

# MCR-SGA-LN-DC - Strain gage/load cell amplifier



5603007

<https://www.phoenixcontact.com/us/products/5603007>

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Signal conditioner, low noise, for strain gage/load cell



The figure shows standard version

## Product description

Universal low noise strain gage/load cell amplifier. 1.25 to 12-volt adjustable excitation, 0-5 V, 0-10 V,  $\pm 5$  V,  $\pm 10$  V and 4-20 mA output

## Commercial data

Item number	5603007
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C401
Product key	DK1118
GTIN	4046356134286
Weight per piece (including packing)	184.6 g
Weight per piece (excluding packing)	184.6 g
Customs tariff number	85389091
Country of origin	US

## Technical data

### Product properties

Product type	Signal conditioner
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### Electrical properties

#### Supply

Supply voltage range	11 V DC ... 30 V DC
Typical current consumption	105 mA
Max. current consumption	250 mA (350 W, full bridge at 10 V Excitation)

### Input data

#### Signal

Description of the input	Excitation voltage
Voltage input signal	1.25 V ... 12 V
Max. current input signal	100 mA
Protective circuit	Short-circuit and thermal protection
Input impedance	10 GΩ
Bridge resistance	120 Ω ... 20000 Ω
Gain range	1 V ... 10000 V (13 steps)
Input range of the sensor	0.1 mV ... 1000 mV

### Output data

#### Signal

Voltage output signal	0 V ... 5 V
	0 V ... 10 V
	-10 V ... 10 V
	-5 V ... 5 V
Current output signal	4 mA ... 20 mA

### Connection data

Connection method	COMBICON plug-in screw terminal block
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 12

### Dimensions

Width	22.5 mm
Height	99 mm
Depth	111 mm

### Environmental and real-life conditions

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## Ambient conditions

Ambient temperature (operation)	-25 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	3300 m (Above sea level)
Permissible humidity (operation)	10 % ... 90 %

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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 7(a), 7(c)-I

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
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