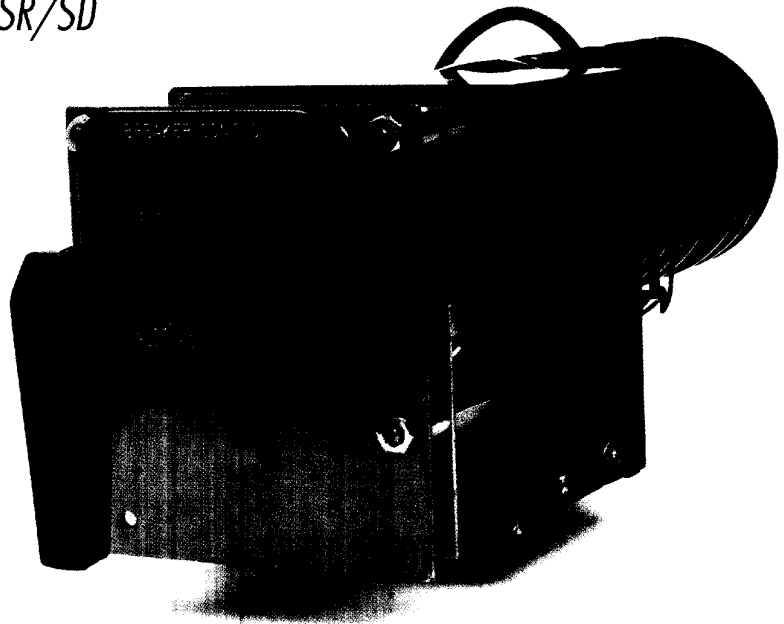


Series 24 Control Switch Relay

*Perform testing and
service safely*

CSR/SD



SERIES 24 CONTROL SWITCH RELAY WITH SCADA DISABLE

CSR/SD

Our Series 24 CSR/SD operates like a standard CSR, allowing both SCADA and manual operation. Pushing in the handle disables remote operation leaving only Local/Manual operation possible, allowing testing and service to be performed safely. In addition, the CSR/SD also provides 2 n/o and 2 n/c contacts, push activated, for customer use as SCADA feedback of status indication.

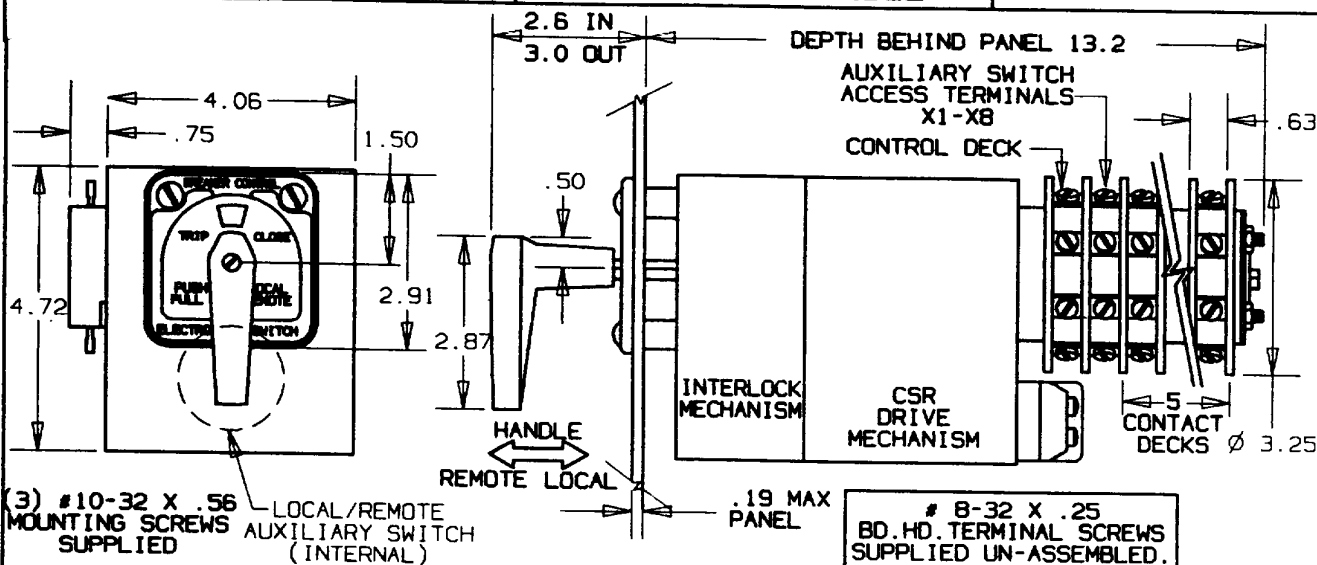
1. The CSR handle pulls out 3/8 of an inch to allow remote operation of the CSR from SCADA and in addition to local/manual operation.
2. When the CSR handle and shaft is pushed in; the remote operation of the CSR is disabled and only local/manual operation of the CSR is possible.
3. The CSR is maintained in the "Normal" position; handle vertical at 0 degrees.
4. Two (2) normally open and two (2) normally closed lateral contacts are provided on the CSR and will operate by means of the 3/8 inch axial movement of the CSR handle shaft (push/pull operation).
5. The red and green CSR target flag will always indicate true status of the breaker whether in SCADA/LOCAL or LOCAL only mode.
6. Electrical connections to the 2 n/c and 2 n/o auxiliary contacts can be made at the terminal block deck at the rear of the CSR. These auxiliary contacts have a 15 amp., 600 volt rating and can be used to provide customer status indication.



ELECTROSWITCH
 UNIT OF ELECTRO SWITCH CORP.
 NEYMOUTH MASSACHUSETTS 02188
 TEL: (617)335-5200 FAX: (617)335-4253

SERIES 24
CONTROL SWITCH RELAY
W/SCADA DISABLE

8857FC

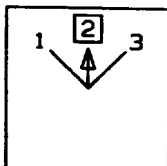


CONTROL CIRCUIT C - 125VDC

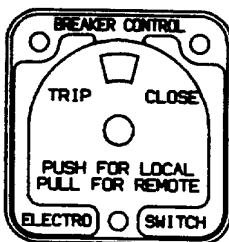
TITLE: BREAKER CONTROL

DECK	CONTACTS	PUSH	PULL	POSITION			
				TRIP	(NAT)	(MAC)	CLOSE
				1	2 FROM	3	
AUX CONT	X1 ○— — ○ X3	X					
	X2 ○— — ○ X4		X				
	X5 ○— — ○ X7	X					
	X6 ○— — ○ X8		X				
1	12 ○— — ○ 13						X
	16 ○— — ○ 17						X
2	21 ○— — ○ 28		X				
	24 ○— — ○ 25		X				
3	31 ○— — ○ 32			X	X		
	35 ○— — ○ 36			X	X		
4	42 ○— — ○ 43				X	X	
	46 ○— — ○ 47				X	X	
5	51 ○— — ○ 52		X	X			
	55 ○— — ○ 56		X	X			

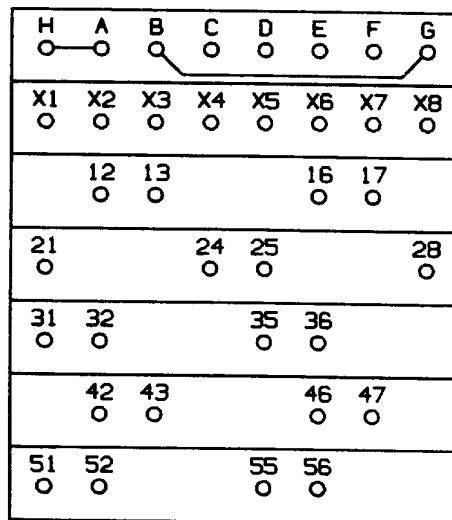
HANDLE POSITIONS



TARGET NAMEPLATE
 CODE 18B-2B48

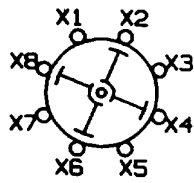


TERMINALS SUPPLIED AS SHOWN BELOW.

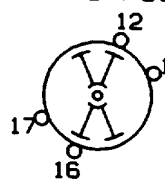


SPRING RETURN TO POSITION 2

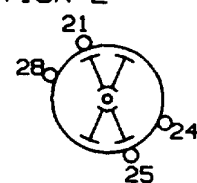
CONTACT DECKS



AUX CONTACT DECK



DECK 1 BBM

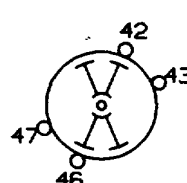


DECK 2 BBM



DECK 3 BBM

COUPLING



DECK 4 BBM



DECK 5 BBM
 SLIP CONTACTS

REVISIONS:

MADE BY: W.D.S. DATE: 8/19/96
 APPR BY: C.J.L. DATE: 8/19/96

DWG. NO:
 SHEET 1 OF 2

REV 0

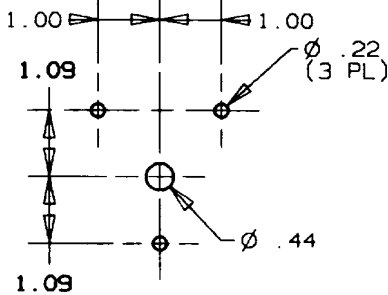


ELECTROSWITCH
 UNIT OF ELECTRO SWITCH CORP.
 NEYMOUTH MASSACHUSETTS 02188
 TEL: (617)335-5200 FAX: (617)335-4253

SERIES 24
CONTROL SWITCH RELAY
W/SCADA DISABLE

8857FC

PANEL DRILLING DIMENSIONS



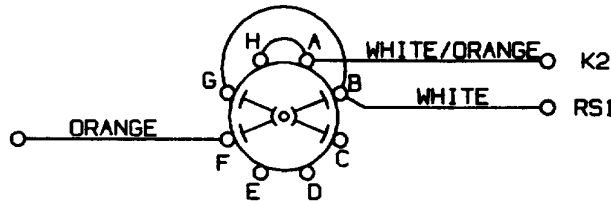
	UL RECOGNIZED CONTACT RATINGS	
	20A-120VAC	3A-125VDC
	15A-240VAC	1A-250VDC
	6A-600VAC	

FOR FURTHER INFORMATION REFER TO TECHNICAL PUBLICATION CSR-1

CONTROL CIRCUIT C - 125VDC
 UP TO 15 SECOND TIME DELAY
 WITH HOLD-IN RESISTOR.

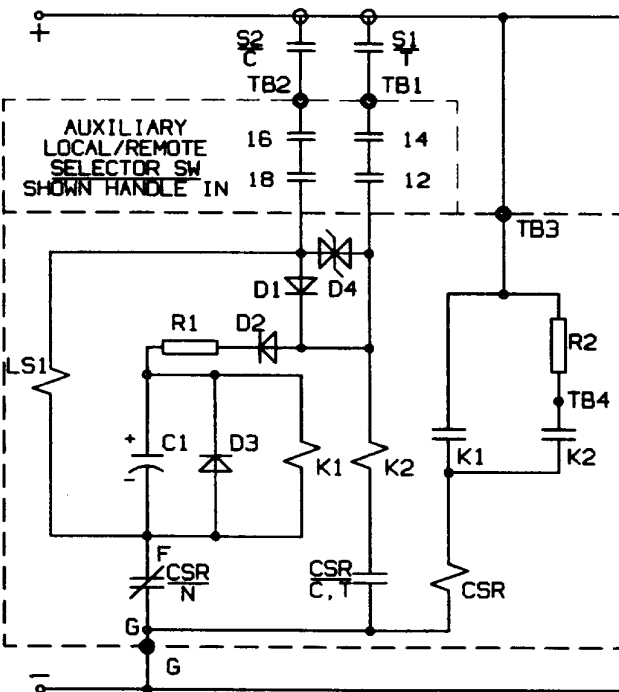
CONTROL DECK

FACTORY: PIN AT 4 $\frac{5}{32}$



OPERATING SPECIFICATIONS

NOMINAL VOLTAGE:	125 VDC
OPERATING RANGE:	106-140VDC
COIL RESISTANCE:	18.96 Ω
COIL BURDEN:	6.6 AMP AT 125 VDC
COMMAND SIGNAL:	100 MSEC MIN 15 SEC MAX
RESPONSE TIME:	60 MSEC (NOMINAL)



SCHMATIC

ITEM	DESCRIPTION
C1	CAPACITOR 25 μ f 150VDC
D1-D3	DIODE 1000 PIV, 1 AMP
D4	ZENER DIODE 200VDC BREAKDOWN
K1-K2	RELAY, SPST 5K Ω
LS1	LINEAR SOLENOID 235 Ω
R1	RESISTOR, 1WATT 240 Ω
R2	RESISTOR, 50WATT 75 Ω
CSR	ROTARY SOLENOID 18.96 Ω
TB	TERMINAL BOARD

REVISIONS: SEE SHEET 1

MADE BY: W.D.S. DATE: 8/19/96
 APPR BY: C.J.L. DATE: 8/19/96

CONTROL CIRCUIT C
125 VDC

DWG. NO:
 SHEET 2 OF 2

REV
0

FN-