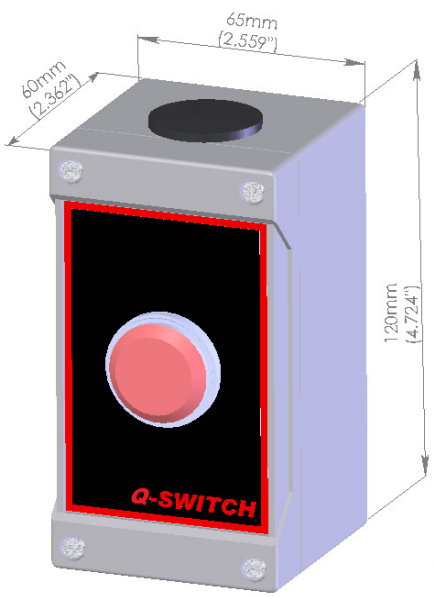


8 7 6 5 4 3 2 1

REVISIONS				
ECN	REV.	DESCRIPTION	DATE	APPROVED
1061	A	FIRST RELEASE	2015-05-06	XY



**GENERAL:**

The Q-Switch is used for working with BI-Box or Q-Controller Switch Input to actuate or reset any assigned outputs, such as Relays, Buzzers and Strobe. The relays can be used for controls of equipments and ventilation fans in machinery rooms.

The Q-Switch can be programmed to control assigned outputs with one of the four actions:

1. Reset Assigned Relays
2. Actuate Assigned Relays
3. Hush Alarmed Buzzer and Relays
4. Reset Latched Relays

**B52 Mechanical refrigeration code:**

*6.2.3 Refrigerant vapour detector*

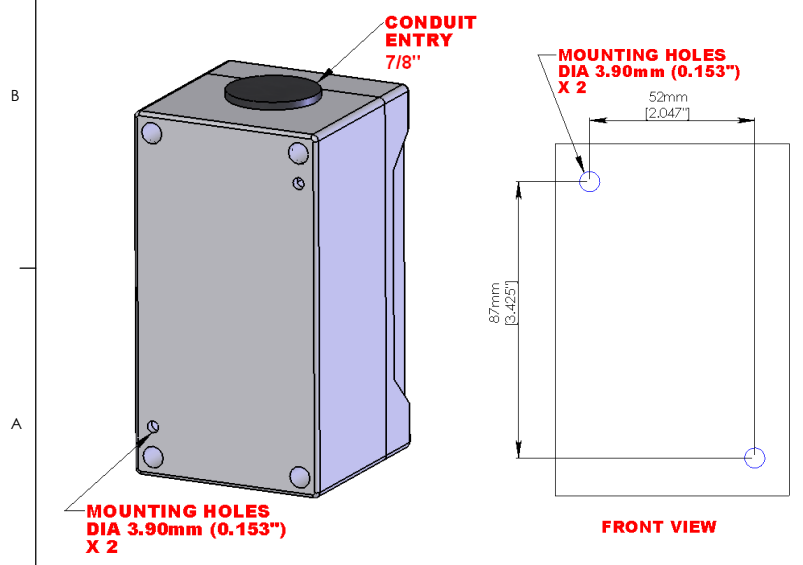
*For all refrigerants except ammonia, a refrigerant vapour detector shall be located in an area where refrigerant from a leak is most likely to concentrate and shall be actuated at a value not greater than the corresponding TLV?/TWA (or a consistent toxicity measure). The sensors, when activated, shall (a) sound a sufficiently audible alarm; and (b) initiate mechanical ventilation in accordance with Clause 6.2.5.5.*

*6.2.5.4 Fan switches*

*Readily accessible independent fan switches shall be installed inside and outside the machinery room. Fan switches located outside the machinery room shall be capable of starting but not stopping the ventilation.*

**Recommended settings in accordance with B52 code:**

- The relay for the ventilation fans is set with LATCHING Function
- The Q-Switch outside the room is set to Actuate the Relay, When the switch is pressed ON, the relay will be actuated, and latched. So the switch can only be capable of starting but not stopping the ventilation
- If the Q-Controller is installed in the same room, the latched relay can be reset through the menu the Q-Controller. Otherwise, install another Q-Switch in the room, and set the switch to be "Reset Latched Relays" to reset the latched relay.
- Reference Q-Controller Operation Manual for how to set Switch Input
- **NOTE: only the switch outside the room is in OFF status, the latched relay can be reset!**

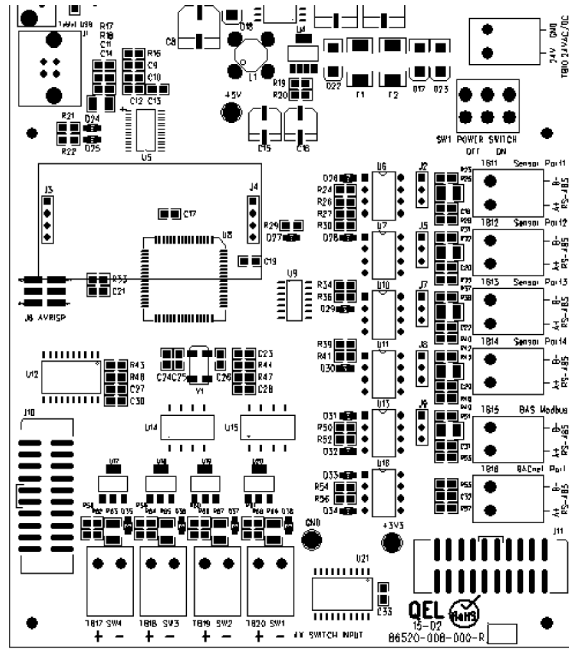


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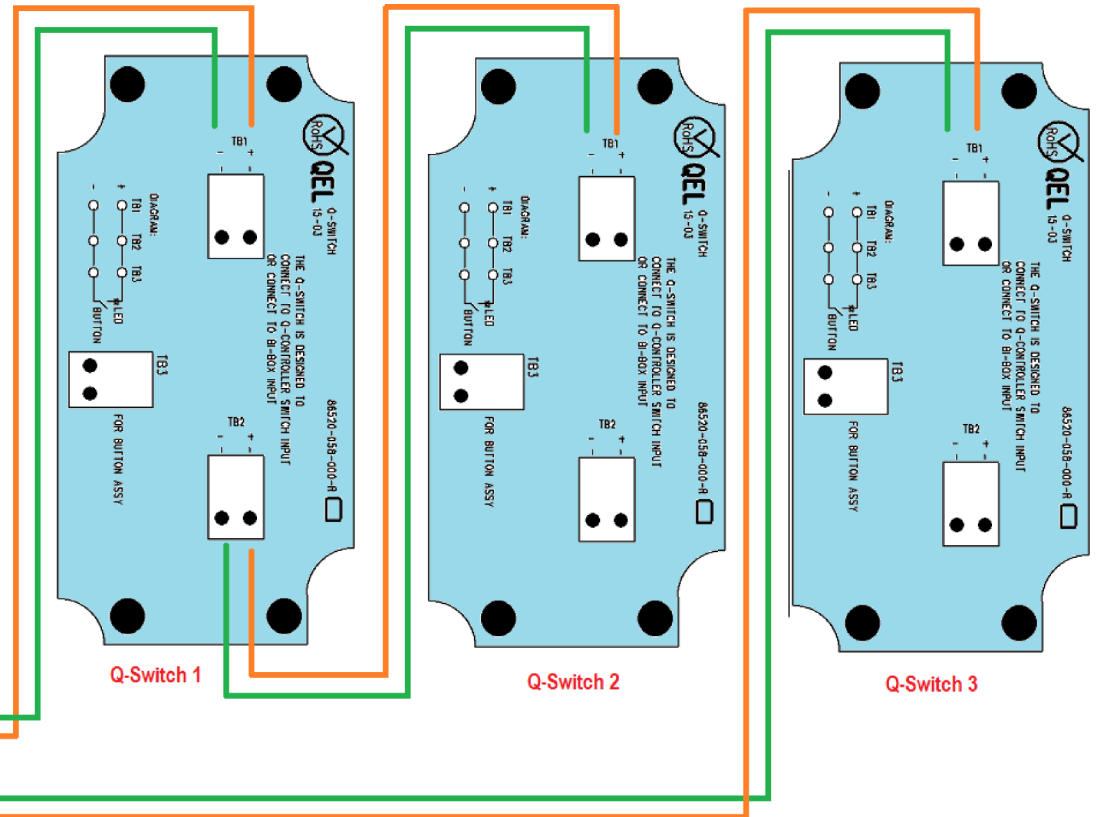
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	QUATROSENSE ENVIRONMENTAL LTD.	
		DIMENSIONS ARE IN INCHES		XY	15-05-06	TITLE:	
		TOLERANCES:				Q-Switch	
		FRACTIONAL ±				Installation Drawing	
		ANGULAR: MACH ± BEND ±				SIZE	
		TWO PLACE DECIMAL ±				DWG. NO.	
		THREE PLACE DECIMAL ±				REV	
		INTERPRET GEOMETRIC TOLERANCING PER:				SCALE: 1:2	
		MATERIAL				WEIGHT:	
		FINISH				SHEET 1 OF 3	
NEXT ASSY	USED ON						
APPLICATION		DO NOT SCALE DRAWING					

8 7 6 5 4 3 2 1

# Q-Switch and Q-Controller Connection:



Q-Controller



Q-Switch 1

Q-Switch 2

Q-Switch 3

Note:  
Q-Switch1 and Q-Switch2 have the same functions  
Q-Switch3 can be defined independently

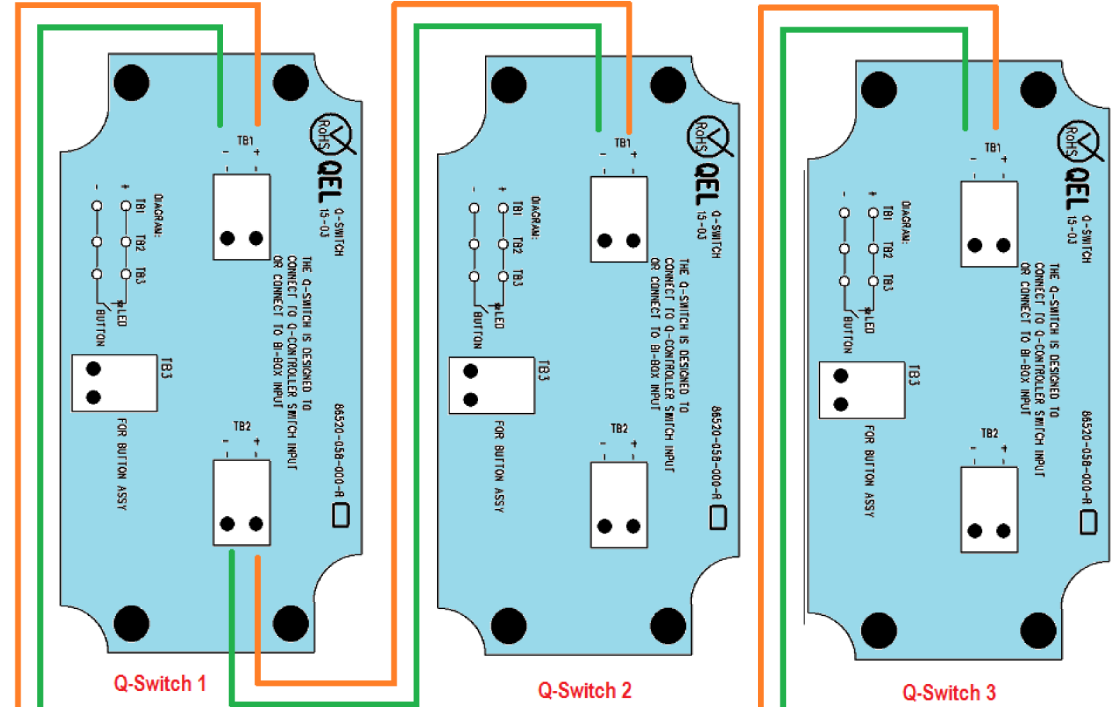
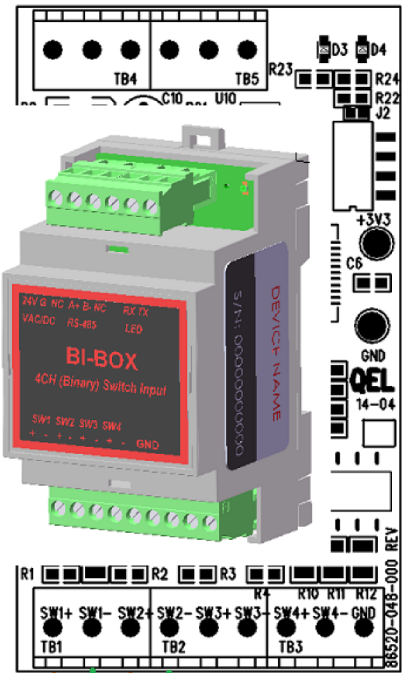
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	See Sheet1	-	-

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		UNLESS OTHERWISE SPECIFIED:	NAME	DATE	QUATROSENSE ENVIRONMENTAL LTD
		DIMENSIONS ARE IN INCHES			TITLE: <h2>Q-Switch Installation Drawing</h2>
		TOLERANCES:	DRAWN		
		FRACTIONAL: $\pm$	CHECKED		
		ANGULAR: MACH $\pm$ BEND $\pm$	ENG APPR.		
		TWO PLACE DECIMAL $\pm$	MFG APPR.		
		THREE PLACE DECIMAL $\pm$	Q.A.		COMMENTS:
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				SIZE <b>B</b> DWG. NO. <b>86550-007-000</b> REV <b>A</b>
	APPLICATION	DO NOT SCALE DRAWING			SCALE: 1:4   SHEET 2 OF 3

# Q-Switch and BI-Box Connection

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	See Sheet1	-	-



Note:  
 Q-Switch1 and Q-Switch2 have the same functions  
 Q-Switch3 can be defined independently

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UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Quatrosense Environmental Ltd
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL: ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL THREE PLACE DECIMAL ±		DRAWN		
INTERPRET GEOMETRIC TOLERANCING PER:		ENG APPR.		SIZE DWG. NO. REV <b>B</b> 86550-007-000 <b>A</b>
MATERIAL		MFG APPR.		
FINISH		Q.A.		
NEXT ASSY	USED ON	COMMENTS:		
APPLICATION		DO NOT SCALE DRAWING		