

ELEMENTARY DIAGRAM FOR BEAM PUMP CONTROL PANEL

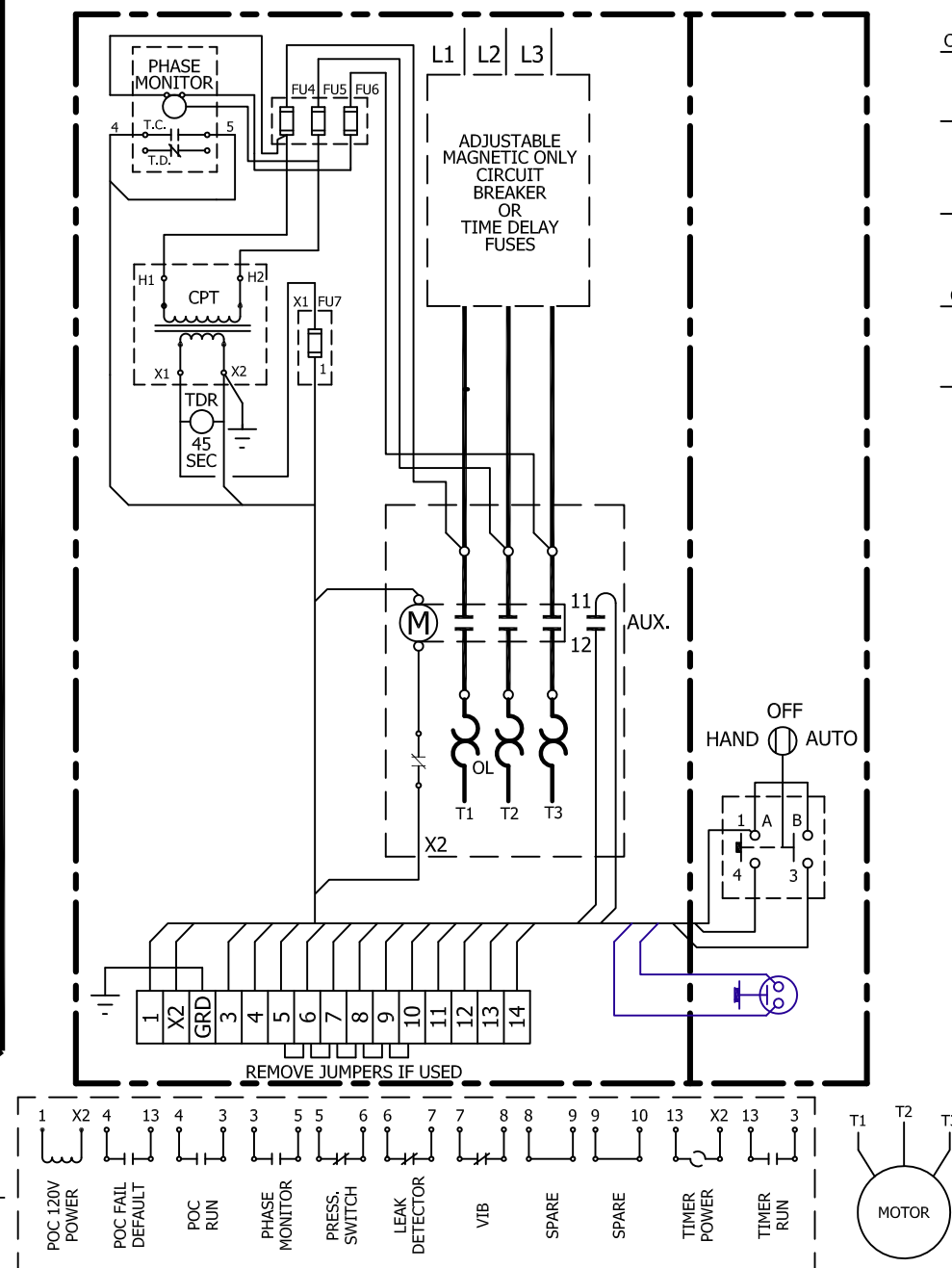
CONTROL WIRING REQUIREMENTS *

LOCATION	WIRE SIZE (MINIMUM)	WIRE COLOR
PRIMARY FUSES AND TRANSFORMER	#14	BLACK
SECONDARY SIDE OF TRANSFORMER	#16	RED
SECONDARY SIDE OF TRANSFORMER (X2) LEAVING CONTROL PANEL	#16	WHITE
GROUND WIRE ON SECONDARY SIDE OF CONTROL TRANSFORMER (X2)	#12	GREEN
DC CONTROL CIRCUITS	#16	BLUE
INTERLOCK CONTROL CIRCUITS SUPPLIED FROM EXTERNAL POWER SUPPLY	#16	YELLOW

* ALL CONTROL WIRING MUST BE 75° C. WIRE (MINIMUM) AND SIZED PER NEMA 1.C.S1-109 AND 1-112.63.

GENERAL NOTES:

- ALL ELECTRICAL EQUIPMENT AND COMPONENTS INSTALLED SHALL BE LISTED AND LABELED FOR ITS USE AND AREA CLASSIFICATION (NEC 110-3).
- CONTROL TRANSFORMER SHALL BE USED TO POWER CONTROL CIRCUIT AS SHOWN.
- LISTED AND LABELED CIRCUIT BREAKERS SIZED AND RATED FOR THE LOAD ARE ACCEPTABLE.
- SELECTOR SWITCH MUST BE HEAVY PILOT DUTY RATED (A600), OUTDOOR RATED AND MOUNTED ON THE FLANGE OF ENCLOSURE. (UL 508A, TABLE Q).
- ADDITIONAL PILOT LIGHTS OR OTHER CONTROL OPERATORS MUST BE HEAVY PILOT DUTY RATED (A600), OUTDOOR RATED, AND MOUNTED ON FLANGE OF THE ENCLOSURE. NO DEVICES CAN BE MOUNTED ON DOOR EXCEPT FOR EXTERNAL RESET BUTTONS. (UL 508A, TABLE Q).
- 3Ø MOTOR SAVER PHASE MONITOR. DETECTS SINGLE PHASE CONDITION.

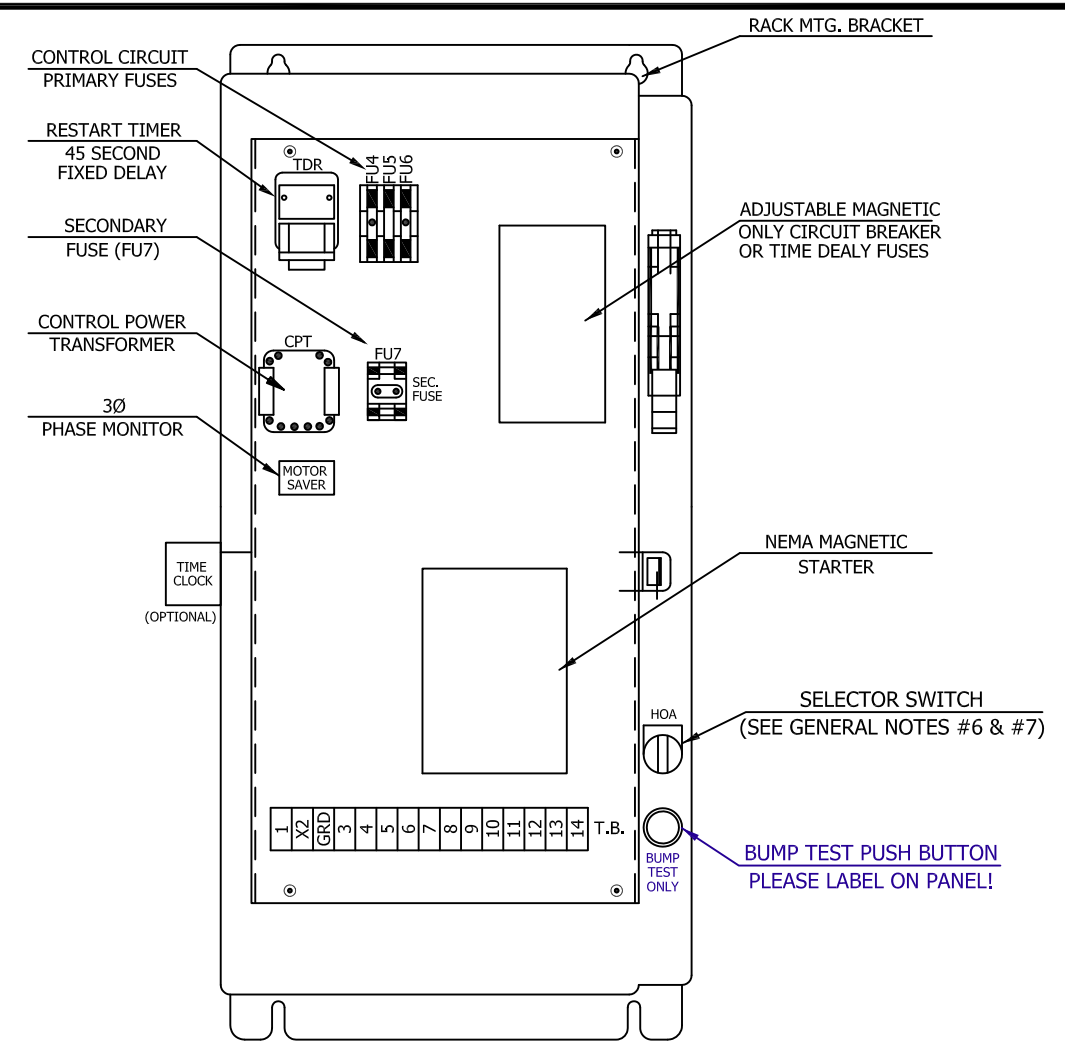


WIRING DIAGRAM FOR BEAM PUMP CONTROL PANEL

CONTROL TRANSFORMER SIZE AND PRIMARY / SECONDARY OVERCURRENT PROTECTION (SEE GENERAL NOTES 2 AND 3)

STARTER SIZE	VA 480/120V	PRIMARY * FUSE TYPE CC KLDR-LITTLEFUSE FNQ-BUSSMAN	SECONDARY * FUSE TYPE 3AG SLO-BLO-LITTLEFUSE MSL-BUSSMAN
1-2	150	1.5	1.5
3-4-5	200	2.0	2.0

* REFERENCE N.E.C. 430-72 AND 450-3.



LOCATION OF COMPONENTS SHOWN IN APPROX. RECOMMENDED LOCATIONS. IN NO CASE SHALL COMPONENT BE LOCATED SO AS TO VOID WIRE TERMINATION SPACINGS BETWEEN PHASES AND TO GROUND.

NEMA OIL WELL BEAM PUMP CONTROL PANEL

CRITICAL COMPONENTS/SETTINGS

- TDR - 45 SECOND FIXED TIME DELAY.
- BUMP TEST BUTTON - MOMENTARY CONTACT.
- PROGRAMMER NOTE: SET P.O.C. START DELAY TO STAGGER PUMP UNIT STARTS. DELAY FIRST START BY 30 SECONDS. DELAY ADDITIONAL STARTS IN 15 SECOND INCREMENTS.

WOLFBERY EXCLUSIVE BEAM PUMPING UNIT CONTROL PANEL

REVISION	DESCRIPTION	DATE	DRAWN BY	CHKD BY
1	ADDED 3Ø PHASE MONITOR	9/3/13	DWM	RDT
2	ADDED WOLFBERY PANEL COMPONENTS.	4/21/2014	JMH	CIA
3				

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DRAWN: HWW	DATE: 3/28/11	CHECKED:	DATE:	SCALE: NONE
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