

Siemens 6ES7214-1BD23-0XB0 Manual

Brand	Siemens
Product Series	Siemens
Product Type	-

Description

6ES7214-1BD23-0XB0

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SIMATIC S7-200, CPU 224, COMPACT UNIT,
AC POWER SUPPLY 14 DI DC/10 DO, RELAY,
8/12 KB CODE/8 KB DATA,
PROFIBUS DP EXTENDABLE

Supply voltage

120 V AC Ja

230 V AC Ja

Line frequency

Voedingsspanningsfrequentie maximaal 63 Hz

Load voltage L+

Rated value (DC) 24 V

permissible range, lower limit (DC) 5 V

permissible range, upper limit (DC) 30 V

Load voltage L1

Rated value (AC) 100 V

permissible range, lower limit (AC) 5 V

permissible range, upper limit (AC) 250 V

permissible frequency range, lower limit 47 Hz

permissible frequency range, upper limit 63 Hz

Input current

Inrush current, max. 20 A

from supply voltage L1, max. 200 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. 8 kbyte

Program memory, max. 12 kbyte

Backup

present Ja

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Battery

Backup battery

Backup time, max. 100 h

CPU processing times

for bit operations, max. 0,22 μ s

Counters, timers and their retentivity

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

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Hardware configuration

Expansion devices, max. 7

Expansion modules

Analog inputs/outputs, max. 35

Digital inputs/outputs, max. 168

AS-Interface inputs/outputs, max. 62

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. 2 A

on lamp load, max. 200 W

Output current

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

nominale waarde

2 A

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

maximaal

0 mA

Output delay with resistive load

"0" to "1", max. 10 ms

"1" to "0", max. 10 ms

Parallel switching of 2 outputs

for uprating Nee

Switching frequency

of the pulse outputs, with resistive load, max. 1 Hz

Total current of the outputs (per group)

all mounting positions

up to 40 °C, max. 10 A

horizontal installation

up to 55 °C, max. 10 A

Relay outputs

Max. number of relay outputs, integrated 10

Number of operating cycles, max. 10000000

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

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Transmission rate, min. 19,2 kbit/s

Transmission rate, max. 187,5 kbit/s

Integrated Functions

Number of counters 6

Counting frequency (counter) max. 30 kHz

Number of alarm inputs 4

Galvanic isolation

Galvanic isolation digital inputs

between the channels Ja

Galvanic isolation digital outputs

between the channels Ja

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 120,5 mm

Hoogte 80 mm

Diepte 62 mm

Weights

Weight, approx. 410 g

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