EVC Thermostat
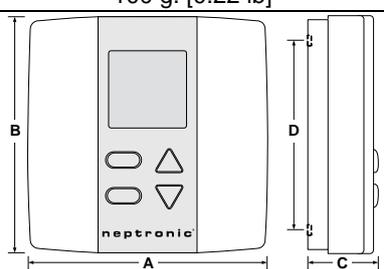## Specification & Installation Instructions

TRL54

The TRL54 functions only with the EVC controllers. All inputs/outputs are located on the controller except for the temperature sensor built-in the TRL54.
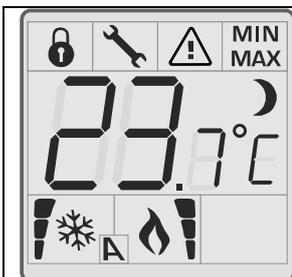
Features:

- Used to program/configure the EVC VAV controller
- Attractive modern look with large LCD and backlight
- Icons driven information
- 3 wire cable between thermostat & EVC
- Selectable analog and digital output
- Precise temperature control with programmable PI function
- Selectable Fahrenheit or Celsius scale
- Manual night set back or no occupancy override
- Multi level lockable access menu
- Lockable setpoint
- Selectable internal or external temperature sensor
  External sensor must be 10KΩ, Type 3
- Change over by contact or external temperature sensor
- Pressure sensor air flow program available
- Selectable proportional control band and dead band
- Anti-freeze protection
- BACnet® MS/TP @ 9600, 19200, 38400, 76800bps available
- Selectable MAC address by dip switch on the EVCB

Technical Data

	TRL54
Electrical connection	3 wire cable
Setpoint range	10ºC to 40ºC [50ºF to 104ºF]
External sensor range	-40ºC to 100ºC [-40ºF to 212ºF]
Control accuracy	Temperature: ±0.4ºC [0.8ºF]
Power supply	22 to 26 Vac 50/60Hz
Power consumption	1 VA
Proportional band	0.5ºC to 5ºC [1ºF to 10ºF] adjustable (heat/cool/changeover independent)
Dead band	0.3ºC to 5ºC [0.6ºF to 10ºF] adjustable (heat/cool/changeover independent)
Operating temperature	0ºC to 50ºC [32ºF to 122ºF]
Storage & transport temperature	-30ºC to 50ºC [-22ºF to 122ºF]
Relative Humidity	5 to 95% non condensing
Degree of protection of housing	IP 30 (EN 60529)
Weight	100 g. [0.22 lb]
Dimensions A = 3.00 in (78mm) B = 3.00 in (78mm) C = 1.00 in (24mm) D = 2.36 in (60mm)	

Interface

Display Symbols					
❄	**Cooling ON** **A: Automatic**	🔒	**Menu set-up lock**	🌙	**Energy saving mode**
🔥	**Heating ON** **A: Automatic**	🔧	**Programming mode** **(Technician setting)**	°C or °F	**ºC: Celsius scale** **ºF: Fahrenheit scale**
⚠	**Alarm status**	MIN MAX	**Minimum/Maximum** **set points**		

Mounting Instructions

CAUTION: Risk of malfunction. Disconnect power prior to separating thermostat cover from its base.
A. Remove the screw (captive) holding the front cover to the base of the thermostat.
B. Lift the front cover of the thermostat to separate it from the base.
C. Pull wire through the base hole.
D. Secure the base to the wall using wall anchors and screws (supplied). Make the appropriate connections.
E. Mount the control module on the base and secure using the screw (from step A).
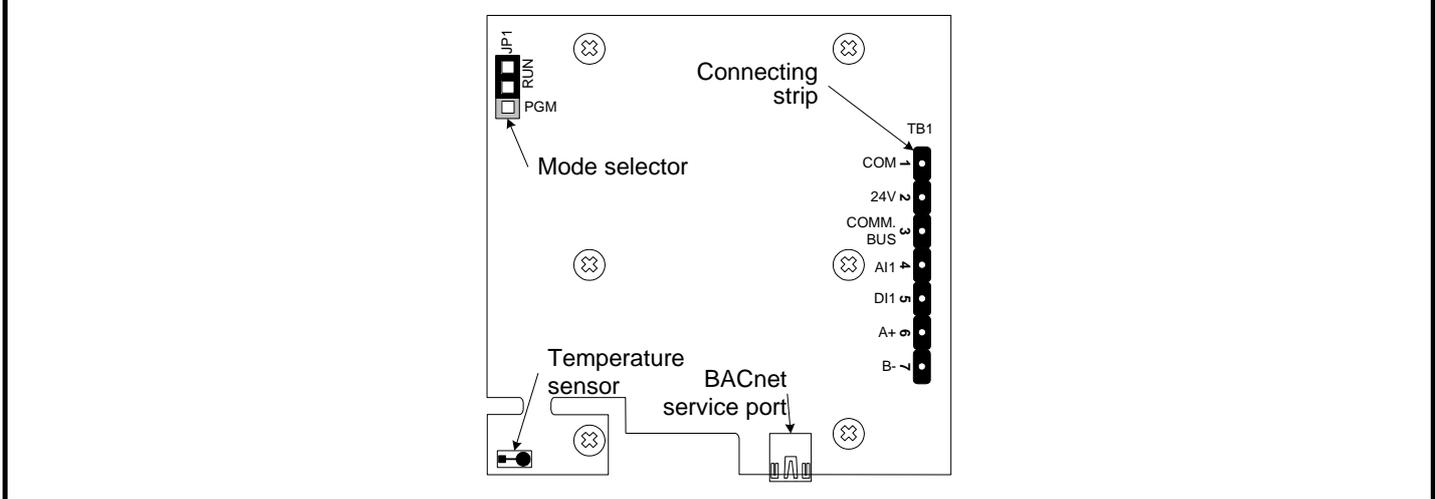
Settings on PC Board & Connections

Mode Selection (JP1)

JP1 RUN PGM	**Jumper (JP1) on RUN:** Thermostat is in **Operation Mode**. Thermostat must be set in this mode to operate properly. If not locked, setpoint and control mode (Heating & Cooling ON, Cooling only ON or Heating only ON) can be modified by end user.	JP1 RUN PGM	**Jumper (JP1) on PGM:** Thermostat is set in **Programming Mode**. Refer to following section about all settings description

TRL54 – 3 wire cable (TB1 #1, 2 & 3)
Connect TB1 #6 (A+) & #7 (B-) to EVCB for BACnet service port to work

Recycling at end of life

At end of life, please return the thermostat to your Neptronic local distributor for recycling. If you need to find the nearest Neptronic authorized distributor, please consult **www.neptronic.com**.