

NOTES: (SEE INSTALLATION & OPERATION MANUAL LMENIM 2306 FOR DETAILS)  
CIRCUIT SHOWN WITH VALVE IN FULLY CLOSED POSITION AND WITH POWER OFF.

**1. REMOTE INPUTS**

SIGNAL THRESHOLD - MINIMUM "ON" 19.2V AC/DC  
MAXIMUM "OFF" 5.0V AC/DC  
MAX LOAD - 10 mA / 110V AC  
2 mA / 24V DC  
REQUIRED CONTROL SIGNAL DURATION = 350ms MIN.  
INPUTS 0,1,2 ARE FIELD CONFIGURABLE FOR CLOSE/OPEN INHIBIT, USER INPUT, OR ESD.  
INPUT 1 MAY ALSO BE CONFIGURED FOR PARTIAL STROKE TEST.  
INPUT 2 MAY ALSO BE CONFIGURED FOR CSE REMOTE SELECTION INDICATION.  
DEFAULT INPUT CONFIGURATION  
INPUT 0 - ESD,  
INPUT 1 - OPEN INHIBIT,  
INPUT 2 - CLOSE INHIBIT.

**2. REMOTE INPUT JUMPERS**

JUMPERS CAN BE USER WIRED TO CONNECT DIG COMMONS #1, 2 & 3 (AS NEEDED). THE 3 REMOTE WIRING GROUPS ARE ELECTRICALLY ISOLATED, INTERNALLY. ONLY A SINGLE POWER SOURCE MAY BE USED TO POWER ANY ONE GROUP BUT DIFFERENT SOURCES MAY POWER DIFFERENT GROUPS. IF DIFFERENT SOURCES ARE USED, ENSURE THAT THE POLARITIES ARE CORRECT.

**3. DEFAULT [S] SETTINGS**

THE DEFAULT OPERATING CONFIGURATION FOR THE "S" OUTPUTS ARE SHOWN IN THE TABLE BELOW. THE CONTACT STATES SHOWN IN THE SCHEMATIC REPRESENT A FULLY CLOSED VALVE.  
SEE OPERATION MANUAL FOR ALTERNATE CONFIGURATIONS.

OUTPUT SWITCH	VALVE POSITION		FUNCTION
	FULL CLOSE	FULL OPEN	
S1a	—	—	CLOSE LIMIT
S1b	—	—	
S2a	—	—	OPEN LIMIT
S2b	—	—	

— OPEN CONTACT  
— CLOSED CONTACT

**4. MAXIMUM EXTERNAL LOAD**

TERMINALS 21 AND 22 (24 VDC)  
- 5W MAX. EXT. LOAD  
TERMINALS 23 AND 24 (117VAC)  
- 15VA MAX. EXT. LOAD

**5. CONTACT RATINGS**

S1, S2- 0.5 AMP @ 125 VAC, 2 AMPS @ 30 VDC (RESISTIVE)  
MONITOR- 0.5 AMP @ 125 VAC, 2 AMPS @ 30 VDC (RESISTIVE)  
R5-R8- 5 AMPS @ 250 VAC OR 30 VDC (RESISTIVE)

**6. FUSES**

FS1 (PRIMARY) - 600V AC, 1A, 100ka Int RATING, FAST ACTING 10.3 x 38.1mm TUBE, UL LISTED, CSA CERTIFIED  
FS2 (PRIMARY) - 0.2A, 250V, TIME DELAY, 5 x 20mm, GLASS TUBE  
FS3 (SECONDARY)

**7. RELAY BOARDS**

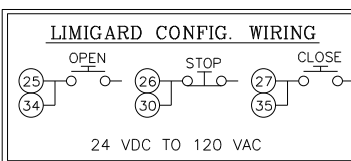
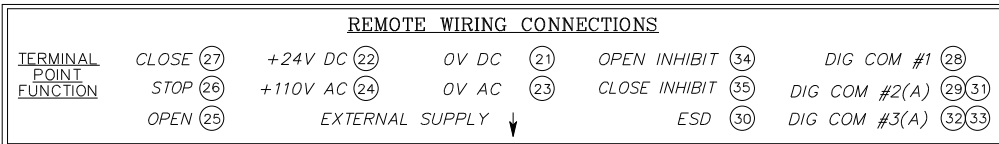
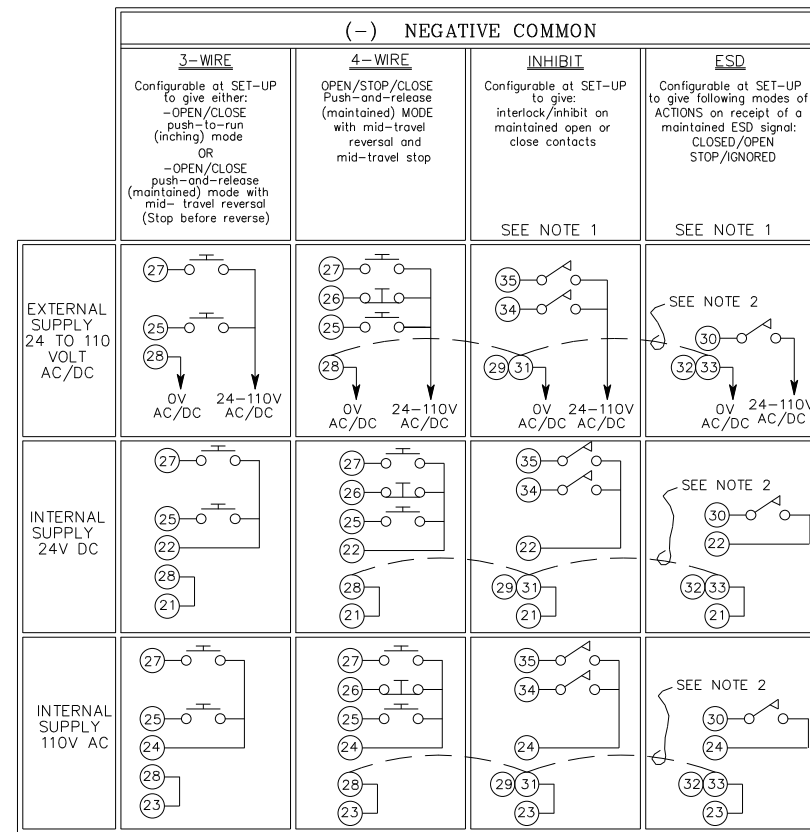
SET JUMPER J1 TO POSITION 3-4 ON THE RELAY BOARD. CONNECT 22-PIN CONNECTOR WITH YELLOW WIRES TO J3 ON THE RELAY BOARD.

**8. APT OR ATT EXTERNAL LOAD**

4-20 mA OUTPUT SIGNAL - 600 OHMS MAX.  
0-10 VDC OUTPUT SIGNAL - 1000 OHMS MAX.  
SET JUMPERS JP1 AND JP2 TO POSITION 1-2 ON ANALOG BOARD.  
THE 3-PIN CONNECTOR WITH BLUE WIRES SHOULD BE CONNECTED TO J3 ON THE ANALOG BOARD.

TABLE 1: TRANSFORMER TAPPING OPTIONS

TYPE	TAPS	APPL. VOLTAGES
1	106V	110V
	115V	115V, 120V
	200V	208V
	212V	220V
2	226V	226V, 230V, 240V
	366V	380V
	392V	400V, 415V
	450V	440V, 460V, 480V
3	212V	220V
	505V	525V
	530V	550V
	572V	575V, 600V



DRAWN	DATE	Limitorque Actuation Systems 5114 WOODALL ROAD, LYNCHBURG, VIRGINIA 24506-1318
RLP	10/30/12	
CHECKED	DATE	TITLE
ZKC	11/01/12	MXa WIRING DIAGRAM
APPROVED	DATE	Standard 3Wire/4Wire
ZKC	11/01/12	APT (Analog Position Transmitter)
		Mechanical Contactor
		OB, OS w/opt (4) 5A, (1) 2A monitor relay
		110Vac/15VA
UNIT TYPE	DWG NO	REV
MXa	WD-MXa-020010-1000	00H
		SHEET
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