

Series ISC

SIGNAL CONVERTERS WITH GALVANIC ISOLATION

* Signal Converters for :

Pt100 / RTD

Thermocouple J,K,T,E,S,R

Process in mA and Vdc

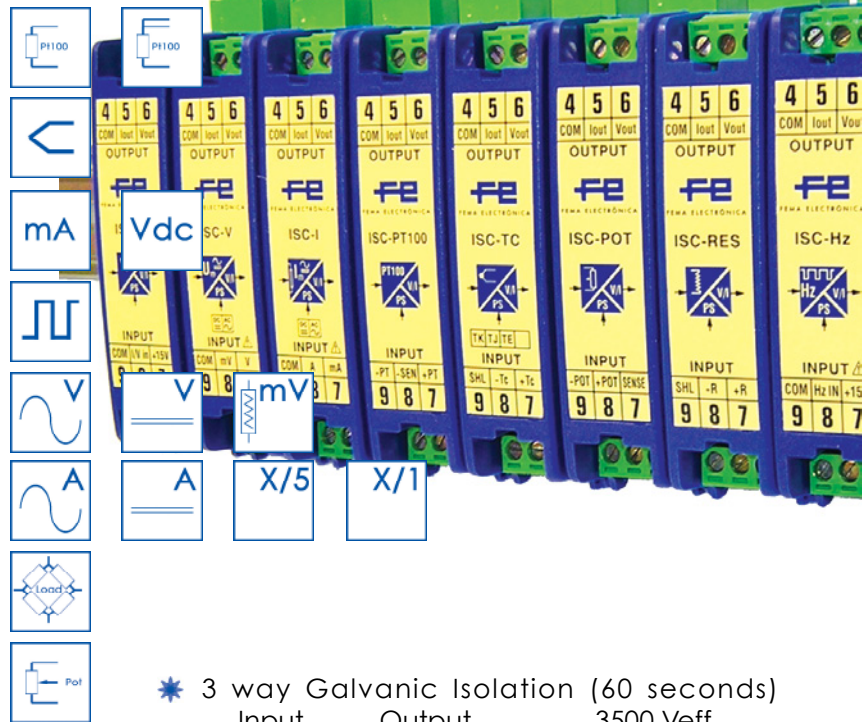
Frequencies

Voltages in AC and DC

Currents in AC and DC

Loadcells

Potentiometers



- * 3 way Galvanic Isolation (60 seconds)

Input - Output	3500 Veff
Input - Power	3500 Veff
Output - Power	1500/3500 Veff

- * Configurable
 - Output in 4/20 mA, 0/10 Vdc or others
 - Input ranges jumper selectable
 - Readjustment by frontal trimmers
 - Access to trimmers through front cover

- * Standard DIN rail mount

ISOLATED



INFORMATION
(1763R0)

FEMEA
ELECTRONICA

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TECHNICAL DATA – ISC

General Specifications

The ISC series is a full range of signal converters, with available outputs in 0/10 Vdc or 4/20 mA, which adds to the measuring system a high level of galvanic isolation between input, output and power circuits.

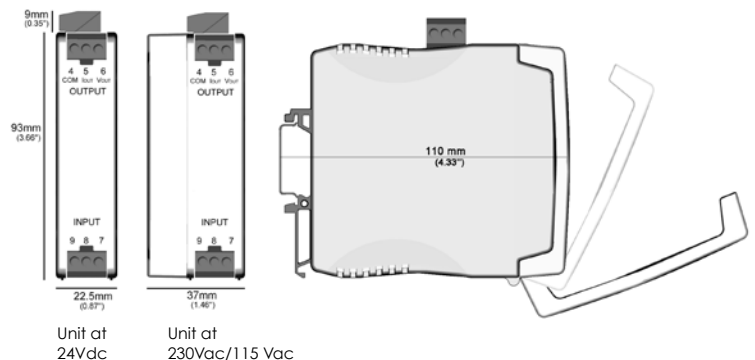
The wide range of available models cover applications from process signals in mA and Vdc, temperatures from thermocouple types J, K, T, E, S, R and PT100/RTD probes, voltages and currents in AC and DC, shunt signals, X/5 and X/1 current transformers, frequencies, potentiometers ...and more.

The high level of galvanic isolation provided by ISC units protects the inputs of the PLC or other remote acquisition system, by isolating at the same time the grounds or references of each circuit.

The accuracy of the ISC units is designed to be used with 12 bit acquisition systems.

All ISC units are allowed to configure several input and output ranges, adjusting the accuracy of the instrument to the desired useful signal range both at input and output. Adjustment potentiometers and range selection jumpers are both accessible through the front cover of the instrument.

Dimensions



IDEAL SOLUTION for converting and conditioning all type of analogue signals to standard process signals in mA or Vdc, which will be further retransmitted to a PLC or remote acquisition system, while protecting the inputs with high galvanic isolation levels and minimizing noise problems due to ground interconnections.

References

ISC	Model	Power	Adjust (examples)
	P	0 (230 Vac)	4/20 mA = 0/10 Vdc
	PT100	1 (115 Vac)	0/ 100°C = 4/20 mA
	TJ	6 (24 Vdc)	0/ 700°C = 4/20 mA
	TK		0/1200°C = 0/10 Vdc
	TT		0/ 400°C = 0/10 Vdc
	TE		0/ 800°C = 4/20 mA
	TS		0/1600°C = 4/20 mA
	TR		0/1700°C = 0/10 Vdc
	VDC		0/350Vdc = 0/10 Vdc
	VAC		0/175 Vac = 4/20 mA
	IDC		0/3.5 Adc = 4/20 mA
	IAC		0/5 Aac = 0/10 Vdc
	HZ		0/15000Hz = 0/10 Vdc
	LC		0/20 mV = 4/20 mA
	POT		0/100% = 4/20 mA
	RES		0/2KOhm = 4/20 mA

Technical Data

ACCURACY	<0.2% and <0.3%
LINEARITY	<0.1% and <0.2%
THERMAL DRIFT	<150ppM and <250 ppM/°C typical
RESPONSE TIME	<70 mSec. and <250 mSec.
POWER CONSUMPTION	230 VAC, 115 VAC, 24 VDC <3.8 VA
OUTPUTS ISOLATION	0/10 Vdc, 4/20 mA and others 3500 Veff - 60 Seconds
OUTPUTS IN Vdc	max 11 Vdc approx. min -1 Vdc approx. Load R > 1KOhm
OUTPUTS IN mA	max 22 mA approx. min -1.5 mA approx. Load R < 400 Ohm
OPERATING TEMP.	from 0 to +60 °C
STORAGE TEMP.	from -20 to +70 °C
PROTECTION	IP30
WEIGHT	120 gr. and 200 gr.
WIDTH	22,5 mm and 37mm
MOUNTING	Standard DIN rail

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