



## Tehničke specifikacije

### Performance Parameters

Description	CPU 226L DC/DC/DC	CPU 226L AC/DC/Relay
Order Number	CTS7 216-2AD33-0X40	CTS7 216-2BD33-0X40
<b>Physical Size</b>		
Dimensions(W×H×D)	196×80×62mm	196×80×62mm
Power loss(dissipation)	9W	11W
<b>Power Supply</b>		
Line voltage-permissible range	20.4 to 28.8VDC	85 to 264VAC,47 to 63Hz
Input current CPU only/max load	110/700 mA at 24 VDC	30/100 mA at 240 VAC 60/200 mA at 120 VAC
In rush current(maximum)	10A at 28.8 VDC	20A at 264 VDC
Isolation(input power to logic)	Not isolated	1500VAC
Hold up time(from loss of input power)	10ms at 24VDC	80ms at 240VAC,20ms at 120VAC
Internal Fuse, not user-replaceable	2A,250V,Slow Blow	2A,250V,Slow Blow
+5VDC power for Expansion I/O(max)	660mA	660mA
<b>24VDC Sensor Power Output</b>		
Voltage range	15.4 to 28.8 VDC	20.4 to 28.8 VDC
Maximum current	280 mA	280 mA
Ripple noise(maximum)	Same as input line	Less than 1V peak to peak
Current limit	600mA	600mA
Isolation(sensorpower to logic circuit)	Not isolated	Not isolated
<b>CPU Features</b>		

Onboard digital inputs	24 DC24V	24 DC24V
Onboard digital outputs	16 DC24V	16 Relay
Program memory size	24K Bytes	
Data block size	10K Bytes	
Stored permanently	10K Bytes	
Backed by super capacitor or battery	10K Bytes	
High-speed counters(32 bit value)		
Total	6 High-speed counters	
Single phase counters	6, each at 30KHz clock rate	
Two phase counters	4, each at 30KHz clock rate	
Pulse outputs	2 at 20KHz pulse rate	
Analog adjustments	2 with 8 bit resolution	
Timed interrupts	2 with 1ms resolution	
Edge interrupts	4 edge up and/or 4 edge down	
Selectable input filter times	7 ranges from 0.2ms to 12.8ms	
Pulse catch	14 pulse catch inputs	
Number of expansion I/O Modules	7 modules	
Maximum digital I/O	256 points(128 inputs / 128 outputs)	
Maximum analog I/O	64 points(32 inputs / 32 outputs)	
Internal memory bits	256 bits	
Stored permanently on power down	112 bits	
Backed by super capacitor or battery	256 bits	
Timers Total	256 timers	
Backed by super capacitor or battery	64 timers	
1ms	4 timers	
10ms	16 timers	
100ms	236 timers	
Counters total	256 counters	

Backed by super capacitor or battery	256 counters
Boolean execution speed	0.15µs per instruction
Float execution speed	8µs per instruction
Super capacitor data retention time	100 hours, typical
Onboard Communication	
Communication Interface	216-2AD/2BD: 3 logical ports, PORT0: PPI/MPI in RS485, PORT1: PPI/MPI in RS485 and RS232, FPORT: RS485, Freeport 216-2AF/2BF: 3 logical ports, PORT0: PPI/MPI in RS485 and RS232, FPORT0: RS485, Freeport , FPORT1: RS485, Freeport
Isolation(external signal to logic circuit)	Not isolated
PPI/MPI baudrates	9.6,19.2, and 187.5 kbaud
Freeport baudrates	0.3,0.6,1.2,2.4,4.8,9.6,19.2 and 38.4 kbaud
Maximum cable length per segment	
Up to 38.4 kbaud	1200m
187.5 kbaud	1000m
Maximum number of stations	
Per segment	32 stations
Per network	126 stations
Maximum number of masters	32 masters
PPI master mode(NETR/NETW)	Yes
MPI connections	4 total,2 reserved:1 for PG and 1OP
Input Features	
Number of integrated inputs	24 inputs
Input type	Sink/Source(IEC Type 1 sink)
Input Voltage	
Maxumum continuous permissible	30 VDC
Surge	35 VDC for 0.5 s

Rated value	24 VDC at 4 mA, nominal			
Logic 1 signal(minimum)	15 VDC at 2.5 mA, minimum			
Logic 0 signal(maximum)	5 VDC ata 1mA, maximum			
Isolation(Field Side to Logic Circuit)				
Optical isolation(Galvanic)	500 VAC for 1 minute			
Isolation groups of	8 points			
Input Delay Times				
Filtered inputs and interrupt inputs	0.2 to 12.8 ms, user-selectable			
HSC Clock Input Rate				
Single Phase				
Logic 1 lever = 15 to 30 VDC	20 kHz, maximum			
Logic 1 lever = 15 to 26 VDC	30 kHz, maximum			
Quadrature				
Logic 1 lever = 15 to 30 VDC	10 kHz, maximum			
Logic 1 lever = 15 to 26 VDC	20 kHz, maximum			
Connection of 2 Wire Proximity Sensor(Bero)				
Premissible leakage current	1 mA, maximum			
Cable Length				
Unshielded(not HSC)	300 m			
Shielded	500 m			
HSC inputs,shielded	50 m			
Number of inputs ON Simultaneously				
40°C	24			
50°C	24			
Output Feature				
Number of integrated outputs	16 outputs	16 outputs		
Output type	Solid State-MOSFET	Relay, dry contact		
Output voltage				

Permissible range	20.4 to 28.8 VDC	5 to 30VDC or 5 to 250 VAC
Rated value	24 VDC	-
Logic 1 signal at maximum current	20 VDC, minimum	-
Logic 0 signal with 10 kohm load	0.1 VDC, maximum	-
<b>Output Current</b>		
Logic 1 signal	0.75A	2A
Number of output ON(maximum)	16	16
Lamp load	5W	30W DC/200W AC
ON state resistance(contact resistance)	0.3 ohm	0.2 ohm,maximum when new
Leakage current per point	1 0 µA, maximum	-
Surge current	8A for 100 ms, maximum	7A with contacts closed
Overload protection	No	No
<b>Isolation</b>		
Optical isolation(galvanic)	500 VAC for 1 minute	-
Isolation resistance	-	100 Mohm, minimum when new
Isolation coil to contact	-	1500 VAC for 1 minute
Isolation between open contacts	-	750 VAC for 1minute
<b>Inductive Load Clamping</b>		
Repetitive energy dissipation	1W, all channels	-
Clamp voltage limits	L+ minus 48V	-
<b>Output Delay</b>		
Off to On	15µs,maximum	-
On to Off	100µs,maximum	-
<b>Switching Frequency(pulse train outputs)</b>		
Q0.0 and I0.0	20 kHz, maximum	1 Hz, maximum
<b>Relay</b>		
Switching delay	-	10 ms,maximum
Lifetime mechanical(no load)	-	20,000,000 open/close cycles

Lifetime contacts at rated load(2A)	-	300,000 open/close cycles
Cable Length		
Shielded	500 m	500 m
Unshielded	150 m	150 m

#### Accessory

1. RS232 Programmable Cable
2. Battery
3. Memory Card

#### Definicija pinova komunikacionog porta

216-2AD/216-2BD:

DB9 Female	PIN	PORT0(PPI)	PORT1(PPI)	FPORT(Freeport)
	1	Shell Ground	Shell Ground	1 : Shell Ground
	2	Logical Ground	RS232 Signal RXD	2 : RS485 Signal B/+
	3	RS485 Signal B	RS485 Signal B	3 : RS485 Signal A/-
	4	Send Request	Send Request	
	5	Logical Ground	Logical Ground	
	6	+5V , 100Ω	+5V , 100Ω	
	7	+24V	Null/+24V	
	8	RS485 Signal A	RS485 Signal A	
	9	Reserved	RS232 Signal TXD	

	Shell	Shell Ground	Shell	Ground	
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