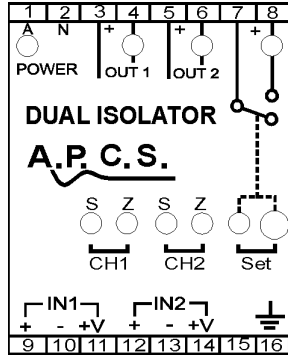


Input Connections - Special Function Isolator SFI762



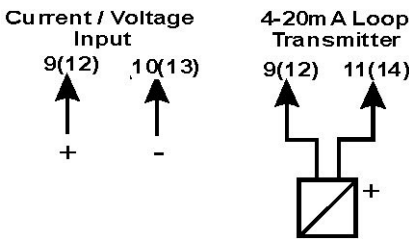
All the input options specified on this document can be applied to IN1 (input 1) and IN2 (input 2).

All input types for SFI762 can be mixed, for example IN1 could be 4-20mA while IN2 is thermocouple.

All pin number connections without brackets are for IN1 and while pin numbers with brackets are for (IN2).

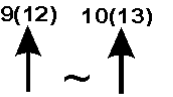
Link Selectable Input [1]

Use selection table on main data sheet to set range. If the input current range is 4-20mA then the 24Vdc on terminal 10(14) can be used for loop-powered transmitters.



AC voltage 10mV to 500V span [30]

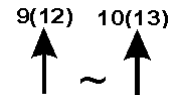
Required calibration range is factory configured.



True rms [32]

Required calibration range is factory configured.

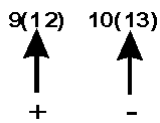
Input range: 10mV up to 500Vac
10mA up to 250mAac via shunt



Input impedance: 12kΩ for 10mV input
> 1MΩ for 500V input
Offset: up to 200% of range
Linearity and drift error: < 0.5% of range

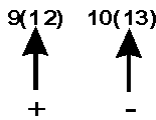
DC Voltage [21]

Required calibration range is factory configured.
Input range: 200mV up to 2kV.
Input impedance: > 1MΩ.
Linearity and drift error: < 0.2% of range.



Millivolt [22]

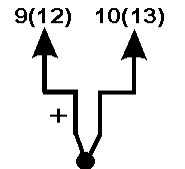
Required calibration range is factory configured.
Input range: > 1mV
Input impedance: > 1MΩ.
Linearity and drift error: < 0.2% of range.



Thermocouple [33]

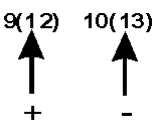
Linearised: 0.2%
Ambient operating temperature range: -10...+65°C.
Cold junction comp: 0.02% per °C C/J change.

Input offset adjustment: 200% of range.
Internal Offset Adjust: ±50%.
Input range: 4mV up to 80mV.
Input impedance: > 1MΩ.



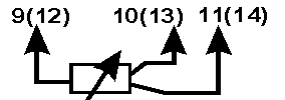
Bipolar [23]

Required calibration range is factory configured.
Input range bipolar: ±0.5mV to ±2kV
Input impedance: > 1MΩ.
Linearity and drift error: < 0.2% of range.



RTD [34]

Required calibration range is factory configured.



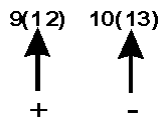
Temperature drift error: 0.02% / °C within operating range.

Input range: 7Ω up to 230Ω (20°C up to 650°C, Pt100).

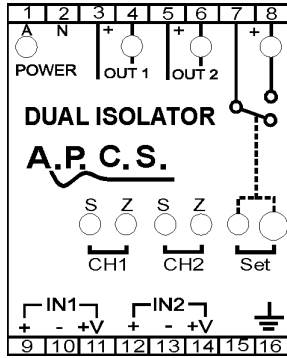
Sensor excitation: 350µA.

DC current 10A max [24]

Required calibration range is factory configured..



In the interest of development and improvement, APCS reserve the right to amend, without notice, details contained in this publication. APCS will accept no legal liability for any errors, omissions or amendments.



All the input options specified on this document can be applied to IN1 (input 1) and IN2 (input 2).

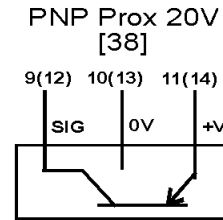
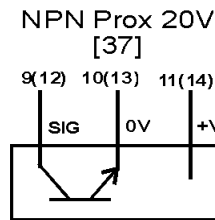
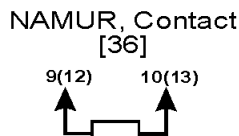
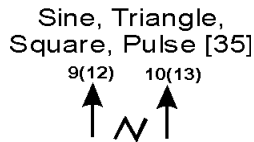
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Frequency Inputs Inputs 35 to 38

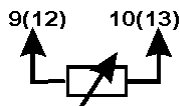
Required calibration range is factory configured.

Calibration accuracy:	<0.2% of range.
Linearity:	<0.2% of range.
Ambient operating temperature range:	-20...+70°C.
Temperature drift error:	< 0.5% within operating range.
Response time for 0.5% ripple at 10% of signal:	$T_{90} = \frac{20sec}{F_{max}}$
Internal offset adjustment:	±50% typical.
Input range:	5Hz up to 5kHz.
Input level:	0.1Vpp sine up to 50Vdc pulse.
Excitation for NAMUR sensor:	5V/1mA (or contact).



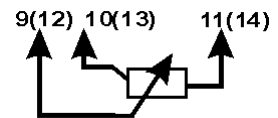
Resistance - constant current excitation [39]

This input card consists of a precision current source adjustable by a 15-turn potentiometer located on the input card. A buffer amplifier is used to condition the input voltage to the uniform card output of 0 – 1V.



Potentiometer 3W voltage excited [42]

Excitation voltage: 2.5V.



Calibration accuracy:	<0.5%.
Linearity:	<0.5%.
Temperature drift error:	<0.5% within operating range (not taking account of input lead resistance).
Input range:	50Ω up to 10kΩ.
Excitation current:	0.6mA max.