

Following on from comments from another manufacturer that 'No Meters can measure accurately below 20%', we feel that the following information may be of interest to your customers:

Summary of accuracy requirements for compliance with Standards

Current	Standard PF	Class 1 IEC 1036 1990	Class 1 EN 61036 1996	Class 0.5 EN 60521 1995	Class 0.5 EN 60687 1993
I_{max}	1	±1.0%	±1.0%	±0.5%	±0.5%
I_b	1	±1.0%	±1.0%	±0.5%	±0.5%
0.2 I_b	1	±1.0%	±1.0%	±0.5%	±0.5%
0.1 I_b	1	±1.0%	±1.0%	±0.5%	±0.5%
0.05 I_b	1	±1.5%	±1.0%	±1.0%	±0.5%
0.02 I_b	1	---	±1.5%	---	±1.0%
0.01 I_b	1	---	---	---	±1.0%
I_{max}	0.5	±1.0%	±1.0%	±0.8%	±0.6%
I_b	0.5	±1.0%	±1.0%	±0.8%	±0.6%
0.2 I_b	0.5	±1.0%	±1.0%	±0.8%	±0.6%
0.1 I_b	0.5	±1.5%	±1.0%	±1.3%	±0.6%
0.05 I_b	0.5	---	±1.5%	---	±1.0%
0.02 I_b	0.5	---	---	---	±1.0%

Typical Meter Accuracies at low Currents, PF = 1

Current	PowerRail 303	PM303	KWh Cube PowerCube	PowerRail 323	PM390	MultiCube
0.2 I_b	-0.2%	+0.2%	-0.2%	-0.3%	-0.10%	-0.1%
0.1 I_b	-0.2%	+0.1%	-0.2%	-0.3%	-0.02%	-0.2%
0.05 I_b	0.0%	-0.0%	-0.3%	-0.1%	+0.22%	-0.1%
0.02 I_b	+0.7%	+0.8%	0.0%	+0.7%	+0.59%	-0.8%
0.01 I_b	+1.4%	+3.0%	0.0%	+1.4%	+1.50%	-2.4%
0.005 I_b	n/a	n/a	n/a	n/a	+2.95%	n/a

Typical Meter Accuracies at low Currents, PF = 0.5

Current	PowerRail 303	PM303	KWh Cube PowerCube	PowerRail 323	PM390	MultiCube
0.2 I_b	-0.4%	-0.0%	-0.3%	-0.4%	+0.16%	+0.4%
0.1 I_b	-0.1%	-0.4	-0.3%	-0.1%	+0.05%	-0.2%
0.05 I_b	+0.3%	-1.3%	-0.3%	+0.3%	+0.20%	-1.4%
0.02 I_b	+1.4%	n/a	0.0%	+1.4%	+0.80%	-4.7%
0.01 I_b	n/a	n/a	n/a	n/a	+1.43%	n/a

All errors quoted are as a percentage of reading