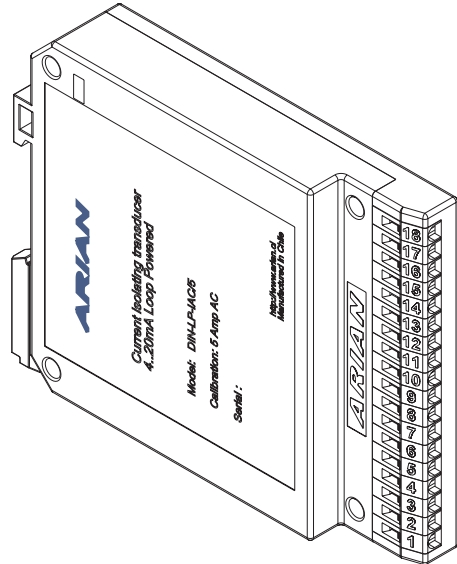


DIN-LP series Loop Powered 4... 20mA Isolating Transducers

- Isolates voltage and current signals for PLC input as loop powered 4...20 mA.
- Do not need any additional power supply.
- 5 years guarantee.



General description

The DIN-LP isolating transducers modules allow safe and reliable inputs for PLC's 4... 20 mA analog signals.

They do not require any additional power supply because the modules are powered by the 4... 20 mA output current loop, simplifying installation and wiring.

Input signals are voltages and currents coming from sensors or transducers (eg. load cells, current transformers). The output is a galvanically isolated 4... 20 mA loop proportional to the input.

Galvanic isolation eliminates the problems produced by plant ground potential differences and reduces the ones produced by electromagnetic interference. The isolation provided by each module allows to use nonisolated 4... 20mA PLC input channels.

Other applications can be:

- Inflammable or explosive environment instrumentation.
- Thermocouple compensated cable saving in long distances.
- Generating floating ground for several 4...20mA instruments interconnect.
- Measure differential voltage (by example, load cell)
- PC analog signal input for laboratory use.

Technical specifications:

OUTPUT:	Maximum operation voltage.	30 V
	Minimum operation voltage.	$3.6 V + 20 \text{ mA} \cdot R_L$
	Isolation:	4000 V min. Magnetic transformer based isolation, no optocoupler used.
	Temperature stability:	25 ppm / °C max.
	Long term stability:	20 ppm / year max.

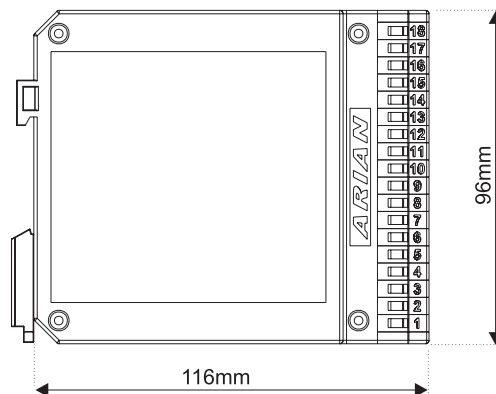
Note:

AC voltage and current modules are calibrated for RMS value of a sinusoidal input, but the measurement is made by absolute value average. The input frequency range is 40-400Hz. and the maximum error is 0.5%.

CONSTRUCTION:	Material:	Fiberglass reinforced polyester; IP65
	Total dimensions:	23 mm wide, 98 mm height , 116 mm deep.
	Assembly	Rail DIN
	Weight:	100 grams.
	Operation temperature:	-10 ... 50 °C.

CE DIRECTIVES: 2004/108/EC (EMC) Electromagnetic compatibility directive

STANDARDS:	EMC immunity:	EN61326-1:2006 Industrial locations.
	EMC emissions:	EN61326-1:2006 Class A.



Models:

	High input range for 20mA output	Input impedance or current input.	Use with
DIN-LP-VAC	adjustable, 5 to 600Vac	< 500uA	High voltage AC network
DIN-LP-MVDC	adjustable, 10 to 80mVdc	>10Mohms	Load cells, Ph sensors
DIN-LP-VDC	adjustable, 5 to 600Vdc	< 500uA	DC voltages
DIN-LP-VDC2	adjustable, 80mV to 5V dc	< 62uA	
DIN-LP-IAC5	fixed, 5 Amp. Ac	0.01 ohms	eg. 1000A/5A current transformer
DIN-LP-420MA	fixed, 4-20mA	2.7ohms	4-20ma to 4-20ma isolator
DIN-LP-50MV	fixed, 50mVdc	4.3 Kohms	50mV current shunts
DIN-LP-60MV	fixed, 60mVdc	4.3 Kohms	60mV current shunts

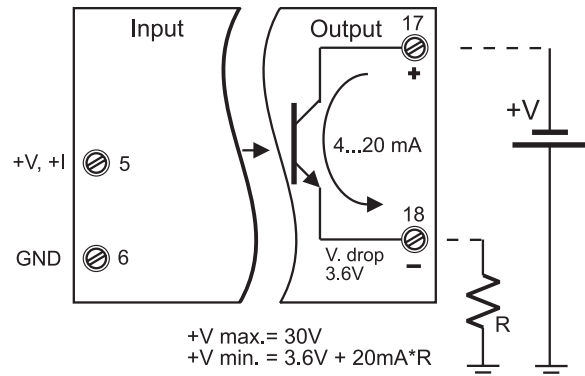
Ordering Code examples:

Specify factory calibration when ordering adjustable models, for example:

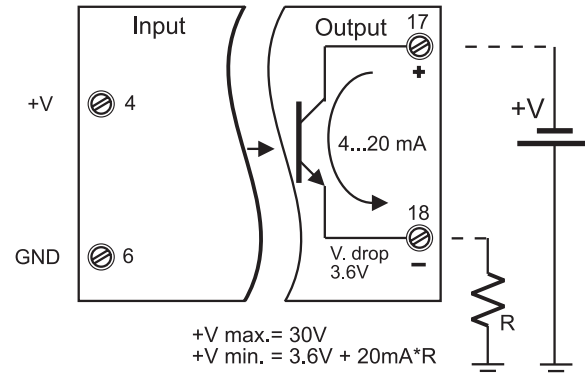
Part code	Calibration
DIN-LP-VAC / 300V	0..300Vac to 4..20mA
DIN-LP-VDC / 120V	0..120Vdc to 4..20mA
DIN-LP-MVDC / 27mV	0..27mVdc to 4..20mA
DIN-LP-IAC5	0.5 Amp Ac to 4..20mA

Connections:

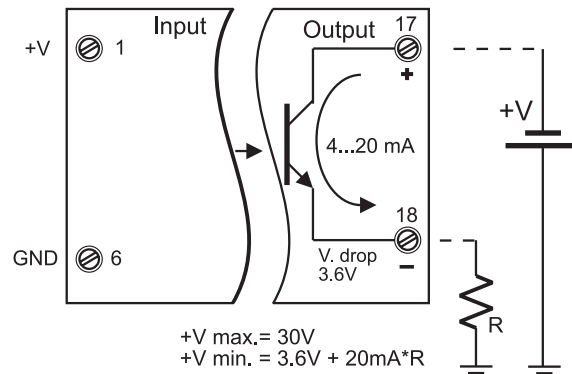
DIN-LP-MVDC
DIN-LP-420MA
DIN-LP-IAC5



DIN-LP-50MV
DIN-LP-60MV
DIN-LP-VDC2

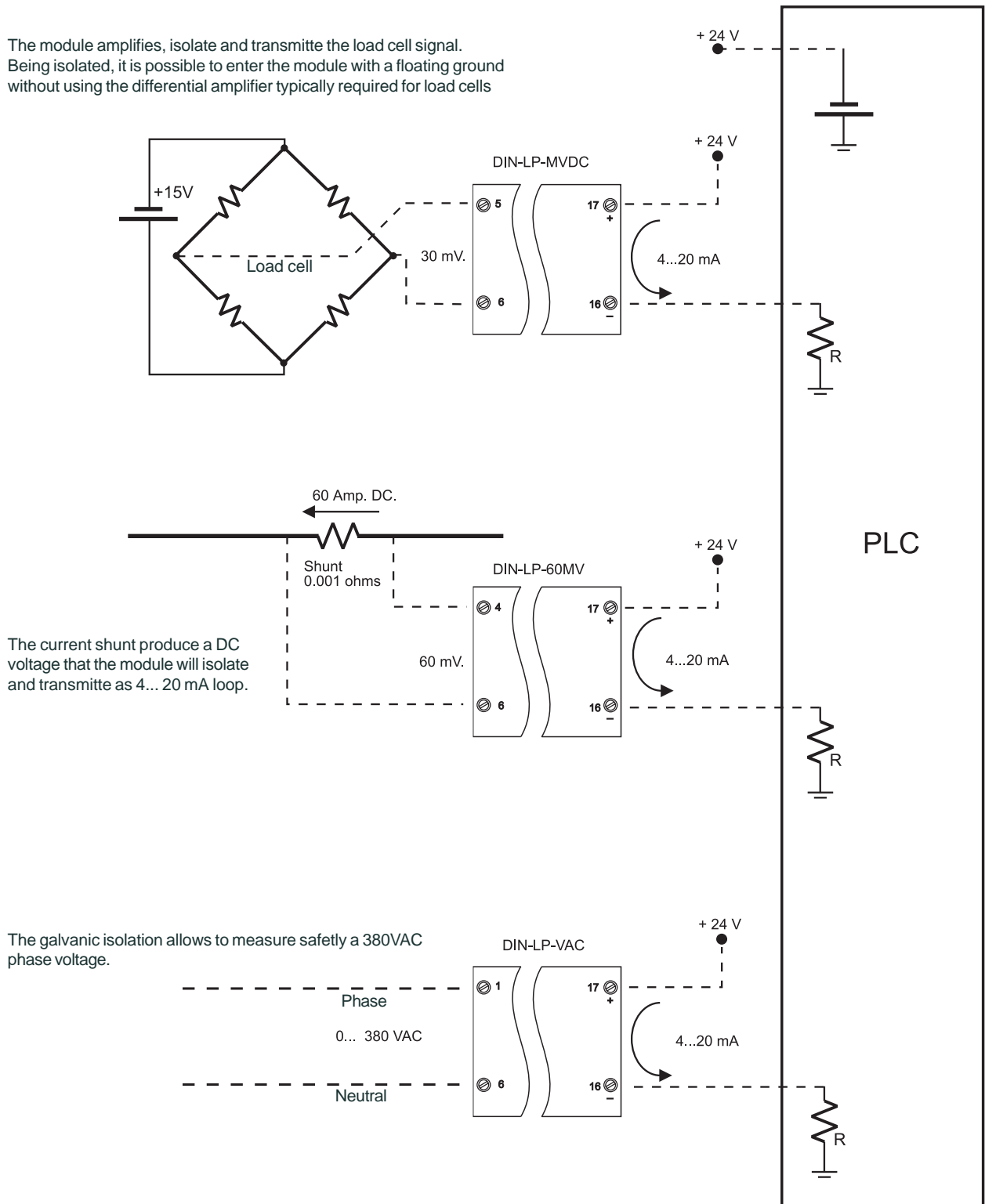


DIN-LP-VAC
DIN-LP-VDC



Application example, multiple isolated 4.. 20mA PLC Inputs

The module amplifies, isolate and transmits the load cell signal.
Being isolated, it is possible to enter the module with a floating ground without using the differential amplifier typically required for load cells



More information:

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