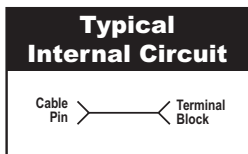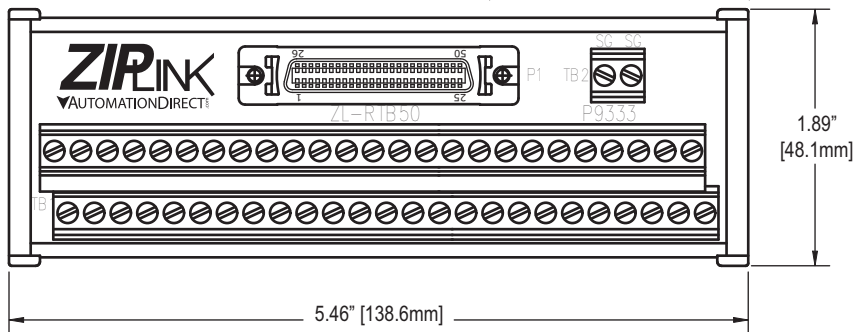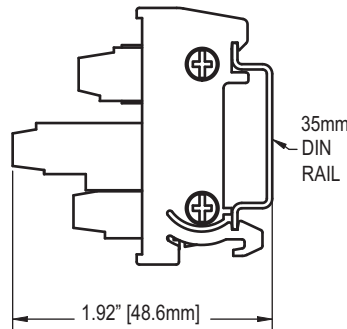**CAUTION:** All unmarked terminals should be left unconnected (no connection). The unmarked terminals are used internally by the servo drive and connecting externally could cause damage to the servo drive.
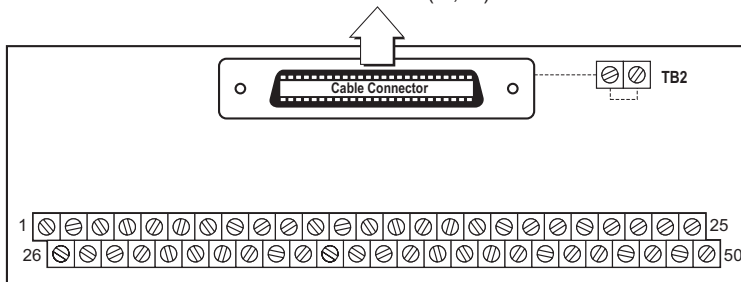
Go to http://www.automationdirect.com/sureservomanual.html to download the complete Servo drive information.

Typical Internal Circuit

Note: ZL-RTB50 pinouts are straight through from pin to terminal. For example, Connector Pin 1 = Terminal 1, Connector Pin 2 = Terminal 2, etc.

To SureServo drive CN1 Connector.
Use ZL-SVC-CBL-50 (-1, -2) cable.

NOTE: TB2 is internally connected to the shield drain wire and should be field connected to earth ground.

ROW	ZL-RTB50 TB1 Pinouts		
	Pin Number	Terminal ID	Description
TOP ROW	1	D04+	Digital Output
	2	D03-	Digital Output
	3	D03+	Digital Output
	4	D02-	Digital Output
	5	D02+	Digital Output
	6	D01-	Digital Output
	7	D01+	Digital Output
	8	DI4-	Digital Input
	9	DI1-	Digital Input
	10	DI2-	Digital Input
	11	COM+	Power Common DI & DO
	12	GND	Power VCC Ground AI
	13	GND	Power VCC Ground AI
	14	VGND	No Connection
	15	MON2	Analog Monitor Output 2
	16	MON1	Analog Monitor Output 1
	17	VDD	Power 24V Source
	18	T_REF	Analog Torque Input
	19	GND	Power VCC Ground AI
	20	VCC	Power 12V Source
	21	OA	Position Pulse A Output
	22	/OA	Position Pulse /A Output
	23	/OB	Position Pulse /B Output
	24	/OZ	Position Pulse /Z Output
	25	OB	Position Pulse B Output
BOTTOM ROW	26	D04-	Digital Output
	27	D05-	Digital Output
	28	D05+	Digital Output
	29	NC	No Connection
	30	DI8-	Digital Input
	31	DI7-	Digital Input
	32	DI6-	Digital Input
	33	DI5-	Digital Input
	34	DI3-	Digital Input
	35	PULL HI	Position Pulse Input
	36	/SIGN	Position Pulse Input
	37	SIGN	Position Pulse Input
	38	NC	No Connection
	39	NC	No Connection
	40	TGND	No Connection
	41	PULSE	Position Pulse Input
	42	V_REF	Analog Velocity Input
	43	/PULSE	Position Pulse Input
	44	GND	Power VCC Ground AI
	45	COM-	Power VDD Ground DI & DO
	46	NC	No Connection
	47	COM-	Power VDD Ground DI & DO
	48	NC	No Connection
	49	COM-	Power VDD Ground DI & DO
	50	OZ	Position Pulse Z Output

Description

The ZL-RTB50 is a DIN rail mounted feed through module designed to interface the SureServo servo drive analog and discrete control signals to a PLC or other controllers by connecting the ZL-SVC-CBL50 cable between the SureServo CN1 connector and the ZL-RTB50 connector.

Cables

The ZL-SVC-CBL50 is available in three lengths.

- ZL-SVC-CBL50   0.5m (1.6ft)
- ZL-SVC-CBL50-1   1m (3.3ft)
- ZL-SVC-CBL50-2   2m (6.6ft)

HAZARD WARNING

A. THIS EQUIPMENT IS SUITABLE FOR USE IN CLASS I, DIVISION 2/ZONE 2, GROUPS A, B, C AND D OR NON-HAZARDOUS LOCATIONS ONLY.

B. **WARNING – EXPLOSION HAZARD –** SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2/ZONE 2.

C. **WARNING – EXPLOSION HAZARD –** DO NOT CONNECT OR DISCONNECT CONNECTORS OR OPERATE SWITCHES WHILE CIRCUIT IS LIVE UNLESS THE AREA IS KNOWN TO BE NON-HAZARDOUS.

D. ALL MODULES USED WITH ACCESSORIES MUST USE R/C (ECBT2) MATING PLUG FOR ALL APPLICABLE MODELS. ALL MATING PLUGS SHALL HAVE SUITABLE RATINGS FOR DEVICE.

WARNING: To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify that the equipment, installation, and operation are in compliance with the latest revision of these codes.
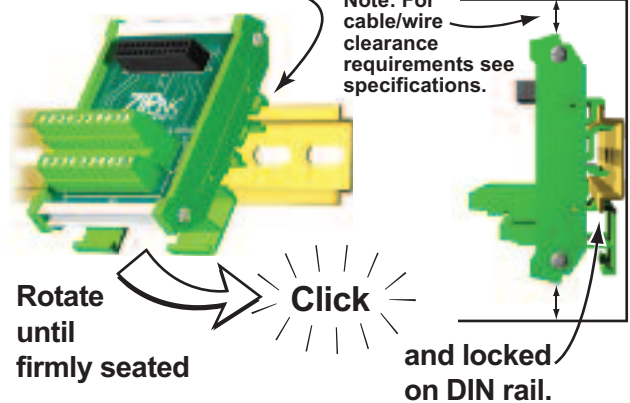
Equipment damage or serious injury to personnel can result from the failure to follow all applicable codes and standards. We do not guarantee the products described in this publication are suitable for your particular application, nor do we assume any responsibility for your product design, installation, or operation.

If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call Technical Support at 770-844-4200.
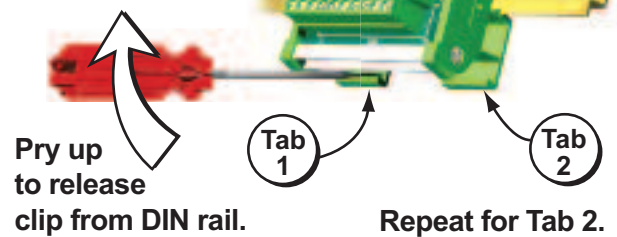
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DIN Rail Installation and Removal

To install ZIPLink module, insert upper tab into DIN rail.

Note: For cable/wire clearance requirements see specifications.

Rotate until firmly seated

Click

and locked on DIN rail.

To remove ZIPLink module, insert screwdriver between Tab 1 and module.

Pry up to release clip from DIN rail.

Tab 1

Tab 2

Repeat for Tab 2.

Specifications

*Description**	50-Pole Connector Module for interfacing SureServo I/O to a controller
Approvals	File # E200031 UL, cUL, Class 1, Division 2, Groups A,B,C,D Hazardous Locations, CE, EN 61131-2:2007
*Operation Voltage***	0-30VDC
Voltage Rating	24VDC
Maximum Current per Circuit	0.2A
Maximum Current per Module	10A
Number of Terminal Block Positions	50
Surrounding Temperature Range	32 to 140°F (0 to 60°C)
Terminal Block Contacts	Copper alloy, tin-lead plated
*Wire Range (Rated Cross Section)***	12-24AWG Solid or Stranded Copper Conductor (2.5mm²)
Wire Strip Length	0.24-0.27" (6-7mm)
Screw Torque	4.4 in-lbs (0.5 Nm)
Connector Type	3M mini DELTA Ribbon (MDR), 101 Series, 50 pin Example: Plug 10150 - 3000VE, Shell 10350 - 52A0 - 008
Dimensions (WxHxD)	5.46" x 1.89" x 1.87" (138.6mm x 48.1mm x 47.5mm)
Connecting Cable (Sold separately)	ZL-SVC-CBL50 (0.5m/1.6ft) ZL-SVC-CBL50-1 (1m/3.3ft) ZL-SVC-CBL50-2 (2m/6.6ft)
Cable/Wire Cleareance	4.00" (101.6mm) top and bottom
Mounting Restrictions	None

*Connecting cables are for internal wiring only.
**Use Class 2 power supply. Use conductors rated 60°/75°C.