



Level Relay contacts are shown in the OPEN position. Conditions:

1. FOGRod Contacts 1,5,7 are all dry/not submerged
2. LIT-100 front panel slide switch 'Level Relays' in the N/O position

TN08 - Technical Note LIT-100 & EXTERNAL LATCHING RELAYS

SEQUENTIAL STATE OF STOP/LEAD/LAG FOGROD CONTACTS	LEVEL RELAY 1	LATCHING RELAY 2	LATCHING RELAY 3	LEAD PUMP	LAG PUMP
1-dry, 5-dry, 7-dry	Not Energized	NOT Latched , held in Reset by Relay 1	NOT Latched , held in Reset by Relay 1	OFF	OFF
1-wet, 5-dry, 7-dry	Energized	NOT Latched , not held in Reset	NOT Latched , not held in Reset	OFF	OFF
1-wet, 5-wet, 7-dry	Energized	LATCHED - SET state active	NOT Latched , not held in Reset	ON	OFF
1-wet, 5-wet, 7-wet	Energized	LATCHED - SET state active	LATCHED -SET state active	ON	ON
1-wet, 5-wet, 7-dry	Energized	LATCHED - SET state active	LATCHED -SET state NOT active	ON	ON
1-wet, 5-dry, 7-dry	Energized	LATCHED -SET state NOT active	LATCHED -SET state NOT active	ON	ON
1-dry, 5-dry, 7-dry	Not Energized	NOT Latched , held in Reset by Relay 1	NOT Latched , held in Reset by Relay 1	OFF	OFF

NOTES

1. Latching Relay 2 & 3 Part No: RR2KP-U AC-120. Bottom view shown. Shown in unlatched/reset position.
2. Latching Relay 2 & 3 'RESET' input is = Latch Enable / Latch Disable. When voltage is applied, the Latching Relay is in 'RESET' (Latch Disable) mode. When voltage is removed, the Latching Relay is in Latch Enabled mode.
3. When the LIT-100 Level Relay 1 contact is open (FOGRod contact #1 is DRY), Latching Relays 2 & 3 must be held in RESET mode to disable the latching function. To achieve this, a N/C relay contact must be used. The LIT-100 Level Relays can only be configured to N/O to properly control Lead and Lag pump ON, so Level Relay 1 cannot be used on its own to provide voltage to the RESET input. An additional Relay, Common Relay 1, must be used and connected as shown, using the N/C relay contacts. Common Relay 1 is a SPDT type.