

Siemens 6ES7214-2AD23-0XB0 Manual

Brand	Siemens
Product Series	Siemens
Product Type	-

Description

6ES7214-2AD23-0XB0

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SIMATIC S7-200, CPU 224XP COMPACT UNIT,
DC POWER SUPPLY 14 DI DC/10 DO DC,
2 AI, 1 AO 12/16 KB CODE/10 KB DATA,
2 PPI/FREEPORT PORTS

Supply voltage

24 V DC Ja

Voedingsspanning / bij DC / nominale waarde / minimaal 20,4 V

Voedingsspanning / bij DC / nominale waarde / maximaal 28,8 V

Load voltage L+

Rated value (DC) 24 V

permissible range, lower limit (DC) 20,4 V

permissible range, upper limit (DC) 28,8 V

Input current

Inrush current, max. 12 A

from supply voltage L+, max. 900 mA

Encoder supply

24 V encoder supply

24 V Ja

Short-circuit protection Ja

Output current, max. 280 mA

Memory

Number of memory modules (optional) 1

Data and program memory

Data memory, max. 10 kbyte

Program memory, max. 16 kbyte

Backup

present Ja

Battery

Backup battery

Backup time, max. 100 h

CPU processing times

for bit operations, max. 0,22 µs

Counters, timers and their retentivity

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S7 counter
 Number 256
 of which retentive with battery
 adjustable Ja
 lower limit 1
 upper limit 256
 Counting range
 lower limit 0
 upper limit 32767
 S7 times
 Number 256
 of which retentive with battery
 adjustable Ja
 upper limit 64
 Time range
 lower limit 1 ms
 upper limit 54 min
 Data areas and their retentivity
 Flag
 Number, max. 32 byte
 Retentivity available Ja
 Hardware configuration
 Expansion devices, max. 7
 Expansion modules
 Analog inputs/outputs, max. 38
 Digital inputs/outputs, max. 168
 AS-Interface inputs/outputs, max. 62

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Digital inputs
 Aantal digitale ingangen 14
 m/p-reading Ja
 Input voltage
 Ingangsspanning / aan de digitale ingang / bij DC /
 nominale waarde
 24 V
 Input current
 Ingangsstroom / aan de digitale ingang / bij signaal <1> /
 typisch
 2,5 mA
 Input delay (for rated value of input voltage)
 for standard inputs
 parameterizable Ja
 at "0" to "1", min. 0,2 ms
 at "0" to "1", max. 12,8 ms
 for interrupt inputs
 parameterizable Ja
 for counter/technological functions
 parameterizable Ja
 Cable length
 Cable length, shielded, max. 500 m

Cable length unshielded, max. 300 m

Digital outputs

Aantal van de digitale uitgangen 10

Short-circuit protection Nee

Switching capacity of the outputs

with resistive load, max. 0,75 A

on lamp load, max. 5 W

Output current

Uitgangsstroom / aan de digitale uitgang / bij signaal <1> /

nominale waarde

750 mA

Reststroom / aan de digitale uitgang / bij signaal <0> /

maximaal

10 μ A

Output delay with resistive load

"0" to "1", max. 15 μ s

"1" to "0", max. 130 μ s

Parallel switching of 2 outputs

for uprating Ja

Switching frequency

of the pulse outputs, with resistive load, max. 100 kHz

Total current of the outputs (per group)

all mounting positions

up to 40 °C, max. 3,75 A

horizontal installation

up to 55 °C, max. 3,75 A

Relay outputs

Max. number of relay outputs, integrated 0

Cable length

Cable length, shielded, max. 500 m

Cable length unshielded, max. 150 m

Analog inputs

Number of analog potentiometers 2

Encoder

Connectable encoders

2-wire sensor Ja

permissible quiescent current (2-wire sensor), max. 1 mA

1. Interface

Functionality

MPI Ja

PPI Ja

serial data exchange Ja

MPI

Transmission rate, min. 19,2 kbit/s

Transmission rate, max. 187,5 kbit/s

2. Interface

Functionality

MPI Ja

PPI Ja

serial data exchange Ja

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MPI

Transmission rate, min. 19,2 kbit/s

Transmission rate, max. 187,5 kbit/s

Integrated Functions

Number of counters 6

Counting frequency (counter) max. 200 kHz

Number of alarm inputs 4

Number of pulse outputs 2

Limit frequency (pulse) 20 kHz

Galvanic isolation

Galvanic isolation digital inputs

between the channels Ja

Galvanic isolation digital outputs

between the channels Ja

between the channels, in groups of 5

Degree and class of protection

IP20 Ja

Ambient conditions

Operating temperature

Omgevingstemperatuur / bij horizontale inbouwpositie /

tijdens bedrijf / minimaal

0 °C

Omgevingstemperatuur / bij horizontale inbouwpositie /

tijdens bedrijf / maximaal

55 °C

Omgevingstemperatuur / bij verticale inbouwpositie /

tijdens bedrijf / minimaal

0 °C

Omgevingstemperatuur / bij verticale inbouwpositie /

tijdens bedrijf / maximaal

45 °C

Air pressure

Luchtdruk / minimaal 860 hPa

Luchtdruk / maximaal 1080 hPa

Relative humidity

Relatieve luchtvochtigheid / tijdens de werking / minimaal 5 %

Relatieve luchtvochtigheid / tijdens de werking / maximaal 95 %

Configuration

Programming

Number of subroutines, max. 64

Programming language

LAD Ja

FBD Ja

STL Ja

Know-how protection

User program protection/password protection Ja

Aansluitingstechniek

Plug-in I/O terminals Ja

Dimensions

Breedte 140 mm

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Hoogte 80 mm

Diepte 62 mm

Weight, approx. 390 g

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