



**High  
Functionality**

# Universal Isolation Amplifier DB 6200

Isolation And Conversion Of  
Bipolar And Unipolar Industrial Signals

With the configurable Isolation Amplifier DB 6200 DRAGO is extending its offer on high functional and high reliable components of the interface technique.

The Isolation Amplifier DB 6200 is used for isolation and conversion of bipolar and unipolar industrial signals. Due to the easy selection of the input and output ranges, the new universal power supply and the ultra small housing the Isolation Amplifier is suitable for flexible use. High reliability and Protective Separation are further characteristics that make the DB 6200 unrivaled.

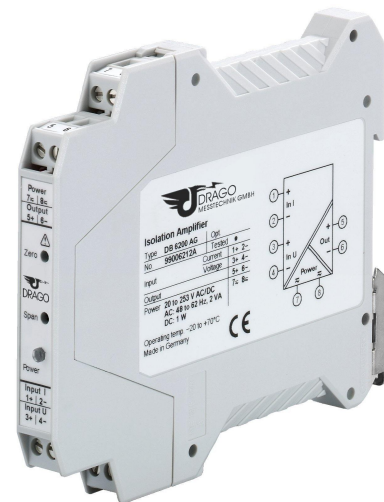
The order key allows you to select the desired input and output ranges to which the unit will be adjusted at the factory before delivery. These can be easily reconfigured at any time by means of DIP switch settings. Subsequent readjustment or a measured range compensation can then be performed at the zero/span potentiometers on the front panel. Also the cut-off frequency can be adapted to the measurement task by using the DIP Switch.

The small housing with 12.5 mm width saves space in your switch cabinet and facilitates by the practical plug-in screw terminal blocks the assembly. For range setting a simple housing unblocking is installed which makes it possible to reach easily all control elements on the mounting rail.

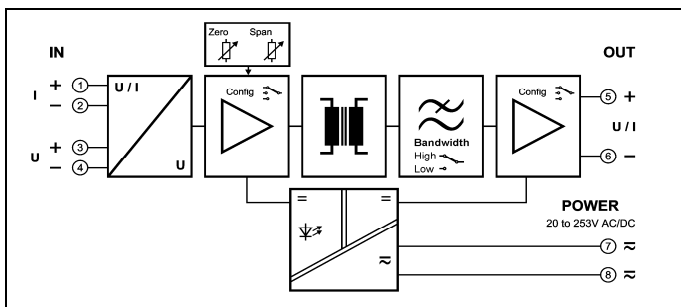
The new universal power pack for 20 ... 253 V AC/DC means the DB 6200 can be used anywhere in the world, with all mains power supplies. The unit's high efficiency contributes significantly to reducing the unit's own heat generation. This is reflected in extremely high reliability and long-term stability. A green LED on the front of the unit has been provided to monitor the power supply.

- **Easy selection of input and output range**  
Input and output range for unipolar and bipolar signals can be easily set by using DIP switch
- **Universal power supply for 20...253 V AC/DC**  
Applicable world-wide for all common supply voltages
- **3-port isolation**  
Protection against erroneous measurements due to parasitic voltages or ground loops
- **Ultra small sized housing**  
12.5 mm housing with plug-in screw terminal blocks
- **High bandwidth; high accuracy**  
No distortion; no falsification of measured signal
- **Protective Separation**  
Protects service personnel and downstream devices against impermissibly high voltage
- **Maximum reliability**  
No maintenance costs
- **5 Years Warranty**

**5 Years Warranty**  
Defects occurring within 5 years from delivery are remedied free of charge at our plant (carriage and insurance paid by sender).



### Block diagram



**Technical Data**

Input	Voltage	Current
Input signals (terminal/switch selectable)	$\pm 10\text{ V}^{1)}$ 0 ... 10 V 2 ... 10 V $\pm 5\text{ V}$ 0 ... 5 V 1 ... 5 V	$\pm 20\text{ mA}$ 0 ... 20 mA 4 ... 20 mA $\pm 10\text{ mA}$ 0 ... 10 mA 2 ... 10 mA
Input resistance	Approx. 1 M $\Omega$	Approx. 25 $\Omega$
Input capacitance	Approx. 1 nF	Approx. 1 nF
Overload	Voltage limitation via 30 V Z-Diode, max. continuous current 30 mA	$\leq 200\text{ mA}$
Output	Voltage	Current
Output signals (switch selectable)	$\pm 10\text{ V}^{1)}$ 0 ... 10 V 2 ... 10 V $\pm 5\text{ V}$ 0 ... 5 V 1 ... 5 V	$\pm 20\text{ mA}$ 0 ... 20 mA 4 ... 20 mA $\pm 10\text{ mA}$ 0 ... 10 mA 2 ... 10 mA
Load	$\leq 10\text{ mA}$ (1 k $\Omega$ @ 10 V)	$\leq 12\text{ V}$ (600 $\Omega$ @ 20 mA)
Linear transmission range	unipolar: - 2 ... + 110 % bipolar: - 110 ... + 110 %	
Ripple	$< 10\text{ mV}_{\text{rms}}$	
General Data		
Transmission error	0.1 % of final value	
Temperature coefficient <sup>2)</sup>	100 ppm/K final value	
Zero/Span compensation	$\pm 10\%$	
Cut-off frequency (-3 dB)	$> 10\text{ kHz}^{1)}$ switchable to $< 30\text{ Hz}$	
Test voltage	4 kV, 50 Hz Input against output against power supply	
Working voltage <sup>3)</sup> (Basic Insulation)	Up to 1000 V AC/DC for overvoltage category II and pollution degree 2 acc. to EN 61010-1 between all circuits.	
Protection against electrical shock <sup>3)</sup>	Protective separation according to EN 61140 by reinforced insulation in accordance with EN 61010-1 up to 600 V AC/DC for overvoltage category II and pollution degree 2 between all circuits.	
Ambient temperature	Operation -20 to +70 °C (-4 to +158 °F) Transport and storage -35 to +85 °C (-31 to +185 °F)	
Power supply	20 ... 253 V AC/DC AC 48 ... 62 Hz, approx. 2 VA DC approx. 1.0 W	
EMC <sup>4)</sup>	EN 61326 -1	
Construction	12.5 mm housing, protection type: IP 20	
Weight	Approx. 100 g	

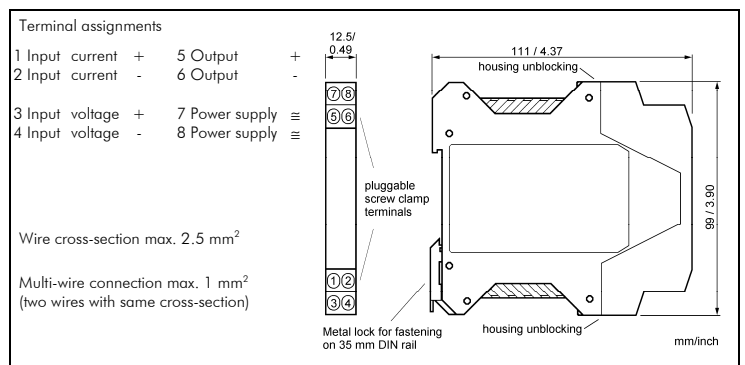
- 1) Factory setting, if no other information is given by ordering
- 2) Average TC in specified operating temperature range
- 3) As far as relevant the standards and rules mentioned above are considered by development and production of our devices. In addition relevant assembly rules are to be considered by installation of our devices in other equipments. For applications with high working voltages, take measures to prevent accidental contact and make sure that there is sufficient distance or insulation between adjacent situated devices.
- 4) Minor deviations possible during interference

**Ordering Table For Factory Setting**

DB 6200 AG	- XX	- YY		
	Input	Output		
Range	XX/YY			
$\pm 10\text{ V}$	00	$\pm 20\text{ mA}$	06	
0 ... 10 V	01	0 ... 20 mA	07	
2 ... 10 V	02	4 ... 20 mA	08	
$\pm 5\text{ V}$	03	$\pm 10\text{ mA}$	09	
0 ... 5 V	04	0 ... 10 mA	10	
1 ... 5 V	05	2 ... 10 mA	11	

Example: Input:  $\pm 5\text{ V}$ , Output: 4 ... 20 mA  
Order No.: DB 6200 AG - 03 - 08

**Dimensions**



**Product line**

Devices	Order No.
Universal Isolation Amplifier, configurable	DB 6200 AG - XX - YY

If no information is given by ordering, the devices are delivered with the standard configuration: Input signal  $\pm 10\text{ V}$ , Output signal  $\pm 10\text{ V}$ .

Subject to change!