

XL-500E-AS (SHOWN)  
CONNECTOR DETAIL  
SCALE 0.300

MATING CONNECTOR DETAIL (TOP)

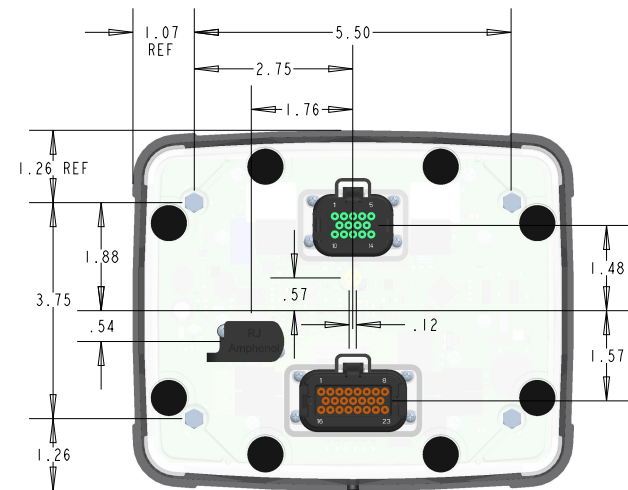
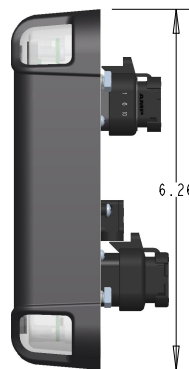


776273-1 PLUG, 14P TYCO/AMP (BLACK)  
770854-1 SOCKET (TIN PLATED)  
770854-3 SOCKET (GOLD PLATED)  
SCALE 0.500

MATING CONNECTOR DETAIL (BOTTOM)



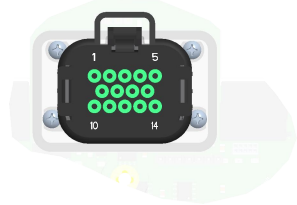
770680-1 PLUG, 23P TYCO/AMP (BLACK)  
770854-1 SOCKET (TIN PLATED)  
770854-3 SOCKET (GOLD PLATED)  
SCALE 0.500



TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED			
DECIMAL PLACE TOLERANCES	0.0 = ±0.060 0.00 = ±0.030 0.000 = ±0.010		
ANGLES:	XX = ±0.5°	NEXT ASS'Y:	XL SERIES PANEL ASSEMBLY
DRAWING UNITS UNLESS SPECIFIED: INCHES		DESCRIPTION:	XL-SERIES, 14/23-PIN AMP PCB PIN CONFIGURATIONS
DRAWN BY: KLD	DATE: Aug-09-16	MATERIAL: REFERENCE BILL OF MATERIAL	
CHECKED BY:	DATE:	STATUS: RELEASED	
A	15-Jan-2020	KLD	UPDATED PCB, IMAGES, RJ45 JACK, DUST COVER
REV:	DATE:	BY:	DESCRIPTION:
MODEL: XL SERIES		DRAWING NUMBER:	
CONFIGURATION: ALL		SHEET: 1 OF 2	
		REV: A	

XL SERIES INPUT/OUTPUT OPTIONS		
PCB 8600-200, Version 1.3, BOM 1.8		
CONNECTOR, 14 POSITION TYCO/AMP (TOP)		
PIN	DEFAULT	OPTIONS
1	RELAY 2 (NO)	10 AMP
2	RELAY 1 (NO)	5 AMP
3	RELAY 3 (NO)	5 AMP
4	COMMON	RELAYS 2 & 4
5	RELAY 4 (NO)	10 AMP
6	COMMON	RELAY 1
7	CAN H	J1939
8	CAN L	J1939
9	COMMON	RELAY 3
10	ACC	ACCESSORY DETECT
11	B+ IN	8-32 VDC
12	GND	None
13	AI 1	(12mA R), 4-20mA, 0-5 VDC
14	DI 1	None
CONNECTOR, 23 POSITION TYCO/AMP (BOTTOM)		
PIN	DEFAULT	OPTIONS
1	RELAY 5 (NO)	5 AMP
2	AI 2	(12mA R), 4-20mA, 0-5 VDC
3	FA 1	Flex Analog, (4-20mA), 0-5 VDC
4	FA 3	Flex Analog, (4-20mA), 0-5 VDC
5	FREQ IN	None
6	DI 8	None
7	DI 9	None
8	RELAY 7 (NO)	5 AMP
9	COMMON	RELAYS 5 & 6
10	AI 3	(12mA R), 4-20mA, 0-5 VDC
11	FA 2	Flex Analog, (4-20mA), 0-5 VDC
12	FA 4	Flex Analog, (4-20mA), 0-5 VDC
13	MODBUS A	None
14	MODBUS B	None
15	COMMON	RELAYS 7 & 8
16	RELAY 6 (NO)	5 AMP
17	DI 2	None
18	DI 3	None
19	DI 4	None
20	DI 5	None
21	DI 6	None
22	DI 7	None
23	RELAY 8 (NO)	5 AMP

**PCB CONNECTIONS (PROVIDED CONNECTORS)**

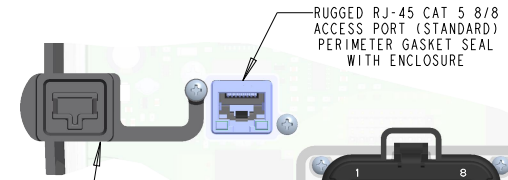


DETAIL C  
TYCO/AMP 14 PIN  
PART # 776262-1  
SCALE 0.500

**HARNESS (REQUIRED CONNECTORS)**



776273-1 PLUG, TYCO/AMP (BLACK)  
770854-1 SOCKET (TIN PLATED)  
770854-3 SOCKET (GOLD PLATED)  
770678-1 CAVITY SEAL  
SCALE 0.500



AMPHENOL RJ45 DUST COVER (SHOWN OPEN)  
SILICONE RUBBER GRIPS INSIDE/OUTSIDE OF MATING AREA.



DETAIL D  
TYCO/AMP 23 PIN  
PART # 776228-1  
SCALE 0.500



770680-1 PLUG, TYCO/AMP (BLACK)  
770854-1 SOCKET (TIN PLATED)  
770854-3 SOCKET (GOLD PLATED)  
770678-1 CAVITY SEAL  
SCALE 0.500

KEY	
() Denotes Multiple Option Default Setting	
AI	Analog Input Low/High, Wetting Current Resistive, Current, Active Voltage
AO	Analog Output, 8 mA Max 0-5 VDC
DI	Digital Input Low/High, V Batt wetting current, close to GROUND
FA	Flex Analog, 4-20mA, 0-5 VDC
FREQ IN	MPU, Alt Tach or Sq Wave; 3 V Min

REV	DATE	BY	DESCRIPTION
A	15-JAN-2020	KLD	UPDATED PCB, IMAGES, RJ45 JACK, DUST COVER

TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED	
DECIMAL PLACE TOLERANCES	0.0 = ±0.060 0.00 = ±0.030 0.000 = ±0.010
ANGLES:	XX = ±0.5°
DRAWING UNITS UNLESS SPECIFIED: INCHES	
DRAWN BY: KLD	DATE: 06-Sep-19
CHECKED BY:	DATE:
MODEL: XL SERIES	
CONFIGURATION: ALL	

CONTROLS INCORPORATED	
WWW.CONTROLSINC.COM	330-239-4345
NEXT ASS'Y:	XL SERIES PANEL ASSEMBLY
DESCRIPTION:	XL-SERIES, 14/23-PIN AMP PCB PIN CONFIGURATIONS
MATERIAL: REFERENCE BOM / DETAIL DWG	
STATUS: RELEASED	
DRAWING NUMBER:	REV:
SHEET: 2 OF 2	XL_SERIES A