



LATCHING SWITCH RELAYS

The electrical power industry has a great variety of requirements for latching type auxiliary relays to provide maintained contacts – both N/C and N/O. Often, manually operated switches are used in conjunction with traditional relays to provide the “maintained” function. However, traditional protective relays have limitations as to the number of contacts available and their ability to withstand seismic vibration. Traditional auxiliary relays used in conjunction with the protective relays also exhibit these limitations.

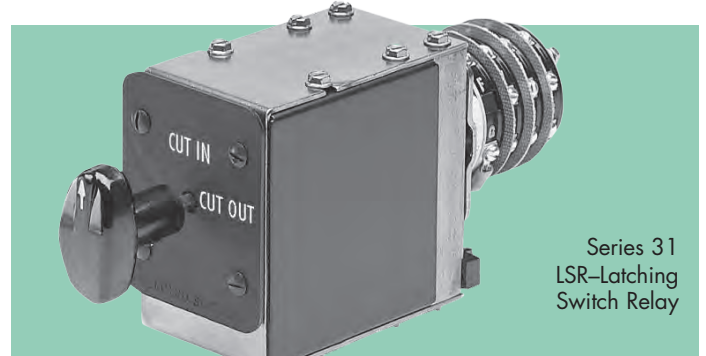
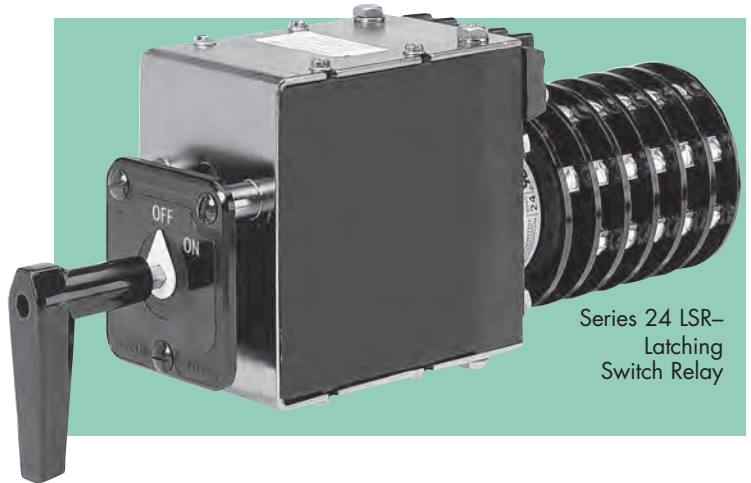
The LSR Latching Switch Relay was developed to meet these requirements. It is a two position rotary action Latching Switch Relay that provides control of up to 20 N/O and 20 N/C contacts in a single device. It is a manually or remotely operated unit used for a variety of applications; latching relay, reclosing relay, programming relay, and local/remote switch that is SCADA compatible.

- **Series 24 LSR now available with lighted nameplate.**
See page 12 for Lighted Nameplate information.

NOTE: The Series 24 and 31 LSR Class 1E utility products comply with the following Standards: ANSI/IEEE C37.90 and ANSI/IEEE C37.90.1

Series 24 and 31 Latching Switch Relays

- | | |
|--------------|--|
| HIGH QUALITY | <ul style="list-style-type: none"> • Designed and manufactured to the highest standards in the industry • Qualified to UL, CSA, ANSI/IEEE |
| VERSATILITY | <ul style="list-style-type: none"> • 2 Size options - Series 24 and Series 31 • Up to 20 N/O and 20 N/C contacts • Electric or manual operation • Control circuits • Available without handle for remote only operation |
| AVAILABILITY | <ul style="list-style-type: none"> • Many Series 24/31 LSRs are available from stock for immediate delivery |
| SERVICE | <ul style="list-style-type: none"> • The Electroswitch team of Customer Service and Applications Professionals stand behind every Electroswitch product. Let us put over 50 years of know-how to work for you! |



NOW AVAILABLE!
The New Serial Communication LSR
 (DNP 3.0 or Modbus)
 For more information, visit:
www.electroswitch.com
 or call: **781-335-5200**

Contact Deck Arrangement

The blade and terminal configuration enables the use of multiple contacts in the same deck, and simple stacking procedures enable the fabrication of many independent contacts in one relay. Specifically, two N/O contacts and two N/C contacts are provided in each deck, and ten decks can be stacked, resulting in a relay with up to forty contacts. This deck arrangement is illustrated in Fig 1.

The contacts operate reliably, using every contact and terminal illustrated. For good practice, however, it is suggested that polarized voltages should not be used on adjacent contacts. This is because of the remote possibility of flashover during transition between adjacent contacts — especially at the higher DC ratings, or in highly inductive circuits.

The illustration of the basic deck LSR layout is for the first deck. For multideck units the second digit of the terminal number is the same as the deck number.

As an example: Terminal 82 is in the eighth deck, in line under terminal 12 and is a N/O contact used together with terminal 84.

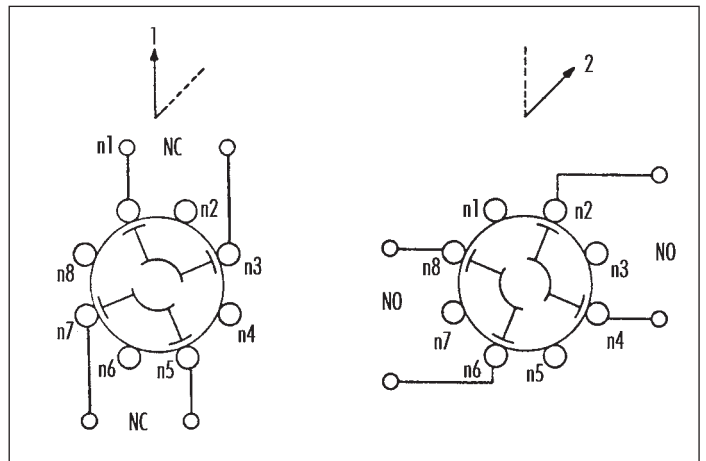


FIG 1.