

RISH DPM 196 A / V - 20

With 20 mm Digit height



Operating Manual

The RISH DPM 196 A/V - 20 is a Digital Panel Meter (DPM) with extra large height of 20 mm for measurement of Single phase AC current and AC Voltage in 96x96 DIN quadratic size. Three ranges for power supply are available

Operation:

By changing short links on the front side of Display [Accessible after removing Front Glass and Black Frame], decimal point can be adjusted as shown in sticker on page 2. Display can be adjusted from 5% to 100% of range by means of span adjustment potentiometer provided on the rear side of the meter. If required zero can be adjusted with the help of zero adjustment potentiometer.

The DPM comes with a set of pre-printed captions (eg kA, kV,..) User can put the caption as per their application in the pocket provided on the front panel sticker. Refer Fig. A

RISH DPM 196 A / V - 20 Series is available in following Versions :

RISH DPM 196 A-20	Instrument for Single Phase AC Current measurement
RISH DPM 196 V-20	Instrument for Single Phase AC Voltage measurement

Technical data

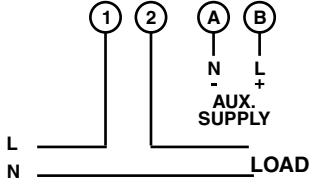
Display	Display range	1999
	Decimal point position	Selectable by short links at the front side
	Negative display indication	"-"
	Digit height	20mm / 7-segment digits
	Overload indication	last 3 digits blank
Measuring range	Accuracy	< 0.5 % + 1 digit
	Voltage AC (Input current < 600 μ A)	0 ... 500 VL-L. [45...60 Hz] or 400 Hz or
	Current AC (Voltage drop < 600 mV)	0 ... 1 A [45...60 Hz] or 400 Hz or 0 ... 5 A [45...60 Hz] or 400 Hz
	Range adjustment span	From 5% to 100% of range
	Temperature coefficient Zero point drift	300 ppm / °C 200 ppm / °C
Power supply	Direct voltage DC	24V (21...30V) max.5.5 W (isolated)
	Alternating voltage AC (47 - 60 Hz)	110 V (+10 %, -15%) max.5.5 W (isolated) 230 V (+10 %, -15%) max.5.5 W (isolated)
Environmental conditions	Operating temperature	0 ... 55 °C
	Storage temperature	-25 °C ... +70 °C
	Protection class	IP 20 to IEC EN 60 529
	Front	IP 50
	Device safety EMC immunity EMC radiated interference	According to IEC EN 61 010 According to IEC / EN 61 000-4-1 up to 4 According to IEC/ EN 61326 class B
Dimensions and weights	Front frame	96 mm x 96 mm to DIN 43 700
	Panel cut-out	(92 ^{+0.8})mm x (92 ^{+0.8})mm
	Depth	55mm
	Weight	Approx. 550 gm
Sundry	Connections	Plug-in screw terminal blocks

SAMPLE STICKERS

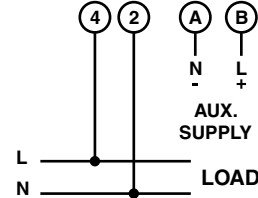
RISH DPM 196 A - 20		Sr. No. / /	
Full Scale : 1999			
Aux. Supply	A N B L	230 V AC 50 Hz (+10% / -15%)	
Input Current (I)	1 HI	1A AC	
	2 LO	Common	
<input type="checkbox"/> Z - Zero Adj. <input type="checkbox"/> S - Span Adj.			
		Front Display View Select short link position for Decimal point adjustment	

RISH DPM 196 V - 20		Sr. No. / /	
Full Scale : 1999			
Aux. Supply	A N B L	230 V AC 50 Hz (+10% / -15%)	
Input Voltage (V)	4 HI	0...500 VAC	
	2 LO	Common	
<input type="checkbox"/> Z - Zero Adj. <input type="checkbox"/> S - Span Adj.			
		Front Display View Select short link position for Decimal point adjustment	

CONNECTION FOR RISH DPM 196 A - 20



CONNECTION FOR RISH DPM 196 V - 20

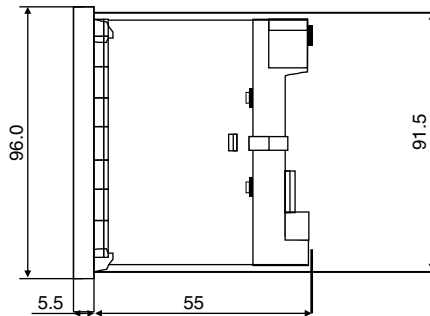
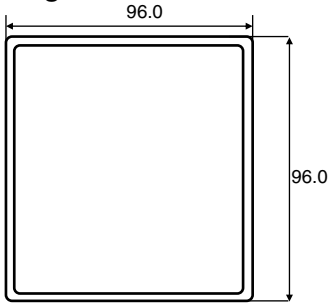


Measuring Input

Voltage Input
 Current Input
 Auxiliary Supply
 Display adjust (with external Calibrator)
 Decimal point adjustment

Terminals 2 and 4
 Terminals 1 and 2
 Terminals A(-/N) and B(+/L)
 With zero and span pots at rear of the meter
 With short links at front on Display

Design and Installation



Installation Cut-out

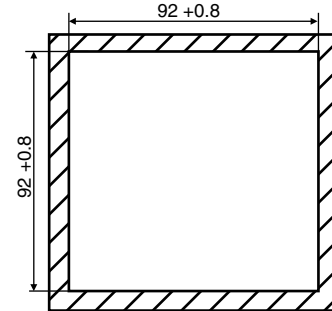
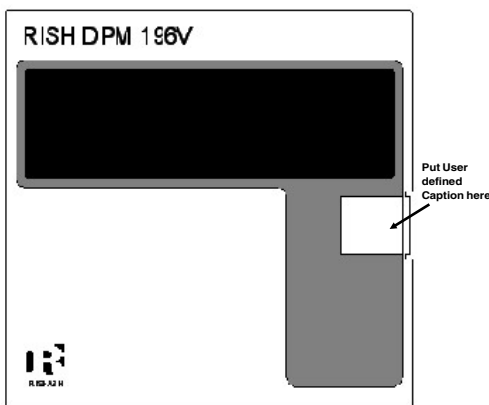
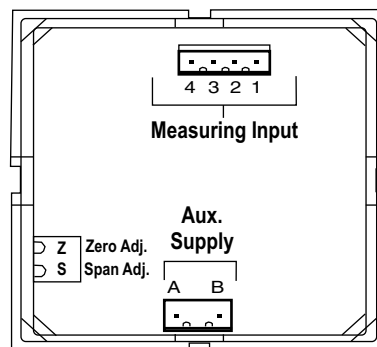


Figure A



Conection Diagram



Decimal point Adjustment :

Decimal point position is selectable by short links at the front side of Display. Decimal point adjustment is accessible after removing Front glass and Black frame.

Short link position	Decimal point position on Display
	XXXX
	X.XXX
	XX.XX
	XXX.X



Caution : Do not change the Short links on Display (For Decimal point Adjustment) when input is applied to the DPM !