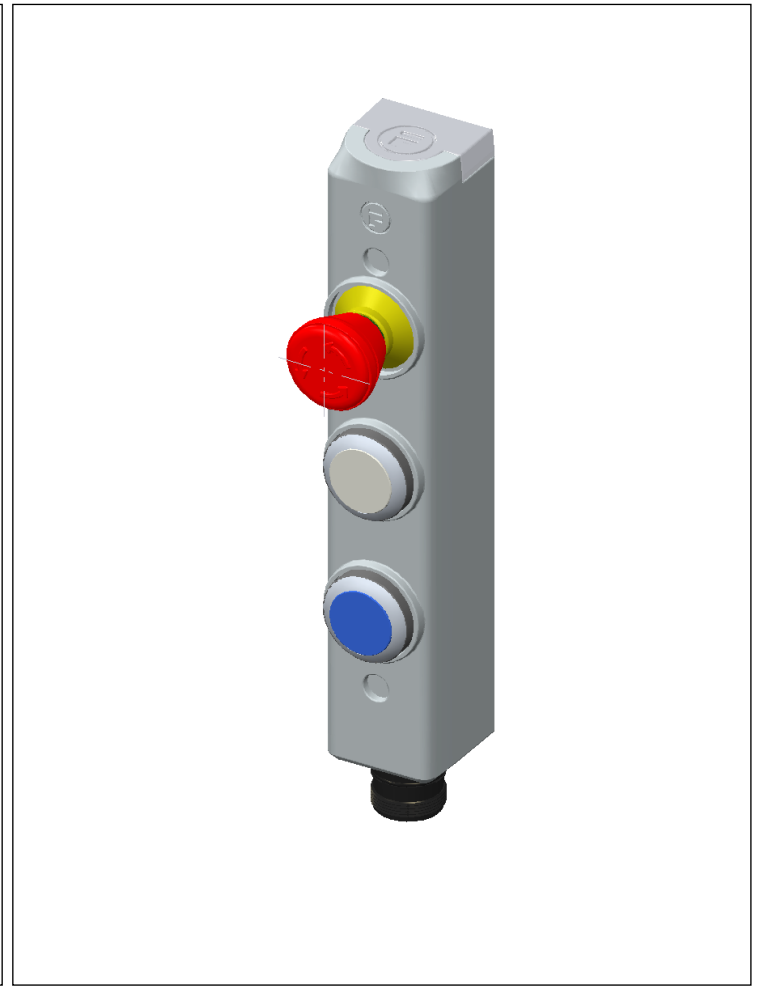
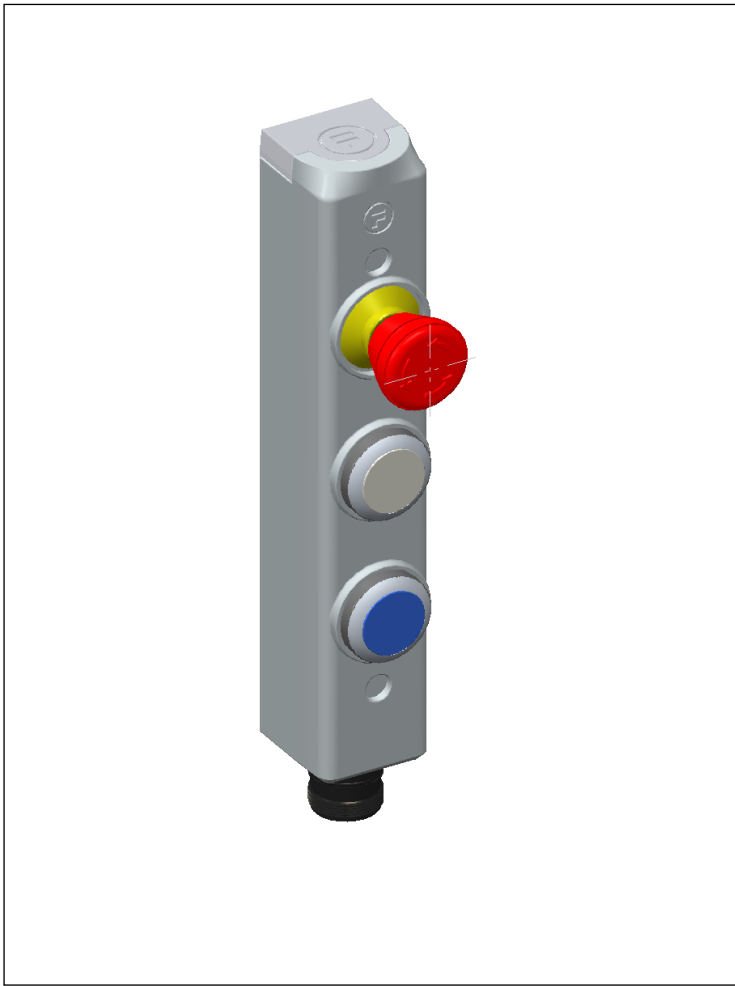


Datasheet for THCEMP7P6Q5



Breakdown List

Item number: ITM-00260288	
Part	Description
THC	Cap Element
TEM	Twist Reset, monitored, individual wiring
TP7	Illuminated Push Button - White
TP6	Illuminated Push Button - Blue
TQ5	12 Pin M23 QD Safety & Control

Datasheet for THCEMP7P6Q5

Technical Specification

tGard offers "a customised safety solution, as standard" and is defined by a range of tGard elements, including selector switches, safety switches(solenoid and non solenoid), personnel keys(safety keys), emergency release, push buttons, estops, indicator lamps and a choice of operating handles for both hinged and sliding guard doors. These elements are simply selected and then assembled into a robust housing, suitable for mounting onto machine guarding, providing the user with an exact configuration specific to the application.

tGard is quick and easy to install and can be mounted directly onto a flat surface, doors or extruded aluminium profiles without the need for mounting plates or brackets. It is IP65 as standard and has been designed to be fully compliant with the new machinery safety standards.

Technical Specification

Housing Materials	THC	Painted die cast zinc alloy
	TEM	Painted die cast aluminium
	TP7	
	TP6	
Colour	THC	Dark Grey
	TP7	
	TP6	
	TEM	Red
Ambient Temperature		-25°C to 40°C (-13°F to 104°F)
Environment	THC	Indoor
	TEM	
	TP7	
	TP6	
	TQ5	
Ingress Protection	THC	IP65****
	TEM	
	TP7	
	TP6	
	TQ5	
Retention Force	THC	2500N
Operating Force	THC	5N to 10N
Mechanical Life	THC	1,000,000 Operations
Maximum Frequency of Operations	THC	1 per second
Switching Contact Element	TP7	1 output
	TP6	
Voltage	TQ5	24V DC
Switches Conformance	TEM	IEC 60947-5-1
Min hinged door radius	THC	150mm (using TAH actuator handle)
Electrical Life	TP7	1,000,000 Operations
	TP6	
Operating Life	TP7	1,000,000 momentary version
	TP6	500,000 latching version
Switching Principle	TEM	Positive Break
Switching Current	TEM	1mA MIN / 100mA MAX
	TP7	

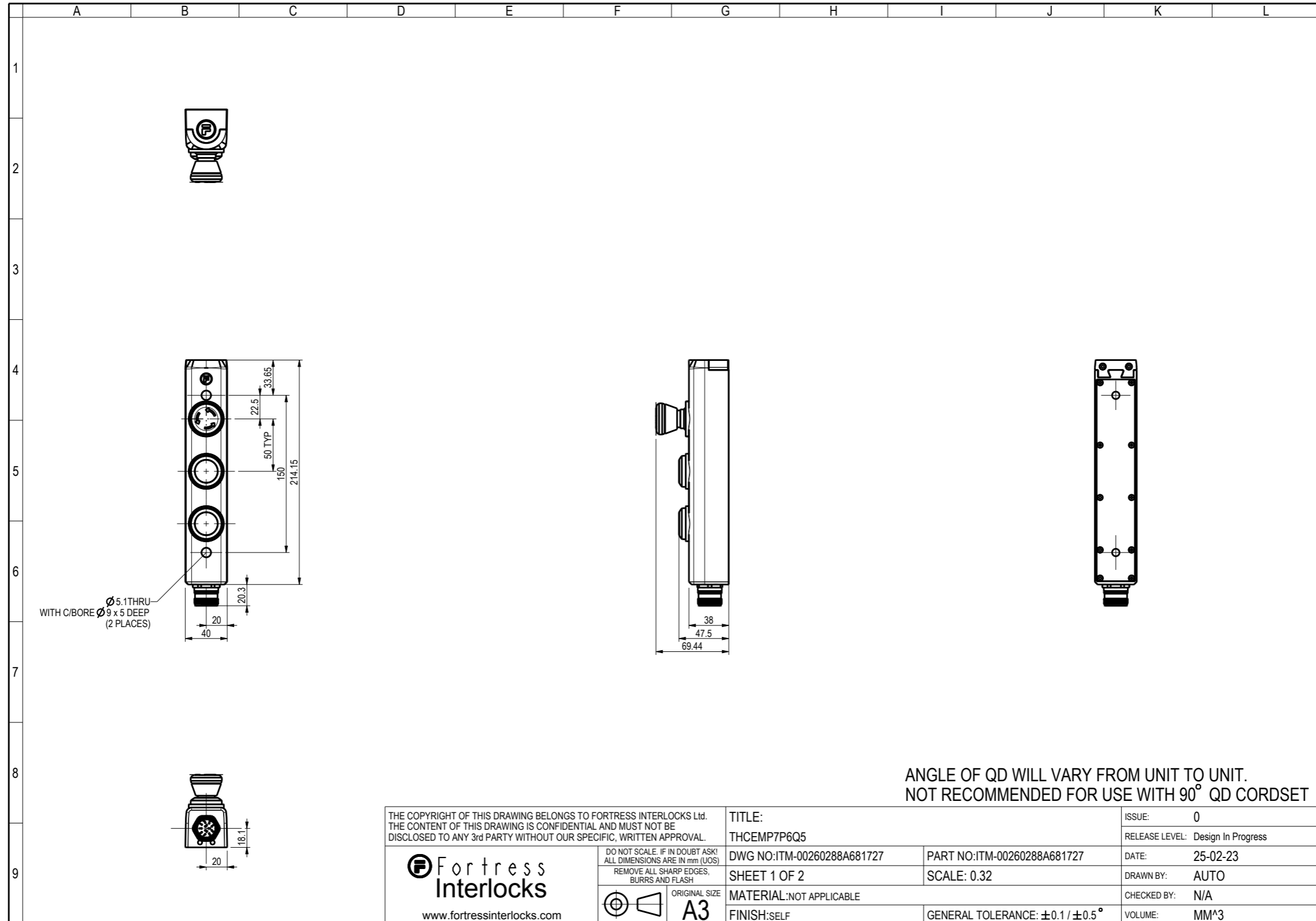
Datasheet for THCEMP7P6Q5

	TP6	
Switching Voltage	TEM	24V
	TP7	
	TP6	
	TP6	
LED Life	TP7	100,000 hours on time
	TP6	
	TP6	
Max current on power supply	TQ5	0.75A

**** IP protection is to the tGard stack that this module attaches to, when correctly fitted according to installation and maintenance instructions.

Datasheet for THCEMP7P6Q5

Full Dimensional Drawing



THE COPYRIGHT OF THIS DRAWING BELONGS TO FORTRESS INTERLOCKS Ltd. THE CONTENT OF THIS DRAWING IS CONFIDENTIAL AND MUST NOT BE DISCLOSED TO ANY 3rd PARTY WITHOUT OUR SPECIFIC, WRITTEN APPROVAL.		TITLE: THCEMP7P6Q5		ISSUE: 0	
 www.fortressinterlocks.com		DWG NO: ITM-00260288A681727		RELEASE LEVEL: Design In Progress	
DO NOT SCALE. IF IN DOUBT ASK! ALL DIMENSIONS ARE IN mm (UOS) REMOVE ALL SHARP EDGES, BURRS AND FLASH		PART NO: ITM-00260288A681727		DATE: 25-02-23	
ORIGINAL SIZE A3		SHEET 1 OF 2		SCALE: 0.32	
		MATERIAL: NOT APPLICABLE		DRAWN BY: AUTO	
		FINISH: SELF		CHECKED BY: N/A	
		GENERAL TOLERANCE: ±0.1 / ±0.5°		VOLUME: MM³	

Datasheet for THCEMP7P6Q5

	A	B	C	D	E	F	G	H	I	J	K	L																																																																																																																																																																																																																																																																			
1																																																																																																																																																																																																																																																																															
2	<table border="1" style="margin: auto;"> <tr> <td style="width: 10%;">Item</td> <td>THCEMP7P6Q5</td> </tr> </table>												Item	THCEMP7P6Q5																																																																																																																																																																																																																																																																	
Item	THCEMP7P6Q5																																																																																																																																																																																																																																																																														
3	<table border="1" style="margin: auto;"> <tr> <td style="width: 10%;">HEAD</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>Base</td> </tr> <tr> <td>THC</td> <td>EM</td> <td>P7</td> <td>P6</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Q5</td> </tr> </table>												HEAD	1	2	3	4	5	6	7	8	9	10	Base	THC	EM	P7	P6								Q5																																																																																																																																																																																																																																											
HEAD	1	2	3	4	5	6	7	8	9	10	Base																																																																																																																																																																																																																																																																				
THC	EM	P7	P6								Q5																																																																																																																																																																																																																																																																				
4	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Input</th> <th>Output</th> <th>2nd Output</th> <th>SC1 in</th> <th>SC2 in</th> <th>SC1 out</th> <th>SC2 out</th> <th>SC3 in</th> <th>SC4 in</th> <th>SC3 out</th> <th>SC4 out</th> <th>SC5 in</th> <th>SC6 in</th> <th>SC5 out</th> <th>SC6 out</th> <th>+24V</th> <th>0V</th> <th>Earth</th> </tr> </thead> <tbody> <tr> <td>TEM</td> <td>-</td> <td>11</td> <td>-</td> <td>2</td> <td>4</td> <td>5</td> <td>6</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> </tr> <tr> <td>TP7</td> <td>9</td> <td>10</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> </tr> <tr> <td>TP6</td> <td>7</td> <td>8</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">5</td> <td colspan="12"></td> </tr> <tr> <td style="text-align: center;">6</td> <td colspan="12"> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>TQ5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>3</td> <td>12</td> </tr> </table> </td> </tr> <tr> <td style="text-align: center;">7</td> <td colspan="12"> <p>Note: 2nd Output = Anti Clock turn on 3 Pos. Switch Note: ***** denotes safety element is wired in series to other safety elements</p> </td> </tr> <tr> <td style="text-align: center;">8</td> <td colspan="12"></td> </tr> <tr> <td style="text-align: center;">9</td> <td colspan="12"> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 30%; vertical-align: top;"> <p style="font-size: 8px;">THE COPYRIGHT OF THIS DRAWING BELONGS TO FORTRESS INTERLOCKS Ltd. THE CONTENT OF THIS DRAWING IS CONFIDENTIAL AND MUST NOT BE DISCLOSED TO ANY 3rd PARTY WITHOUT OUR SPECIFIC, WRITTEN APPROVAL.</p> <p style="font-size: 8px;">www.fortressinterlocks.com</p> </td> <td style="width: 20%; vertical-align: top;"> <p style="font-size: 8px;">DO NOT SCALE. IF IN DOUBT ASK! ALL DIMENSIONS ARE IN mm (UOS) REMOVE ALL SHARP EDGES, BURRS AND FLASH</p> <p style="font-size: 12px; font-weight: bold;">A3</p> </td> <td style="width: 30%; vertical-align: top;"> <p style="font-size: 8px;">TITLE: WIRING TABLE FOR THCEMP7P6Q5</p> <p style="font-size: 8px;">DWG NO: ITM-00260288A681727 PART NO: ITM-00260288A681727</p> <p style="font-size: 8px;">SHEET 2 OF 2 SCALE: 0.32</p> <p style="font-size: 8px;">MATERIAL: NOT APPLICABLE FINISH: SELF GENERAL TOLERANCE: ±0.1 / ±0.5°</p> </td> <td style="width: 20%; vertical-align: top;"> <p style="font-size: 8px;">ISSUE: 0</p> <p style="font-size: 8px;">RELEASE LEVEL: Design In Progress</p> <p style="font-size: 8px;">DATE: 25-02-23</p> <p style="font-size: 8px;">DRAWN BY: AUTO</p> <p style="font-size: 8px;">CHECKED BY: N/A</p> <p style="font-size: 8px;">VOLUME: 0.000 MM^3</p> </td> </tr> </table> </td> </tr> </tbody></table>													Input	Output	2nd Output	SC1 in	SC2 in	SC1 out	SC2 out	SC3 in	SC4 in	SC3 out	SC4 out	SC5 in	SC6 in	SC5 out	SC6 out	+24V	0V	Earth	TEM	-	11	-	2	4	5	6	-	-	-	-	-	-	-	-				TP7	9	10	-	-	-	-	-	-	-	-	-	-	-	-	-				TP6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				5													6	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>TQ5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>3</td> <td>12</td> </tr> </table>												TQ5																1	3	12	7	<p>Note: 2nd Output = Anti Clock turn on 3 Pos. Switch Note: ***** denotes safety element is wired in series to other safety elements</p>												8													9	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 30%; vertical-align: top;"> <p style="font-size: 8px;">THE COPYRIGHT OF THIS DRAWING BELONGS TO FORTRESS INTERLOCKS Ltd. THE CONTENT OF THIS DRAWING IS CONFIDENTIAL AND MUST NOT BE DISCLOSED TO ANY 3rd PARTY WITHOUT OUR SPECIFIC, WRITTEN APPROVAL.</p> <p style="font-size: 8px;">www.fortressinterlocks.com</p> </td> <td style="width: 20%; vertical-align: top;"> <p style="font-size: 8px;">DO NOT SCALE. IF IN DOUBT ASK! ALL DIMENSIONS ARE IN mm (UOS) REMOVE ALL SHARP EDGES, BURRS AND FLASH</p> <p style="font-size: 12px; font-weight: bold;">A3</p> </td> <td style="width: 30%; vertical-align: top;"> <p style="font-size: 8px;">TITLE: WIRING TABLE FOR THCEMP7P6Q5</p> <p style="font-size: 8px;">DWG NO: ITM-00260288A681727 PART NO: ITM-00260288A681727</p> <p style="font-size: 8px;">SHEET 2 OF 2 SCALE: 0.32</p> <p style="font-size: 8px;">MATERIAL: NOT APPLICABLE FINISH: SELF GENERAL TOLERANCE: ±0.1 / ±0.5°</p> </td> <td style="width: 20%; vertical-align: top;"> <p style="font-size: 8px;">ISSUE: 0</p> <p style="font-size: 8px;">RELEASE LEVEL: Design In Progress</p> <p style="font-size: 8px;">DATE: 25-02-23</p> <p style="font-size: 8px;">DRAWN BY: AUTO</p> <p style="font-size: 8px;">CHECKED BY: N/A</p> <p style="font-size: 8px;">VOLUME: 0.000 MM^3</p> </td> </tr> </table>												<p style="font-size: 8px;">THE COPYRIGHT OF THIS DRAWING BELONGS TO FORTRESS INTERLOCKS Ltd. THE CONTENT OF THIS DRAWING IS CONFIDENTIAL AND MUST NOT BE DISCLOSED TO ANY 3rd PARTY WITHOUT OUR SPECIFIC, WRITTEN APPROVAL.</p> <p style="font-size: 8px;">www.fortressinterlocks.com</p>	<p style="font-size: 8px;">DO NOT SCALE. IF IN DOUBT ASK! ALL DIMENSIONS ARE IN mm (UOS) REMOVE ALL SHARP EDGES, BURRS AND FLASH</p> <p style="font-size: 12px; font-weight: bold;">A3</p>	<p style="font-size: 8px;">TITLE: WIRING TABLE FOR THCEMP7P6Q5</p> <p style="font-size: 8px;">DWG NO: ITM-00260288A681727 PART NO: ITM-00260288A681727</p> <p style="font-size: 8px;">SHEET 2 OF 2 SCALE: 0.32</p> <p style="font-size: 8px;">MATERIAL: NOT APPLICABLE FINISH: SELF GENERAL TOLERANCE: ±0.1 / ±0.5°</p>	<p style="font-size: 8px;">ISSUE: 0</p> <p style="font-size: 8px;">RELEASE LEVEL: Design In Progress</p> <p style="font-size: 8px;">DATE: 25-02-23</p> <p style="font-size: 8px;">DRAWN BY: AUTO</p> <p style="font-size: 8px;">CHECKED BY: N/A</p> <p style="font-size: 8px;">VOLUME: 0.000 MM^3</p>
	Input	Output	2nd Output	SC1 in	SC2 in	SC1 out	SC2 out	SC3 in	SC4 in	SC3 out	SC4 out	SC5 in	SC6 in	SC5 out	SC6 out	+24V	0V	Earth																																																																																																																																																																																																																																																													
TEM	-	11	-	2	4	5	6	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																
TP7	9	10	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																
TP6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																
5																																																																																																																																																																																																																																																																															
6	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>TQ5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>3</td> <td>12</td> </tr> </table>												TQ5																1	3	12																																																																																																																																																																																																																																																
TQ5																1	3	12																																																																																																																																																																																																																																																													
7	<p>Note: 2nd Output = Anti Clock turn on 3 Pos. Switch Note: ***** denotes safety element is wired in series to other safety elements</p>																																																																																																																																																																																																																																																																														
8																																																																																																																																																																																																																																																																															
9	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 30%; vertical-align: top;"> <p style="font-size: 8px;">THE COPYRIGHT OF THIS DRAWING BELONGS TO FORTRESS INTERLOCKS Ltd. THE CONTENT OF THIS DRAWING IS CONFIDENTIAL AND MUST NOT BE DISCLOSED TO ANY 3rd PARTY WITHOUT OUR SPECIFIC, WRITTEN APPROVAL.</p> <p style="font-size: 8px;">www.fortressinterlocks.com</p> </td> <td style="width: 20%; vertical-align: top;"> <p style="font-size: 8px;">DO NOT SCALE. IF IN DOUBT ASK! ALL DIMENSIONS ARE IN mm (UOS) REMOVE ALL SHARP EDGES, BURRS AND FLASH</p> <p style="font-size: 12px; font-weight: bold;">A3</p> </td> <td style="width: 30%; vertical-align: top;"> <p style="font-size: 8px;">TITLE: WIRING TABLE FOR THCEMP7P6Q5</p> <p style="font-size: 8px;">DWG NO: ITM-00260288A681727 PART NO: ITM-00260288A681727</p> <p style="font-size: 8px;">SHEET 2 OF 2 SCALE: 0.32</p> <p style="font-size: 8px;">MATERIAL: NOT APPLICABLE FINISH: SELF GENERAL TOLERANCE: ±0.1 / ±0.5°</p> </td> <td style="width: 20%; vertical-align: top;"> <p style="font-size: 8px;">ISSUE: 0</p> <p style="font-size: 8px;">RELEASE LEVEL: Design In Progress</p> <p style="font-size: 8px;">DATE: 25-02-23</p> <p style="font-size: 8px;">DRAWN BY: AUTO</p> <p style="font-size: 8px;">CHECKED BY: N/A</p> <p style="font-size: 8px;">VOLUME: 0.000 MM^3</p> </td> </tr> </table>												<p style="font-size: 8px;">THE COPYRIGHT OF THIS DRAWING BELONGS TO FORTRESS INTERLOCKS Ltd. THE CONTENT OF THIS DRAWING IS CONFIDENTIAL AND MUST NOT BE DISCLOSED TO ANY 3rd PARTY WITHOUT OUR SPECIFIC, WRITTEN APPROVAL.</p> <p style="font-size: 8px;">www.fortressinterlocks.com</p>	<p style="font-size: 8px;">DO NOT SCALE. IF IN DOUBT ASK! ALL DIMENSIONS ARE IN mm (UOS) REMOVE ALL SHARP EDGES, BURRS AND FLASH</p> <p style="font-size: 12px; font-weight: bold;">A3</p>	<p style="font-size: 8px;">TITLE: WIRING TABLE FOR THCEMP7P6Q5</p> <p style="font-size: 8px;">DWG NO: ITM-00260288A681727 PART NO: ITM-00260288A681727</p> <p style="font-size: 8px;">SHEET 2 OF 2 SCALE: 0.32</p> <p style="font-size: 8px;">MATERIAL: NOT APPLICABLE FINISH: SELF GENERAL TOLERANCE: ±0.1 / ±0.5°</p>	<p style="font-size: 8px;">ISSUE: 0</p> <p style="font-size: 8px;">RELEASE LEVEL: Design In Progress</p> <p style="font-size: 8px;">DATE: 25-02-23</p> <p style="font-size: 8px;">DRAWN BY: AUTO</p> <p style="font-size: 8px;">CHECKED BY: N/A</p> <p style="font-size: 8px;">VOLUME: 0.000 MM^3</p>																																																																																																																																																																																																																																																															
<p style="font-size: 8px;">THE COPYRIGHT OF THIS DRAWING BELONGS TO FORTRESS INTERLOCKS Ltd. THE CONTENT OF THIS DRAWING IS CONFIDENTIAL AND MUST NOT BE DISCLOSED TO ANY 3rd PARTY WITHOUT OUR SPECIFIC, WRITTEN APPROVAL.</p> <p style="font-size: 8px;">www.fortressinterlocks.com</p>	<p style="font-size: 8px;">DO NOT SCALE. IF IN DOUBT ASK! ALL DIMENSIONS ARE IN mm (UOS) REMOVE ALL SHARP EDGES, BURRS AND FLASH</p> <p style="font-size: 12px; font-weight: bold;">A3</p>	<p style="font-size: 8px;">TITLE: WIRING TABLE FOR THCEMP7P6Q5</p> <p style="font-size: 8px;">DWG NO: ITM-00260288A681727 PART NO: ITM-00260288A681727</p> <p style="font-size: 8px;">SHEET 2 OF 2 SCALE: 0.32</p> <p style="font-size: 8px;">MATERIAL: NOT APPLICABLE FINISH: SELF GENERAL TOLERANCE: ±0.1 / ±0.5°</p>	<p style="font-size: 8px;">ISSUE: 0</p> <p style="font-size: 8px;">RELEASE LEVEL: Design In Progress</p> <p style="font-size: 8px;">DATE: 25-02-23</p> <p style="font-size: 8px;">DRAWN BY: AUTO</p> <p style="font-size: 8px;">CHECKED BY: N/A</p> <p style="font-size: 8px;">VOLUME: 0.000 MM^3</p>																																																																																																																																																																																																																																																																												