

DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR HCAI SPECIAL SEISMIC	OFFICE USE ONLY
CERTIFICATION PREAPPROVAL (OSP)	APPLICATION #: OSP-0116
HCAI Special Seismic Certification Preapproval (OSP)	
Type: New X Renewal	
Manufacturer Information	
Manufacturer: Daikin Applied	
Manufacturer's Technical Representative: Art Rizoli	
Mailing Address: 207 Laurel Hill Rd. Verona, VA 24482	
Telephone: (540) 248-9539 Email: Art.rizoli@daikina	pplied.com
Product Information	10,
Product Name: Chillers	· ·
Product Type: Chillers - Water Cooled	12
Product Model Number: See Attachment A for a complete listing of models in	cluded in this application.
General Description: Centrifugal Chillers. BY: Mohammad Karim	0
Mounting Description: Rigid or Neoprene Pad Isolated, Floor Mounted	
Tested Seismic Enhancements: Seismic enhancements made to the test anomalies during the tests shall be incorp	units and/or modifications required to address porated into the production units.
Applicant Information	4.
Applicant Company Name: TRU Compliance, by Structural Integrity Associat	es Inc.
Contact Person: Galen Reid	
Mailing Address: 233 SW Wilson Ave., Suite 101 Bend, OR 97702	
Telephone: (541) 604-7225 Email: greid@structint.co	
Title: Director, TRU Compliance	····

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





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California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)
Company Name: STRUCTURAL INTEGRITY ASSOCIATES, INC.
Name: Andrew Coughlin California License Number: S6082
Mailing Address: 5215 Hellyer Ave, Suite 101 San Jose, CA 95138-1025
Telephone: (415) 635-8461 Email: acoughlin@structint.com
Certification Method
GR-63-Core X ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3
Other (Please Specify):
FOR CODE CO
Testing Laboratory
Company Name: Pacific Earthquake Engineering Research Center (PEER) Contact
Person: Amarnath Kasalanati
Mailing Address: 1301 South 46th St., Bldg. 420 Richmond CA 94720-1729
Telephone: (510) 642-3437 Email: Amarnath1@berkeley.edu
Company Name: PORTLAND STATE UNIVERSITY (PSU)
Contact Person: Peter Dusicka
Mailing Address: PO Box 751, Portland OR 97207
Telephone: (503) 725-9558 Email: dusicka@pdx.edu
Company Name: UNIVERSITY OF CALIFORNIA, SAN DIEGO (UCSD)
Contact Person: Gianmario Benzoni
Mailing Address: 9500 Gilman Drive, #0826 La Jolla CA 92093-0826
Telephone: (858) 534-1432 Email: benzoni@ucsd.edu



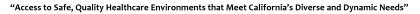


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Seismic Parameters

Design Basis of Equipment or Components	esign Basis of Equipment or Components (Fp/Wp) = 1.15 (Rigid: SDS = 1.6, z/h = 1); 3.60 (Neoprene Pad Isolated: SDS = 2.0, z/h = 1)						
SDS (Design spectral response accele	eration at short period, g) = 1.6 (Rigid); 2.0 (Neoprene Pad Isolated)						
ap (Amplification factor) =	1.0 (Rigid); 2.5 (Neoprene Pad Isolated)						
Rp (Response modification factor) =	2.5						
Ω_0 (System overstrength factor) =	2.0						
lp (Importance factor) =	1.5						
z/h (Height ratio factor) =	1 and 0						
Natural frequencies (Hz) =	See Attachment						
Overall dimensions and weight =	See Attachment ODE						
4	NED HOLE						

HCAI Approval (For Office Use Only) - Approval Expires on 01/11/2029							
Date:	1/11/2023	R	OSP-0116	- m			
Name:	Mohammad Karim		BY: Mohammad Karim	Title:	Supervisor, Health Facilities		
Special	Seismic Certification Va	llid <mark>Up to</mark> : SDS ((g) = See Above	z/h =	See Above		
Conditic	on of Approval (if applica	ble):	DATE: 01/11/2023				
		ALTRON.	NIA BUILDING CO	22			





STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY

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	aikin Applied MC and WMC, Magneti	ic Bearing	Centrigua		TABLE	1	
Certified Product Constru Carbon Steel	-	ic Dearing	Centrigua				
Certified Options Summo Subcomponents and opti	•	in Table 3.					
Mounting Configuration: Base mounted - neoprene Note: Installed mounting config	e isolated	FOF		E CO	and stiffness	s to those tested.	
Building Code: CBC 2022	I.S.		Certificatio		S _{DS} =	2.0 g z/h=1.0 2.0 g z/h=0.0	1.5
Model Line	Model		mensions		Weight	Notes	UUT
		Depth	Width	Height	(lb.)		
Magnitude TMC	TMC044S	128.0	ha35.0na	d 79.0rin	5,086	TMC and WMC Model Lines are the same except for software	Extrap.
	TMC048S	128.0	35.0	79.0	5,920		1
Magnetic Bearing	TMC060S	134.2	47.2	82.9	6,705		Interp.
Templifier Heat Pump	TMC036D	169.2	43.5	80.8	7,709		Interp.
(1200-5000 MBH)	TMC044D	169.1	47.2	83.9	8,221		Interp.
	TMC048D	169.1	47.2	83.9	9,321		Interp.
	TMC060D	168.5	55.2	94.3	9,555		3
	WMC043S	128.0	35.0	79.0	5,086		Extrap.
Magnitude [®] Magnetic	WMC048S	128.0	35.0	79.0	5,920		1
Bearing Centrifugal	WMC060S	134.2	47.2	82.9	6,705	TMC and WMC Model Lines	Interp.
Chillers, Model WMC,	WMC036D WMC043D	169.2	43.5	80.8	7,709	are the same except for software	Interp.
(125-400 tons)		169.1	47.2	83.9	8,221	Soltware	Interp.
	WMC048D WMC060D	169.1	47.2	83.9	9,321		Interp.
	WMC000D	168.5	55.2	94.3	9,555		3

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Daikin Applied

HSC, TSC, WDC and WSC Centrifugal Compressor Water Chillers

Certified Product Construction Summary:

Carbon Steel

Certified Options Summary:

Subcomponents and options are summarized in Table 4.

Mounting Configuration:

Base mounted - rigid or neoprene isolated

Note: Installed mounting configuration must be of similar configuration and equivalent strength and stiffness to those tested.

FORC

ODF

Building Code: CBC 2022	Building Code: CBC 2022		2022 Seismic Certification Limits:			1.6 g z/h=1.0 1.6 g z/h=0.0 I _P =	<i>I</i> _P = 1.5	
Model Line	Model	Dimensions (in)		Weight	Notes	υυτ		
Model Line	Model	Depth	Width	Height	(lb.)	Notes	001	
	HSC063	2 175.0 O	ha 53.0 na	d 90.0rin	9,170	0	5	
Heat Recovery	HS <mark>C079</mark>	175.0	80.0	105.0	22,007		Interp.	
Centrifugal Compressor Chillers, - HSC	HSC087	175.0	80.0	105.0	24,999	HSC, TSC and WSC Model	Interp.	
	HSC100	181.0	104.0	106.0	38,823	lines are the same except for software	Interp.	
(200-1250 tons)	HSC113	181.0	104.0	106.0	43,017	Software	Interp.	
	HSC126	181.0	104.0	106.0	43,017		Interp.	
Tanaalifian Cantaifu aal	TSC063	175.0	53.0	90.0	9,170		5	
Templifier Centrifugal	TSC079	175.0	80.0	105.0	22,007		Interp.	
Compressor Heat	TSC087	175.0	80.0	105.0	24,999	HSC, TSC and WSC Model	Interp.	
Pump Water Heaters, — TSC —	TSC100	181.0	104.0	106.0	38,823	lines are the same except for software	Interp.	
(5,000 to 19,000 MBH)	TSC113	181.0	104.0	106.0	43,017	Soltware	Interp.	
	TSC126	181.0	104.0	106.0	43,017	-	Interp.	
	WDC063	224.0	75.0	106.0	37,515		Interp.	
Double Centrifugal	WDC079	224.0	93.0	106.0	54,197		Interp.	
Compressor Chillers,	WDC087	224.0	93.0	106.0	54,197	-	Interp.	
WDC	WDC100	231.0	118.0	115.0	78,781		Interp.	
(400-2500 tons)	WDC113	231.0	118.0	115.0	78,781	-	Interp.	
	WDC126	231.0	118.0	115.0	78,781		2	
	WSC063	175.0	53.0	90.0	9,170		5	
Single Centrifugal	WSC079	175.0	80.0	105.0	22,007		Interp.	
Compressor Chillers,	WSC087	175.0	80.0	105.0	24,999	HSC, TSC and WSC Model	Interp.	
WSC	WSC100	181.0	104.0	106.0	38,823	lines are the same except for software	Interp.	
(200-1250 tons)	WSC113	181.0	104.0	106.0	43,017	SUILWAIE	Interp.	
	WSC126	181.0	104.0	106.0	43,017		Interp.	

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TABLE 2

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Manufacturer:	Daikin Applied		rators, & Condensers	TABLE 3	
Model Line: TMC and WMC, Magnetic B Building Code: CBC 2022		Bearing Centrifugal Chillers Seismic Certification	on Limits: $S_{DS} = 2.0 g z/h = 1.0$ $S_{DS} = 2.0 g z/h = 0.0$	I _P = 1.5	
Component Type	Manufacturer	Model	CODE Description	Note	s UUT
		TT300			1
		TT350	Magnetic Bearing Compressor with		Interp
Compressor	Danfoss/Turbocor	TT400	Integral Motor and Variable Frequency		Interp
		TT500	Drive (Carbon Steel)		Interp
		TT700			3
Evaporator	Daikin	E2209 BY M	ohammad Karim 🔍 O		1
		E2212			5
		E2609	Carbon Steel ASME Shell with Copper		Interp
		E2612 DATE	Tubes /11/2023		Interp
		E3009			3
		C2009			1
		C2012	Carbon Steel ASME Shell with Copper		Interp
Condenser	Daikin	C2209			Interp
		C2212			5
		C2609			3
Controllers	Benshaw/Carel	Part 332830705	MicroTech II, Carel based, Carbon Steel	Unit Controller	1,3
On emotion lists of	Tru-Vu	Part 331670401	OITS, 21" Touch Screen, Plastic		3,5
Operator Interface	AxiomTech	Part 330276502	OITS, 15" Touch Screen, Plastic		1

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Manufacturer: Model Line:	Daikin Applied TMC and WMC, Magn	s, Evaporators, & Condensers	TABLE 3	
Building Code: CBC 2	022	Seismic Certification Limits: $S_{DS} = 2.0 g z/h = $ $S_{DS} = 2.0 g z/h = $	$I_{\rm P} = 1.5$	
Component Type	Manufacturer	Model FOR CODE Description	Note	es UUT
		BOX-ELEC,BEN- WMC_145S_B_TT300_ 01450_00000_00000_ D_00460_ H6_ A_ S_ D_ N_ N_ OSP-0116 S_ N_ N_N_ S_RA BY: Mohammad Karim BOX-ELEC,BEN-	WMC048S	1
		WMC_200S_B_TT700_TE 01/11/2023 01640_00000_00000_D_ 00460_H6_A_S_D_N_N_ S_N_N_N_S_RA	WMC060S	Interp.
Power Panel	Benshaw	BOX-ELEC,BEN- WMC_150D_C_TT300_ 01350_TT300_01350_D_ 00460_H6_A_S_D_N_N_ S_N_N_N_S_RA	WMC036D	Interp.
		BOX-ELEC,BEN- WMC_275D_C_TT350_ 02160_TT350_02160_ D_ 00460_ H6_ A_ S_ D_ N_ N_ S_ N_ N_ N_ S_RA	WMC044D	Interp.

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Manufacturer: Model Line:	Daikin Applied TMC and WMC, Magne	etic Bearing Centrifugal Chillers	aporators, & Condensers	TABLE 3	
Building Code: CBC 2022		Seismic Certificatio	on Limits: $S_{DS} = 2.0 g z/h = 1.0$ $S_{DS} = 2.0 g z/h = 0.0$	I _P = 1.5	
Component Type	Manufacturer	Model FO	CODE Description	Note	s UUT
Power Panel	Benshaw	BOX-ELEC,BEN- WMC_290D_C_TT400_ 01500_TT400_01500_D_ 00460_H6_A_S_D_N_N_ S_N_N_N_S_RA	HCAi DSP-0116	WMC048D	Interp
i ower i anet		BOX-ELEC,BEN- WMC_350D_C_TT700_ 01640_TT700_01640_D_ 00460_H6_A_S_D_N_N_ S_N_N_N_S_RA	: 01/11/2023	WMC060D	3
		AB	UILDING		

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nufacturer: del Line:			Table Description: Compressors, Evaporators, & Condensor WSC Centrifugal Compressor Water Chillers					
Building Code: CBC 2022		Seismic Certifica	tion Limits: $S_{DS} = 1.6 g z/h = 1.0$ $S_{DS} = 1.6 g z/h = 0.0$	I _P = 1.5				
component Type	Manufacturer	Model	R CODE Description	Note	s UU1			
		CE063			5			
		CE079			Inter			
Compressor	Daikin	CE087	Oil Centrifugal Compressor		Inter			
Compressor	Daikiii	CE100	OSP-0116		Inter			
		CE113			Inter			
		CE126 DV-1	Appammad Karim		2			
		E2212			5			
		E2612			Inter			
		(E3012 DAT	E: 01/11/2023		Inter			
		E3612			Inter			
Fuenerator	Daikin	E4212	Carbon Steel ASME Shell with Copper		Inter			
Evaporator	Daikili	E2416	Tubes		Inter			
		E3016			Inter			
		E3616	BLITIDING		Inter			
		E4216	OILDIN		Inter			
		E4816			2			
			Part 350147201, CE063-CE087		5			
Oil Pump	Daikin	16	Compressors, 1hp, 120V					
on Fullip	Daikiii	10	Part 350147221, CE100-CE126		2			
			Compressors, 1hp, 120V		2			
Oil Cooler	Alfa Laval	26	Part 74666413	Stainless Steel Brazed	Plato 5			
	Alla Laval	48	Part 74666414		2			

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lanufacturer:	Daikin Applied		Table Description: Compressors, Evapo	rators, & Condensors	TABLE 4
lodel Line:	HSC, TSC, WDC and WSC	Centrifugal Compressor Wa	ater Chillers		
Building Code: CBC 2022		Seismic Certifica	tion Limits: $S_{DS} = 1.6 g z/h = 1.0$ $S_{DS} = 1.6 g z/h = 0.0$	I _P = 1.5	
Component Type	Manufacturer	Model	R CODE Description	Notes	s UUT
		C2212			5
		C2612			Interp
		C3012			Inter
		C3612	OSP-0116		Inter
Condenser	Daikin	C4212	Carbon Steel ASME Shell with Copper		Inter
Condensei	Daikiii	C2416 DV-1	Hohammad Karim		Inter
		C3016			Inter
		C3616			Inter
		C4216 DAT	E: 01/11/2023		Inter
		C4816			2
Controller	Benshaw	Part 333529001	— MicroTech II, Carel based, Carbon Steel	Unit Controller	2,5
Controller	Delisiidw	Part 333529201		Compressor Controller	2,5
On enerte a laste afe e e	Tru-Vu	Part 331670401	OITS, 21" Touch Screen, Plastic		3, 5
Operator Interface	AxiomTech	Part 330276502	OITS, 15" Touch Screen, Plastic		1, 2
		VFD015AMA	OILDIN		Extra
		VFD018AMA			5
		VFD026AMA			Inter
		VFD035AMA			Inter
VFD Starter ¹	ABB	VFD045AMA			Inter
		VFD059AMA			Inter
		VFD073AMA			Inter
		VFD081AMA			6,7

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Manufacturer: Model Line:	Daikin Applied HSC, TSC, WDC and WSC (Centrifugal Compressor Wat	oorators, & Condensors	TABLE 4	
Building Code: CBC 2022			Seismic Certification Limits: $S_{DS} = 1.6 g z/h = 1.0$ $S_{DS} = 1.6 g z/h = 0.0$		
Component Type	Manufacturer	Model FC	CODE Description	Note	es UUT
		23	230hp, 200V - 575V, 460V tested		5
		25	250hp, 2300V-6600V		Interp.
		29	290hp, 200V - 575V		Interp.
		32	320hp, 2300V-6600V		Interp.
		35	350hp, 200V - 575V		Interp.
			400hp, 200V - 575V		Interp.
		41	410hp, 200V-6600V		Interp.
		47 DATI	450hp, 200V - 575V		Interp.
Motor	Regal Beloit	49 DAT	500hp, 200V - 575V	Semi-Hermetic Coppe	Intorn
		50	500hp, 2300V-6600V	windings/Carbon Steel Shell	Interp.
		57	575hp, 200V - 575V		Interp.
		58	580hp, 2300V-6600V		Interp.
		61	600hp, 380V - 6600V		Interp.
		65	650hp, 2300V - 6600V		Interp.
		66	650hp, 200V - 575V		Interp.
		72	725hp, 380V - 6600V		Interp.
		84	850hp, 380V - 6600V		2

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lodel Li	ne: HSC, TMC, TSC,	WDC, WMC, WSC						
UUT	Unit Description (Mounting)	Report Number (UUT#)	Testing Lab	Year Tested	ISO 17025 Accredited?	S _{DS}	z/h	۱ _P
1	WMC145S E2209/C2009 (Base mounted - isolated)	iSTAR-1003 (UUT1)	iSTAR Lab	2010	No ¹	2.0 2.0	1.0 0.0	1.5
2	WDC126 E4816/C4816 (Base mounted - isolated)	SRMD-2010-08 (UUT1)	Caltrans SRMD Test Facility	2010	No ¹	1.6 1.6	1.0 0.0	1.5
3	WMC060DC/E3009- HB2CL2V/C2609-GB2CL2V (Base mounted - rigid)	15046-TR-001-R1 (UUT3)	Pacific Earthquake Engineering Research (PEER)	2017	Yes	2.0 2.5	1.0 0.0	1.5
4		Here and the second sec	NOT USED	N Y	Z			
5	WSC063M/E2212- 2RA/C2212-2RA (Base mounted - rigid)	15046-TR-001-R1 (UUT5)	Pacific Earthquake Engineering Research (PEER)	2017	Yes	2.0 2.5	1.0 0.0	1.5
6	VFD081AMA (Base mounted - isolated)	15046-TR-001-R1 (UUT6) TE	Pacific Earthquake Engineering Research (PEER)	2017	Yes	2.0 2.5	1.0 0.0	1.5
7	VFD081AMA (Base mounted - rigid)	15046-TR-001-R1 (UUT7)	Pacific Earthquake Engineering Research (PEER)	2017	Yes	2.0 2.5	1.0 0.0	1.5
		B	UILDING					

1. iSTAR Lab and Caltrans SRMD Test Facility were not ISO 17025 accredited at the time of testing but has been reviewed by TRU Compliance and found to mee the requirments for ICC-ES AC156 testing. Review form is on file with TRU Compliance.

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Manufacturer:	Daikin Ap	plied					_		-
Model Line:		, TSC, WDC, WMC, W	/SC					JUT	1
Model Number:	-	E2209/C2009		Serial Nu	mber:	N/A			
Product Constru	ction Summary:								
Carbon Steel									
• •	nponent Summai	•		_					
-	,	• • •	r: Daikin (E2209); Con						
			ator Interface: Axiom						
Power Panel: Be	enshaw (BOX-ELE	C,BEN-WMC_145S_B	_TT300_01450_00000_	00000_ D_	00460_H	H6_A_S_	D_ N_ N_9	5_ N_ N_ N	I_ S_RA)
		F		Dr.					
		NED		ND,					
		, Li	UUT Properties						
Weight		Dimension (in)	Lowest Natural Frequency (Hz)						
(lb.)	Depth	Width	OS Height 16	16 Front-Back		Side-Side		Vertical	
5,920	128.0	35.0	79.0	12	.3	10	0.1		-
		UUT Highes	st Passed Seismic Run	Informat	ion 💍				
Buildi	ng Code	Test Crite	eria S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
СВО	2022		156 01/ 12.0 2.0	3 1.0 0.0	1.5	3.20	2.40	-	-
Test Mounting D	etails: (Test Rep	ort: iSTAR-1003)(UUT	Г1)	ABBB	0		•		
-					V				
Finish	-				-				
-				COV					
			SUMPING	1 AT	Transfer of	-			
		A Part	ALL IL	- Destroy				-	
		and the second se		NOT THE	The state of the s				
		A MARKED	and the second s						
	0	A	3	1	NP?				
T	1	AL.	2016	-	Q?				

UUT1 was base mounted - isolated in 1/4" neoprene pads with eight (8) 1" Grade 8 bolts. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

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Madal Lina.	Daikin Ap	plied									`
Model Line:	HSC, TMC	, TSC, W	VDC, WMC, WS	SC					Ľ	JUT	2
Model Number:	WDC126 E	4816/C	4816			Serial Nu	mber:	N/A			
Product Construc	tion Summary:										
Carbon Steel											
Options/Subcom, Compressor: Dai Dil Cooler: Alfa La Controller: Bens Motor: Regal Belo	kin (CE126); Eva aval (48 - Part 74 haw (Part 33352	porato 4666414	4); Condense	r: Daikin (C	24816);	,		.,	502);		
		14	5	UUT Pro	operties		2				
Weight		Dir	mension (in)				Lowes	t Natural	Frequen	cy (Hz)	
(lb.)	Depth	4	Width	OSHei	ight 16	Front-Back		Side-Side		Vertical	
78,781	231.0		118.0	11	5.0	8.5 6			5.3 21.5		
			UUT Highest	Passed Se	ismic Run	Informa	tio <mark>n</mark>				
Building Code			Test Crite	ria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	
Buildir	CBC 2022					1.0					A _{RIG-V} (g)
	2022	G	IC <mark>C-ES AC</mark> 1	156 01/	$11^{1.6}_{-1.6}_{-1.6}$	3 0.0	1.5	2.56	1.92	1.07	Α_{RIG-V} (g) 0.43



UUT2 was base mounted - isolated on 1/4" neoprene pads with eight (8) 1" Grade 8 bolts. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

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Manufacturer:	Daikin Ap	plied							.		ר
Model Line:	HSC, TMC	C, TSC, N	NDC, WMC, W	SC						JUT	3
Model Number:	WMC0601	DC/E300)9-HB2CL2V/(C2609-G	B2CL2V	Serial N	umber:	517A000	900		
Product Construc	tion Summary	:									
Carbon Steel											
Options/Subcom		-									
Compressor: Dar	•	• •	•								
Controllers: Bens Power Panel: Be											
Power Panel: Be	ISNAW (BOX-ELE	EC,BEN-	WMC_350D_C	R	01640_11/00	_01640_ L	0_00460_	H6_A_S_	D_ N_ N_3	5_ N_ N_ I	N_ S_RA
			20 F			Min					
			SL	11117	Properties						
Weight		Di	mension (in)		Troperties		Lowes	t Natural	Frequen	cy (Hz)	
(lb.)	Depth	14	Width			Front-Back		Side-Side		Ver	tical
9,555	168.5		55.2		94.3 14.2		4.2	14.3		12.8	
			UUT <mark>Highes</mark>	t Passe	d Seismic Ru	n Informa	tio <mark>n</mark>				
Buildin	g Code		Test Crite	eria	S _{DS} (g)	z/h	Ι _Ρ	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (
CBC	2022	Ç	ICC-ESAC15		1/1/2.0	3 1.0 0.0	1.5	3.20	2.40	1.67	0.67
Test Mounting De	tails: (Test Rep	ort: 150	46-TR-001-R1	.)(UUT3)		CEPPE	201	-	-		
		T	DEN	201							
	-		1 TAM	The local division of		FOY	F				
				BUT	DINE						
			I to the other				and the second	6			
			a color		1	19	1 4				
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		「話る			N. YE.						
		NT.	the proof	. The Care		H					
	Call of the	2			T K	a main	and a	3			
		M.C.	100			1	5				
		<			d	S.		*			
		the second			T			-			
		-		-	- Alera La						
	ounted rigid +	o the to	blousing	ht (0) 1"	SAE Grada 0	holte we	chore and		bod	vono no	اسمطمت
UUT3 was base m each mounting fo	-	o the ta	inte using eigi	πι (δ) Τ΄	SAE GIADE 8	bolls, Wa	shers and	ла 1/4° ГГС	med ueot	nene pac	under
Jnit maintained s											

Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

OSP-0116

1700688-CR-002-R0



Manufacturer:	Daikin Ap	plied						_		
Model Line:	•	, , TSC, WDC, WMC, WS	SC					ו נ	JUT	5
Model Number:	-	/E2212-2RA/C2212-2			Serial Nu	umber:	STNU16	1200060		
Product Construe	ction Summary:	· · · · ·								
Carbon Steel										
Options/Subcom	-									
-		porator: Daikin (E22		-	n (16 - Pa	rt 35014 ⁻	7201);			
		4666413); Condense				U (Dart 2)	01670401			
		9001, Part 33352920: Motor: Regal Beloit (2			e: Tru-vi	u (Part 33	31670401)			
VFD Starter. ADL		Notor: Regar Defort		VIVIV	Min					
		NE								
			UUT Pro	operties		Z				
Weight (lb.) Depth		Dimension (in)	Den.	ight 16	_		t Natural Frequen			l'a a l
9,170	175.0	Depth Width 175.0 53.0				-Back 1.0	Side-Side		Vertical 10.8	
9,170	175.0	UUT Highest).0 Dismic P un				5.0	10.0	
Buildir	ng Code	Test Crite		S _{DS} (g)	z/h	I I _P	Δ(σ)	Δ(σ)	A _{FLX-V} (g)	Δ(σ)
	-			2.0	1.0					
CBC 2022		ICC-ESAC	156 01/	1/202	3 0.0	1.5	3.20	2.40	1.67	0.67
Test Mounting De	etails: (Test Rep	ort: 15046-TR-001-R1)	(UUT5)	ANNAN ANNA	AAAA	0	-	-	-	
						· V	-11-	1 Hom		
					O					
				C	CH-	No.				
<u> </u>			PUILI	DING	P. Start			Interio		
			1 9	ALL SK T				The State		
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		Tour		1		JUD 10	T			
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		The second	and the second sec	and the second s						
	III -					-	- 50	J.		
			-		~	Car a				
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					a ma					
							2. 20			
-				CONTRACTORS						
	-	o the table using eigh								
	-	ity and remained fun		manufact	urer requ	uirement	after shal	ke table te	est.	
Contents were in	cluded in testing	g per operating condi	tions.						•••••	
					I RU Com		by Structu	-		
						844-	TRU-0200	info@t	rucompli	ance.con

1700688-CR-002-R0



Manufacturer:	Daikin Ap	plied							_		
Model Line:		HSC, TMC, TSC, WDC, WMC, WSC								JUT	6
Model Number:	VFD081A	MA				Serial Nı	ımber:	21643C0	001		
Product Construe	ction Summary	:									
Carbon Steel Enc	losure										
Options/Subcom	-	-									
<pre>/FD Starter: ABE during testing</pre>	8 (VFD081AMA) -	A ratche	et strap aroun	d the cabi	net was ind	cluded as	s a seism	ic upgrade	e to keep	the door	closed
Juning testing				200	DE						
			IED FC		DEC	Mp					
		4	S.	UUT Pro	operties		T				
Weight		Dimension (in)						st Natural Frequen		1	
(lb.) 944	Depth 61.0	2	Width 59.0		ight 16	Front-Back		Side-Side 1.9		Vertical 4.3	
944	01.0		UUT Highest					<u> </u>	.9	4	.3
Buildir	ng Code	P	Test Crite		S _{DS} (g)	z/h	I _P	Δ(σ)	Δ	A _{FLX-V} (g)	A
	2022		ICC-ESAC156		2.0	2 1.0	1.5	3.20	2.40	1.67	0.67
CDC	2022		ice Estici	50 017	2.5	0.0	4.9	5.20	2.40	1.01	0.01
est Mountina De	tails: (Test Ren	ort 1504	46-TR-001-R1)	(UUT6)			S				
Test Mounting De	etails: (Test Rep	oort: 150-	46-TR-001-R1)				22			-	

UUT6 was mounted on a test fixture (total wt. 3,815 lbs.) that was base mounted - isolated on four (4) VMC MSSH-1E-1000 isolators using four (4) 5/8" SAE Grade 8 bolts, each to fasten the isolators to the table and one (1) 3/4" SAE Grade 8 bolt each to fasten the UUT to the isolators.

Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

1700688-CR-002-R0



Manufacturer:	Daikin Ap	plied									7
Model Line:	HSC, TMC	HSC, TMC, TSC, WDC, WMC, WSC							ļ	JUT	1
Model Number:	odel Number: VFD081AMA							21643C0	001		
Product Construc	-	:									
Carbon Steel Encl	losure										
Options/Subcom VFD Starter: ABB		-	ot strap arou	und the cat	vinot was in	cludod ar	- a coism	ic upgrad	a ta kaan	the door	closod
during testing	(VFDU81AMA) -	Aratch	et strap arou	ind the cal	met was m	ciuded as	a seisin	iic upgraue	е то кеер	the door	ciosed
				200							
			F	ORCU	JDE C	21					
			ED'			Mp,					
			SI	UUTP	roperties		-				
Weight		Dir	mension (in)	Mar Mar Maran		Lowest Natu			Frequen	cy (Hz)	
(lb.)	Depth	2Z	Width	OSF	eight 16	Front-Back		Side-Side		Ver	tical
944	61.0		59.0		80.0		4.6		4.7		3.9
		P	UUT Highes						r	1	
Building Code			Test Criteria		S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g
CBC 2022			ICC-ESAC156 01/12.5		$\frac{2.0}{11/202}$	3 1.0	1.5	3.20	2.40	1.67	0.67
		Y			2.5	0.0					
Test Mounting De											
15		-0	a liz			toy					
5 -	- 7	0	Ó	CALL.	DINO						
	Mark.		0					_	-		
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		1	- 9	.			-	Contract of the second			
					ACA IN	2		P			
100 B 100			0								
-		AP 0	0						1	-	
	-				-	8	4	3	12 5 4		
	34	and the			10	4	-	-	Creek.	and the second second	
					A Carlos		CTL C	and the second second		Contraction of the second	
UUT7 was mount							-				
were locked to sir	-	-				table usi	ng four ((4) 5/8" SA	E Grade 8	bolts, w	ashers
and one (1) 3/4" S	AE Grade 8 boli	t each to	b fasten the l	JUI to the	isolators.						

Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.