

UNIVERSAL DIN RAIL TRIP AMPLIFIER

KOS1630

- SIMPLE CONFIGURATION VIA USB PORT
- UNIVERSAL Pt100, THERMOCOUPLE, mV, mA Input
- ISOLATED INPUT
- DUAL RELAY OUTPUTS 250 V AC 1A
- RELAY ISOLATED FROM EACH OTHER
- 3 YEARS WARRANTY



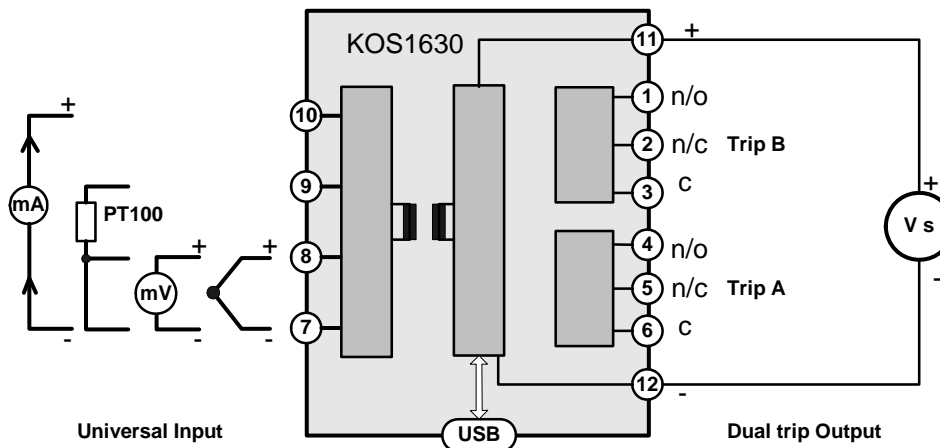
INTRODUCTION

The KOS1630 is the new generation DIN rail mounted temperature amplifier from DITEL. It has been designed to accept most common process and temperature sensor inputs and provide the user with a dual trip output. Isolation is provided on all three ports. All temperature ranges are linear to temperature.

Designed for ease of use, our latest USB interface is fitted for quick and easy configuration. Just connect a standard USB cable between the KOS1630 and your PC. Using our free configuration software, your PC will automatically upload the existing configuration data and guide you through any changes you wish to make. To further help save time, the KOS1630 does not need to be wired to a power supply during the configuration process, it is powered via the USB interface from your PC. The following parameters are configurable:

INPUT TYPE	UNITS	TRIP A Level	TRIP A Setpoint	TRIP A Hysteresis	TRIP B Level	TRIP B Setpoint	TRIP B Hysteresis
Pt100	°F, °C, mV & mA	High Low	Set in units	Set in units	High Low	Set in units	Set in units
TC: K, J, E, N, T, R, S							
mV							
mA							

The range led indicates out of range input during normal operation.
Alarm LEDs are provided for each trip.



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SPECIFICATION

INPUTS

INPUT	RANGE	ACCURACY (Note 1)	STABILITY	O/C	CJ (Note 3)	Sensor excitation (Note 4)	IMPEDANCE
K	(-200 to 1370) °C	0.1 % of FSR ± 0.5 °C (type T 0.2 % FSR. ± 0.5 °C)	± 0.01 % of FSR	Yes	Yes	-	1 M Ω (Note 5)
J	(-100 to 1200) °C						
E	(-100 to 1000) °C						
N	(-180 to 1300) °C						
T	(-100 to 400) °C						
R	(-10 to 1760) °C	± 0.5 °C ± 0.1 % of FSR (Note 2)	± 0.005 % of FSR	-	-	-	
S	(-10 to 1760) °C	± 0.5 °C ± 0.1 % of FSR (Note 2)					
mV	(-40 to 75) mV	± 0.04 mV	± 0.01 % of FSR	-	-	-	2.7 R (Note 6)
P	(-200 to 850) °C	± 0.1 °C / ± 0.05 % of rdg					
mA	(-10 to 25) mA	± 0.008 mA	± 0.01 % of FSR	-	-	-	-

Key Rdg = Reading ; FSR = Full Scale Range ; O/C = programmable open circuit sensor detect; CJ = Cold junction error

Notes

1. Accuracy for Pt100 and T/C do not include sensor and cold junction errors.
2. Only over the range (800 to 1600) °C
3. Cold junction range (-20 to 70) °C, Accuracy ± 0.5 °C , Tracking ± 0.05 °C
4. PT100 input Maximum lead resistance 20 R, Lead effect 0.015 °C / Ω .
5. Impedance – not including 0.2 uA open circuit detect bias current effect.
6. Maximum current over load ± 100 mA.

OUTPUT

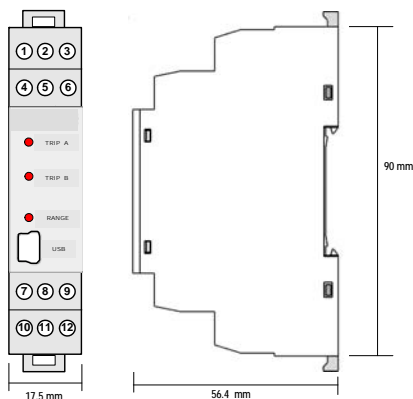
Type Dual Form C relay contacts
Supply 24 V dc ± 5 % @ 40 mA Max
Response time < 500 ms to reach 95 % of final value; Start up time < 3 s
Contact rating 250 V ac rms @ 1A; 30 V dc @ 1 A resistive load
Trip Type Individual trips A & B may be set at high or low level, full range setpoint plus adjustable hysteresis
Ranges Setpoint programmed on units, covering full range of input.
Hysteresis Set in units.
Protection Reverse connection and over-voltage protection. Max over voltage current 100 mA.

GENERAL

Isolation Input to output tested at 500 V dc.
Ambient operating (-20 to 70) °C (10 to 95) % RH non condensing. Storage (-40 to 85) °C
Approvals CE tested to EN 61326

MECHANICAL

Material Polyimide 6.6
 Self extinguishing
Terminals Screw terminal
Cable 2.5 mm Max.
Colour Grey



CODE: KOS1630

ASSOCIATED PRODUCTS

CODE

USBLINK (Software) Available free on www.ditel.es

KOS1603P / TC Pt or TC DIN RAIL TRANSMITTER
 KOS1610 UNIVERSAL DIN RAIL TRANSMITTER mA OUTPUT
 KOS1620 UNIVERSAL DIN RAIL TRANSMITTER VOLTAGE OUTPUT

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