



### CPU226 DC/DC/DC

Technical specifications	
Model	CPU226 DC/DC/DC
<b>Physical characteristic</b>	
Dimensions(W x H x D)(mm)	196x80x62
Power consume	11W
<b>Memory</b>	
Program memory size	
With run mode edit	24K
Without run mode edit	24K
Data memory	10K
<b>I/O</b>	
Local digital inputs	24 inputs
Local digital outputs	16 outputs
Digital I/O image size	256(128 inputs/128 outputs)
Analog I/O image size	64(32 inputs/32 outputs)
expansion modules allowed (Max)	7 modules
intelligent modules allowed (Max)	7 modules
Pulse catch inputs	24
High-speed counters	6 counters total
Single phase	6 at 30KHz
Two phase	4 at 20KHz
Pulse outputs	2 at 20KHz ( DC outputs only )
<b>General</b>	
Timer	Total number : 512 ( 1ms:8 ; 10ms:32 ; 100ms:472 )
Counters	512
Internal memory bits stored on	512

power down	
Time interrupts	2 with 1ms resolution
Edge interrupts	4 up and/or 4 down
Analog adjustment	2 with 8 bit resolution
Boolean execution speed	0.08µs per instruction
Real Time Clock	Built-in
<b>Communications Built-in</b>	
Ports	3 RS-485 ports, within 2 standard PPI port
PPI Baud Rates	9.6 , 19.2 and 187.5 Kbaud
Freeport Baud Rates	1.2kbaud to 115.2Kbaud
Max. cable length per segment	With isolated repeater : 1000 m up to 187.5kbaud, 1200 m up to 38.4kbaud Without isolated repeater: 50 m
Max. number of stations	32 per segment, 126 per network
Max. number of masters	32
Peer to peer ( PPI Master Mode )	Yes
<b>Power</b>	
Input voltage	20.4 to 28.8 V DC
Input current	110mA while CPU only at 24 V DC 700mA while Max. load at 24 V DC
Inrush current	12A at 28.8 V DC
Isolation(field to logic)	Not isolated
Hold up time ( loss of power )	10ms at 24 V DC
Sensor voltage	L+ minus 5 V
Current limit	1.5A peak , thermal limit non-destructive
Ripple noise (sensor to logic)	Derived from input power
Isolation (sensor to logic)	Not isolated
<b>CPU Digital Input Specifications</b>	
Built-in digital inputs	24
Input type	PNP/NPN
Rated voltage	24 V DC at 4mA
Max. continuous permissible voltage	30 V DC
Surge voltage	35 V DC for 0.5s
Logic "1" voltage range	15 to 30 V DC
Logic "0" voltage range	0 to 5 V DC
Input delay	Selectable (0.2 to 12.8ms)

Connection of 2-wire proximity sensor (Bero)	
Permissible leakage current (Max.)	1mA
Isolation (field to logic)	Yes
Optical galvanic Isolation groups	500 V AC for 1minute Refer to Wiring diagram
High Speed Counter (HSC) input rate	
HSC logic level 1(15 TO 30 V DC)	20K Hz (Single phase), 10K Hz (Tow phase)
HSC logic level 1(15 TO 26 V DC)	30K Hz (Single phase), 20K Hz (Tow phase),
Inputs on simultaneously	all
Cable length Max.	
Shielded	500m normal inputs, 50m HSC inputs
unshielded	300m normal inputs
<b>CPU Digital Output Specifications</b>	
Built-in outputs	16 outputs
Output type	Solid State-MOSFET(Sourcing)
Rated voltage	24 V DC
Voltage range	20.4 to 28.8 V DC
Surge current (Max.)	8A for 100ms
Logic "1" (Min)	20 V DC,at maximum current
Logic "0" (Max)	0.1 V DC with 10KΩ load
Rated current per point ( Max. )	0.75A
Rated current per common ( Max )	6A
Leakage current (Max)	10μA
Lamp load (Max)	5W
Inductive clamp voltage	L+ minus 48 VDC, 1w dissipation
On State resistance (contact)	0.3Ω Typical ( 0.6Ω max. )
Isolation	
Optical (galvanic, field to logic)	500 V AC for 1 minute
logic to contact	-
Resistance (logic to contact)	-
Isolation groups	Refer to wiring diagram
<b>Delay(Max)</b>	
Off to on	2μs(Q0.0,Q0.1), 15μs(others)

On to off	10µs(Q0.0,Q0.1), 130µs(others)
Switching	-
Pulse frequency (Max.)	20KHz (Q0.0 and Q0.1)
Lifetime mechanical cycles	-
Lifetime contacts	-
Outputs on simultaneously	All at 60°C(Horizontal)
	All at 50°C (Vertical)
Connecting two outputs in parallel	Yes, only outputs in same group
Cable Length (Shielded)	500m
Cable Length (unshielded)	150m
<b>Order number</b>	<b>UN 216-2AD23-0XB0</b>