BRIDEX

EVA-M ▪ Digital Meter

EVA-H ▪ Harmonics Meter

EVA-E ▪ Energy Meter

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EVA-E | Energy Meter

Product Introduction

EVA-E, complete microprocessor based, poly-phase power & energy meter is equipped with high-resolution liquid crystal display to complete its new state of the art outlook. EVA-E is a multi function power & energy meter, an ideal replacement for stand-alone kilowatt, kilowatthour, kilovar, kilovarhour, kilovoltampere and kllovoltamperehour meters in the market. It is one of the most cost effective yet function rich device with power and energy display in one concept. In addition, it will display maximum kW demand for user configurable time (15min, 30min or 60min), indicating the maximum kW consumed by the connected load in the past. We offer this solution with high accuracy class of +/-1.0% and additional features such as user selectable CT ratio settings, network configuration settings, maximum demand period & pulsing output for third party energy measurement.

Basic Features

EVA-E is designed to give average values of measured parameters at every 1 second interval. Therefore it will give almost instantaneous reading of power measurement. EVA-E can directly measure voltage up to 500VAC combined with current input from external current transformer ranging from 1A - 6000A. Equipped with large 16-digit liquid crystal display, which allow clear viewing of energy consumed at the point of installation. EVA-E will display following power parameters:

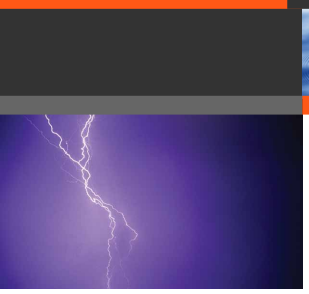
- Kilowatt (1 second average)
- Kilovar (1 second average)
- Kilovoltampere (1 second average)
- Aggregate kilowatt-hour
- Aggregate kilovar-hour
- Aggregate kilovoltampere-hour
- Maximum demand in kW (15min, 30min or 60min average)

EVA-E gives user a choice to select:

- Network configuration - single phase/ 3P3W/ 3P4W
- Current transformer ratio (1A to 6000A)
- Pulse output (1 pulse for 1kWh / 1 pulse for 10kWh)
- Pulse width (150msec)

Selection Guide

Product Code	Network Type (programmable)	Panel Cut-out	Auxiliary Supply	Communication
B-EVA-E	Single Phase / 3P3W / 3P4W	96 x 96	230VAC	Pulse output



Specifications

General

Network type (Programmable)	:	Single phase, 3 phase 3 wires, 3 phase 4 wires
Accuracy & standard	:	According to IEC 1036 Class 1
Ambient temperature	:	0-50 deg C
Humidity	:	0-95% non condensing

Input

Input voltage	:	0-500VAC
Input voltage tolerance	:	80-110% of Un
Burden	:	< 0.2VA per phase
Overload conditions	:	1.5 x Un continuous : 4 x Un for 1 second
Input current	:	5A(6)
Input current tolerance	:	10-120%
Burden	:	< 0.2VA per phase
Overload conditions	:	4 x In continuous
Frequency	:	50/60Hz
Auxiliary Supply	:	230VAC

Output (optional)

KWh pulse output	:	Mercury wetted volt free relay
Pulse rate	:	1 pulse per kWh or 10kWh
Pulse duration	:	150 msec

Enclosure

Display	:	16 digit LCD display including 2 decimal places, re-settable
Dimension	:	DIN 96x96x98mm
Panel mount	:	via 4 corner bracket and thumb tensioning screws
Panel cutout	:	92 + 0.8mm x 92 + 0.8mm
Material	:	black polycarbonate complying with UL 94VO. The cover/window is made from plexiglass 7N
Fixing	:	Snap on DIN rail 35 x 7.5mm complying with DIN 50022 BS5584
Enclosure code	:	Case IP50 / terminal IP 30 complying with IEC529 BS5490 DIN 40050
Terminal	:	3.5mm

Insulation

Test voltage	:	4kV RMS 50Hz for 1 min
Impulse test	:	EMC 5kV transient comply with IEC801 / EN55020
HF interference test	:	EHF 2.5kV 1MHz comply with IEC255-4

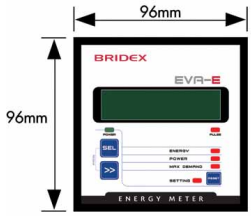
Ordering Format

B – EVA-E

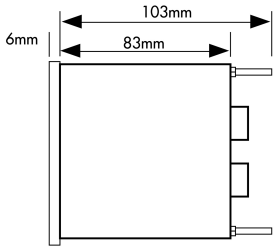
B: Bridex

EVA-E: Energy Meter

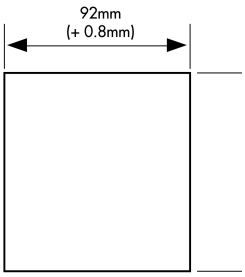
Dimension Diagram



Front Elevation



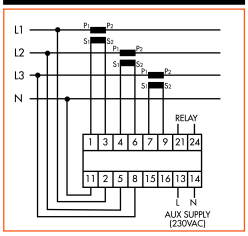
Side Elevation



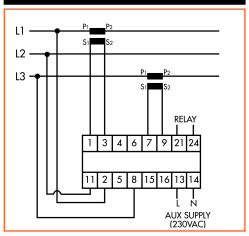
Rear Elevation

Wiring Diagram

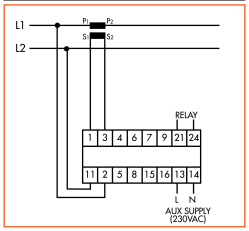
3 PHASE 4 WIRES



3 PHASE 3 WIRES



SINGLE PHASE



BRIDEX

EVA-M ▪ Digital Meter

Product Introduction

EVA-M, complete microprocessor based digital meter is equipped with high-resolution liquid crystal display to complete its new state of the art outlook. EVA-M is a multi function digital meter and ideal replacement for stand-alone voltage, current, frequency and power factor meters in the market. It is one of the most cost effective yet function rich device with 4 in one concept (4 parameter measurement in single device). EVA-M packed in 96 x 96 mm DIN enclosure can easily replace existing panel-mounted voltage or current meters without the need for modification. We offer this solution with high accuracy class of +/-1.0% and selectable CT ratio & network configuration.

Basic Features

EVA-M is designed to give average values of measured parameters at every 1 second interval. Therefore it will give almost instantaneous reading of electrical measurement. EVA-M can directly measure voltage up to 500VAC combined with current input from external current transformer ranging from 1 A- 6000A. Equipped with large 16-digit liquid crystal display, which allow clear viewing of basic electrical parameters at the point of installation. EVA-M will display following parameters:

- Line Voltage (1 second average)
- Phase Voltage (1 second average)
- Line Current (1 second average)
- Neutral Current (1 second average)
- Supply Frequency (1 second average)
- Power Factor (1 second average)

EVA-M gives user a choice to select:

- Network configuration - single phase/ 3P3W/ 3P4W
- Current transformer ratio (1A to 6000A)

Selection Guide

Product Code	Network Type	Panel Cut-out	Auxiliary Supply
B-EVA-M-##-****	Single Phase / 3P3W / 3P4W	96 x 96	230VAC

Specifications

General

Network type	:	Single phase, 3 phase 3 wires, 3 phase 4 wires
Accuracy	:	+/-1.0%
Ambient temperature	:	0-50 deg C
Humidity	:	0-95% non condensing

Input

Input voltage	:	0-500VAC
Input voltage tolerance	:	80-110% of Un
Burden	:	< 0.2VA per phase
Overload conditions	:	1.5 x Un continuous : 4 x Un for 1 second
Input current	:	5A(6)
Input current tolerance	:	10-120%
Burden	:	< 0.2VA per phase
Overload conditions	:	4 x In continuous
Frequency	:	50/60Hz
Auxiliary Supply	:	230VAC

Enclosure

Display	:	16 digit LCD display including 2 decimal places, re-settable
Dimension	:	DIN 96x96x98mm
Panel mount	:	via 4 corner bracket and thumb tensioning screws
Panel cutout	:	92 + 0.8mm x 92 + 0.8mm
Material	:	black polycarbonate complying with UL 94VO. The cover/window is made from plexiglass 7N
Fixing	:	Snap on DIN rail 35 x 7.5mm complying with DIN 50022 BS5584
Enclosure code	:	Case IP50 / terminal IP 30 complying with IEC529 BS5490 DIN 40050
Terminal	:	3.5mm

Insulation

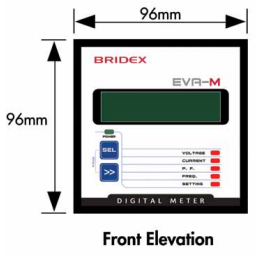
Test voltage	:	4kV RMS 50Hz for 1 min
Impulse test	:	EMC 5kV transient comply with IEC801 / EN55020
HF interference	:	EHF 2.5kV 1MHz comply with test IEC255-4

Ordering Format

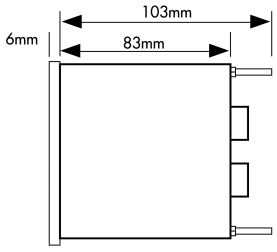
Note

Please refer to the last page.

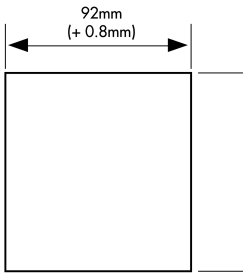
Dimension Diagram



Front Elevation

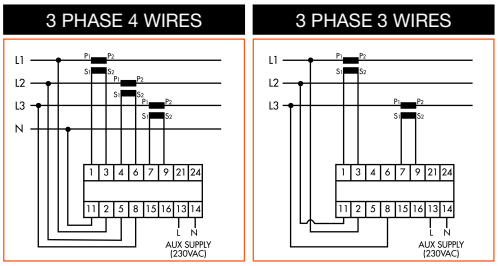


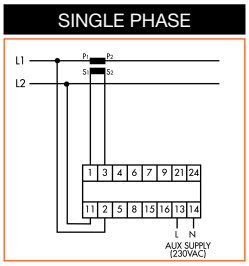
Side Elevation



Rear Elevation

Wiring Diagram





BRIDEX

EVA-H | Harmonics Meter

Product Introduction

EVA-H, complete microprocessor based, poly-phase harmonic meter is equipped with high-resolution liquid crystal display to complete its new state of the art outlook. EVA-H is an ideal meter for each switchboard where load consists of non-linear loads. EVA-H gives Total Harmonic Distortion (THD) for current & voltage and complement for other EVA series products. Harmonic distortion is widely reputed as culprit for cable failures, premature transformer failure as well as abnormal tripping of protection relays. Therefore, it is really important to find out harmonic distortion level at every feeder in the plant. Earlier this is expensive exercise but with EVA-H, plant managers can get all the harmonic information with minimal cost. EVA-H is one of the most cost effective yet function rich device with 2 in one concept (2 parameter measurement in single device). We offer this solution with high accuracy class of +/-1.0% and selectable CT ratio & network configuration.

Basic Features

EVA-H is designed to give average values of measured parameters at every 1 second interval. EVA-H can directly measure voltage up to 500VAC combined with current input from external current transformer ranging from 1A - 6000A Equipped with large 16-digit liquid crystal display, which allow clear viewing of harmonics content at the point of Installation. EVA-H will display following parameters:

- %THD VOLTAGE (1 second average)
- %THD CURRENT (1 second average)

EVA-H gives user a choice to select:

- Network configuration - single phase/ 3P3W/ 3P4W
- Current transformer ratio (1A to 6000A)

Selection Guide

Product Code	Network Type	Panel Cut-out	Auxiliary Supply
B-EVA-H-##-****	Single Phase / 3P3W / 3P4W	96 x 96	230VAC

Specifications

General

Network type	:	Single phase, 3 phase 3 wires, 3 phase 4 wires
Accuracy	:	+/-1.0%
Ambient temperature	:	0-50 deg C
Humidity	:	0-95% non condensing

Input

Input voltage	:	0-500VAC
Input voltage tolerance	:	80-110% of Un
Burden	:	< 0.2VA per phase
Overload conditions	:	1.5 x Un continuous : 4 x Un for 1 second
Input current	:	5A(6)
Input current tolerance	:	10-120%
Burden	:	< 0.2VA per phase
Overload conditions	:	4 x In continuous
Frequency	:	50/60Hz
Auxiliary Supply	:	230VAC

Enclosure

Display	:	16 digit LCD display including 2 decimal places, re-settable
Dimension	:	DIN 96x96x98mm
Panel mount	:	via 4 corner bracket and thumb tensioning screws
Panel cutout	:	92 + 0.8mm x 92 + 0.8mm
Material	:	black polycarbonate complying with UL 94VO. The cover/window is made from plexiglass 7N
Fixing	:	Snap on DIN rail 35 x 7.5mm complying with DIN 50022 BS5584
Enclosure code	:	Case IP50 / terminal IP 30 complying with IEC529 BS5490 DIN 40050
Terminal	:	3.5mm

Insulation

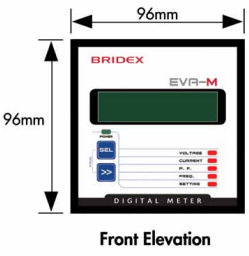
Test voltage	:	4kV RMS 50Hz for 1 min
Impulse test	:	EMC 5kV transient comply with IEC801 / EN55020
HF interference test	:	EHF 2.5kV 1MHz comply with IEC255-4

Ordering Format

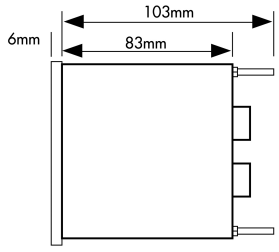
Note

Please refer to the last page.

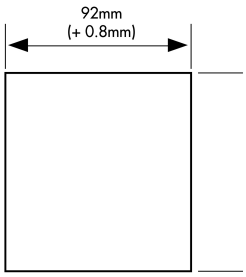
Dimension Diagram



Front Elevation

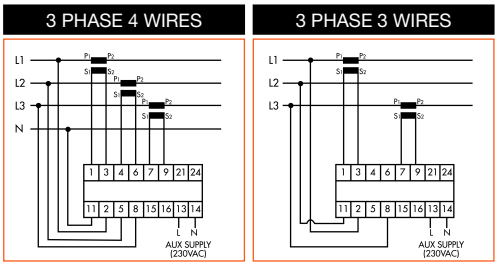


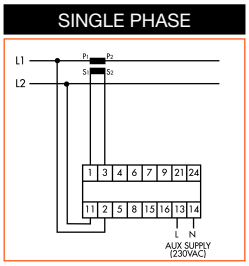
Side Elevation



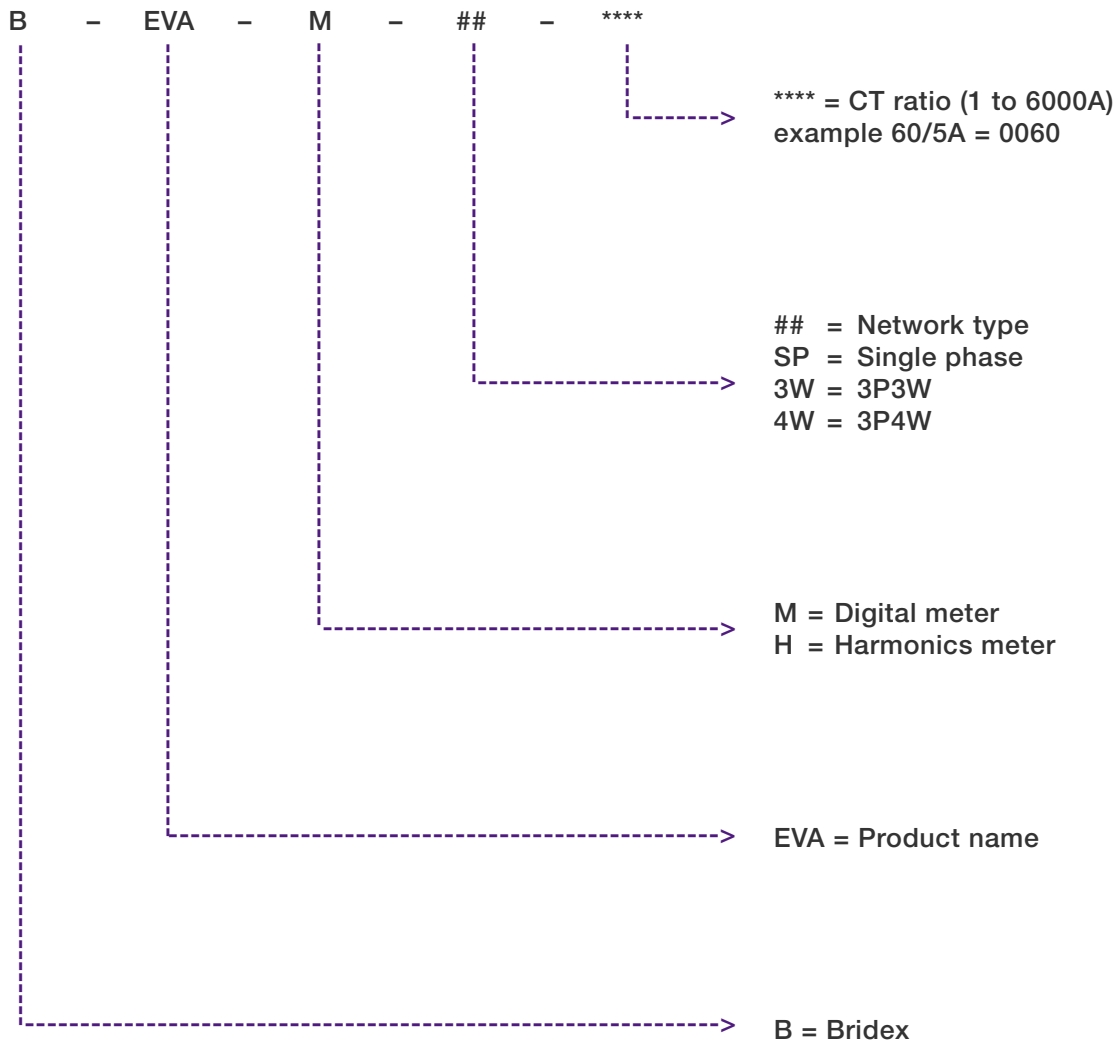
Rear Elevation

Wiring Diagram





Ordering Format



Note

Ordering format only applicable to EVA-M & H, EVA-E is user programmable.

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