

## Current Phase Imbalance

### Description

The current phase imbalance function measures the maximum percentage of deviation between the average current and the individual phase currents.

### Formulas

The current phase imbalance measurement is based on imbalance ratio calculated from the following formulas:

Calculated Measurement	Formula
Imbalance ratio of current in phase 1 (in %)	$li1 = ( L1 - I_{avg}  \times 100) / I_{avg}$
Imbalance ratio of current in phase 2 (in %)	$li2 = ( L2 - I_{avg}  \times 100) / I_{avg}$
Imbalance ratio of current in phase 3 (in %)	$li3 = ( L3 - I_{avg}  \times 100) / I_{avg}$
Current imbalance ratio for three phases (in %)	$I_{imb} = \text{Max}(li1, li2, li3)$

### Characteristics

The line current imbalance function has the following characteristics:

Characteristic	Value
Unit	%
Accuracy	<ul style="list-style-type: none"> <li>● +/- 1.5% for 8 A and 27 A models</li> <li>● +/- 3% for 100 A models</li> </ul>
Resolution	1%
Refresh interval	100 ms