Bipolar Isolation Amplifier DB 6200

Isolation and Conversion of Bipolar and Unipolar Industrial Standard Signals

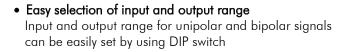
The Isolation Amplifier DB 6200 is used for isolation and conversion of bipolar and unipolar industrial signals.

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 measured range compensation can then be performed at the zero/scan 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.



- Universal power supply for 20...253 V AC/DC Applicable world-wide for all common supply voltages
- 3-port isolation

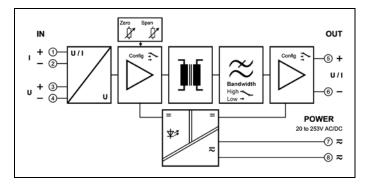
Protection against erroneous measurements due to parasitic voltages or ground loops

- 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

Defects occurring within 5 years from delivery date shall be remedied free of charge at our plant (carriage and insurance paid by sender)



Block diagram







Technical Data

Input	Voltage		Current			
Input signals	± 10 V 0 10 V	2 10 V	± 20 mA	0 20 mA	4 20 mA	
(terminal/switch selectable)	± 5 V 0 5 V	1 5 V	± 10 mA	0 10 mA	2 10 mA	
Input resistance	Approx. 1 MΩ		Approx. 25	Ω		
Input capacitance	Approx. 1 nF		Approx. 1 n	F		
Overload	Voltage limitation via 3	0 V Z-Diode,	≤ 200 mA			
	max. continuous currer	nt 30 mA				
Output	Voltage		Current			
Output signals	± 10 V 0 10 V	2 10 V	\pm 20 mA	0 20 mA	4 20 mA	
(switch selectable)	± 5 V 0 5 V	1 5 V	\pm 10 mA	0 10 mA	2 10 mA	
Load	≤10 mA (1 kΩ at 1	0 V)	$\leq 12 \text{ V}$ (6	600 Ω at 20 mA)		
Linear transmission range	unipolar: - 2 + 110	% bipolar: - 110 ·	+ 110 %			
Residual ripple	$< 10 \text{ mV}_{\text{rms}}$					
General Data						
Transmission error	< 0.1 % full scale					
Temperature coefficient ¹⁾	< 100 ppm/K					
Zero/Span compensation	± 10 %					
Cut-off frequency -3 dB (switchable)	10 kHz 30 Hz					
Response time T ₉₉	80 µs 20 ms					
Test voltage	4 kV AC, 50 Hz, 1 mir	. Input against outp	out against power	r supply		
Working voltage ²⁾ (Basic Insulation)	1000 V AC/DC for overvoltage category II and pollution degree 2 acc. to EN 61010-1					
Protection against electrical shock ²⁾	Protective separation according to EN 61140 by reinforced insulation in accordance with EN					
	up to 600 V AC/DC for overvoltage category II and pollution degree 2 between all circuits					
Ambient temperature	Operation	- 20 to + 70 °C	C (-4 to + 15	58 °F)		
	Transport and storage	- 35 to + 85 °C		35 °F)		
Power supply	20 253 V AC/DC	AC 48 62 Hz,				
		DC approx. 1.0 V	V			
EMC ³⁾	EN 61326 -1					
Construction	12.5 mm (0.49") housi	ng, protection class IP 2	0, mounting on 3	35 mm DIN rail a	cc. to EN 60715	
Weight 1) Average TC related to full scale value in specified opera	Approx. 100 g					

Average TC related to full scale value in specified operating temperature range, reference temperature 23 °C
For applications with high working voltages, ensure there is sufficient spacing or isolation from neighboring devices and protection against electric shocks.
Minor deviations possible during interference

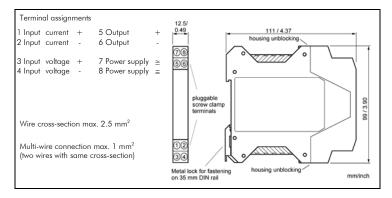
Ordering Table For Factory Setting

DB 6200 AG	- XX Input	- YY Output	
Range	XX/YY		
±10 V	00	± 20 mA	06
0 10 V	01	0 20 mA	07
2 10 V	02	4 20 mA	08
± 5 V	03	± 10 mA	09
0 5 V	04	0 10 mA	10
1 5 V	05	2 10 mA	11

Example:

Input: ± 5 V, Output: 4 ... 20 mA Order No.: DB 6200 AG - 03 - 08

Dimensions



Subject to change!

Product line

Device	Order No.
Bipolar 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 V, Output signal \pm 10 V.