

ELC Controllers / Modules

Standards and Certifications

Table 50-9. Approvals/Certifications

Description	Specification			
Electrical/EMC				
ESD Immunity	8 kV air discharge			
EFT Immunity	Power Line: 2 kV; Digital I/O: 1 kV; Analog & Communication I/O: 250V			
Damped-Oscillatory Wave	Power Line: 1 kV; Digital I/O: 1 kV			
RS Immunity	26 MHz – 1 GHz, 10 V/m			
Other Approvals				
Agency Certifications	UL 508, cUL, CE			

Technical Data and Specifications

Table 50-10. Environmental Ratings

Description	Specification		
Transportation & Storage			
Temperature	-13° – 158°F (-25° – 70°C)		
Humidity	5 - 95%		
Operating			
Temperature	32° – 131°F (0° – 55°C)		
Humidity	50 – 95%		
Power Supply Voltage	ELC: 24V DC (-15% – 20%) (With DC input reverse polarity protection), Expansion Unit: supplied by the ELC		
Power Consumption	3-6W		
Insulation Resistance	$> 5 M\Omega$ at 500V DC (Between all inputs/outputs and earth)		
Grounding	The diameter of grounding wire cannot be smaller than the wire diameter of terminals L and N (All ELC units should be grounded directly to the ground pole).		
Vibration / Shock Resistance	tance Standard: IEC1131-2, IEC 68-2-6 (TEST Fc) / IEC1131-2 & IEC 68-2-27 (TEST Ea)		
Weight (approx.)	0.348 Lbs (0.158 kg)		

Table 50-11. DC Input Point Electrical Specifications

Description	Specification		
Input Type	DC (SINK or SOURCE)		
Input Current	24V DC 5 mA		
Active Level	OFF → ON, above 16V DC		
	ON → OFF, below 14.4V DC		
Response Time	About 10 mS (An adjustment range of 0 – 10,000 mS could be selected through D1020 and D1021)		

Table 50-12. Output Point Electrical Specifications

Output Type	Relay – R	Transistor – T		
Current Specification	1.5A/1 point (5A/COM)	0.3A/1 point @ 40°C; When the output of Y0 and Y1 is high-speed pulse, Y0 and Y1 = 30 mA		
Voltage Specification	Below 250V AC, 30V DC	30V DC		
Maximum Loading 75 VA (Inductive)		9W/1 point	When the output of Y0 and Y1 is high-speed pulse, Y0 and	
	90W (Resistive)		Y1 = 0.9W (Y0 = 32 kHz, Y1 = 10kHz), Y0 can be 50 kHz using D registers.	
Response Time	Adjustable 0 – 15 ms, default is 10 ms	OFF → ON 20 µs ON → OFF 30 µs	Y0 and Y1 are specified points for high-speed pulse	

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