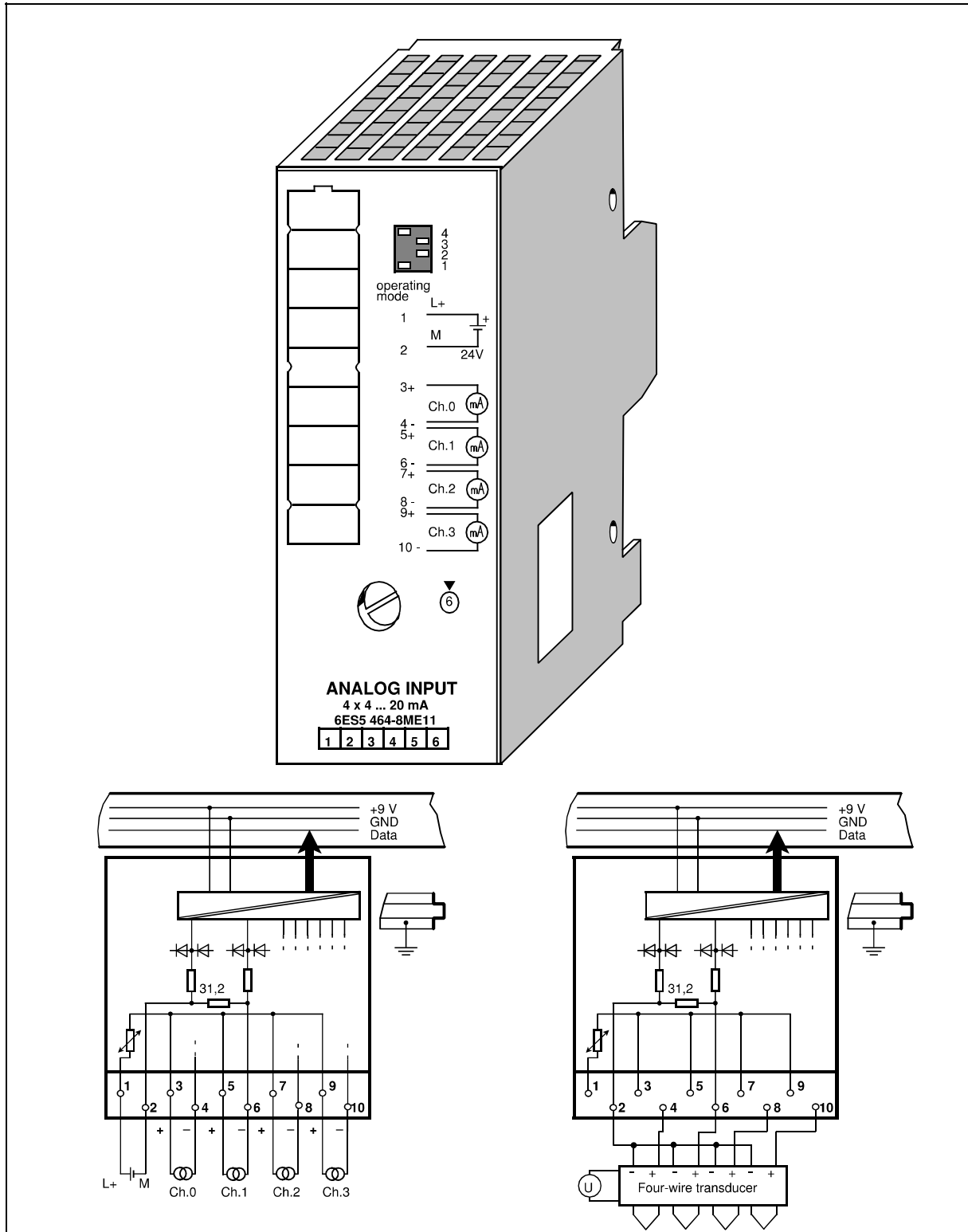


Analog Input Module 4 x 4 to 20 mA

(6ES5 464-8ME11)



Analog Input Module 4 x 4 to 20 mA (continued)

(6ES5 464-8ME11)

Technical specifications					
Input ranges (rated values)		4 to 20 mA	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)	min.	86 dB
Galvanic isolation		yes (inputs to grounding point; not between inputs)	- series-mode rejection (peak value of noise < rated value of input range)	min.	40 dB
Input resistance		31.25	Basic error limits		± 0.15 %
Connection method of sensors		two-wire connection for 2/4 wire transducers	Operational error limits (0 to 60 °C) (32 to 140 °F)		± 0.4 %
Digital representation of input signal		12 bits+sign (2048 units = rated value)	Single errors		
Measured value representation		two's complement (left-justified)	- linearity		± 0.05 %
Measuring principle		integrating	- tolerance		± 0.05 %
Conversion principle		voltage-time conversion (dual slope)	Temperature error		
Integration time (adjustable for optimum noise suppression)		20 ms at 50 Hz 16.6 ms at 60 Hz	- final value		± 0.01 %/K
Encoding time per input			- zero point		± 0.002 %/K
- for 2048 units	max.	60 ms at 50 Hz	Length of cable		
- for 4095 units	max.	50 ms at 60 Hz	- shielded	max.	200 m (660 ft.)
	max.	80 ms at 50 Hz	Supply voltage L+ for 2-wire transducers		
	max.	66.6 ms at 60 Hz	- rated value		24 V DC
Permissible voltage difference			- ripple V_{pp}		3.6 V
- between inputs	max.	± 1 V	- permissible range		20 to 30 V
- between inputs and central ground point	max.	75 V DC/60 V AC	Connection of compensating box		not possible
Permissible input voltage (destruction limit)	max.	80 mA	Insulation rating		VDE 0160
Fault indication for			Rated insulation voltage (+9 V to $\frac{1}{2}$)		12 V AC
- range exceeded		yes (more than 4095 units)	- insulation group		1xB
- sensor wire break		no	- tested with		500 V AC
- general indication of wire break		no	Rated insulation voltage (inputs to +9 V)		60 V AC
			- insulation group		1xB
			- tested with		500 V AC
			Current consumption		
			- from +9 V (CPU)	typ.	70 mA
			- from L+	typ.	80 mA
			Power loss of the module		
			- for 2-wire transducers	typ.	1.0 W
			- for 4-wire transducers	typ.	0.7 W
			Weight	approx.	230 g (8 oz.)