

TLI40

- UNIVERSAL AND POTENTIOMETER INPUT
- UP TO 4 OUTPUTS
- RS485



FEATURES

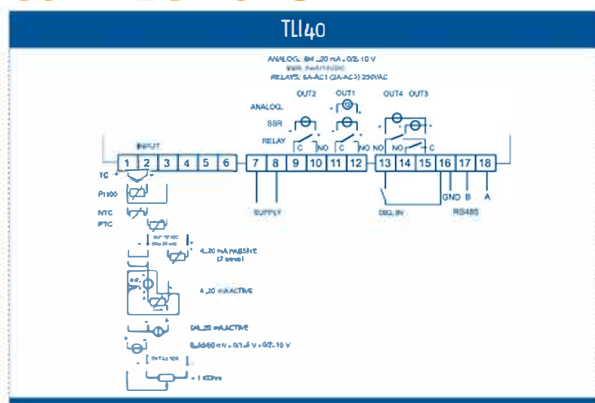
DISPLAY	TLI40
Single	4 red digit, h 12 mm
INPUTS	
Universal	Thermocouples J, K, S, B, C, E, L, N, R, T and Infrared sensors J or K + Thermoresistances Pt 100 3 wires + Thermistors PTC KTY 81-121 (990 Ω a 25°C) e Thermistors NTC 103AT-2 (10 k Ω a 25°C) + Linear signals 0... 50mV, 0... 60mV, 12... 60mV, 0/4... 20mA, 0/1... 5V, 0/2...10V + Linear Potentiometers (see next page for temperature ranges)
Accuracy	$\pm 0.15\%$ fs
OUTPUTS	
Up to 4	OUT 1, OUT 2, OUT 3 and OUT 4: Relay SPST-NO (5A-AC1, 2A-AC3/250 Vac) or 7mA/14 Vdc to drive SSR
Current or voltage (as alternative to OUT 1)	OUT 1: 0/4...20mA or 0/2...10V
Auxiliary power supply	12 Vdc/20 mA max 2.5 Vdc/2.5 mA for Linear Potentiometers
FUNCTIONAL	
Sampling rate	Selectable from 8 to 64 samples per second for analogue signals or potentiometer inputs
Resolution	8 samples/sec = 32000 points 16 samples/sec = 16000 points 32 samples/sec = 8000 points 64 samples/sec = 4000 points
Accuracy	$\pm 0.15\%$ fs
Serial communication	RS485 with ModBus-RTU (iBUS) protocol
Baud rate	1200... 38400 baud, programmable
GENERAL	
Power supply	24 Vac/Vdc, 100... 240 Vac $\pm 10\%$ / 50/60 Hz
Power consumption	8 VA approx.
Dimensions / Weight	48 x 48 mm - depth 98 mm / 190 g approx.
Connections	Screw terminal block 2 x 1 mm ²
Mounting	Flush in panel in 45 x 45 mm hole
Front protection degree	IP 54, mounted on panel with gasket
Operating / storage temperature	0... 50°C (32... 122°F) / -30... 70°C (-22... 158°F)
Operating humidity	30... 95 RH% without condensation
Conformity	Directive CEE EMC 2004/108/CE (EN 61326), Directive CEE BT 2006/95/CE (EN 61010-1)

HOW TO ORDER

To compose the part number, pls. choose one of the option for each variable

TLI40	CODE
POWER SUPPLY	
20... 30 Vac/Vdc	L
90... 240 Vac	H
OUT 1	
Relay	R
20 mA/14 Vdc for SSR driving	O
0/4... 20mA	C
0/2... 10V	V
Not available	-
OUT 2	
Relay	R
Vdc for SSR driving	O
Not available	-
OUT 3	
Relay	R
Vdc for SSR driving	O
Not available	-
OUT 4	
Relay	R
Vdc for SSR driving	O
Not available	-
SERIAL COMMUNICATION AND DIGITAL INPUT	
RS485	S
RS485 + Digital input	I
Not available	-
SENSOR POWER SUPPLY	
2.5 Vdc	B
12 Vdc for analogue input	A
INPUT FROM POTENTIOMETER	
Available	-P
Not available	--

CONNECTIONS



TEMPERATURE RANGES

TEMPERATURE RANGES		
INPUT	WITHOUT "DP" (DECIMAL POINT)	WITH "DP" = 1, 2, 3
tc J	-160 ... 1000 °C - 256 ... 1832 °F	-160.0 ... 999.9 °C -199.9 ... 999.9 °F
tc K	-270 ... 1370 °C - 454 ... 2498 °F	-199.9 ... 999.9 °C -199.9 ... 999.9 °F
tc S	-50 ... 1760 °C -58 ... 3200 °F	-50.0 ... 999.9 °C -58.0 ... 999.9 °F
tc B	72 ... 1820 °C 162 ... 3308 °F	72.0 ... 999.9 °C 162.0 ... 999.9 °F
tc E	-150 ... 750 °C -252 ... 1382 °F	-150.0 ... 999.9 °C -199.9 ... 999.9 °F
tc L	-150 ... 900 °C -252 ... 1652 °F	-150.0 ... 900.0 °C -199.9 ... 999.9 °F
tc N	-270 ... 1300 °C -454 ... 2372 °F	-199.9 ... 999.9 °C -199.9 ... 999.9 °F
tc R	-50 ... 1760 °C -58 ... 3200 °F	-50.0 ... 999.9 °C -58.0 ... 999.9 °F
tc T	-270 ... 400 °C -454 ... 752 °F	-199.9 ... 400.0 °C -199.9 ... 752.0 °F
tc C	0 ... 2320 °C 32 ... 4208 °F	0.0 ... 999.9 °C 32.0 ... 999.9 °F
IR sensors (ZIS)	-46 ... 785 °C -50 ... 1445 °F	-46.0 ... 785.0 °C -50.8 ... 999.9 °F
Pl100 (IEC)	-200 ... 850 °C -328 ... 1562 °F	-99.9 ... 850.0 °C -99.9 ... 999.9 °F
PTC (KTY81-121)	-55 ... 150 °C -67 ... 302 °F	-55.0 ... 150.0 °C -67.0 ... 302.0 °F
NTC (103-AT2)	-50 ... 110 °C -58 ... 230 °F	-50.0 ... 110.0 °C -58.0 ... 230.0 °F
0... 20 mA	-1999 ... 9999	-199.9 ... 999.9 -19.99 ... 99.99
4... 20 mA	-1999 ... 9999	-199.9 ... 999.9 -19.99 ... 99.99 -1.999 ... 9.999
0... 50 mV	-1999 ... 9999	-199.9 ... 999.9 -19.99 ... 99.99 -1.999 ... 9.999
0... 60 mV	-1999 ... 9999	-199.9 ... 999.9 -19.99 ... 99.99 -1.999 ... 9.999
12... 60 mV	-1999 ... 9999	-199.9 ... 999.9 -19.99 ... 99.99 -1.999 ... 9.999
0... 5 V	-1999 ... 9999	-199.9 ... 999.9 -19.99 ... 99.99 -1.999 ... 9.999
1... 5 V	-1999 ... 9999	-199.9 ... 999.9 -19.99 ... 99.99 -1.999 ... 9.999
0... 10 V	-1999 ... 9999	-199.9 ... 999.9 -19.99 ... 99.99 -1.999 ... 9.999
2... 10 V	-1999 ... 9999	-199.9 ... 999.9 -19.99 ... 99.99 -1.999 ... 9.999
Potentiometers (> 1 KΩ)	-1999 ... 9999	-199.9 ... 999.9 -19.99 ... 99.99 -1.999 ... 9.999