

# Installation and User Instruction Weatherproof Thermostat TH5-20

The TH5-20 thermostat is designed to provide precise control of heating, cooling, and ventilation systems. A stainless-steel sensing coil is mounted on the side of the weatherproof ABS plastic enclosure. The adjustable knob pointer allows the thermostat to be recalibrated.

## INSTALLATION

1. Installation may only be done by a certified electrician; the local electrical code needs to be followed.  
Install waterproof cable grommets on the bottom of the enclosure, where the knock outs are located.
2. Mount the TH5-20 using the 3 flanges on outside of plastic enclosure.
3. Open enclosure for wiring, unscrew the 4 corner screws about 1/4". Lift lid from enclosure leaving knob in place on lid. Picture 1.
4. Connect wires to appropriate terminals (heating or cooling) and protective ground terminal. (See wiring example picture 2 and wiring diagram picture 3.)
5. Align the flat on the shaft with the flat on the knob, before replacing the lid and securing lid with the four screws to the housing.
6. Wiring test  
Set dial to 38°C (100°F). (Full clockwise)  
Connect power supply. Heating unit should come on (or cooling should remain off). Turn dial down to 5°C (41°F). Heating unit should shut off (or cooling turn on) as dial passes current room temperature. Turn dial back to 38°C (100°F). Heating should again turn on (or cooling off).
7. Set dial to desired temperature.

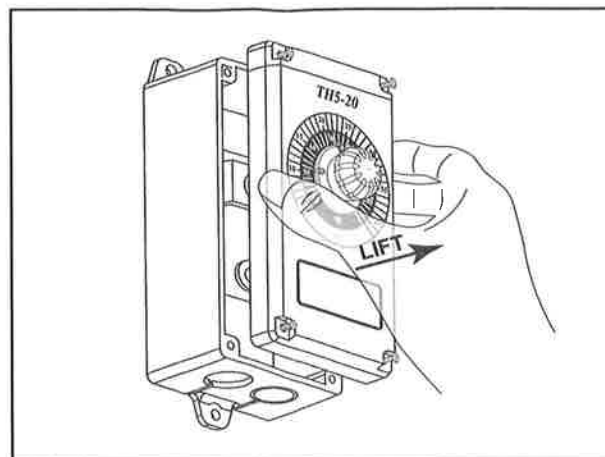
## CALIBRATION

This thermostat is carefully calibrated before shipment. Sometimes mechanical thermostats can lose calibration. If this happens, the adjustable knob allows the thermostat to be re calibrated.

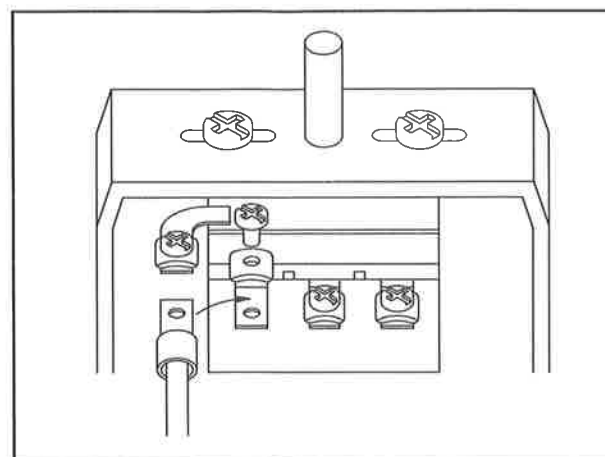
To recalibrate, follow these steps:

1. Place accurate thermometer next to stainless steel spiral sensor. Allow thermometer to reach room temperature (15 minutes to be safe) and be sure to keep hands away from spiral sensor to prevent inadvertent heating. After temperature stabilization turn the knob so the thermostat clicks, turn the knob back so it clicks again. Turn the knob so it sits just between the 2 clicks. (Picture 4 (1))
2. When the thermometer reading and the knob temperature reading are not the same (+/-1°C or +/-1,8 °F) you may consider to recalibrate the thermostat.
3. Release the Phillips screw in the side of the knob grip, 1 to 1 1/2 rev. to unlock the knob grip and the

This TH5-20 thermostat is resistant to moisture and gases found in corrosive agricultural buildings. The TH5-20 will provide accurate temperature control with long life in livestock confinement buildings, greenhouses, warehouses and industrial buildings.



Picture 1



Picture 2

**Type TH5-20**  
Temperature regulating equipment  
E357053

Enclosure for indoor use, UL50 Type 2  
Boîtier pour l'utilisation intérieure.

Protection against falling dirt, dripping and light splashing water,  
Protégé contre la poussière et les projections d'eau.

Electric specifications for each contact set as specified in table.  
Caractéristiques électriques pour chaque contact comme spécifié dans le tableau.

Use supplied wires to connect thermostat.  
Branchement du thermostat avec les fils fournis.

Wiring Diagram:  
Schéma de branchement:

Line IN / Black wire  
Cooling / Red wire  
Refrid / Fil rouge  
Heating / Yellow wire  
Chaud / Fil jaune  
Ground / Green wire  
Terre / Fil vert

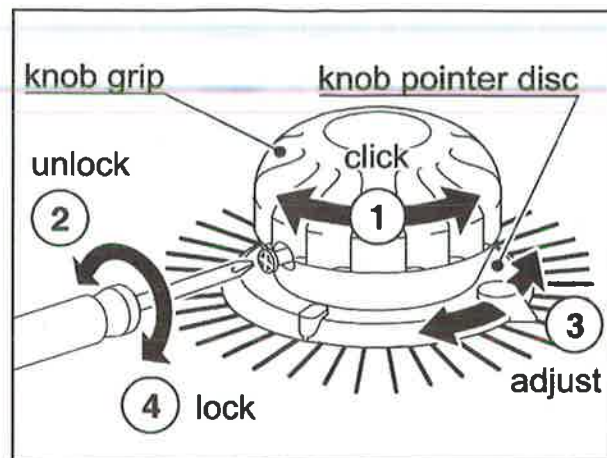
Contacts	Rating Charge max.	VA C. 50 or 60 Hz. Volts ac 50 ou 60 Hz.	
		120	240
Cooling & Fan Refrondissement, & ventilateur	Resistive load non inductive, AMP Charge non inductif (A)	16	16
	FLA, Full load, AMP @PF 0.7 Charge max. (A) Cos φ 0.7	12	10
	LRA, Locked rotor AMP Avec rotor bloquant (A)	48	40
	Pilot duty, VA Charge nominal (VA)	120	
	Heating Chauffage	Resistive load non inductive, AMP Charge non inductif (A)	16
Heating Chauffage	FLA, Full load, AMP @PF 0.7 Charge max. (A) Cos φ 0.7	8	6
	LRA, Locked rotor, AMP Avec rotor bloquant (A)	32	24
	Pilot duty, VA Charge nominal (VA)	120	

Picture 3

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## TH5-20

- knob pointer disc parts. (See Picture 4 (2))
4. Hold the knob grip securely with the fingers of one hand so it cannot rotate or move position. Turn the knob pointer disc with the other hand so the white arrow points to the same temperature as the thermometer is reading. (See Picture 4 (3))
  5. Tighten Phillips screw to lock knob grip and knob pointer disc part. (See Picture 4 (4))
  6. Recheck by repeating step 1
  7. This completes the calibration procedure.



Picture 4

SPECIFICATIONS TH-5-20 Weatherproof Thermostat	
Switch	Single pole double throw
Range	40-105 °F / 5-40°C
Sensing element	Stainless steel spiral.
Terminals	Screw terminals
Differential	2,4°F/1,3°C
Enclosure	ABS Plastic weatherproof. 2 conduit or cable gland openings maximum. Gasket for lid and sealed spiral entries.
Lid with knob	Lift lid after releasing 4 screws about 1/6". Knob remains attached to lid.
Knob	Can be temperature scale calibrated. Unlock with small Philips screwdriver.
ELECTRICAL RATINGS	110/240 Volts A.C. 50/60 Hz Full load.16 A (resistive) For inductive loads see table picture 3

**Warranty:** The supplier warranty covers the TH5-20 thermostat against manufacturing defects for twelve (12) months from the purchase date. This warranty applies when product is proven to have been properly installed, and has been maintained and operated in accordance with the manufacturer's instructions. If the control has been repaired or altered in any way, this warranty does not apply. Warranty claims must be submitted in writing to the supplier within two weeks (14 days) of the problem or malfunction of the corresponding claim. The product detailed in the claim must be returned with the claim form at customer's expense. If the supplier determines the claim to be valid, the supplier will repair or replace the thermostat or component at no charge and will return to the customer FOB to supplier's address. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS HEREBY EXCLUDED. IN NO EVENT OR CIRCUMSTANCE SHALL THE SUPPLIER BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER.

**WARNING:** These products are designed and manufactured to provide high performance and are guaranteed to be free from defects. However, the user should recognize that even reliable products may experience an occasional failure. If these products are planned to be used in a system where failure could result in loss or injury, the user should provide an adequate backup system, as well as acknowledge willingness to accept the risk of such loss or injury.

Supplied by : (stamp)