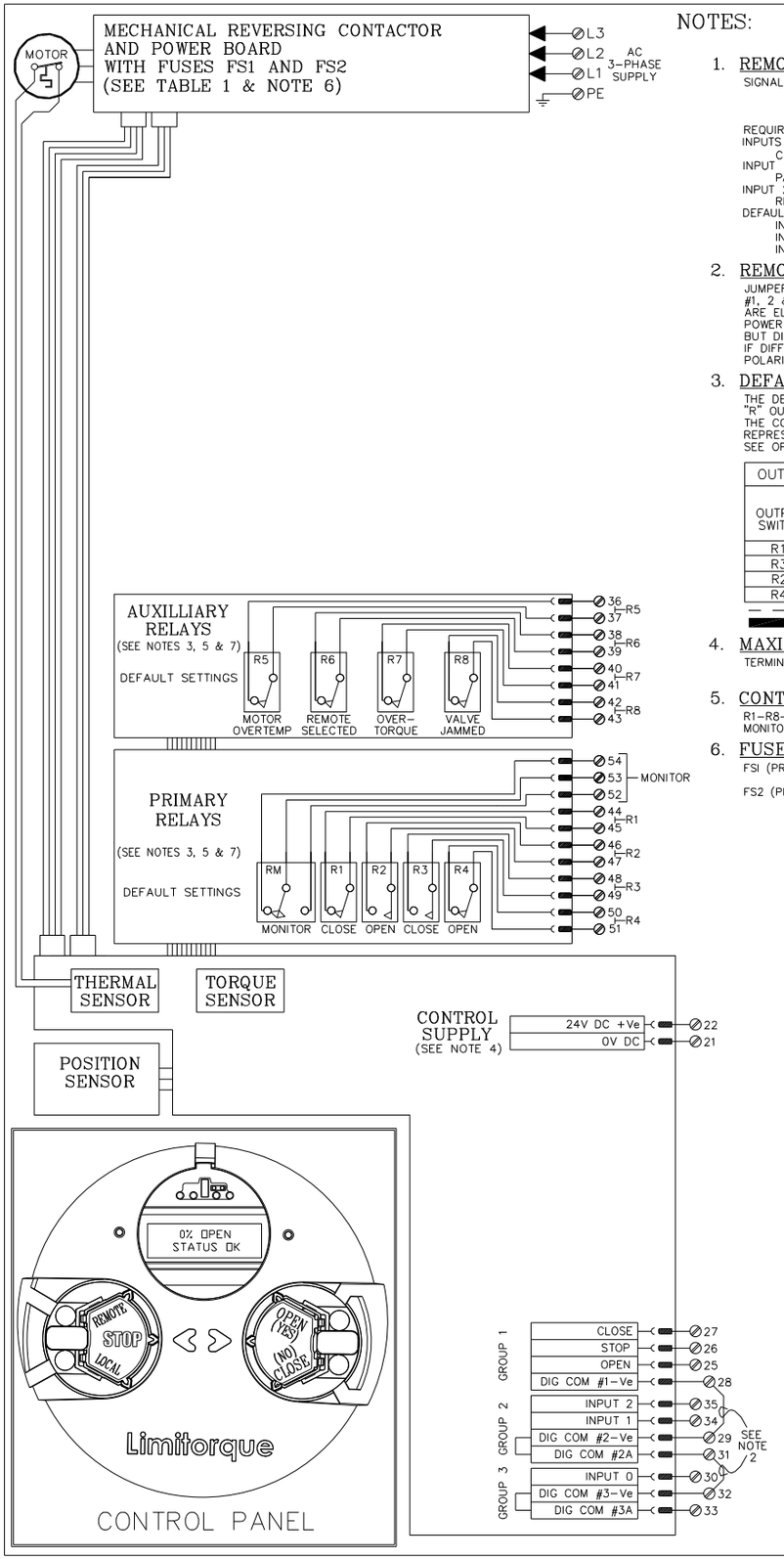


NOTES: (SEE INSTALLATION & OPERATION MANUAL LMENIM 2306 FOR DETAILS)

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 [R] SETTINGS

THE DEFAULT OPERATING CONFIGURATION FOR THE "R" 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 CONTACT DEVELOPMENT

OUTPUT SWITCH	VALVE POSITION: FULL CLOSE	VALVE POSITION: FULL OPEN	FUNCTION
R1	■ — — — — — —	— — — — — — —	CLOSE LIMIT
R3	— ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■	CLOSE LIMIT
R2	— — — — — — —	— — — — — — ■	OPEN LIMIT
R4	■ ■ ■ ■ ■ ■ ■	■ — — — — — —	OPEN LIMIT

— — OPEN CONTACT
■ CLOSED CONTACT

4. MAXIMUM EXTERNAL LOAD

TERMINALS 21 AND 22 (24 VDC)
– 5W MAX. EXT. LOAD

5. CONTACT RATINGS

R1–R8– 5 AMPS @ 250 VAC OR 30 VDC (RESISTIVE)
MONITOR– 5 AMPS @ 250 VAC OR 30 VDC (RESISTIVE)

6. FUSES

FS1 (PRIMARY)
FS2 (PRIMARY)
600V AC, 1A, 100kA Int RATING, FAST ACTING 10.3 x 38.1mm TUBE. UL LISTED, CSA CERTIFIED

7. RELAY BOARDS

SET JUMPER J1 TO POSITION 1–2 FOR RELAY BOARD 1.
SET JUMPER J1 TO POSITION 3–4 FOR RELAY BOARD 2.
RELAY BOARD 1 REQUIRES 12–PIN CONNECTOR WITH YELLOW WIRES TO BE CONNECTED TO WIRING HARNESS (64–825–0066–3) THEN TO J3. RELAY BOARD 2 REQUIRES 22–PIN CONNECTOR WITH YELLOW WIRES BE CONNECTED TO J3 ON THE RELAY 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

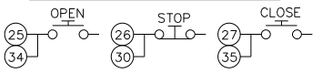
(–) NEGATIVE COMMON

	3–WIRE	4–WIRE	INHIBIT	ESD
	Configurable at SET-UP to give either: –OPEN/CLOSE push-to-run (inching) mode OR –OPEN/CLOSE push-and-release (maintained) mode with mid- travel reversal (Stop before reverse)	OPEN/STOP/CLOSE Push-and-release (maintained) MODE with mid-travel reversal and mid-travel stop	Configurable at SET-UP to give: interlock/inhibit on maintained open or close contacts	Configurable at SET-UP to give following modes of ACTIONS on receipt of a maintained ESD signal: CLOSED/OPEN STOP/IGNORED
	SEE NOTE 1			SEE NOTE 1
EXTERNAL SUPPLY 24 TO 110 VOLT AC/DC	27 25 28 — 0V AC/DC, 24–110V AC/DC	27 26 25 28 — 0V AC/DC, 24–110V AC/DC	35 34 29 31 — 0V AC/DC, 24–110V AC/DC	SEE NOTE 2 30 32 33 — 0V AC/DC, 24–110V AC/DC
INTERNAL SUPPLY 24V DC	27 25 22 28 21	27 26 25 22 28 21	35 34 22 29 31 21	SEE NOTE 2 30 22 32 33 21

REMOTE WIRING CONNECTIONS

TERMINAL POINT FUNCTION					
	CLOSE (27)	+24V DC (22)	0V DC (21)	OPEN INHIBIT (34)	DIG COM #1 (28)
	STOP (26)	+110V AC (23)	0V AC (24)	CLOSE INHIBIT (35)	DIG COM #2(A) (29)(31)
	OPEN (25)	EXTERNAL SUPPLY ↓		ESD (30)	DIG COM #3(A) (32)(33)

LIMIGARD CONFIG. WIRING



24 VDC TO 120 VAC

DRAWN	DATE	FLOWSERVE Limitorque Actuation Systems, 5114 WOODALL ROAD, LYNCHBURG, VIRGINIA 24506-1318			
RLP	10/30/12	TITLE: MXa WIRING DIAGRAM Standard No Analog Mechanical Contactor OC, (8) 5A, (1) 5A monitor relay 3Wire/4Wire Negative Common			
CHECKED	DATE				
ZKC	11/01/12				
APPROVED	DATE	UNIT TYPE MXa	DWG NO WD–MXa–030000–0000	REV 00L	SHEET 1 OF 1
ZKC	11/01/12				