

# SPECIFYING AN I/O WIRING SYSTEM

Compatibility Matrix Chart for 205/305/405 PLCs									
I/O Modules	Feed-through Modules			AC-Powered Relay Modules			DC-Powered Relay Modules		
	ZL-CM20	ZL-CM24	ZL-CM40	ZL-CM08RL120	ZL-CM16RL120A	ZL-CM16RL120B	ZL-CM08RL24	ZL-CM16RL24A	ZL-CM16RL24B
D2-08NA-1	ZL-2CBL1#	-	-	-	-	-	-	-	-
D2-08ND3	ZL-2CBL1#	-	-	-	-	-	-	-	-
D2-16NA	ZL-2CBL2#	-	-	-	-	-	-	-	-
D2-16ND3-2	ZL-2CBL2#	-	-	-	-	-	-	-	-
D2-32ND3	-	-	ZL-4CBL4#	-	-	-	-	-	-
D2-32ND3-2	-	-	ZL-4CBL4#	-	-	-	-	-	-
D2-08TA	ZL-2CBL1#	-	-	ZL-2CBL1#	-	-	-	-	-
D2-08TD1	ZL-2CBL1#	-	-	-	-	-	ZL-2CBL1#	-	-
D2-08TD2	ZL-2CBL1#	-	-	-	-	-	-	-	-
D2-08TR	ZL-2CBL1#	-	-	-	-	-	ZL-2CBL1#	-	-
D2-12TA	ZL-2CBL2#	-	-	-	ZL-2CBL2#	-	-	-	-
D2-12TR	ZL-2CBL2#	-	-	-	-	-	-	-	-
D2-16TD1-2	ZL-2CBL2#	-	-	-	-	-	-	ZL-2CBL2#	-
D2-16TD2-2	ZL-2CBL2#	-	-	-	-	-	-	ZL-2CBL2#	-
D2-32TD1	-	-	ZL-4CBL4#	-	-	-	-	-	-
D2-32TD2	-	-	ZL-4CBL4#	-	-	-	-	-	-
D3-16NA	ZL-3CBL2#	-	-	-	-	-	-	-	-
D3-16ND2-1	ZL-3CBL2#	-	-	-	-	-	-	-	-
D3-16ND2-2	-	ZL-3CBL3#	-	-	-	-	-	-	-
D3-16ND2F	ZL-3CBL2#	-	-	-	-	-	-	-	-
D3-16NE3	ZL-3CBL2#	-	-	-	-	-	-	-	-
D3-08TA-1	ZL-3CBL2#	-	-	ZL-3CBL1FR8#	-	-	-	-	-
D3-16TA-2	ZL-3CBL2#	-	-	-	ZL-3CBL2FR16#	-	-	-	-
D3-16TD1-1	ZL-3CBL2#	-	-	-	-	-	-	ZL-3CBL2FR16#	-
D3-16TD1-2	-	ZL-3CBL3#	-	-	-	-	-	-	ZL-3CBL3FRD16#
D3-16TD2	ZL-3CBL2#	-	-	-	-	-	-	ZL-3CBL2FR16#	-
D4-08ND3S	-	ZL-4CBL2#	-	-	-	-	-	-	-
D4-16NA	-	ZL-4CBL2#	-	-	-	-	-	-	-
D4-16NA-1	-	ZL-4CBL2#	-	-	-	-	-	-	-
D4-16ND2	-	ZL-4CBL2#	-	-	-	-	-	-	-
D4-16ND2F	-	ZL-4CBL2#	-	-	-	-	-	-	-
D4-16NE3	-	ZL-4CBL2#	-	-	-	-	-	-	-
D4-32ND3-1	-	-	ZL-4CBL4#	-	-	-	-	-	-
D4-32ND3-2	-	-	ZL-4CBL4#	-	-	-	-	-	-
D4-64ND2	-	-	ZL-4CBL4#	-	-	-	-	-	-
D4-16TA	-	ZL-4CBL2#	-	-	-	ZL-4CBL2#	-	-	-
D4-16TD1	-	ZL-4CBL2#	-	-	-	-	-	-	ZL-4CBL2#
D4-16TD2	-	ZL-4CBL2#	-	-	-	-	-	-	ZL-4CBL2#
D4-32TD1	-	-	ZL-4CBL4#	-	-	-	-	-	-
D4-32TD1-1	-	-	ZL-4CBL4#	-	-	-	-	-	-
D4-32TD2	-	-	ZL-4CBL4#	-	-	-	-	-	-
D4-64TD1	-	-	ZL-4CBL4#	-	-	-	-	-	-
F3-08TAS	ZL-3CBL2#	-	-	-	-	-	-	-	-
F3-16ND3F	ZL-3CBL2#	-	-	-	-	-	-	-	-
F3-1616TA-2	ZL-3CBL2#	-	-	-	-	-	-	-	-
F4-08NE3S	-	ZL-4CBL2#	-	-	-	-	-	-	-
H2-CTRIO	ZL-2CBL2#	-	-	-	-	-	-	-	-

NOTE: # Cables are available in 0.5, 1.0 and 2.0 meter lengths. The length is designated by the last digit in the part number: (blank) = 0.5m, 1 = 1.0m, 2 = 2.0m long. Example: ZL-2CBL2-2 represents a cable length of 2 meters.



# SPECIFYING AN I/O WIRING SYSTEM, (CONT.)

Compatibility Matrix Chart for 205/305/405 PLCs (cont'd)										
I/O Modules	Fuse Modules			LED Modules					Communication Adapter Boards	
	ZL-CM08TF	ZL-CM16TF1	ZL-CM16TF2	ZL-CM08L24	ZL-CM08L120	ZL-CM16L24	ZL-CM16L120	ZL-CM32L524	DN-15TB	DN-25TB
D2-08NA-1	-	-	-	-	ZL-2CBL1#	-	-	-		
D2-08ND3	-	-	-	ZL-2CBL1#	-	-	-	-	ZL-DN15TB-CBL	ZL-DN25TB-CBL
D2-16NA	-	-	-	-	-	-	ZL-2CBL2#	-		
D2-16ND3-2	-	-	-	-	-	ZL-2CBL2#	--	-		
D2-08TA	ZL-2CBL1#	-	-	-	-	-	--	-		
D2-08TD1	ZL-2CBL1#	-	-	-	-	-	--	-		
D2-08TD2	-	-	-	-	-	-	-	-		
D2-08TR	ZL-2CBL1#	--	-	-	-	-	-	-		
D2-12TA	-	ZL-2CBL2#	-	-	-	-	-	-		
D2-12TR	-	ZL-2CBL2#	-	-	-	-	-	-		
D2-16TD1-2	-	ZL-2CBL2#	-	-	-	-	-	-		
D2-16TD2-2	-	ZL-2CBL2#	-	-	-	-	--	-		
D2-32TD1	-	-	-	-	-	-	-	-		
D2-32ND3	-	-	-	-	-	-	-	ZL-4CBL4#		
D3-16NA	-	-	-	-	-	-	ZL-3CBL2#	-		
D3-16ND2-1	-	-	-	-	-	-	-	-		
D3-16ND2-2	-	-	-	-	-	-	-	-		
D3-16ND2F	-	-	-	-	-	-	-	-		
D3-16NE3	-	-	-	-	-	ZL-3CBL2#	-	-		
D3-08TA-1	-	ZL-3CBL1FR8#	-	-	-	-	-	-		
D3-16TA-2	-	ZL-3CBL2FR16#	-	-	-	-	-	-		
D3-16TD1-1	-	ZL-3CBL2FR16#	-	-	-	-	-	-		
D3-16TD1-2	-	-	ZL-3CBL3FRD16#	-	-	-	-	-		
D3-16TD2	-	ZL-3CBL2FR16#	-	-	-	-	-	-		
D4-08ND3S	-	-	-	-	-	-	-	-		
D4-16NA	-	-	-	-	-	-	ZL-4CBL2#	-		
D4-16NA-1	-	-	-	-	-	-	-	-		
D4-16ND2	-	-	-	-	-	ZL-4CBL2#	-	-		
D4-16ND2F	-	-	-	-	-	ZL-4CBL2#	-	-		
D4-16NE3	-	-	-	-	-	ZL-4CBL2#	-	-		
D4-32ND3-1	-	-	-	-	-	-	-	ZL-4CBL4#		
D4-32ND3-2	-	-	-	-	-	-	-	ZL-4CBL4#		
D4-64ND2	-	-	-	-	-	-	-	ZL-4CBL4#		
D4-16TA	-	-	ZL-4CBL2#	-	-	-	-	-		
D4-16TD1	-	-	ZL-4CBL2#	-	-	-	-	-		
D4-16TD2	-	-	ZL-4CBL2#	-	-	-	-	-		
D4-32TD1	-	-	-	-	-	-	-	-		
D4-32TD1-1	-	-	-	-	-	-	-	-		
D4-32TD2	-	-	-	-	-	-	-	-		
D4-64TD1	-	-	-	-	-	-	-	-		
F3-08TAS	-	-	-	-	-	-	-	-		
F3-16ND3F	-	-	-	-	-	-	-	-		
F4-08NE3S	-	-	-	-	-	-	-	-		

Note: The communication modules will work **only** with the DL06/250/260/350/450 bottom ports and the DL205/305/405 DCM modules.



\*NOTE: 64-point modules for the DL405 require two cables per module. # Cables are available in 0.5, 1.0 and 2.0 meter lengths. The length is designated by the last digit in the part number: (blank) = 0.5m, -1 = 1.0m, 2 = 2.0m long. Example: ZL-2CBL2-2 represents a cable length of 2 meters.

# SPECIFYING AN I/O WIRING SYSTEM, (CONT.)

Compatibility Matrix Chart For 05/06 PLCs				
I/O Modules	Feed-through Modules	Relay Modules	Fuse Modules	LED Modules
		ZL-CM056	ZL-CM16RL24B	ZL-CM16TF2
<b>DO-16TD1</b>	ZL-CBL056	ZL-CBL056FR	ZL-CBL056FR	-
<b>DO-16TD2</b>	ZL-CBL056	ZL-CBL056FR	ZL-CBL056FR	-
<b>DO-16ND3</b>	ZL-CBL056	-	-	ZL-CBL056L

# CONNECTION CABLES

ZIPLink Connection Cables					
Part Number	Description	Insulation Rating	Conductor Size	Price	
<b>Standard DL205 8 Channel</b>					
ZL-2CBL1	DL205-8 ZIPLink cable, 1.6 ft. (0.5M)	300V 80°C	#24 AWG	\$28.00	
ZL-2CBL1-1	DL205-8 ZIPLink cable, 3.3 ft. (1.0M)	300V 80°C	#24 AWG	\$28.00	
ZL-2CBL1-2	DL205-8 ZIPLink cable, 6.5 ft. (2.0M)	300V 80°C	#24 AWG	\$30.00	
<b>Standard DL205 16 Channel</b>					
ZL-2CBL2	DL205-16 ZIPLink cable, 1.6 ft. (0.5M)	300V 80°C	#24 AWG	\$48.00	
ZL-2CBL2-1	DL205-16 ZIPLink cable, 3.3 ft. (1.0M)	300V 80°C	#24 AWG	\$48.00	
ZL-2CBL2-2	DL205-16 ZIPLink cable, 6.5 ft. (2.0M)	300V 80°C	#24 AWG	\$50.00	
<b>LED/Sensor DL205 16 Channel</b>					
ZL-2CBL2L	DL205-16, ZIPLink LED/sensor module cable, 1.6 ft. (0.5M)	300V 80°C	#24 AWG	\$38.00	
ZL-2CBL2L-1	DL205-16, ZIPLink LED/sensor module cable, 3.3 ft. (1.0M)	300V 80°C	#24 AWG	\$38.00	
ZL-2CBL2L-2	DL205-16, ZIPLink LED/sensor module cable, 6.5 ft. (2.0M)	300V 80°C	#24 AWG	\$39.00	
<b>Standard DL305 16 Channel</b>					
ZL-3CBL2	DL305-16 ZIPLink cable, 1.6 ft. (0.5M)	300V 80°C	#24 AWG	\$38.00	
ZL-3CBL2-1	DL305-16 ZIPLink cable, 3.3 ft. (1.0M)	300V 80°C	#24 AWG	\$30.00	
ZL-3CBL2-2	DL305-16 ZIPLink cable, 6.5 ft. (2.0M)	300V 80°C	#24 AWG	\$41.00	
<b>LED/Sensor DL305 16 Channel</b>					
ZL-3CBL2L	DL305-16, ZIPLink LED/sensor module cable, 1.6 ft. (0.5M)	300V 80°C	#24 AWG	\$27.00	
ZL-3CBL2L-1	DL305-16, ZIPLink LED/sensor module cable, 3.3 ft. (1.0M)	300V 80°C	#24 AWG	\$28.00	
ZL-3CBL2L-2	DL305-16, ZIPLink LED/sensor module cable, 6.5 ft. (2.0M)	300V 80°C	#24 AWG	\$32.00	
<b>Fuse/Relay DL305 8 Channel</b>					
ZL-3CBL1FR8	DL305-8, ZIPLink fuse/relay module cable, 1.6 ft. (0.5M)	300V 80°C	#24 AWG	\$27.00	
ZL-3CBL1FR8-1	DL305-8, ZIPLink fuse/relay module cable, 3.3 ft. (1.0M)	300V 80°C	#24 AWG	\$28.00	
ZL-3CBL1FR8-2	DL305-8, ZIPLink fuse/relay module cable, 6.5 ft. (2.0M)	300V 80°C	#24 AWG	\$32.00	
<b>Fuse/Relay DL305 16 Channel</b>					
ZL-3CBL2FR16	DL305-16, ZIPLink fuse/relay module cable, 1.6 ft. (0.5M)	300V 80°C	#24 AWG	\$27.00	
ZL-3CBL2FR16-1	DL305-16, ZIPLink fuse/relay module cable, 3.3 ft. (1.0M)	300V 80°C	#24 AWG	\$28.00	
ZL-3CBL2FR16-2	DL305-16, ZIPLink fuse/relay module cable, 6.5 ft. (2.0M)	300V 80°C	#24 AWG	\$32.00	
<b>Standard DL305 16 Channel</b>					
ZL-3CBL3	DL305-16 ZIPLink cable, 1.6 ft. (0.5M)	300V 80°C	#24 AWG	\$24.00	
ZL-3CBL3-1	DL305-16 ZIPLink cable, 3.3 ft. (1.0M)	300V 80°C	#24 AWG	\$24.00	
ZL-3CBL3-2	DL305-16 ZIPLink cable, 6.5 ft. (2.0M)	300V 80°C	#24 AWG	\$38.00	
<b>Fuse/Relay DL305 16 Channel</b>					
ZL-3CBL3FRD16	DL305-16, ZIPLink fuse/relay module cable, 1.6 ft. (0.5M)	300V 80°C	#24 AWG	\$24.00	
ZL-3CBL3FRD16-1	DL305-16, ZIPLink fuse/relay module cable, 3.3 ft. (1.0M)	300V 80°C	#24 AWG	\$24.00	
ZL-3CBL3FRD16-2	DL305-16, ZIPLink fuse/relay module cable, 6.5 ft. (2.0M)	300V 80°C	#24 AWG	\$27.00	
<b>Standard DL405 16 Channel</b>					
ZL-4CBL2	DL405-16 ZIPLink cable, 1.6 ft. (0.5M)	300V 80°C	#24 AWG	\$42.00	
ZL-4CBL2-1	DL405-16 ZIPLink cable, 3.3 ft. (1.0M)	300V 80°C	#24 AWG	\$42.00	
ZL-4CBL2-2	DL405-16 ZIPLink cable, 6.5 ft. (2.0M)	300V 80°C	#24 AWG	\$46.00	
<b>Standard DL205 or DL405 32 Channel</b>					
ZL-4CBL4	DL205 or DL405-32 ZIPLink cable, 1.6 ft. (0.5M)	300V 80°C	#24 AWG	\$59.00	
ZL-4CBL4-1	DL205 or DL405-32 ZIPLink cable, 3.3 ft. (1.0M)	300V 80°C	#24 AWG	\$59.00	
ZL-4CBL4-2	DL205 or DL405-32 ZIPLink cable, 6.5 ft. (2.0M)	300V 80°C	#24 AWG	\$68.00	

**ZL-2CBL1xx**



**ZL-2CBL2xx**



**ZL-3CBL2xx**



**ZL-3CBL3xx**



**ZL-4CBL2xx**



**ZL-4CBL4xx**



CONNECTION

# CONNECTION CABLES (CONT.)

ZIPLink Connection Cables				
Part Number	Description	Insulation Rating	Conductor Size	Price
<b>Communication Adapter</b>				
ZL-DN15TB-CBL	15 pin shielded cable for DN-15TB module 6.5 ft (2M)	300V 80°C	#24 AWG	\$10.00
ZL-DN25TB-CBL	25 pin shielded cable for DN-25TB module 6 ft (1.8M)	300V 80°C	#28 AWG	\$10.00
<b>Ready to Wire w/Pigtail End</b>				
ZL-2CBL2-2P	DL-205-16 Ready-to-wire 20 conductor cable, 2A max/conductor 6.5 ft (2M)	300V 80°C	#24 AWG	\$25.00
ZL-3CBL3-2P	DL-305-16 Ready-to-wire 24 conductor cable, 2A max/conductor 6.5 ft (2M)	300V 80°C	#24 AWG	\$33.00
<b>Standard DL05/06</b>				
ZL-CBL056	Ziplink cable for DL05 and 06 16 point I/O modules to Ziplink feedthrough modules (0.5M)	300V 80°C	#24 AWG	\$21.00
ZL-CBL056L	Ziplink cable for DL05 and 06 16 point I/O LED modules (0.5M)	300V 80°C	#24 AWG	\$24.00
ZL-CBL056FR	Ziplink cable for DL05 and 06 16 point I/O fuse/relay modules (0.5M)	300V 80°C	#24 AWG	\$24.00
<b>Standard</b>				
ZL-DB9-CBL	Cable with 9-pin Dsub connectors on both ends, black. male/female, (2M)	300V 80°C	#28 AWG	\$7.00
ZL-DB15-CBL	Cable with 15-pin Dsub connectors on both ends, black. male/female, (2M)	300V 80°C	#28 AWG	\$8.00
ZL-DB25-CBL	Cable with 25-pin Dsub connectors on both ends, black. male/female, (2M)	300V 80°C	#28AWG	\$9.00
ZL-RJ12-CBL	Reverse-wired cable with two RJ12 connectors, black. (2M)	300V 80°C	#28 AWG	\$4.00

Note: Use ZL-DN15TB-CBL cable only for Communication Module DN-15TB; Super VGA cables will not function correctly.

## ZL-2CBL2-2P\*



\* Can be used with any brand PLC.

## ZL-CBL056L



## ZL-DN15TB-CBL



## ZL-DN25TB-CBL



# FEED-THROUGH CONNECTOR MODULES

Feed-through modules provide low-cost and compact field wiring screw termination solutions for quickly connecting ZIPLink cables with PLCs.



**ZL-CM20**



**ZL-CM24**



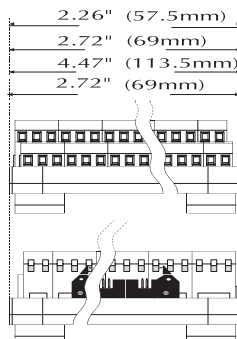
**ZL-CM40**



**ZL-CM056**

Specifications												
Feed-Through Modules	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg
	ZL-CM20	1	\$29.00	ZL-CM24	1	\$34.00	ZL-CM40	1	\$48.00	ZL-CM056	1	\$19.00
<b>Description</b>	20-pole connector module with marking labels			24-pole connector module with marking labels			40-pole connector module with marking labels			Ziplink connector module for O5 and O6 PLC 16 channel I/O modules		
<b>Approvals</b>	UL,CUL,CE			UL,CUL,CE			UL,CUL,CE			UL,CUL,CE		
<b>Voltage Rating</b>	0 -132VAC/DC			0 -132VAC/DC			0 -132VAC/DC			0 -132VAC/DC		
<b>UL/CUL File #</b>	E197592			E197592			E197592			E197592		
<b>Operating Voltage</b>	0-120VAC/DC			0-120VAC/DC			0-120VAC/DC			0-120VAC/DC		
<b>Maximum Voltage</b>	600Vp			600Vp			600Vp			600Vp		
<b>Max. Current (per circuit)</b>	2 Amps			2 Amps			2 Amps			2 Amps		
<b>Max. Current (per module)</b>	12 Amps			12 Amps			12 Amps			12 Amps		
<b>Number of Channels</b>	20			24			40			24		
<b>Terminal Block Contacts</b>	Copper alloy, tin-lead plating											
<b>Wire range (rated cross section)</b>	22-14AWG (0.2-25mm <sup>2</sup> )			22-14AWG (0.2-25mm <sup>2</sup> )			22-14AWG (0.2-25mm <sup>2</sup> )			22-14AWG (0.2-25mm <sup>2</sup> )		
<b>Wire Strip Length</b>	0.32" (8mm)			0.32" (8mm)			0.32" (8mm)			0.32" (8mm)		
<b>Tightening Torque</b>	3.5 lb./in. (0.4Nm)			3.5 lb./in. (0.4Nm)			3.5 lb./in. (0.4Nm)			3.5 lb./in. (0.4Nm)		
<b>Operating Temperature</b>	-10°C to+50°C			-10°C to +50°C			-10°C to+50°C			-10°C to+50°C		
<b>Dimensions (L x W x H)</b>	2.26" w x 1.85" h x 2.17" l (57.5mm x 47mm x 2.17mm)			2.72" w x 1.85" h x 2.17" l (69mm x 47mm x 55mm)			4.47" w x 1.85" h x 2.17" l (113.5mm x 47mm x 55mm)			2.72" w x 1.85" h x 2.17" l (69mm x 47mm x 55mm)		
Accessories												
	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg
<b>DIN Rail</b>	DN-R35S1	10	\$20.25	DN-R35S1	10	\$20.25	DN-R35S1	10	\$20.25	DN-R35S1	10	\$20.25
<b>Angled Support Bracket</b>	DN-ASB1	50	\$44.25	DN-ASB1	50	\$44.25	DN-ASB1	50	\$44.25	DN-ASB1	50	\$44.25
<b>End Bracket</b>	DN-EB35	50	\$35.25	DN-EB35	50	\$35.25	DN-EB35	50	\$35.25	DN-EB35	50	\$35.25
<b>Slotted Screwdriver</b>	DN-SS1	1	\$4.25	DN-SS1	1	\$4.25	DN-SS1	1	\$4.25	DN-SS1	1	\$4.25
<b>Marking Labels</b>	Included — preprinted and blank			Included — preprinted and blank			Included — preprinted and blank			Included — preprinted and blank		

**ZL-CM20**  
**ZL-CM24**  
**ZL-CM40**  
**ZL-CM056**



CONNECTION

# FUSE MODULES

Fuse modules provide fuse protection for PLC output devices. The 8 and 16-point fuse modules are supplied with replaceable fuses and protective safety covers. Use with DL05/06/205/305/405 PLCs. Commons are not isolated on ZL-CM16TF1 and ZL-CM16TF2.



**ZL-CM08TF**



**ZL-CM16TF1**



**ZL-CM16TF2**

*Note: Do not exceed 5 Amps maximum per common with PLC I/O modules D2-12TR, D3-16TA2, D4-16TA.*

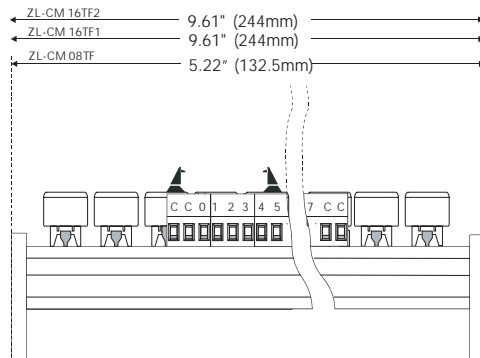
Specifications									
Fuse Modules	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg
		ZL-CM08TF	1	\$49.00	ZL-CM16TF1	1	\$79.00	ZL-CM16TF2	1
<b>Description</b>	8-point I/O fused connector module, 20 pin IDC			16-point I/O fused connector module, 20 pin IDC			16-point I/O fused connector module, 24 pin IDC		
<b>Approvals</b>	UL,CUL,CE			UL,CUL,CE			UL,CUL,CE		
<b>Voltage Rating</b>	0 -132VAC/DC			0 -132VAC/DC			0 -132VAC/DC		
<b>Maximum Peak Voltage</b>	600Vp			600Vp			600Vp		
<b>Number of Channels</b>	8			16			16		
<b>Maximum Current (per Circuit)</b>	2A			2A			2A		
<b>Maximum Current (per Module)</b>	12A			16A			16A		
<b># of Terminals per Device Common</b>	1			2			2		
<b>Terminal Block Contacts</b>	Copper alloy, tin-lead plating								
<b>Wire Range (Rated Cross Section)</b>	14-22 AWG (0.2-2.5mm <sup>2</sup> )			14-22 AWG (0.2-2.5mm <sup>2</sup> )			14-22 AWG (0.2-2.5mm <sup>2</sup> )		
<b>Wire Strip Length</b>	0.32" (8mm)			0.32" (8mm)			0.32" (8mm)		
<b>Tightening Torque</b>	3.5-4.5 lb/in. (0.38-0.50 Nm)			3.5-4.5 lb/in. (0.38-0.50 Nm)			3.5-4.5 lb/in. (0.38-0.50 Nm)		
<b>Operating Temperature Range</b>	-10°C to +50°C			-10°C to +50°C			-10°C to +50°C		
<b>Storage temperature</b>	-10°C to +50°C			-10°C to +50°C			-10°C to +50°C		
<b>Protection</b>	IP00			IP00			IP00		
<b>Replaceable Fuse Size*</b>	5x20mm			5x20mm			5x20mm		
<b>Dimensions (L x W x H)</b>	3.66"x2.48"x5.22"			3.66"x2.48"x9.61"			3.66"x2.48"x9.61"		

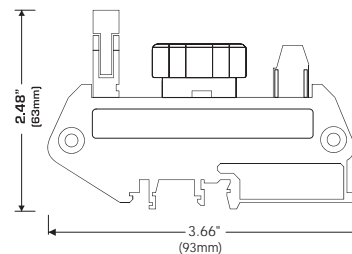
Accessories									
	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg
<b>DIN Rail</b>	DN-R35S1	10	\$20.25	DN-R35S1	10	\$20.25	DN-R35S1	10	\$20.25
<b>Angled Support Bracket</b>	DN-ASB1	50	\$44.25	DN-ASB1	50	\$44.25	DN-ASB1	50	\$44.25
<b>End Bracket</b>	DN-EB35	50	\$35.25	DN-EB35	50	\$35.25	DN-EB35	50	\$35.25
<b>Slotted Screwdriver</b>	DN-SS1	1	\$4.25	DN-SS1	1	\$4.25	DN-SS1	1	\$4.25
<b>Fuse kit</b>	ZL-FUSE-KIT	Assorted fuses	\$16.00	ZL-FUSE-KIT	Assorted fuses	\$16.00	ZL-FUSE-KIT	Assorted fuses	\$16.00

\*Such as a Ferraz Shawmut GDG2 or Bussman GDC-2A TimeLag fuse or equivalent

**ZL-CM16TF2**  
**ZL-CM16TF1**  
**ZL-CM08TF**



### Dimensions





# DC-POWERED RELAY MODULES

Our DC-powered relay modules provide isolation, switch high current (10A) loads, are offered in 8 or 16 points, and include diode protection to prevent voltage spikes at the relay coil from damaging connected PLC I/O modules.

Relays included.



**ZL-CM08RL24**



**ZL-CM16RL24A**

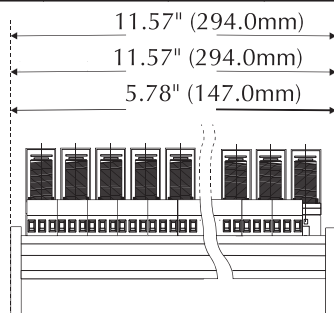


**ZL-CM16RL24B**

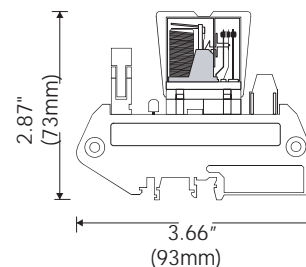
Specifications									
DC Relay Modules	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg
		ZL-CM08RL24	1	\$99.00	ZL-CM16RL24A	1	\$191.00	ZL-CM16RL24B	1
<b>Description</b>	8-channel relay module w/LEDs			16-channel relay module w/LEDs, 20 pin IDC			16-channel relay module w/LEDs, 24 pin IDC		
<b>Approvals</b>	UL/CUL/CE			UL/CUL/CE			UL/CUL/CE		
<b>Operating Range, Coil</b>	19.4-26.4 VDC			19.4-26.4 VDC			19.4-26.4 VDC		
<b>Input Current per Channel</b>	25mA ±5%			25mA ±5%			25mA ±5%		
<b>Coil Supply Voltage</b>	24VDC±5%			24VDC±5%			24VDC±5%		
<b>Coil Supply Current Max</b>	200mA (total 8 modules)			400mA (total 16 modules)			400mA (total 16 modules)		
<b>Pickup Current</b>	16.7mA			16.7mA			16.7mA		
<b>OFF to ON/ON to OFF Response</b>	15ms/5ms			15ms/5ms			15ms/5ms		
<b>Switching Speed</b>	60Hz			60Hz			60Hz		
<b>Terminal Block Contact</b>	Copper alloy, tin-lead plating								
<b>Contact Type</b>	1 Form C (SPDT)			1 Form C (SPDT)			1 Form C (SPDT)		
<b>Contact Voltage (per point)</b>	250VAC/30VDC			250VAC/30VDC			250VAC/30VDC		
<b>Contact Current (per point)</b>	10A			10A			10A		
<b>Life Mechanical Contact</b>	2x10 <sup>6</sup>			2x10 <sup>6</sup>			2x10 <sup>6</sup>		
<b>Maximum Switching Voltage</b>	400VAC 125VDC			400VAC 125VDC			400VAC 125VDC		
<b>Maximum Current for Relay</b>	10A			10A			10A		
<b>Maximum Power, Inductive</b>	AC 1500VA, DC 150W			AC 1500VA, DC 150W			AC 1500VA, DC 150W		
<b>Maximum Power, Resistive</b>	AC 2500VA, DC 300W			AC 2500VA, DC 300W			AC 2500VA, DC 300W		
<b>Minimum Load</b>	100mA 5VDC			100mA 5VDC			100mA 5VDC		
<b>Channel to Channel/Contact Isolation</b>	1000VAC (up to 1 min.)			1000VAC (up to 1 min.)			1000VAC (up to 1 min.)		
<b>Coil/Contact Isolation</b>	2500VAC (up to 1min.)			2500VAC (up to 1min.)			2500VAC (up to 1min.)		
<b>Operating Temperature</b>	-10°C to +45°C			-10°C to +45°C			-10°C to +45°C		
<b>Dimensions (L x W x H)</b>	5.78"x3.66"x 2.87"			11.574 x3.66"x 2.87"			11.57"x3.66"x2.87"		

Accessories									
	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg
<b>DIN Rail</b>	DN-R35S1	10	\$20.25	DN-R35S1	10	\$20.25	DN-R35S1	10	\$20.25
<b>Angled Support Bracket</b>	DN-ASB1	50	\$44.25	DN-ASB1	50	\$44.25	DN-ASB1	50	\$44.25
<b>End Bracket</b>	DN-EB35	50	\$35.25	DN-EB35	50	\$35.25	DN-EB35	50	\$35.25
<b>Slotted Screwdriver</b>	DN-SS1	1	\$4.25	DN-SS1	1	\$4.25	DN-SS1	1	\$4.25
<b>DC Relays (24VDC)</b>	ZL-RELAY-24	10	\$29.00	ZL-RELAY-24	10	\$29.00	ZL-RELAY-24	10	\$29.00
<b>Relay Kit</b>	ZL-RELAY-KIT	10	\$7.00	ZL-RELAY-KIT	10	\$7.00	ZL-RELAY-KIT	10	\$7.00

**ZL-CM16RL24A**  
**ZL-CM16RL24B**  
**ZL-CM08RL24**



Dimensions



CONNECTION



# AC-POWERED RELAY MODULES

Our AC-powered relay modules provide isolation, switch high current (10A) loads, are offered in 8 or 16 points, and include diode protection to prevent voltage spikes at the relay coil from damaging connected PLC I/O modules.

*Relays included.*

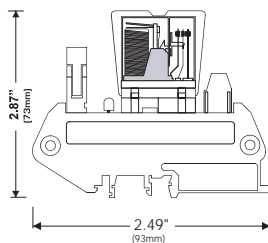


**ZL-CM08RL120**

**ZL-CM16RL120A**

**ZL-CM16RL120B**

Specifications									
AC Powered Relay Modules	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg
	ZL-CM08RL120	1	\$137.00	ZL-CM16RL120A	1	\$186.00	ZL-CM16RL120B	1	\$199.00
<b>Description</b>	8-channel relay module w/LEDs, 120VAC, 20-pin IDC			16-channel relay module w/LEDs, 120VAC, 20-pin IDC			16-channel relay module w/LEDs, 120VAC, 24-pin IDC		
<b>Approvals</b>	UL,CUL,CE			UL,CUL,CE			UL,CUL,CE		
<b>Contact Type</b>	1 Form C (SPDT)			1 Form C (SPDT)			1 Form C (SPDT)		
<b>Contact Rated Current</b>	10A			10A			10A		
<b>Terminal Block Contacts</b>	Copper alloy, tin-lead plating								
<b>Maximum Switching Voltage</b>	400VAC			400VAC			400VAC		
<b>Material Contact</b>	Ag/Ni			Ag/Ni			Ag/Ni		
<b>Contact Voltage (per point)</b>	250VAC/30VDC			250VAC/30VDC			250VAC/30VDC		
<b>Max Power, Inductive</b>	AC 1500VA, DC 150W			AC 1500VA, DC 150W			AC 1500VA, DC 150W		
<b>Max Power, Resistive</b>	AC 2500VA, DC 300W			AC 2500VA, DC 300W			AC 2500VA, DC 300W		
<b>Minimum Load</b>	100Ma 5VDC			100Ma 5VDC			100Ma 5VDC		
<b>Mechanical Life</b>	2X10 <sup>6</sup> cycles			2X10 <sup>6</sup> cycles			2X10 <sup>6</sup> cycles		
<b>Coil/Contact Isolation</b>	2000Vrms (up to 1min)			2000Vrms (up to 1min)			2000Vrms (up to 1min)		
<b>Input Voltage</b>	88-130VAC 50-60Hz			88-130VAC 50-60Hz			88-130VAC 50-60Hz		
<b>Total Input Current</b>	60mA			60mA			15mA		
<b>Coil Supply Voltage</b>	120VAC -20%/+10%, 50-60hz			120VAC -20%/+10%, 50-60hz			120VAC -20%/+10%, 50-60hz		
<b>Operate/Release Time</b>	15ms/10ms			15ms/10ms			15ms/10ms		
<b>LED Indicator Current</b>	2mA			2mA			2mA		
<b>Operating Temperature</b>	-10°C to +45°C			-10°C to +45°C			-10°C to +45°C		
<b>Dimensions (L x W x H)</b>	5.78"x2.30"x2.87" (With Relay)			11.57"x2.30"x2.87" (With Relay)			11.57x2.30"x2.87" (With Relay)		
Accessories									
	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg	Part #	Pcs/Pkg	Price/Pkg
<b>DIN Rail</b>	DN-R35S1	10	\$20.25	DN-R35S1	10	\$20.25	DN-R35S1	10	\$20.25
<b>Angled Support Bracket</b>	DN-ASB1	50	\$44.25	DN-ASB1	50	\$44.25	DN-ASB1	50	\$44.25
<b>End Bracket</b>	DN-EB35	50	\$35.25	DN-EB35	50	\$35.25	DN-EB35	50	\$35.25
<b>Slotted Screwdriver</b>	DN-SS1	1	\$4.25	DN-SS1	1	\$4.25	DN-SS1	1	\$4.25
<b>AC Relays (120VAC)</b>	ZL-RELAY-120	10	\$48.00	ZL-RELAY-120	10	\$48.00	ZL-RELAY-120	10	\$48.00



**ZL-CM16RL120A**  
**ZL-CM16RL120B**  
**ZL-CM08RL120**

