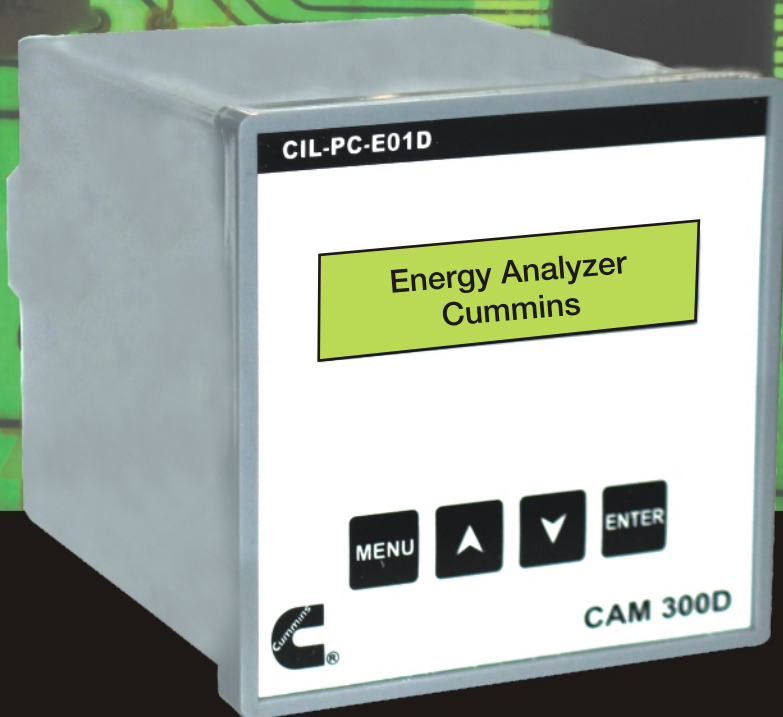


EVERY™ READING ACCURATE.



Dual Source Energy Analyser
(Part number - AX 1012725)

Introduction

CAM Series Energy Analyzers are specially developed for 3-phase electrical energy measurement applications. CAM300D is a dual source energy analyzer useful for the applications where source energy can be either utility or generator set. It measures and displays total 44 electrical parameters. A serial RS-485 port is provided for the analyzer to create network of analyzers that can be managed by means of a Software* Security password facility is provided to prevent any un -authorised access of the set up menu.

Features

- One unit of 'CAM300D' replaces all your analog meters and transducers.
- Measures 44 electrical parameters with harmonics in both LV and HV.
- Alphanumeric 16 character 2 line LCD display with continuous backlit
- RS 485 MODBUS serial interface (19200-baud rate max)
- Screen refresh time: 500 ms
- NABL approved
- Chip - parameter refresh rate is 20 ms
- Accuracy 0.5% maintained even on non-linear loads and fast switching loads. Continuous cycle by cycle sampling at 128 samples per cycle and on all voltage and current inputs
- RUN and SET program mode
- Tamper proof password protected program mode
- Instantaneous start
- LOW power consumption (less than 1 watt)
- Direct reading CT. CT/PT ratio programmable.
- Frequent adjustment not required
- No mechanical wear and tear
- Safe to use - fully isolated CT inputs for user and installation safety.
- Finger touch proof terminals for CT and voltage connections
- Rugged design to perform even in poor power quality conditions

Technical Specifications

1. System Inputs:

- Supply Voltage: 230 VAC ($\pm 2\%$ line regulation), 50 Hz
- 3 phase voltage input (star- connection) 415V ($\pm 10\%$ Line Regulation)
- Four membrane keys to set parameters
- 24V Digital input to differentiate energy source

2. System Outputs:

- 16 character, 2 line alphanumeric backlit LCD display
- RS 485 MODBUS serial interface (19200-baud rate max)

3. Measurement Accuracy:

- Voltage: $\pm 0.25\%$ of full scale
- Current: $\pm 0.25\%$ of full scale
- Frequency: $\pm 0.2\%$ of full scale
- Instantaneous power: $\pm 0.5\%$ of full scale
- Power factor: $\pm 0.5\%$ of full scale
- Active energy : $\pm 0.5\%$ of full scale

4. Operating Conditions:

- Temperature: 0°C to 55°C
- Humidity: 0% to 95% non-condensing

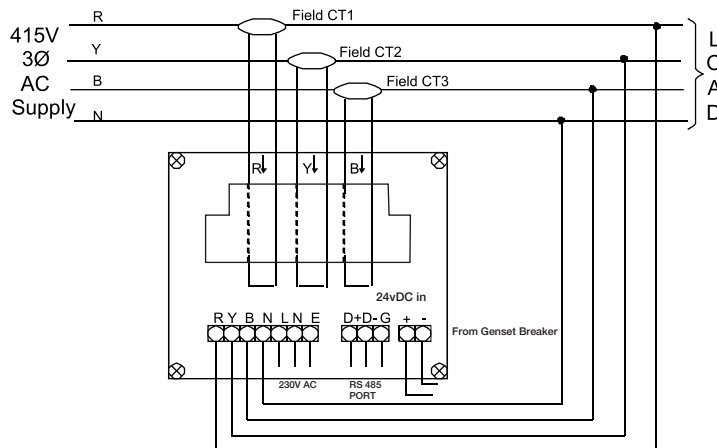
5. Mechanical Specifications:

- Size: 96x96x141 mm (Including CT)
- Weight: 713 gms.
- Material: ABS plastic.
- Mounting: Flush on panel mounting.
- Termination details: 12L - Type detachable (Rear side).
- Panel cutout - $92 \pm 0.5 \times 92 \pm 0.5\text{mm}$

* Software available at extra cost on request.

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WIRING DIAGRAM FOR 3-PHASE 4-WIRE CONNECTION

List of Parameters

Frequency (F)	Reactive Power Line 1 (KVARr)
3-Phase Equivalent Line Voltage (V)	Reactive Power Line 2 (KVARy)
Line Voltage (L1-L2) Vry	Reactive Power Line 3 (KVARb)
Phase Voltage (Vr)	Phase Equivalent Active Power (KW)
Line Voltage (L2-L3) Vyb	Active Power Line 1 (Kwr)
Phase Voltage (Vr)	Active Power Line 2 (Kwy)
Line Voltage (L1-L3) Vbr	Active Power Line 3 (Kwb)
Phase Voltage (Vb)	Max 3 Ph Equi Active Power (KWmax)
3 - Phase Equivalent Line Current (I)	3 - Phase Equivalent Reactive Energy (KVARH)
Current Line -1(Ir)	3 - Phase Equivalent Apparent Energy (KVAH)
Current Line -2(Iy)	3 - Phase Equivalent Active Energy (KWH)
Current Line -3(Ib)	Active Energy Line 1 (KWHr)
3 - Phase Equivalent Power Factor (PF)	Active Energy Line 2 (KWHy)
PF Line 1 (PF 1)	Active Energy Line 3 (KWHb)
PFLine2(PF2)	Voltage THD for Phase R* (THDVr)
PF Line 3 (PF 3)	Voltage THD for Phase V (THDVy)
3 - Phase Equivalent Apparent Power(KVA)	Voltage THD for Phase B* (THDVb)
Apparent Power Line 1 (KVARr)	Current THD for Phase R* (THDIr)
Apparent Power Line 1 (KVARr)	Current THD for Phase Y* (THDIy)
Apparent Power Line 3 (KVA b)	Current THD for PhaseB*(THDIb)
Max 3 - Phase Equivalent Apparent Power (KVAmax)	Equivalent Voltage THD* (THD V)
3 - Phase Equivalent Reactive Power (KVARH)	Equivalent Current THD* (THD I)

Applications

- Apartment Complex / Townships
- Malls & Multiplex
- IT Parks
- Commercial complexes

