

Product Information

**Digital Amperemeter
A9648**



- Measuring range programmable 0..6/60 A
- LED-Display 14.2 mm red, indicating range ±9999(0) Digit
- Max. 4 alarm outputs, relay SPDT or electronic

Characteristics

The Digital Amperemeter A9648 has been designed to measure DC and AC current signals. Five basic models are selectable and possible to measure currents from 0..0.900 mA to 0..60.0A. The measuring range is free programmable. Measuring of bipolar currents are possible. For example -20..+20 mA. Additional the free programmable display range within ± 9999(0) digit can be assigned to a programmed current measurement range. This can be important, if the measured current is a degree for another physical dimension.

Technical data

Power supply

Supply voltage : 230 V AC ±10 %; 115 V AC ±10 %,
24 V AC ±10 % or 24 V DC ±15 %

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

Operat. temperature : -10..+55 °C

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

Input : model 1-4 = 0..0.9 mA up to 6 A DC/AC_{TRMS}
model 5 = 0..4.5 up to 60 A AC_{TRMS}

Input resistant : model 1 = 20 Ω, model 2 = 2 Ω,
model 3 = 0.2 Ω, model 4 = 0.02 Ω,
model 5 = integrated current transformer

Over load : 2-times; 4-times max. 5 s

Basic accuracy : < 0.1 % ± 2 Digit (DC); 0.5 % ± 2 Digit (AC)

Display : LED red, 14.2 mm, ±9999(0) Digit

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

Output

Relay : SPDT < 250 V AC < 250 VA < 2 A,
< 300 V DC < 50 W < 2 A

Electronic : max. 35 V AC/DC max.100 mA,
short circuit protected

Analog : 0/4 ... 20 mA burden ≤ 500 Ω; 0/2 ... 10 V
burden > 500 Ω, isolated
automatic output changing

- Accuracy : 0.1 %; TK 0.01 %/K

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

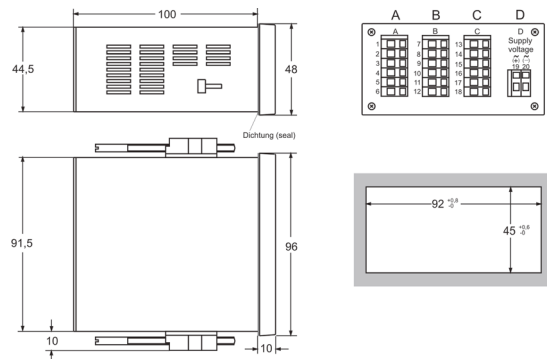
Dimensions : front 96x48 mm, mounting depth 100,
120 mm (with transformer)

Weight : max. 390 g

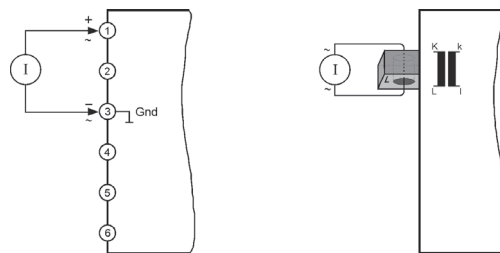
Connection : clamp terminals, 0.08..1.5 mm²
AWG28..AWG14

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

Dimensions



Connection diagram



Ordering code

A9648 - 1. - 2. - 3. - 4. - 5. - 6. - 7.

1. Terminal strip A	
1	0..9.999 mA DC/AC _{TRMS} clamp terminal
2	0..99.99 mA DC/AC _{TRMS} clamp terminal
3	0..999.9 mA DC/AC _{TRMS} clamp terminal
4	0..6.000 A DC/AC _{TRMS} clamp terminal
5	0..60.00 A AC _{TRMS} winding transformer
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
4. Terminal strip D; supply voltage	
0	230 V AC ±10 % 50-60Hz
1	115 V AC ±10 % 50-60Hz
4	24 V AC ±10 % 50-60Hz
5	24 V DC ±15 %
5. Options	
00	without option
01	min- and max-peak hold
07	display brightness programmable
6. Unit appears in the unit field	
7. Additional text above the display (3x90 mm HxW)	