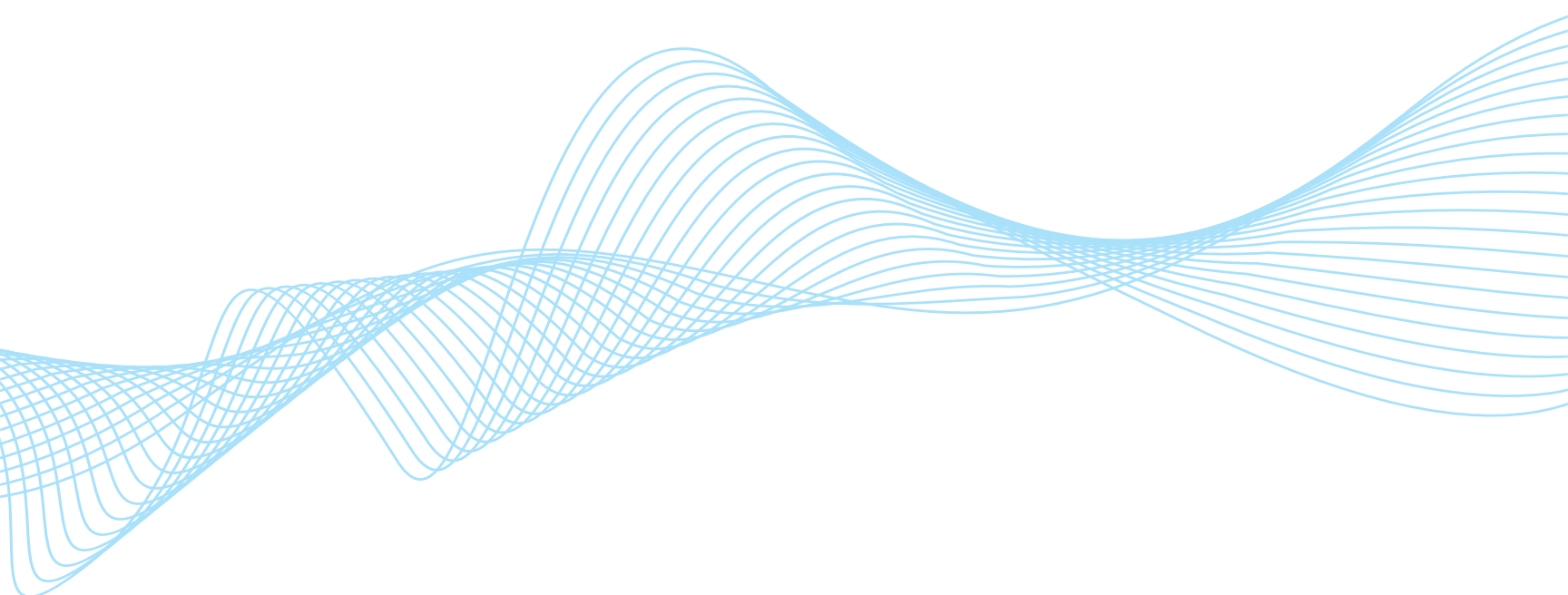


DPM

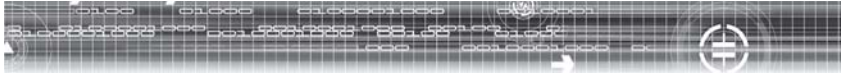
| 96×96 |

kW kVAR kVA PF



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DPM 96x96 (KW, KVar, KVA, PF)

96 x 96

Active Power (KW) DPM
 Reactive Power (Kvar) DPM
 Apparant Power (KVA) DPM
 Power Factor (PF) Meter



DPM 96x96 Series measures system active power (Import / Export), Reactive power(Import / Export), Apparent Power & Power Factor of three phase & single phase network. IT has 4 digit single line auto ranging LED display with polarity Indication

GENERAL FEATURES:

APPLICABLE STANDARDS

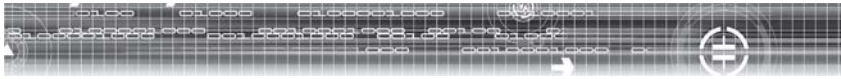
Performance standard for direct acting instrument	DIN EN60051
Digital Measurement	DIN 43 751
Device Safety	IEC 61010
Protection Class (Front Facia)	IP 54 according to IEC 60529
Safety Class	II according to IEC 348/ VDE 0411
Climatic Class	Class 2 VDE / DIN 3540
EMC Immunity	DIN EN 61000-43
EMC Radiated Interference	IEC 61326

Reference conditions for Accuracy:

Reference temperature	23°C +/- 2°C
Input waveform	Sinusoidal (distortion factor 0.005)
Input frequency	50 or 60 Hz ±2%
Auxiliary supply voltage	Rated Value ±1%
Auxiliary supply frequency	Rated Value ±1%

FACT SHEET:

Casing Details	Moulded case suitable for mounting in control / switchgear panels, machinery console
Case Material	Glass filled polycarbonate, Flame retardant & drip proof as per UL 94 V0
Front Facia	Glass-polycarbonate
Color of Bezel	Black
Position of use	Vertical
Panel Fixing	Side clamps
Panel thickness	≤40mm
Terminals	Plug-in screw terminal block
Display Type	Bright RED seven segment LED
Negative display indication	"_"
Overload indication	Last 3 digits blank
Setting Time	<1sec. (0...99%)
ISOLATION:	
DC voltage version	1kV
AC voltage version	2kV
AMBIENT CONDITIONS:	
Operating Temp.	-10 to +55°C
Storage Temp.	-20 to +65°C



TECHNICAL SPECIFICATIONS:

Model	DPM kW	DPM kVA	DPM kVar	DPM PF
Measured Qty	kW	kVA	kVar	PF
Input Range	Voltage : 57.7 - 277V L-N (100-480V L-L) Current : 1A or 5A AC programmable onsite			
Frequency Range	40-70Hz			
Accuracy	0.5% of range	1% of range	2%	
Digit Height	11mm & 20mm			
Temperature Coefficient	0.025% /°C for Voltage, 0.05% / °C for Current			

DIMENSIONS & WEIGHTS

Bezel size	96x96mm
Panel Cutout	92.08mm x 92.08mm
Overall depth	<80mm
Weight	0.7 Kg

POWER SUPPLY

Direct DC voltage	12V to 48V DC +/- 10%
Alternating AC voltage	110V, 230V, 380VAC -15% +20%
AC/DC Voltage	100-250V AC/DC +/- 10%

VA Burden:

Nominal input voltage burden	< 0.2 VA approx. per phase
Nominal input current burden	< 0.6 VA approx. per phase
AC Supply burden	Approx. 4 VA

Overload Withstand:

Voltage	2 x rated value for 1 second, repeated 10 times at 10 second intervals
Current	20x for 1 second, repeated 5 times at 5 min

Operating Measuring Ranges

Voltage	5... 120% of rated value
Current	5 ... 120% of rated value
Frequency	40...70 Hz
Power Factor	0.5 Lag ... 1... 0.5 Lead for kW, kVA DPM / 0.1 Lag ... 1... 0.1 lead for PF DPM

Application:

DPM 96x96 series measures system active Power (Import / Export), Reactive Power (Import / Export), Apparent Power & Power Factor of Three phase and single phase Network. It has 4 digit single line auto ranging LED display with polarity indication.

Product Range :

- Active Power (kW) DPM.
- Reactive Power (kVar) DPM.
- Apparent Power (kVA) DPM.
- Power Factor (PF) meter.

Product Features:

*On site programmable PT/CT ratios:

It is possible to program primary of external potential Transformer (PT), primary of external Current Transformer (CT) on site via front panel keys by entering into Programming mode.

*User selectable CT Secondary 5A/1A

The secondary of external Current Transformer (CT) can be programmed on site to either 5A or 1A using front panel keys.

*User selectable 3 phase 3W or 4W

User can program on site the network connection as either 3 Phase 3 Wire or 4 Wire using front panel keys.

*Note: For Power Factor DPM Customer need to specify CT ratio, PT ratio & network type 3phase (3 or 4 wire) / single phase (1P2W) requirement while ordering.

User selectable Power Parameter

User can select any one of the power parameter (Active / Reactive / Apparent) on site as per its requirement, reducing inventory cost.

True RMS measurement:

The instrument measures distorted waveform up to 15th Harmonic.

High brightness LED display

Single line four digit. Digit heights 11mm or 20 mm.

Enclosure Protection for dust and water:

conforms to IP 54 (front face) as per IEC60529

Compliance to International Safety standards:

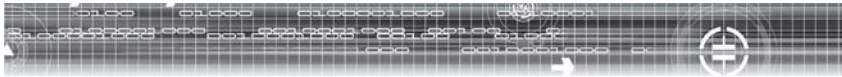
Compliance to International Safety standard IEC 61010-1- 2001

EMC Compatibility :

Compliance to International standard IEC 61326

Low back depth:

The instrument has very low back depth (behind the panel) of less than 80 mm .

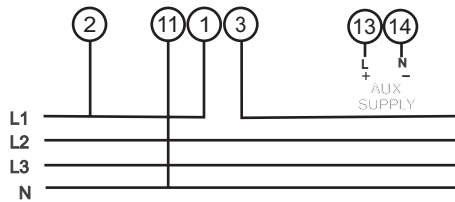


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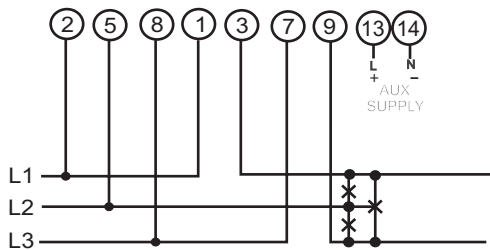
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CONNECTION DIAGRAMS :

For Single Phase

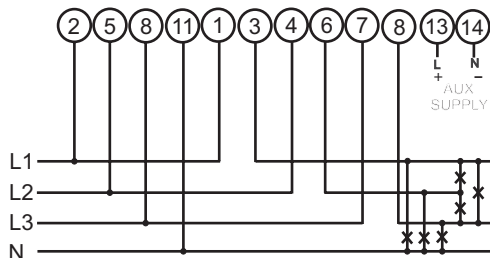


3 Phase 3 Wire Unbalanced Load



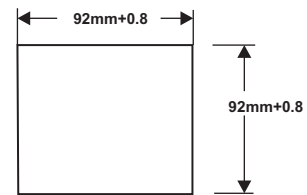
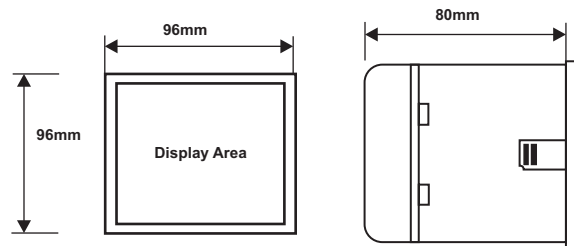
For Direct operated meter

3 Phase 4 Wire Unbalanced Load



For Direct operated meter

DIMENSIONAL DIAGRAMS :



ORDERING INFORMATION

Please specify ordering information as given below,

Type	System	Voltage	Current	Aux. Supply	Digit Height
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ORDERING EXAMPLE

DPM-PF	3P4W	415V _{LL}	5A	230VAC	11
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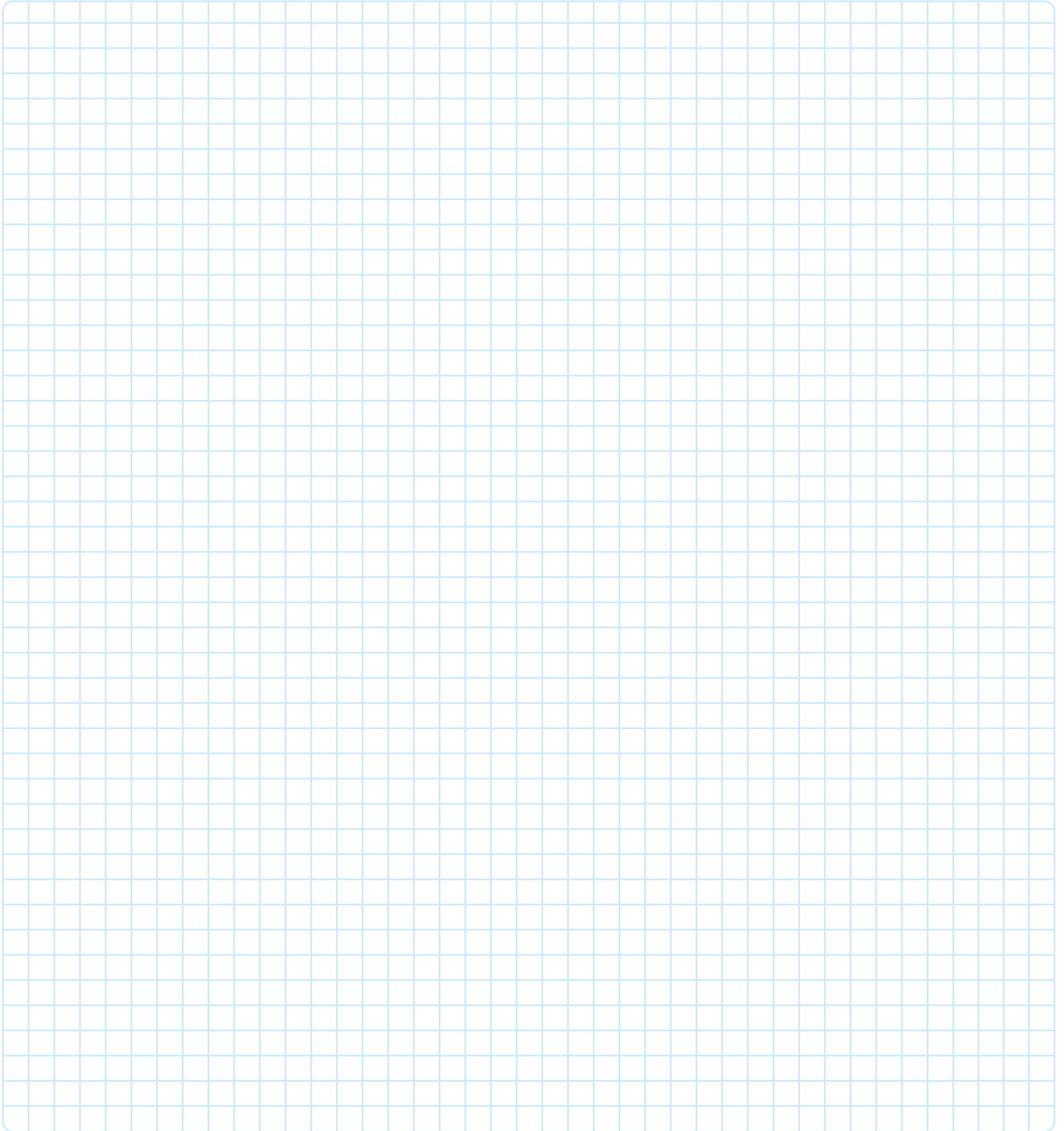
It is recommended that the wires used for connections to the instrument should have lugs soldered at the end. That is, the connections should be made with Lugged wires for secure connections. The Maximum diameter of the lug should be 7.0mm and maximum thickness 3.5 mm.

Permissible cross section of the connection wires:

$\leq 4.0 \text{ mm}^2$ single wire or $2 \times 2.5 \text{ mm}^2$ fine wire



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ZIEGLER INSTRUMENTS

Schnepfenreuther Weg 6, D-90425 Nurnberg, Germany.
Tel.: (+49)(911) 38 492 45
Fax.: (+49)(911) 32 26 212
E-mail: info@ziegler-instruments.com
Website: ziegler-instruments.com

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