

ADDER SUBTRACTOR

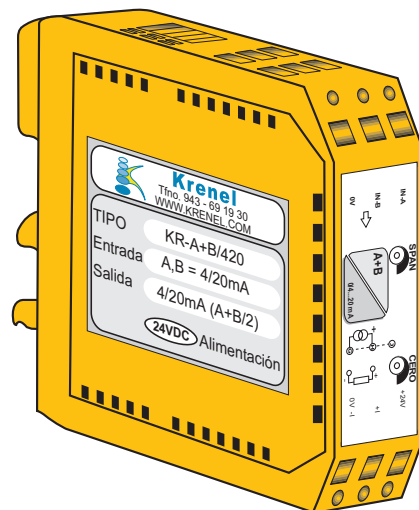


2 INPUTS

**0/10V,
4/20mA**

...

ARITHMETICS
A+B



DESCRIPTION

Arithmetic modules are used to add or subtract 2 analog voltage or current signals. The result is converted into a sign of voltage or current, whose output gain is adjustable.

It is presented in modular configuration to fit DIN EN plastic profiles of reduced space and consumption.

REGULATIONS COMPLIANCE

Electromagnetic Compatibility	2004 / 108 / CE
Low voltage for amb. industrial	2006/95/CEE
Electromagnetic emissions	UNE-EN 50081-2
Electromagnetic immunity	UNE-EN 50082-2
Waste electronics(WEEE)	2002 / 96 / CE

TECHNICAL CHARACT.

- Power supply.	<i>Passive</i> <i>Active</i>	24 VDC (+/-10%) 230 VAC (+/-10%)
- Working temp		- 10° ... +55° C
- Max global error		< 0,1%
- Max consumption (max load 1 K)		20 mA
- Max current in the loop 4.. 20 mA		25 mA
- External access to the SPAN and CERO adjustables.		
- Protection against shortcuts in the output		
- Protection against polarity error in the current loop.		

INPUT

- Input impedance (voltage)	> 100 K
- Input impedance (current)	50 ohm.
- Max current input	50 mA

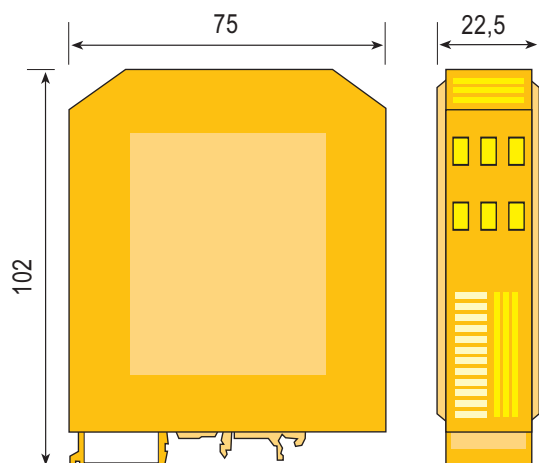
OUTPUT

- Load impedance (voltage)	min. 1 Kohm.
- Load impedance (4/20mA)	max. 600 Ohm.

MECHANICAL

Protection:	IP 20
Connection wire:	< 2,5 mm, 12 AWG
Box:	Polyamide UL94. V2
Weight: max.	75/120 gr.
Rail:	EN 50035, EN 50022

DIMENSIONS (mm)



ADDER MODELS

SUPPLY	0 / 10 V	4 / 20 mA
24VDC	KR-(A+B)010/010	KR-(A+B)420/420
230VAC	KR:(A+B)010/010	KR:(A+B)420/420

SUBTRACTOR MODELS

SUPPLY	0 / 10 V	4 / 20 mA
24VDC	KR-(A-B)010/010	KR-(A-B)420/420
230VAC	KR:(A-B)010/010	KR:(A-B)420/420

OUTPUT CONNECTIONS 4 / 20 mA

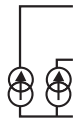
SUPPLY 24 VDC

ACTIVE SUPPLY (3 WIRES)

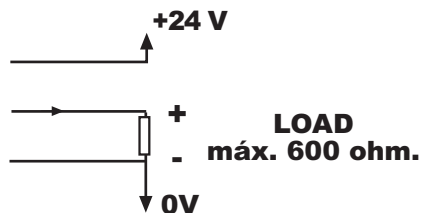
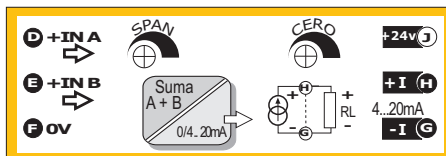
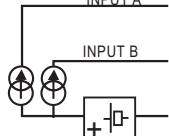
REFERENCES:

KR - (A + B) 420 / 420

ACTIVE
0-4 / 20 mA



PASSIVE
0-4 / 20 mA



SUPPLY 230 VAC

ACTIVE OUTPUT

REFERENCES:

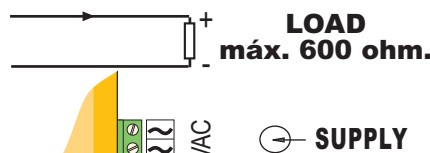
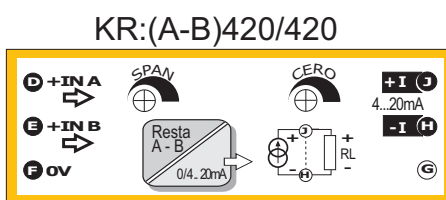
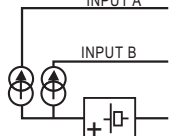
KR : (A+B) 420 / 420

KR : (A-B) 420 / 420

ACTIVE
0-4 / 20 mA



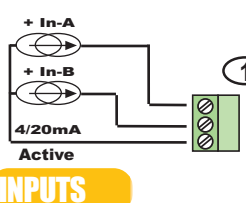
PASSIVE
0-4 / 20 mA



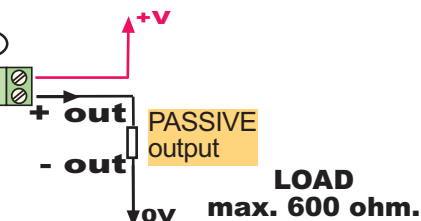
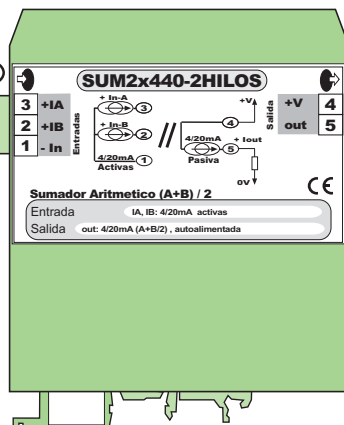
KR:(A+B)420/420

CONNECTIONS SUM2x440-2HILOS.

(Self supplied. 6 .32VDC, through



INPUTS



2 Active Inputs 4/20mA Adder (A+B) / 2 SUM2x440-2HILOS CE Passive Output 4/20mA

OUTPUT CONNECTIONS 0 / 10

SUPPLY 230 VAC / 24 VDC

REFERENCES:

ADDER

KR - (A-B) 010 / 010
KR : (A-B) 010 / 010

(24 VDC)
(230VAC)

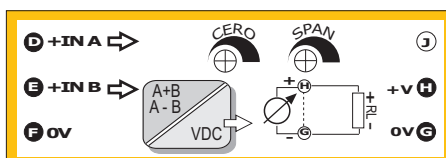
KR - (A+B) 010 / 010
KR : (A+B) 010 / 010

SUBTRACTOR

0/10 V

0/10 V

0V



OUTPUT CONNECTIONS 4 / 20 mA

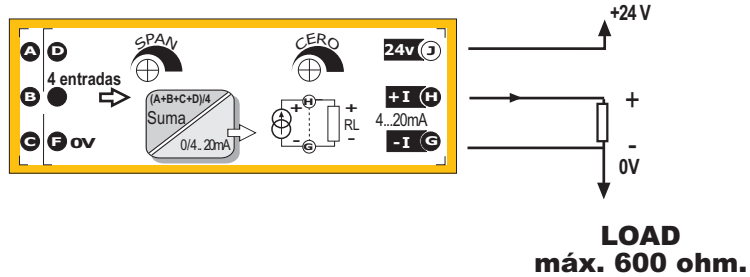
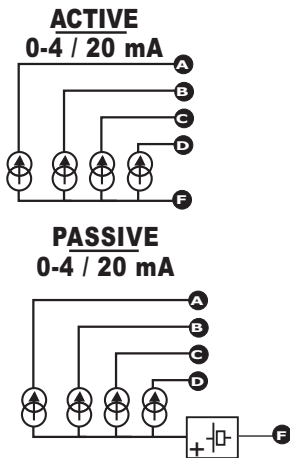
(FOR MULTIPLE INPUTS)

SUPPLY 24 VDC

ACTIVE OUTPUT (3 WIRES)

REFERENCES:

KR - (A + B+C+D) 420 / 420



SUPPLY 230 VAC

ACTIVE OUTPUT

REFERENCES:

KR : (A+B+C+D) 420 / 420

