# **NextGen TW Series Controllers**

Basic, Basic Plus, and Advanced



In majority of manufacturing facilities today, compressed air is an important energy source that is often referred to as the 4th utility. Unlike other utilities, the compressed air system is typically left to the end user to ensure it's running efficiently & cost effectively. In any manufacturing facility, equipment uptime is essential. By providing clean & dry compressed air downstream, contamination related equipment failures are reduced greatly.

Parker's TW Series Heatless Desiccant Air dryers remove water vapor from compressed air through Pressure Swing Adsorption, reducing the pressure dewpoint of the incoming air to -40°F (-40°C). The TW Series is packaged with high efficiency Oil-X series filtration, industry leading Allen-Bradley® PLCs, & designed to withstand the harshest environments with options like stainless steel tubing, low ambient design, & NEMA 4X or 7 Class 1 Div 2 Groups C & D.



## **Basic Controller**



RIGHT TOWER REGENERATING 2m53s

RIGHT TOWER REPRESSURIZING 53s

- Allen-Bradley® PLC
- 4 Line LCD Display
  - o Tower regeneration status
  - o Time remaining in cycle
- NEMA 12 Enclosure Option for NEMA 4X SS
- Run Timer
- Filter Maintenance Timer
- Step through regeneration for maintenance (Manual Stepping)
- Tank Cycle Counter
- Compressor Lock
- Cycle Lock
- Adjustable Time Cycles



#### Basic Plus Controller



RIGHT TOWER REGENERATING 2m53s DEWPOINT: -40°F

RIGHT TOWER REPRESSURIZING 53s **DEWPOINT:** -40°F

- Allen-Bradley® PLC
- 4 Line LCD Display
  - o Tower regeneration status
  - o Time remaining in cycle
  - o Dewpoint
- PowerLoc Energy Management System
- Dewpoint Sensor Input (-148°F to 68°F)
- Left & Right Pressure Switches
- Red Alarm Light
- Programmable Double Pole Double Throw Alarm Relav
- Alarms
  - o High Dewpoint
  - o Bad Blowdown
  - o Bad Repressurization

### **Advanced Controller**



-36°F

00:04:15

A-FILTER

0 psid

**DEWPOINT**:

INLET: 80°F 100psi P-FILTER

100<sub>psi</sub>

R-TOWER

100 psi

ALARMS DASHBOARD

BAD LEFT BAD RIGHT HIGH INLET HIGH LOWDOWN BLOWDOWN TEMP DEWPOINT

**REGENERATE LEFT:** 

OUTLET:

L-TOWER

68 psi

- LCD Touch Panel Display NEMA 12 Enclosure
  - - o Option for NEMA 4X SS
  - Adjustable Time Cycles

Allen-Bradley® PLC

- Run Timer
- Cycle Counter
- Filter Maintenance Timer
- PLC Controlled Timed Solenoid Drain
- Standard Sensors
  - o Dewpoint
  - o Inlet Pressure & Temperature
  - o Outlet Pressure
  - o Left & Right Tank Pressure
- Modbus TCP / Ethernet Standard
- Modbus RTU RS485 Optional
- IoT Gateway / Voice of the Machine Enabled -
- Alarms
  - o Failure to Switch
  - o High Inlet Temp
  - o High Dewpoint
  - o Low Inlet Pressure
  - o Bad Blowdown
  - o Bad Repressurization
  - o Pre-Filter Differential Pressure
  - o After-Filter Differential Pressure
  - o Drain Fault



- Parker's Voice of the Machine Software is a cloud-based remote monitoring interface that provides operating status, data trends, communicates alarms via email or text alerts and analytics for increased awareness of your assets
- Available with Advanced Controller only
- Utilizes Cellular Networks to Communicate
- Communicates local data to the cloud in real time
- Displays when the dryer has an active alarm or is in Powerloc **Energy Savings mode**
- Alerts & Notifications can be set in a manner that makes sense to the customer

BAD LEFT BAD RIGHT LOW INLET REPRESS REPRESS PRESSURE RIGHT SWITCHING MUFFLER FAILURE DRAIN INLET TEMP ALARM RELAY

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