

RTU Control Scheme Options

TURNTIDE SMART MOTOR SYSTEM



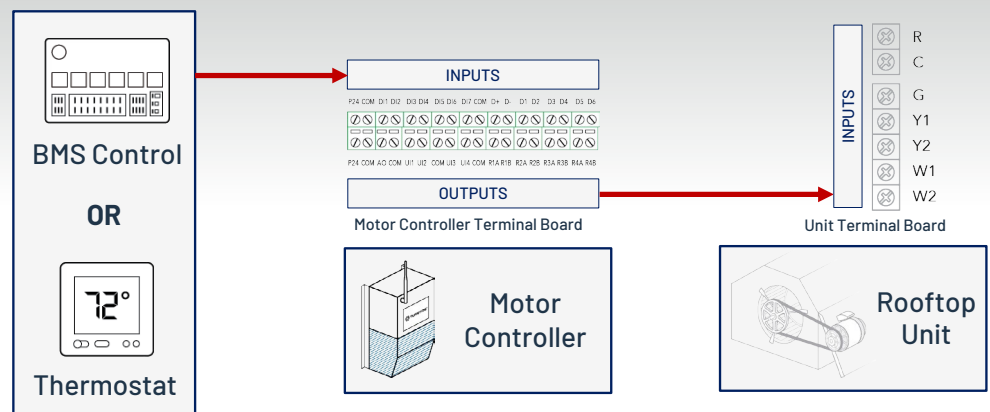
Turntide is modifying the prewiring method of Turntide motor controllers to simplify installation processes. These changes will save installers time and enable partners and installers to complete a Turntide rooftop unit (RTU) retrofit project more smoothly.

Starting with P06 and SL121, we are transitioning our motor controller wiring scheme from Man in the Middle to Monitor only. This document covers what that means, and what you can expect installing our new motor controllers.

Man in the Middle

Supported out-of-the-box for:
P04W, P05, SL120 Motor Controllers

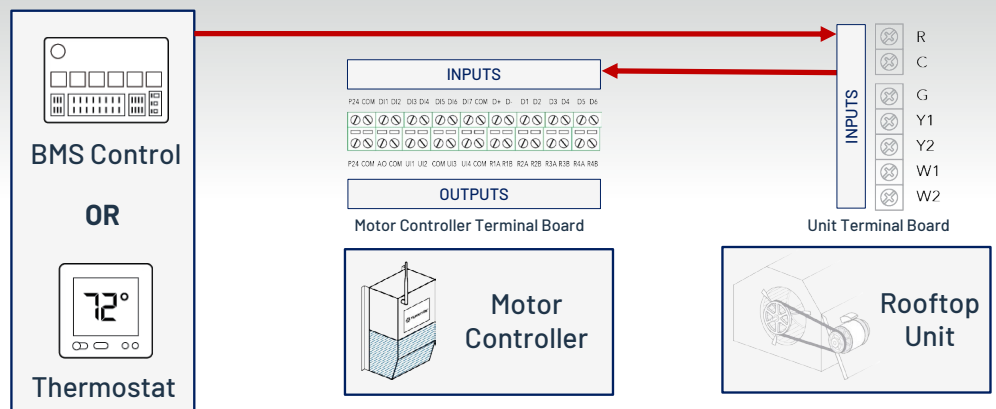
- + BMS or Thermostat is wired to the Turntide motor controller's inputs
- + Turntide motor controller outputs are wired to the RTU unit terminal board, to communicate which mode the RTU should operate in
- + The motor will reach its target speed before the RTU turns on its cooling or heating mechanisms
- + Provides an opportunity to remotely modify the operating mode of the RTU to validate operation



Monitor Only

Supported out-of-the-box for:
P06 and SL121 Motor Controllers

- + BMS or Thermostat is not physically connected to the Turntide motor controller's inputs
- + Turntide motor controller inputs are wired to the RTU unit terminal board
- + Turntide motor controller outputs are now available for other potential uses, such as run status or alarm/warning indication. **NOTE: This is not currently supported without a Monitor Only-specific Cascade flow.**
- + The thermostat/BMS will send signals both to the motor controller and RTU unit terminal board simultaneously



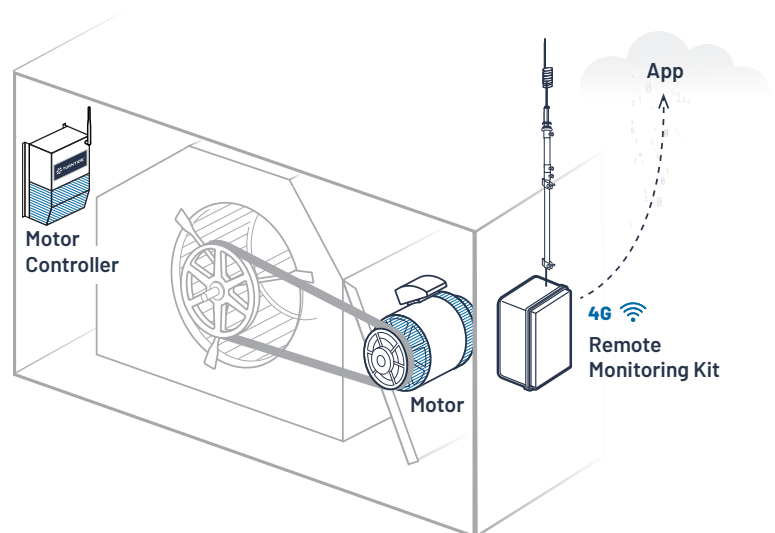
Summary

New models of Turntide motor controllers (P06 and SL121) will be pre-wired as Monitor Only. In the field, you'll be able to easily recognize a Monitor Only motor controller by the blue insulation jacket around prewiring.

Advantages to Monitor Only

- + **Reduced installation time:** Save time and money in installation
- + **Simpler and more consistent wiring scheme:** Wiring is the same across any application
- + **Safer installation process:** No more cutting of OEM wiring
- + **Less likely to trip:** No changing of timing on any signals
- + **Frees up additional controls:** 4 extra digital outputs available on the motor controller

We expect that Turntide Smart Motor System Monitor Only installations will be more convenient, less time-consuming, and a better overall experience for installers. However, we'll continue to support Man in the Middle installations when necessary. Please review the latest technical documentation about Monitor Only installations prior to your next install, which can be found on Turntide Academy (www.turntideacademy.com).



TURNTIDE TECHNOLOGY FOR SUSTAINABLE OPERATIONS

Our breakthrough technologies accelerate electrification and sustainable operations for energy-intensive industries.