# **CLICK PLUS Option Slot Module Specifications**

Please note: \$US prices shown

For current \$AUD visit www.directautomation.com.au

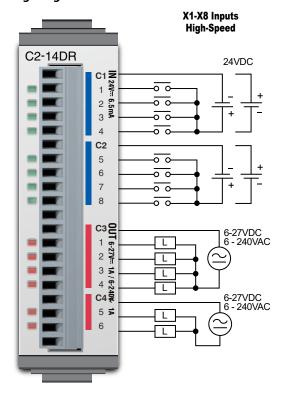
**C2-14DR** 

\$70.00

#### 8 DC Input/6 Relay Output Option Slot I/O Module

8-point 24VDC input, 6-point Form A SPST relay output module, removable terminal block included (replacement AutomationDirect p/n C0-16TB).

#### Wiring Diagram





**NOTE:** Use this module and a CLICK PLUS CPU as a comparable replacement for the existing C0-11DRE-D PLC.

## Z/PLink Pre-Wired PLC Connection Cables and Modules

ZL-RTB20 20-pin feed-through connector module



20-pin connector cable ZL-C0-CBL20 (0.5 m length) ZL-C0-CBL20-1 (1.0 m length) ZL-C0-CBL20-2 (2.0 m length)



I/O Specifications - Inputs				
Inputs per Module 8 (Sink/Source)				
Operating Voltage Range	24VDC			
Input Voltage Range	21.6–26.4 VDC			
Input Current	Typ 6.5 mA @ 24VDC			
Maximum Input Current	7.0 mA @ 26.4 VDC			
Input Impedance	3.9 kΩ @ 24VDC			
Input Frequency (Max) X1-X8: 100kHz (3m cable)				
ON Voltage Level	> 19VDC			
OFF Voltage Level < 2VDC				
Minimum ON Current	4.5 mA			
Maximum OFF Current	0.5 mA			
OFF to ON Response	Typ 3µs, Max 5µs			
ON to OFF Response	Typ 1µs, Max 3µs			
Status Indicators	Logic Side (8 points, green LED)			
Commons	2 (4 points/common) Isolated			

I/O Specifications - Outputs				
Outputs per Module 6				
Operating Voltage Range	6-27 VDC / 6-240 VAC			
Output Type	Relay, form A (SPST)			
AC Frequency 47–63 Hz				
Maximum Current	1A/point (resistive) C3: 4A/common; C4: 2A/common			
Minimum Load Current	5mA @ 5VDC			
Maximum Inrush Current	3A for 10ms			
OFF to ON Response	< 15ms			
ON to OFF Response	< 15ms			
Status Indicators	Logic Side (6 points, red LED)			
Commons per Module	2 (4 points or 2 points / common)			

General Specifications				
Current Consumption at 24VDC 75mA max (All Points On)				
Terminal Block Replacement Part No.	<u>C0-16TB</u>			
Drawing Link PDF				
Weight	62g			

Maximum Number of High Speed Counters				
Up	6			
Down	6			
Up/Down	3			
Pulse/Direction	4			
Quadrature A-B 4				
Quadrature A-B+Z	2			

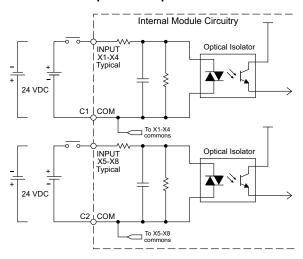
Typical Relay Life (Operations) at Room Temperature			
Voltage & Load Type Relay Life*			
30VDC Resistive 200,000 cycles			
30VDC Inductive	100,000 cycles		
250VAC Resistive 200,000 cycles			
250VAC Inductive	50,000 cycles		

\*ON to OFF = 1 cycle

# **CLICK PLUS Option Slot Module Specifications**

### **C2-14DR** (cont'd)

#### **Equivalent Input Circuit**



# 

# Insulation Requirements for IEC/UL 61010-1 and 61010-2-201 (sections 6.5 and 6.7)

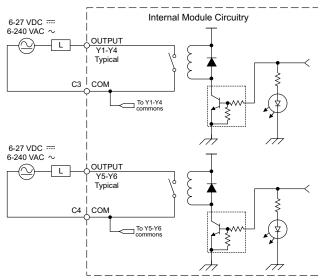
#### **Input to Output Insulation**

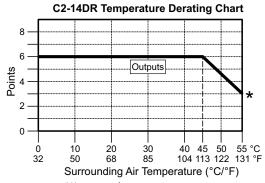
Basic insulation is provided between Relay Output 1 and the closest Input terminal. When connecting the Relay Output to a circuit that exceeds 100VAC (141VDC) more than the closest input circuit an additional basic insulation layer must be added to the input circuit.

#### **Output to Output Insulation**

Basic insulation is provided between Relay Outputs. When connecting a Relay Output to a circuit that exceeds 100VAC (141VDC) more than the adjacent Relay Outputs, an additional basic insulation layer must be added to the adjacent Relay Output circuits.

#### **Equivalent Output Circuit**



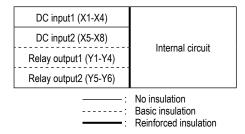


#### \* Use every other output.

#### **Additional Basic Insulation Examples**

- Supplementary Insulation: Interposing relay, additional insulating material,... (sec. 6.5.3)
- Automatic Disconnection of the Supply: Properly sized breaker (sec. 6.5.5)
- Current or Voltage Limiting device: Properly sized fuse (sec. 6.5.6)

Basic insulation requires a clearance distance of 1.5 mm or more, a creepage distance of 2.5 mm or more, and dielectric voltage withstand of 1500Vrms.

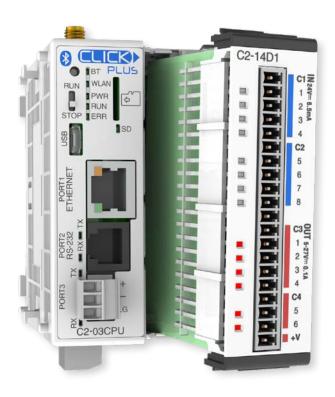


# **CLICK PLUS Option Slot Module Specifications**

## General Specifications For All CLICK PLUS Option Slot Modules

These general specifications apply to all CLICK PLUS Option Slot Modules. Please refer to the appropriate I/O temperature derating charts under the Option Slot module and Stackable I/O module specifications to determine the best operating conditions based on the ambient temperature of your particular application.

Option Slot Module General Specifications			
Operating Temperature	32°F to 131°F [0°C to 55°C]		
Storage Temperature	-4°F to 158°F [-20°C to 70°C] IEC 60068-2-1 (Test Ab, Cold) IEC 60068-2-2 (Test Bb, Dry Heat) IEC 60068-2-14 (Test Na, Thermal Shock)		
Ambient Humidity	30% to 95% relative humidity (non-condensing)		
Environmental Air	No corrosive gases. Environmental pollution level is 2 (UL840)		
Environment	For Indoor Use Only		
Vibration	IEC60068-2-6 (Test Fc) 5–9Hz:3.5mm amplitude, 9–150Hz 1.0G 10 sweep cycles per axis on each of 3 mutually perpendicular axes.		
Shock	IEC60068-2-27 (Test Ea) 15G peak, 11ms duration, 3 shocks in each direction per axis, on 3 mutually perpendicular axes.		
Noise Immunity	<en61131-2> EN61000-4-2 (ESD) EN61000-4-3 (RFI) EN61000-4-4 (FTB) EN61000-4-6 (Conducted) EN61000-4-8 (Power frequency magnetic field immunity) <local test=""> Impulse Immunity : 1000V @ 1uS pulse</local></en61131-2>		
Emissions	EN55011 Class A (Radiated RF emission)		
Agency Approvals	UL61010 (File No. E157382, E316037); CE (EN61131-2); CUL Canadian C22.2		
Other	RoHS 2011/65/EU Amendment (EU)2015/863		



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# **CLICK PLUS PLC Specifications**

## **CLICK PLUS PLC Hardware/Software Compatibility**

The table below shows the minimum software and hardware versions required for the CLICK PLUS PLCs and Option Slot Modules. The CLICK PLUS PLC can also utilize the CLICK Stackable I/O Modules, as any software and hardware version compatible with CLICK PLUS is also compatible with the CLICK Stackable I/O Modules.

CLICK PLUS PLC Features Software Compatibility						
			Л	Minimum CLICK Soft	ware Version	
Device Type	Part Number	Hardware	High-Speed Inputs*	High-Speed Outputs*	EtherNet/IP	PID, DHCP, DNS, SNTP, MQTT
	<u>C2-01CPU</u>				v3.00	
	<u>C2-02CPU</u>	v3.00	v3.00		N/A	v3.00
CLICK PLUS CPU	<u>C2-03CPU</u>			v3.30	v3.00	
CLICK PLUS CPU	C2-01CPU-2			V3.30	v3.20	
	C2-02CPU-2	v3.20	v3.20		N/A	v3.20
	C2-03CPU-2				v3.20	
	<u>C2-14D1</u>			v3.30		
	C2-14D2		v3.00	V3.30	N/A	N/A
	<u>C2-14DR</u>	v3.00		N1/A		
	<u>C2-14AR</u>		N/A	N/A		
	C2-08D1-4VC	0.00	v3.00	v3.30	N/A	N/A
	C2-08D2-4VC					
	C2-08DR-4VC	v3.00		N/A		
Option Slot	C2-08AR-4VC		N/A	IN/A		
I/O Modules	C2-08D1-6C			v3.30		
	C2-08D2-6C	v3.00	v3.00	V3.30	N/A	N/A
	C2-08DR-6C	V3.00		N/A		N/A
	C2-08AR-6C		N/A	IN/A		
	C2-08D1-6V			2.20	v3.30 N/A N/A	
	C2-08D2-6V	v3.00	v3.00	V3.30		NI/A
	C2-08DR-6V	V3.00		N/A		N/A
	<u>C2-08AR-6V</u>		N/A			
Option Slot Intelligent Modules	C2-DCM	v3.20	N/A	N/A	N/A	N/A

<sup>\*</sup> High-speed Inputs and Outputs are only available when the Option Slot I/O Module is installed in Slot 0.

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# Wiring System for CLICK PLC Family

### Wiring Solutions using the **ZIP**Link Wiring System

**ZIP**Links eliminate the normally tedious process of wiring between devices by utilizing prewired cables and DIN rail mount connector modules. It's as simple as plugging in a

cable connector at either end or terminating wires at only one end. Prewired cables keep installation clean and efficient, using half the space at a fraction of the cost of standard terminal blocks. **ZIP**Links are available in a variety of styles to suit your needs, including feedthrough connector module. **ZIP**Links are available for all Basic, Standard and Ethernet CLICK PLC units, select

CLICK PLUS option slot modules, and most discrete and analog stackable I/O modules. Pre-printed I/O-specific adhesive label strips for quick marking of **ZIP**Link modules are provided with **ZIP**Link cables.



#### Solution 1: CLICK PLC, CLICK PLUS PLC with Option Slot Module, and Stackable I/O Modules to ZIPLink Connector Modules

When looking for quick and easy I/O-to-field termination, a **ZIP**Link connector module used in conjunction with a prewired **ZIP**Link cable, consisting of an I/O terminal block at one end and a multi-pin connector at the other end, is the best solution.

Solution 2: CLICK/CLICK PLUS PLC I/O to 3rd Party Devices

When wanting to connect PLC I/O (built-in, option slot module, or stackable) to another device within close proximity, no extra terminal blocks are necessary when using the **ZIP**Link Pigtail Cables. **ZIP**Link Pigtail Cables are prewired to an I/O terminal block with color-coded pigtail with soldered-tip wires on the other end.

## Solution 3: GS Series and DuraPulse Drives Communication Cables

Need to communicate via Modbus RTU to a drive or a network of drives?

**ZIP**Link cables are available in a wide range of configurations for connecting to PLCs and SureServo, SureStep, Stellar Soft Starter and AC drives. Add a **ZIP**Link communications module to quickly and easily set up a multi-device network.

#### **Solution 4: Serial Communications Cables**

**ZIP**Link offers communications cables for use with CLICK PLCs and select CLICK PLUS PLCs that can also be used with other communications devices. Connections include a 6-pin RJ12 connector which can be used in conjunction with the RJ12 Feedthrough module.

Use the "CLICK PLC PLC Unit **ZIP**Link Selector" table and CLICK I/O **ZIP**Link selector tables located in this section:

- Locate your PLC or I/O module.
- Select a **ZIP**Link Module.
- Select a corresponding **ZIP**Link Cable.

Use the I/O Modules to 3rd Party Devices selector tables located in the **ZIP**Link section:

- Locate your PLC or I/O module.
- Select a **ZIP**Link Pigtail Cable that is compatible with your 3rd party device



Use the Drives Communication selector tables located in the **ZIP**Link section:

- Locate your Drive and type of communications.
- Select a **ZIP**Link cable and other associated hardware.





Use the Serial Communications Cables selector table located in the *ZIP*Link section:

- · Locate your connector type
- · Select a cable.





Selector						
PLC or Option Si		1	ZIPLink			
CLICK PLC Unit	CLICK PLUS Option Slot Module	# of Terms	Component	Module Part No.	Cable Part No.	
<u>C0-00DD1-D</u>	NA					
<u>C0-00DD2-D</u>	NA					
<u>C0-00DR-D</u>	NA					
C0-00AR-D	NA	20	Feedthrough	ZL-RTB20,	ZL-C0-CBL20	
C0-01DD1-D	NA	20	reedinough	ZL-RTB20-1	*	
C0-01DD2-D	NA					
C0-01DR-D	NA					
C0-01AR-D	NA					
C0-02DD1-D	NA					
C0-02DD2-D	NA		No <i>ZIP</i> Links are available for CLICK Analog PLC units.			
C0-02DR-D	NA	]	IOI CLICK	Alialog PLC uli	115.	
C0-10DD1E-D	NA				ZL-C0-CBL20	
C0-10DD2E-D	NA	1		ZL-RTB20, ZL-RTB20-1		
C0-10DRE-D	NA	1				
C0-10ARE-D	NA					
C0-11DD1E-D	C2-14D1	20	Feedthrough			
C0-11DD2E-D	C2-14D2	1				
C0-11DRE-D	C2-14DR	1				
C0-11ARE-D	C2-14AR	1				
C0-12DD1E-D	C2-08D1-4VC		,	'		
C0-12DD2E-D	C2-08D2-4VC	1				
C0-12DRE-D	C2-08DR-4VC	1				
C0-12ARE-D	C2-08AR-4VC	1				
C0-12DD1E-1-D	C2-08D1-6C	1				
C0-12DD2E-1-D	C2-08D2-6C	1		s are available		
C0-12DRE-1-D	C2-08DR-6C	CLICE	CLICK Etherne			
C0-12ARE-1-D	C2-08AR-6C	CLIC	CPLUS Option S	SIOL IVIOUUIES W	ui analog i/O.	
C0-12DD1E-2-D	C2-08D1-6V					
C0-12DD2E-2-D	C2-08D2-6V					
C0-12DRE-2-D	C2-08DR-6V	1				
C0-12ARE-2-D	C2-08AR-6V	1				
NA	C2-DCM	CLIC	No <b>ZIP</b> Link CPLUS Option S	s are available Slot Communic		

#### Table Notes:

- \* Select the cable length by replacing the \* with: Blank = 0.5 m, -1 = 1.0 m, or -2 = 2.0 m.
- 1 Note: The <u>C0-04TRS</u> relay output is derated not to exceed 2A per point maximum when used with the *ZIP*Link wiring system.
- 2 Note: Fuses (5x20 mm) are not included. See Edison Electronic Fuse section for 5x20 mm fuse. S500 and GMA electronic circuit protection is recommended for fast-acting maximum protection. S506 and GMC electronic circuit protection is recommended for time-delay performance. Ideal for inductive circuits. To ensure proper operation, do not exceed the voltage and current rating of the ZIPLink module. ZL-RFU20 = 2A per circuit.

CLICK/CLICK PLUS PLC Discrete Input Module <i>ZIP</i> Link Selector					
I/O Module			ZIPLink		
Input Module	# of Terms	Component Module Cable Part No. Part No.			
C0-08SIM		Not supp	oorted by <b>ZIP</b> Link	(	
C0-08ND3					
C0-08ND3-1	11	Foodthrough	ZL-RTB20	ZL-C0-CBL11 *	
C0-08NE3		Feedthrough	ZL-RTBZU	ZL-CU-CBL11	
C0-08NA					
CO 16ND3	20	Feedthrough	ZL-RTB20		
<u>C0-16ND3</u>	20	Sensor	ZL-LTB16-24-1	71 CO ODI 00 *	
00 4CNF2	20	Feedthrough	ZL-RTB20	<u>ZL-C0-CBL20</u> *	
<u>C0-16NE3</u>	20	Sensor	ZL-LTB16-24-1		

CLICK/		PLUS PL			
Module <i>ZIP</i> Link Selector					
I/O Module	ZIPLink				
Output Module	# of Terms	Component	Module Part No.	Cable Part No.	
C0-08TD1					
C0-08TD2	11	Feedthrough	ZL-RTB20	ZL-C0-CBL11 *	
C0-08TR					
C0-08TR-3		Not supp	orted by <b>ZIP</b> Link	(	
<u>C0-08TA</u>					
		Feedthrough	ZL-RTB20		
C0-16TD1	20	Fuse	ZL-RFU20 2	ZL-C0-CBL20*	
00 10101	20	Relay (sinking)	<u>ZL-</u> RRL16-24-1	<u> 22 00 00220</u>	
		Feedthrough	ZL-RTB20		
C0-16TD2	20	Fuse	<b>ZL-RFU20</b> 2	ZL-C0-CBL20*	
00-10102	20	Relay (sourcing)	<u>ZL-</u> RRL16-24-2	<u>ZL-OU-OBLZU</u>	
C0-04TRS1	20	Feedthrough	ZL-RTB20	ZL-C0-CBL20*	
C0-04TRS-10	Not supported by <b>ZIP</b> Link				

CLICK/CLICK PLUS PLC Combo I/O Module  ZIPLink Selector					
I/O Module			ZIPLink		
Combo Module	# of Terms	I'omnonent			
C0-16CDD1 C0-16CDD2	20	Feedthrough	ZL-RTB20	ZL-C0-CBL20 *	
C0-08CDR	11	Feedthrough	ZL-RTB20	ZL-C0-CBL11 *	

CLICK/CLICK PLUS PLC Analog I/O Module ZIPLink Selector					
I/O Module			ZIPLink		
Analog Module	# of Terms	Component	Module Part No.	Cable Part No.	
C0-04AD-1	11	Feedthrough	ZL-RTB20	ZL-C0-CBL11 *	
C0-04AD-2	11	Feedthrough	ZL-RTB20	ZL-C0-CBL11 *	
C0-04RTD	20	No <b>ZIP</b> Links are available for RTD and			
C0-04THM	11	the	ermocouple mod	ules.	
C0-04DA-1	11	Feedthrough	ZL-RTB20	ZL-C0-CBL11 *	
C0-04DA-2	11	Feedthrough	ZL-RTB20	ZL-C0-CBL11 *	
C0-4AD2DA-1	20	Feedthrough	ZL-RTB20	ZL-C0-CBL20 *	
C0-4AD2DA-2	20	Feedthrough	ZL-RTB20	ZL-C0-CBL20 *	

# **Accessories**

#### <u>C2-USER-M</u> \$0.00 CLICK PLUS PLC Hardware User Manual

Manual covers all CLICK PLUS PLC and I/O module installation and wiring, specifications, error codes and troubleshooting guide. The CLICK PLUS PLC Hardware User Manual can be downloaded free at the AutomationDirect Web site; www.AutomationDirect.com



#### <u>CO-USER-M</u> \$0.00 CLICK PLC Hardware User Manual

Manual covers all CLICK PLC and I/O module installation and wiring, specifications, error codes and troubleshooting guide. The CLICK PLC Hardware User Manual can be downloaded free at the AutomationDirect Web site; www.AutomationDirect.com



#### <u>CO-PGMSW</u> \$12.00 Programming Software USB

The programming software can be downloaded free at the AutomationDirect Web site, or the USB can be purchased from the AutomationDirect online Web store. <a href="https://www.automationDirect.com">www.AutomationDirect.com</a>



# EA-MG-PGM-CBL \$52.00 PC to Panel Programming Cable Assembly for C-more Micro-Graphic Panels and CLICK/CLICK PLUS PLCs

The 6-ft cable assembly connects a personal computer to any *C-more* Micro-Graphic panel, CLICK PLC, or select CLICK PLUS PLC for setup and programming.

Note: This cable assembly uses the PC's USB port and converts the signals to serial transmissions. The USB port supplies 5VDC to the Micro-Graphic panel for configuration operations.

Assembly includes standard USB A-type connector to B-type connector cable, custom converter, and an RS232C cable with an RJ12 modular connector on each end.



#### <u>USB-CBL-AMICB6</u> \$5.25 USB A to USB microB Programming Cable Assembly (CLICK PLUS Only)

Programming cable, USB A to USB microB, 6ft (1.83 m) length. For use with CLICK PLUS PLCs and most USB devices. The USB port supplies 5VDC to the CLICK PLUS CPU for programming.



#### <u>D2-DSCBL</u> \$35.00 Programming Cable for CLICK/CLICK PLUS and DirectLOGIC PLCs

12ft. (3.66 m) RS232 shielded PC programming cable for CLICK, select CLICK PLUS PLCs, DL05, DL06, DL105, DL205, D3-350, D4-450, D4-454, and Do-more H2 and T1H series CPUs. 9-pin D-shell female connector to an RJ12 6P6C connector.



Note: If your PC has a USB port but does not have a serial port, you must use programming cable <u>EA-MG-PGM-CBL</u> to connect to CLICK PLCs. For CLICK PLUS PLCs, you may also use USB-CBL-AMICB6

#### <u>CO-3TB</u> \$10.00 Spare 3-Pole Terminal Block

Replacement 3-pole terminal block for the 3-wire RS-485 Port 3 on CLICK Standard and Analog PLCs as well as the CLICK PLUS <u>C2-03CPU</u>. Sold in packs of 2.





#### <u>CO-4TB</u> \$10.00 Spare 24VDC Power Terminal Block

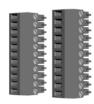
Replacement terminal block for the 24VDC supply power to the PLC. Sold in packs of 2.





#### <u>CO-8TB</u> \$16.50 Spare 8-Point I/O Terminal Block

Replacement terminal block for the 8-point I/O modules. Sold in packs of 2.



#### <u>CO-8TB-1</u> \$19.50 Spare 13-Point I/O Terminal Block

Replacement terminal block for the 8-point I/O relay modules. Sold in packs of 2.



#### <u>CO-16TB</u> \$23.00 Spare 16-Point I/O Terminal Block

Replacement terminal block for the 16-point I/O modules and PLC built-in I/O. Sold in packs of 2.



#### <u>C2-6TB</u> \$16.50 Spare 6-pt Terminal Block

Replacement terminal block for the C2-DCM serial ports. Sold in packs of 2.



# **Accessories**

#### <u>SE-ANT250</u> \$50.50 Wi-Fi/Bluetooth Dome Antenna

2.4 GHz antenna, IP67, panel mount, 9.8 ft (3m) cable length, for external mounting when CLICK PLUS PLC is installed in a metallic enclosure.



#### C2-FILL \$8.50 CPU Option Slot Cover

Snap-on cover for CLICK PLUS CPU Option Slot in applications without an Option Slot module present.



#### MSD-SLC16G \$100.00

16GB microSD card, industrial grade, 3D NAND Flash (with SLC Mode), 85°C [185°F] max operating temp.



#### <u>SE-ANT210</u> \$10.50 Wi-Fi/Bluetooth Whip Antenna

Whip/straight 2.4 GHz antenna, IP65, connector mount. Not recommended for installation in a metallic enclosure.



#### D2-BAT-1 \$6.50

Replacement CR2354 battery for Standard, Analog, Ethernet Standard and Ethernet Analog PLC units.



#### <u>TW-SD-MSL-2</u> \$3.75 Insulated Slotted Screwdriver

0.4 x 2.5 x 80 mm slotted screwdriver for terminal blocks.



#### <u>DN-EB35MN</u> \$31.50 **DIN**nector **End Bracket**



#### DO-MC-BAT \$3.00

Replacement CR2032 battery for CLICK PLUS PLC units.



#### <u>DN-WS</u> Wire Stripper

\$63.00



## C-more and C-more Micro Graphic Operator Interfaces





#### **ZIPLink Wiring Systems**



