77x35x77mm

# SINGLE OUTPUT ON/OFF OR PID THERMOSTAT OR HUMIDISTAT

Runs on mains power supply  $\bullet$  PID with autotuning or ON/OFF control  $\bullet$  Output on relay (16A) or SSR piloting  $\bullet$  Input for PTC, NTCIOK or  $0 \div IV \bullet 0.1 / I^{\circ}C$  or  $I^{\circ}F$  resolution  $\bullet$  Refrigerating (dehumidifying) or heating (humidifying) control mode selection  $\bullet$  Stand-by button on the front  $\bullet$  Load start limitation and safety function in the event of breakage of the sensor  $\bullet$  Quick setup through ZOT-LTR device  $\bullet$  Connection to LAE supervisory systems TAB.

## **APPLICATIONS:**

Temperature: Control of small cold stores, refrigerated cabinets and tables, heating systems, heated cupboards, bainsmarie, ovens, laboratory equipment.

Humidity: Control of greenhouses, seasoning cells, cold rooms, air-conditioned rooms.

			LTR-5 Series			
Functions	LTR-5T	LTR-5C	LTR-5A			
Input type	PTC	NTC10K	0÷1V			
Range	-50÷150°C	-40÷125°C	0÷99.9% r.H.			
	-60÷300°F	-40÷260°F				
Accuracy	$\pm 0.3^{\circ}C^{(a)}; \pm 1.0^{\circ}C^{(c)}$	$\pm 0.3^{\circ}C^{(b)}; \pm 1^{\circ}C^{(c)}$	±0.7% r.H.			
Resolution	0.1/1	0.1/1 % r.H.				
Front protection	IP55					
Panel cut-out	71x29 mm					
(a) $-50 \div 140^{\circ}$ (c) $-40 \div 110^{\circ}$ (c) remaining range						

(a) -50÷140°C; (b) -40÷110°C; (c) remaining range.

### How to order examples:

LTR-5CSRE-A (NTC10K input, 1 relay, screw terminals, 230Vac supply, TTL port) LTR-5ASRU (0+1V input, 1 relay, screw terminals, 115Vac supply, no serial port)

On request, the LTR-5 is also available with gasket for a better protection between bezel and panel. In order to know more options available for the models, please consult LAE or our local dealer.



77х35х77 мм

# Two channel universal Controller, ON/OFF or PID

Runs on mains power supply  $\bullet$  PID with autotuning or ON/OFF control  $\bullet$  Main output on 12A relay or for SSR-piloting and auxiliary output on 5A relay  $\bullet$  Input for  $0 \div IV$ ,  $0/4 \div 20$ mA, PTC/NTC10K, TC J/K or Pt100  $\bullet$  0.1 / 1°C or 1°F resolution  $\bullet$  Selectable Refrigerating/Heating (Dehumidifying/Humidifying) control  $\bullet$  Absolute or relative temperature alarms  $\bullet$  ON/OFF button on front  $\bullet$  Load start limitation and safety operation in case of probe failure  $\bullet$  Quick programming through ZOT-AC1 key  $\bullet$  Connection to LAE TAB supervisory systems

### **APPLICATIONS:**

**Temperature:** Control of small cold stores, refrigerated cabinets and tables, heating systems, heated cupboards, bains-marie, ovens, laboratory equipment.

Humidity: Control of greenhouses, seasoning cells, cold rooms, air-conditioned rooms.

AC1-5 Serie							<b>5</b> Series
Functions	AC1-5T		AC1-5P	AC1-5J		AC1-5A	AC1-5I
Input type	PTC	NTC10K	Pt100	TC "J"	TC "K"	0÷1V	0/4÷20mA
Range	-50÷150°C -60÷300°F	-40÷125°C -40÷260°C	-100÷850°C -150÷999°F	-50÷750°C -60÷999°F	-50÷999°C -60÷999°F	Configurable in setup	
Accuracy	±0.3°C	±0.3°C	±0.3°C <sup>(a)</sup> ; ±1°C <sup>(b)</sup>	±3°C		±3mV	±0.2mA
Resolution	0.1/1°C/1°F			1 °C / °F		0.1/1	

(a) -50÷150°C; (b) remaining range.

#### How to order:

ACI-5T52RW-A (PTC/NTC10K input, screw terminals, 2 relays, 115÷230Vac supply voltage,TTL port) ACI-5A52MD-B (0÷IV input, screw terminals, output 1 on SSR drive, output 2 on relay, 12Vac/dc supply voltage, R5485 port)

On request, the ACI-5 is also available with gasket for a better protection between bezel and panel. In order to know versions available, please consult LAE or our local dealer.



j	Т	S	R	E	-B
	1	2	3	4	5
FUNCTION	DESCRIPTION				
Input	<b>T*</b> = PTC; <b>C</b> **= NTC10K; <b>A</b> = 0÷1V				
Connectors	<b>S</b> = screw terminals; <b>Q</b> = male+female terminals				
Output type	<b>R</b> = relay; <b>F</b> = SSR drive				
Supply	<b>D</b> =12Vac/dc; <b>E</b> =230Vac; <b>U</b> =115Vac, 2W				
Serial comm.	- = no serial port; <b>-A</b> = TTL; <b>-B</b> = RS485				
	FUNCTION Input Connectors Output type Supply	FUNCTION D   Input T*   Connectors S= screw   Output type D=12V	FUNCTION DESCRIPTION   Input T*= PTC; C**=   Connectors S= screw terminals; C   Output type R = relay;   Supply D =12Vac/dc; E =2	I 2 3   FUNCTION DESCRIPTION   Input T*= PTC; C**= NTC10K; A   Connectors S= screw terminals; Q= male+fer   Output type R = relay; F = SSR dri   Supply D =12Vac/dc; E =230Vac; U = 1	I Z 3 4   FUNCTION DESCRIPTION   Input T*= PTC; C**= NTC10K; A= 0+1V   Connectors S= screw terminals; Q= male+female termin   Output type R = relay; F = SSR drive   Supply D =12Vac/dc; E =230Vac; U =115Vac, 2W

\*The standard PTC probe is the STIK20PI \*\*The standard NTC probe is the SN4K20PI





AC	1-5	T	S	1	R	W	-B	
		0	2	3	4	5	6	
POS.	FUNCTION	DESCRIPTION						
0	Input	$\mathbf{A} = 0 \div 1V$ ; $\mathbf{I} = 0/4 \div 20$ mA; $\mathbf{J} = TC 'J' / 'K'$ ; $\mathbf{P} = Pt100$ ; $\mathbf{T} = PTC/NTC10K$						
2	Connections	S = built-in screw terminals						
3	Output No.	<b>1</b> = one; <b>2</b> = two						
4	Output type	<b>R</b> = relay; <b>M</b> = Out1 on SSR, Out2 on relay						
5	Supply	<b>D</b> * = 12Vac/dc; <b>W</b> = 115230Vac 50/60Hz; 3 W						
6	Serial comm.	<b>Nil</b> = no; -A = <b>TTL</b> ; -B = RS485						

\* = in the version with 12Vac/dc power supply, the maximum voltage on the outputs is 50Vac/dc, in order to ensure safety insulations.

