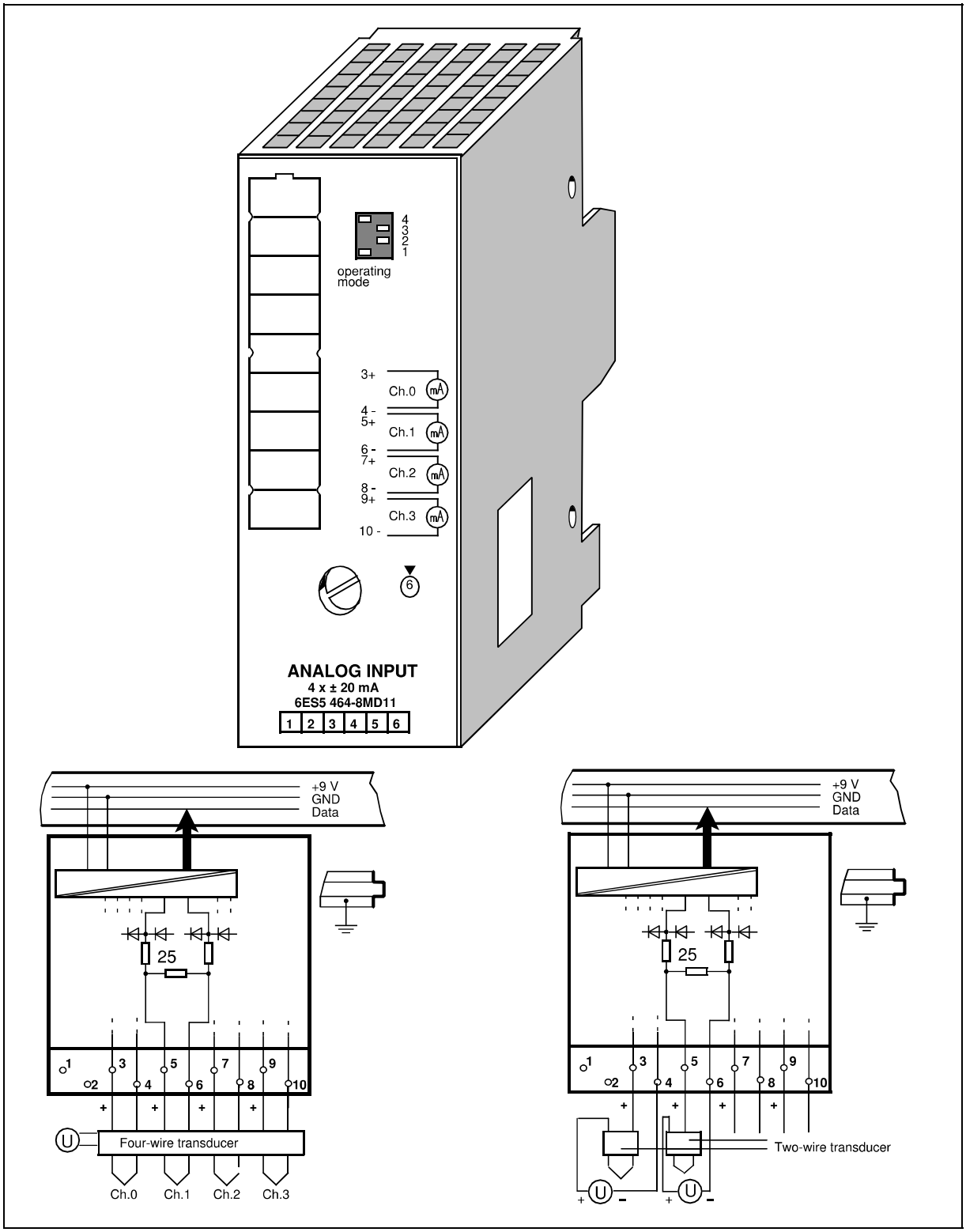
Analog Input Module 4 x ±20 mA **(6ES5 464-8MD11)**



Analog Input Module 4 x ±20 mA (continued) (6ES5 464-8MD11)

Technical specifications

Input ranges (rated values)		±20 mA
Number of inputs		1, 2 or 4 (selectable)
Galvanic isolation		yes (inputs to grounding point; not between inputs)
Input resistance		25
Connection method of sensors		two-wire connection
Digital representation of input signal		12 bits+sign (2048 units =rated value)
Measured value representation		two's complement (left-justified)
Measuring principle		integrating
Conversion principle		voltage-time conversion (dual slope)
Integration time (adjustable for optimum noise suppression)		20 ms at 50 Hz 16.6 ms at 60 Hz
Encoding time per input		
- for 2048 units	max.	60 ms at 50 Hz
	max.	50 ms at 60 Hz
- for 4095 units	max.	80 ms at 50 Hz
	max.	66.6 ms at 60 Hz
Permissible voltage difference		
- between inputs	max.	±1 V
- between inputs and central ground point	max.	75 V DC/60 V AC
Permissible input voltage (destruction limit)	max.	80 mA
Fault indication for		
- range exceeded		yes (more than 4095 units)
- sensor wire break		no
- general indication of wire break		no

Noise suppression for f=nx (50/60 Hz±1%); n=1,2, ...		
- common-mode rejection (V_{pp}=1 V)	min.	86 dB
- series-mode rejection (peak value of noise <rated value of input range)	min.	40 dB
Basic error limits		±0.2 %
Operational error limits (0 to 60 °C) (32 to 140 °F)		±0.45 %
Single errors		
- linearity		±0.05 %
- tolerance		±0.05 %
- polarity reversal error		±0.05 %
Temperature error		
- final value		±0.01 %/K
- zero point		±0.002 %/K
Length of cable		
- shielded	max.	200 m (660 ft.)
Supply voltage L+		none
Connection of compensating box		not possible
Insulation rating		VDE 0160
Rated insulation voltage (+9 V to ⏚)		12 V AC
- insulation group		1×B
- tested with		500 V AC
Rated insulation voltage (inputs to +9 V)		60 V AC
- insulation group		1×B
- tested with		500 V AC
Current consumption		
- from +9 V (CPU)	typ.	70 mA
Power loss of the module	typ.	0.7 W
Weight	approx.	230 g (8 oz.)