



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

APPLICATION FOR HCAI SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0238

HCAI Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Trane

Manufacturer's Technical Representative: Ernie Weyhrauch

Mailing Address: 2473 Fortune Drive, Lexington, KY 40509

Telephone: (859) 788-5408

Email: Ernie.Weyhrauch@tranetechnologies.com

Product Information

Product Name: Performance Climate Changer (PCC/CSAA/PSCA)

Product Model Number(s): Size 3 through Size 120

Product Category: Air Conditioning Units

Product Sub-Category: Air Conditioning Units - Packaged

General Description: Catalogued Air Handling Units (with internal vibration isolators) that can be made in multiple sizes as measured by the area of the coils. Stacked unit with components in more than one vertical level are outside the scope of this OSP.

Mounting Description: Rigid base mounted and rigid roof curb mounted without external vibration isolators.

Tested Seismic Enhancements: Seismic enhancements made to the test units and/or modifications required to address anomalies during the tests shall be incorporated into the production units.

Applicant Information

Applicant Company Name: VMC Group

Contact Person: John Giuliano

Mailing Address: 113 Main Street, Bloomingdale, NJ 07403

Telephone: (973) 838-1780

Email: john.giuliano@thvmcgroup.com

Title: President



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California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)

Company Name: THE VMC GROUP

Name: Kenneth Tarlow California License Number: S2851

Mailing Address: 980 9th Street, 16th Floor, Sacramento, CA 95814

Telephone: (832) 627-2214 Email: ken.tarlow@thevmcgroup.com

Certification Method

☐ GR-63-Core ☒ ICC-ES AC156 ☐ IEEE 344 ☐ IEEE 693 ☐ NEBS 3
☐ Other (Please Specify):

Testing Laboratory

Company Name: CLARK TESTING LABORATORY, INC.

Contact Person: Zach Fischer

Mailing Address: 1801 Route 51, Jefferson Hills PA 15025

Telephone: (412) 387-1001 Email: zfischer@clarktesting.com

Company Name: UNIVERSITY OF CALIFORNIA, BERKELEY (PEER)

Contact Person: Amarnath Kasalanati

Mailing Address: 325 Davis Hall, Berkeley CA 94720-1729

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Company Name: QUALTECH/CURTISS WRIGHT/TRENTEC

Contact Person: Marie Nemiwe

Mailing Address: 4600 East Tech Drive, Cincinnati OH 45245

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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) =	4.16
Sds (Design spectral response acceleration at short period, g) =	1.85
a_p (Amplification factor) =	2.5
R_p (Response modification factor) =	2.0 (Internally Isolated Sub-Components)
Ω_0 (System overstrength factor) =	2.5
I_p (Importance factor) =	1.5
z/h (Height ratio factor) =	1
Natural frequencies (Hz) =	See Attachment
Overall dimensions and weight =	See Attachment

HCAI Approval (For Office Use Only) - Approval Expires on 10/01/2031

Date:	10/1/2025		
Name:	Mohammad Karim	Title:	Supervisor, Health Facilities
Special Seismic Certification Valid Up to:	Sds (g) = 1.85	z/h =	1
Condition of Approval (if applicable):	BY: Mohammad Karim DATE: 10/1/2025		

Table 1 - Product Sizes

Unit	Height [in]	Width [in]	Tested Length [in]	Max. Length [in]	Tested Weight [lb]	psf
Minimum	22.5	31.5	-	Unlimited	-	-
UUT-1	29	31.5	300		2,485	38
UUT-2A	120	182	325		20,360	50
UUT-2B	120	182	314		14,920	38
UUT-3	39	66	295		4,092	30
UUT-4A	72	72	72		2,500	69
UUT4B	55	89.5	56.5		1,774	51
UUT-13	38	62	156		2,050	31
UUT-14	119.75	155	277		13,450	45
UUT-15	33.75	31.5	172.8		1,400	37
UUT-16	119.75	182	261.5		16,040	49
UUT-17	121	84	182		12,228	115
Maximum	121.75	184	-		-	115

Notes:

Overall unit length is variable depending on the installed modules.

Units are certified for "inline" applications only. L-shaped, T-shaped or U-shaped units are not permitted.

Table 2 - Base Frame Construction

Baseraill Height	Material	Section	UUT	MFR
2.5	16 ga Galv Carbon Steel	Cold Formed	Interpolated	Trane
4			Interpolated	
6			UUT-13	
7.25			Extrapolated	
2.5	14 ga Galv Carbon Steel	Cold Formed	UUT-1, 4	
4			Interpolated	
6			UUT-13	
7.25			UUT-15	
6	10 ga Galv Carbon Steel	Cold Formed	UUT-2A, 2B, 14, 16	
7.25			UUT-17	

Table 3a - Enclosure Construction, Wall/Roof Exterior Panels

Skin	Insulation	Panel Nominal Thickness	Wall/Roof Panel Material	Wall/Roof Panel Thickness ¹	Wall/Roof Panel Type	UUT	MFR
Outer	Interstitial Foam	2"	Galv Carbon Steel	22 ga (0.026")	Solid	UUT-1, 2, 4, 13, 14, 15, 17	Trane
Outer	Interstitial Foam	2"	Stainless Steel	22 ga	Solid	Interpolated	
Outer	Interstitial Foam	3"	Galv Carbon Steel	22 ga (0.026")	Solid	UUT-16	

Note: ¹Trane uses a lower bound tolerance of 0.026" on the material

Table 3b - Enclosure Const., Wall/Roof Interior Panels (Liners)

Skin	Insulation	Panel Nominal Thickness	Wall/Roof Panel Material	Wall/Roof Panel Thickness ¹	Wall/Roof Panel Type	UUT	MFR
Inner	Interstitial Foam	2"	Galv Carbon Steel	22 ga (0.026")	Solid	UUT-1, 2, 4, 13, 15, 17	Trane
Inner	Interstitial Foam	3"	Galv Carbon Steel	22 ga (0.026")	Solid	UUT-16	
Inner	Interstitial Foam	2"	Galv Carbon Steel	22 ga (0.026")	Perforated	UUT-2, 14	
Inner	Interstitial Foam	3"	Galv Carbon Steel	22 ga (0.026")	Perforated	Extrapolated	
Inner	Interstitial Foam	2"	Stainless Steel	22 ga (0.026")	Solid	UUT-2	
Inner	Interstitial Foam	2"	Stainless Steel	22 ga	Perforated	Interpolated	
Inner	Interstitial Foam	3"	Stainless Steel	22 ga (0.026")	Solid	UUT-16	

Note: ¹Trane uses a lower bound tolerance of 0.026" on the material



Table 4a - Hydronic Coil

Dimensions		Width [in] - Single Stack								Width [in] - Double Stack								UUT	MFR	
		27.50	40.00	46.50	57.50	62.50	68.00	76.00	89.50	76.00	89.50	96.00	108.50	121.50	136.50	150.50	178.00			184.00
Height [in]	22.50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	UUT-1	Trane
	28.75	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	31.25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	UUT-3	
	35.00	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	42.50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	46.25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	55.00	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	60.75	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	69.25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	79.00	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	82.50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	97.50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	109.75	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	UUT-2B	
	120.00	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	UUT-17	

Table 4b - Hydronic Coil Options

		UUT	MFR
Casing Material	Galvanized Carbon Steel	UUT-1, UUT-2B, UUT-3	Trane
	Stainless Steel	UUT-17	
Tube Material	Copper	UUT-1, UUT-2B, UUT-3, UUT-17	
Tube Outer Diameter	3/8"	Extrapolated	
	1/2"	UUT-1, UUT-3	
	5/8"	UUT-2B, UUT-17	
Tube Wall Thickness	0.16" (1/2" OD)	UUT-1, UUT-2B, UUT-3	
	0.25" (1/2" OD)	Extrapolated	
	0.020" (5/8" OD)	UUT-2B, UUT-3	
	0.024" (5/8" OD)	Extrapolated	
	0.035" (5/8" OD)	UUT-17	
Permitted Fin Material	Aluminum	UUT-1, UUT-2B, UUT-3	
	Copper	UUT-17	
Permitted Fin Pitch	72	Extrapolated	
	84	UUT-3	
	92	UUT-2B, UUT-3	
	103	UUT-1	
	168	UUT-17	
Permitted Tube Rows	1	UUT-3	
	2	UUT-1	
	4	Interpolated	
	6	UUT-2B	
	8	UUT-3, UUT-17	
	10	Extrapolated	
Permitted Coil Configurations	Single	UUT-1, UUT-3	
	Stacked	UUT-2B, UUT-17	
Header Material	Copper	UUT-1, UUT-3, UUT-2B, UUT-17	

Table 4c - Steam Coil

Dimensions		Width [in] - Single Stack						Width [in] - Double Stack					Width [in] - Triple Stack						UUT	MFR
		27.50	40.00	46.50	57.50	62.50	68.00	76.00	89.50	96.00	108.50	121.50	76.00	89.50	121.50	136.50	150.50	178.00		
Height [in]	22.50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	UUT-15	Trane
	28.75	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	31.25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	35.00	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	42.50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	46.25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	55.00	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	60.75	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	69.25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	79.00	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	82.50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	97.50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	109.75	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	UUT-2A	

Table 4d - Steam Coil Options

		UUT	MFR
Casing Material	Galvanized Carbon Steel	UUT-2A, UUT-15	Trane
	Stainless Steel	Extrapolated	
Tube Material	Copper	UUT-2A, UUT-15	
Tube Outer Diameter	1"	UUT-2A, UUT-15	
Tube Wall Thickness	0.031" (1" OD)	UUT-2A, UUT-15	
Permitted Fin Material	Copper	UUT-2A, UUT-15	
	Aluminum ¹	Extrapolated	
Permitted Fin Pitch	42	Extrapolated	
	Interpolated	Extrapolated	
	92	UUT-2A	
	Interpolated	Interpolated	
	132	UUT-15	
Permitted Tube Rows	1	UUT-2A, UUT-15	
Permitted Coil Configurations	Single	UUT-15	
	Double Stacked	Interpolated	
	Triple Stacked	UUT-2A	
Header Material	Ductile Iron Casing	UUT-2A, UUT-15	

Note:
¹Aluminum is deemed acceptable base on the DX coils test; refer to Table 4f for details.

Table 4e - DX Coils

Dimensions		Width [in] - Single Stack								Width [in] - Double Stack								UUT	MFR
		27.50	40.00	46.50	57.50	62.50	68.00	76.00	89.50	76.00	89.50	96.00	108.50	121.50	136.50	150.50	178.00		
Height [in]	22.50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	UUT-1	Trane
	28.75	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	31.25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	35.00	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	42.50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	46.25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	55.00	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	60.75	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	69.25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	79.00	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	82.50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	97.50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Interpolated	
	109.75	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	UUT-16	

Table 4f - DX Coil Options

		UUT	MFR
Casing Material	Galvanized Carbon Steel	UUT-1, UUT-16	Trane
	Stainless Steel ¹	Interpolated	
Tube Material	Copper	UUT-1, UUT-16	
Tube Outer Diameter	1/2"	UUT-1, UUT-16	
Tube Wall Thickness	0.16" (1/2" OD)	UUT-1, UUT-16	
	0.16" Rifled (1/2" OD)		
	0.25" (1/2" OD)		
Permitted Fin Material	Aluminum	UUT-1, UUT-16	
Permitted Fin Pitch	72	Extrapolated	
	72 - 151	Extrapolated	
	151	UUT-1, UUT-16	
	151 - 168	Extrapolated	
	168	Extrapolated	
Permitted Tube Rows	4	Extrapolated	
	6	UUT-1, UUT-16	
	8	Extrapolated	
Permitted Coil Configurations	Single	UUT-1	
	Stacked	UUT-16	
Header Material	Copper	UUT-1, UUT-16	

Note:

¹Stainless steel is deemed acceptable based on the steam coils test; refer to Table 4b for details.

Table 5 - Variable Frequency Drives

Model	Max. Dimensions [in]			Max. Weight [lb]	Power [HP]	Voltage [V]	UUT	MFR
	Width	Depth	Height					
X1317	24	14	44	198	0.5 to 120	200 to 575	Interpolated	Trane (Danfoss)
				99	7.5	460	UUT-15	
				96	10	200	UUT-13	
				171	100	460	UUT-14	
4951	32.5	12	44	214	0.5 to 125	200 to 575	Interpolated	
				214	120	460	UUT-16	
4955	5	9	15	10	5	480	Extrapolated	ABB ACH580
	5	9	40	30	5 to 25	200 to 480	UUT-19A,B*	
	9	11	48	59	5 to 25	200 to 575	Interpolated	
	8	10	56	86	25	480	UUT-18A,B*	

Note: *UUT-18A,B & UUT-19A,B referenced for VFD subcomponent only.

Table 6 - Starter

Model	Max. Dimensions [in]			Max. Weight [lb]	Power [HP]	Voltage [V]	UUT	MFR
	Width	Depth	Height					
X1318	24	10	30	73	0.5 to 100	200 to 575	Interpolated	Trane (Whitepath)
	16	10	23	73	7.5	200	UUT-13	
	24	5	30	57	100	460	UUT-14	

Table 7 - Controller

Model	Max. Dimensions [in]			Max. Weight	UUT	MFR
	Width	Depth	Height			
X1365****	11	7	13	21	UUT-16	Trane
	19	11	30	65	UUT-13	

Table 8 - Dampers

Model	Max. Dimensions [in]			Weight [lb]	UUT	MFR
	Width	Height	Diameter			
CD50	28	23	N/A	21	UUT-17	Ruskin
	178	110		678		
CD60	28	23	N/A	30	UUT-1	
	178	110		950	UUT-2	
Backdraft	14	14	N/A	6	UUT-15	Ruskin & Greenheck
	38	38		29	UUT-16	
Traq	N/A	N/A	13	31	UUT-15	Trane
			28	122	UUT-2	

Table 9 - Miscellaneous Components

Description	Model Number	Dimensions [in]	Weight [lb]	Materials	UUT	MFR
Blenders	Air 66" Series IV	66Wx11.6Dx66H	219	5052 Al	2	Blender Products, Inc.
Diffusers	4953-0122-0001 / 4953-0122-0013	18.2x16.5 / 34.5x104.2	11.5 / 161	16 ga. Perforated G40 steel	1, 2	Trane
Humidifier Grid	Humidipack	17.5Wx8.5Dx19H / 149Wx8.5Dx78H	53 / 1080	Stainless Steel	1, 3	Armstrong International
UV Lamp Array	4953-11896-0001~0003 - Ballast, X13160728010~030 bulbs	Ballast - 4Wx2Dx19H, 25H, 36H Bulb - ø1.25, 17L, 23L, 35L	Ballast - 6	UV ballast, UV bulb	2	Ultraviolet Devices Inc.
	4951-3176-0001 - Ballast, X13161080010~030 bulbs	Ballast - 4Wx6Dx14H, Bulb - ø.75, 20.3L, 33.5L, 61.5L	Ballast - 20	UV ballast, UV bulb	16	UV Resources
TCACS (Trane Catalytic Air Cleaner System)	4951-2262	178Wx6Dx109H	603.5	steel & titanium dioxide media	2	Genesis Air
MICP and Motor Overload Panel	4951-4***	20"Wx9"Dx39"H Maximum	90	Galv Carbon Steel	17	Trane

Table 10a - Filter Rack

Filter Rack Type			Frame Material Options	Max. Dimensions Width x Height	Size						UUT	MFR
Load Access	Type	Holds Filter Type			3	...	10	...	100	120		
Side Loading	Flat	2"	22 gage galvanized carbon steel filter holding tracks with 18 gage galvanized carbon steel vertical supports and blockoffs	Rack assembly and blockoffs fill inside unit dimensions for all unit sizes	X	X	X	X	X	X	Interpolated	Trane
		4"			X	X	X	X	X	X	UUT-13	
		CMDS 2"/ 4" Combo			X	X	X	X	X	X	Interpolated	
		Bag/ Cartridge (BC)			X	X	X	X	X	X	UUT-14	
	Angled	2"	22 gage filter holding tracks with 18 gage vertical supports and	Rack assembly and blockoffs fill inside unit dimensions for all unit	X	X	X	X	X	X	UUT-1, 2A	
		4"			X	X	X	X	X	X	Interpolated	
Front Loading	Flat	2"	14 gage galvanized carbon steel filter holding rack with 18 gage galvanized carbon steel blockoffs	Rack assembly and blockoffs fill inside unit dimensions for all unit sizes	X	X	X	X	X	X	UUT-13	Trane
		4"			X	X	X	X	X	X	UUT-13, 14	
		Bag (B)			X	X	X	X	X	X	UUT-13, 14	
		Cartridge (C)			X	X	X	X	X	X	Interpolated	
HEPA	Flat	HEPA	14 gage filter holding rack with	Rack assembly and blockoffs fill	X	X	X	X	X	X	UUT-1, 2A	Qualex
HEPA	Flat	HEPA	10 gage filter holding panel with	Rack assembly fills inside unit	X	X	X	X	X	X	UUT-15, 16	Trane

Note: All filters racks are made from Galvanized CS

Table 10b - Filter Media

Filter Media Type				Filter Media Materials	Size						UUT	MFR
Filter Size	Filter Type		MERV Rating		3	...	10	...	100	120		
2"	Permanent		2	Aluminum	X	X	X	X	X	X	UUT-13, 14	Airguard Industries
	Throwaway		5	Fiberglass	X	X	X	X	X	X	UUT-13, 14	
	Pleated	Coated	7	Cotton/Polyester	X	X	X	X	X	X	Interpolated	
		Regular	8		X	X	X	X	X	X	UUT-1, 2A	
		Regular	13		X	X	X	X	X	X	UUT-14	
4"	Pleated	Coated	7	Cotton/Polyester	X	X	X	X	X	X	UUT-13	
		Regular	8		X	X	X	X	X	X	Interpolated	
	High Efficiency	65%	11	Cotton/Polyester	X	X	X	X	X	X	UUT-13	
		85%	12		X	X	X	X	X	X	Interpolated	
		95%	14		X	X	X	X	X	X	UUT-14	
	Standard		11	Cotton/Polyester	X	X	X	X	X	X	UUT-14	
			13		X	X	X	X	X	X	UUT-14	
					X	X	X	X	X	X	UUT-14	
12"	Cartridge	65%	11	Synthetic	X	X	X	X	X	X	UUT-14	
		85%	12		X	X	X	X	X	X	Interpolated	
		95%	15		X	X	X	X	X	X	UUT-14	
18"	Short Bag	65%	12	Synthetic	X	X	X	X	X	X	UUT-13	
		85%	13		X	X	X	X	X	X	Interpolated	
		95%	14		X	X	X	X	X	X	UUT-14	
30"	Long Bag	65%	12	Synthetic	X	X	X	X	X	X	UUT-13	
		85%	13		X	X	X	X	X	X	Interpolated	
		95%	14		X	X	X	X	X	X	UUT-14	
-	HEPA	99.97%	17	Microglass Paper Media / Corrugated Aluminum Separators	X	X	X	X	X	X	UUT-1, 2A, 15, 16	

Table 11 - Sound Attenuator

Model	Type	Max. Dimensions [in]			Max. Weight [lb]	UUT	MFR
		Height	Width	Depth			
X4509	Rectangular Dissipative, Fiberglass Lined, or Film Lined	29	57	36	149	UUT-13	Vibro-Acoustics
		108	145	60	2,220	Interpolated	
		108	145	60	2,220	UUT-14	

Table 12 - Electric Heat Component

Max. Output [kW]	Max. Weight [lbs]	MFR	UUT
3 - 26.3	109	Indeeco	UUT-15
52 - 578.8	1191		UUT-16

Table 13 - Fans Components

Model	Fan Type	Drive	Shaft	Fan Qty.	Size	HP	Max Weight [lb]	Housing Material	Blade Material	UUT	MFR	
FC/FB	Housed	Belt	Horizontal	1	9	3	43	Carbon Steel/ Galvanized Steel	Galvanized Steel	UUT-1	Comefri	
FC/FA					10	5	63			UUT-13		
FC/FA					15	5	115			UUT-3		
FC/FB					40	40	950			UUT-2B		
FA/FB/FC					9 to 40	0.75 to 75	950			Interpolated		
BC/BB					9	5	43			UUT-1		
AF/AB					25	40	350			UUT-4A		
AF/AB					40	100	950			Interpolated		
AF/AB					44	100	1,451			UUT-14		
AB/BB/BC/AA/AF					9 to 44	0.75 to 100	1,451			Interpolated		
AF/PB	Plenum	Belt	Horizontal	1	18	10	100	Carbon Steel/ Galvanized Steel	Aluminum/ Steel	UUT-3	Chicago Blower	
AF/PB					32	40	417			UUT-4B	Comefri	
AF/PA					55	75	1,932			UUT-3	Chicago Blower	
AF/BC/PA/PB					10 to 55	0.75 to 75	1,932			Interpolated	Chicago Blower / Comefri	
AF		Direct		Horizontal	1	10.5	7.5	123	Carbon Steel/ Galvanized Steel	Aluminum/ Steel	UUT-15	Trane
AF/NR					4	22	5	776			UUT-15	
AF					4	30	30	1,148			UUT-16	
AF/SF					6	24.5	20	1,308			UUT-2A	Lau
AF/NF/NR/NW/SW					6	10 to 30	1 to 30	1,308			Interpolated	Trane

Note: Max weight includes fan housing, fan wheel, fan sled

Table 14 - Motors For Fans

Fan Type	Motor Drive	HP	Max Weight [lb]	UUT	MFR
Housed	Belt	0.75 to 100	1,239	Interpolated	Baldor
		3	91	UUT-1	
		5	108	UUT-1	
		40	578	UUT-1, 2B	
		100	1,239	UUT-4A	
Plenum	Belt	0.75 to 75	889	Interpolated	
		10	185	UUT-15	
		40	578	UUT-4B	
		75	889	UUT-4B	
	Direct	0.75 to 30	481	Interpolated	
		5	108	UUT-16	
		7.5	159	UUT-15	
		20	315	UUT-2A	
		30	481	UUT-16	

Table 15a - Motorized Impeller Fan Component - Rigid Mounted

Desc.	Max. kW	Voltage	Shaft Orientation	Max. Wt. One Fan [lb]	Tested Fan Array Wide x High	Max. Fan Qty	Tested Fan Assembly [lbs]	UUT	MFR
EBM 280	1	240	Horizontal	30	1x1	1	30	UUT-15	EBM Pabst
			Vertical		N/A	N/A	N/A	UUT-15	
EBM 280	1	240 - 480	Horizontal, Vertical	30				Interpolated	
EBM 310	3	240 - 480	Horizontal, Vertical	60				Interpolated	
EBM 355	3	240 - 480	Horizontal, Vertical	61				Interpolated	
EBM 400	3	240 - 480	Horizontal, Vertical	87				Interpolated	
EBM 450	6	240 - 480	Horizontal, Vertical	121				Interpolated	
EBM 500	6	240 - 480	Horizontal, Vertical	128				Interpolated	
EBM 560	6	240 - 480	Horizontal, Vertical	161				Interpolated	
EBM 560	14	480	Horizontal	245	1x1	1	245	UUT-17	
			Vertical	245	N/A	N/A	N/A	UUT-17	
EBM 630	6	240 - 480	Horizontal, Vertical	157				Interpolated	
EBM 630	6	480	Horizontal	157	3x1	3	471	UUT-16	
			Vertical	157	N/A	N/A	N/A	UUT-16	
EBM 560	6	480	Horizontal	114	1x3	3	342	UUT-17	

Note: Aluminum impeller wheel, steel inlet nozzle, steel supporting structure

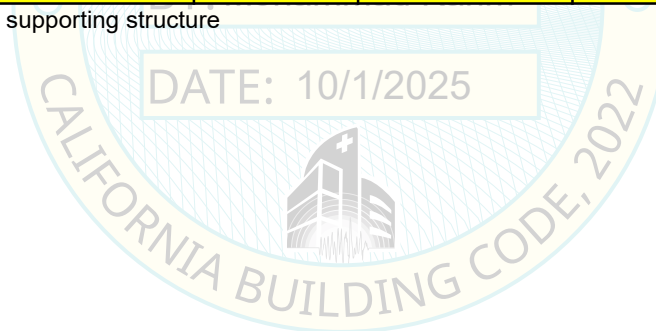
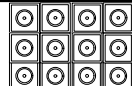
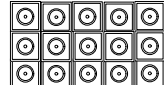


Table 15b - Fan Array Configurations - Horizontal Fans

Array Configuration	Max Fan Quantity	Max Fan Assembly Weight ¹ [lb]	UUT
1x1 	1	245	UUT-17
2x1 	2	490	Interpolated
3x1 	3	735 ²	UUT-16
4x1 	4	980	Interpolated
5x1 	5	1,225	Interpolated
1x2 	2	228	Interpolated
2x2 	4	456	Interpolated
3x2 	6	684	Interpolated
4x2 	8	912	Interpolated
5x2 	10	1140	Interpolated
1x3 	3	342	UUT-17
2x3 	6	684	Extrapolated
3x3 	9	1,026	Extrapolated
4x3 	12	1,368	Extrapolated
5x3 	15	1,710	Extrapolated

Notes:

¹Stacked max fan assembly weight is limited by the stacked fans tested on UUT-17.

²Tested weight of fan assembly tested on UUT-16 is 471 lbs

Vertical fans are never stacked or connected and tested as a 1x1 of the largest size.

Stacked fans are independent of adjacent stacks



UNIT UNDER TEST (UUT) Summary Sheet

UUT-1

Test Report: Clark EL9573

Model Line	Model Number	Manufacturer
Performance Climate Changer	PCC/CSAA Size 3	Trane

Product Construction Summary

Galvanized Carbon Steel Base Frame, Galvanized Carbon Steel Enclosure

Options / Subcomponent Summary

DX Coil: Trane; Hydronic Coil: Trane; LV DDC Controller: Trane; Damper: Ruskin; Diffuser: Trane; Humidifier: Armstrong; Angled Filter: Trane Frame & Airguard Media; HEPA Filter: Qualex Frame & Airguard Media; Housed Fans: Comefri Fan & Baldor Motor

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
2,485	300.0	31.5	29.0	15.4	7.0	12.7

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	1.85	1.0	1.5	2.96	2.22	1.24	0.50
		-	-	-	-	-	-	-

Test Mounting Details

Base Mounted to VMC P6000S Rigid Roof Curb with intermittantly spaced Qty (14) 1/8" Thick x 3" Long welds & (14) 1/2" dia SAE Grade 5 bolts (UUT welded to plates & plates bolted to Roof Curb main body). Roof Curb base mounted to shake table with intermittantly spaced Qty (28) 1/2" dia SAE Grade 5 Bolts.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

UUT-2A

Test Report: PEER STI 2011-10

Model Line	Model Number	Manufacturer
Performance Climate Changer	PCC/CSAA Size 120	Trane

Product Construction Summary

Galvanized Carbon Steel Base Frame, Galvanized Carbon Steel & Stainless Steel Enclosure

Options / Subcomponent Summary

Steam Coil: Trane; LV DDC Controller: Trane; Damper: Ruskin; Traq Damper: Trane; Blender: Blender Products; UV Lamp Array: Ultraviolet Devices; TCACS: Genesis; Angled Filter: Trane Frame & Airguard Media; HEPA Filter: Qualex Frame & Airguard Media; Plenum Fan: Lau Fan & Baldor Motor/AO Smith Motor

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
20,360	325.0	182.0	120.0	2.8	3.7	4.3

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.34	0.54
		-	-	-	-	-	-	-

Test Mounting Details

Base Mounted to VMC P6000S Rigid Roof Curb with intermittantly spaced Qty (40) 1/2" dia SAE Grade 8 Bolts. Roof Curb base mounted to shake table with intermittantly spaced Qty (40) 1/2" dia SAE Grade 8 Bolts.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

UUT-2B

Test Report: PEER STI 2011-10; UUT-1B

Model Line	Model Number	Manufacturer
Performance Climate Changer	PCC/CSAA Size 120	Trane

Product Construction Summary

Galvanized Carbon Steel Base Frame, Galvanized Carbon Steel & Stainless Steel Enclosure

Options / Subcomponent Summary

Hydronic Coil: Trane; Diffuser: Trane; Housed Fan: Comefri Fan & Baldor Motor

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
14,920	314.0	182.0	120.0	2.8	2.9	2.8

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.34	0.54
		-	-	-	-	-	-	-

Test Mounting Details

Base Mounted to VMC P6000S Rigid Roof Curb with intermittantly spaced Qty (40) 1/2" dia SAE Grade 8 Bolts. Roof Curb base mounted to shake table with intermittantly spaced Qty (40) 1/2" dia SAE Grade 8 Bolts.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

UUT-3

Test Report: PEER STI 2010-7; UUT-1

Model Line	Model Number	Manufacturer
T Series	Size 10	Trane

Product Construction Summary

Galvanized Carbon Steel Base Frame, Galvanized Carbon Steel Enclosure

Options / Subcomponent Summary

Hydronic Coil: Trane; Humidifier: Armstrong; Housed Fan: Comefri Fan & Baldor Motor; Plenum Fan: Chicago Blower Fan & Baldo Motor

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
4,092	295.0	66.0	39.0	8.2	8.4	10.1

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS}	z/h	I_p	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2022	ICC-ES AC156	1.85	1.0	1.5	2.96	2.22	1.24	0.50
		-	-	-	-	-	-	-

Test Mounting Details

Base Mounted to VMC P6000S Rigid Roof Curb with intermittantly spaced Qty (14) 1/8" Thick x 3" Long welds. Roof Curb base mounted to shake table with intermittantly spaced Qty (28) 1/2" dia SAE Grade 8 Bolts.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

UUT-4A

Test Report: Trentec Q9018.0; UUT-1

Model Line	Model Number	Manufacturer
Performance Climate Changer	PCC/CSAA Size 30	Trane

Product Construction Summary

Galvanized Carbon Steel Base Frame, Galvanized Carbon Steel Enclosure

Options / Subcomponent Summary

Housed Fan: Comefri Fan & Baldor Motor; Q MP580 LV Controller: Trane

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
2,500	72.0	72.0	72.0	4.0	2.2	1.6

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	1.85	1.0	1.5	2.96	2.22	1.24	0.50
		-	-	-	-	-	-	-

Test Mounting Details

Base Mounted to shake table with Qty (4) 1/2" dia SAE Grade 8 Bolts. (1) Bolt per UUT corner.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

UUT-4B

Test Report: Trentec Q9018.0; UUT-2

Model Line	Model Number	Manufacturer
Performance Climate Changer	PCC/CSAA Size 30	Trane

Product Construction Summary

Galvanized Carbon Steel Base Frame, Galvanized Carbon Steel Enclosure

Options / Subcomponent Summary

Plenum Fan: Comefri Fan & Baldor Motor

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
1,774	56.5	89.5	55.0	2.4	1.7	2.1

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	1.85	1.0	1.5	2.96	2.22	1.24	0.50
		-	-	-	-	-	-	-

Test Mounting Details

Base Mounted to shake table with Qty (4) 1/2" dia SAE Grade 8 Bolts. (1) Bolt per UUT corner.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

UUT-13

Test Report: PEER STI 2013-18

Model Line	Model Number	Manufacturer
Performance Climate Changer	PCC/CSAA Size 10	Trane

Product Construction Summary

Galvanized Carbon Steel Base Frame, Galvanized Carbon Steel Enclosure

Options / Subcomponent Summary

TR150 VFD: Trane; UC600 LV Controller: Trane; Starter: Trane; Filter Frame: Trane; Filter Media: Airguard Industries; Housed Fan: Comefri Fan & Regal/Beloit Motor; Sound Attenuator: Vibro/Acoustics

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
2,050	156.0	62.0	38.0	22.9	11.3	33.3+

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	1.85	1.0	1.5	2.96	2.22	1.24	0.50
		-	-	-	-	-	-	-

Test Mounting Details

Base mounted unit with intermittantly spaced Qty (28) 1/2" dia SAE Grade 8 Bolts. (50" maximum spacing). Fixture rigidly on table.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

UUT-14

Test Report: PEER STI 2013-18

Model Line	Model Number	Manufacturer
Performance Climate Changer	PCC/CSAA Size 100	Trane

Product Construction Summary

Galvanized Carbon Steel Base Frame, Galvanized Carbon Steel Enclosure

Options / Subcomponent Summary

TR150 VFD: Trane; Starter: Trane; Filter Frame: Trane; Filter Media: Airguard Industries; Housed Fan: Comefri Fan & Regal/Beloit Motor; Sound Attenuator: Vibro Acoustics

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
13,450	277.0	155.0	119.8	8.6	8.3	33.3+

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	1.85	1.0	1.5	2.96	2.22	1.24	0.50
		-	-	-	-	-	-	-

Test Mounting Details

Base mounted unit with intermittantly spaced Qty (32) 1/2" dia SAE Grade 8 Bolts. (48" maximum spacing). Fixture rigidly on table.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

UUT-15

Test Report: VMA-48642-01E

Model Line	Model Number	Manufacturer
Performance Climate Changer	PCC/CSAA Size 3	Trane

Product Construction Summary

Galvanized Carbon Steel Base Frame, Galvanized Carbon Steel Enclosure

Options / Subcomponent Summary

Steam Coil: Trane; TR150 VFD: Trane; Traq Damper: Trane; Backdraft Damper: Ruskin; HEPA Filter Frame: Trane; HEPA Filter Media: Airguard Industries; Plenum Fan: Trane; Plenum Fan Motor: Baldor; Motorized Impeller Fan: EBM Pabst; Electric Heat: Indeeco

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
1,400	172.8	31.5	33.8	23.0	33.3+	18.5

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	1.85	1.0	1.5	2.96	2.22	1.24	0.50
		-	-	-	-	-	-	-

Test Mounting Details

Base mounted to shake table with intermittantly spaced Qty (22) 1/2" dia. SAE Grade 8 bolts



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

UUT-16

Test Report: VMA-48642-01E

Model Line	Model Number	Manufacturer
Performance Climate Changer	PCC/CSAA Size 120	Trane

Product Construction Summary

Galvanized Carbon Steel Base Frame, Galvanized Carbon Steel & Stainless Steel Enclosure

Options / Subcomponent Summary

DX Coil: Trane; TR150 VFD: Trane; UC600 LV Controller: Trane; Backdraft Damper: Greenheck; UV Lamp Array: UV Resources; HEPA Filter Frame: Trane; HEPA Filter Media: Airguard Industries; Plenum Fan: Trane; Plenum Fan Motor: Baldor; Motorized Impeller Fan: EBM Pabst; Electric Heat: Indeeco

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
16,040	261.5	182.0	119.8	7.5	9.3	13.0

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	1.85	1.0	1.5	2.96	2.22	1.24	0.50
		-	-	-	-	-	-	-

Test Mounting Details

Base mounted to VMC P6000S Rigid Roof Curb with intermittantly spaced Qty (18) 1/8" thick x 3" long welds.
Roof curb base mounted to shake table with intermittantly spaced Qty (28) 1/2" Dia. SAE Grade 8 bolts.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

UUT-17

Test Report: Clark JID 20-00265

Model Line	Model Number	Manufacturer
Performance Climate Changer	PCC/CSAA Size 120	Trane

Product Construction Summary

Galvanized Carbon Steel Base Frame, Galvanized Carbon Steel Enclosure

Options / Subcomponent Summary

Hydronic Coil: Trane; CD50 Damper: Ruskin; MICP Motor Overload Panel: Trane; EBM 560 4.5kW Motorized Impeller Fan: EBM Pabst

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
12,228	182.0	84.0	121.0	3.9	4.4	11.7

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	1.85	1.0	1.5	2.96	2.22	1.24	0.50
		-	-	-	-	-	-	-

Test Mounting Details

Base mounted to VMC P6000S Rigid Roof Curb with intermittantly spaced Qty (20) 1/8" thick x 3" long welds.
Roof curb base mounted to shake table with intermittantly spaced Qty (20) 1/2" Dia. SAE Grade 5 bolts.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

**UUT-18A
(For VFD
Subcomponent)**

Test Report: DCL 30686-1801; UUT-6A

Model Line	Model Number	Manufacturer
ACx580	ACH580-VCR-065A-4	ABB

Product Construction Summary

Plastic Type 1 Enclosure with Carbon Steel R4 Base

Options / Subcomponent Summary

Variable Frequency Drive: ABB

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
86	10.0	8.0	56.0	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
		2.50	0.0	1.5	-	-	1.68	0.68

Test Mounting Details

UUT was mounted to wall fixture using (4) 5/16" grade 8 bolts. Wall fixture was rigidly mounted to the table using M12 threaded rods spaced 8" on center.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

**UUT-18B
(For VFD
Subcomponent)**

Test Report: DCL 30686-1801; UUT-6B

Model Line	Model Number	Manufacturer
ACx580	ACH580-VCR-065A-4	ABB

Product Construction Summary

Plastic Type 1 Enclosure with Carbon Steel R4 Base

Options / Subcomponent Summary

Variable Frequency Drive: ABB

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
86	10.0	8.0	56.0	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
		2.50	0.0	1.5	-	-	1.68	0.68

Test Mounting Details

UUT was mounted to wall fixture using (4) 5/16" grade 8 bolts. Wall fixture was isolated using (4) VMC Group MSSH-1E-530N spring isolators.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

**UUT-19A
(For VFD
Subcomponent)**

Test Report: DCL 30686-1801; UUT-5A

Model Line	Model Number	Manufacturer
ACx580	ACH580-VCR-012A-4	ABB

Product Construction Summary

Plastic Type 1 Enclosure with Carbon Steel R1 Base

Options / Subcomponent Summary

Variable Frequency Drive: ABB

UUT Properties

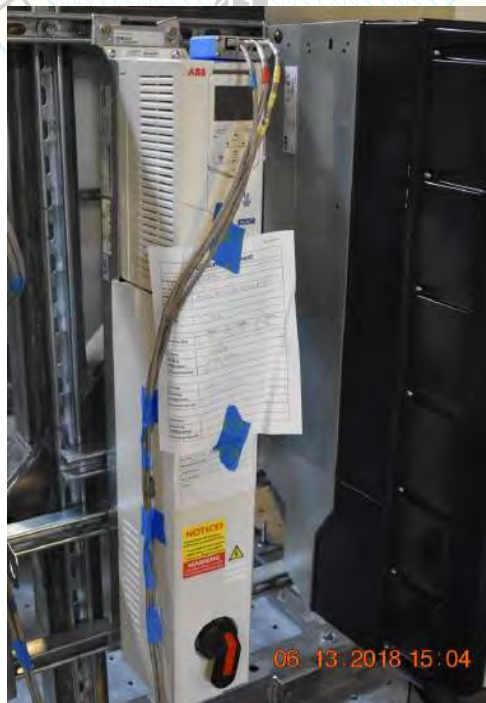
Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
30	9.0	5.0	40.0	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
		2.50	0.0	1.5	-	-	1.68	0.68

Test Mounting Details

UUT was mounted to wall fixture using (4) 1/4" Grade 8 bolts. Wall fixture was rigidly mounted to the table using M12 threaded rods spaced 8" on center.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

**UUT-19B
(For VFD
Subcomponent)**

Test Report: DCL 30686-1801; UUT-5B

Model Line	Model Number	Manufacturer
ACx580	ACH580-VCR-012A-4	ABB

Product Construction Summary

Plastic Type 1 Enclosure with Carbon Steel R1 Base

Options / Subcomponent Summary

Variable Frequency Drive: ABB

UUT Properties

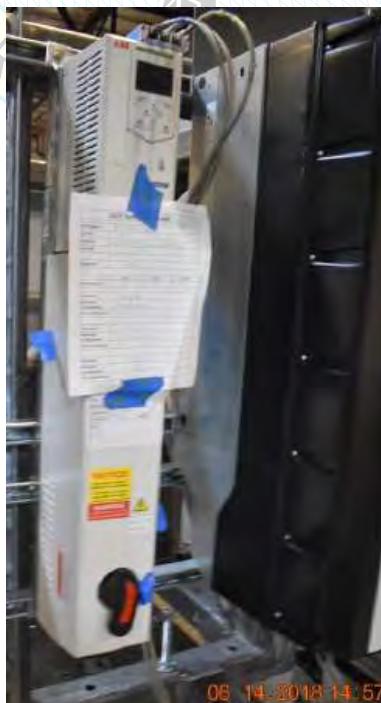
Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
30	9.0	5.0	40.0	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
		2.50	0.0	1.5	-	-	1.68	0.68

Test Mounting Details

UUT was mounted to wall fixture using (4) 1/4" grade 8 bolts. Wall fixture was isolated using (4) VMC Group MSSH-1E-530N spring isolators.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.