# Panel Meters and Controllers
# AC Ammeter or Voltmeter
# Type DI3-72 AV1/AV5




- **3-dgt µP-based indicator for AC currents or voltages**
- **Selectable CT/VT primary range**
- **Panel mounting**
- **72 x 72 mm**
- **Degree of protection (front): IP 50 (IP 65 on request)**

## Product Description

3-dgt µP-based meter with double input for AC currents or voltages. With 20 selectable primary CT/VT ranges. The housing is for panel mounting and ensures a degree of protection (front) of IP 50 (IP 65 on request).

## Ordering Key

**DI3-72AV5AD0XX**

- **Model**
- **Range code**
- **Measurement**
- **Power supply**
- **Setpoints**
- **Options**

## Type Selection

**Range code**

| | | |
|---|---|---|
| **AV1:** | 1 A/100 V Standard current/voltage | See Range Table |
| **AV5:** | 5 A/500 V Standard current/voltage | |

**Power supply**

| | |
|---|---|
| **A:** | 24 VAC, -15% +10%, 50/60 Hz [1] |
| **B:** | 48 VAC, -15% +10%, 50/60 Hz [1] |
| **C:** | 115 VAC, -15% +10%, 50/60 Hz [1] |
| **D:** | 230 VAC, -15% +10%, 50/60 Hz (standard) |

**Options**

| | |
|---|---|
| **XX:** | None (standard) |
| **EX:** | Degree of protection IP 65 |

[1] Power supply on request

## Input Specifications

| | |
|---|---|
| **Rated input** | 5A/500 VAC, 45 to 400 Hz (1A/100 VAC on request) |
| **Overload protection** | |
| Cont. Current: | 1.2 x rated input |
| Voltage: | 1.2 x rated input |
| For 1 s Current: | 5 x rated input |
| Voltage: | 2 x rated input |
| **Accuracy** (@ 25°C ± 5°C, R.H. ≤ 60%) | ± 0.5% f.s., ± 1 dgt |
| **Temperature drift** | ± 350 ppm/°C |
| **Display** | 7-segment LED, h 14.2 mm, 3 digits |
| **Sampling rate** | 1 time/s |
| **Indication** | |
| Max. | 999 |
| Min. | 000 |
| 500 VAC range | Scale suppression up to 5% f.s. |
| Other ranges | Scale suppression up to 3% f.s. |
| Over range | EEE |
| **Input range selection** | DIP-switch selectable |
| **Decimal point position** | DIP-switch selectable |

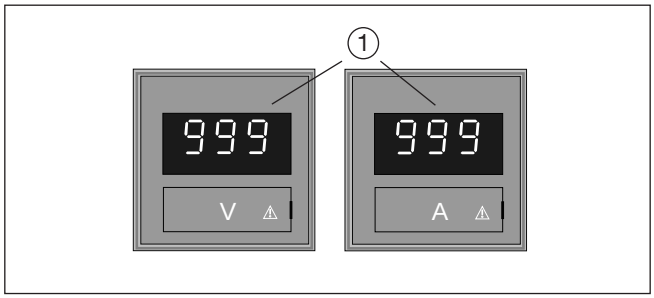
## General Specifications

| | |
|---|---|
| **Operating temperature** | 0° to 50°C (32° to 122°F) (R.H. < 90% non-condensing) |
| **Storage temperature** | -10° to 60°C (14° to 140°F) (R.H. < 90% non-condensing) |
| **Insulation reference voltage** | 300 $V_{rms}$ to ground |
| **Dielectric strength** | 4000 $V_{rms}$ for 1 minute |
| **Noise rejection** | |
| CMRR | 100 dB, 40 to 60 Hz. |
| **EMC** | IEC 60801-2, IEC 60801-3, IEC 60801-4 (level 2), EN 50 081-1, EN 50 082-1. |
| **Safety standards** | EN 61 010-1, IEC 61010-1, VDE 0411 |
| **Connector** | Screw-type |
| **Housing** | |
| Dimensions | 72 x 72 x 75 mm |
| Material | ABS, self-extinguishing: UL 94 V-0 |
| **Degree of protection** | Front: IP 50 (IP 65 on request) |
| **Weight** | Approx 250 g |
| **Approvals** | CE, CSA |

## Supply Specifications

| | |
|---|---|
| **AC supply** | 230 VAC, -15% +10%, 50/60 Hz (standard)<br>24 VAC, 48 VAC, 115 VAC, -15% +10%, 50/60 Hz (on request) |
| **Power consumption** | 3.2 VA |

## Front Panel Description



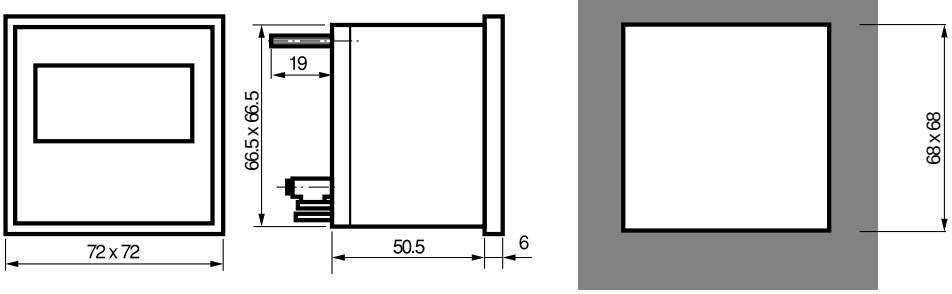

**1. Display**
3-dgt (maximum read-out 999).

Alphanumeric indication by means of 7-segment display for:
- Displaying of the measured value, over-range.

## Range Table

| Range | Connection | | | Decimal point position | Resolution | Voltage drop ammeters | Input imp. voltmeters | Range code |
|---|---|---|---|---|---|---|---|---|
| 1A/100 V | Direct 1A | | Direct 100 V | 999/99.9 | 1 mA/0.1 V | 1 V | 1 MΩ | **AV1** |
| 5A/500 V | Direct 5A | | Direct 500 V | 9.99/999 | 10 mA/1 V | 250 mV | 1 MΩ | **AV5** |
| 10 A | CT10/1 A | CT10/5 A | | 9.99 | 10 mA | 1 V/250 mV | | **AV1/AV5** |
| 15 A | CT15/1 A | CT15/5 A | | 99.9 | 100 mA | 1 V/250 mV | | **AV1/AV5** |
| 25 A | CT25/1 A | CT25/5 A | | 99.9 | 100 mA | 1 V/250 mV | | **AV1/AV5** |
| 40 A | CT40/1 A | CT40/5 A | | 99.9 | 100 mA | 1 V/250 mV | | **AV1/AV5** |
| 50 A | CT50/1 A | CT50/5 A | | 99.9 | 100 mA | 1 V/250 mV | | **AV1/AV5** |
| 60 A | CT60/1 A | CT60/5 A | | 99.9 | 100 mA | 1 V/250 mV | | **AV1/AV5** |
| 100 A | CT100/1 A | CT100/5 A | | 99.9 | 100 mA | 1 V/250 mV | | **AV1/AV5** |
| 150 A | CT150/1 A | CT150/5 A | | 999 | 1 A | 1 V/250 mV | | **AV1/AV5** |
| 220 V | | | VT220/100 V | 999 | 1 V | | 1 MΩ | **AV1** |
| 250 A | CT250/1 A | CT250/5 A | | 999 | 1 A | 1 V/250 mV | | **AV1/AV5** |
| 380 V | | | VT380/100 V | 999 | 1 V | | 1 MΩ | **AV1** |
| 400 A | CT400/1 A | CT400/5 A | | 999 | 1 A | 1 V/250 mV | | **AV1/AV5** |
| 500 A/V | CT500/1 A | | VT500/100 V | 999 | 1 A/V | 1 V | 1 MΩ | **AV1** |
| 500 A | CT500/5 A | | | 999 | 1 A | 250 mV | | **AV5** |
| 600 A/V | CT600/1 A | | VT600/100 V | 999 | 1 A/V | 1 V | 1 MΩ | **AV1** |
| 600 A | CT600/5 A | | | 999 | 1 A | 250 mV | | **AV5** |
| 1000 A/V | CT1000/1 A | | VT1000/100 V | 999 | 1 A/V | 1 V | 1 MΩ | **AV1** |
| 1000 A | CT1000/5 A | | | 999 | 1 A | 250 mV | | **AV5** |

## Dimensions (mm)

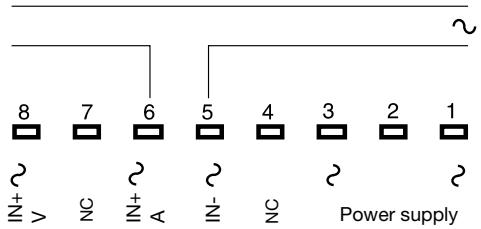




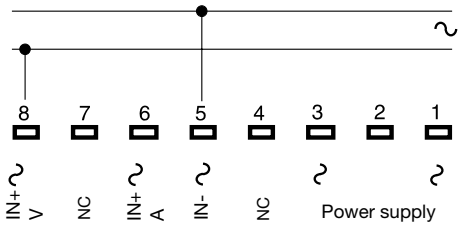

Specifications are subject to change without notice

## Wiring Diagrams

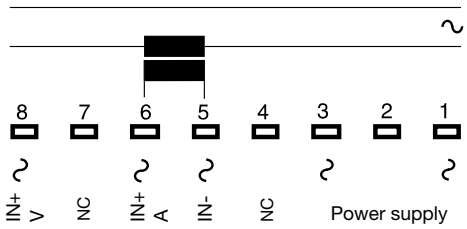
Current measurements - direct




Voltage measurements - direct




Current measurements - C.T.




Voltage measurements - V.T.

