YASKAWA

Data sheet
CPU 215PG (215-2BE06)

Technical data

Order no.	215-2BE06
Type	CPU 215PG
General information	
Note	-
Features	Work memory [KB]: 128 Interface [RJ45]: Ethernet PG/OP communication Interface [RS485]: MPI MMC card slot, up to 32 expansion modules Programmable with WinPLC7, SIMATIC Manager and TIA Portal
Technical data power supply	
Power supply (rated value)	DC 24 V
Power supply (permitted range)	DC 20.4...28.8 V
Reverse polarity protection	yes
Current consumption (no-load operation)	140 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
Max. current drain load supply	-
Power loss	6 W
Load and working memory	
Load memory, integrated	192 KB
Load memory, maximum	192 KB
Work memory, integrated	128 KB
Work memory, maximal	128 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
Operable function modules	32
Operable communication modules PtP	32
Operable communication modules LAN	-
Status information, alarms, diagnostics	
Status display	yes
Interrupts	no
Process alarm	no
Diagnostic interrupt	no
Diagnostic functions	no
Diagnostics information read-out	possible
Supply voltage display	green LED

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Group error display	red SF LED
Channel error display	none
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 255
S7 counter remanence adjustable	C0 .. C7
Number of S7 times	256
S7 times remanence	adjustable 0 up to 255
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 1023
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	yes
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
Clock synchronization	-
Synchronization via MPI	-
Synchronization via Ethernet (NTP)	-
Address areas (I/O)	

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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	yes
Global data communication	yes
Number of GD circuits, max.	4
Size of GD packets, max.	22 Byte
S7 basic communication	yes
S7 basic communication, user data per job	76 Byte
S7 communication	yes
S7 communication as server	yes
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	yes
MP²I (MPI/RS232)	yes
Point-to-point interface	-
5V DC Power supply	max. 90mA, non-isolated
24V DC Power supply	max. 100mA, non-isolated
Functionality MPI	
Number of connections, max.	16
PG/OP channel	yes
Routing	-
Global data communication	yes
S7 basic communication	yes
S7 communication	yes

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S7 communication as server	yes
S7 communication as client	-
Transmission speed, min.	19.2 kbit/s
Transmission speed, max.	187.5 kbit/s
Functionality RJ45 interfaces	
Type	TP
Type of interface	Ethernet 10/100 MBit
Connector	RJ45
Electrically isolated	yes
PG/OP channel	yes
Number of connections, max.	8
Productive connections	yes
Ethernet communication CP	
Number of configurable connections, max.	16
Number of productive connections by Siemens NetPro, max.	16
S7 connections	-
User data per S7 connection, max.	-
TCP-connections	FETCH PASSIV, WRITE PASSIV, Connection of passive data handling
User data per TCP connection, max.	64 KB
ISO-connections	-
User data per ISO connection, max.	-
ISO on TCP connections (RFC 1006)	FETCH PASSIV, WRITE PASSIV, Connection of passive data handling
User data per ISO on TCP connection, max.	32 KB
UDP-connections	-
User data per UDP connection, max.	-
UDP-multicast-connections	-
UDP-broadcast-connections	-
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
Net weight	150 g
Weight including accessories	-
Gross weight	-
Environmental conditions	
Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C
Certifications	
UL certification	in preparation
KC certification	-

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