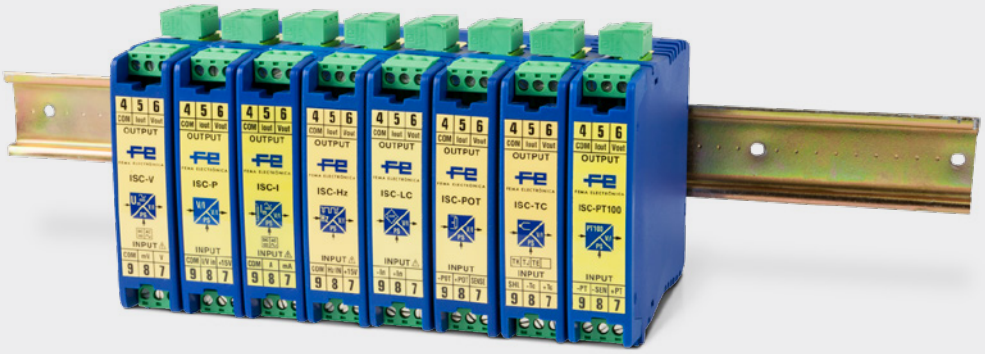
SERIES ISC



Output signal	4/20mA, 0/10Vdc, …
Mounting	DIN rail
Power	0 (230Vac) 1 (115Vac) 6 (24Vdc)
Main features	Wide range of accepted input signals Isolated circuits, 3 way isolation High isolation levels Configurable from front jumpers and potentiometers
Models	For Process For Pt100/RTD For Thermocouple J For Thermocouple K For Thermocouple T For Thermocouple E For Thermocouple S For Thermocouple R For DC Voltages For AC Voltages For DC Currents For AC Currents For Potentiometers For Resistances For Frequency For Load cells

The Series ISC is a complete range of signal converters for all type of industrial applications. The differential features are the high isolation it provides between input, output and power circuits, and the wide range of references covering from most usual process and temperature signals, to not so usual AC and DC voltages and currents up to 650 V and 5 A, frequencies, resistances, and more.

The Series ISC provides signal conversion from wide range of signals to standard process 4/20 mA and 0/10 Vdc, and similar signals.

The Series ISC mounts plug-in screw terminals for safe connections, a housing specifically designed at FEMA, and a practical standard DIN rail fixation.

The high isolation provided by the Series ISC makes a recommended instrument to protect the PLC inputs and remote instrumentation against overvoltages, ground loops, and electrical spurious.

In short, the Series ISC is a common use range of instrument, for industrial applications, with the aim of signal conversion and signal isolation.

MODELS

Model	ISC-P	ISC-PT100	ISC-TJ	ISC-TK
Input signals	FOR PROCESS 	FOR PT100/RTD (2 AND 3 WIRES) 	FOR THERMOCOUPLE J 	FOR THERMOCOUPLE K 
Input ranges	4/20mA, 0/20mA, 0/50mA, … 0/10Vdc, 0/1Vdc, ...	0/600ºC, 0/450ºC, 0/300ºC, 0/200ºC, 0/100ºC, -50/150ºC, -25/75ºC	0/700ºC, 0/400ºC, 0/250ºC, 0/150ºC	0/1200ºC, 0/700ºC, 0/400ºC, 0/250ºC, 0/150ºC
Output ranges	4/20mA, 0/10Vdc, ...	4/20mA, 0/10Vdc, ...	4/20mA, 0/10Vdc, ...	4/20mA, 0/10Vdc, ...
Channels	1	1	1	1
Excitation voltage	+15Vdc (max. 22mA)	- - -	- - -	- - -
Notes	- - -	Sensor break detection	Sensor break detection Automatic cold junction compensation	Sensor break detection Automatic cold junction compensation
Total error	<0,3%	<0,3%	<0,5%	<0,5%
Thermal drift	200ppm	250ppm	250ppm	250ppm
Step response	<70mSec.	<250mSec.	<250mSec.	<250mSec.
Power	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)
Consumption	<3W	<3W	<3W	<3W
Isolation Input/Output	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)
Isolation Power/Input	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)
Isolation Power/Output	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC
Protection	IP30	IP30	IP30	IP30
Particular functions of this model	Readjustable by potentiometers	Readjustable by potentiometers	Readjustable by potentiometers	Readjustable by potentiometers
Configuration	By potentiometers and jumpers	By potentiometers and jumpers	By potentiometers and jumpers	By potentiometers and jumpers
Mounting	DIN rail	DIN rail	DIN rail	DIN rail
Weight	<200gr.	<200gr.	<200gr.	<200gr.

ISC-TE	ISC-TT	ISC-TR	ISC-TS
FOR THERMOCOUPLE E	FOR THERMOCOUPLE T	FOR THERMOCOUPLE R	FOR THERMOCOUPLE S
0/800ºC, 0/500ºC, 0/350ºC, 0/175ºC, 0/100ºC	0/400ºC, 0/300ºC, 0/200ºC	850/1700ºC	0/1600ºC
4/20mA, 0/10Vdc, ...	4/20mA, 0/10Vdc, ...	4/20mA, 0/10Vdc, ...	4/20mA, 0/10Vdc, ...
1	1	1	1
- - -	- - -	- - -	- - -
Sensor break detection Automatic cold junction compensation	Sensor break detection Automatic cold junction compensation	Sensor break detection Automatic cold junction compensation	Sensor break detection Automatic cold junction compensation
<0,5%	<0,5%	<0,5%	<0,5%
250ppm	250ppm	250ppm	250ppm
<250mSec.	<250mSec.	<250mSec.	<250mSec.
0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)
<3W	<3W	<3W	<3W
3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)
3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)
3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC
IP30	IP30	IP30	IP30
Readjustable by potentiometers	Readjustable by potentiometers	Readjustable by potentiometers	Readjustable by potentiometers
By potentiometers and jumpers	By potentiometers and jumpers	By potentiometers and jumpers	By potentiometers and jumpers
DIN rail	DIN rail	DIN rail	DIN rail
<200gr.	<200gr.	<200gr.	<200gr.

MODELS

Model	ISC-VAC	ISC-VDC	ISC-IAC	ISC-IDC
Input signals	FOR AC VOLTAGE SIGNALS 	FOR DC VOLTAGE SIGNALS 	FOR AC CURRENT SIGNALS 	FOR DC CURRENT SIGNALS 
Input ranges	0/650Vac, 0/300Vac, 0/150Vac, 0/100Vac, 0/65Vac, 0/30Vac, 0/15Vac, 0/7,5Vac, 0/1Vac, 0/650mVac, 0/300mVac, 0/150mVac, 0/75mVac	0/650Vdc, 0/300Vdc, 0/150Vdc, 0/100Vdc, 0/65Vdc, 0/30Vdc, 0/15Vdc, 0/7,5Vdc, 0/1Vdc, 0/650mVdc, 0/300mVdc, 0/150mVdc, 0/75mVdc	0/5Aac, 0/3Aac, 0/2Aac, 0/1Aac, 0/500mAac, 0/300mAac, 0/200mAac, 0/100mAac	0/5Adc, 0/3Adc, 0/2Adc, 0/1Adc, 0/500mAdc, 0/300mAdc, 0/200mAdc, 0/100mAdc
Output ranges	4/20mA, 0/10Vdc, ...	4/20mA, 0/10Vdc, ...	4/20mA, 0/10Vdc, ...	4/20mA, 0/10Vdc, ...
Channels	1	1	1	1
Excitation voltage	- - -	- - -	- - -	- - -
Notes	Single phase AC voltages Measure in 'mean square value'	- - -	Single phase AC currents Measure in 'mean square value'	- - -
Total error	<0,5%	<0,5%	<0,5%	<0,5%
Thermal drift	250ppm	250ppm	250ppm	250ppm
Step response	<250mSec.	<70mSec.	<250mSec.	<70mSec.
Power	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)
Consumption	<3W	<3W	<3W	<3W
Isolation Input/Output	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)
Isolation Power/Input	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)
Isolation Power/Output	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC
Protection	IP30	IP30	IP30	IP30
Particular functions of this model	Readjustable by potentiometers	Readjustable by potentiometers	Readjustable by potentiometers	Readjustable by potentiometers
Configuration	By potentiometers and jumpers	By potentiometers and jumpers	By potentiometers and jumpers	By potentiometers and jumpers
Mounting	DIN rail	DIN rail	DIN rail	DIN rail
Weight	<200gr.	<200gr.	<200gr.	<200gr.

ISC-POT	ISC-RES	ISC-HZ	ISC-LC
FOR POTENTIOMETERS	FOR RESISTANCES	FOR FREQUENCY SIGNALS	FOR LOAD CELLS
0/100%, 0/50%, 0/25%, 0/12,5%	0/10KOhms, 0/5KOhms, 0/3KOhms, 0/1,5Kohms	0/50KHz, 0/30KHz, 0/20KHz, 0/10KHz, 0/5KHz, 0/3KHz, 0/2KHz, 0/1KHz, 0/500Hz, 0/300Hz, 0/200Hz, 0/100Hz, 0/60Hz, 0/40Hz, 0/20Hz	0/30mVdc, 0/20mVdc, 0/10mVdc
4/20mA, 0/10Vdc, ...	4/20mA, 0/10Vdc, ...	4/20mA, 0/10Vdc, ...	4/20mA, 0/10Vdc, ...
1	1	1	1
+1Vdc	- - -	+15Vdc (20mA) y 9,2Vdc (for NAMUR)	- - -
Potentiometers with nominal value between 100 Ohms and 1 Mohm	2 wire measure	Accepts NPN, PNP, push-pull, NAMUR, pick-up, sinusoidal up to 24Vac, sinusoidal up to 200Vac	Does not include power for the load cell
<0,3%	<0,3%	<0,3%	<0,3%
250ppm	250ppm	250ppm	250ppm
<70mSec.	<70mSec.	Depends on range	<75mSec.
0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)	0 (230Vac) 1 (115Vac) 6 (24Vdc isolated)
<3W	<3W	<3W	<3W
3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)
3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)	3500Veff (50Hz) (1 minute)
3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC	3500Veff (50Hz) (1 minute) in AC 1000Veff (50Hz) (1 minute) In DC
IP30	IP30	IP30	IP30
Readjustable by potentiometers	Readjustable by potentiometers	Readjustable by potentiometers	Readjustable by potentiometers
By potentiometers and jumpers	By potentiometers and jumpers	By potentiometers and jumpers	By potentiometers and jumpers
DIN rail	DIN rail	DIN rail	DIN rail
<200gr.	<200gr.	<200gr.	<200gr.

How to order

	Model	Power	Input signal	Output signal
ISC -	*P* -	*6* -	*0/10Vdc* -	*4/20mA*
	- P	- 0 *(230Vac)*	- 4/20mA	- 4/20mA
	- PT100	- 1 *(115Vac)*	- 0/1000ºC	- 0/10Vdc
	- TJ	- 6 *(24Vdc isolated)*	- 0/650Vac	- ...
	- TK		- 0/5Aac	
	- TE		- ...	
	- TT			
	- TR			
	- TS			
	- VAC			
	- VDC			
	- ...