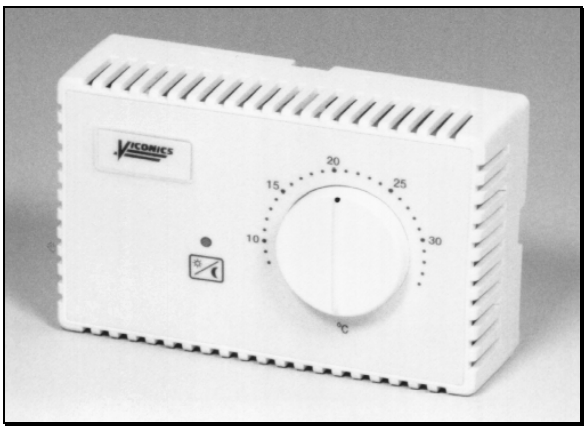
VICONICS

μICRO-STAT®

T100
T150



ELECTRONIC THERMOSTAT:

- **ONE STAGE**
- **DAY-NIGHT MODE (T150 ONLY)**

The model T100 and T150 are part of Viconics' Micro-Stat Series low voltage RHVAC room temperature and humidity controls line.

CONTROL OUTPUTS FOR ALL APPLICATIONS

The thermostats are available with various outputs to drive:

- Relays
- Contactors
- Solenoids
- Valves
- Motors
- SSR's
- SCR Power Controllers

APPLICATIONS

- Room control of temperature
- Proportional room electric heating control
- Proportional room hot water heating control
- Proportional room cold water cooling control
- Air conditioning control

ADVANCED DESIGN AND PI CONTROL

Advanced microcomputer electronics and PI control algorithms provides precise temperature control and eliminates wasted heating energy caused by the typical On-Off cycling in conventional thermostats. As a result the room occupant is able to reduce the setpoint or desired temperature to the lowest comfortable setting. The result is energy savings ranges from 5% to 10%.

DAY-NIGHT MODE

A night mode, initiated by a remote timer or computer contact, provides energy savings during unoccupied periods of up to 10 %, without sacrificing comfort in occupied rooms. A flashing LED indicator warns an person in an occupied room that the thermostat is in night mode. The occupant may override this condition locally for 4 hours by pressing the switch on the thermostat.

REPROGRAMMABLE

Each thermostat is computer calibrated and factory programmed to the ordered specification. However, over 10 control parameters (such as heating/cooling mode, proportional band, night set-back etc.) may be changed in the field with programming tool without having to remove the thermostat cover. The C263 also doubles as a diagnostic tool and indicates the status of all the inputs and outputs to each stat, and will reduce troubleshooting time by quickly identifying the specific problem.

SENSORS

Each thermostat can be either room or duct mounted with local or remote sensors, and can be selected by an internal jumper.

COVERS

The thermostats are available with 4 covers options in either °C and °F. Thermostat cover plugs in to base for easy wiring and service. The base fits onto a standard electrical box. The User adjustable front models feature internally selectable minimum and maximum setpoint knob stops.

SPECIFICATIONS

Operating Conditions:	0 °C to 50 °C (32 °F to 122 °F)
	0% to 95% R.H. non-condensing
Sensor:	Local 47 K NTC thermistor
Resolution:	± 0.1 °C (± 0.2 °F)
Control accuracy:	± 0.2 ° C (± 0.4 °F) for low ranges
(calibrated)	± 0.9 ° C (± 1.8 °F) for high ranges
Ranges:	10 °C to 32 °C (50 °F to 90 °F)
	-18 °C to 82 °C (0 °F to 180 °F)
Outputs:	Isolated Triac: 30 Vac at ½ A max.
	0 to 10 Vdc into 2KΩ resistance min.
	0 / 5 Vdc at 20 mA max. for both outputs.
Power:	24 Vac -15%, +10% 50/60 Hz; 2 VA

ORDER CODE

T100 - AB - CD - EF (without day-night mode)

T150 - AB - CD - EF (with day-night mode)

A	Output no. 1 (controlled device)	Type
1	Relay, thermal relay, two position motor	Isolated Triac
2	Normally open thermal valve	Isolated Triac
3	Normally close thermal valve	Isolated Triac
4	"SSR" with 24 Vac input	Isolated Triac
5	"SSR" with 3-32 Vdc input	Pulsed 0/5 Vdc
6	0 to 10 Vdc actuator, voltage relay or "SCR"	0 to 10 Vdc

B	Output no. 2
0	Non available

C	Output control mode	
1	Heating, reverse acting, (RA)	* Standard
2	Cooling, direct acting, (DA)	

D	Main control sensor location	
1	Room, inside thermostat, or (duct return air**)	* Standard
2	Duct supply air**	

** Order with: S60 or S70 sensor

E	Setpoint adjustment	
1	User adjustable	* Standard
2	Blind cover	

F	Scale	
1	10 °C to 32 °C	* Standard
2	50 °F to 90 °F	
3	-18 °C to 82 °C	Δ
4	0 °F to 180 °F	Δ

Example: T150 - 50 - 11 - 12
One "SSR" 3-32 Volts output.
Main sensor located inside the room.
Adjustable setpoint. Scale 50 °F to 90 °F.

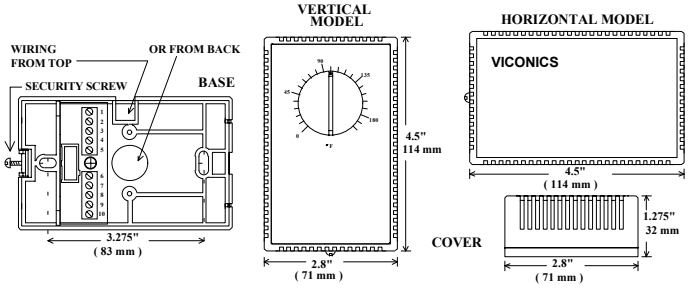
Δ Note: These models have a vertical cover.

Note: Order remote sensor separately.

WIRING

For complete technical information on wiring, commissioning and servicing, please refer to the T100 / T150 service manual.

DIMENSIONS



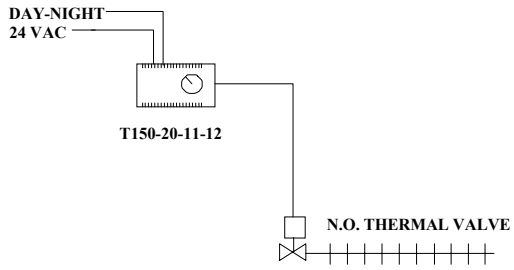
Specifications and equipment are subject to change without prior notice.

APPLICATION EXAMPLES

COVERS ALL YOUR THERMOSTATS NEEDS...

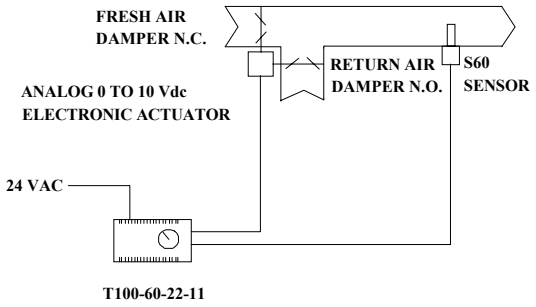
From simple...

Hot water hydronic heating
Day-night mode



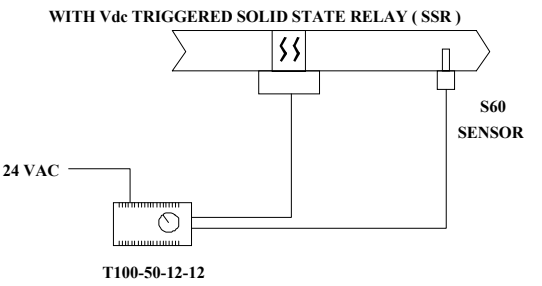
To more complicated...

Mixed air control
Cooling 0 to 10 Vdc



To sophisticated applications !

Electric heat
Time proportionning modulation
Supply control



Represented by:

Viconics Electronics Inc. 9245, Langelier Blvd, St-Leonard, Quebec, Canada H1P 3K9 www.viconics.com