MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6ES7288-3AR02-0AA0

SM AR02 RTD ANALOG INPUT MODULE

Used with the applicable SIMATIC S7-200 SMART configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens official technical documentation for 6ES7288-3AR02-0AA0

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Data sheet 6ES7288-3AR02-0AA0

SIMATIC S7-200 SMART, Analog input SM AR02 RTD, 2x AI RTD modules

General information	
Product type designation	SM AR02, AI RTD 2x16 bit
CiR - Configuration in RUN	
Reparameterization possible in RUN	No
Supply voltage	
Type of supply voltage	DC
Rated value (DC)	24 V; -15 / +20 %
Input current	
Current consumption, typ.	40 mA
from backplane bus 5 V DC, typ.	80 mA
Power loss	
Power loss, typ.	1.5 W
Analog inputs	
Number of analog inputs	2; Resistance thermometer
permissible input voltage for voltage input (destruction limit), max.	30 V
Technical unit for temperature measurement adjustable	Yes; Degrees Celsius/degrees Fahrenheit
Input ranges	
● Voltage	No
● Current	No
● Thermocouple	No
● Resistance thermometer	Yes; Resistance-type transmitter: Pt10, Pt50, Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Ni200, Ni500, Ni1000, Cu10, Cu50, Cu100, LG-Ni1000
● Resistance	Yes; 48 Ω,150 Ω, 300 Ω, 600 Ω, 3 000 Ω,
Input ranges (rated values), resistance thermometer	
● Cu 10	Yes
— Input resistance (Cu 10)	10 Ω
● Ni 100	Yes
— Input resistance (Ni 100)	100 Ω
● Ni 1000	Yes
— Input resistance (Ni 1000)	1 000 Ω
● LG-Ni 1000	Yes
— Input resistance (LG-Ni 1000)	1 000 Ω
● Ni 120	Yes
— Input resistance (Ni 120)	120 Ω
● Ni 200	Yes
— Input resistance (Ni 200)	200 Ω
● Ni 500	Yes
— Input resistance (Ni 500)	500 Ω
● Pt 100	Yes
— Input resistance (Pt 100)	100 Ω
● Pt 1000	Yes
— Input resistance (Pt 1000)	1 000 Ω
● Pt 200	Yes
— Input resistance (Pt 200)	200 Ω
● Pt 500	Yes
— Input resistance (Pt 500)	500 Ω
Input ranges (rated values), resistors	
● 0 to 48 ohms	Yes
● 0 to 150 ohms	Yes
● 0 to 300 ohms	Yes
● 0 to 600 ohms	Yes

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● 0 to 3000 ohms	Yes
Analog outputs	
Number of analog outputs	0
Analog value generation for the inputs	
Measurement principle	Sigma Delta
Integration and conversion time/resolution per channel	
● Resolution with overrange (bit including sign), max.	15 bit; at 150, 300, 600 und 3 000 ohms; otherwise 15 bits + sign
● Integration time, parameterizable	Yes; 10/ 16.67/ 20/ 100 ms
● Interference voltage suppression for interference frequency f1 in Hz	10 / 50 / 60 / 400 Hz
Smoothing of measured values	
● parameterizable	Yes; In four stages by means of digital filtering
● Step: None	Yes; 1x
● Step: low	Yes; 4x
● Step: Medium	Yes; 16x
● Step: High	Yes; 32x
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
CE mark	Yes
Dimensions	
Width	45 mm
Height	100 mm
Depth	81 mm
Weights	
Weight, approx.	148.7 g

Classifications

	Version	Classification
eClass	14	27-24-22-01
eClass	12	27-24-22-01
eClass	9.1	27-24-22-01
eClass	9	27-24-22-01
eClass	8	27-24-22-01
eClass	7.1	27-24-22-01
eClass	6	27-24-22-01
ETIM	9	EC001420
ETIM	8	EC001420
ETIM	7	EC001420
IDEA	4	3562
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

CE EG-Konf.

UK CA

last modified: 4/25/2024

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