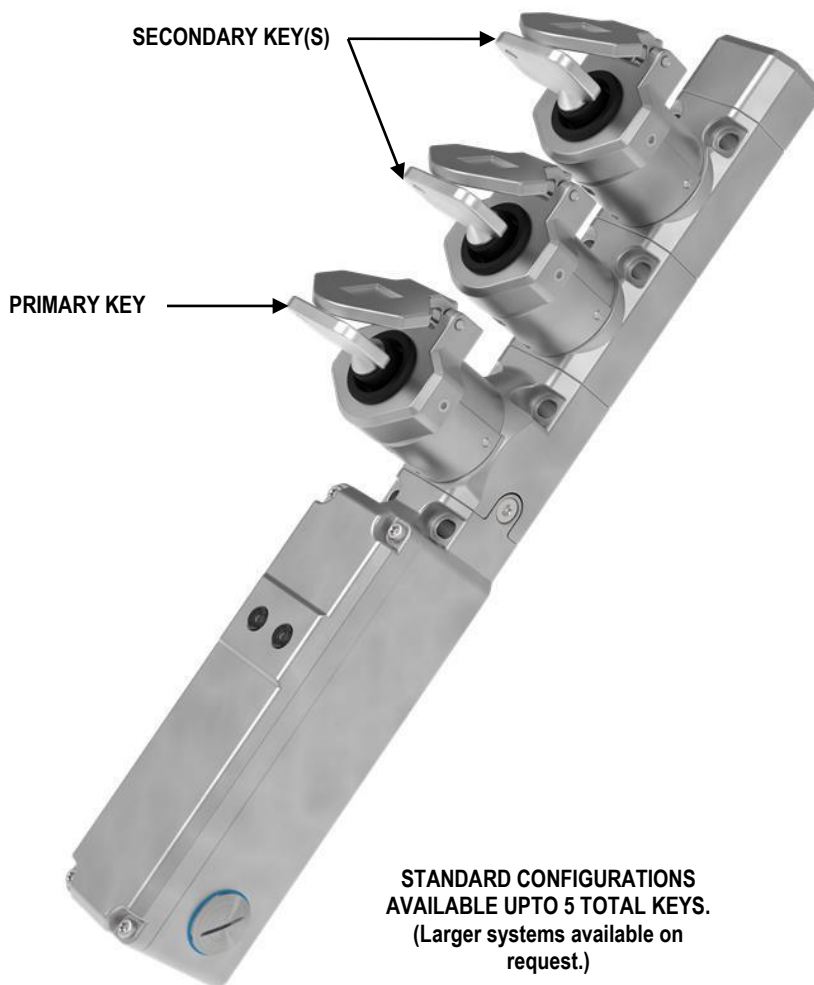




Trapped Key CONTROL SWITCH w. Sol. Control – ISB4 x Multi Key Operating Instructions



Configuration Shown (3-Way):
SS-ISB4-3-22-0x3
(see table)

READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE INSTALLING, OPERATING, OR MAINTAINING THIS EQUIPMENT.

The product is designed to be a component of a customized safety-oriented control system. It is the responsibility of the user to ensure the correct overall functionality of its systems and machines. IDEM, its subsidiaries and affiliates, are not in a position to guarantee all of the characteristics of a given system or product not designed by IDEM.

INSTALLATION: Installation must only be carried out by competent personnel and in accordance with these instructions. Always use correct size metal mounting bolts (M6). Tightening torque 2Nm.

WARNING: ALWAYS OBSERVE ELECTRICAL RATINGS FOR EX VERSIONS.

MAINTENANCE: Every month: Check all circuits for correct function. If the key or housing display signs of mechanical damage, then remove and replace. IDEM will not accept responsibility for failure of the switch functions if the installation and maintenance requirements are not implemented. THESE INSTRUCTIONS FORM PART OF THE PRODUCT WARRANTY.

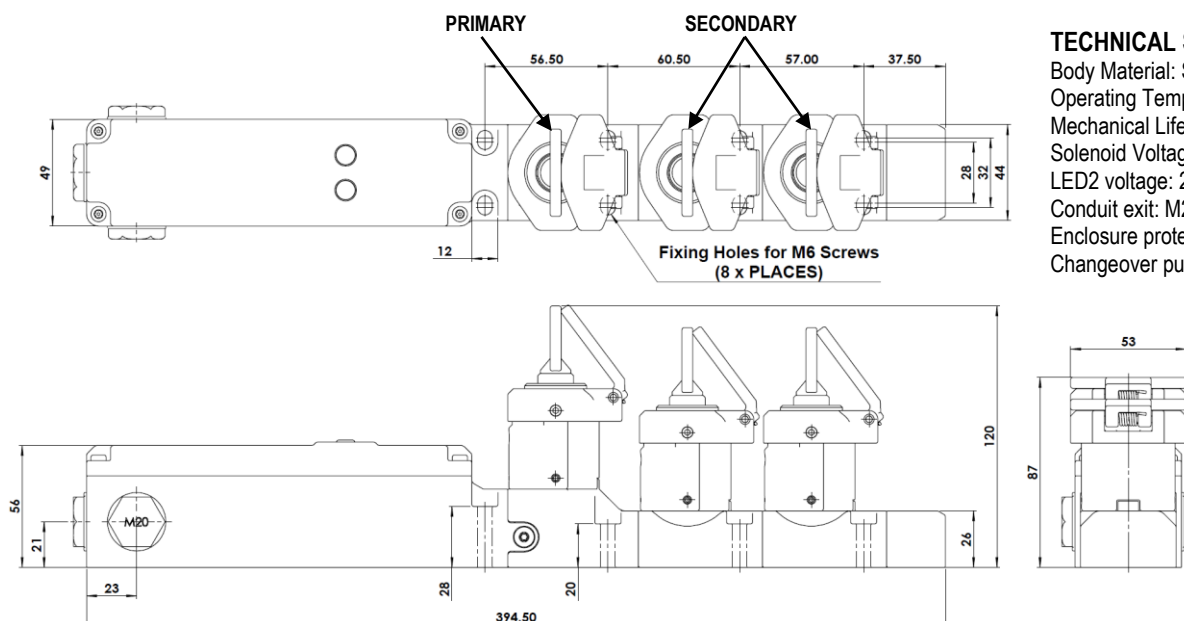
CONFIGURATIONS:

The ISB4 x Multiple Keys is available in two configurations: All Keys Trapped, or One Key Free, remaining Keys Trapped. Please consult Technical@idemsafety.com if in any doubt over function.

- **ALL KEYS TRAPPED:** Energise solenoid to open NC contacts. Primary Key can now be turned and released, mechanically blocking NC contacts from being closed. Once Primary Key is turned and released, all further Secondary Keys can be removed. Primary Key cannot be re-trapped, until all Secondary Keys are inserted and trapped, allowing machine restart.
- **PRIMARY KEY FREE, SECONDARY KEYS TRAPPED:** Insert Primary Key. Energise solenoid to open NC contacts. Once solenoid is energised, Primary Key can be Trapped, mechanically blocking NC contacts from being closed. Once Primary Key is Trapped, all further Secondary Keys can be turned and released. Primary Key cannot be released, and machine started, until all Secondary Keys have been returned and Trapped.

Trapped Key CONTROL SWITCH w. Sol. Control – ISB4 x Multi Key

PRODUCT DIMENSIONS (mm) (3-Way shown)



TECHNICAL SPECIFICATIONS:

Body Material: Stainless steel or Die Cast
 Operating Temperature: -20°C. to +40°C
 Mechanical Life (B10d): 1,000,000 cycles
 Solenoid Voltage: 24V.dc (+/- 10%)
 LED2 voltage: 24V.dc (+/- 10%)
 Conduit exit: M20
 Enclosure protection: IP67 / IP69K
 Changeover pushbutton (if fitted): 24V.dc / 400mA

APPLYING 24V.DC TO A1 AND A2 WILL:

Energise the solenoid and allow the **Primary Key** to be **trapped** or **removed** according to the configuration:

- Contacts 11/12 and 21/22 will open (safety contacts)
 - Contacts 33/34 and 43/44 will close (auxiliary contacts),
- LED1 (red) will stay illuminated.

DE-ENERGISING A1 AND A2 WILL:

Cause LED1 (red) to go off.

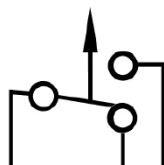
When **Primary Key** is returned to **initial Free** or **initial Trapped** position, according to the configuration:

- Contacts 11/12 and 21/22 will close (safety contacts)
 - Contacts 33/34 and 43/44 will open (auxiliary contacts),
- LED2 Green is an auxiliary indication circuit for optional user use.

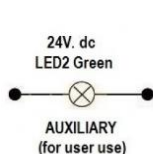
Changeover Push button (if fitted)

Wire colours (NC/NO):

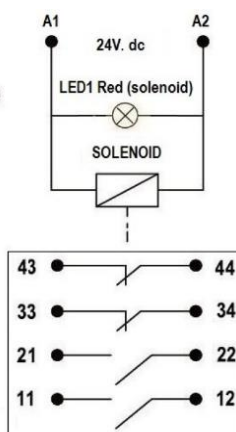
Black = common
 Brown = NC
 Blue = NO



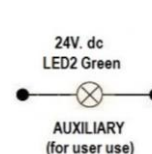
USER WIRABLE



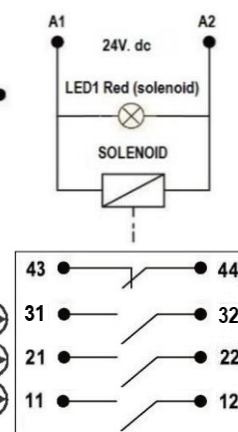
NO
 NO
 NC
 NC



2NC 2NO



NO
 NC
 NC
 NC



3NC 1NO

PART NO. CONFIGURATION TABLE

Material (SS or M)		ISB4		Total # of Keys		Contacts (2NC 2NO) OR		Primary Key Trapped=0 Primary Key Free=1		Keys Trapped (1, 2, 3, etc)		Optional Push Button (-PB)		Optional Lockable Dust Cover (-LT)
SS or M	-	ISB4	-	2	-	22 or 31	-	0	x	2	-	PB	-	LT
SS or M	-	ISB4	-	3	-	22 or 31	-	0	x	3	-	PB	-	LT
SS or M	-	ISB4	-	4	-	22 or 31	-	0	x	4	-	PB	-	LT
SS or M	-	ISB4	-	5	-	22 or 31	-	0	x	5	-	PB	-	LT
SS or M	-	ISB4	-	2	-	22 or 31	-	1	x	1	-	PB	-	LT
SS or M	-	ISB4	-	3	-	22 or 31	-	1	x	2	-	PB	-	LT
SS or M	-	ISB4	-	4	-	22 or 31	-	1	x	3	-	PB	-	LT
SS or M	-	ISB4	-	5	-	22 or 31	-	1	x	4	-	PB	-	LT