Quincy
COMPRESSOR

NET$YNC II

Quincy Net$ync II Conductor System
For Multiple Air Compressor Installations

NET$YNC II CONDUCTOR SYSTEM

SYSTEM OPTIMIZATION

The Quincy Net$ync II Conductor system selects the most efficient combination of compressors based on demand. Consistent, steady pressure will optimize production and minimize power costs.

SAVE 20% TO 60% IN ENERGY COSTS

Synchronizing compressed air output with demand ensures the system will never operate more compressors or use more electricity than is required.

UNIVERSALLY DEPLOYABLE

The Net$ync II Conductor system can be used with almost any combination of compressors regardless of make or local control type. It provides a main control "Conductor" to direct the machine-specific interface modules. The interface modules are individually dedicated to operate stop/start, fixed speed, variable capacity and VSD compressors. The more complex the system, the greater the energy savings potential.

SELECTABLE PRESSURE BANDS, MACHINE PRIORITIES AND MODES

Advanced algorithms allow the operator to customize operating protocols for optimum performance and efficiency.

Net$ync II Conductor-12

REDUCED SYSTEM MAINTENANCE

Running only those compressors required to satisfy demand will minimize the total running hours of all compressors and reduce the load on downstream dryers and filters. Reduced running time and lighter loads also translate into reduced maintenance.

OPTIONAL REMOTE MONITORING SOFTWARE AND EXPANDED I/O

Monitor your entire system performance from your desktop. Adding inputs, such as filter pressure drop or dewpoint allows you to keep a close watch on your process.

Power$ync I/O Gateway

Q485 Gateway

ADJUSTABLE PRESSURE BAND

This feature allows the operator to program scheduled changes to pressure operating targets to optimize energy savings. For example, an operator may select one target pressure for Monday through Friday and a lower pressure target for Saturday and Sunday operation, thus reducing energy costs.

SELECTABLE MACHINE PRIORITIES

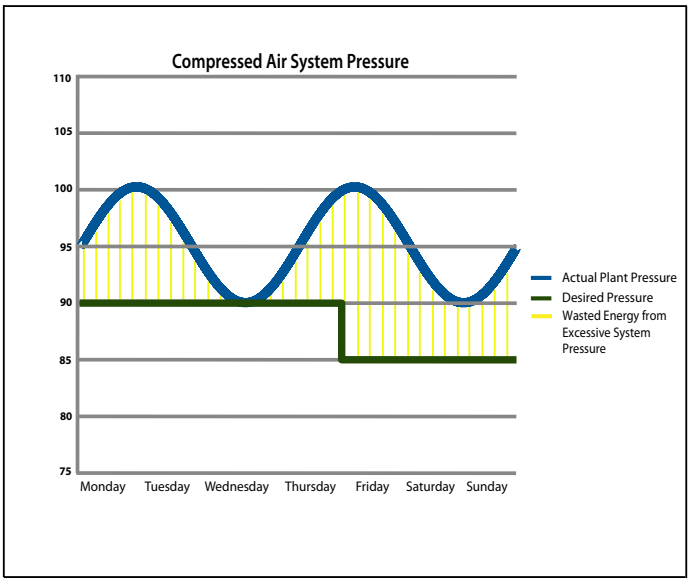
Net$ync II allows users to select the priority of multiple machine operation in order to optimize energy savings, reduce maintenance and ensure consistent system pressure. For example, priorities can be established so that newer equipment operates first, and older, backup machines turn on with last priority. Net$ync II Conductor 12, 24 and VAC also include the advanced energy algorithm to automatically select the most efficient combination of compressors to satisfy the system demand.

MODE SELECTION

To further customize a multiple compressor system, the Quincy Net$ync II Conductor system provides four operating modes:

- Energy Control Mode - Uses the advanced energy control algorithm to automatically select the most efficient combination of machines. If there is a VSD compressor in the network, it will typically be the lead machine.
- EHR - Equalizes running time on all compressors in the network. This helps synchronize maintenance cycles and prevents over-working older machines.
- FIFO - (First in, First out) This is the mode used for Stop/Start controls and reciprocating compressors. (Conductor -4 models only)
- FILO - (First in, Last out) For fixed and variable capacity rotary compressors. Simple timer rotation machine selection.

From systems small to large, the Quincy Net$ync II family provides an energy efficient solution.



Operating your compressed air system at pressures above your minimum desired level results in wasted energy costs. Quincy's Net$ync II ensures your system operates at your optimal pressure; ensuring production consistency without excessive energy costs.

NET$YNC II CONDUCTOR SYSTEM

COMPRESSOR MANAGEMENT

Multiple compressor networks have always been difficult to control due to such variables as fluctuating demand, pressure switch repeatability, air treatment requirements, overall system design and piping layout.

Typically, multiple compressor systems use a cascade method to maintain required pressure. In order for the trim machines to load on falling pressure, the cascade method requires the system to operate at higher pressures all of the time. A three-unit system might require a 20 psi pressure band to maintain system pressure. Unnecessarily high system pressure equals wasted energy in a compressor cascade system.

Quincy's Net$ync II Conductor system manages compressor operation in a very tight pressure band, eliminating energy wasting effects of artificial load caused by unnecessary elevated pressure.

A typical Net$ync II Conductor system with three 100 HP compressors networked could save more than $10,000 annually versus a cascade system.

For every two psi that the system operates above the minimum required pressure, 1% of compressor energy is wasted. With the Net$ync II Conductor system, this waste is minimized.

BEFORE *NET$YNC II CONDUCTOR SYSTEM*

Operating Pressure	Compressor A	Compressor B	Compressor C
115			
110			
105			Unload
100		Unload	
95	Unload		Load
90		Load	
85	Load		
80	Minimum Plant Pressure		

*Based on a three compressor cascade system at a 10 psi pressure range
*Based on 8,750 hrs/yr at $0.10/kwh electrical costs

AFTER *NET$YNC II CONDUCTOR SYSTEM*

Operating Pressure	Compressor A	Compressor B	Compressor C
115			
110			
105			
100	*Tight Pressure control through Intelligent System Management*		
95			
90			
85	Unload / Load	Unload / Load	Unload / Load
80	Minimum Plant Pressure		

*Based on a three compressor cascade system at a 10 psi pressure range
*Based on 8,750 hrs/yr at $0.10/kwh electrical costs

NET$YNC II FAMILY OF SYSTEM CONTROLLERS

CONDUCTOR - 4: Central management and control of networks consisting of two, three and four compressors. Compatible with fixed speed compressors only. Includes FIFO control algorithm.

CONDUCTOR - 12: Central management and control of networks consisting of two to twelve compressors, including multiple VSD installations. Includes energy optimizer algorithm.

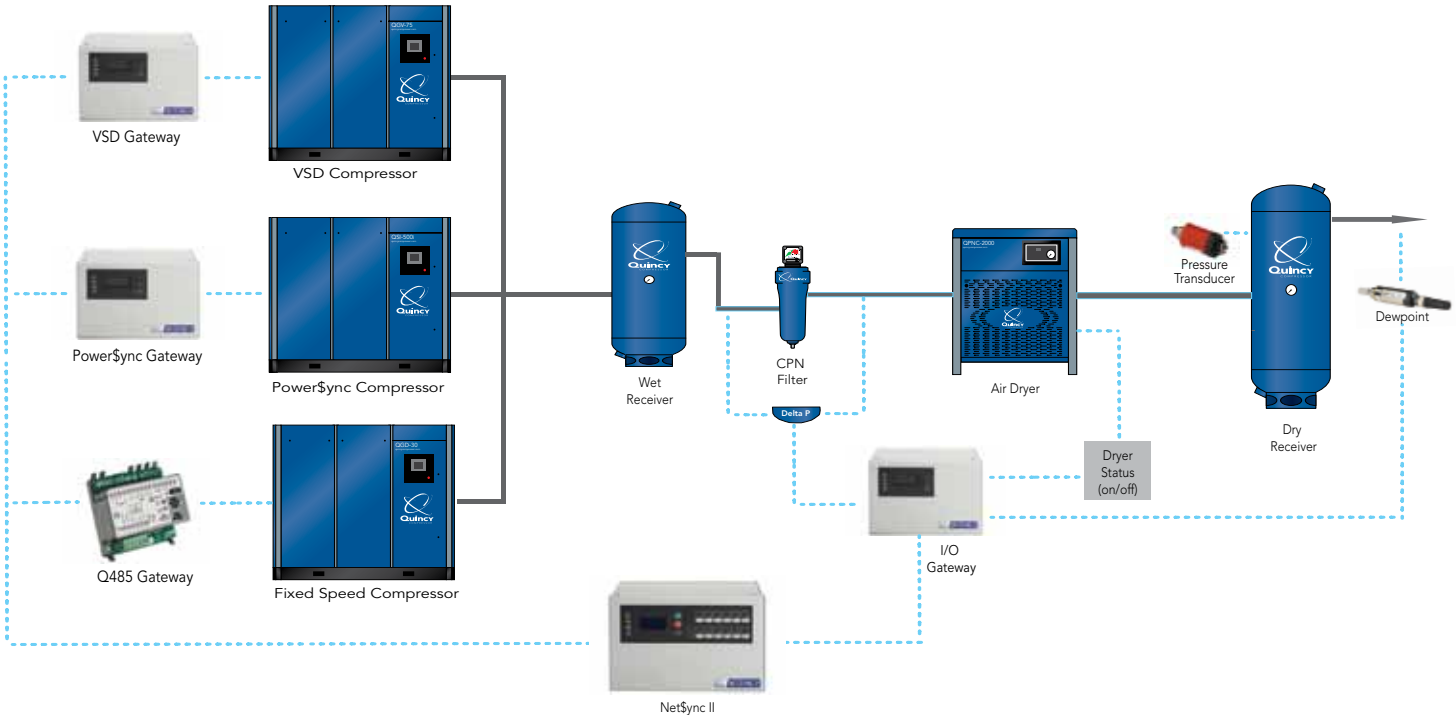
CONDUCTOR - 24: Central management and control of networks consisting of two to twenty-four compressors, including multiple VSD installations and installations with multiple compressor rooms. Includes energy optimizer algorithm.

CONDUCTOR - VAC: Central management and control of vacuum pump networks consisting of two to twelve vacuum pumps. Includes energy optimizer algorithm.

All Net$ync II conductors and gateways feature back-lit user interfaces which are both informative and intuitive.

All Net$ync II Conductor models ensure a narrow pressure band using enhanced software. The pre-programmed software application can be customized and/or expanded, on site, using the password-protected operator interface.

SYSTEM FLOW SCHEMATIC - TYPICAL THREE COMPRESSOR NETWORK



ANCILLARY EQUIPMENT MONITORING & CONTROL

I/O GATEWAY

- Customize a system by monitoring downstream equipment
- Automatic operating of ancillary equipment e.g. water pumps
- 8 Digital inputs
- 4 Analog inputs
- 16 Virtual Relay outputs (6 physical)

NET$YNC II SENSORS

- System Pressure
- Δ P across filters, dryers and receivers
- System Temperature
- System Dewpoint
- System Flow
- Compressor Current

QUINCY SYSTEM MONITORING (QSM) is independent of remote servers or other IT infrastructure hardware, allowing users to create their own dedicated data tunnel, freely and easily accessing information from wherever they will be in the world. QSM provides unrivalled access to system information through its intuitive HTML and Java screens. QSM provides such a thorough and detailed system analysis, it's like having a permanent audit!

* Modular and expandable, Net$ync II can answer tomorrow's needs today.

CHOOSE YOUR NET$YNC II CONDUCTOR

FUNCTION	CONDUCTOR-4	CONDUCTOR-12	CONDUCTOR-24	CONDUCTOR-VAC
Max. Number of Compressors	4	12	24	12*
Max. Number of Programmable Profiles	3	4	6	4
Single, tight pressure band control	X	X	X	X
Real time clock scheduling	X	X	X	X
Programmable system pre-fill	X	X	X	X
Energy Optimizer Algorithm		X	X	X
Multiple VSD control		X	X	
Ancillary equipment starting			X	
Multi-zone control			X	
Multi-pressure balance			X	
Back-up pressure transducer capable			X	
Visualization of I/O gateways	2	2	12	2

*Vacuum Pumps

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