

Acuvim-L Series

Multifunction Power Meter



Acuvim-L Series



DESCRIPTION

The Acuvim-L series are multifunction power meters manufactured by Accuenergy. It is the ideal choice for monitoring and controlling of power distribution system. Some of the features and electric power parameters available on the ultra-compact Acuvim-L are:

- True-RMS measuring parameter
- 4-quadrant Energy
- Power Quality Analysis
- Over limit alarm
- Energy pulse output

Acuvim-L may be used as a data gathering device for an intelligent Power Distribution System or a Plant Automation System. All monitoring data is available via digital RS485 communication port running Modbus™ Protocol.

The quality of the power system is important with increasing use of electronic loads such as computers, ballasts or variable frequency drives. With the Acuvim-L power analysis option, any phase current or voltage can be displayed and the harmonic content calculated. By knowing the harmonic distribution, action can be taken to prevent overheated transformers, motors, capacitors, neutral wires and nuisance breaker trips. Redistribution of the system loading can also be determined.

APPLICATIONS

- Metering of distribution feeders, transformers, generators, capacitor banks and motors
- Medium and low voltage systems
- Commercial, industrial, utility
- Power quality analysis

FEATURES

Metering

- Voltage V1, V2, V3, V12, V23, V31
- Current I1, I2, I3, In
- Power P1, P2, P3, Psum
- Reactive Power Q1, Q2, Q3, Qsum
- Apparent Power Ssum

- Frequency F
- Power Factor PF1, PF2, PF3, PF
- Energy Ep_imp, Ep_exp
- Reactive Energy Eq_imp, Eq_exp
- Demand Dmd_I1, Dmd_I2, Dmd_I3, Dmd_P, Dmd_q

Monitoring

- Power Quality
- Voltage Harmonics 2nd to 15th and THD
- Current Harmonics 2nd to 15th and THD
- Voltage Imbalance Factor U_unbl
- Current Imbalance Factor I_unbl
- Max/Min Statistics with Time Stamps
- Running Hour

Alarm

One (1) alarm parameter may be set within a specified time interval. If indicated parameter is over or under its setting limit and persists over the specified time interval, the event will be recorded with time stamps and trigger the Alarm DO output. The indicated parameter can be selected from any of the 31 parameters available.

Pulse Output option

Two Digital outputs can be configured as pulse output for kWh and kVarh. The pulse rate and width can be set.

Communication

RS485, Industry standard Modbus™ RTU protocol

Display

Clear and large character LCD Screen display with orange back light
Wide environmental temperature endurance

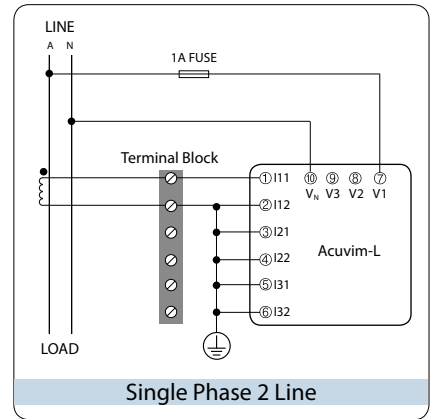
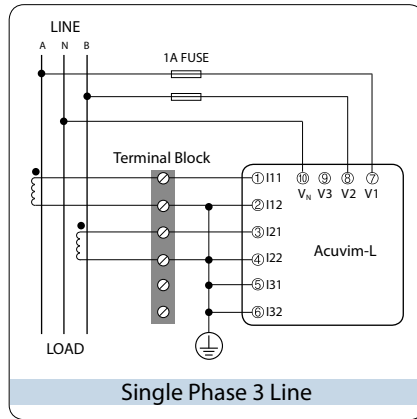
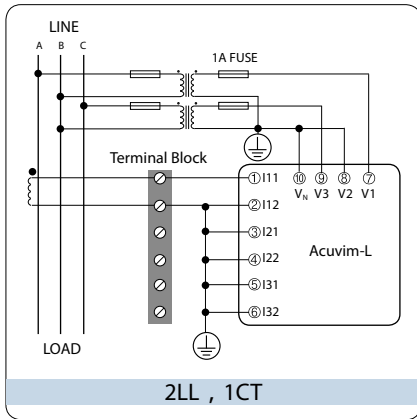
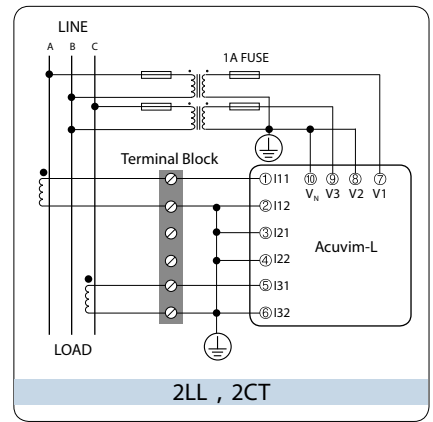
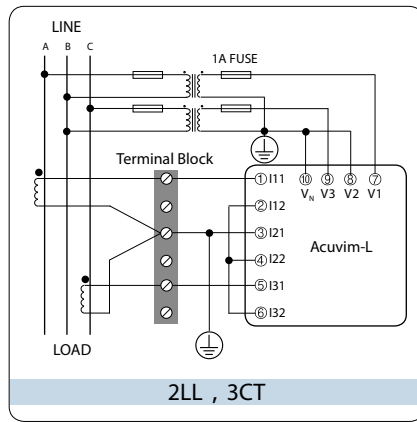
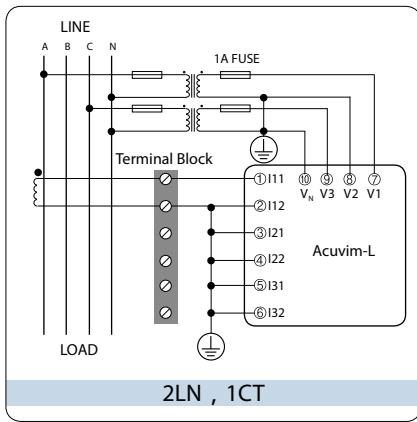
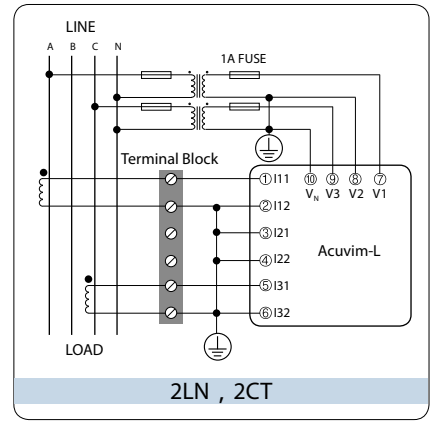
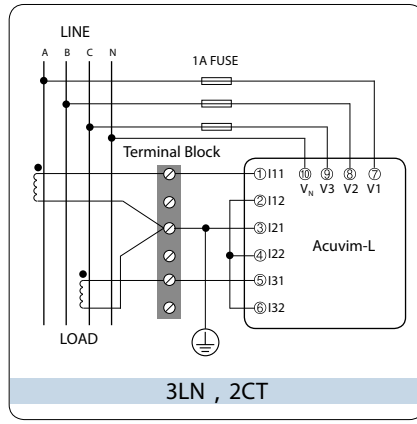
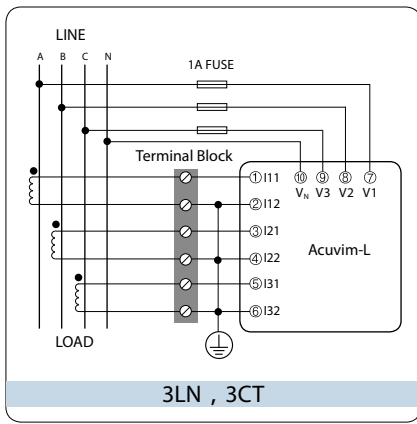
Outline

Small Size 96×96×51(92×92 Cutout) DIN or 4" ANSI Round

Acuvim II Meter

Function		Parameter	AL	BL	CL
REAL TIME METERING	Phase Voltage	U1, U2, U3	•	•	•
	Line Voltage	U12, U23, U31	•	•	•
	Current	I1, I2, I3, In	•	•	•
	Power	P1, P2, P3, Psum	•	•	•
	Reactive Power	Q1, Q2, Q3, Qsum	•	•	•
	Apparent Power	Ssum	•	•	•
	Power Factor	PF1, PF2, PF3, PF	•	•	•
	Load Nature	L/C/R	•	•	•
ENERGY & DEMAND	ENERGY	Ep_imp, Ep_exp,	•	•	•
	REACTIVE ENERGY	Eq_imp, Eq_exp,	•	•	•
	CURRENT DEMAND	Dmd_I1, Dmd_I2, Dmd_I3	•	•	•
	POWER DEMAND	Dmd_Psum, Dmd_Qsum	•	•	•
POWER QUALITY	Voltage Unbalance	U_unbl	•	•	•
	Current Unbalance	I_unbl	•	•	•
	Voltage THD	THD_V1, THD_V2, THD_V3,	•	•	•
	Current THD	THD_I1, THD_I2, THD_I3,	•	•	•
	Individual Harmonics	2 nd ~ 15 th (Current and Voltage)	•	•	•
STATISTICS	Max Current Demand	Dmd_I1_max, Dmd_I2_max, Dmd_I3_max	•	•	•
	Max Power Demand	Dmd_Psum_max, Dmd_Qsum_max	•	•	•
	Max & Min of Voltage		•	•	•
	Max & Min of Current		•	•	•
HOUR	Running Hour	Hour	•	•	•
I/O	Energy Pulse Output			•	
	Alarm Output			•	
COMMUNICATION	RS-485	MODBUS®-RTU Protocol			•

Typical Wiring



DIMENSIONS

