

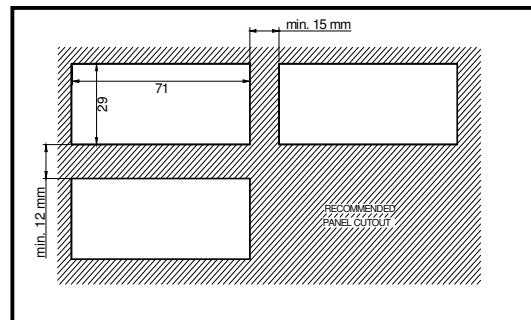
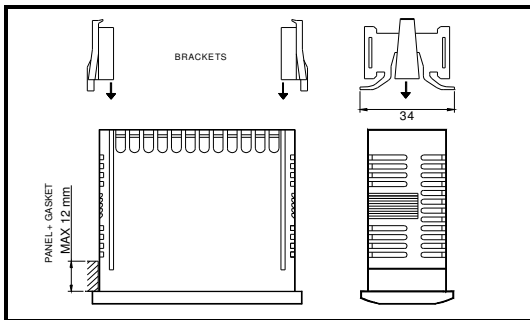
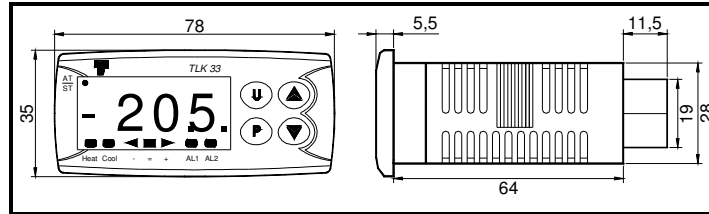


- **PID**
- **2 alarm outputs for SSR driving**
- **RS485**

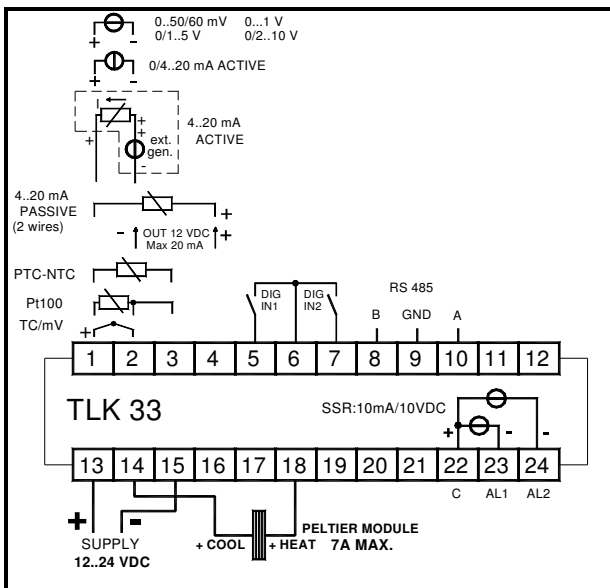

**TLK 33**

MECHANICAL DATA	
Housing	Self-extinguishing plastic, UL 94 V0
Dimensions	35x78 mm - depth 75,5 mm
Weight	130 g approx.
Connections	2,5 mm <sup>2</sup> 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...24 VDC +/- 10%
Power consumption	4 VA approx.
INPUT DATA	
4 different configuration for programmable multi-input	Pt 100 – According to IEC 751, accuracy class A or B Thermocouples J, K, S – According to IEC 584-2, accuracy class 1 or 2 Infrared Thermocouples IRS J and K 0...50 mV, 0...60 mV, 12...60 mV
	PTC KTY 81-121 (990 Ω at 25°C) NTC 103AT-2 (10 kΩ at 25°C) Thermocouples J, K, S – According to IEC 584-2, accuracy class 1 or 2 Infrared Thermocouples 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 inputs	2 for free voltage contacts
Normalized signals input impedance	for 0/4...20 mA input: 51 Ω - for mV e V input: 1 MΩ
OUTPUT DATA	
Tension to directly drive Peltier device	12...24 VDC static output (the same of the power supply) / to directly drive Peltier device max 7A; optional up to 2 alarm outputs in tension to drive SSR (10mA/ 10VDC).
Uscita alimentazione ausiliaria	12 VDC / 20 mA max
FUNCTIONAL DATA	
Control	PID double action
PID functions	AUTOTUNING FAST, SELFTUNING, FUZZY OVERSHOOT CONTROL
Multi Set Point	Up to 4 programmable Set Points
Overall accuracy	+/-0,5% full scale (TC S : +/- 1% fs)
Display resolution	Accordino to the used probe : 1/0,1/0,01/0,001
Measurement Range	According to used probe and to the measurement unit
Unit of measurement	°C / °F, programmable
Max. cold junction compensation drift	0,1 °C/°C with operative temperature 0...50 °C after warm-up time of 20 min.
Sampling rate	8 sample per second
Serial communication	RS485 with MODBUS-RTU (JBUS) protocol
Communication rate	1200...38400 baud, programmable
Display	4 red digit h=12 mm
Parameters access	Protected by password
Operating temperature	0...50 °C
Operating humidity	30...95 RH% without condensation

## DIMENSIONS (mm)



## CONNECTIONS



## CODING

TLK 33	35 x 78	
Description	Codes	Code Description
Power supply	<b>G</b>	12...24 VDC
Input signal	<b>I</b>	0-4/20 mA
	<b>E</b>	PTC,NTC + TC K,S,IR, mV
	<b>D</b>	PT100 + TC J,K,S,IR, mV
	<b>V</b>	0..1V, 0/1...5V, 0/2..10V
Control output	<b>O</b>	12-24 VDC output for Peltier device (7A max)
AL1 output	<b>O</b>	SSR output
	-	None
AL2 output	<b>O</b>	SSR output
	-	None
Serial Communication	<b>S</b>	RS485
	-	None
Digital Input	<b>I</b>	Digital Input
	-	None