const. (boolean type)
 - Const. (String)
 - system variable
 - User variable (boolean)
 - Const. (numeric)
 - Digital input
 - read Profibus
 - C Timestring
 - User variable (numeric)
- Out**
 - Digital output
 - Log
 - Printing (multiple values)
 - Recording
 - reset
 - send email
 - Simple recording
 - tariff control
 - tariff control (more than 2 tariffs)
 - write Modbus
 - write Profibus
- Processing**
 - drop-out delay
 - For-Next-Loop
 - Inline program code
 - on-delay timer
 - Sleep
 - Edge trigger
 - If
 - interval time relay
 - pulse generator
- Grouping**
 - Group
- FinalLoop**
 - Repeater
- Mathematical operators**
 - absolute value
 - Divide
 - Add
 - Multiply
 - Add 4 input
 - Subtract
- Boolean operators**
 - Bit test
 - Boolean And
 - Boolean And 4 input
 - Boolean Excl.-Or
 - Boolean Or
 - Boolean Or 4 input
 - Not
 - set bit pattern
- Comparators**
 - Above threshold
 - Out of range
 - Below threshold
 - compare numbers
 - In range
- Timer control**
 - timer
 - weebased timer
- Counter**
 - Sec.-counter
- Comment**
 - Comment field

Graphical programming: Examples

Example of threshold value monitoring (comparator)

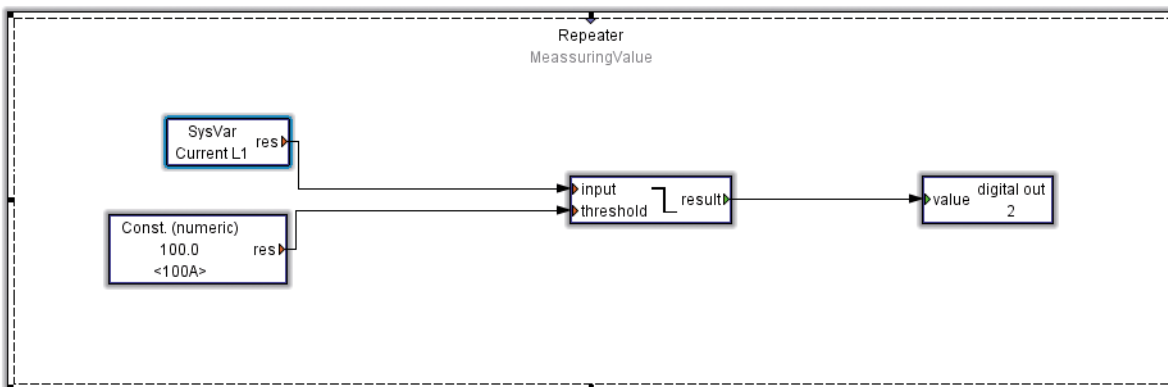
Example 1

- Monitoring of current L1: Determination of the threshold value by means of constants, lower level 2 A, upper level 100 A
- Digital output 1 signals the exceedance of the predefined values



Example 2

- Works with only one lower threshold (in this case 100 A)
- In the event of the current dropping below 100 A, digital output 2 will be activated



Example 3

- An email will be sent in the event of the value dropping below the predefined setting
- In this example the email will be sent with an under-voltage of < 200 V in phases L1, L2 or L3
- Additional information: Voltage values from the 3 phases at the time of the undervoltage

