Data sheet
CPU 214CAN (214-2CM03)

Technical data

Order no.	214-2CM03
Type	CPU 214CAN

General information

Note	-
Features	CANopen master 96 kB work memory 144 kB load memory

Technical data power supply

Power supply (rated value)	DC 24 V
Power supply (permitted range)	DC 20.4...28.8 V
Reverse polarity protection	✔
Current consumption (no-load operation)	110 mA
Current consumption (rated value)	1.5 A
Inrush current	65 A
I^2t	0.75 A^2s
Max. current drain at backplane bus	3 A
Power loss	5 W

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Max. current drain load supply	-
Power loss	5 W

Load and working memory

Load memory, integrated	144 KB
Load memory, maximum	144 KB
Work memory, integrated	96 KB
Work memory, maximal	96 KB
Memory divided in 50% program / 50% data	-
Memory card slot	MMC-Card with max. 512 MB

Hardware configuration

Racks, max.	4
Modules per rack, max.	total max. 32
Number of integrated DP master	-
Number of DP master via CP	8

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Operable function modules	32
Operable communication modules PtP	32
Operable communication modules LAN	-

Command processing times

Bit instructions, min.	0.18 µs
Word instruction, min.	0.78 µs
Double integer arithmetic, min.	1.8 µs
Floating-point arithmetic, min.	40 µs

Timers/Counters and their retentive characteristics

Number of S7 counters	256
S7 counter remanence	adjustable 0 up to 64
S7 counter remanence adjustable	C0 .. C7
Number of S7 times	256
S7 times remanence	adjustable 0 up to 128
S7 times remanence adjustable	not retentive

Data range and retentive characteristic

Number of flags	8192 Bit
Bit memories retentive characteristic adjustable	adjustable 0 up to 256
Bit memories retentive characteristic preset	MB0 .. MB15
Number of data blocks	2047
Max. data blocks size	16 KB
Number range DBs	1 ... 2047
Max. local data size per execution level	1024 Byte
Max. local data size per block	1024 Byte

Blocks

Number of OBs	14
Maximum OB size	16 KB
Total number DBs, FBs, FCs	-
Number of FBs	1024
Maximum FB size	16 KB
Number range FBs	0 ... 1023
Number of FCs	1024
Maximum FC size	16 KB
Number range FCs	0 ... 1023
Maximum nesting depth per priority class	8
Maximum nesting depth additional within an error OB	1

Time

Real-time clock buffered	✔
Clock buffered period (min.)	30 d
Type of buffering	Vanadium Rechargeable Lithium Battery
Load time for 50% buffering period	20 h
Load time for 100% buffering period	48 h
Accuracy (max. deviation per day)	10 s
Number of operating hours counter	8

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Clock synchronization	-
Synchronization via MPI	-
Synchronization via Ethernet (NTP)	-

Address areas (I/O)

Input I/O address area	1024 Byte
Output I/O address area	1024 Byte
Process image adjustable	-
Input process image preset	128 Byte
Output process image preset	128 Byte
Input process image maximal	128 Byte
Output process image maximal	128 Byte
Digital inputs	8192
Digital outputs	8192
Digital inputs central	512
Digital outputs central	512
Integrated digital inputs	-
Integrated digital outputs	-
Analog inputs	512
Analog outputs	512
Analog inputs, central	128
Analog outputs, central	128
Integrated analog inputs	-
Integrated analog outputs	-

Communication functions

PG/OP channel	✔
Global data communication	✔
Number of GD circuits, max.	4
Size of GD packets, max.	22 Byte
S7 basic communication	✔
S7 basic communication, user data per job	76 Byte
S7 communication	✔
S7 communication as server	✔
S7 communication as client	-
S7 communication, user data per job	160 Byte
Number of connections, max.	16

Functionality Sub-D interfaces

Type	MP²I
Type of interface	RS485
Connector	Sub-D, 9-pin, female
Electrically isolated	-
MPI	✔
MP²I (MPI/RS232)	✔
DP master	-
DP slave	-
Point-to-point interface	-

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Type	CAN
Type of interface	CAN
Connector	Sub-D, 9-pin, male
Electrically isolated	✔
MPI	-
MP²I (MPI/RS232)	-
DP master	-
DP slave	-
Point-to-point interface	-

Functionality MPI

Number of connections, max.	16
PG/OP channel	✔
Routing	-
Global data communication	✔
S7 basic communication	✔
S7 communication	✔
S7 communication as server	✔
S7 communication as client	-
Transmission speed, min.	19.2 kbit/s
Transmission speed, max.	187.5 kbit/s

Datasizes

Input bytes	0
Output bytes	0
Parameter bytes	3
Diagnostic bytes	0

Housing

Material	PPE / PA 6.6
Mounting	Profile rail 35 mm

Mechanical data

Dimensions (WxHxD)	50.8 mm x 76 mm x 80 mm
Weight	150 g

Environmental conditions

Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C

Certifications

UL508 certification	yes

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