

RISH DPM 48/96 AK



Operating Manual

The **RISH DPM 48/96 AK** is a digital standard instrument for measurement of frequency of AC voltage up to 199.9/500Hz.

Operation:

The decimal point can be set by means of jumpers at the rear side of the DPM. Fine adjustment of full scale value is possible with span adjustment pointer provided at the back side of DPM.

Further **RISH DPM 48/96** versions from the series:

| | |
|-------------------------|---|
| RISHDPM 48/96 A | Digital panel meter for DC current measurement, 3 ranges. |
| RISHDPM 48/96 B | Digital panel meter for DC current measurement. 2 ranges. |
| RISHDPM 48/96 C | Digital panel meter for DC voltage measurement, 2 ranges. |
| RISHDPM 48/96 F | Digital panel meter for DC voltage measurement, 4 ranges. |
| RISHDPM 48/96 AC | Digital Panel Meter for AC Voltage and AC Current measurement 3 ranges. |
| RISHDPM 48/96 T | Digital panel meter for temperature measurement with PT100,2 ranges. |

Technical data

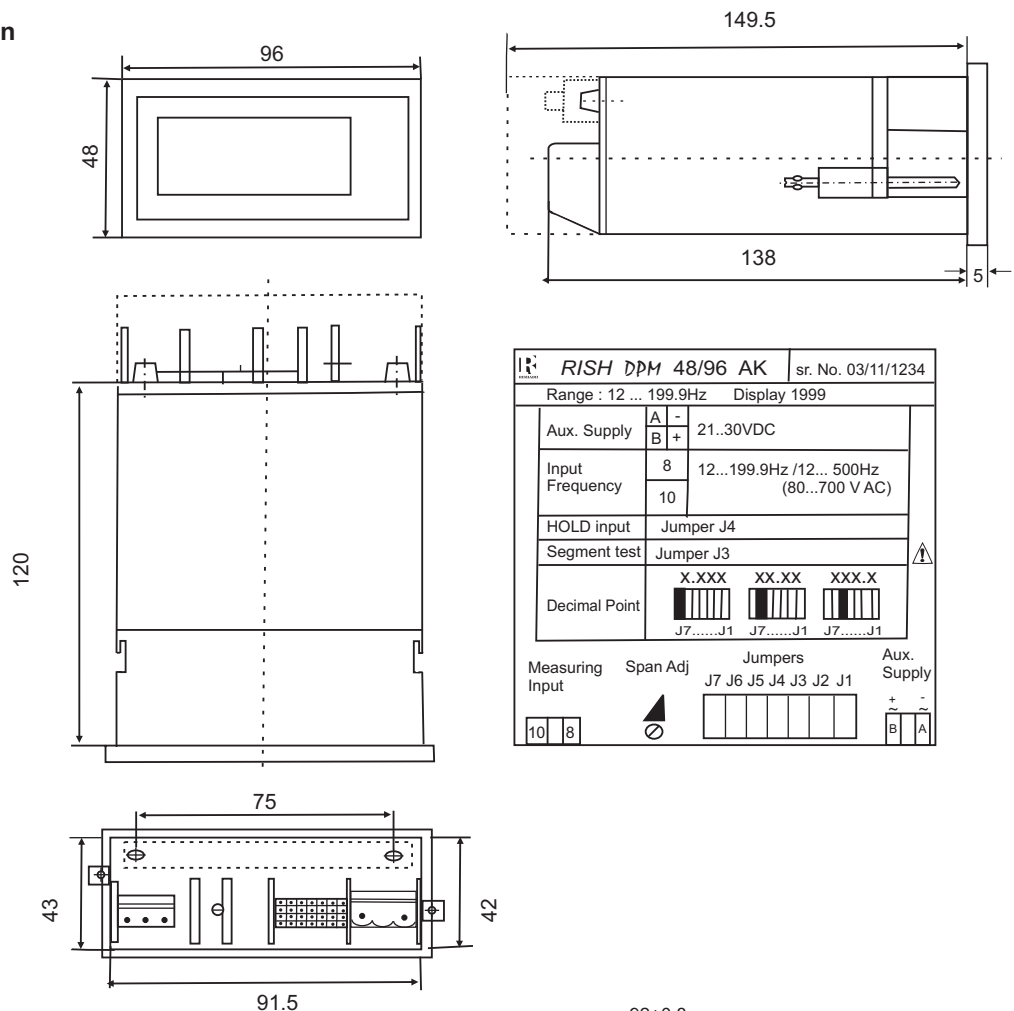
| | | | |
|---|--|---|-----------------|
| Display | Display range | 0....+1999 | |
| | Decimal point position | selectable by rear jumper position | |
| | Negative display indication | “-” | |
| | Digit height | 14mm / 7-segment digits | |
| | Overload indication . | "1..."; if display > 1999 | |
| For frequency | Input voltage | 80.....700V | |
| | Measuring range | 12199.9 Hz 12500 Hz | |
| | Calibration | Meters are precalibrated To a standard value | |
| | | | |
| Digital Input | Display hold | selectable by rear jumper position | |
| | Segment test | selectable by rear jumper position | |
| Accuracy | after exact calibration | ±(025 % of max. display + 5 digits) | |
| Additional error | Temperature drift | <190 ppm / °C | |
| | Zero drift | <0.2 digits / °C | |
| | (only for devices with shift zero point) | | |
| Power supply | Direct voltage DC | 24V +/-15% | max. 5.5W |
| | Alternating voltage | 24V +10%,-15% | max. 5.5W |
| | (50 - 60 Hz) | 115V +10%. -15% | max. 5.5W |
| | | 230V + 10%, -15% | max. 5.5W |
| A/D Converter | System | Dual slope | |
| | Integration time | approx. 100ms | |
| | Sampling rate | typ. 3 per sec. | |
| Test voltages Test duration 2 sec.) | UH (Auxiliary supply) | 230 / 115V AC | 24V AC / 24V DC |
| | Supply - input signal | 2kV | 0.5 kV |
| | Supply - housing | 2kV | 0.5 kV |
| | Input signal - housing | 2kV | 2 kV |
| Dimensions and weights | Front bezel size | 96 mm x 48 mm (DIN 43 718) | |
| | Panel cut-out | 92 +0.8 mm x 43.5 +0.6 mm | |
| | Overall depth | 138mm | |
| | Weight | 500 g approx. | |

Environmental conditions

Operating temperature
 Storage temperature
 Climatic class
 Safety class
 Protection class
 front
 Overvoltage category
 Device safety
 EMC immunity
 EMC radiated interference

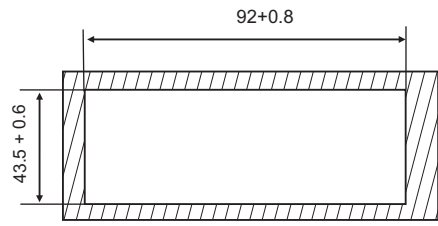
0... 50 °C
 -20 °C... +70 °C
 Class 2 to VDE / DIN 3540
 II to IEC 348 / VDE 0411
 IP 20 to IEC EN 60 529
 IP 50
 II
 According to IEC EN 61 010
 According to DIN EN 61 000-4-1 to 4
 According to IEC EN 61326 class B

Design and installation

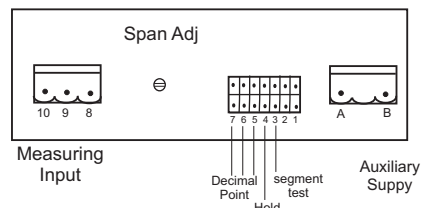


| | | |
|-------------------------------------|------------|--|
| RISH DPM 48/96 AK | | sr. No. 03/11/1234 |
| Range : 12 ... 199.9Hz Display 1999 | | |
| Aux. Supply | A - B + | 21..30VDC |
| Input Frequency | 8 | 12...199.9Hz /12... 500Hz (80...700 V AC) |
| | 10 | |
| HOLD input | Jumper J4 | |
| Segment test | Jumper J3 | |
| Decimal Point | X.XXX | XX.XX |
| | XXX.X | |
| | J7.....J1 | J7.....J1 |
| Measuring Input | Span Adj | Aux. Supply |
| 10 8 | ⊖ | J7 J6 J5 J4 J3 J2 J1 |
| | | B A |

Installation cut-out



Connections



⚠ Caution : Do not change the jumpers when input is applied to the DPM !

Subject to change without notice!

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