



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
FACILITIES DEVELOPMENT DIVISION

**APPLICATION FOR OSHPD SPECIAL SEISMIC  
CERTIFICATION PREAPPROVAL (OSP)**

OFFICE USE ONLY

APPLICATION #: OSP – 0252 – 10

**OSHPD Special Seismic Certification Preapproval (OSP)**

Type: ☐ New ☒ Renewal

**Manufacturer Information**

Manufacturer: Climatec

Manufacturer's Technical Representative: Clark Freeman, PE

Mailing Address: 18002 Cowan, Irvine, CA 92614

Telephone: 949.214.8652 Email: clarkf@climatec.com

**Product Information**

Product Name: Honeywell Custom Control panels

Product Type: Control Panel

Product Model Number: See Attachments

(List all unique product identification numbers and/or part numbers)

General Description: Configurable control panels for HVAC applications.

Mounting Description: Wall mounted with wall base both rigid & isolated.

Units may be Surface Mounted on a Wall or Equipment.

**Applicant Information**

Applicant Company Name: TRU Compliance, LLC

Contact Person: Matthew Tobolski, PhD, SE

Mailing Address: 960 SW Disk Dr., Suite 104, Bend, OR 97702

Telephone: 844.878.0200 Email: mtobolski@trucompliance.com

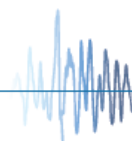
I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant:  Date: 12/05/2016

Title: President and CEO Company Name: TRU Compliance, LLC

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY  
OSH-FD-759 (REV 12/16/15)



OSHPD

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**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
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**California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)**

Company Name: TRU Compliance, LLC  
Name: Matthew Tobolski, PhD, SE California License Number: S5648  
Mailing Address: 960 SW Disk Dr., Suite 104, Bend, OR 97702  
Telephone: 844.878.0200 Email: mtobolski@trucompliance.com

**Supports and Attachments Preapproval**

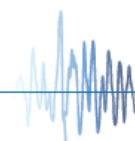
- ☐ Supports and attachments are preapproved under OPM-  
(Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required)  
☒ Supports and attachments are not preapproved

**Certification Method**

- ☒ Testing in accordance with: ☒ ICC-ES AC156  
☐ Other (Please Specify): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Testing Laboratory**

Company Name: Dynamic Certification Laboratories, LLC  
Contact Name: Kelly Laplace  
Mailing Address: 1315 Greg Street, Suite 109  
Telephone: 775.358.5085 Email: kelly@shaketest.com





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**Seismic Parameters**

Design in accordance with ASCE 7-10 Chapter 13: ☒ Yes ☐ No

Design Basis of Equipment or Components ( $F_p/W_p$ ) = 1.45 (rigid); 4.35 (isolated)

$S_{DS}$  (Design spectral response acceleration at short period, g) = 1.93

$a_p$  (In-structure equipment or component amplification factor) = 2.5

$R_p$  (Equipment or component response modification factor) = 6.0 (rigid); 2.5 (isolated)

$\Omega_0$  (System overstrength factor) = 2.0

$I_p$  (Importance factor) = 1.5

$z/h$  (Height factor ratio) = 1.0

Equipment or Component Natural Frequencies (Hz) = See attached

Overall dimensions and weight (or range thereof) = See attached

Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15: ☐ Yes ☒ No

Design Basis of Equipment or Components ( $V/W$ ) = \_\_\_\_\_

$S_{DS}$  (Design spectral response acceleration at short period, g) = \_\_\_\_\_

$S_{D1}$  (Design spectral response acceleration at 1 second period, g) = \_\_\_\_\_

$R$  (Response modification coefficient) = \_\_\_\_\_

$\Omega_0$  (System overstrength factor) = \_\_\_\_\_

$C_d$  (Deflection amplification factor) = \_\_\_\_\_

$I_p$  (Importance factor) = 1.5

Height to Center of Gravity above base = \_\_\_\_\_

Equipment or Component Natural Frequencies (Hz) = \_\_\_\_\_

Overall dimensions and weight (or range thereof) = \_\_\_\_\_

Tank(s) designed in accordance with ASME BPVC, 2015: ☐ Yes ☒ No

**List of Attachments Supporting Special Seismic Certification**

☒ Test Report(s) ☐ Drawings ☐ Calculations ☐ Manufacturer's Catalog

☒ Other(s) (Please Specify): Attachment

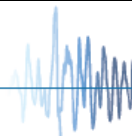
**OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2022**

Signature:  Date: 2/2/17

Print Name: M. R. Karim Title: SHFR

Special Seismic Certification Valid Up to :  $S_{DS}$  (g) = 1.93  $z/h$  = 1.0

Condition of Approval (if applicable): \_\_\_\_\_



**TRU PROJECT NO. 16027**

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# SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

TRU PROJECT NO. 16027



<b>Manufacturer:</b> Climatec		<b>Table Description:</b> Enclosures						<b>TABLE 2</b>
<b>Model Line:</b> Honeywell Custom Control Panels								
<b>Building Code:</b> CBC 2016		<b>Seismic Certification Limits:</b> $S_{DS} = 1.93 g$ $z/h = 1.0$ $I_p = 1.5$						
Model Line (Manufacturer)	Model	Dimension (in)			Weight (lb)	Material	Notes	UUT
		Depth	Width	Height				
Type 1 Enclosures (Hoffman)	A16N12ALP	6.6	12	16		Carbon steel, NEMA 1		extrap.
	A16N16ALP	6.6	16	16		Carbon steel, NEMA 1		extrap.
	A16N20ALP	6.6	20	16		Carbon steel, NEMA 1		extrap.
	A20N16ALP	6.6	16	20		Carbon steel, NEMA 1		1
	A20N20ALP	6.6	20	20		Carbon steel, NEMA 1		interp.
	A24N16ALP	6.6	16	24		Carbon steel, NEMA 1		interp.
	A24N20ALP	6.6	20	24		Carbon steel, NEMA 1		interp.
	A24N24ALP	6.6	24	24		Carbon steel, NEMA 1		interp.
	A30N24ALP	6.6	24	30		Carbon steel, NEMA 1		interp.
	A36N24ALP	6.6	24	36		Carbon steel, NEMA 1		interp.
	A36N30ALP	6.6	30	36		Carbon steel, NEMA 1		interp.
	A16N12BLP	8.6	12	16		Carbon steel, NEMA 1		interp.
	A20N12BLP	8.6	12	20		Carbon steel, NEMA 1		interp.
	A20N16BLP	8.6	16	20		Carbon steel, NEMA 1		interp.
	A20N20BLP	8.6	20	20		Carbon steel, NEMA 1		interp.
	A24N20BLP	8.6	20	24		Carbon steel, NEMA 1		interp.
	A24N24BLP	8.6	24	24		Carbon steel, NEMA 1		interp.
	A30N20BLP	8.6	20	30		Carbon steel, NEMA 1		interp.
	A30N24BLP	8.6	24	30		Carbon steel, NEMA 1		interp.
	A30N30BLP	8.6	30	30		Carbon steel, NEMA 1		interp.
	A36N24BLP	8.6	24	36		Carbon steel, NEMA 1		interp.
	A36N30BLP	8.6	30	36		Carbon steel, NEMA 1		interp.
	A42N3009	9.3	30	42		Carbon steel, NEMA 1		interp.

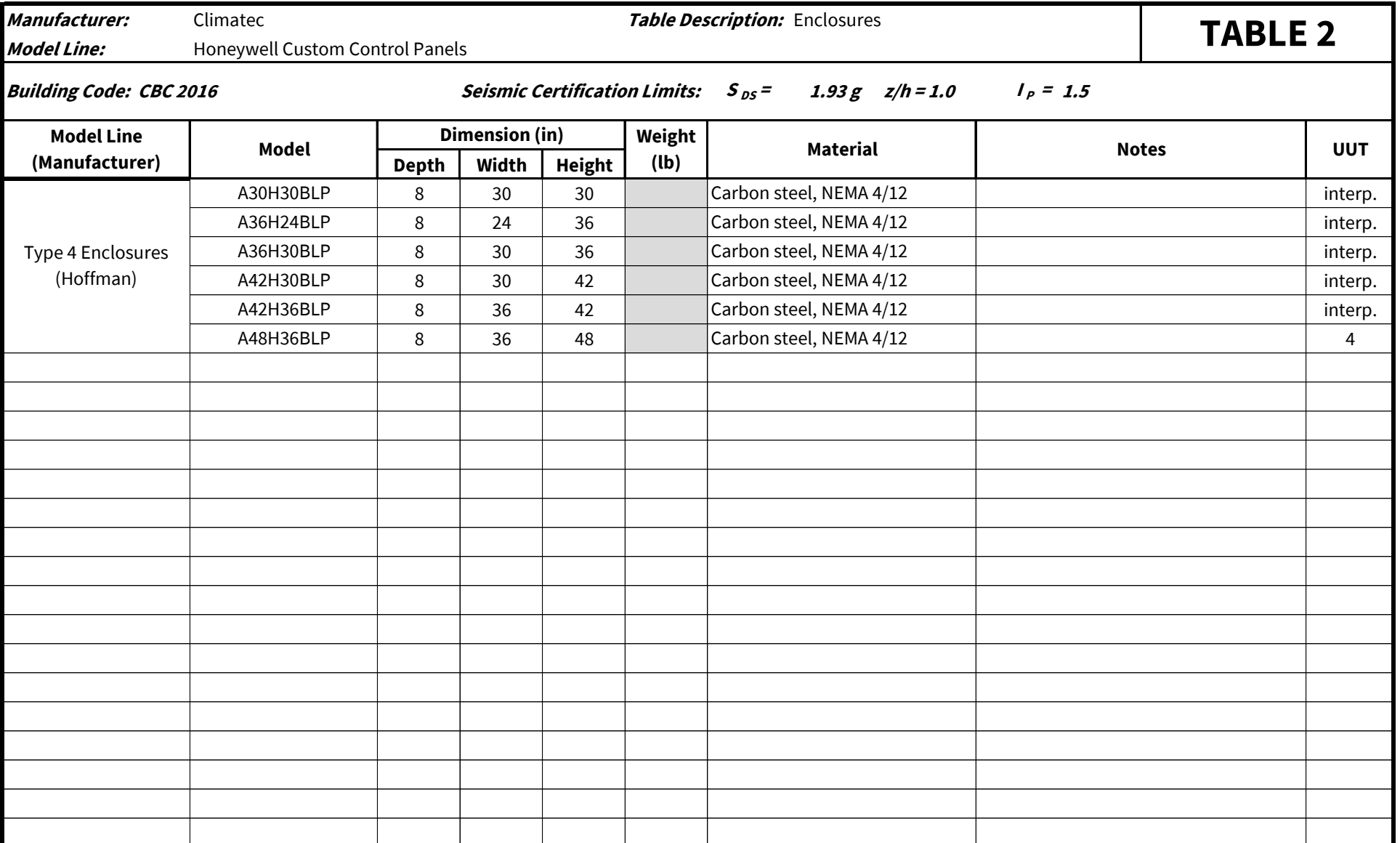
# SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

TRU PROJECT NO. 16027



<b>Manufacturer:</b> Climatec		<b>Table Description:</b> Enclosures						<b>TABLE 2</b>	
<b>Model Line:</b> Honeywell Custom Control Panels									
<b>Building Code:</b> CBC 2016		<b>Seismic Certification Limits:</b> $S_{DS} = 1.93\text{ g}$ $z/h = 1.0$ $I_p = 1.5$							
Model Line (Manufacturer)	Model	Dimension (in)			Weight (lb)	Material	Notes	UUT	
		Depth	Width	Height					
Type 1 Enclosures (Hoffman)	A42N3609	9.3	36	42		Carbon steel, NEMA 1		interp.	
	A48N3609	9.3	36	48		Carbon steel, NEMA 1		2	
Type 4 Enclosures (Hoffman)	A16H12ALP	6	12	16		Carbon steel, NEMA 4/12		extrap.	
	A16H16ALP	6	16	16		Carbon steel, NEMA 4/12		extrap.	
	A16H20ALP	6	20	16		Carbon steel, NEMA 4/12		extrap.	
	A20H16ALP	6	16	20		Carbon steel, NEMA 4/12		extrap.	
	A20H20ALP	6	20	20		Carbon steel, NEMA 4/12		extrap.	
	A24H12ALP	6	12	24		Carbon steel, NEMA 4/12		extrap.	
	A24H16ALP	6	16	24		Carbon steel, NEMA 4/12		extrap.	
	A24H20ALP	6	20	24		Carbon steel, NEMA 4/12		3	
	A24H24ALP	6	24	24		Carbon steel, NEMA 4/12		interp.	
	A30H20ALP	6	20	30		Carbon steel, NEMA 4/12		interp.	
	A30H24ALP	6	24	30		Carbon steel, NEMA 4/12		interp.	
	A36H24ALP	6	24	36		Carbon steel, NEMA 4/12		interp.	
	A16H12BLP	8	12	16		Carbon steel, NEMA 4/12		interp.	
	A20H16BLP	8	16	20		Carbon steel, NEMA 4/12		interp.	
	A20H20BLP	8	20	20		Carbon steel, NEMA 4/12		interp.	
	A20H24BLP	8	24	20		Carbon steel, NEMA 4/12		interp.	
	A24H20BLP	8	20	24		Carbon steel, NEMA 4/12		interp.	
	A24H24BLP	8	24	24		Carbon steel, NEMA 4/12		interp.	
	A24H30BLP	8	30	24		Carbon steel, NEMA 4/12		interp.	
	A30H20BLP	8	20	30		Carbon steel, NEMA 4/12		interp.	
	A30H24BLP	8	24	30		Carbon steel, NEMA 4/12		interp.	

**TRU PROJECT NO. 16027**



# SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

TRU PROJECT NO. 16027



<b>Manufacturer:</b> Climatec		<b>Table Description:</b> Transformers and Power Supplies			<b>TABLE 3</b>
<b>Model Line:</b> Honeywell Custom Control Panels					
<b>Building Code:</b> CBC 2016		<b>Seismic Certification Limits:</b> $S_{DS} = 1.93 g$ $z/h = 1.0$ $I_p = 1.5$			
Component Type	Manufacturer	Model	Description	Notes	UUT
Power Supply	Functional Devices	PSH75AB10	75 VA		Extrap.
		PSH75A75AB10	DUAL 75 VA		Extrap.
		PSH100AB10	100 VA		3
		PSH100A100AB10	DUAL 100 VA		4
	Kele	DCP-1.5W	24VAC/24VDC		4
	Veris	PS247.5	120VAC/24VDC		4
		PS2415	120VAC/24VDC		Interp.
		PS2430	120VAC/24VDC		Interp.
		PS2450	120VAC/24VDC		Interp.
		PS24100	120VAC/24VDC		2
UPS	Sola-HD	SDU 500	UPS		1
		SDU-PMBRK	MOUNTING BRACKET		1
Transformer	Veris	X100CBB	100VA		2
		X050CBB	50VA		2



# SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

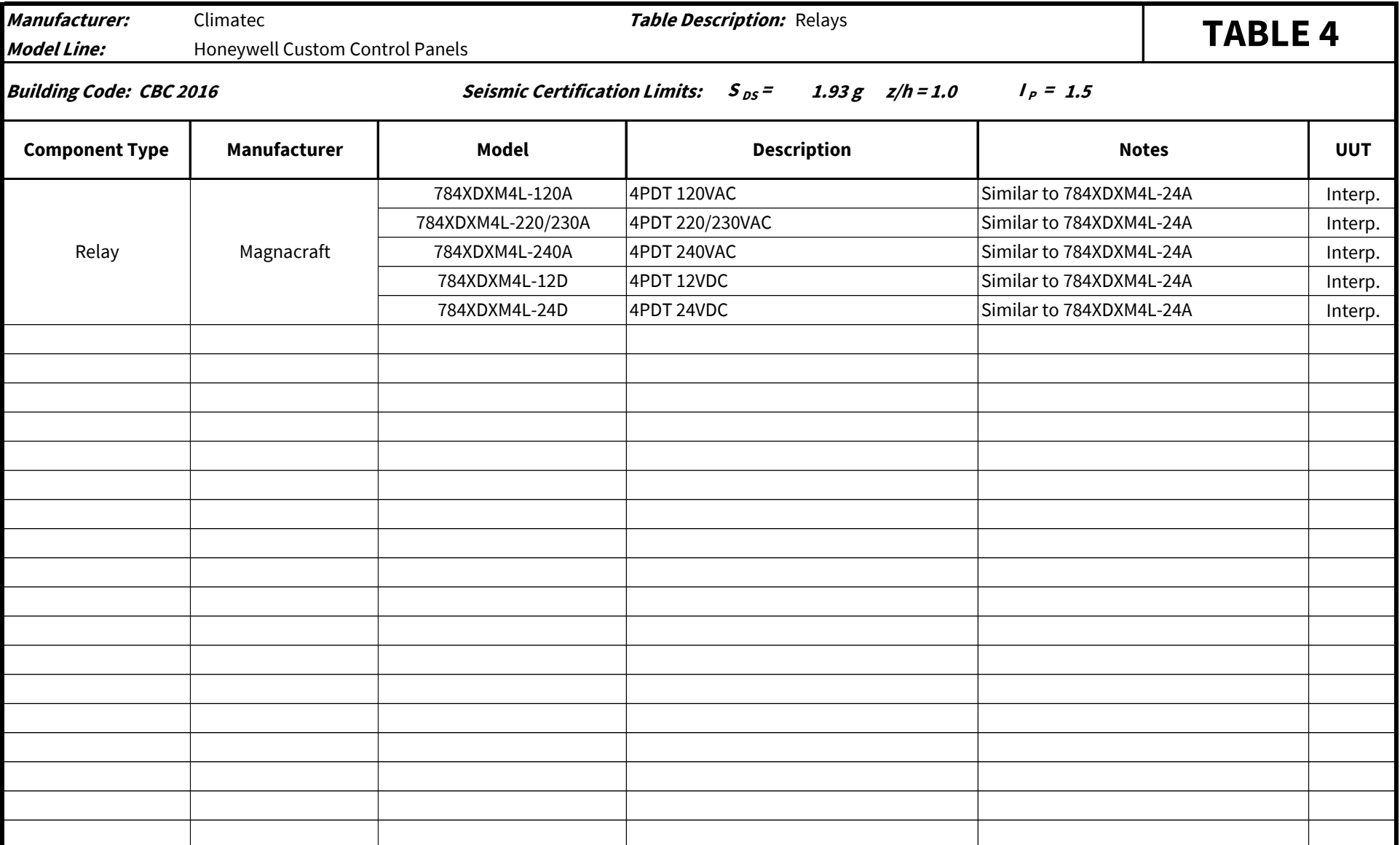
TRU PROJECT NO. 16027



<b>Manufacturer:</b> Climatec		<b>Table Description:</b> Relays			<b>TABLE 4</b>
<b>Model Line:</b> Honeywell Custom Control Panels					
<b>Building Code:</b> CBC 2016		<b>Seismic Certification Limits:</b> $S_{DS}=1.93\text{ g}$ $z/h=1.0$ $I_p=1.5$			
Component Type	Manufacturer	Model	Description	Notes	UUT
Relay	Magnacraft	781XAXM4L-24A	1PDT 24VAC		3
		781XAXM4L-12A	1PDT 12VAC	Similar to 781XAXM4L-24A	Interp.
		781XAXM4L-120A	1PDT 120VAC	Similar to 781XAXM4L-24A	Interp.
		781XAXM4L-220/230A	1PDT 220/230VAC	Similar to 781XAXM4L-24A	Interp.
		781XAXM4L-240A	1PDT 240VAC	Similar to 781XAXM4L-24A	Interp.
		781XAXM4L-12D	Full featured 11	Similar to 781XAXM4L-24A	Interp.
		781XAXM4L-24D	1PDT 24VDC	Similar to 781XAXM4L-24A	Interp.
		782XBXM4L-24A	2PDT 24VAC		2
		782XBXM4L-12A	2PDT 12VAC	Similar to 782XBXM4L-24A	Interp.
		782XBXM4L-120A	2PDT 120VAC	Similar to 782XBXM4L-24A	Interp.
		782XBXM4L-220/230A	2PDT 220/230VAC	Similar to 782XBXM4L-24A	Interp.
		782XBXM4L-240A	2PDT 240VAC	Similar to 782XBXM4L-24A	Interp.
		782XBXM4L-12D	2PDT 12VDC	Similar to 782XBXM4L-24A	Interp.
		782XBXM4L-24D	2PDT 24VDC	Similar to 782XBXM4L-24A	Interp.
		783XCXM4L-24A	3PDT 24VAC		4
		783XCXM4L-12A	3PDT 12VAC	Similar to 783XCXM4L-24A	Interp.
		783XCXM4L-120A	3PDT 120VAC	Similar to 783XCXM4L-24A	Interp.
		783XCXM4L-220/230A	3PDT 220/230VAC	Similar to 783XCXM4L-24A	Interp.
		783XCXM4L-240A	3PDT 240VAC	Similar to 783XCXM4L-24A	Interp.
		783XCXM4L-12D	3PDT 12VDC	Similar to 783XCXM4L-24A	Interp.
		783XCXM4L-24D	3PDT 24VDC	Similar to 783XCXM4L-24A	Interp.
		784XDXM4L-24A	4PDT 24VAC		4
		784XDXM4L-12A	4PDT 12VAC	Similar to 784XDXM4L-24A	Interp.

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**TRU PROJECT NO. 16027**



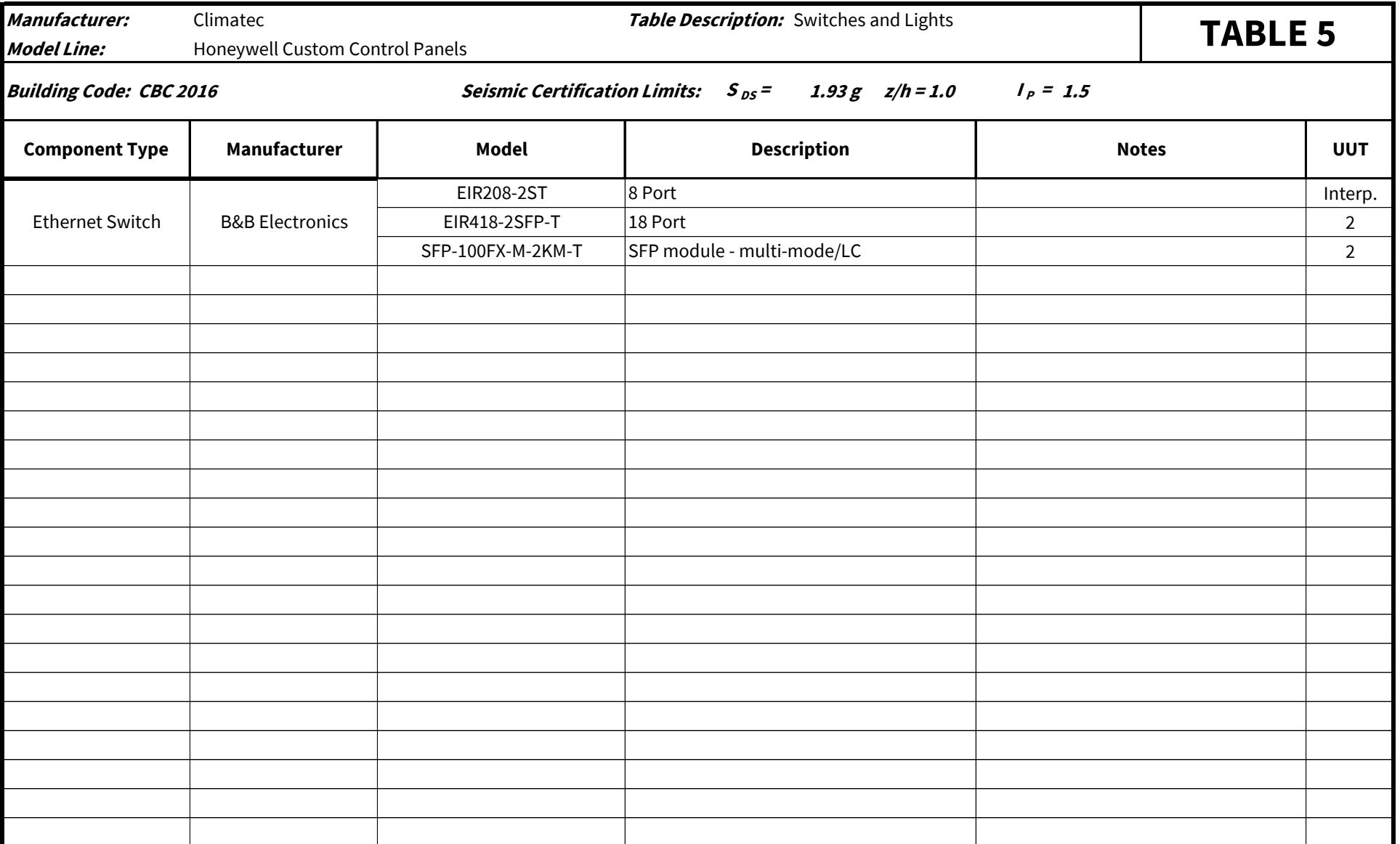
# SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

TRU PROJECT NO. 16027



<b>Manufacturer:</b> Climatec		<b>Table Description:</b> Switches and Lights			<b>TABLE 5</b>
<b>Model Line:</b> Honeywell Custom Control Panels					
<b>Building Code: CBC 2016</b> <b>Seismic Certification Limits:</b> $S_{DS}=1.93\text{ g}$ $z/h=1.0$ $I_p=1.5$					
Component Type	Manufacturer	Model	Description	Notes	UUT
Panel Light	IDEC	APW299D-R-24	Red		2
		APW299D-G-24	Green		3,4
		APW299D-A-24	Amber	Similar to APW299D-R-24	Interp.
		APW299D-R-120	Red	Similar to APW299D-R-24	Interp.
		APW299D-G-120	Green	Similar to APW299D-R-24	Interp.
		APW299D-A-120	Amber	Similar to APW299D-R-24	Interp.
		APW299-R-24	Red	Similar to APW299D-R-24	Interp.
		APW299-G-24	Green	Similar to APW299D-R-24	Interp.
		APW299-A-24	Amber	Similar to APW299D-R-24	Interp.
Switch	IDEC	ASW2K10	2 Position switch w/ key		4
		ASW210	2 Position switch		Interp.
		ASW3K20	3 Position switch w/ key		2
		ASW320	3 Position switch		Interp.
LCD	Kele	LPI-1C	Panel mount LCD		2
Ethernet Switch	B&B Electronics	EIR102-MC	2 Port		Extrap.
		EIR208	8 Port		4
		EIR208-MT	8 Port		Interp.
		EIR208-MC	8 Port		Interp.
		EIR208-SC	8 Port		Interp.
		EIR208-ST	8 Port		Interp.
		EIR208-2MT	8 Port		Interp.
		EIR208-2MC	8 Port		Interp.
		EIR208-2SC	8 Port		Interp.

**TRU PROJECT NO. 16027**



# SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

TRU PROJECT NO. 16027



<b>Manufacturer:</b> Climatec		<b>Table Description:</b> Controllers and components			<b>TABLE 6</b>
<b>Model Line:</b> Honeywell Custom Control Panels					
<b>Building Code: CBC 2016</b> <b>Seismic Certification Limits:</b> $S_{DS}=1.93\text{ g}$ $z/h=1.0$ $I_p=1.5$					
Component Type	Manufacturer	Model	Description	Notes	UUT
Controller	Honeywell	NPB-2X-RS485	DUAL RS-485 COMM PORT		4
		NPB-232	RS-232 Comm Card	Same as NPB-2X-RS485, diff. cable	Interp.
		XF821A	Panel Bus Analog Input Module		2
		XF823A	Panel Bus Binary Input Module		2
		XFL821A	LON Bus Analog Input Module		2
		XFL823A	LON Bus Binary Input Module		2
		IO-16-H/U	Optional I/O module		Interp.
		IO-34-H/U	Optional I/O module		Interp.
		IO-16-REM-H/U	Remote IO-16 Module		Interp.
		SIO6042	Optional I/O module		Interp.
		SIO4022	Optional I/O module		Interp.
		SIO12000	Optional I/O module		Interp.
		W7750A2005/U	Remote I/O Constant Volume AHU		Interp.
		W7750B2011/U	Remote I/O Constant Volume AHU		Interp.
		W7750C2001/U	Remote I/O Constant Volume AHU		Interp.
		W7753A2002/U	Remote I/O Unit Ventilator Controller		Interp.
		W7761A2010/U	Excel 10 Remote I/O		2
		XFR822A	Panel Bus Analog Output Module W/ OR		2
		XFLR822A	LON Bus Analog Output Module W/ OR		2
		XFR824A	Panel Bus Relay Module W/ OR		2
		XFLR824A	LON Bus Relay Module W/ OR		2
		WEB-600	WEB 600	Same as WEB-700, program, connect	Interp.
		WEB-700	WEB 700		4

# SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

TRU PROJECT NO. 16027



<b>Manufacturer:</b> Climatec		<b>Table Description:</b> Controllers and components			<b>TABLE 6</b>
<b>Model Line:</b> Honeywell Custom Control Panels					
<b>Building Code: CBC 2016</b> <b>Seismic Certification Limits:</b> $S_{DS}=1.93\text{ g}$ $z/h=1.0$ $I_p=1.5$					
Component Type	Manufacturer	Model	Description	Notes	UUT
Controller	Honeywell	XCL8010A	EXCEL 800		2
		NPB-LON	LON Adapter		4
		PUL1012S	Spyder Lon Unitary		Extrap.
		PUL1012S-ILC-US	Spyder Lon Unitary		Extrap.
		PUL4024S	Spyder Lon Unitary		4
		PUL4024S-ILC-US	Spyder Lon Unitary		Interp.
		PUL6438S-ILC	Spyder Lon Unitary		Interp.
		PUL6438S-ILC-US	Spyder Lon Unitary		Interp.
		PUL6438S	Spyder Lon Unitary		4
		PUB6438SR	Spyder BACnet Unitary	Same as PUL6438S, programming	Interp.
		PUB6438SR-ILC	Spyder BACnet Unitary	Same as PUL6438S-ILC, programming	Interp.
		PUB6438SR-ILC-US	Spyder BACnet Unitary	Same as PUL6438S-ILC-US, program	Interp.
		PUB6438S-ILC	Spyder BACnet Unitary	Same as PUL6438S-ILC, programming	Interp.
		PUB6438S-ILC-US	Spyder BACnet Unitary	Same as PUL6438S-ILC-US, program	Interp.
		NPM-256	WEB 600 memory expansion	Software for WEB 600	Interp.
		XS821-22	Terminal Socket For AI/AO Modules		2
		XS823	Terminal Socket For BI Module		2
		XS824-25	Terminal Socket For Relay Modules		2
		XS814	Auxiliary Terminal Blocks		2
		XS817	3-Relay Cross Connector		2
		NPB-PWR-H	24V power module	Same as NPB-PWR-UN-H, connection	Interp.
		NPB-PWR-UN-H	Universal power module		4

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TRU PROJECT NO. 16027



<b>Manufacturer:</b> Climatec		<b>Table Description:</b> Controllers and components			<b>TABLE 6</b>
<b>Model Line:</b> Honeywell Custom Control Panels					
<b>Building Code:</b> CBC 2016		<b>Seismic Certification Limits:</b> $S_{DS} = 1.93 g$ $z/h = 1.0$ $I_p = 1.5$			
Component Type	Manufacturer	Model	Description	Notes	UUT
Controller	Tridium	NPB-RS232	RS-232 Comm Card		2
		NPB-8000-232	RS-232 Comm Card	Same as NPB-RS232, connections	Interp.
		NPB-2X-485	DUAL RS-485 COMM PORT	Same as NPB-RS232, connections	Interp.
		NPB-8000-2X-485	RS-485 Comm Card	Same as NPB-RS232, connections	Interp.
		NPB-LON	LON Adapter		2
		NPB-8000-LON	LON Adapter	Same as NPB-LON, connections	Interp.
		NPB-256	JACE 600 memory expansion		2
		NPB-PWR-UN	Universal power module	Same as NPB-PWR, connection	Interp.
		NPB-PWR	24V power module		2
		J-600	JACE-600		2
		J-700	JACE-700	Same as J-600, program, connections	Interp.
		J-8000	JACE-8000	Same as J-600, program, connections	Interp.
		IO-16	Optional I/O module		2
		IO-34	Optional I/O module		2
		T-IO-16-485	Remote IO-16 Module		2

**TRU PROJECT NO. 16027**

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# UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 16027



<b>Manufacturer:</b>	Climatec	<b>UUT 1</b>
<b>Model Line:</b>	Honeywell Custom Control Panels	
<b>Model Number:</b>	Custom Control Panel	
<b>Serial Number:</b>		N/A

**Product Construction Summary:**  
NEMA 1, carbon steel enclosure.

**Options/Subcomponent Summary:**  
120V power, uninterruptible power supply. See Tables 3 - 8 for a specific listing of subcomponents installed in the panel.

UUT Properties									
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)					
	Depth	Width	Height	Front-Back	Side-Side	Vertical			
37	7	16	20	N/A	N/A	N/A			
UUT Highest Passed Seismic Run Information									
Building Code		Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016		ICC-ES AC156	1.93 g	1.0	1.5	3.09	2.32	1.29	0.51

## Test Mounting Details:



Wall mounted - rigid



Wall mounted - isolated

Rigid wall mounted to steel stud wall with (4) 3/8" grade 5 bolts. Tested with fixture rigid & isolated mounted to table. Unit maintained structural integrity and remained functional per manufacturer requirement after the shake table test. Contents were included in testing per operating conditions.

# UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 16027



<b>Manufacturer:</b>	Climatec	<b>UUT 2</b>
<b>Model Line:</b>	Honeywell Custom Control Panels	
<b>Model Number:</b>	Custom Control Panel	
<b>Serial Number:</b>		N/A

**Product Construction Summary:**  
NEMA 1, carbon steel enclosure.

**Options/Subcomponent Summary:**  
120V power, power supply, control transformer, relays, switches, lights, Tridium JACE-600 controller, Honeywell Excel 800 controller, remote IO-16 module, LPR router module and terminators. See Tables 3 - 8 for a specific listing of subcomponents installed in the panel.

<b>UUT Properties</b>						
<b>Weight (lb)</b>	<b>Dimension (in)</b>			<b>Lowest Natural Frequency (Hz)</b>		
	<b>Depth</b>	<b>Width</b>	<b>Height</b>	<b>Front-Back</b>	<b>Side-Side</b>	<b>Vertical</b>
180	9	36	48	N/A	N/A	N/A

<b>UUT Highest Passed Seismic Run Information</b>								
<b>Building Code</b>	<b>Test Criteria</b>	<b>S<sub>DS</sub> (g)</b>	<b>z/h</b>	<b>I<sub>P</sub></b>	<b>A<sub>FLX-H</sub> (g)</b>	<b>A<sub>RIG-H</sub> (g)</b>	<b>A<sub>FLX-V</sub> (g)</b>	<b>A<sub>RIG-V</sub> (g)</b>
CBC 2016	ICC-ES AC156	1.93 g	1.0	1.5	3.09	2.32	1.29	0.51

**Test Mounting Details:**



Wall mounted - rigid



Wall mounted - isolated

Rigid wall mounted to steel stud wall with (4) 3/8" grade 5 bolts. Tested with fixture rigid & isolated mounted to table. Unit maintained structural integrity and remained functional per manufacturer requirement after the shake table test. Contents were included in testing per operating conditions.

# UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 16027



<b>Manufacturer:</b>	Climatec	<b>UUT 3</b>
<b>Model Line:</b>	Honeywell Custom Control Panels	
<b>Model Number:</b>	Custom Control Panel	
<b>Serial Number:</b>		N/A

**Product Construction Summary:**  
NEMA 4/12, carbon steel enclosure.

**Options/Subcomponent Summary:**  
120V power, power supply, relays, lights, Honeywell Spyder BACnet unitary controller. See Tables 3 - 8 for a specific listing of subcomponents installed in the panel.

UUT Properties									
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)					
	Depth	Width	Height	Front-Back	Side-Side	Vertical			
51	6	20	24	N/A	N/A	N/A			
UUT Highest Passed Seismic Run Information									
Building Code		Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016		ICC-ES AC156	1.93 g	1.0	1.5	3.09	2.32	1.29	0.51

**Test Mounting Details:**



Wall mounted - rigid



Wall mounted - isolated

Rigid wall mounted to steel stud wall with (4) 3/8" grade 5 bolts. Tested with fixture rigid & isolated mounted to table. Unit maintained structural integrity and remained functional per manufacturer requirement after the shake table test. Contents were included in testing per operating conditions.

**TRU PROJECT NO. 16027**



**Options/Subcomponent Summary:**  
120V power, power supply, relays, switches, lights, Honeywell Spyder Lon Unitary Controller, Lon adapter, Web 700 controller.  
See Tables 3 - 8 for a specific listing of subcomponents installed in the panel.

UUT Properties									
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)					
	Depth	Width	Height	Front-Back	Side-Side	Vertical			
180	8	36	48	N/A	N/A	N/A			
UUT Highest Passed Seismic Run Information									
Building Code		Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016		ICC-ES AC156	1.93 g	1.0	1.5	3.09	2.32	1.29	0.51

**UUT4b**

Wall mounted - rigid



Wall mounted - isolated

Rigid wall mounted to steel stud wall with (4) 3/8" grade 5 bolts. Tested with fixture rigid & isolated mounted to table. Unit maintained structural integrity and remained functional per manufacturer requirement after the shake table test. Contents were included in testing per operating conditions.