GOBLIN

ELECTRICAL LOAD MANAGER / DEMAND CONTROLLER

- Accuracy Class 0.5 (as per IS14697)
- Displays more than 20 Parameters
- Four Relay contacts, individually field programmable for alarm parameter
- RS485 MODBUS-RTU Connectivity
- 128 X 6 4 Graphical LC Display
- USB port for downloading data (Device Mode)
- Directly accepts pen-drive to transfer logged data (Host mode)
- On board 2 MB of non-volatile memory. Data logging with field programmable log duration
- CT / PT ratios field programmable
- Odd Harmonic Analysis up to 15th for all voltages and currents, including THD

The digital power meter GOBLIN is a micro-controller based unit which not only measures a host of electrical parameters to display them on a 128 x 64 backlit LCD, but also acts as a comprehensive load managing device due to its four numbers of output relay contacts. These outputs are individually field programmable for both the parameter on which to generate alarm as well as the values on which to activate alarm and deactivate it. In addition to this flexibility in terms of load management, the meter also has RS485 port. RS485 supports MODBUS RTU protocol for connections to EMS/SCADA.

The unit is meant for use in three phase four wire / three wire systems. The installation type, CT ratios and PT ratios are site selectable.

The Load Manager with its four relay contacts can be used as a Demand Controller. The method of Demand calculation i.e. sliding window, fixed window can be selected at site.

GOBLIN is a versatile meter, with all the features needed to implement a robust electrical load management system. It can be configured to suit most control and communication needs.

Technical Specifications

Parameter			
Type		**Name**	**Statistics**
INPUT		Three Phases and Neutral of a 3P4W system / Three Phases of a 3P3W system	
		Voltage	Direct Voltage Input : Up to 500V L-L, Up to 300V L-N PT Ratio : Site Selectable Burden : 0.5VA
		Current	Secondary Current Input : 5A or 1A (Site Selectable) CT Ratio : Site Selectable Range of Reading : 5 – 5000A Burden : < 1.0VA Overload : 5A CT = 6A RMS Continuous 1A CT = 1.2A RMS Continuous
		Power Supply	Auxiliary Supply: 90 - 480 VAC, 50-60 Hz.
OUTPUT		Relay	Four. Individually Field Programmable. Switching Voltage : Max. 250 VAC Switching Power : Max. 1000W Expected Mechanical Life : >10 x 10^6 switching operations Expected Electrical Life : >4 x 10^6 switching operations @(Load = 200VA, Cosφ = 0.5)
MEASUREMENT	True RMS Basic Parameters	Voltage (Volts L-N & L-L)	V_{L-N} Accuracy : 0.5% of Reading V_{L-L} Accuracy : 1.0% of Reading
		Current (Amps IR, IY, IB)	Accuracy : 0.25% of Reading
		Line Frequency	45 to 55 Hz, Accuracy: 0.3% of Reading
	Power	Active Power (P)	Accuracy: 0.5% of Reading (For IPFI>0.5)
		Reactive Power (Q)	Accuracy: 1.5% of Reading (Between 0.5 Lag to 0.8 Lead)
		Apparent Power (S)	Accuracy: 0.5% of Reading
		Power Factor	For Individual phases and System. Accuracy: 0.5% of Reading (IPFI≥0.5) Range of Reading: 0.05 to 1.000 Lag/Lead
	Energy	Total Active Energy (KWh)	Range of Reading: 0 to 9999999.9 KWh Accuracy: Class 0.5 as per IS14697
		Total Apparent Energy (KVAh)	Range of Reading: 0 to 9999999.9 KVAh Accuracy: Class 0.5 as per IS14697
		Total Reactive Energy (KVARh)	Range of Reading: 0 to 9999999.9 KVARh Accuracy: Class 1.0
	Power Quality	3^{rd} to 15^{th} Harmonics(Odd) for all Voltages with THD	
		3^{rd} to 15^{th} Harmonics(Odd) for all Currents with THD	
	Demand	Active Power (KW) Demand - Sliding & Fixed, Selectable	
		Apparent Power (KVA) Demand - Sliding & Fixed, Selectable	
MISCELLANEOUS	Dimensions	Bezel	144 X 144 mm
		Panel Cutout	138 X 138 mm
		Depth of installation	55 mm
		Display	128 X 64 Graphical LCD
		Operating temp	10°C to 50°C
		Weight	0.65 Kgs (Approx.)
		Operating Current Range	0.4% to 120% of CT primary
	Communication	Data Logging Buffer	2 MB, Non-volatile memory, Can hold 19691 records
		Logging Duration	Site selectable from 1 minute to 60 minutes
		RS485	Modbus-RTU protocol
		USB 2.0	For downloading logged data
		Pendrive	

TESPL/ CAT/ GOBLIN/ 0809 - Ver-2

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*Specifications are subject to change without notice due to continuous improvement.