

CONTROLTEC

TEMPERATURE CONTROLLERS

TLK

CE

PID

33x75 mm



TLK 38

TLK 39

TLK 31

TLK 32

MECHANICAL CHARACTERISTICS

Housing	Self-extinguishing plastic, UL 94 V0		
Dimensions	33x75 mm - depth 64 mm		
Weight	180 g approx.		190 g. approx.
Connections	2,5 mm ² screw terminal block		
Mounting	Flush in panel in 29x71 mm hole		
Front panel protection	IP 65 mounted in panel with gasket		

ELECTRICAL DATA

Power supply	12 VAC/DC, 24, 115, 230 VAC +/-10%	12 VAC/VDC
AC Frequency	50 / 60 Hz	
Power consumption	4 VA approx.	5 VA approx.

INPUT DATA

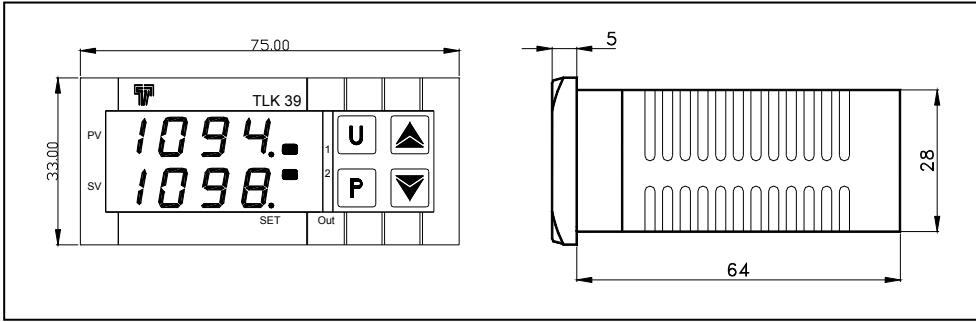
4 different multi-input possibilities	Thermocouples J, K, S – According to IEC 584-2, accuracy class 1 or 2 Pt 100 – According to IEC 751, accuracy class A or B ControlTEC Sensors IRS J and K 0...50 mV, 0...60 mV, 12...60 mV	
	Thermocouples J, K, S – According to IEC 584-2, accuracy class 1 or 2 PTC KTY 81-121 (990 Ω at 25°C) NTC 103AT-2 (10 kΩ at 25°C) ControlTEC Sensors IRS J and K 0...50 mV, 0...60 mV, 12...60 mV	
	0/4...20 mA	
	0/1...5 V, 0/2...10 V	
Digital input	--	2 programmable digital inputs
Normalized signals input impedance	for 0/4...20 mA input : 51 Ω - for mV and V input : 1 MΩ	

OUTPUT DATA

Relay	Up to 2 outputs SPDT (8 A-AC1, 3 A-AC3 / 250 VAC)	Up to 4 outputs SPST-NO (5 A-AC1, 2 A-AC3 / 250 VAC)
Relay electric life	100000 operations	
Voltage for SSR driving	Up to 2 outputs : 15 mA / 7 VDC with protection against short circuits	Up to 4 outputs : 7 mA / 14 VDC with protection against short circuits
Auxiliary power supply output	12 VDC / 20 mA max	

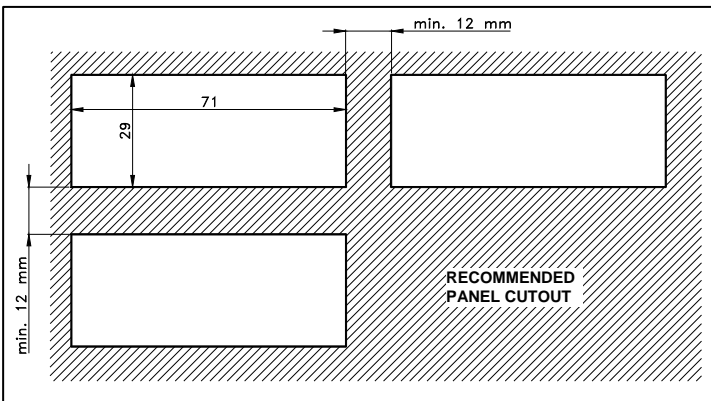
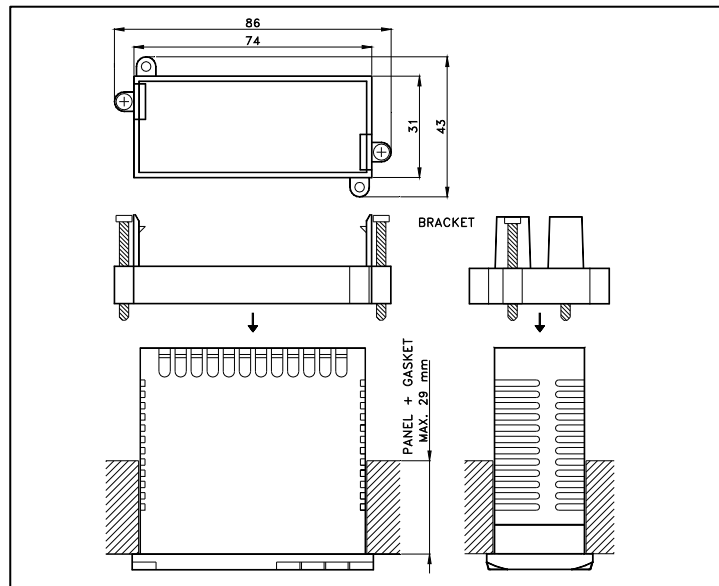
FUNCTIONAL DATA

Control	ON/OFF, Neutral Zone, PID single and double action programmable		
Multi Set Point	Up to 4 programmable Set Points		
Overall accuracy	+/-0.5% full scale		+/-0.15% full scale
Display resolution	According to the probe selected 1/0, 1/0, 01/0, 001		
Measurement range	According to the probe used and to the measurement unit		
Measurement Unit	°C - °F, programmable		
Max. cold junction compensation drift	0.04°C/°C with operating temperature 0...50°C after warm-up time of 20 min.		
Sampling rate	130 ms		
Serial communication	--	RS485 with MODBUS-RTU (JBUS) protocol	
Serial transmission rate	--	1200...38400 selectable	
Display	4 digit red h=12 mm	4+4 digit red/green h=7 mm	4 digit red h=12 mm 4+4 digit red/green h=7 mm
Parameters access	Protected by password		
Operating temperature	0...55°C		
Operating humidity	30...95 RH% without condensation		



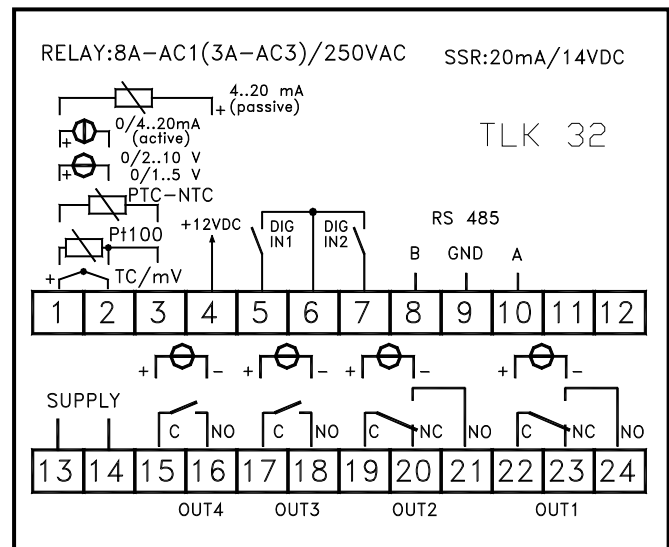
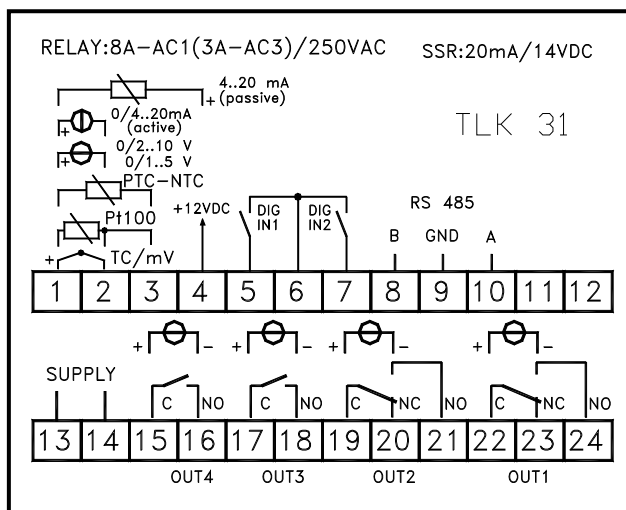
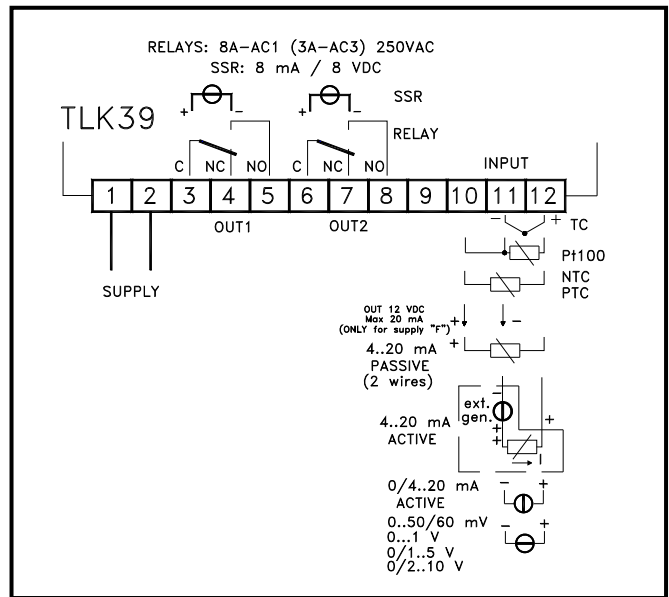
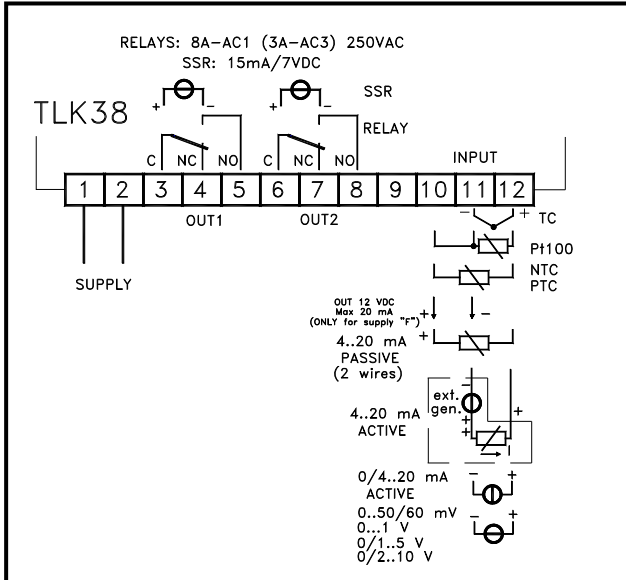
DIMENSIONS (mm)

PANEL MOUNTING DEVICE



PANEL CUTOUT

CONNECTION DIAGRAMS





1-800-566-3883

TLK 38	Single Display	33 x 75
TLK 39	Double Display	
Description	C o d e s	Code Description
Power Supply	F	12 VAC/DC
	L	24 VAC
	H	100 - 240 VAC
Input signal	V	0-1/5V, 0-2/10 V
	I	0-4/20 mA
	E	TC (J,K,S,IR) + PTC,NTC, mV
	C	TC (J,K,S,IR) + PT100, mV
Main output OUT 1	R	Relay
	O	20 mA/14 VDC for SSR
Second output OUT 2	R	Relay
	O	20 mA/14 VDC for SSR
	-	No output

HOW TO ORDER

TLK 31	Single Display	33 x 75
TLK 32	Double Display	
Description	C o d e s	Code Description
Input signal	V	0-1/5V, 0-2/10 V
	I	0-4/20 mA
	E	TC (J,K,S,IR) + PTC,NTC, mV
	C	TC (J,K,S,IR) + PT100, mV
Main output OUT 1	R	Relay
	O	20 mA/14 VDC x SSR
Second output OUT 2	R	Relay
	O	20 mA/14 VDC x SSR
	-	No output
Third output OUT 3	R	Relay
	O	20 mA/14 VDC x SSR
	-	No output
Fourth output OUT 4	R	Relay
	O	20 mA/14 VDC x SSR
	-	No output
Serial communication	S	RS485
	-	No
Digital Input	I	Digital input
	-	No