


E-DR-ADLM

Digital Strain Gauge Amplifier

DR-ADLM

● Characteristics

0620 - LOAD MEASURING - FORCE - OVERLOAD

	- Input:	up to 2 strain gauge bridges (options available)
	- Input sensitivity:	0,1...5 mV/V (strain gauge)
	- Sensor supply:	5 VDC (strain gauge)
	- Analogue output:	4...20 mA / 0...10 V (options available)
	- Voltage supply:	24 VDC ±20%
	- Resolution:	12 / 14 / 15 / 16 bit
	- Combined error:	0,2% of end scale value
	- Ingress protection:	IP 20
	- Taring:	with external drive and key
	- Interface:	RS485, USB
	- Enclosure:	plastics PA66 GF30 for top hat rail

● Technical Data

Input		
Strain gauge:	Amplifier:	up to 2 strain gauge full bridges 350 Ω (summation of signal)
	Sensitivity:	0,1...5 mV/V (programmable)
Standard signal:	Current:	0(4)...20 mA
Option:	Voltage:	0...10 V
Output		
Analogue:	0...10 V and 4...20 mA (standard)	
Optionen:	0...10 V und 0...20 mA	
	2...10 V und 4...20 mA	
	2...10 V und 0...20 mA	
Current:	load <500 Ω	
Voltage:	load resistance 10 kΩ minimum	
Interface		
Interface 1:	RS485 (configuration and evaluation)	
Interface 2:	USB 2.0 (configuration and evaluation), under front cover	
	Type: Mini-B port	
Optional interface:	currently not available	
Accuracy		
Resolution:	12 / 14 / 15 / 16 bit (programmable)	
at measuring rate:	128 / 32 / 16 / 8 per second	
Combined error:	± 0,2% of end scale value	
Temperature coefficient.:	<50 ppm/K	
Measuring rate:	10 ms...5 s (programmable)	
Filter:	10 ms...5 s (programmable)	

● Applications

The digital measuring amplifier is suitable for nearly all applications where strain gauge sensors are used. It can be adapted easily to local conditions via its interface. Available outputs for further processing are standard signal and RS485.



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● Technical Data (Continued)

Power Supply

Voltage:	24 VDC, ±20%
Power consumption:	with options approx. 1,5 W
Sensor supply:	5 VDC, 35 mA maximum

Environmental Conditions

Operating temperature:	-10...+60°C
Storing temperature:	-20...+70°C

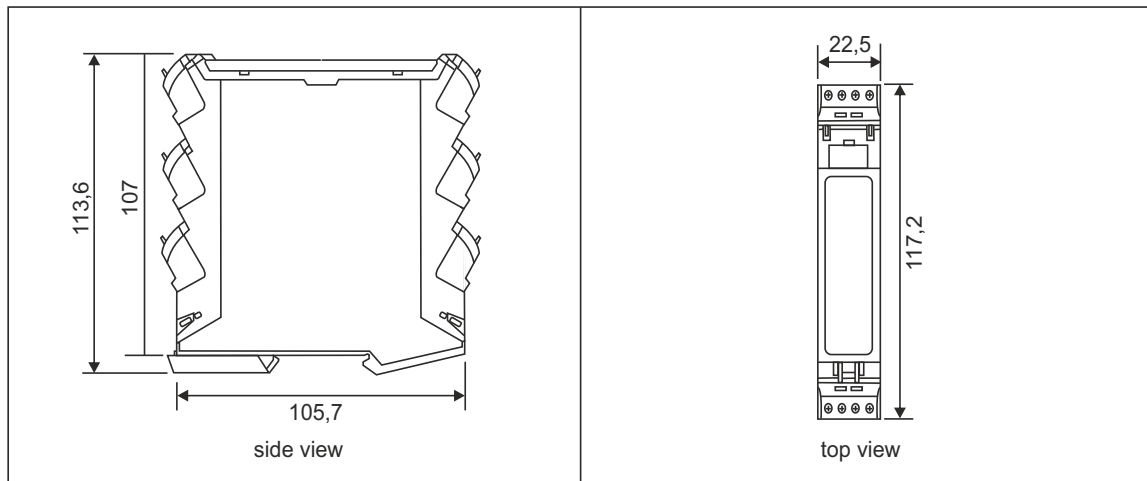
Tare

External function:	Active (drive with external 24 VDC) Option: Passive (drive with potential free relay point)
Internal function:	Key under front cover

Mechanics

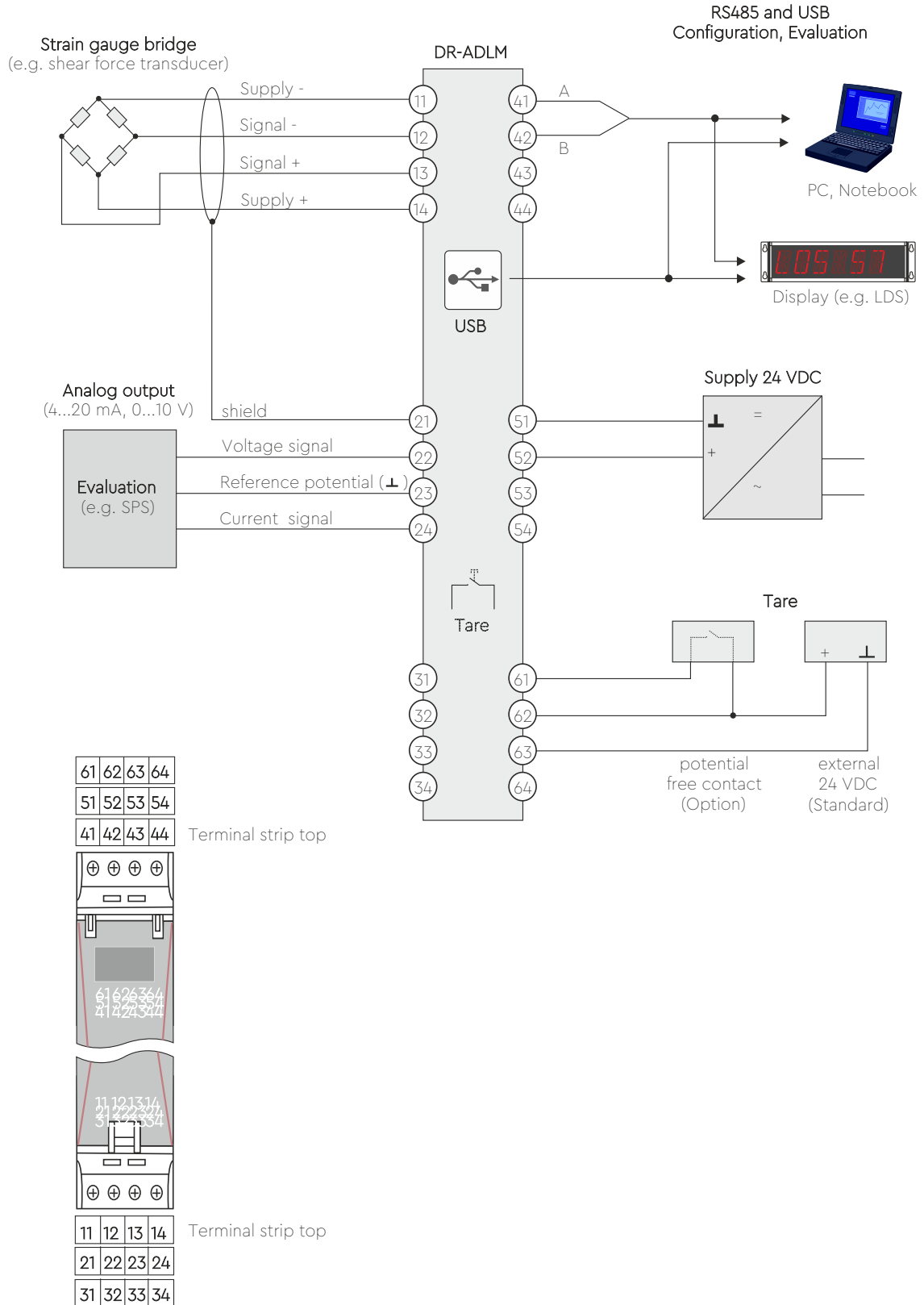
Case DR 22,5:	
Dimensions:	117,2x22,5x113,6 mm
Material:	PA66 GF30
Color:	black
Flammability:	UL 94 V-0
Mounting:	DIN rail TS 35
Protection:	IP 20
Weight:	approx. 180 g
Electrical connection:	6 plug-in terminal strips 4-pole
Clamping range:	0,13...3,31 mm ²

● Dimensions (in mm)



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● *Electrical Connection*



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● Order Code

B	D	X	X	X	X	X	X	-	X	X
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Input:	Strain gauge 0,1...5 mV/V 0(4)...20 mA 0...10 V	A 6 4								
Output:	4...20 mA, 0...10 V (standard) 0...20 mA, 2...10 V 4...20 mA, 2...10 V 0...20 mA, 0...10 V	8 9 1 2								
Optional interface:	Without		0							
Tare:	Externally (standard) Internally			0 1						
Supply:	24 VDC				0					
Enclosure:	DR 22,5						C			
Configuration:	Factory setting ¹⁾ Customized (please specify) ²⁾								0 1	
Special model:	No Yes (please specify)									0 1

1) Factory setting: Sensitivity: 3 mV/V / Resolution: 16 bit / Measuring rate: 5/s / Filter: 1s
 2) Possible options are within the limits of technical data as described in this data sheet. If values are not given, factory settings will be used.