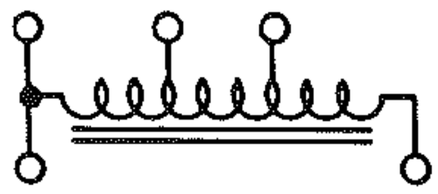
TYPICAL GRAPHICAL SYMBOLS FOR ELECTRICAL DIAGRAMS

COILS (CONTINUED)

AUTO TRANSFORMER

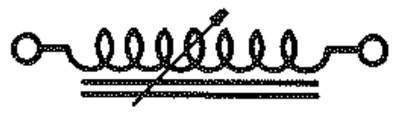


REACTORS

IRON CORE

AIR CORE

ADJUSTABLE

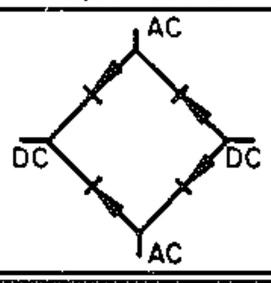


(SHOWN WITH IRON CORE)

RECTIFIERS

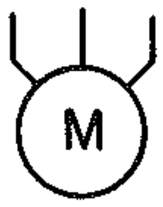
HALF WAVE

PULL WAVE



MOTORS

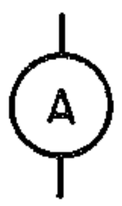
THREE PHASE



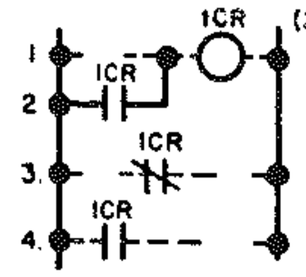
D. C. TYPES

FIELDS

ARMATURE



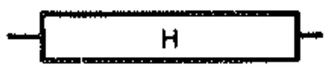
LOCATION OF RELAY CONTACTS



NUMBERS IN PARENTHESIS DESIGNATE THE LOCATION OF RELAY CONTACTS. A LINE UNDERNEATH A LOCATION NUMBER SIGNIFIES A NORMALLY CLOSED CONTACT

RESISTORS

FIXED



HEATING ELEMENT

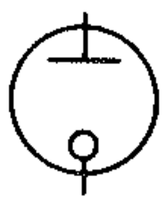
TAPPED

DENOTE PURPOSE

POTENTIOMETER OR RHEOSTAT

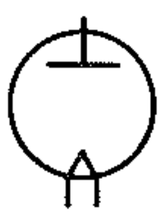
ELECTRONIC TUBES

COLD CATHODE

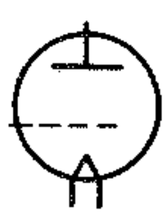


VOLTAGE REG.

DIODE

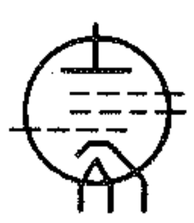


TRIODE

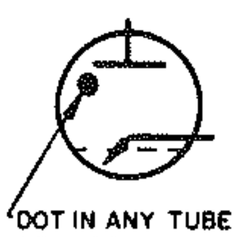


TETRODE

PENTODE

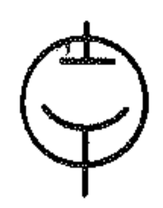


IGNITRON



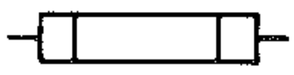
DOT IN ANY TUBE DENOTES GAS

PHOTO-CELL

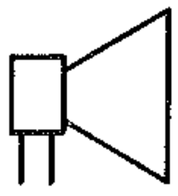


MISCELLANEOUS

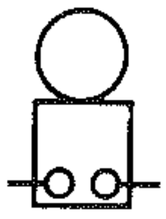
FUSE (POWER OR CONTROL CIRCUIT)



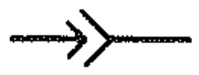
HORN, SIREN, ETC.



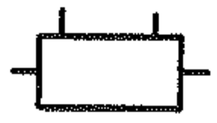
BELL OR BUZZER



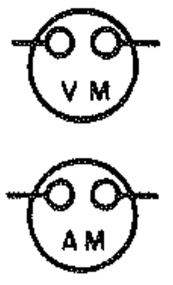
PLUG AND RECEPTACLE



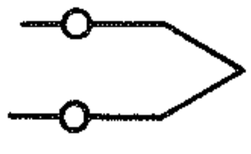
METER SHUNT



METER

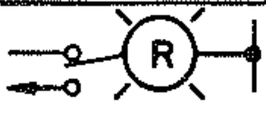


THERMOCOUPLES



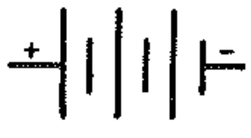
LAMPS

PUSH TO TEST



DENOTE COLOR BY LETTER

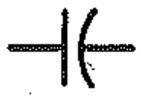
BATTERY



GROUND

CAPACITOR

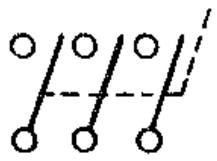
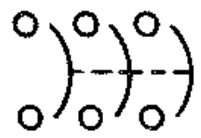
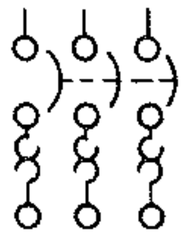
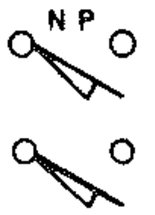
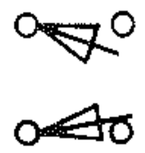
FIXED

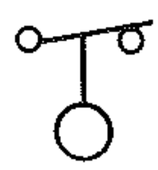


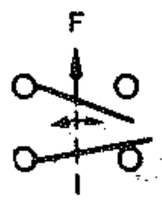
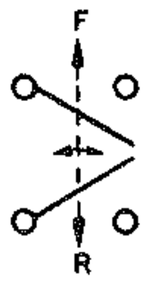
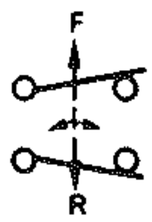
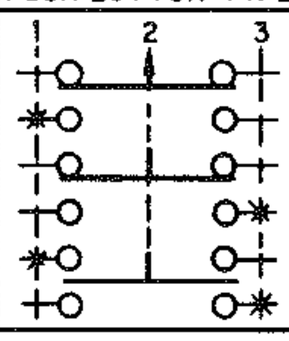
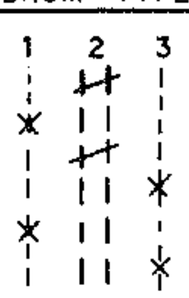
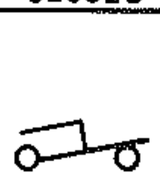
ADJUSTABLE

TYPICAL GRAPHICAL SYMBOLS FOR ELECTRICAL DIAGRAMS

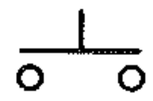
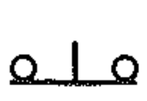
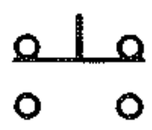
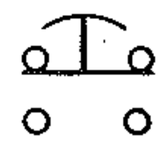
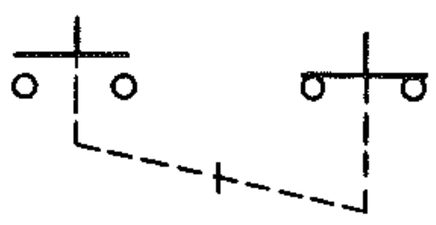
SWITCHES

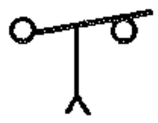
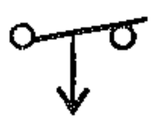
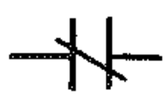
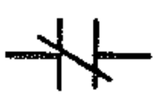
DISCONNECT	CIRCUIT INTERRUPTER	CIRCUIT BREAKER	LIMIT			
			SPRING RETURN			MAINTAINED POSITION
			NORMALLY OPEN	NORMALLY CLOSED	NEUTRAL POSITION	
			HELD CLOSED	HELD OPEN	 N P	

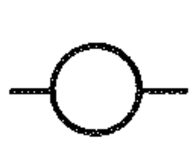
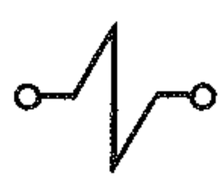
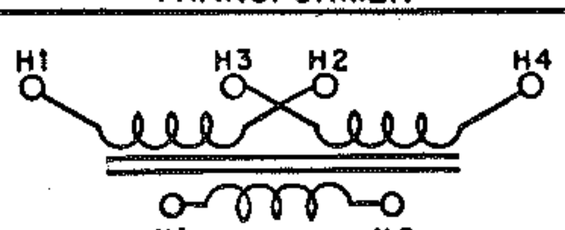
LIQUID LEVEL		VACUUM & PRESSURE		TEMPERATURE ACTUATED		FLOW (AIR, WATER, ETC)	
NORMALLY OPEN	NORMALLY CLOSED	NORMALLY OPEN	NORMALLY CLOSED	NORMALLY OPEN	NORMALLY CLOSED	NORMALLY OPEN	NORMALLY CLOSED
							

SPEED (PLUGGING)		ANTI-PLUG	SELECTOR		FOOT	
			PREFERRED	ALTERNATE	NORMALLY CLOSED	NORMALLY OPEN
			PUSH BUTTON TYPE	DRUM TYPE		
 F	 F R	 F R	 1 2 3	 1 2 3		

PUSH BUTTONS

SINGLE CIRCUIT		DOUBLE CIRCUIT	MUSHROOM HEAD	MAINTAINED CONTACT
NORMALLY OPEN	NORMALLY CLOSED			
				

TIMER CONTACTS. CONTACT ACTION RETARDED WHEN COIL IS:				GENERAL CONTACTS. STARTERS, RELAYS, ETC		
ENERGIZED		DE-ENERGIZED		OVERLOAD THERMAL	NORMALLY OPEN	NORMALLY CLOSED
NORMALLY OPEN	NORMALLY CLOSED	NORMALLY OPEN	NORMALLY CLOSED			
						

CONDUCTORS		COILS			
NOT CONNECTED	CONNECTED	RELAYS TIMERS, ETC.	OVERLOAD THERMAL	SOLENOID	CONTROL TRANSFORMER
					 H1 H3 H2 H4 X1 X2

(CONTINUED)