New Integra Ci1

Energy Division

Crompton Instruments Integra Ci1 Energy Meter

The Integra Ci1 energy meter is specially designed and developed as a cost effective watt hour and VAr hour meter to complement the current Crompton Instruments Ci meter series. The Integra Ci1 self-contained 96mm DIN panel mounted watt hour, VAr hour meter measures the real consumption of active and reactive energy to Class 1.0 accuracy.

The backlit LCD screen displays 8 character counter indicating watt hour or VAr hour units. The optional modules enable transfer of energy measurements to building management systems (BMS) via pulsed or digital communication options.

Programmable functions
The Integra Ci1 energy meter provides simple programming to suit single-phase, three-phase three-wire and three-phase four-wire un-balanced system configurations, CT ratio settings and configuration of selected communication options. To prevent unauthorised access to the product configuration settings, all set-up screens offer password protection.

Plug in modules
Plug in modules allows to fit either maximum of two isolated pulsed output relays or a RS-485 communication module + one isolated pulsed output relay. The communication output module can be programmed internally to respond either to Modbus® RTU or Johnson Controls.

Display
The four push buttons give direct access to display the programmed set CT ratio, watt hours import and export, VAr hours import and export and the phase sequence test routine for both voltage and current phases. During the accumulation of the Wh or VArh the running icon will flash at a rate dependant on the displayed parameter.

Self-explanatory standard international icons on the display allow to read at a glance what parameters are measured and what system configuration (Wh or VAhr) is.

Features
- DIN 96 enclosure
- Backlit LCD screen
- Bezel depth 6.1mm
- Plug-in output modules
- Programmable CT ratio
- User programmable system configuration
- Phase diagnostic indication
- System running indication
- Removable energy threshold (1%)

Benefits
- Cost effective
- Intuitive navigation
- Crompton Instruments brand quality
- UK manufactured
- Easy 'clip-in' panel mounting

Standards
IEC 61326
IEC 61010-1
IEC 62053-21
RoHS Compliant

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Specifications

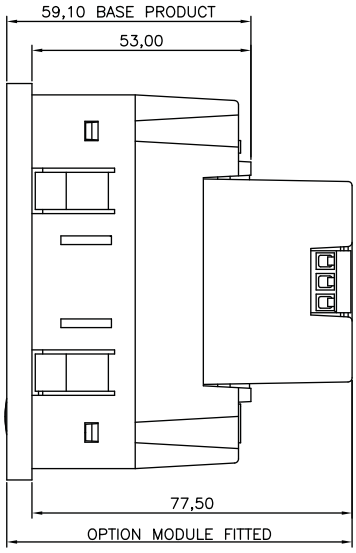
Input	
Nominal input voltage	100-289V ac L-N (173-500V ac L-L)
Max. continuous input overload voltage	120% of nominal
Max. short duration input voltage	2 x range maximum (1 second application repeated 5 times at 5 min intervals)
Nominal input voltage burden	< 0.2VA per phase
Nominal input current	5A ac rms
Max. continuous input overload current	120% of nominal
Max. short duration input current	10 x range maximum (1 second application repeated 5 times at 5 min intervals)
Frequency	45-66Hz
Auxiliary	
Operating range	110-400V ac nominal +/- 10% (99-440V ac absolute limits) or 120-350V dc +/- 20% (96-420V dc absolute limits)
Auxiliary burden	5 VA (Max)
Accuracy	
Active energy (Wh)	Class 1 (IEC 62053-21)
Reactive energy (VArh)	+/- 1% of range
Display	
LCD	8 character backlit counter (########.#) After the maximum reading is reached the digits will return to zero
Output modules (optional)	
Pulsed output relays	1 per module (2 modules fitted per Ci1)
Contact rating	50mA max at 250V ac
Type	Solid state relay
RS485 output module	1 RS-485 communication module (maximum of 1 module fitted per Ci1)
Type	2-wire half duplex
Baud rate	2400, 4800, 9600, 19200, 38400
Enclosure	
Enclosure style	DIN 96 panel mount
Dimensions	96x96x64.1mm (depth behind panel without module 53mm, with module 77.5mm)
Panel cut-out	92x92mm
Panel thickness	1-5mm
Front protection rating	IP52

Product Codes

Description	Part number
Integra Ci1 base unit	CI1-01
Options	
Pulsed output	CI-PUL-01
Modbus® RS485	CI-MOD-01
Accessories	
IP65 protective cover	3 G365 02
IP54 panel gasket	3 C345 01

Parameters

Button	Screen	Parameters
CT	1	CT Ratio
Wh	2 3	IMPORT Wh EXPORT Wh
Wh	4 5	IMPORT VArh EXPORT VArh
TEST	6	Phase sequence diagnostic



Energy Division – economical solutions for the electrical power industry: cable accessories, connectors & fittings, electrical equipment, instruments, lighting controls, insulators & insulation enhancement and surge arresters.

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