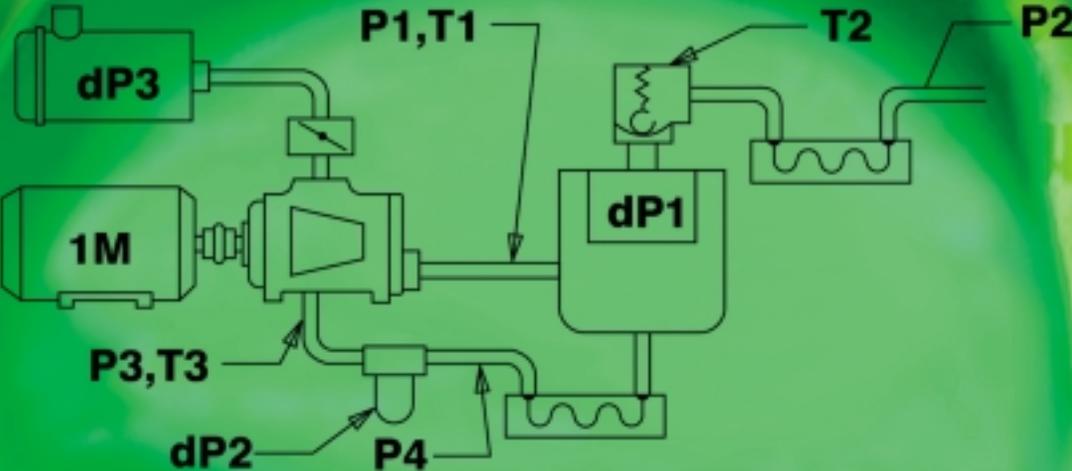


# The Supervisor™



*The Next  
Generation  
Controller,  
ready to serve  
you now.*



# *the Supervisor...*

## **The Controller of the future is here.**

### **Safeguards your system**

The Supervisor acts like a sentry for your compressed air system. It protects your compressor against malfunction. It monitors your compressor's operating conditions and indicates servicing needs. It controls your compressed air system pressure matching, and machine sequencing, if applicable.

### **Only the functions you need**

With the Supervisor, you save money because you pay only for the functionality you need. This dedicated microprocessor provides all the needed features of a PLC without the PLC price.

### **Modular design, easy to expand**

The Supervisor's modular design makes it flexible and easy to expand. The controller is a network of individual modules performing specific functions, daisy-chained together with a simple communications cable. Since each module contains a microprocessor and memory, processing power is automatically expanded, so application specific features can be easily added.

Upgrades are easier, too, since the entire controller doesn't need to be replaced.

### **Control network components**

Each Supervisor consists of a Display Module (LCD display and keyboard) and I/O Module (interface for sensors and relays). For machine sequencing or monitoring and control communications, a Communications Module with RS485, RS232 and DeviceNet channels is added to the network.

### **Control flexibility**

The Supervisor offers a variety of control schemes, so you can optimize the scheme for each individual application. Control schemes include load/no-load, variable displacement control with Sullair's spiral valve, inlet modulation, and variable speed control. Adjustable unload and control band set points are available.

### **Communications flexibility**

Infrastructure is in place to support a wide array of communications, monitoring and control options. All critical parameters that can be viewed or changed locally can be accessed remotely. Supervisor menus are sharp, clear, backlit and easy to understand.



# protects, monitors and communicates

User-friendly, menu-driven screens let you know what your compressor's thinking.

## < Main Display

- Line 1. Machine state: Full Load, Loaded, Unloaded, Stopped, E-Stop, Remote Stop or Seq Stop
- Line 2. Fault or Warnings
- Line 3. Line pressure (P2)
- Line 4. Discharge temperature (T1)

T1-Discharge	195 °F
T2-Dry Side	167 °F
T3-Oil	155 °F
T4-Interstage	130 °F

^

## Status Menu (read-only)

- All system temperatures
- All system pressures and differential pressures
- Machine loaded and run hours
- Number of load/unload cycles and starts
- Digital inputs and relay outputs status

Unload	110psi
Load Delta	10psi
Unload Time	15min
Drain Interval	4min

^

## Control Parameters Menu (user changeable)

- Unload pressure and control band set-points
- Time run unloaded in AUTO mode
- Drain interval and drain time for electric drain option
- Automatic restart time delay after a power interruption
- Wye to delta transition timer for wye-delta starters
- Select English, Spanish, French, German or Italian.

Call Sullair Service	1-800-Sullair
Ser No	422620
Warn at	100hr

Oil Filter	1000hr
PN	02250131-310
Separator	1002hr
Prim.	02250120-522

^

## Maintenance Menu (user changeable)

- "Call for service" information. Can be programmed to include Sullair distributor's name and telephone number.
- Run hours countdown to warn maintenance required and replacement parts numbers for the consumables.

1 Run Hours	2104:00
T1 Discharge	High

^

## Fault Log Menu (read-only)

- Last 16 faults
- Allows user to review the situation in depth.
- Shows possible fault patterns

T1 Discharge High				
Time	T1	T2	P1	P2
0s	255	167	60	100
5s	507-783	0	98	

^

## Sensor Log Menu (read-only)

- All sensor reading leading up to the last fault
- 5 seconds apart for 1 minute; then 1 minute apart for 10 minutes
- Provides clear view of the series of events

Sequence by	Remote
Seq Hrs	3411hr
Com Number	1
Machines	6

^

## Sequence Parameters Menu (user changeable)

- Sequence method
- Sequence hours counter
- Machine com number
- Sequencing pressure and recovery time parameters
- Minute, hour, day, month and year settings for real-time clock

#	Stat	Hrs	Cap	101
1	M	0	0	0
2				
3				

^

## System Display Menu (read-only)

- Shows the status of each compressor in a sequencing system
- Machine status, sequence hours and local line pressure

Loaded	
dp1 Separator High	
P2-Line	100psi
T1-Discharge	211 °F

Pressure across separator high,
-Plugged separator elements, replace

^

## Help Function and Troubleshooting Guide are built in

- If a warning condition occurs, the LED on the "?" symbol will blink yellow, and the warning message will appear on the second line of the main display.
- If a fault condition occurs, the LED on the "?" symbol will blink red and the fault message will appear on the second line of the main display.
- If the LED is blinking yellow or red, the "?" key can be pressed to display the probable cause and potential remedies.



# *technical specifications*



## The Supervisor meets UL, CSA and CE codes.

### The display module

- PC-proven (Intel® or equal) microprocessor
- 4 lines by 20 characters LCD for full text display
- 11-key, easy-to-understand keypad
- User-friendly, menu-driven screens
- Select English, Spanish, French, German or Italian.

### The I/O module

- PC-proven (Intel® or equal) microprocessor
- Pressure, temperature and digital inputs required to monitor/control the compressor – plus spares.
- Digital outputs for remote interface.

### The communications module

- RS232 channel for connection to printers and modems
- RS485 channel for connection to PLCs and PCs
- Multiple sequencing methods include by-sequence hours, rotate hours, machine number and remote sequencing
- All critical parameters that can be viewed or changed locally can also be viewed or changed remotely through communications channels.



[www.sullair.com](http://www.sullair.com)

SULLAIR CORPORATION, 3700 E. Michigan Blvd., Michigan City, IN 46360 Telephone: 1-800-367-6737 or 219-879-5451

SIP-10110 Specifications subject to change without notice. © Copyright 2004 Sullair Corporation. All rights reserved. EA/11/04/3



Printed on recycled paper