# AcuRev 1200 Series

# Rail-mounted Single phase Energy Meter















# **DESCRIPTION**

AcuRev 1200 series rail-mounted single phase energy Meters has a small size and high accuracy, can access to 80A current directly, it is ideal for use in distributor and tight spaces. The meter is equipped with an easy to read liquid crystal display (LCD) which displays all the important information. It is ideal for building energy management systems, energy monitoring and energy metering systems.

# **APPLICATIONS**

- Commercial Complex/Mall
- Apartment/Condominiums
- Hospitals/Public Services
- Hotels/Office Buildings
- Tenant Submetering/Billing
- Data Centers
- LEED Projects
- Energy Management Systems
- Industrial and Utilities Applications

# **FEATURES**

- Comply to IEC62053-22 classes 0.5S Measurement Standard
- Small size, DIN rail mounting
- Direct metering up 80A
- Support active / reactive energy pulse output
- Support multi-rate features: 4 rates, real-time clock
- 7 digits backlit LCD display
- Facilitate communication, RS485 interface, infrared interface;
   MODBUS-RTU protocol
- Easy to install, easy to meter reading, less set, easy maintenance and replacement (separate base and header design)

# AcuRev 1200 Meter

FUNCTION		PARAMETER	AcuRev 1201	AcuRev 1202	AcuRev 1203	AcuRev 1204
ENERGY	Energy	Combination active energy, Ep_imp, Ep_exp	•	•	•	•
	Reactive Energy	Combination reactive energy				
		Four-quadrant reactive energy				•
	Apparent Energy	Es_imp, Es_exp			•	•
TOU	4 Tarrifs				•	•
POWER DEMAND	Power Demand	Dmd_P, Dmd_Q, Dmd_S			•	•
	Peak Power Demand	Dmd_P_max, Dmd_Q_max, Dmd_S_max			•	•
CURRENT DEMAND	Current Demand	Dmd_I			•	•
	Peak Current Demand	Dmd_I_max			•	•
REAL TIME METERING	Phase Voltage	U		•	•	•
	Current	1		•	•	•
	Power	P		•	•	•
	Reactive Power	Q			•	•
	Apparent Power	S			•	•
	Power Factor	PF			•	•
	Frequency	F		•	•	•
TIME	Year, Month, Date, Hour,					
	Minute, Second					
COMMUNICATION PORT	Non-contact infrared		•	•	•	•
	RS-485			0	0	0
COMMUNICATION	Modbus-RTU			©	©	(iii)
PROTOCOL						
<b>ENERGY PULSE</b>	kWh/kvarh Output		•	•	•	•
OUTPUT						
DISPLAY	LCD Display		•	•	•	•
TREND RECORDS	Electrical parameters					•

● Function ◎ Option Blank NA

# **SPECIFICATIONS**

METERING						
Parameter	Accuracy	Resolution	Range			
kWh	0.5%	0.1kWh	0-999999.9			
kvar	0.5%	0.1kvar	0-999999.9			
kVAh	0.5%	0.1kVAh	0-999999.9			
V	0.5%	0.1V	175.0V-265.0V			
I	0.5%	0.001A	100mA-80A			
Р	0.5%	0.1W	-30-30kW			
Q	0.5%	0.1var	-30-30kvar			
S	0.5%	0.1VA	-30-30kVA			
PF	0.5%	0.001	-1.000-1.000			
Freq	0.2%	0.01Hz	50/60			
Active power Demand	0.5%	0.1W/var/VA	30kW/kvar/KVA			
Current Demand	0.5%	0.001A	80A			

### Voltage

Reference Voltage 220V L-N
Operation Voltage Range 80% - 120%Vn
Operation Frequency 50/60Hz

#### Current

Reference Current In 10A

Maximum Current 80A

Starting Current 0.001In

# Power (Taken from the voltage loop)

Supply Voltage Taken from the voltage loop

Burden <2W or 10VA

# **Operating Enviornment**

Operation temperature  $-25-70^{\circ}$ C Storage temperature  $-40-85^{\circ}$ C

The annual average humidity of 85%, a year can Humidity

have 30 to 95%

# Pulse Output

Isolation Voltage 2500Vac

External loop voltage 5-60V

Rated Current 10mA

Pulse Width (high) 100ms

Pulse Constant 1000 imp/kwh

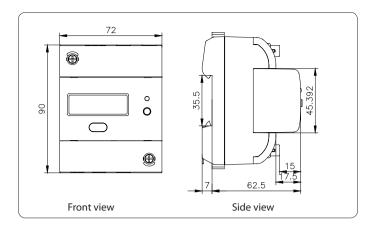
#### Communication

RS485 interface rate 1200-38400bps Communication protocol MODBUS-RTU

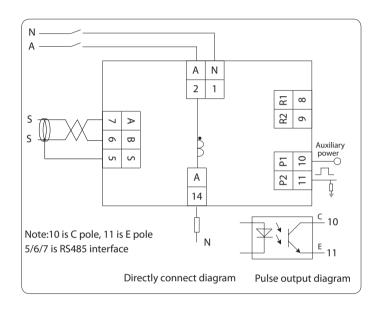
IR interface Non-contact Far-infrared

IR rate 1200bps

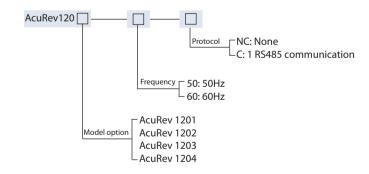
# **DIMENSIONS**



# **TYPICAL WIRING**



# **ORDERING INFORMATION**





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