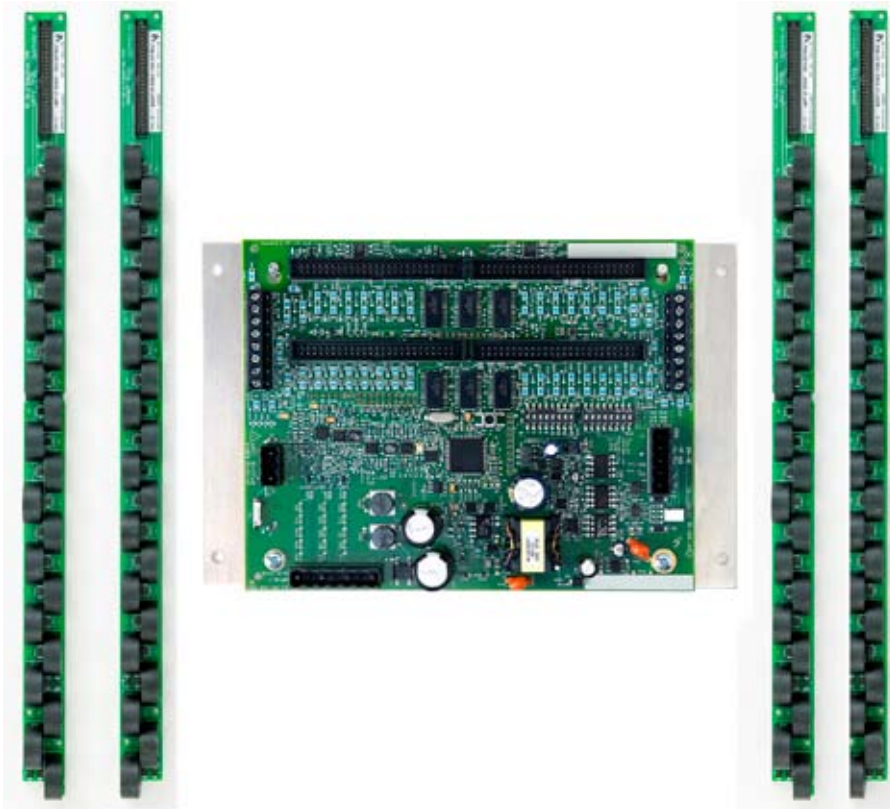
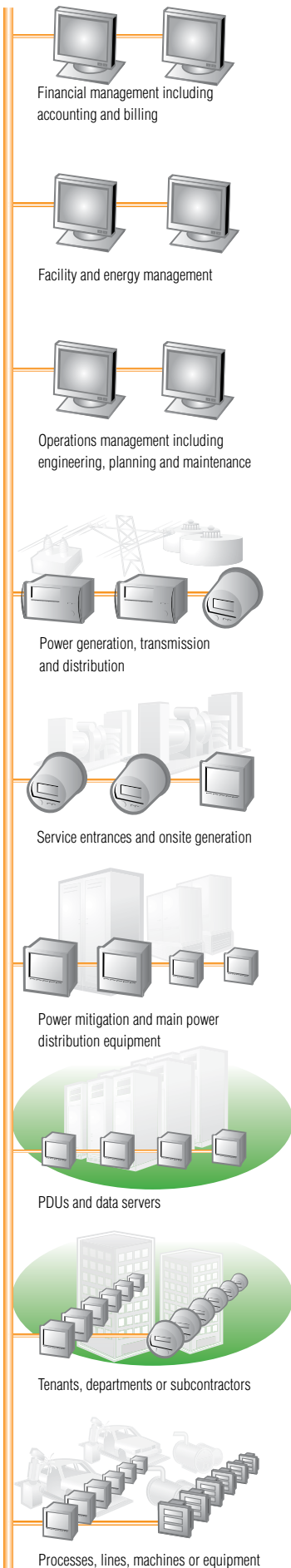


Gain energy insight and control with PowerLogic™

PowerLogic BCPM

branch circuit power meter





The branch circuit power meter solution

The ideal solution for data centre managers, engineers and operational executives who are responsible for delivering power to critical applications. In corporate and hosted data centre facilities, this technology helps you plan and optimise the critical power infrastructure to meet the demands of continuous availability.

The PowerLogic BCPM is a highly accurate, full featured metering product designed for the unique, multi-circuit and minimal space requirements of a high performance power distribution unit (PDU) or remote power panel (RPP).

The BCPM monitors up to 84 branch circuits and the incoming power mains, to provide information on a complete PDU. Full alarming capabilities ensure that potential issues are dealt with before they become problems.

Unlike products designed for specific hardware, the flexible BCPM will fit any PDU or RPP design and supports both new and retrofit installations. It has exceptional dynamic range and accuracy, and optional feature sets to meet the energy challenges of mission critical data centres.

Ideal for critical power applications and data centres

Monitor power distribution at the circuit level to:

- Maximise uptime and avoid outages
- Optimise existing infrastructure
- Improve power distribution efficiency
- Track usage and allocate energy costs
- Enable accurate sub-billing

Features

Choose from three feature sets:

BCPMA – Advanced: power and energy per circuit and mains

BCPMB – Intermediate: current per circuit, power and energy per mains

BCPMC – Basic: current only per circuit and mains

For mains monitoring, the BCPM requires 1/3 V CTs, purchased separately through your local Schneider Electric sales representative.

(see BCPM feature list on back page)



Total PDU Metering

Branch circuit metering

Monitor 42 or 84 circuits with 2 or 4 CT strips.

Current monitoring 100 A CTs		
Current accuracy	1% of reading from 2 A to 100 A	2% of reading from 0.25 A to 2 A
Power accuracy	3% of reading from 1 A to 100 A ⁽¹⁾ ⁽²⁾	

⁽¹⁾ Add 1% for 0.8 power factor to 0.5 power factor

⁽²⁾ Not applicable to BCPMB or BCPMC

Mains metering

Two sets of 4 CT inputs (3 phase plus neutral) using 1/3 Volt CTs – auxiliary CTs are ordered separately through your local sales representative.

Auxiliary 3-phase (mains) metering	
Power accuracy	IEC 61036 Class 1, ANSI C12.1 ⁽¹⁾ ⁽²⁾
Voltage range	90 – 277 V Line to Neutral voltage Inputs ⁽²⁾
Voltage accuracy	1% of reading from 90 – 277 V, Line to Neutral ⁽²⁾

⁽¹⁾ Excludes CTs

⁽²⁾ Applicable to BCPMA and BCPMB

Input power

Overload capability	10 k AIC
Input power	90 – 277 Vac
Frequency	50/60 Hz

Environment

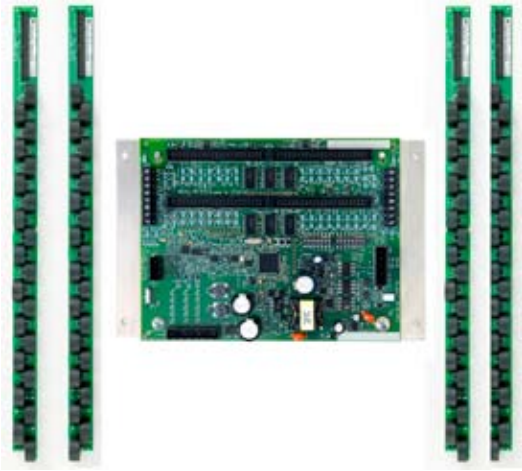
Operating temperature range	0° C – 60° C (<95% RH, non-condensing)
Storage temperature range	-40° C – 70° C

Total PDU Metering

Branch circuit metering

Dimensions

- Main PCB: 7.3" (184 mm) x 5.8" (146 mm)
- 3/4" (19 mm) CT strips: 20.5" (521 mm) x 1.0" (26 mm)
- 1" (26 mm) CT strips: 24" (610 mm) x 1.0" (26 mm)



Communications

The BCPM integrates easily into existing networks

- Modbus RTU protocol
- 2/4 wire RS-485, Parity Even, Odd, None (dip switch selectable)
- 9600, 19.2 K, 38.4 K (dip switch selectable)

Standards and Safety

- UL 508, "open type" device
- Installation category: CAT III
- IEC/EN 61010 CE

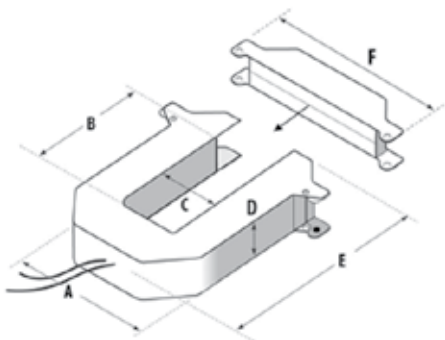
1/3 Volt low-voltage CTs

The BCPM uses 1/3 V output split-core CTs for the auxiliary inputs. These CTs are ordered separately from the BCPM through your local Schneider Electric sales representative.



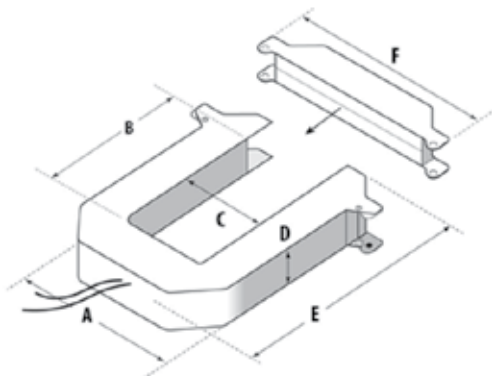
1/3 Volt low-voltage CT specifications	
Accuracy	1% from 10% to 100% of rated current
Frequency range	50/60 Hz
Operating temperature range	-15° C – 60° C
Storage temperature range	-40° C – 70° C
Humidity range	0 – 95% non-condensing
Leads	18 AWG, 600 Vac, UL 1015 twisted pair, 1.8m standard length
Max. voltage L-N sensed conductor	600 Vac

1/3 Volt low-voltage CT dimensions



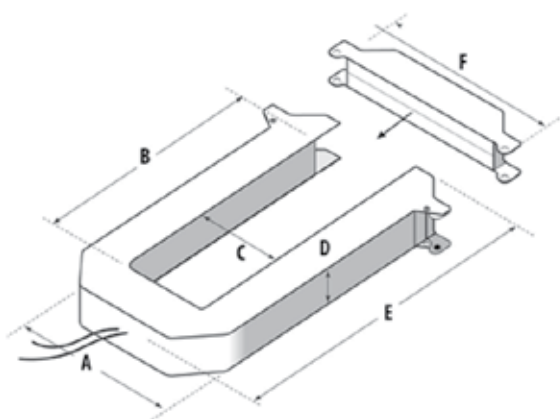
Small form factor 100/200/300 Amp

- A = 96 mm
- B = 30 mm
- C = 31 mm
- D = 30 mm
- E = 100 mm
- F = 121 mm



Medium form factor 400/600/800 Amp

- A = 125 mm
- B = 73 mm
- C = 62 mm
- D = 30 mm
- E = 132 mm
- F = 151 mm



Large form factor

800/1000/1200/1600/2000/2400 Amp

- A = 125 mm
- B = 139 mm
- C = 62 mm
- D = 30 mm
- E = 201 mm
- F = 151 mm

1/3 Volt low-voltage CT ordering guide

Part number	Amperage	Inside dimensions
LVCT00102S	100 A	31 mm x 100 mm
LVCT00202S	200 A	31 mm x 100 mm
LVCT00302S	300 A	31 mm x 100 mm
LVCT00403S	400 A	62 mm x 132 mm
LVCT00603S	600 A	62 mm x 132 mm
LVCT00803S	800 A	62 mm x 132 mm
LVCT00804S	800 A	62 mm x 201 mm
LVCT01004S	1000 A	62 mm x 201 mm
LVCT01204S	1200 A	62 mm x 201 mm
LVCT01604S	1600 A	62 mm x 201 mm
LVCT02004S	2000 A	62 mm x 201 mm
LVCT02404S	2400 A	62 mm x 201 mm

Features	BCPMA	BCPMB	BCPMC
Circuit metering			
Current per circuit	■	■	■
Present current demand	■	■	■
Max current demand	■	■	■
Max current	■	■	■
Power per circuit	■		
Present demand	■		
Max demand	■		
Energy per circuit (kWh)	■		
Power factor	■		
Mains metering			
Current, per phase	■	■	■
Max current, per phase	■	■	■
Present current demand, per phase	■	■	■
Max current demand, per phase	■	■	■
Power and energy per phase for each auxiliary input	■	■	
kWh	■	■	
kW, real power per phase	■	■	
Power Factor	■	■	
Total	■	■	
Per phase	■	■	
Voltage	■	■	
Line to line and average L-L of 3 phases	■	■	
Line to neutral and average L-N of 3 phases	■	■	
Frequency (Phase A)	■	■	
Alarm levels (per circuit and mains)			
High-high	■	■	■
High	■	■	■
Low	■	■	■
Low-low	■	■	■
Trip	■	■	■



"The 2007 award recognizes Schneider Electric for its technological advancements and wide product range in the field of power quality (PQ) and energy management solutions. In total, this is the fourth award that Schneider Electric and [recently acquired] Power Measurement have received from Frost & Sullivan in recognition of achievements in this arena."
Prithvi Raj, Frost & Sullivan research analyst



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