

K-Line-Power Circuit Breakers—Descripti

AUXILIARY SWITCHES FOR K-LINE CIRCUIT BREAKERS

INTRODUCTION

The auxiliary switch is a contact device operated mechanically by the circuit breaker to effect electrical circuits for closing, tripping and signaling purposes.

Auxiliary switches, as used on the K-Line circuit breakers, are front connected switches with double break rotary contacts. These switches may be furnished as 4 and 8 contacts.

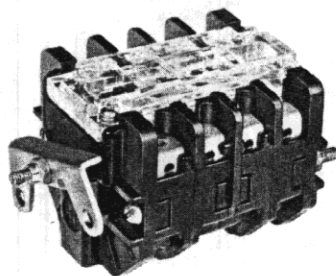


Fig. 1 - Four contact auxiliary switches for K-Line circuit breakers.

These switches are mounted on a shelf straddled between the breaker side frames and in front of the arc extinguishers. Linkage from the auxiliary switch to an arm on the jack shaft operate these switches. These links are on the right and left hand side of the breaker just inside the breaker side frames. The auxiliary switches are readily mounted on the shelf and additions may be made as required. Refer to Fig. 2.

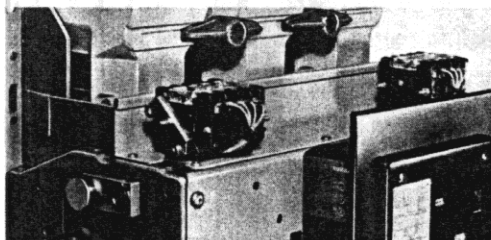
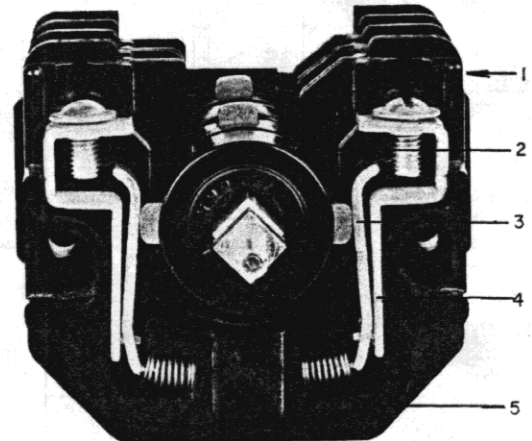


Fig. 2 - Method of mounting auxiliary switches on shelf for K-Line circuit breakers.

The switch itself is groups of built up sections as in Fig. 3 enclosing the contact structure consisting of movable and stationary contacts. The movable contacts rotate with a common shaft and operate in sequence as assembled. These contacts may be assembled so that they may be

closed when the circuit breaker is closed "a" or closed when the circuit breaker is open "b". Any contact can be changed as "a" to "b" or "b" to "a" type of contact.



1. Contact Molding
2. Rotating Contact Assembly
3. Movable Contact
4. Stationary Contact
5. Contact Spring

Fig. 3 - Auxiliary switch with end molding cover and operating crank removed.

RATINGS

The switch can carry 40 amperes continuously with limitations in interrupting as indicated in Table I. Two contacts are sometimes placed in series for operating on highly inductive D-C circuits. The interrupting ratings given below are also indicated on the transparent cover of the switch.

TABLE I - Interrupting Ratings

Circuit Voltages		Maximum Amperes
AC	115	30
	240	20
	480	10
	600	7
DC	125	10#
	250	5#
	600	0.5#

Inductive load current corresponding to the interruption of the trip coil circuit of a breaker