Airsprint-RMS
3 phase AC Current RMS to Modbus RS485

Airsprint-RMS is a 3 phase AC Current Monitoring Device with Modbus RS485 output for compatibility with IOT Gateways, PLC's & RTU's. It is extremely useful for **Condition Monitoring** of 3 phase AC motors especially if they are Start Stopped for few seconds like **OLTC (Online Tap Change Motors) for Power Transformers**. Airsprint-RMS captures the following data every time the tap change motor is operated based on Trigger setting. Average RMS of the phase for the period of operation, Max RMS value during the period of operation, Period of operation (in seconds), Count of the Number of Operations. Apart from this the instantaneous value for each phase is also available. The gateway can then read all these data at its own sampling interval which can be in minutes. It can also be used for Machine OEE applications where the instantaneous current can define whether the machine is running or if it is in Idle State / Stop State.

Specifications
Input

1) Current, 4 - 20 mA DC/ 0 –1A AC/ 0-5 A AC
2) Voltage0-.333 V AC/ 0 - 10 mV/A AC

Input impedance

200 Ω for Voltage, mV
250 Ω for current inputs

Isolation

Not Applicable

Output

Modbus RS485
Parameters for One 3 phase Motor
- Instantaneous RMS Current – 3 Nos
- Avg Current in Cycle– 3 Nos
- Max Current in Cycle – 3 Nos
- Cycle Time -1 No
- Cycle Count - 1 No

(Cycle Start/Stop based on Current threshold Trigger Setting)

Indications

Red LED for Power Present
Green LED for Modbus Connectivity

Output accuracy

+/- 0.25% of span

Display accuracy

Not Applicable

Power supply

1) 10-30 V DC

Power consumption

6 VA max.

Dimensions

23.2 x 101 x 93.5 mm(W x H x D).
Enclosure ABS Screw Terminal Connection ,
Wall Mount

Ambient temperature

0 - 60° C.

Storage temperature

0 - 70° C.

Humidity

90% RH (non-condensing)

Hall Sensor : 0-35A