



MADE IN  
USA

**APT Series** power transducers sense true, "active" power and are a cost-effective way to measure kW on 1 $\phi$  or 3 $\phi$  applications up to 600VAC. Powered by 24V or 120V supply, the APT provides a fully isolated 4–20mA proportional output making it compatible with most supervisory controllers, panel meters and data loggers. Housed in a compact, DIN-compatible enclosure, the APT accepts standard 5A or 0–333mV current transformer inputs. Optional accessories include transceivers for wireless communication.

## Features

- **4–20mA Proportional Output to kW; Compatible with PLC and Datalogging Equipment**
- **Accepts 5A Secondary CTs or 0–333mV ProteCT™ CTs**
- **DIN-rail Compatible Package; Finger-safe Terminals**

## Applications

### True, Active Power Monitoring

- Measure motor power consumption when current alone provides insufficient resolution (e.g. voltage or PF variation).
- Monitor machine tool finishing operations such as deburring.
- Sense brush entanglements in carwash systems.
- Detect dry run or blockages on pumping systems.
- Monitor SCR fired electrical heaters.
- Monitor general power usage and tripping of electrical loads.

## APT SERIES Power Transducers

### Specifications

|                         |                                                                                                                                     |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Power Supply</b>     | 120VAC or 24VAC/VDC (+/- 10%), 2VA max                                                                                              |
| <b>Output</b>           | 0–5VDC, 0–10VDC or 4–20mA                                                                                                           |
| <b>Accuracy</b>         | 0.5% Full Scale (True RMS KW)                                                                                                       |
| <b>Voltage Range</b>    | 120–600VAC                                                                                                                          |
| <b>Frequency Range</b>  | 6–400Hz                                                                                                                             |
| <b>Amperage Range</b>   | <ul style="list-style-type: none"> <li>• 5A–4,000A w/standard 5A secondary CTs</li> <li>• 5A–1,500A w/ProteCT™ 333mV CTs</li> </ul> |
| <b>Indication</b>       | Power on LED                                                                                                                        |
| <b>Mounting</b>         | DIN-rail Compatible                                                                                                                 |
| <b>Pwr Consumption</b>  | <2.0VA                                                                                                                              |
| <b>Isolated Voltage</b> | 1250VAC                                                                                                                             |
| <b>EMC</b>              | EN50081-1, EN61000-6-2                                                                                                              |
| <b>Case</b>             | UL94 V0 Flammability Rated                                                                                                          |
| <b>Environmental</b>    | -4 to 122°F (-20 to 50°C), 0–95% RH non-condensing                                                                                  |
| <b>Connections</b>      | CTs (3), Voltage Inputs (3), Output (two-wire)<br>Wireless Mesh Network Transceiver (optional)                                      |

### Ordering Information

Sample Model Number: APT-48T-5A-120-010

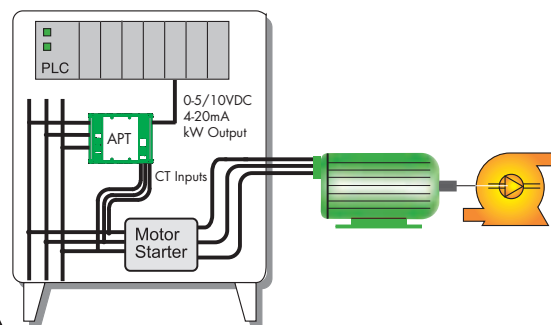
Example: APT - 12T - 5A - 024 - 005

APT - (1) (2) (3) (4)

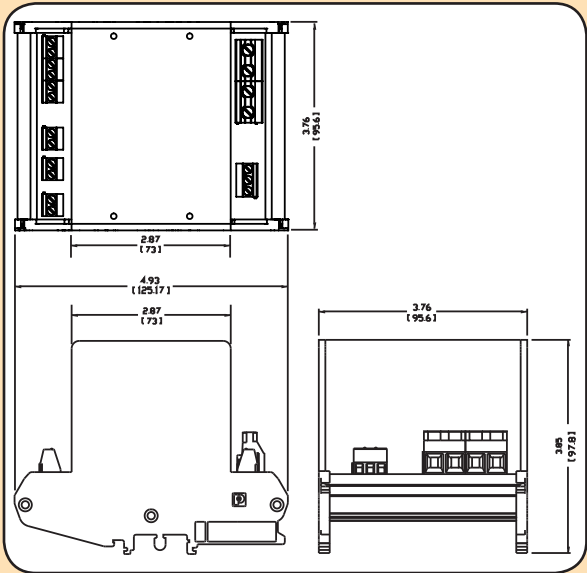
(1) Voltage      (2) CT Inputs      (3) Supply Voltage      (4) Full Scale Output

|     |                  |    |                     |     |        |     |         |
|-----|------------------|----|---------------------|-----|--------|-----|---------|
| 12T | 120V Three Phase | 5A | XXX:5 5A Secondary  | 024 | 24VAC  | 005 | 0-5VDC  |
| 24T | 240V Three Phase | MV | XXX:333mV Secondary | 120 | 120VAC | 010 | 0-10VDC |
| 48T | 480V Three Phase |    |                     |     |        | 420 | 4-20mA  |

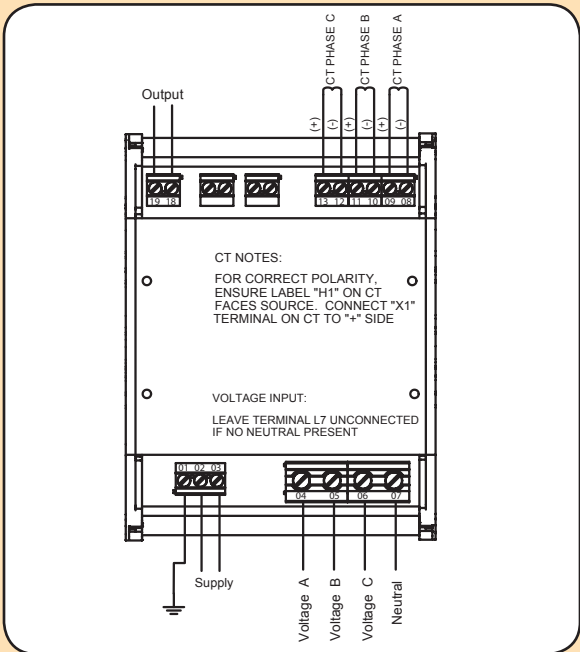
### Pump Motor KW Monitoring



# Dimensions



# Connections



# APT Output Values

| Voltage | CT Ratio | Full Scale kW (20mA) |
|---------|----------|----------------------|
| 480     | 5:5      | 4.16                 |
| 480     | 100      | 83.14                |
| 480     | 200      | 166.28               |
| 480     | 400      | 332.55               |
| 480     | 600      | 498.83               |
| 480     | 800      | 665.11               |
| 480     | 1000     | 831.38               |
| 480     | 1200     | 997.66               |
| 480     | 1500     | 1247.08              |
| 480     | 1600     | 1330.22              |
| 480     | 2000     | 1662.77              |
| 380     | 5:5      | 32.91                |
| 380     | 100      | 65.82                |
| 380     | 200      | 131.64               |
| 380     | 400      | 263.27               |
| 380     | 600      | 394.91               |
| 380     | 800      | 526.54               |
| 380     | 1000     | 658.18               |
| 380     | 1200     | 789.82               |
| 380     | 1500     | 987.27               |
| 380     | 1600     | 1053.09              |
| 380     | 2000     | 1316.36              |
| 240     | 5:5      | 2.08                 |
| 240     | 100      | 41.57                |
| 240     | 200      | 83.19                |
| 240     | 400      | 166.28               |
| 240     | 600      | 249.42               |
| 240     | 800      | 332.55               |
| 240     | 1000     | 415.69               |
| 240     | 1200     | 498.83               |
| 240     | 1500     | 623.54               |
| 240     | 1600     | 665.11               |
| 240     | 2000     | 831.38               |
| 208     | 5:5      | 1.81                 |
| 208     | 100      | 36.03                |
| 208     | 200      | 72.05                |
| 208     | 400      | 144.11               |
| 208     | 600      | 216.16               |
| 208     | 800      | 288.21               |
| 208     | 1000     | 360.27               |
| 208     | 1200     | 432.32               |
| 208     | 1500     | 540.40               |
| 208     | 1600     | 576.43               |
| 208     | 2000     | 720.53               |
| 120     | 5:5      | 1.04                 |
| 120     | 100      | 20.79                |
| 120     | 200      | 41.57                |
| 120     | 400      | 83.14                |
| 120     | 600      | 124.71               |
| 120     | 800      | 166.28               |
| 120     | 1000     | 207.85               |
| 120     | 1200     | 249.42               |
| 120     | 1500     | 311.77               |
| 120     | 1600     | 332.55               |
| 120     | 2000     | 415.69               |