Four Parameter Meter

New

Preliminary Data

Software

Model : 3Phase 3Wire 2Element	**QU144x192U(W,VAR,PF,Hz)33**	**QU144x192U(V,A,PF,Hz)33**
Model : 3Phase 4Wire 3Element	**QU144x192U(W,VAR,PF,Hz)34**	**QU144x192U(V,A,PF,Hz)34**
Parameters Measured :	Active Power (System) Reactive Power (System) Power Factor (System) & Frequency (System)	Voltage (System) Current (System) Power Factor (System) & Frequency (System)

Introduction

MECO QU144x192U is indigenously designed, tooled and manufactured by the Research and Development Department of MECO and is a very high performance, rugged and reliable meter. This micro-controller based meter measures and simultaneously displays TRMS values of Four electrical parameters with super bright and large LED display enabling reading from a distance

- Active Power (System) - KW/MW
- Power Factor (System) - PF
- Voltage (System) - V
- Apparent Power (System) - KVA / MVA
- Reactive Power (System) - KVAR/MVAR
- Frequency (System) - Hz
- Current (System) - I

Advantages

Conventional method uses 4 Transducers plus 4 Digital Panel Meters and several cumbersome wires, occupying lot of space in front of the panel and inside the panel. The use of QU144x192U reduces the burden on Current & Potential Transformers. QU144x192U Four Parameter Meter is designed, keeping the Class 1.0 accuracies and 1.0 inch height display size for Generation, Transmission & Distribution Panels. Cost of ownership comes from a combination of Transducers, Panel meters, Panel Size, Panel Wiring & Space and User Productivity. All these areas have been targeted in the QU144x192U Meter reducing the cost to less than 50%. The accuracies are Software set to 1.0% FSD using state-of-the-art calibrators and comes with a Calibration Certificate Traceable to National Standards. There are no user set potentiometers, hence accuracy cannot be tampered with.

Application

This highly accurate, rugged, and compact instruments is competitively priced and ideal for use in application for Power Distribution sector, PLC's / SCADA, Power Management, QC Testing, Energy Audit, BMS and Genset.

Specifications

System (any one only)	3Phase 2Element 3Wire 3Phase 3Element 4Wire	**Communication** (standard)	RS-485 Port (5kV Isolated), MODBUS-RTU Protocol with POWER MASTER Software
Input		**Environment**	
Voltage / Phase	50 - 300V (Max.) (P - N)	Calibration	27°C ± 5°C
Current / Phase	0.2A - 1.2A (max.) or 1A - 6A (max.) (any one only)	Operating	0 to 50°C, RH < 70%
Frequency	45 - 55 Hz	Storage	-10 to 60°C, RH < 70%
Power Factor	0.300 Lag (L) - 1.000 - 0.300 Lead (C)	**Dimensions**	
Auxiliary Supply (any one only)	230V AC ±20%, 50Hz or 110V AC ±20%, 50Hz	Front	144 x 192 mm
		Depth (Behind Bezel)	60 mm (approx.)
Terminals	Screw Type	Panel Cut-out	138(+0.8, 0.0) x 186(+0.8, 0.0)

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ISO 9001:2000 CERTIFIED

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Model : 3Phase 4Wire 3Element	**QU144x192U(W,VAR,VA,PF)34**	**QU144x192U(W,VA,A,PF)34**	**QU144x192U(W,V,A,PF)34**
Parameters Measured :	Active Power (System) Reactive Power (System) Apparent Power (System) & Power Factor (System)	Active Power (System) Apparent Power (System) Current (System) & Power Factor (System)	Active Power (System) Voltage (System) Current (System) & Power Factor (System)

Features

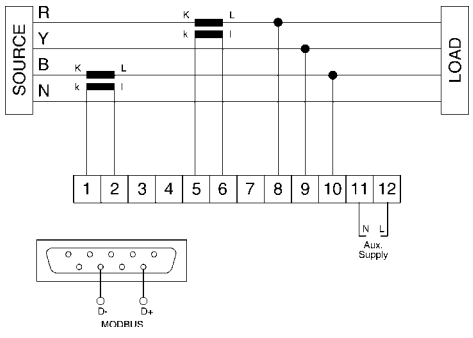
- Measures and Displays 4 Electrical Parameters
- TRMS Measurements
- Import-Export (4 Quadrant Operation)
- 3 Phase 3 Wire / 3 Phase 4 Wire (User Selectable)
- MODBUS RTU Protocol (Standard)
- POWER MASTER Software
- IP54 (for meter front)
- CE Compliance with EN61010-1, EN61326-1
- 4 Rows of 4 Digit, Super Bright, 1 inch, Red LED Display
- CTR, PTR & Instrument Address (User Programmable)
- RS 485 Port (5kV Isolated) (Standard)

Accuracy

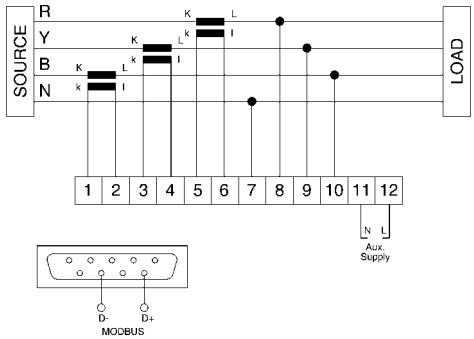
Parameters Measured (4 Parameters as per Model selected)	**Accuracy**	**System**
Active Power (System)	± 1% of F.S.	KW / MW (System)
Reactive Power (System)	± 1% of F.S.	KVAR / MVAR (System)
Frequency (System)	± 0.2 Hz	Hz (System)
Power Factor (System)	± 1° Electrical	PF (System)
Apparent Power (System)	± 1% of F.S.	KVA / MVA (System)
Voltage (System)	± 0.5% of F.S.	V (System)
Current (System)	± 0.5% of F.S.	I (System)
Other Parameters like Active Energy, Reactive Energy, Apparent Energy	Please inquire sales@mecoinst.com	

Ordering Information : Model, Input Voltage, Input Current, Input Frequency, System (3P2E3W or 3P3E4W), CTR / PTR (if any) & Auxiliary Supply.

Terminal Connection



3 Phase 2 Element 3 Wire



3 Phase 3 Element 4 Wire