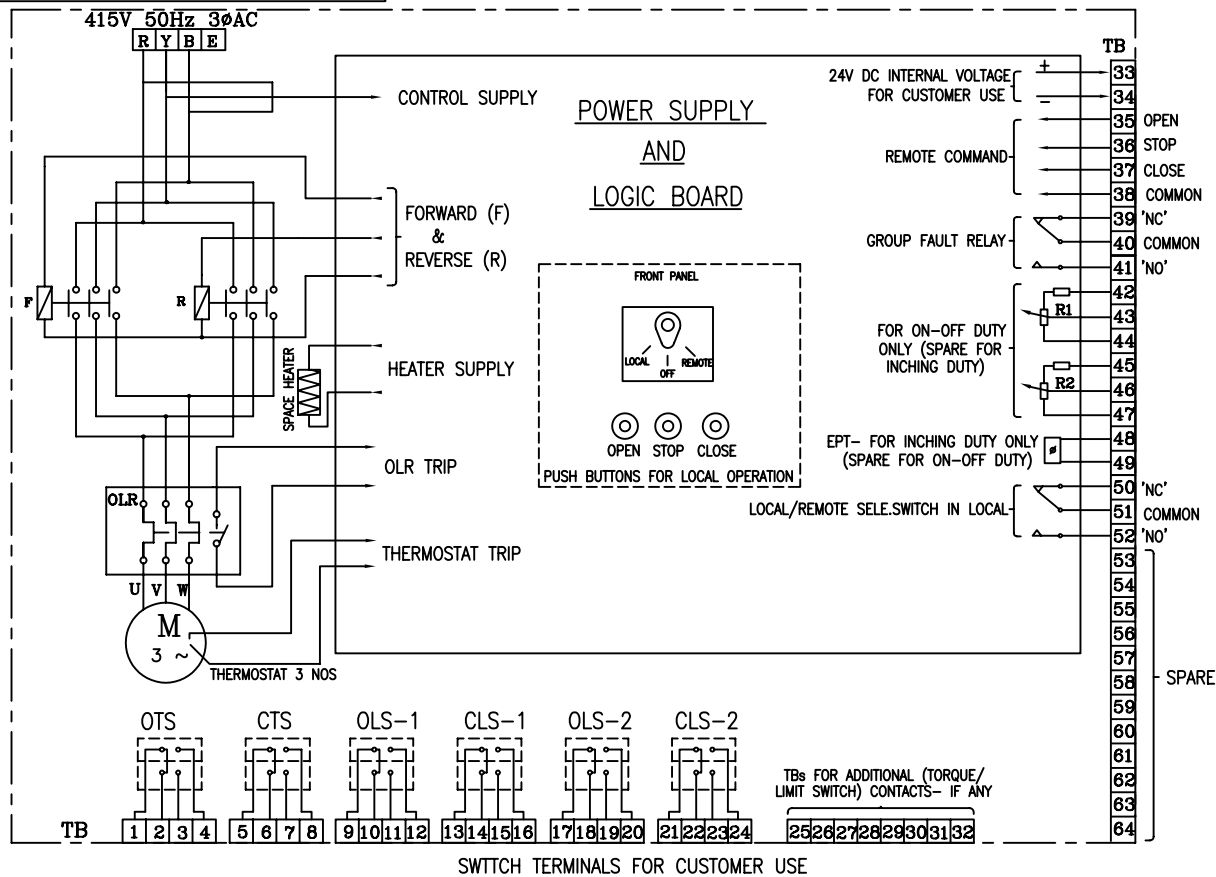


3-V-MISC-24227

DRAWING NO.



## CONTACT DEVELOPMENT DIAGRAM

OTS	1-2	OPEN AT OVER TORQUE DURING OPENING TRAVEL				
	3-4	CLOSE AT OVER TORQUE DURING OPENING TRAVEL				
CTS	5-6	OPEN AT OVER TORQUE DURING CLOSING TRAVEL				
	7-8	CLOSE AT OVER TORQUE DURING CLOSING TRAVEL				
OLS-1	9-10					
	11-12					
CLS-1	13-14					
	15-16					
OLS-2	17-18					
	19-20					
CLS-2	21-22					
	23-24					
SWITCH	TERMINAL NO.	FULL OPEN	a	INTERMEDIATE	b	FULL CLOSE
		VALVE POSITION				
<div>————— INDICATES CONTACT CLOSED</div> <div>- - - - - INDICATES CONTACT OPEN</div>						
CONTACT RATING: 5A AT 250V AC & 0.5A AT 220V DC						

## SETTING PROCEDURE OF POSITION LIMIT AND TORQUE SWITCH



VALVES	OPEN		CLOSE	
	MAIN	BACK UP	MAIN	BACK UP
GATE VALVE OF 100 mm AND ABOVE IN 1500 CL AND ABOVE RATINGS	OLS	OTS *	CLS	CTS
ALL OTHER GATE & GLOBE VALVES	OLS	OTS *	CTS	#
# - CLS NOT TO BE CONNECTED IN TRIP CIRCUIT				
* - BYPASS OTS FOR INITIAL 5% OF TRAVEL (FOR GATE VALVES ONLY)				

## NOTE:-

- ALL TORQUE AND LIMIT SWITCHES (OTS, CTS, OLS1&2, CLS1&2) ARE WITH 2NO+2NC CONTACTS '1NO+1NC' IS TERMINATED IN TBS 1-24, REMAINING CONTACTS ARE FOR INTERNAL USE.  
ANY SPARE CONTACTS WHICH ARE NOT USED INTERNALLY ARE TO BE TERMINATED IN TBS 25-32
- CTS - TORQUE SWITCHES FOR CW ROTATION (CLOSE)
- OTS - TORQUE SWITCHES FOR CCW ROTATION (OPEN)
- OLS-1, OLS-2 - LIMITSWITCHES FOR POSITION OPEN
- CLS-1, CLS-2 - LIMITSWITCHES FOR POSITION CLOSE
- EPT - ELECTRONIC POSITION TRANSMITTER (POTENTIOMETRIC TYPE, FOR INCHING DUTY)
- R1-R2-POTENTIOMETER 2 x 100 OHMS (FOR ON-OFF DUTY)
- FOR COMMANDS & EPT EITHER INTERNALLY GENERATED 24 VDC OR EXTERNAL SUPPLY OF 24VDC CAN BE USED
- M - MOTOR 3Φ 415V 50 Hz AC SUPPLY

REV	DATE	ALTERED
		CHD & APPD

CAUTION: The information on this document is the property of BHARAT HEAVY ELECTRICALS LTD. It must not be used directly or indirectly in any way detrimental to the interest of the company.

TYPE OF PRODUCT		ELECTRICAL VALVE ACTUATORS (AC) WITH INTEGRAL STARTERS						
OR NAME OF		(DRAWN FOR INTERMEDIATE POSITION OF VALVES)						
CUSTOMER/PROJECT								
<div> 365-121</div>		BHARAT HEAVY ELECTRICALS LTD.,		DRN	NAME	SIGN	DATE	NO.OF
		UNIT: HIGH PRESSURE BOILER PLANT. TIRUCHIRAPALLI-620014.		CHD	D.DINAKARAN	D.D	07.10.04	VAR.
				APPD	K.ARUNACHALAM	K.A	07.10.04	
DEPT	VL		SCALE	WEIGHT (KG).	REFERENCE INFORMATION			NO. OF
CODE								ITEMS
TITLE				CARD	DRAWING NO.			REV
WIRING DIAGRAM (TERMINAL PLAN)				CODE	3-V-MISC-24227			0
FOR ACTUATOR WITH INTEGRAL STARTER				U 01				