

A61

ELECTRIC ROOM TEMPERATURE CONTROLLERS

GENERAL INFORMATION

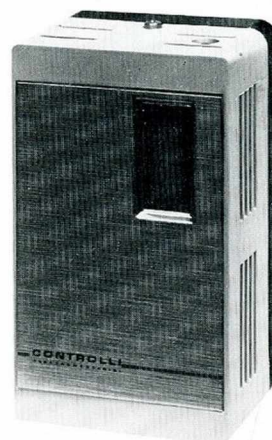
A sensitive vapor filled thermal element operates the electrical circuit to maintain the desired temperature. The entire mechanism is secured to sturdy bakelite base.

A steel cover, encloses the mechanism and the electrical components.

Terminal blocks are at rear of the base. Set point adjustment on top of case.

SPECIFICATIONS

Range	: 10° ÷ 30°C
Ambient temperature limits	: -5° +40°C
Finish	: in ABS, white coloured
Weight	: 0,45 Kg
Enclosure	: IP 30 (DIN 40050)



ON-OFF CONTROL					
Code	Model	Action	Differential °C	Electrical circuit	Electrical rating
350001	A61 - R3	two position	1,5	1 SPDT	6(1)A - 220 V c.a.
350061	A61 - 3A	three stage heating	1,2 each stage	3 SPST (*)	3(0,5)A - 220 V a.c.
350062	A61 - 3C	three stage cooling			
350063	A61 - 2A - 1C	two stage heating			
350064	A61 - 1A - 2C	one stage cooling one stage heating two stage cooling			

(*) Temperature space between a stage and the following one is 0,7°C.

PROPORTIONAL CONTROL					
Code	Model	Action	Proportional band °C	Electrical circuit	Supply
350011	A61 - M	proportional	1,5	one 165 Ω potentiometer	24 V a.c.
350012	A61 - ML	proportional for limit action	2,5	one 340 Ω potentiometer	
350071	A61 - M2	proportional for sequence control	3	two 165 Ω potentiometer	
350072	A61 - M22	proportional for unison control	1,5	two 165 Ω potentiometer	

INSTALLATION

Locate the thermostat where it will be exposed to unrestricted natural air circulation and to average conditions of the controlled space.
Do not locate the thermostat near sources of heat or cold, which might affect the control point.

Fasten mounting plate on the wall.
Pull all wires through the opening on the plate.
Make all electrical connections to thermostat.
Hook thermostat on mounting plate and tighten mounting screw until thermostat is secure.

WIRING

The screw-type terminal are provided on back of thermostat for all electrical connections.
Make all connections in accordance with the job wiring diagram and in compliance with national and local electrical codes.

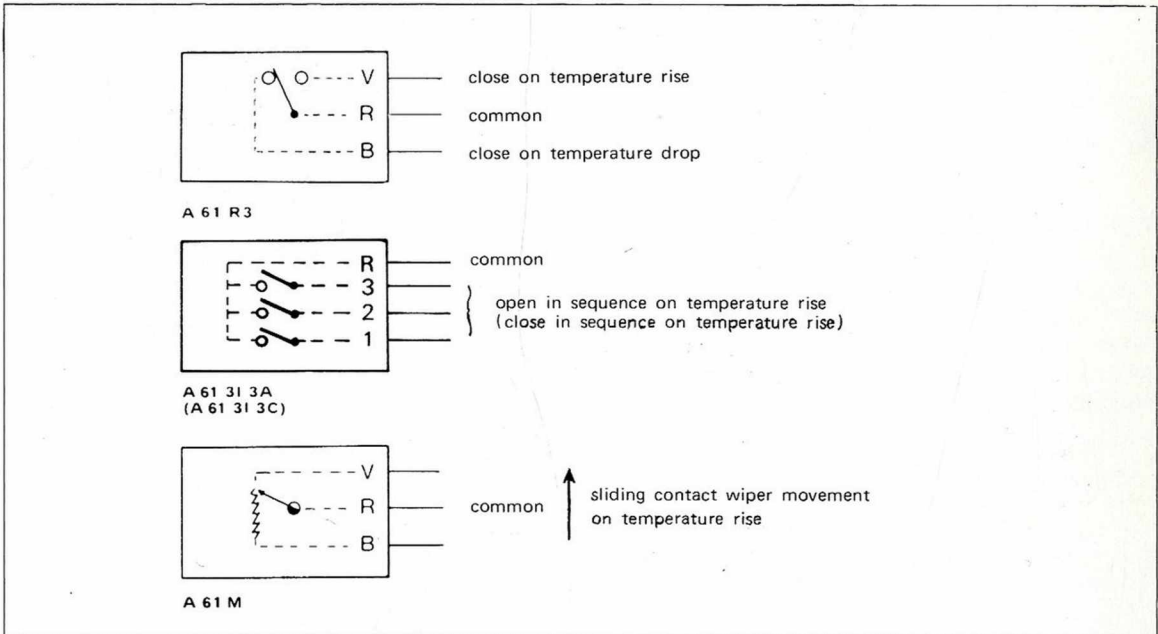
SETTING

The set-point value can be adjusted at any point along the scale, by means of screw on top of cover.

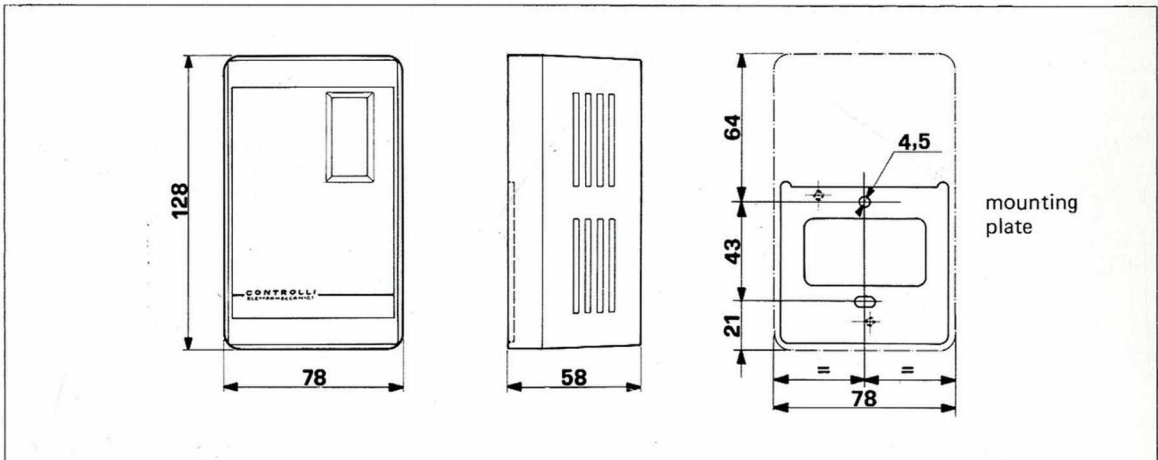
- A61 - R3 The main scale setting determines the point at which contacts R - B will break.
- A61-3A/3C The main scale setting determines the point at which contacts R - 2 will break.
- A61 - M The main scale setting determines the point at which sliding contact wiper is at center of the active potentiometer winding.

CALIBRATION

All thermostats are precision calibrated at the factory and normally will not require any recalibration.



DIMENSIONS (mm)



U 61 - UB 62

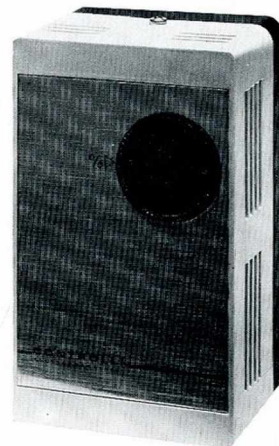
ELECTRIC ROOM HUMIDITY CONTROLLERS

GENERAL INFORMATION

Highly sensitive multiple hair element operates the electrical circuit to maintain the desired humidity. The entire mechanism is secured to sturdy bakelite base.

A steel cover encloses the mechanism and the electrical components.

Terminal blocks are at rear of the base. Set point adjustment, with frontal knob.



SPECIFICATIONS

Ambient temperature : min. -5; max. +40°C
 Finish : in ABS white coloured
 Weight : 0,45 Kg
 Enclosure : IP 30 (DIN 40050)

ON - OFF CONTROL						
Code	Model	Action	Range % R.H.	Differential % R.H.	Electrical circuit	Electrical rating
350304	U 61 - R 3	on - off	30 ÷ 90	5	SPDT	3(0,5)A - 220V a.c.
350307	UB 62		40 ÷ 85	6		

PROPORTIONAL CONTROL						
Code	Model	Action	Range % R.H.	Proportional Band % R.H.	Electrical circuit	Supply
350306	U 61 - M	proportional	30 ÷ 90	15	one 165 Ω potentiometer	24 V a.c.
350310	U 61 - ML	proportional for limit action		25	one 340 Ω potentiometer	

INSTALLATION

Locate the humidostat where it will be exposed to unrestricted natural air circulation and to the average conditions of the controlled space.

Do not located the humidostat near sources of heat or cold, or in spaces where the temperature is below 5°C or over 40°C.

Fasten mounting plate on the wall.
Pull all wires through the opening on the plate.
Make all electrical connections to humidostat.
Hook humidostat on mounting plate and tighten mounting screw until humidostat is secure.

WIRING

The screw-type terminals are provided on back of humidostat for all electrical connections.

Make all connections in accordance with the job wiring diagram and in compliance with national and local electrical codes.

SETTING

The set-point value can be adjusted at any point along the scale, by means of frontal knob.

UB 62

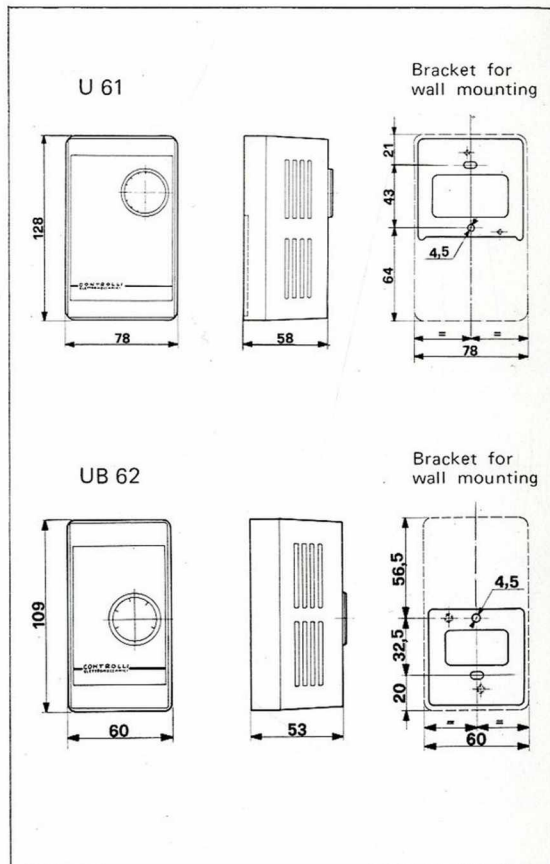
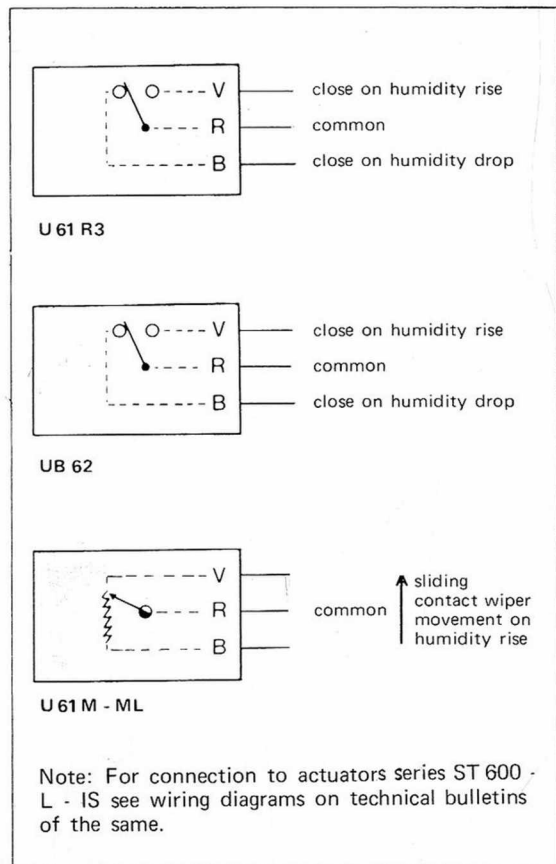
U61 R3 The main scale setting determines the point at which contacts R - B will break.

U61-M The main scale setting determines the point at which sliding contact wiper is at center of active potentiometer winding.

CALIBRATION

All humidostats are precision calibrated at the factory and normally will not require any calibration.

DIMENSIONS (mm)



C 300

BULB TEMPERATURE CONTROLLERS

GENERAL INFORMATION

A sensitive vapor filled thermal element operates the electrical circuit to maintain the desired temperature. The entire mechanism is secured to sturdy die cast aluminium finish case.

A gasketed cover enclosed the mechanism, the electrical contacts and the terminal block.

Set point adjustment with knob on top of the case. The front is provided with a large protected window for viewing temperature setting



SPECIFICATIONS

Sensing element : - C 300 Copper bulb and capillary (2 m)
- C 300/S Copper spiral (ø 30 x 70 mm)

Ambient temp. : $-5 \div 50^{\circ}\text{C}$

Enclosure : IP 54 (DIN 40050)

Finish : Aluminium case - blue cover

Weight : 1,5 Kg

TWO POSITION CONTROL						
Code	Model	Range °C	Max safe bulb temp. °C	Differential °C	Electrical circuit	
355305	C 305	$-30 \div 10$	40	Adjustable $1,5 \div 5$	one SPDT micro switch 15 (2,5)A - 250 V c. a.	
355306	C 306	$-10 \div 40$	50			
355307	C 307	$20 \div 70$	85			
355308	C 308	$55 \div 120$	135			
355309	C 309	$95 \div 140$	155			
355310	C 310	$135 \div 200$	230			
355312	C 306S	$-10 \div 40$	50			
Special model - Two stage or floating control C30.2R3 with two SPDT micro switches - Differential adjustable, minimum 3°C.						
PROPORTIONAL CONTROL						
Code	Model	Range °C	Max safe bulb temp. °C	Proportional Band °C	Electrical circuit	Power supply
355355	C 355	$-30 \div 10$	50	Adjustable $2 \div 10$	one 165 Ohm potentiometer	24 V a.c.
355356	C 356	$-10 \div 40$	50			
355357	C 357	$20 \div 70$	85			
355358	C 358	$55 \div 120$	135			
355359	C 359	$95 \div 140$	155			
355360	C 360	$135 \div 200$	230			
355362	C 356S	$-10 \div 40$	50			
Special model C35.ML with one 340 Ohm potentiometer for proportional limit action C35.M2 with two 165 Ohm potentiometer for sequence control C35.M22 with two 165 Ohm potentiometer for unison control						

ACCESSORIES

- G1** - Code 275080 - Copper well - length 180 mm
3/4 gas tapping
Max fluid pressure: 20 Kg/cm²
- G4** - Code 275082 - Stainless steel well - length 180 mm
3/4 gas tapping
Max fluid pressure: 40 Kg/cm²
- R1** - Code 275084 - Brass compression fitting
3/4 gas tapping
- R2** - Code 275085 - Stainless steel compression fitting
3/4 gas tapping

OPTIONAL

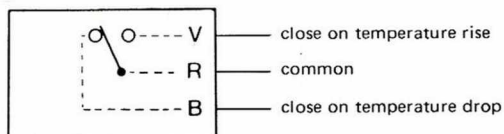
- CX** - Code 355821 - Stainless steel bulb and capillary tubing (1,6 m long)

WIRING

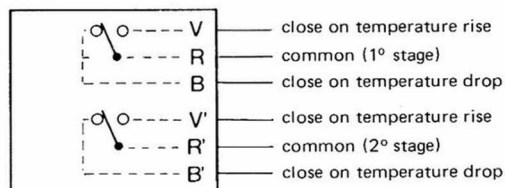
The screw-type terminals are provided inside the case for all electrical connections.

Make all connections in accordance with the job wiring diagram and in compliance with national and local electrical codes.

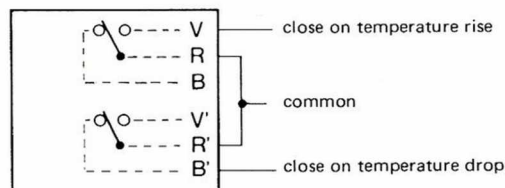
Be sure before replacing the cover that the wires are clear from moving mechanism of controller.



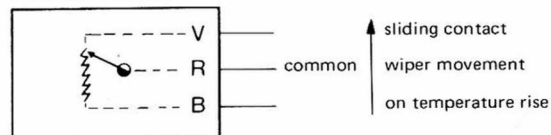
C 300



C 300 2R3 two stage



C 300 2R3 floating



C 350

Note: For connection to actuators series ST 600 · L · IS see wiring diagrams on technical bulletins of the same.

SETTING

Turn setting knob until main scale indicator points to the desired average temperature.

DIFFERENTIAL - THROTTLING RANGE ADJUSTMENT

The differential for two position controllers and the throttling range on proportional ones is adjustable by one screw located on top of the case just in front of the setting knob.

Set differential or throttling range at minimum value necessary to make the system stable.

CALIBRATION

All controllers are precision calibrated at the factory and normally will not require any recalibration.

DIMENSIONS (mm)

