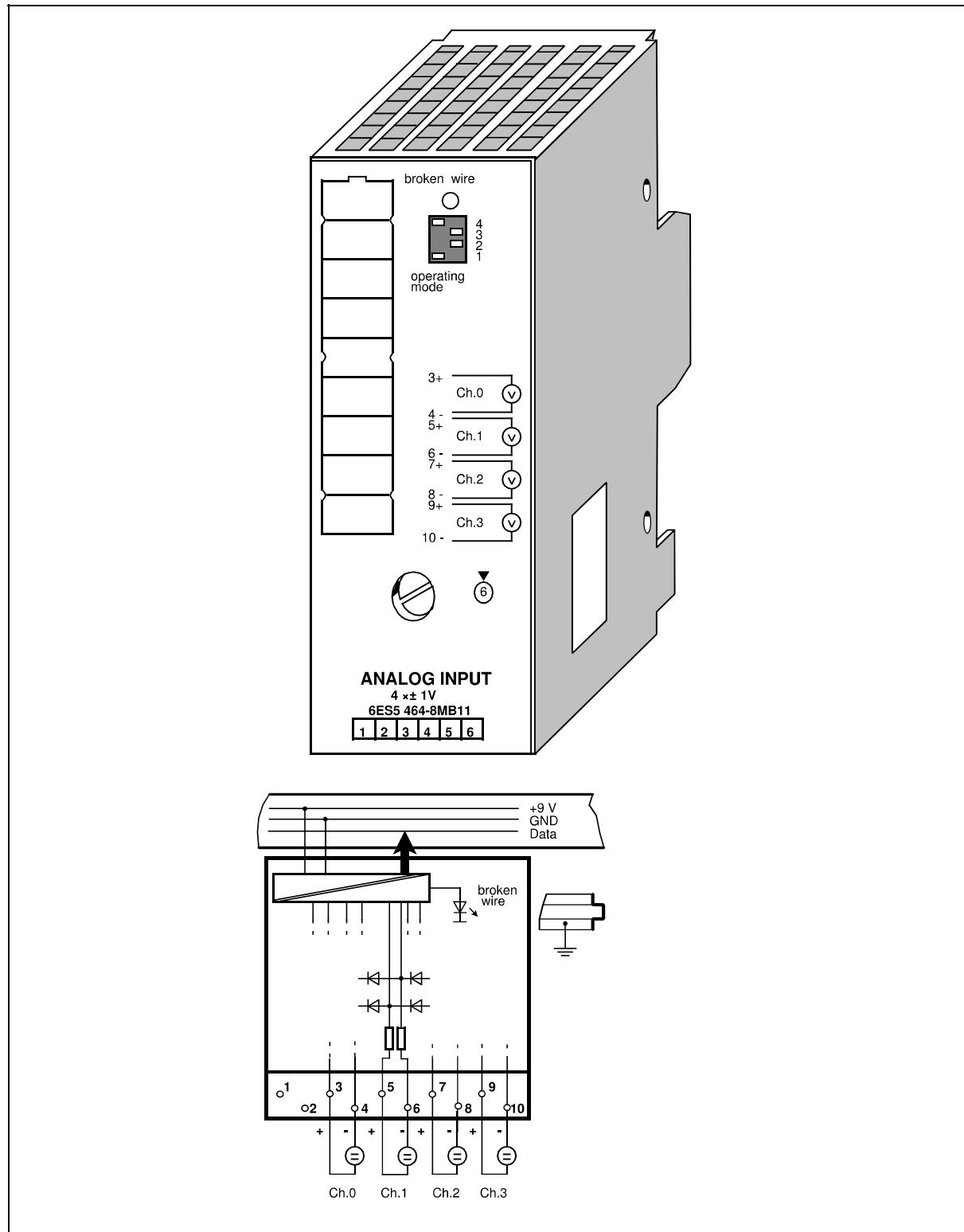


Analog Input Module 4 x ± 1 V

(6ES5 464-8MB11)



Analog Input Module 4 x ± 1 V (continued)

(6ES5 464-8MB11)

Technical specifications			
Input ranges (rated values)	± 1 V	Noise suppression for $f=nx$ (50/60 Hz $\pm 1\%$); $n=1, 2, \dots$	
Number of inputs	1, 2 or 4 (selectable)	- common-mode rejection ($V_{pp}=1$ V) - series-mode rejection (peak value of noise < rated value of input range)	min. 86 dB min. 40 dB
Galvanic isolation	yes (inputs to grounding point; not between inputs)		
Input resistance	10 M	Basic error limits	$\pm 0.1\%$
Connection method of sensors	two-wire connection	Operational error limits (0 to 60 °C) (32 to 140 °F)	$\pm 0.35\%$
Digital representation of input signal	12 bits+sign (2048 units = rated value)	Single errors - linearity - tolerance - polarity reversal error	$\pm 0.05\%$ $\pm 0.05\%$ $\pm 0.05\%$
Measured value representation	two's complement (left-justified)	Temperature error - final value - zero point	$\pm 0.01\%/\text{K}$ $\pm 0.002\%/\text{K}$
Measuring principle	integrating		
Conversion principle	voltage-time conversion (dual slope)	Length of cable - shielded	max. 200 m (660 ft.)
Integration time (adjustable for optimum noise suppression)	20 ms at 50 Hz 16.6 ms at 60 Hz	Supply voltage L+	none
Encoding time per input		Connection of com- pensating box	not possible
- for 2048 units	max. 60 ms at 50 Hz	Insulation rating	VDE 0160
- for 4095 units	max. 50 ms at 60 Hz max. 80 ms at 50 Hz max. 66.6 ms at 60 Hz	Rated insulation voltage (+9 V to $\frac{1}{2}$) - insulation group - tested with	12 V AC 1xB 500 V AC
Permissible voltage difference		Rated insulation voltage (inputs to +9 V) - insulation group - tested with	60 V AC 1xB 500 V AC
- between inputs	max. ± 1 V		
- between inputs and central ground point	max. 75 V DC/60 V AC		
Permissible input voltage (destruction limit)	max. 24 V DC	Current consumption - from +9 V (CPU)	typ. 70 mA
Fault indication for		Power loss of the module	typ. 0.7 W
- range exceeded	yes (more than 4095 units)	Weight	approx. 230 g (8 oz.)
- sensor wire break	yes (selectable)		
- general indication of wire break	red LED		