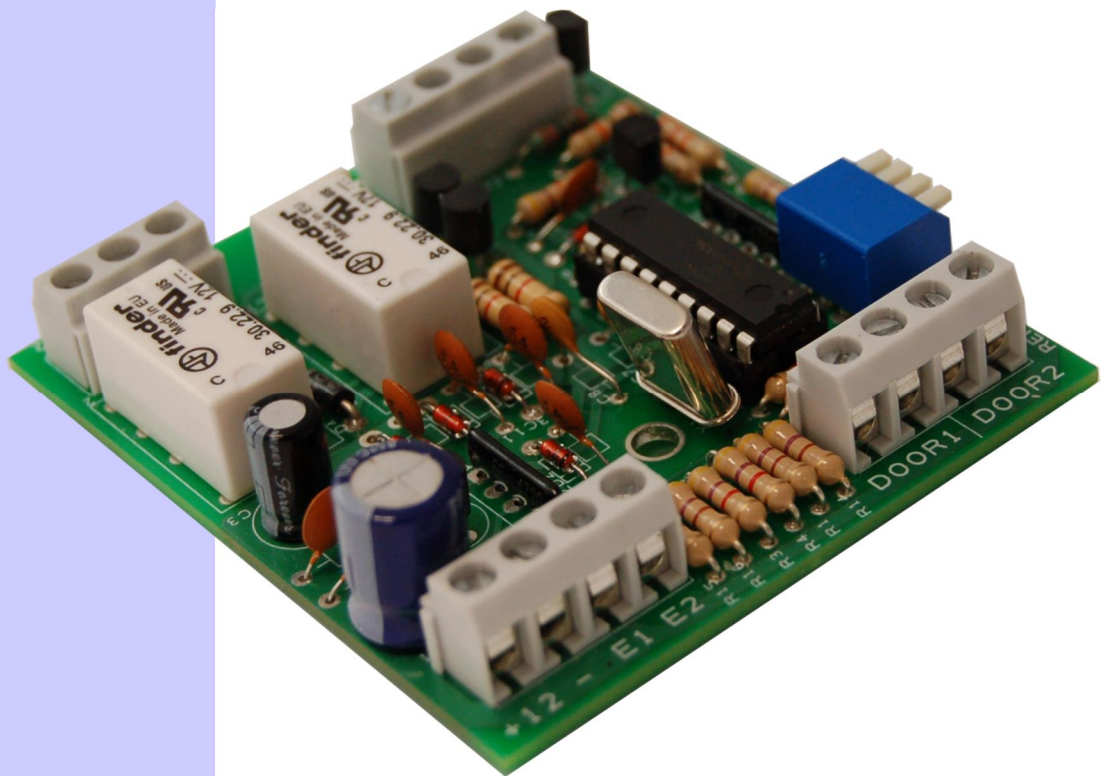


# VX126 Interlock PCB



TECHNICAL MANUAL  
EDITION 1.0

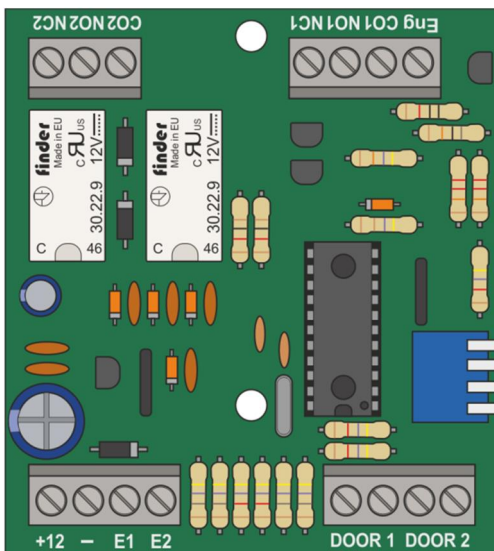
**VX**  
**VIDEX**  
The Power to Secure

## DESCRIPTION

The VX126 is a 2 door interlock PCB which can be extended to more doors by connecting additional units together by the use of a busy signal. The device requires 2 sets of door sensors (normally closed) and 2 push to exit buttons (normally open). Two timed dry contact relay outputs allow connectivity for fail safe / fail secure locks and also automatic doors / gates.

The device can be configured to automatically open the opposite door after the first has closed by use of the sequential door opening setting, and also de-energise the relay before the relay time has elapsed (providing the door has been shut) by use of the follow door sensor setting.

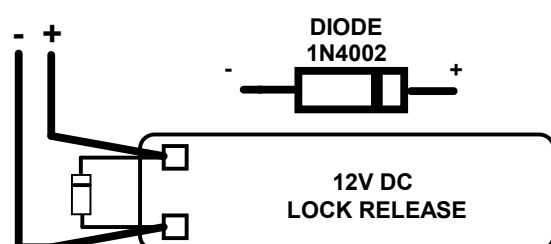
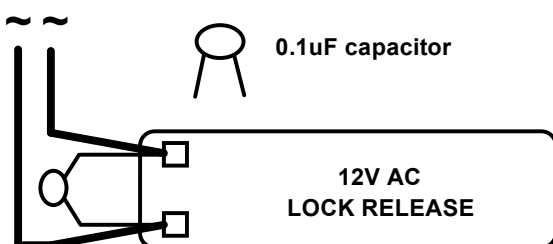
## TERMINALS



Terminal	Description
+12	+12V dc Input
-	Ground
E1	Push to exit 1 (Normally open)
E2	Push to exit 2 (Normally open)
Door 1	Door contact 1
Door 1	(Normally closed)
Door 2	Door contact 2
Door 2	(Normally closed)
ENG	Busy Signal
CO1	Common (Relay 1)
NO1	Normally Open (Relay1)
NC1	Normally Closed (Relay 1)
CO2	Common (Relay 2)
NO2	Normally Open (Relay 2)
NC2	Normally Closed (Relay 2)

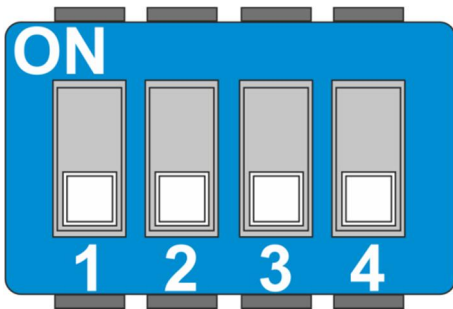
## LOCK RELEASE BACK EMF

A capacitor must be fitted across the terminals of an AC lock release and a diode fitted across the terminals of a DC lock release as shown in the diagrams directly below to suppress back EMF.



## DIP SWITCHES

There are four dipswitches located on the VX126. These are used to change the relay time, sequential door opening and follow door sensor settings.



Dip Switch 1	
ON	Sequential door opening
OFF	Normal operation

Dip Switch 2	
ON	Follow door sensors
OFF	Normal operation

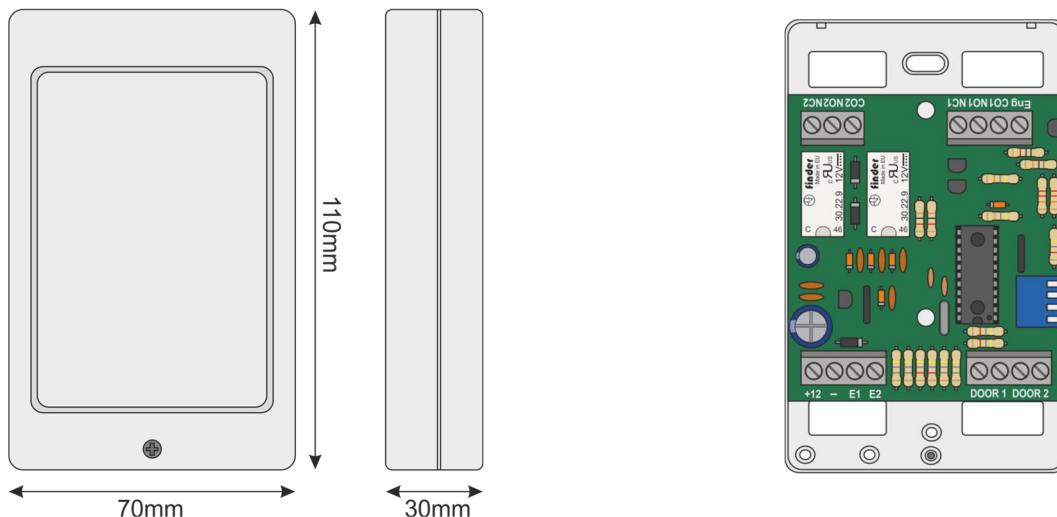
Dip Switch 3 & 4		
OFF	OFF	2.5 Seconds
OFF	ON	5 Seconds
ON	OFF	7.5 Seconds
ON	ON	10 Seconds

### Notes

Sequential door opening . This feature allows the opposite door in use to open automatically after the current door in use has been closed **and** the relay time has elapsed. This is monitored using the door contact inputs.

Follow door sensors . This feature senses when the door has closed, causing the relay to de-energise before its set time expires.

## DIMENSIONS / ENCLOSURE



## COMPONENTS

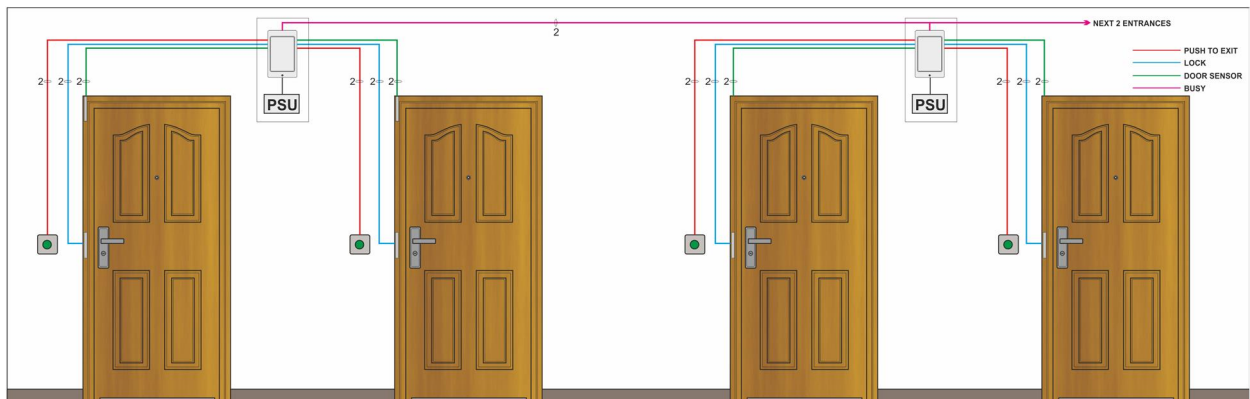
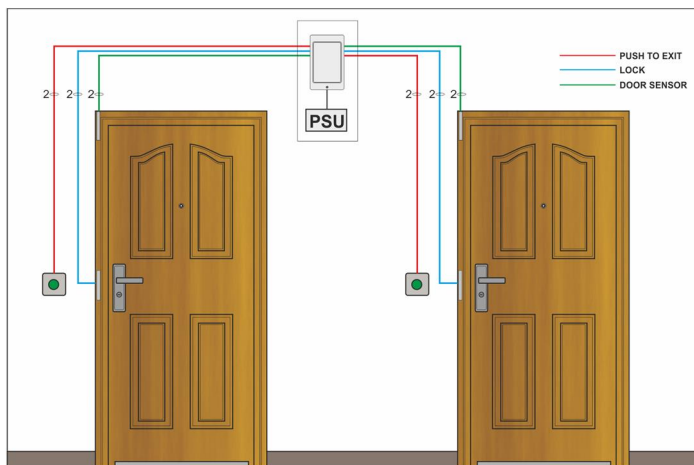
### Push to exit buttons

These must be of the normally open type (push to make).

### Door Sensors

Normally closed door contacts must be used so that the door sensor inputs on the vx126 are shorted while the doors are closed.

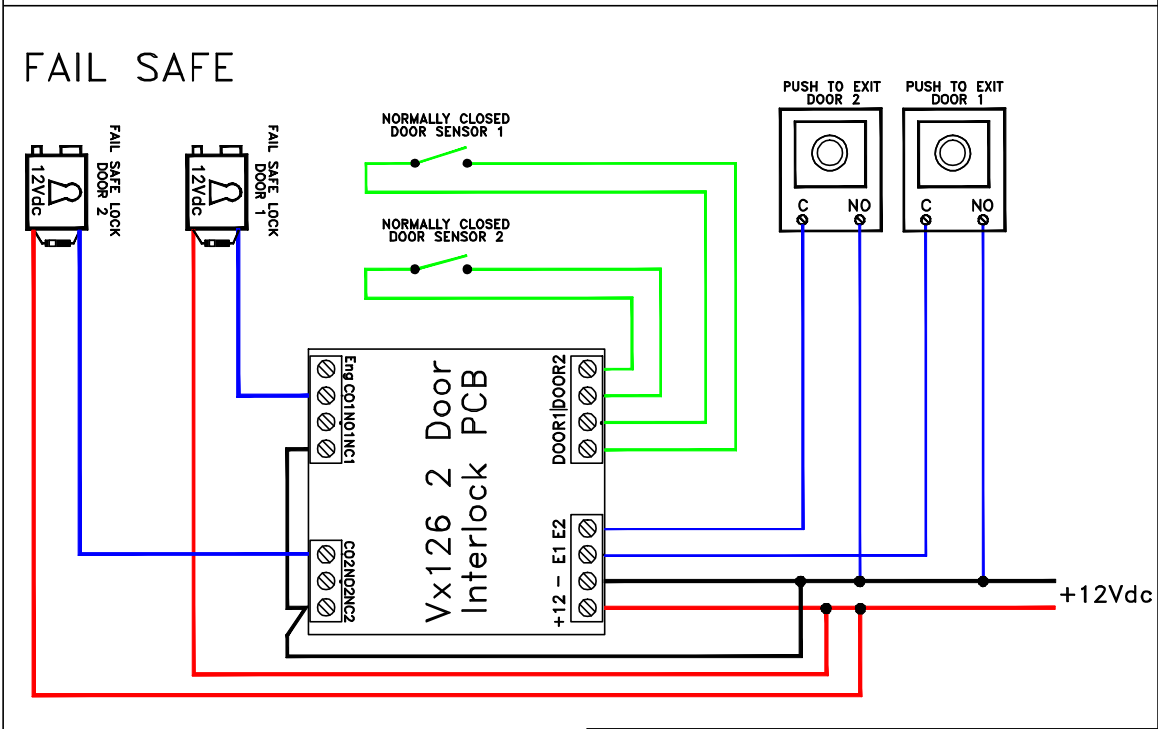
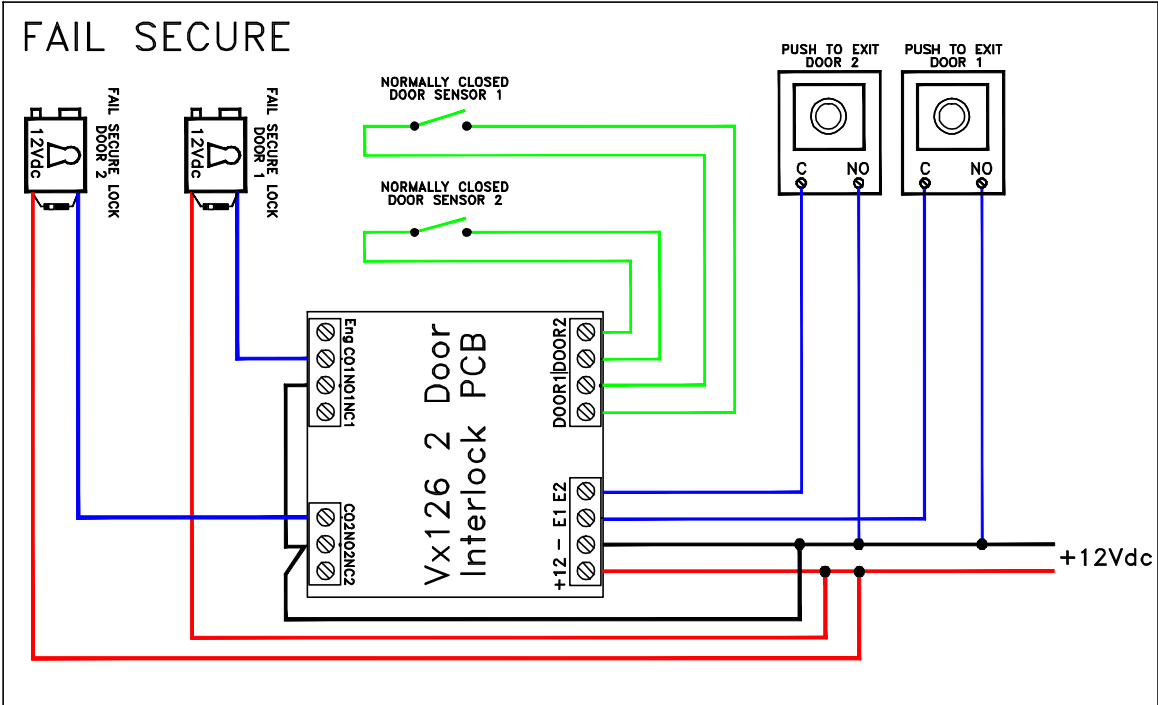
## BLOCK DIAGRAMS



## TECHNICAL SPECIFICATION

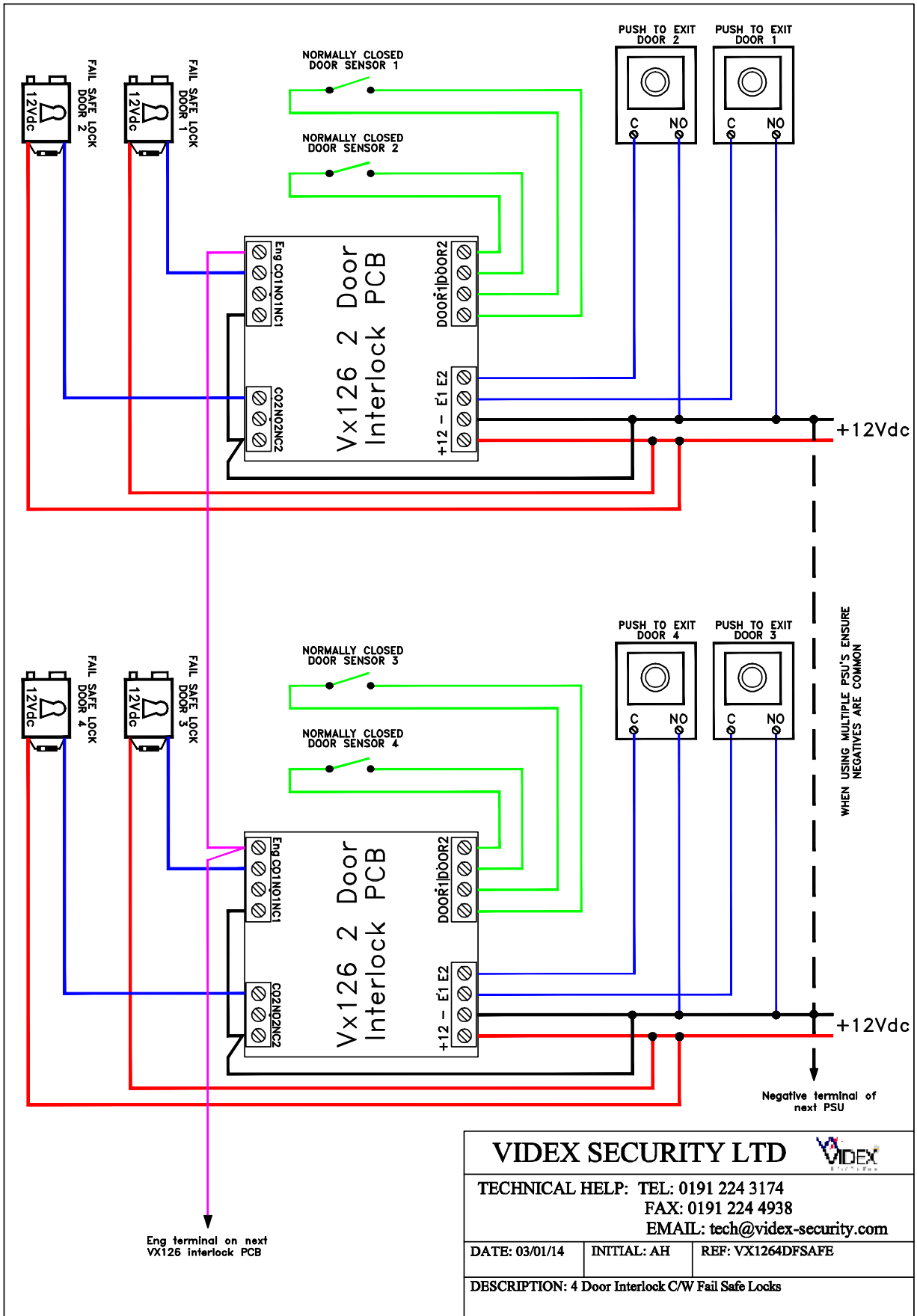
Working voltage	:	12Vdc
Stand-by absorption	:	approx. 10mA
Max. absorption	:	approx. 60mA
Working temperature	:	-10 +50 °C

**WIRING DIAGRAMS**



<b>VIDEX SECURITY LTD</b>		
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DATE: 03/01/14	INITIAL: AH	REF: VX1262DFSAFESFSECURE
DESCRIPTION: 2 Door Interlock C/W Fail Safe or Fail Secure Locks		

# VX126 Interlock PCB



<b>VIDEX SECURITY LTD</b>		
TECHNICAL HELP: TEL: 0191 224 3174 FAX: 0191 224 4938 EMAIL: <a href="mailto:tech@videx-security.com">tech@videx-security.com</a>		
DATE: 03/01/14	INITIAL: AH	REF: VX1264DFS SAFE
DESCRIPTION: 4 Door Interlock C/W Fail Safe Locks		

## TROUBLESHOOTING

### Push to exit button does not operate relay

- 1) Check 12V dc is present across voltage input terminals (+12 & -)
- 2) Measure dc voltage across both push button inputs (E1 & E2) to GND. These should measure approx. 5V dc in rest and 0V dc when associated push button is active.
- 3) Ensure both doors are closed and measure dc voltage across both sets of door sensor inputs (DOOR1 / DOOR2). 0V dc should be present in this state and 5V dc while the associated door is opened.
- 4) If 2 or more VX126 interlock PCBs are part of the same system, measure the ENG terminal to ground. Approx 12V dc should be present when the system is in standby. This will be on when one unit is busy.

### Relays only operate when doors are in the open position

- 1) Normally open contacts of door sensor in use, switch to normally closed.

### Push to exit button operates the incorrect door

- 1) Check cabling from both push to exit buttons back to terminals E1 & E2 of the interlock PCB, and that they are not back to front.

### When using multiple PCBs it is possible to activate multiple entrances simultaneously

- 1) Measure the terminal ENG to ground. Approx. 12V dc should be present while the system is in standby.
- 2) Check continuity of the ENG cable between VX126 PCBs.
- 3) If using multiple 12V dc power supplies, ensure a common negative link is present.

## VX126 Interlock PCB



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