

KR1

- 3 DYNAMIC COLOUR LED DISPLAY
- INDEPENDENT TIMER
- WORKING HOURS COUNTER
- WATTMETER FUNCTION

evolution



FEATURES

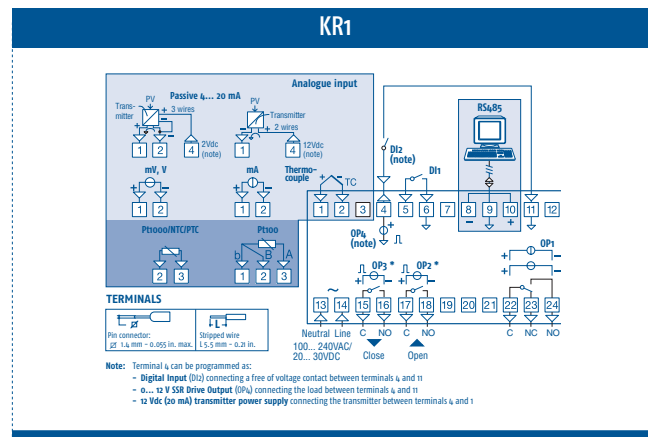
DISPLAY	KR1
Dual LED	Main display: 4 digit h 11.7 mm. 3 colours: red, green and amber Secondary display: 4 green digit, h 7 mm
INPUTS	
Universal	Thermocouples: J (-50... +1000°C/-58... 1832°F), K (-50... +1370°C/-58... 2498°F), S/R (-50... +1760°C/-58... 3200°F), T (-70... +400°C/-94... 752°F) Infrared sensors: J or K Thermoresistances: 3 wires Pt 100 and 2 wires Pt 1000 (-200... 850°C/-328... 1562°F) Linear signals: 0/12... 60mV, 0/4... 20mA, 0/1... 5V, 0/2... 10V
Accuracy	Thermocouples: J (-50... +1000°C/-58... 1832°F), K (-50... +1370°C/-58... 2498°F), S/R (-50... +1760°C/-58... 3200°F), T (-70... +400°C/-94... 752°F) Infrared sensors: J or K Thermistors: PTC KTY81-121 (-55... +150°C/-67... 302°F), NTC 103 AT2 (-50... +110°C/-58... 230°F) Linear signals: 0/12... 60mV, 0/4... 20mA, 0/1... 5V, 0/2... 10V ± 0.5% span ±1 digit, (±1% span ±1 digit for T/C S type)
Digital inputs	1 or 2 according to instrument's part number (the 2nd digital input is alternative to OUT 4)
OUTPUTS	
Up to 4	OUT 1: Relay SPDT 4A/240 Vac or voltage to drive SSR 13V max. @ 1mA, 10.5V min. @ 15mA ±10% OUT 2: Relay SPST-NO 2A/240 Vac or voltage to drive SSR 13V max. @ 1mA, 10.5V min. @ 15mA ±10% OUT 3: Relay SPST-NO 2A/240 Vac or voltage to drive SSR 13V max. @ 1mA, 10.5V min. @ 15mA ±10% OUT 4 programmable: voltage output to drive SSR 13V max. @ 1mA, 10.5V min. @ 22mA ±10% or transmitter supply or 2nd digital input
FUNCTIONAL	
Control	PID single or double action, ON/OFF, ON/OFF with Neutral Zone Autotuning and Selftuning algorithms, Overshoot control
Alarms	3 alarms programmable as absolute, deviation, band
Set Point	4 programmable Set Points
Serial communication	TTL (standard) + RS485 (optional), ModBus RTU protocol
Baud rate	1200... 38400 baud
Working hours counters	A cumulative non-erasable counter and a second one resettable with alarm
Wattmeter function	Instantaneous power, time consumption
EVOogreen	Stand-by mode of display, selectable
Timer (optional)	Independent with 5 function modes
GENERAL	
Power supply	24 Vac/Vdc ± 10%, 100... 240 Vac/Vdc -15%/+ 10% (50/60 Hz)
Power consumption	7 VA max.
Dimensions / Weight	78 x 35 mm - depth 78 mm + 14 mm (plug-in terminals) / 200 g
Mounting	Flush in panel in 69 x 28 mm hole
Connections	24 screw terminals 2.5 mm ² (AWG22.... AWG14) fix, plug-in or clamp type
Front protection degree	IP 65, mounted on panel with gasket
Operating / storage temperature	0... 50°C (32... 122°F)/-20... +70°C (-4... 158°F)
Operating humidity	20... 95 RH%, without condensation
Conformity	EN 61010-1, EN 61326

HOW TO ORDER

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

KR1	CODE
VERSION	
Controller	-
Controller + Timer	T
POWER SUPPLY	
24 Vac/Vdc	L
100... 240 Vac	H
INPUT	
TC, RTD, mA, V, mV + digital input 1	C
TC, NTC, PTC, mA, V, mV + digital input 1	E
OUT 1	
Relay SPDT 4A	R
Vdc for SSR driving	O
OUT 2	
Relay SPST 2A	R
Vdc for SSR driving	O
Not available	-
OUT 3	
Relay SPST 2A	R
Vdc for SSR driving	O
Not available	-
OUT 4	
Digital input 2 or digital output or transmitter supply	D
RS485	
Available	S
Not available	-
CONNECTION	
Plug-in screw type	E
Plug-in screw type, fix part only	N
Clamp type	M
Fix screw type (standard)	-

CONNECTIONS



DIMENSIONS

