Technical Specifications

Input Voltage	
Nominal input voltage (AC RMS)	Phase –Neutral 290V L-N , Line-Line 500V L-L
Max continuous input voltage	120% of rated value
Nominal input voltage burden	< 0.3 VA approx. per phase (For external auxiliary meter)
System PT secondary values	100VLL to 500VLL programmable on site.
System PT primary values	100VLL to 692kVLL programmable on site.

Input Current	
Nominal input current	5A / 1A AC RMS
System CT secondary values	1A & 5A programmable on site
System CT primary values	From 1A up to 9999A (for 1 or 5 Amp)
Max continuous input current	120% of rated value
Nominal input current burden	< 0.2 VA approx. per phase

Auxiliary Supply	
External Aux	40 V – 300V AC-DC (± 5 %)
Self powered **	input voltage range from 80% to 100% of Rated value. (Self powered meter is available only in 3Phase 4 Wire and Single Phase network.) Auxiliary input is derived from Phase 1 (R phase)
Frequency range	45 to 65 Hz
VA burden	< 4 VA Approx.

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

Operating Measuring Ranges	
Voltage Range With External Aux	10… 120% of rated value
Voltage Range With Self Power	80… 120% of rated value
Current Range	10 … 120% of rated value
Frequency	45…65 Hz.
Power Factor	0.5 Lead ... 1 ... 0.5 Lag.

Technical Specifications

Influence of Variations

Temperature coefficient	0.025% / °C for Voltage 0.05% / °C for Current

Display update rate	
Response time to step input	1 sec approx.

Applicable Standards	
EMC	IEC 61326-1: 2005
Safety	IEC 61010-1-2001 , Permanently connected use
IP for water & dust	IEC60529

Safety	
Pollution degree	2
Installation category	III
High Voltage Test	4.7 kV DC, for 1 minute between Aux. and measuring inputs

Environmental	
Operating temperature	-20 to +70°C
Storage temperature	-30 to +80°C
Relative humidity	0 to 95% non condensing
Warm up time	Minimum 3 minute
Shock	15g in 3 planes
Vibration	10... 55 Hz, 0.15mm amplitude

Enclosure	
Front	IP 50
Back	IP 20

Dimensions and Weights	
Bezel size	96 mm x 96 mm DIN 43 718.
Panel cut-out	92 +0.8 mm x 92 + 0.8 mm.
Overall depth	55 mm.(without output option)
Panel Thickness	1 - 3 mm for self clicking, 1 – 6 mm for swivel screws.
Weight	320 gm. Approx.(with output option)

Technical Specifications

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%
Voltage Range	20... 100% of Nominal Value.
Current Range	10... 100% of Nominal Value.
Power	Cos phi / sin phi = 1 for Active / Reactive Power & Energy. 10... 100% of Nominal Current & 20... 100% of Nominal Voltage.
Power Factor / Phase Angle	40... 100% of Nominal Current & 20... 100% of Nominal Voltage.

Accuracy	
Voltage	± 1% of Nominal Value.
Current	± 1% of Nominal Value.
Frequency	0.5% of mid frequency
Active Power	± 1% of Nominal Value.
Re-Active Power	± 1% of Nominal Value.
Apparent Power	± 1% of Nominal Value.
Active Energy	± 1%
Reactive Energy	± 1%
Apparent Energy	± 1%
Power Factor	2% of Unity
Phase angle	2% of range

Measurement error is normally much less than error specified above. Variation due to influence quantity is less than twice the error allowed for reference condition.