

# Productivity Meter PR9648



- 2 digital inputs for summation, difference and ratio measurement
- Input prescaler programmable
- LED-Display 14.2 mm red,  $\pm 99999$  Digit
- Max. 4 alarm outputs, relay SPDT or transistor

## Characteristics

The Productivity-Meter PR9648 analysis impulse rates, representing a speed, flow, passing time or revolutions per time. The displayed values therefore always refer to a determined time unit and represent productivity. There are extensive functions programmable. Since impulses and unit of a displayed value can take any relation, the device offers extensive conversion possibilities.

## Technical data

### Power supply

Supply voltage : 230 V AC  $\pm 10\%$ ; 115 V AC  $\pm 10\%$ ;  
24 V AC  $\pm 10\%$  or 24 V DC  $\pm 15\%$

Power consumption : max. 3.5 VA, with analog output 5 VA

Operating temp. : -10...+55 °C

CE- conformity : EN 61326-1:2013  
EN 60664-1:2007

### Input

PNP sensor :  $R_i = 6.3\text{ k}\Omega$   
level:  $< 4\text{ V}$  low;  $> 8.5\text{ V}$  high;  
hysteresis  $> 2.5\text{ V}$ ; max. 35 V DC

Namur sensor :  $R_i$  approx.  $1\text{ k}\Omega$  ( $< 4\text{ mA}$ )  
level:  $< 1\text{ mA}$  low;  $> 2.2\text{ mA}$  high;  
hysteresis  $> 0.5\text{ mA}$ ; max. 35 V DC

Pulse frequency : input A or B =  $0.1\text{ Hz}..15\text{ kHz}$ ,  
A and B together =  $0.1\text{ Hz}..8\text{ kHz}$ ,  
contact =  $0.1\text{ Hz}..30\text{ Hz}$ ,  
2-channel rotary encoder =  $0.1\text{ Hz}..10\text{ kHz}$

Min. pulse width : electronic  $50\text{ }\mu\text{s}$ , contact 5 ms

Time base :  $\text{sec}^{-1}$ ,  $\text{min}^{-1}$ ,  $\text{h}^{-1}$

Accuracy :  $\leq 0.003\%$   $\pm 1$  Digit

Hold input : 24 V DC or contact

Transmitter supply : 8 V (Namur), 24 V DC (pnp),  $R_i$  appr.  $150\text{ }\Omega$ ,  
max. 50 mA (25 mA with 4 relay outputs)

Display : LED red, 14.2 mm, -99999..99999 Digit

Parameter display : LED 2-digit red, 7 mm  
(parameter and output indicator)

### Output

Relay : SPDT  $< 250\text{ V AC}$   $< 250\text{ VA}$   $< 2\text{ A}$ ,  
 $< 300\text{ V DC}$   $< 50\text{ W}$   $< 2\text{ A}$

Transistor : max. 35 V AC/DC, 100 mA,  
with short circuit protection

Analog output :  $0/4..20\text{ mA}$  burden  $\leq 500\text{ }\Omega$ ;  $0/2..10\text{ V}$ ,  
burden  $> 500\text{ }\Omega$ , with isolation

-Accuracy :  $0.1\%$ ; TK  $0.01\%$ /K

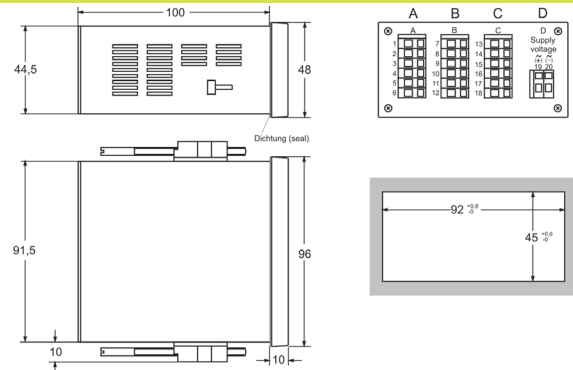
Case : panel case DIN 96x48 mm,  
material PA6-GF; UL94V-0

Dimensions : front 96x48 mm, mounting depth 100mm

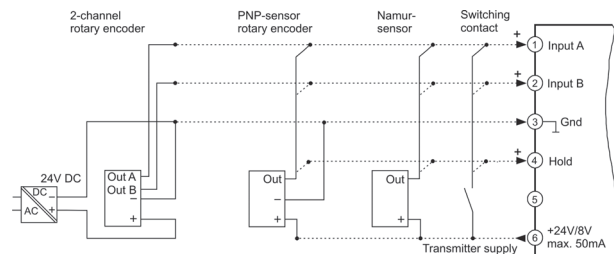
Weight : max. 390 g  
Connection : clamp terminals,  $0.08..1.5\text{ mm}^2$ ,  
AWG28..AWG14

Protection class : front IP65, terminals IP20 acc. to BGV A3

## Dimensions



## Connection diagram



## Ordering code

PR9648 -  1. -  2. -  3. -  4. -  5. -  6. -  7.

1. Terminal strip A	
1	2 configurable impulse inputs, display conversion programmable, hold input, integrated transmitter supply 24V max. 50 mA
2. Terminal strip B	
00	not installed
2R	2 relay outputs
2T	2 electronic outputs
3. Terminal strip C	
00	not installed
2R	2 relay outputs
2T	2 electronic outputs
AO	analog output $0/4..20\text{ mA}$ , $0/2..10\text{ V DC}$
4. Terminal strip D; supply voltage	
0	230 V AC $\pm 10\%$ 50-60Hz
1	115 V AC $\pm 10\%$ 50-60Hz
4	24 V AC $\pm 10\%$ 50-60Hz
5	24 V DC $\pm 15\%$
5. Options	
00	without option
01	min- and max- peak hold
6. Unit (appears in the unit field)	
7. Additional text placed above the display (3x90 mm HxW)	