



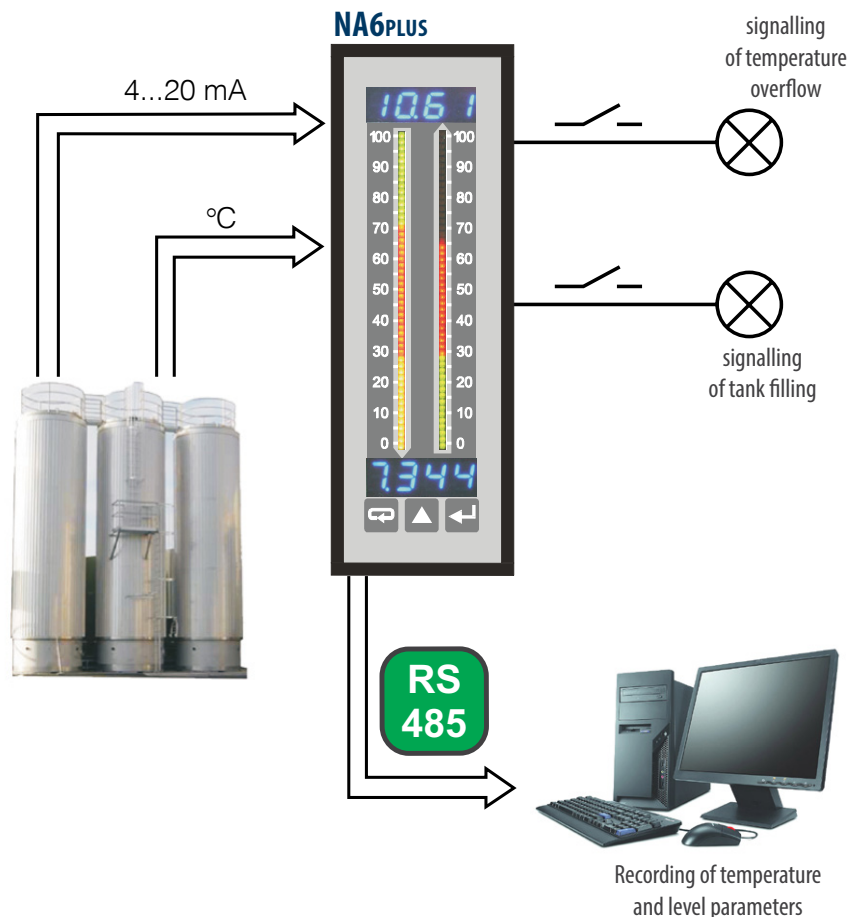
NA6PLUS - DIGITAL METER WITH BARGRAPH

- 3 or 7-colour bargraph with programmable colour switching over.
- Logging of the measured signal in programmed time intervals (800 samples).
- 2 independent measuring channels with universal input.
- Programmable indication characteristic (21-point rescaling) and bargraph magnifier.
- Up to 8 programmable alarm outputs.
- Alarm triggered by the rate of change of the measured signal over time.
- Mathematical operations on channels.
- Communication in SCADA systems (RS485/Modbus interfaces).
- Conversion of any measured value into a current or voltage analog signal.



EXAMPLE OF APPLICATION

Level and temperature measurement in the tank.



NA6PLUS- DIGITAL METER WITH BARGRAPH

FEATURES	INPUTS	OUTPUTS	GALVANIC ISOLATION
     	      	     	   

TECHNICAL DATA

INPUTS				OUTPUTS	
Input type	Measurement range	Basic error	Additional error	Output type	Features
Pt100	-200...850°C	0.1%	compensation of temperature changes of reference welds ≤ ±1°C compensation of cable resistance changes - when changing the resistance of wires < 10Ω the error is ≤ ±0.5°C - when changing the resistance of wires < 20Ω the error is ≤ ±1°C	Current analog output	1 or 2 programmable 0/4...20 mA; load resistance ≤ 500 Ω
Pt500	-200...850°C			Voltage analog output	1 or 2 programmable 0-10 V; load resistance ≥ 500 Ω
Pt1000	-200...850°C			Relay output	4 relays; NOC voltageless contacts, maximal load: - voltage: 250 V a.c., 150 V d.c. - current: 5 A 30 V d.c., 250 V a.c. - resistive load: 1250 VA, 150 W
J (Fe-CuNi)	-100...1100°C				
K (NiCr-NiAl)	-100...1370°C				
N (NiCrSi-NiSi)	-100...1300°C	0.2%	change in ambient temperature ≤ ± 0.1% of the range	Open collector (OC) type	8 outputs of OC type: maximal load: - voltage: 5...30V d.c. - current: 25mA d.c.
E (NiCr-CuNi)	-100...850°C				
R (PtRh13-Pt)	0...1760°C				
S (PtRh10-Pt)	0...1760°C	0.1%	change in ambient temperature ≤ ± 0.1% of the range	Digital interface	interface type: RS-485; transmission protocol: MODBUS, RTU (8N2, 8E1, 8O1, 8N1) baud rate: 2400, 4800, 9600, 19200, 57600, 115200 b/s
T (Cu-CuNi)	-50...400°C				
Resistance	0...5 kΩ				
Voltage	± 75 mV, R _{imp.} > 100 kΩ ± 300 mV, R _{imp.} > 100 kΩ ± 0...600 V, R _{imp.} > 3.5 MΩ	0.1%	change in ambient temperature ≤ ± 0.1% of the range	Additional supply output	24 V d.c., maximal load 30 mA
Current	± 40 mA, R _{imp.} < 4 Ω ± 5 A, R _{imp.} = 10 mΩ ± 10%				

Intensity of current flowing through the resistance thermometer: $< 400 \mu\text{A}$

Resistance of wires connecting the resistance thermometer with the meter: $< 20 \Omega/1 \text{ wire}$

EXTERNAL FEATURE

Readout field	2 x 4 -digits LED display	7-segment digits of 7 mm high, measuring range -1999...9999
	bargraph	bargraph of 100 mm length: - 55 segments in three-colour version - 28 segments in seven-colour version Bargraph resolution: programmable
Overall dimensions	48 x 144 x 100 mm	
Weight	$< 0.4 \text{ kg}$	panel cut-out: 44+0.5 x 137.5+0.5 mm
Protection grade (acc. to EN 60529)	from frontal side: IP50	from terminal side: IP20

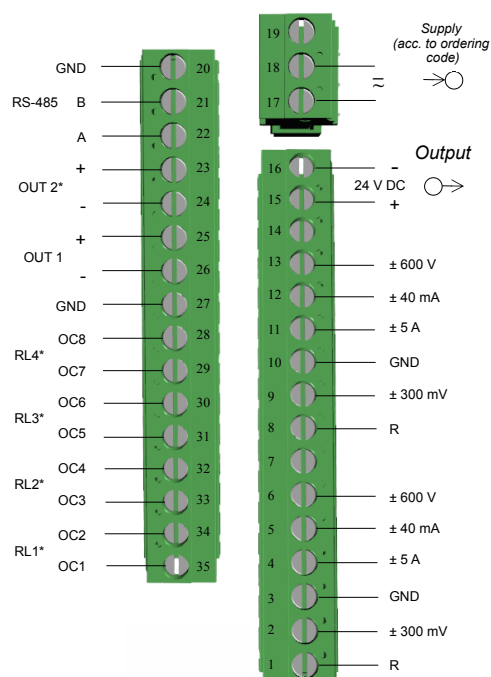
RATED OPERATING CONDITIONS

Supply voltage	95...253 V a.c. 40...400 Hz; 90...300 V d.c. 20...40 V a.c. 40...400 Hz, 20...60 V d.c.	power consumption $\leq 13 \text{ VA}$
Temperature	ambient: -10...23...55°C	storage: -25...85°C
Relative humidity	$< 95\%$	Condensation inadmissible

SAFETY AND COMPATIBILITY REQUIREMENTS

Electromagnetic compatibility	noise immunity	acc. to EN 61000-6-2
	noise emissions	acc. to EN 61000-6-4
Pollution grade	2	acc. to EN 61010-1
Installation category	III	
Maximal phase-to-earth operating voltage	• for input circuit: 600 V • for supply circuit: 300 V • for other circuits: 50 V	
Altitude above sea level	$< 2000 \text{ m}$	

ELECTRICAL CONNECTIONS



*-optional elements depend on the meter's version

Fig. 1 Description of the terminal strip.

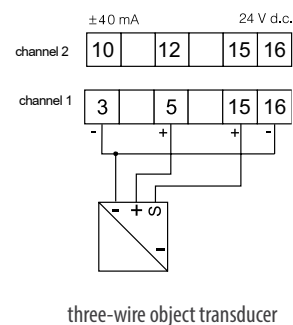
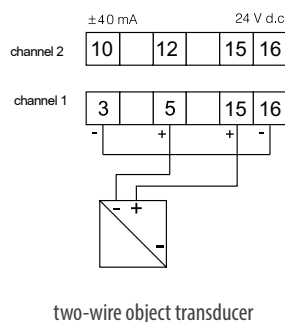
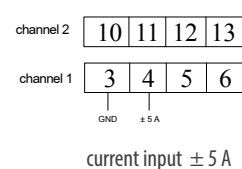
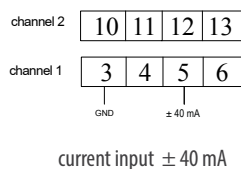
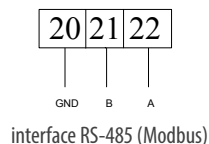
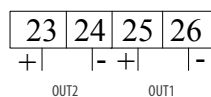
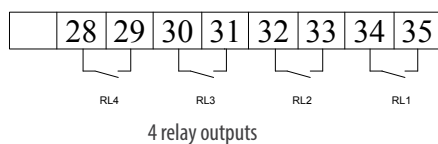
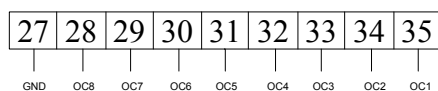
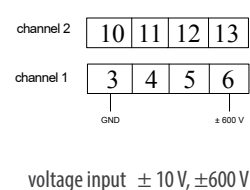
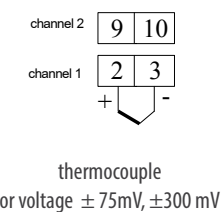
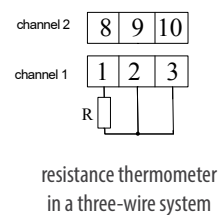
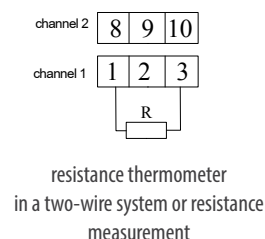


Fig.3. Connection way of output signals depending on the execution code.

Fig. 2 Connection way of input signals.

NA6PLUS- DIGITAL METER WITH BARGRAPH

ORDERING

NA6PLUS -	X	XX	X	X	X	X	XX	X	X
Bargraph colour:									
3-colour(R, G, R+G)	T								
7-colour (R, G, B, R+G, R+B, G+B, R+G+B)	M								
Display colour on channels 1 and 2:									
red-red	RR								
red-green	RG								
green-red	GR								
green-green	GG								
Input signal:									
universal input	U								
custom-made*	X								
Analog output:									
lack	0								
0/4...20mA	1								
0...10 V	2								
2 x 0/4...20 mA	3								
2 x 0...10 V	4								
1 x 0/4...20 mA, 1 x 0...10 V	5								
Additional output:									
lack	0								
4 relays	4								
8 outputs of OC type	8								
Supply voltage:									
95...253 V a.c./d.c.	1								
20...40 V a.c., 20...60 V d.c.	3								
Version:									
standard	00								
custom-made**	XX								
Language:									
Polish	P								
English	E								
other*	X								
Acceptance tests:									
without extra requirements	0								
with an extra quality inspection certificate	1								
acc. to customer's request**	X								

* - after agreeing with the manufacturer

Ordering example:

The code **NA6PLUS- TRRU18100E0** means:

NA6PLUS - NA6PLUS meter
T - bargraph RG
RR - red display coul
U - universal inputs
1 - current output 0/4...20 mA
8 - 8 outputs of OC type
1 - supply 95...253V a.c./ 90...300 V d.c.
00 - standard version
E - english version
0 - without extra requirements



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NA6Plus-19A_en