Type Lense

# Heavy Duty Oiltight Selector Switch Units - 10250T/91000T or E34



Underwriters Laboratories Listed For use on a flat surface of Type 1, 2, 3, 3R, 4, 4X, 12 and 13 enclosures. IP 65

### ASSEMBLY INSTRUCTIONS

- 1. Select the desired schematic circuit function from the chart below and note in your cam column the type of contacts, N.O. or N.C., the "A" and "B" circuit locations, and any series or parallel jumper connections the may be required
- 2. Choose contact blocks that have the required schematic circuits and assemble in any convenient sequence that fulfills the "A" and "B" circuit location requirements

NOTE: Single circuit contact blocks, if used, must be last in the stack and positioned so that the plunger motion is transmitted through.

3. Make the indicated series or parallel jumper connections.

(10250T/91000TA70,TA71).



4. If this operator was received without an operating cap, assemble the separately purchased cap, assemble the separately purchased cap and secure with the screws provided

NOTES: Single, double and 2NO-2NC contact blocks are available. Six contacts can be stacked in each of the two circuit locations making a maximum of twelve circuits possible.

For additional selector switch explanation ask for manual NU-118.

The two sections of the operating cam of this selector switch work independently, so it is important that the contact blocks be oriented with their plungers in the correct "A" and "B" circuit locations. The sketch below identifies these positions with respect to the locatin nib or marked top.

# LIGHT MODULE OF CONTACT BLOCK Grounding nibs Locating nib Operating cab Knob, Lever, Coin, Slot, Key or Knob To be changed in Coin Slot Assembly

Allen Wrench Sketch shows VERTICAL MOUNTING. For HORIZONTAL MOUNTING loosen the set screw and assemble so that the locating nib is at the left

ILLUMINATED GASKET INSTRUCTIONS This operator was shipped with the gasket oriented for VERTICAL MOUNTING using lever lens and the new type knob lens.

For HORIZONTAL MOUNTING (or VERTICAL MOUNTING using the old type knob) carefully peel the lens gasket, rotate it 90°, and press onto the operator. (Lens screws will now thread into alternate holes).

LAMB REMOVAL TOOL For Trans. Type Cat. No. 10250TA74 for Full Voltage Type E30KV1.

For Replacement Gasket Order PT #32-803

The selector switch operator in this package may not be complete. A knob. lever, coin slot or knob type lens operating cap is required wich may be merchandised and packaged separately.

# WIRING INSTRUCTIONS

The illustration shows the circuit conditions that result for each position of the selector switch

#### 10250T/91000T20 10250T/Q1000T21 SERIES OR E34 SERIES OR E34 Heavy lines indicates costumers connections Light lines are factory installed jumpers X=circuit closed O=circuit open I = l eft C=Center 10250T/91000T46 10250T/91000T22 SERIES OR E34 SERIES OR E34 1-2-3-4=4 position switch

## ASSEMBLY INSTRUCTIONS

US 60/75°C COPPER CONDUCTORS ONLY



- 1. Drill mounting hole for vertical or horizontal mounting per one of the figures
- 2. ensure sealing gasket is in the place on the operator. Align location nib of the operator with notch in the panel and insert operator through mounting hole.
- 3. Place legend plate and mounting nut over operator. Tighten mounting nut. If applicable assemble buttons to operator. Tighten securely (5 ft-lbs)
- 4. Torque terminals to 12 in/lbs (1.4 Nm).
- For ease of assembly, we recommend the following tools:

91000T/10250TA95 (for 10250T/91000T octagonal nut, E29 and E30 line) (for 10250T/91000T octagonal nuts, E22, E30 and E34)

5. Torque contact block stacking screws to 5-7 in/lbs (0.57-0.79 Nm)



# Heavy Duty Oiltight Selector Switch SWITCH UNITS-10250T/91000T OR E34

GROUNDING OF 10250T/91000T AND E34 COMPONENTS



#### GENERAL

With any electrical component there is the possibility an external factor (loose wire, moisture, etc.) can cause a short circuit between the component and ground. If the device is adequately grounded, the condition causes the protective fuse or circuit breaker to open and remove the potential. If not, an electrical hazard may remain unnoticed.

### **GROUNDING NIBS - 10250T**

This 10250T device is designed to make direct metallic contact to the rear of the panel (with no interfere with component-to-panel ground continuity). As a further aid in establishing an electrical ground, the device has 4 metal points, "grounding nibs" designed to penetrate most paint or other protective coatings. Penetration of these nibs is dependent upon the torque applied to the mounting nut. Recommended torque is 5 ft.lbs (6.8Nm). More or less may be necessary to penetrate the specific type of thickness of your panel coating. Test for continuity to ground after installation. If a short circuit to ground does occur, the fault should be corrected and the device replaced.

### GROUNDING KITS

For grounding 10250T devices to non-metallic panels or metal panels having excessive surface coating or for grounding E34 with any panel we offer the following grounding kits which provide for a separate grounding circuit, daisy chained between components and then to ground. Use 10250TKG1.

#### EARTH TERMINALS- 91000T/E34

These devices are supplied with an earth/ground terminal incorporated. These devices have a 6-32 terminal screw and will accommodate ring type terminations for bonding to international specifications.

# CONTACT BLOCK SELECTION CHART

Select cam code giving simplest contact block arrangement for circuit(s) required.

# 2 Position

Combi- nation No.	Desired Circuit Operation X Contacts	Contact Blocks Required to Accomplish Circuit Function				
	Closed O Contacts Open	Top Plunger A	Bottom Plunger B			
1	хо	-olo- NC	- <u>olo</u> - NC			
2	0 X	-\$ <u>-</u> -	, ~,-			

#### 3 Position

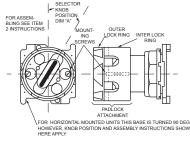
Combi- nation	Desired Circuit Operation	Con	tact Blocks Required to (Jumpers must be ins				
No.	X Circuit Closed	Operator with Can	n Code #2	Operator with Cam Code #3			
	O Circuit Open	Mounting Location		Mounting Location			
İ		Top Plunger A	Bottom Plunger B	Top Plunger A	Bottom Plunger B		
1	хоо	-0 C NO	olo- NC	-0 0- NO			
2	xxo		-olo- NC		-010- NC		
3	хох	-0 o-		No.	-d-o <sub>NO</sub>		
4	0 O X		-0 0- NO		-00- -0-0-		
5	oxx	NC ONO		-olo- NC			
6	0 X O	-olo- NC		-olo- NC			

## 4 Position

Combi- nation	Desired Circuit Operation		Accomplish Circuit Function nation Operation Accomplish		Contact Block Accomplish C			
No.	X Circuit Closed O Circuit Open	Mounting	Location	No.	X Circuit Closed O Circuit Open	Mounting	Location	
	8888	Top Plunger A	Bottom Plunger B		8888	Top Plunger A	Bottom Plunger B	
1	x000	-QLO- NC		10	xoxo	TAL		
2	oxoo		-0 O- NO	] "	X0X0	NC NC		
3	ooxo	-00 NO		- 11	xxxo	NC NO		
4	000X		-olo- NC	] "	*****			
5	xoox	NC GTO	-QLO <sub>NC</sub>	12	oxxx	NO NO		
6	oxxo	يطر	وم NO	12	0^^^			
7	ooxx	Log Olo	~~		xoxx	To-p	-010-1	
8	xxoo	NC OTO	6-NO	13		NC NC	NC	
9	oxox		NO NO Total	14	xxox	مله ا	- NO.	

-Ordinarily, these operators should not be used with overlap and early closing contact blocks (10250T/91000T55, T56, T57 and T58). Contact local EATON sales office on specific application.

# INSTRUCTIONS FOR THE ASSEMBLY OF THE PADLOCK ATTACHMENT E34TA11, 10250T/91000TA11 TO KNOB OPERATED HEAVY DUTY OIL TIGHT SELECTOR SWITCH OPERATORS



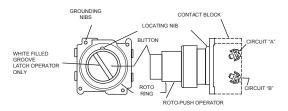
- With the knob of the selector positioned per dimension "A" place the padlock attachment over the knob with the mounting screws located as shown in the illustration.
- 2. Tighten the mounting screws alternately and uniformly to prevent the attachment from being assembled skewed.
- 3. The outer lock ring can now be turned to any desired selector position. there are provisions for 5 padlocks.

Dimension "A"- For 2 or 3 position selector switch operators. Locate the knob half way between clockwise and center positions.

Effective February 2018



# INSTRUCTIONS FOR THE ASSEMBLY OF HEAVY DUTY OILTIGHT ROTO-PUSH UNITS



### APPLICATION INSTRUCTIONS

1-The cam code is stamped on the rear of the operator.

2-Determine the number of operating positions of the operator by moving the

3-Examine the contact block for its circuit arrangement.

4-The chart shows the circuit operating sequence when moving the roto-ring from one position to another with the pushbutton depressed or normal.

5-Assemble the contact block to operator with the circuit corresponding to "A" in the chart mounted located behind the locating nib. This is shown in the sketch on this publication.

6-For additional explanation ask for manual NU-118.

# **INSTRUCTIONS ROTO-PUSH® LATCH OPERATOR** ASSEMBLY INSTRUCTIONS

NOTE: The white-filled groove in the button indicates the roto-ring position. When the roto-ring is in the counterclockwise position the button position is normal and may be depressed independent of the roto-ring. Rotating the ring to the extreme clockwise position depresses and latches the button. The roto-ring has spring return action from any clockwise position except the latched position.

	Collar Position						
Contact Block With	Button Sequence						
	N	D	Latch Down				
N.O. Contact	0	X	X				
N.C. Contact	Х	0	0				

# CAM AND CONTACT BLOCK SELECTION FOR 2 POSITION SWITCH

Com-	Co	ollar F	Positi	on							Cam	Cam	Cam	Cam	Cam
bina-	1	<b>K</b>	1	1	Cam Code 1	Cam Code 2	Cam Code 3	Cam Code 4	Cam Code 5	Cam Code 6	Code	Code	Code	Code	Code
tions	Circuit Sequence •									10	11	12	13	14	
	N	D	N	D											
1	0	0	0	Х	A-Q-LNO	A-J-NO			A-J-NO			AT TNO			
2	0	0	х	0				A-QLO-NC B-0-NO	A-QLO-NC B-O-NO			A COLONO NO	A-QLO-NC	A or B NC	v-oTo-NC
3	0	0	х	Х					B_O_O_NO	A-O-LNO	B-0-0-NO	B_d_NO			
4	0	Χ	0	0	B-0-0-NO	A-QLO-NC B - NO				A-QLO-NO	A-O-O-NO	A TOLOTINO			B-0-0-NO
5	0	Χ	0	Χ	ATO NO	B_O_NO		A-O-O-NO				ALNO	B-0-0-NO		
6	0	Χ	Х	0											A-QLO-NC B-D-NO
7	0	Χ	Х	Χ			A or B NO	B-0-0-NO		B-0-0-NO	ALL NO	B NO	A COLO NO		
8	X	0	0	0			A or B NC	B-QLQ-NC		B-QLQ-NC	ACOTO-NC BCOTO-NC	PCOTONC BCOTONC	P LOTOLNO		
9	X	0	0	Χ											P LOTO NO
10	Х	0	Х	0	PLOTO-NC BLOTO-NC	B-QLQ-NC		A-QLO-NC				A-QLO-NC	B-QLQ-NC		
11	X	0	Х	Χ	B-QLQ-NC	B LOTO NO				å Tololog	A_oLo_NC	A QLO NO			B_olo_NC
12	X	Χ	0	0					B-QLQ-NC	A-QLO-NC	B-oLo_NC	B-QLO-NC			
13	X	Χ	0	Χ				& Total NO	A TOLOTINO			y Laral NC	A_0_NO	A or B NO	A_0_NO
14	Х	Х	Х	0	A-QLO-NC	A-QLO-NC			A-QLO-NC			PCOTO-NC NC NC			

# CAM AND CONTACT BLOCK SELECTION FOR 3 POSITION SWITCH

Com-		С	ollar	Position	on					Cam	Cam	Cam	Cam
bina-	1	<b>k</b>		<b>A</b>	7	1	Cam Code 7	Cam Code 8	Cam Code 9	Code	Code	Code	Code
tions		Cir	cuit :	Seque				•		15	16	17	18
	N	D	N	D	N	D							
1	0	0	0	0	0	Χ	THE NO	THINO NO		B_O O_NO	B-0-0-NO		A-QLO-NC B-L-D-NO
2	0	0	0	0	Х	Χ			B_O_O_NO			A_J_NO	
3	0	0	0	Χ	0	0			A TOLOTNO B TOLOTNO				AT NO NO
4	0	0	0	Х	0	Χ							B_O_O_NO
5	0	Ο	0	X	Х	Χ			A-J-NO				
6	0	Ο	Х	X	0	0		ATQLO-NC B LOLONO					
7	0	0	Х	X	0	Х		B-0-NO					
8	0	0	Х	X	х	0	ATOLO-NO B L A NO						
9	0	0	Х	X	х	Х	B_D_NO						
10	0	Х	0	0	0	0	å Tololno	\$ TOLOTING		A_L_NO	A_J_NO	B_J_NO	A TO O NO
11	0	Х	0	0	0	Х	A_J_NO			ATO NO	ATO NO		
12	0	Х	0	0	х	Х						ALL NO	
13	0	Х	0	Х	0	0							A-G-L-NO
14	0	Х	0	Х	0	Х							NO NO
15	0	Х	Х	Х	0	0		A_LNO					REG OT MO
16	0	Х	Х	Х	0	Х		ATO NO					
17	0	Х	Х	Х	х	Х	ALL NO						
18	х	0	0	0	0	0	A QLO NC BLOLONC						
19	Х	0	0	0	х	Х		A-QLO-NC					
20	Х	0	0	0	х	0		§L <mark>oTo</mark> √vc groovc					
21	Х	0	Х	Х	0	0						NC OTO NC	
22	x	0	Х	Х	x	Х	A-QLO-NC B-Q-NO	A-QLO-NC B-O-NO			v-oTo- <sub>NC</sub>	B-olo-NC	A-QLO-NC B-Q-NO
23	x	0	Х	Х	x	0	A-QLO-NC	B EQ 0-110			Were Parance		
24	x	0	Х	0	x	0				A COLONG BLOJONG	0.010		A COTO NC B COTO NC
25	x	0	Х	0	x	Х				A-QLO-NC			P-OTO-NC Brotto-NC
26	х	X	0	0	0	0							
27	X	X	0	0	0	Х	P-OTO-NC		A-QLO-NC				
28	X	X	0	0	X	0		B-QLO-NC					
29	X	X	0	0	X	Х		%LoTo-NC WC OTO-NC	۷_مام- <sub>NC</sub>				
30	X	X	X	Х	0	0			B FQ-P NO			A_q_Lo_NC	
31	X	X	X	Х	X	0	ACOTO NC BCOTO NC	A TOLOTINO	B-QLO-NC		D. I. NC		A TOLONO
32	X	X	X	0	×	0					B-QLO-NC		i
33	X	Х	X	0	X	Х				B-OTO-NC B-OTO-NC			B-QLQ-NC B-QLQ-NC
	_^_	^		<u> </u>	_ ^_	^				∞الفلما ا			8roTo- <sub>NC</sub>

Limited to 4 contact blocks.

- N=Button in free or normal position.
- D =Button depressed C =Contacts closed

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