SIEMENS

Product data sheet 6ES7134-4JB51-0AB0

SIMATIC DP,
ELECTRONIC MODULE FOR ET 200S,
2/4 AI RTD STANDARD, 15 MM WIDE,
15BIT + SIGN PT100 STD;
PT100 KL;
NI100 STD;
NI100 KL;
150 OHM;
300 OHM;
600 OHM,
CYCLE TIME 110 MS/CHANNEL WITH LED SF (GROUP FAULT)

Supply voltage	
Load voltage L+	
Rated value (DC)	24 V ; From power module
Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	30 mA
from backplane bus 3.3 V DC, max.	10 mA
Output voltage	
Power supply to the transmitters	
present	Yes
short-circuit proof	Yes
Power losses	
Power loss, typ.	0.6 W
Address area	
Address space per module	

Address space per module, max.	8 byte
Analog inputs	
Number of analog inputs	4 ; 2 for 3 or 4-wire connection
permissible input voltage for voltage input (destruction limit), max.	9 V
Constant measurement current for resistance-type transmitter, typ.	1.67 mA
Cycle time (all channels) max.	Number of active channels per module x basic conversion time
Technical unit for temperature measurement adjustable	No
Input ranges	
Resistance thermometer	Yes
Resistance	Yes
Input ranges (rated values), resistance thermometers	
Ni 100	Yes ; Standard/climate
Input resistance (Ni 100)	2000 kΩ
Pt 100	Yes ; Standard/climate
Input resistance (Pt 100)	2000 kΩ
Input ranges (rated values), resistors	
0 to 150 ohms	Yes
Input resistance (0 to 150 ohms)	2000 kΩ
0 to 300 ohms	Yes
Input resistance (0 to 300 ohms)	2000 kΩ
0 to 600 ohms	Yes
Input resistance (0 to 600 ohms)	2000 kΩ
Resistance thermometer (RTD)	
Characteristic linearization	
for resistance thermometer	Pt100 (standard, climatic range), Ni100 (standard, climatic range)
Characteristic linearization	
Parameterizable	Yes ; for Pt100, Ni100
Cable length	
Cable length, shielded, max.	200 m
Analog value creation	

Measurement principle	integrating
Integrations and conversion time/ resolution per channel	
Resolution with overrange (bit including sign), max.	16 bit ; 150 ohms: 14 bits; 300, 600 ohms: 15 bits, Pt100, Ni100: 16 bits
Integration time, parameterizable	Yes
Integration time, ms	16.7 / 20 ms
Interference voltage suppression for interference frequency f1 in Hz	60 / 50 Hz
Conversion time (per channel)	66 / 80 ms; additional conversion time for diagnostic wire break test
Smoothing of measured values	
Parameterizable	Yes ; In four stages by means of digital filtering
Step: None	Yes ; 1 x cycle time
Step: low	Yes ; 4 x cycle time
Step: Medium	Yes ; 32 x cycle time
Step: High	Yes ; 64 x cycle time
Encoder	
Connection of signal encoders	
for resistance measurement with 2-conductor connection	Yes
for resistance measurement with 3-conductor connection	Yes
for resistance measurement with 4-conductor connection	Yes
Errors/accuracies	
Linearity error (relative to input area)	+/- 0,01 %
Temperature error (relative to input area)	+/- 0,005 %/K
Crosstalk between the inputs, min.	-50 dB
Repeat accuracy in settled status at 25 °C (relative to input area)	+/- 0,05 %
Operational limit in overall temperature range	
Resistance-type thermometer, relative to input area	+/- 0,6 %
Basic error limit (operational limit at 25 °C)	
Resistance-type thermometer, relative to input area	+/- 0,4 %

Interference voltage suppression for f = n x (fl +/- 1%), fl = interference frequency	
Series mode interference (peak value of interference < rated value of input range), min.	70 dB
common mode voltage (USS < 2.5 V) , min.	90 dB
Isochronous mode	
Isochronous mode	No
Interrupts/diagnostics/status information	
Diagnoses	
Diagnostic functions	Yes ; Can be read out
Wire break	Yes
Group error	Yes
Overflow/underflow	Yes
Diagnostics indication LED	
Group error SF (red)	Yes
Parameter	
Diagnosis: wire break	Disable / enable
Measurement type/range	deactivated/150 ohms/; 300 ohms/600 ohms/ Pt100 climatic/ Pt100 standard; Ni100 standard / Ni100 climatic, 2, 3 or 4-wire
Group diagnostics	Disable / enable
Overflow/underflow	Disable / enable
Galvanic isolation	
Galvanic isolation analog inputs	
between the channels	No
between the channels and the backplane bus	Yes
between the channels and the load voltage L+	Yes
Permissible potential difference	
between MANA and M internally (UISO)	75 VDC / 60 VAC
Isolation	
Isolation checked with	500 V DC
Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm

Weight	
Weight, approx.	40 g
Status	Sep 14, 2011