

Supervisaire®

Microprocessor Controller

Standard on DRY-O-TRON®:

Pool models	DS/RS	042, 062, 082, 100-562
Pool models	DB/RB	040-562
Non-pool models	DA5/RA5 DB5/RB5	042, 062, 082, 100-562 040-562

Optional:

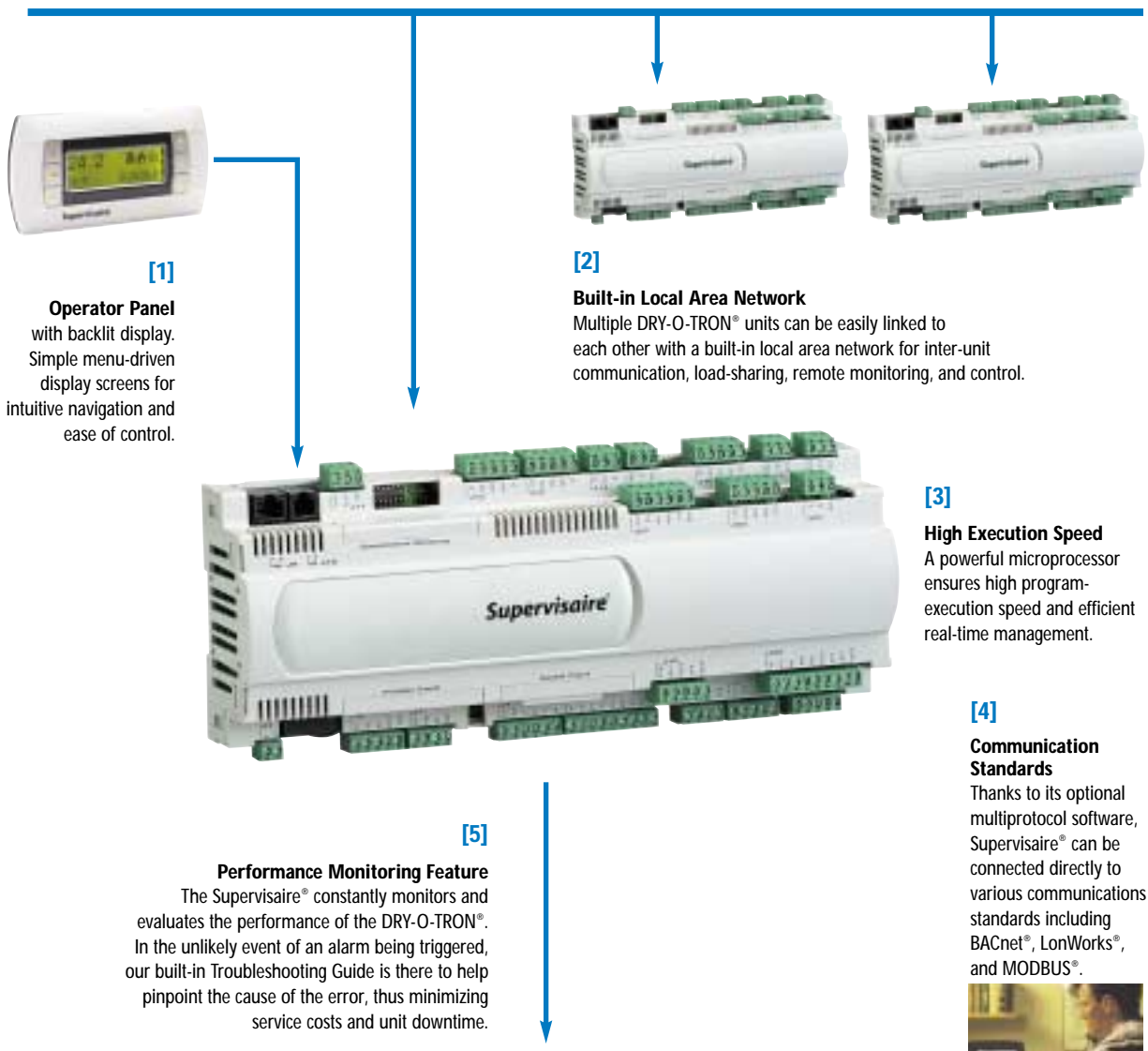
Pool models	DS/DSV/RS	010-080
Non-pool models	DA5/DV5/RA5	010-080
Make-up air series	DK/RK	010-480

Supervisaire® microprocessor controllers provide extremely user-friendly, programmable monitoring and control for all larger DRY-O-TRON® dehumidification systems. Individual units can be linked together on a built-in local area network. The Supervisaire® is available with a Remote Access option and can be connected through a personal computer (direct connection or modem), or via an independently located Remote Operator Panel. BACnet®, LonWorks®, or MODBUS® interfaces are available as an option for communication with Building Management Systems.



Supervisaire® Features:

- User-friendly interface
- Backlit display
- Built-in real-time clock
- PC interface (optional), with tabular HTML display format
- Remote Operator Panel (optional), can be mounted up to 3000 feet away
- Built-in local networking capability
- Factory programmed
- Unit-mounted sensors
- Built-in diagnostics
- Non-volatile memory, no backup batteries required
- Fully factory tested
- Configuration and sensor calibration protected by security code
- °F or °C (optional) temperature display



[1]
Operator Panel
 with backlit display. Simple menu-driven display screens for intuitive navigation and ease of control.

[2]
Built-in Local Area Network
 Multiple DRY-O-TRON® units can be easily linked to each other with a built-in local area network for inter-unit communication, load-sharing, remote monitoring, and control.

[3]
High Execution Speed
 A powerful microprocessor ensures high program-execution speed and efficient real-time management.

[5]
Performance Monitoring Feature
 The Supervisaire® constantly monitors and evaluates the performance of the DRY-O-TRON®. In the unlikely event of an alarm being triggered, our built-in Troubleshooting Guide is there to help pinpoint the cause of the error, thus minimizing service costs and unit downtime.

[4]
Communication Standards
 Thanks to its optional multiprotocol software, Supervisaire® can be connected directly to various communications standards including BACnet®, LonWorks®, and MODBUS®.



[6]
PC Interface

Available with direct or modem connection for remote operational access.

Supervisaire® Options:**BACnet®**

Point to point RS232

LonWorks®

FTT-10A 78kbs network (TP/FT-10)

RS485 39kbs network (TP/485-39)

MODBUS®

Slave, in RTU mode. RS485

Communication parameters:

8 data bits, 2 stop bits, no parity

Baud rate: 1200 to 19200 selectable

MMI - Man Machine Interface

Modem or Direct Connect

Sensor Specifications:**Temperature sensors [air, water]**

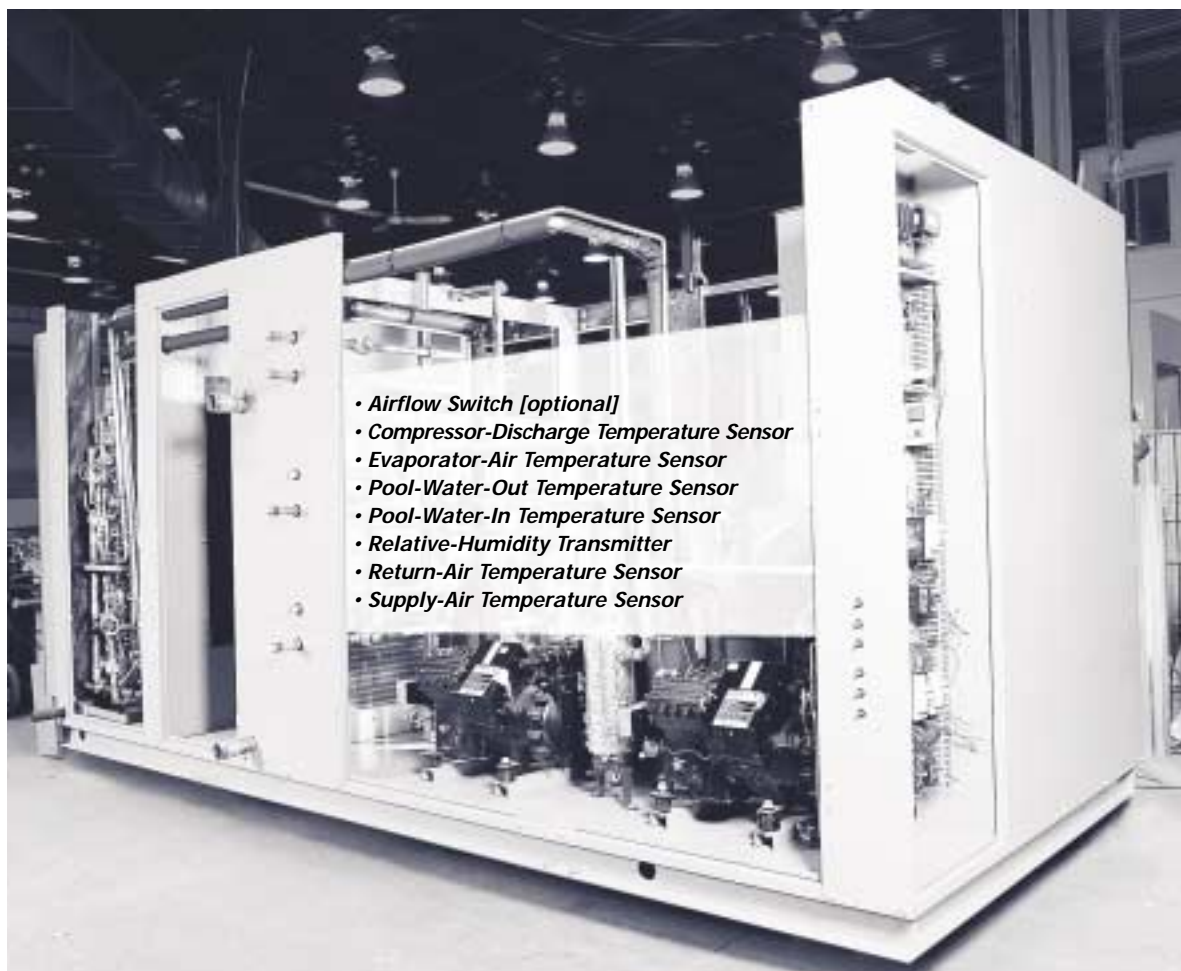
These sensors incorporate a precise thermistor that is unaffected by vibration or level. A sophisticated control algorithm maintains accurate room and pool temperatures under all climatic conditions year-round. The thermistor is enclosed in a rugged housing that is encapsulated in an airtight and watertight membrane. Temperature sensors have a sensing range of -50°F (-45°C) to 250°F (121°C).

Relative-Humidity Transmitter

The Relative-Humidity Transmitter's state-of-the-art design combines micro-processor-based linearization and temperature correction with a world-class capacitive sensor. Relative-Humidity Transmitter's polymer based capacitive sensor construction is resistant to volatile organic compounds. It has an accuracy of $\pm 3\%$ RH and an operating range of 5% RH to 95% RH.

Airflow Differential-Pressure Switch [optional]

This Differential-Pressure Switch senses airflow across the DRY-O-TRON®'s air filters. It features a dust-tight switch enclosure and range-switching set points from 0.12 inches (0.3 cm) to 2.0 inches (5 cm) WG. Exceeding the set points will signal the dirty-filter alarm.

Unit Mounted Sensors:



Operator Panel :

- Operating temperature 32°F (0°C) to 115°F (46°C)
- Built-in self-test [EPROM, RAM, keyboard and display]
- UL Recognized to CSA and UL Standards
- CE Marked
- Standard: Unit mounted - Indoor units
Remote mounted (up to 3000 feet from unit) - Outdoor units
- Optional: Remote mounted - Indoor units
Remote & Unit mounted - Outdoor units

Monitor Functions:

Supervisaire® status and alarm functions
[list for typical two compressor unit]:

Compressor #1 on	Compressor #2 on
Compressor #1 turned off	Compressor #2 turned off
Compressor #1 overload	Compressor #2 overload
Compressor #1 high pressure	Compressor #2 high pressure
Compressor #1 low pressure	Compressor #2 low pressure
Compressor #1 overheat	Compressor #2 overheat
Compressor #1 oil failure	Compressor #2 oil failure
Compressor #1 pumpdown	Compressor #2 pumpdown
Unit remote off	Manual reset required
Evaporator damper closed	Pool #1 Low Water Flow
Pool #2 Low Water Flow	Blower turned off
Blower overload	Call for dehumidification
Power failure	Pool #1 heating call
Call for cooling	Dehumidification on
Air conditioning on	Pool #1 heating on
Pool #2 heating on	Ventilation on
Firestat on	Purge mode on
Freezestat on	Minimum exhaust blower on
Occupied period	Dirty filters
Auxiliary air heat 1 st stage on	Auxiliary air heat 2 nd stage on

Control Functions:

Via the Operator Panel, the user can set/perform the following functions:

- Compressor #1 auto/off mode
- Compressor #2 auto/off mode
- Blower auto/off mode
- Manual reset
- Change RH and temperature set points, heating/cooling dead bands and differentials (password protected)
- Sensor calibration (password protected)

© Copyright 2005 by Dectron Inc.
Dectron Inc. reserves the right to make any changes in the design or specification of any product at any time without notice.



dia
designer indoor air

USA
10935 Crabapple Road
Suite 202-A
Roswell, GA 30075
Tel.: (770) 649-0102
1 800 676 2566
Fax: (770) 649-0243

CANADA
3999 Cote Vertu
Montreal, Quebec
Canada H4R 1R2
Tel.: (514) 336-3330
1 888 DECTRON
Fax: (514) 337-3336



www.dectron.com