## **APPLICATION NOTE**

## **IEC Metric Motor Loads and Product Selection**

In many parts of the world, motors are rated in kilowatts (kW). Although there are many voltages supplied by the serving utilities, 380 VAC three phase, 50 hertz (hZ), is the most common. The table below will help in selecting which current transducer to use when monitoring a specific motor load.

Please keep in mind that these full load amperages (FLA) are averages based on four-pole motors. It is good practice to ask the customer what current level they plan on monitoring.

## **AC Current Transducer Ranges**

AT and ATR Series: Field selectable within each model; ATO Series: 0-2 and 0-5 amps; AT1 Series: 0-10, 0-20 and 0-50 amps; AT2 Series: 0-100, 0-150, and 0-200 amps; ATR Series: 0-100, 0-150, and 0-200 amps. Always select a model with a range lower than the actual load being monitored.

kW	Average FLA 380 VAC 50 hZ	Average Responding 50-60 hZ	True RMS Distored Wave Form	Ranges
0.37	1.24	AT0	ATR0	low
0.75	2.13	AT0	ATR0	high
1.5	3.82	AT0	ATR0	high
2.2	5.18	AT1	ATR1	low
3.7	8.03	AT1	ATR1	low
5.5	12.0	AT1	ATR1	mid
7.5	15.2	AT1	ATR1	mid
11	21.6	AT1	ATR1	high
15	28.3	AT1	ATR1	high
18.5	36.0	AT1	ATR1	high
22	43.9	AT1	ATR1	high
30	58.6	AT2	ATR2	low
37	72.8	AT2	ATR2	low
45	83.8	AT2	ATR2	low
55	108.0	AT2	ATR2	mid
75	172	AT2	ATR2	high

This chart covers just the most common models NK Technologies manufactures. There are many newer products with higher and lower ranges, many in split core housings which may make your installation easier. Contact our applications support specialists at the factory for help selecting a product to fit your needs.



