



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR HCAI SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0317

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: JOHNSON CONTROLS, INC.

Manufacturer's Technical Representative: Jake Ballentine

Mailing Address: 5000 Renaissance Drive, New Freedom, PA 17349

Telephone: (717) 659-3112

Email: jacob.c.ballentine@jci.com

Product Information

Product Name: Chillers

Product Type: Chillers - Air Cooled

Product Model Number: YVAA/QTC4 AIR-COOLED SCREW LIQUID CHILLERS

General Description: Painted carbon steel air-cooled screw liquid chillers.

Mounting Description: Neoprene Vibration Isolated, Floor Mounted

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: Manwill Engineering LLC

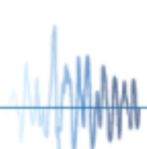
Contact Person: Derek Manwill

Mailing Address: PO Box 1194, Bend, OR 97709

Telephone: (541) 241-2102

Email: derek@manwillse.com

Title: President





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FACILITIES DEVELOPMENT DIVISION**

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

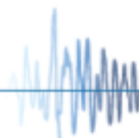
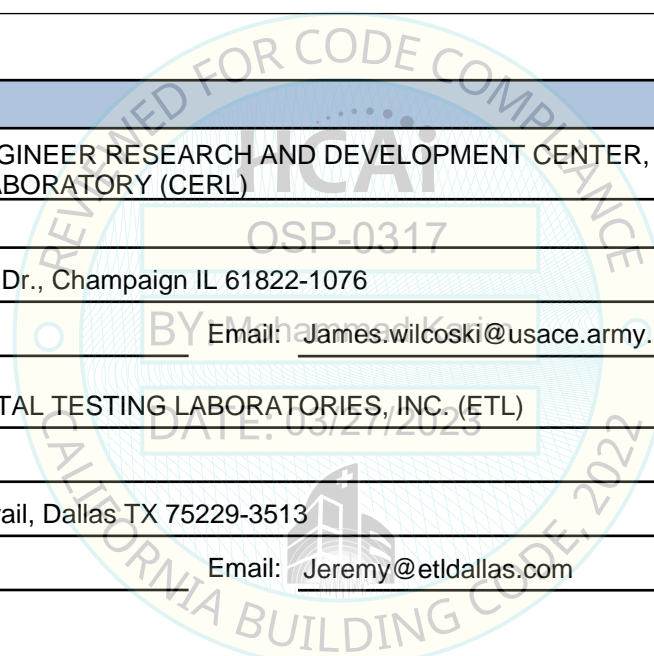
Company Name: MANWILL ENGINEERING LLC
Name: Derek Manwill California License Number: S6266
Mailing Address: PO Box 1194, Bend, OR 97709
Telephone: (541) 241-2102 Email: derek@manwillse.com

Certification Method

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

Testing Laboratory

Company Name: U.S. ARMY ENGINEER RESEARCH AND DEVELOPMENT CENTER, CONSTRUCTION ENGINEERING RESEARCH LABORATORY (CERL)
Contact Person: James Wilcoski
Mailing Address: 2902 Newmark Dr., Champaign IL 61822-1076
Telephone: (217) 373-6763 Email: James.wilcoski@usace.army.mil
Company Name: ENVIRONMENTAL TESTING LABORATORIES, INC. (ETL)
Contact Person: Jeremy Lange
Mailing Address: 11034 Indian Trail, Dallas TX 75229-3513
Telephone: (972) 247-9657 Email: Jeremy@etldallas.com





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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 3.51

SDS (Design spectral response acceleration at short period, g) = 1.95

a_p (Amplification factor) = 2.5

R_p (Response modification factor) = 2.5

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 1

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

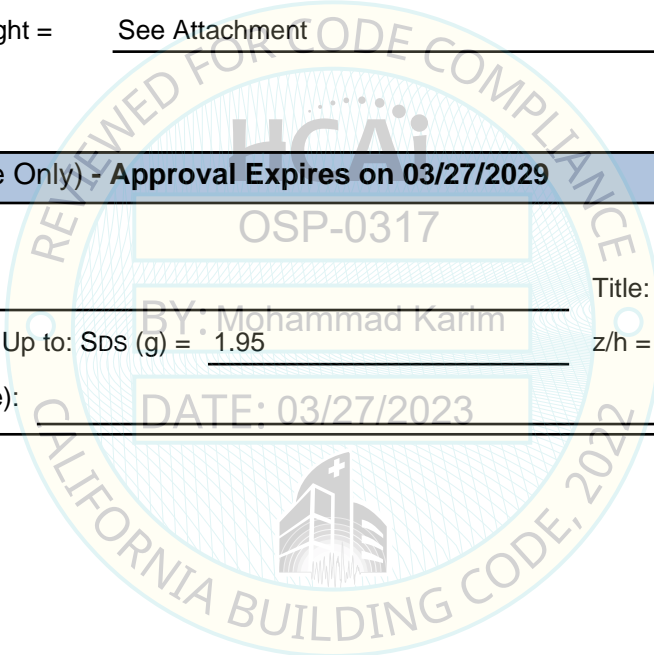
HCAI Approval (For Office Use Only) - Approval Expires on 03/27/2029

Date: 3/27/2023

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = 1.95 z/h = 1

Condition of Approval (if applicable): DATE: 03/27/2023



ATTACHMENT 1: CERTIFIED COMPONENTS

SPECIAL SEISMIC CERTIFICATION

TABLE 1 - YVAA

DOCUMENT NO.: 21043CR1.1

MANUFACTURER: JOHNSON CONTROLS, INC.						
PRODUCT FAMILY: YVAA/QTC4 AIR-COOLED SCREW LIQUID CHILLERS						
MODEL NUMBER	DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
	DEPTH	WIDTH	HEIGHT			
YVAA						
YVAA0153B	208.3	93.0	96.0	13,911		EXTRAP
YVAA0165B	252.0	93.0	96.0	13,801		UUT 1
YVAA0178C	296.2	93.0	96.0	17,764		INTERP
YVAA0183A	252.0	93.0	96.0	14,452		INTERP
YVAA0195A	296.2	93.0	96.0	15,306		INTERP
YVAA0198B	340.2	93.0	96.0	16,439		INTERP
YVAA0200C	231.0	93.0	96.0	16,347		INTERP
YVAA0213A	296.2	93.0	96.0	15,394		INTERP
YVAA0215C	296.2	93.0	96.0	18,036		INTERP
YVAA0218C	340.2	93.0	96.0	18,876		INTERP
YVAA0233B	296.2	93.0	96.0	15,896		INTERP
YVAA0245C	340.3	93.0	96.0	19,091		INTERP
YVAA0248C	384.1	93.0	96.0	19,927		INTERP
YVAA0263B	340.2	93.0	96.0	16,773		INTERP
YVAA0270D	296.2	93.0	96.0	16,775		INTERP
YVAA0273D	340.2	93.0	96.0	19,604		INTERP
YVAA0275E	340.2	93.0	96.0	20,422		INTERP
YVAA0278E	394.2	93.0	96.0	21,251		INTERP
YVAA0295E	384.2	93.0	96.0	21,752		INTERP
YVAA0303C	384.2	93.0	96.0	20,450		INTERP
YVAA0305C	425.0	93.0	96.0	21,273		INTERP
YVAA0308E	428.1	93.0	96.0	22,107		INTERP
YVAA0323E	384.2	93.0	96.0	22,120		INTERP
YVAA0333C	428.1	93.0	96.0	21,658		INTERP
YVAA0343E	428.1	93.0	96.0	22,193		UUT 2
MOUNTING:	Isolated floor mounted on neoprene isolators.			SEISMIC LEVEL:	$S_{DS} = 1.95g$ for $z/h = 1$	$I_p = 1.5$
NOTES:	<p>Product Construction: Painted carbon steel construction.</p> <p>Options/Subcomponents: Available subcomponents are listed in Table 3. Voltage: 460V 60Hz. Refrigerant: R-134a or R-513a. Sound Kit: Level 0. Condenser Coils: Microchannel. Protective Chiller Panels are not certified.</p>					

ATTACHMENT 1: CERTIFIED COMPONENTS

SPECIAL SEISMIC CERTIFICATION

TABLE 2 - QTC4

DOCUMENT NO.: 21043CR1.1

MANUFACTURER: JOHNSON CONTROLS, INC.						
PRODUCT FAMILY: YVAA/QTC4 AIR-COOLED SCREW LIQUID CHILLERS						
MODEL NUMBER	DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
	DEPTH	WIDTH	HEIGHT			
QTC4						
QTC4150SB	208.3	93.0	96.0	13,911		EXTRAP
QTC4165HB	252.0	93.0	96.0	13,801		UUT 1
QTC4175CC	231.0	93.0	96.0	16,347		INTERP
QTC4175PC	296.2	93.0	96.0	17,764		INTERP
QTC4185SA	252.0	93.0	96.0	14,452		INTERP
QTC4185HA	296.2	93.0	96.0	15,306		INTERP
QTC4185PB	340.2	93.0	96.0	16,439		INTERP
QTC4210SA	296.2	93.0	96.0	15,394		INTERP
QTC4210HC	296.2	93.0	96.0	18,036		INTERP
QTC4210PC	340.2	93.0	96.0	18,876		INTERP
QTC4230SB	296.2	93.0	96.0	15,896		INTERP
QTC4240HC	340.2	93.0	96.0	19,091		INTERP
QTC4240PC	384.1	93.0	96.0	19,927		INTERP
QTC4260SB	340.2	93.0	96.0	16,773		INTERP
QTC4270CD	296.2	93.0	96.0	16,775		INTERP
QTC4270SD	340.2	93.0	96.0	19,604		INTERP
QTC4270HE	340.2	93.0	96.0	20,422		INTERP
QTC4270PE	384.2	93.0	96.0	21,251		INTERP
QTC4290HE	384.2	93.0	96.0	21,752		INTERP
QTC4300SC	384.2	93.0	96.0	20,450		INTERP
QTC4300HC	425.0	93.0	96.0	21,273		INTERP
QTC4310PE	428.1	93.0	96.0	22,107		INTERP
QTC4320SE	384.2	93.0	96.0	22,120		INTERP
QTC4330SC	428.1	93.0	96.0	21,658		INTERP
QTC4340SE	428.1	93.0	96.0	22,193		UUT 2
MOUNTING:	Isolated floor mounted on neoprene isolators.			SEISMIC LEVEL:	$S_{DS} = 1.95g$ for $z/h = 1$	$I_p = 1.5$
NOTES:	<p>Product Construction: Identical to YLAA; naming/branding is the only difference. Painted carbon steel construction.</p> <p>Options/Subcomponents: Available subcomponents are listed in Table 3. Voltage: 460V 60Hz. Refrigerant: R-134a or R513a. Sound Kit: Level 0. Condenser Coils: Microchannel. Protective Chiller Panels are not certified.</p>					

ATTACHMENT 1: CERTIFIED SUBCOMPONENTS

SPECIAL SEISMIC CERTIFICATION

TABLE 3 - SUBCOMPONENTS

DOCUMENT NO.: 21043CR.1

MANUFACTURER: JOHNSON CONTROLS, INC.						
PRODUCT FAMILY: YVAA/QTC4 AIR-COOLED SCREW LIQUID CHILLERS						
MODEL NUMBER	DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
	DEPTH	WIDTH	HEIGHT			
Subcomponent: Semi Hermetic York Twin Screw Compressor - Manufacturer: Johnson Controls						
CTS24SAAD	42.1	18.9	18.3	1,133		UUT 1
CTS36SAAD	42.8	18.9	18.3	1,138		INTERP
CTS45SAAD	43.3	18.9	18.3	1,210		INTERP
CTS51SAAD	47.4	19.0	19.0	1,397		UUT 2
Subcomponent: Shell and Tube, Hybrid Falling Film Evaporator - Manufacturer: Johnson Controls						
FFE204	180.1	28.0	28.0	2,727		EXTRAP
FFE230	162.2	29.5	29.5	2,736		UUT 1
FFE278	193.6	29.5	29.5	3,197		INTERP
FFE290	211.9	29.5	29.5	3,622		INTERP
FFE331	227.7	32.5	32.5	4,268		UUT 2
Subcomponent: Fan Motor - Manufacturer: Regal Beloit						
024-36873-507	15.8	6.5	6.8	50	460V, low sound	UUT 1,2
024-34980-501	15.7	6.5	6.8	52	460V, ultra quiet	UUT 1,2
Subcomponent: Fan Impeller - Manufacturer: MultiWing						
026-41594-000	35.2	35.2	4.0	25	Low sound	UUT 1,2
026-41942-000	35.2	35.2	4.0	25	Ultra quiet	UUT 1,2
Subcomponent: Condenser - Manufacturer: Sanhua - Material: Aluminum Microchannel						
026-46798-000	1.5	86.6	47.8	376		UUT 1,2
Subcomponent: Flash Tank - Manufacturer: Johnson Controls						
375-79551-000	15.0	15.0	33.9	254	14in	UUT 1
375-89884-000	19.0	19.0	36.5	393	18in	UUT 2
Subcomponent: Oil Separator - Manufacturer: Johnson Controls						
375-93290-000	12.0	12.0	24.3	101	8in	UUT 1
375-79591-000	14.4	13.6	31.0	176	10in	INTERP
375-89951-000	21.6	20.0	37.7	324	14in	UUT 2
Subcomponent: Electronic Expansion Valve - Manufacturer: Danfoss						
025-43887-000	1.8	7.7	4.6	4.2	ETS-250	UUT 1
025-44027-000	1.8	8.2	5.7	4.9	ETS-400	UUT 1,2
Subcomponent: Vyper Drive Power/Control Panel - Manufacturer: Johnson Controls						
371-05578-109	21.0	60.0	40.0	837	460V, no Circuit Breaker	EXTRAP
371-05578-110	21.0	60.0	40.0	837	460V, no Circuit Breaker	EXTRAP
371-05578-142	21.0	60.0	40.0	837	460V, no Circuit Breaker	EXTRAP
371-05578-143	21.0	60.0	40.0	837	460V, no Circuit Breaker	EXTRAP
371-05578-120	21.0	60.0	40.0	837	460V, 500A Circuit Breaker	UUT 1
371-05578-121	21.0	60.0	40.0	837	460V, 600A Circuit Breaker	INTERP
371-05578-153	21.0	60.0	40.0	837	460V, 600A Circuit Breaker	INTERP
371-05578-154	21.0	60.0	40.0	837	460V, 800A Circuit Breaker	INTERP
371-05678-103	21.0	70.0	40.0	1,000	460V, no Circuit Breaker	INTERP
371-05678-115	21.0	70.0	40.0	1,000	460V, no Circuit Breaker	INTERP
371-05678-107	21.0	70.0	40.0	1,000	460V, 800A Circuit Breaker	UUT 2
NOTES: Table continues on the next page. Additional notes, information, and seismic parameters are shown at the end of the table.						

ATTACHMENT 1: CERTIFIED SUBCOMPONENTS

SPECIAL SEISMIC CERTIFICATION

TABLE 3 - SUBCOMPONENTS (continued)

DOCUMENT NO.: 21043CR1.1

MANUFACTURER: JOHNSON CONTROLS, INC.						
PRODUCT FAMILY: YVAA/QTC4 AIR-COOLED SCREW LIQUID CHILLERS						
MODEL NUMBER	DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
	DEPTH	WIDTH	HEIGHT			
Subcomponent: AYK550-UH-***A-+K465 Drive - Manufacturer: ABB						
024-34333-026, ABB 012A-4	8.3	4.9	14.5	14	380V-480V, 11.9A	EXTRAP
024-34334-011, ABB 024A-2	8.7	4.9	18.5	20	208V-240V, 24.2A	EXTRAP
024-34334-012, ABB 031A-2	8.7	4.9	18.5	20	208V-240V, 30.8A	EXTRAP
024-34334-021, ABB 015A-4	8.7	4.9	18.5	20	380V-480V, 15.4A	EXTRAP
024-34334-022, ABB 023A-4	8.7	4.9	18.5	20	380V-480V, 23A	EXTRAP
024-34397-000, ABB 011A-6	8.7	4.9	18.5	20	500V-600V, 11A	EXTRAP
024-34398-000, ABB 017A-6	8.7	4.9	18.5	20	500V-600V, 17A	EXTRAP
024-34396-000, ABB 09A0-6	8.7	4.9	18.5	20	500V-600V, 9.0A	EXTRAP
024-34335-011, ABB 046A-2	9.1	8.0	23.0	35	208V-240V, 46.2A	EXTRAP
024-34335-012, ABB 059A-2	9.1	8.0	23.0	35	208V-240V, 59.3A	UUT 4
024-34335-021, ABB 031A-4	9.1	8.0	23.0	35	380V-480V, 31A	UUT 1
024-34335-022, ABB 038A-4	9.1	8.0	23.0	35	380V-480V, 38A	UUT 2
024-35956-000, ABB 045A-4	9.1	8.0	23.0	35	380V-480V, 44A	INTERP
024-34399-000, ABB 022A-6	9.1	8.0	23.0	35	500V-600V, 22A	INTERP
024-34336-022, ABB 059A-4	10.3	8.0	27.1	53	380V-480V, 59A	INTERP
024-34336-023, ABB 072A-4	10.3	8.0	27.1	53	380V-480V, 72A	UUT 4
Subcomponent: AYK580-01-***A-+P940 Drive - Manufacturer: ABB						
024-40329-001, ABB 012A-4	8.8	4.9	14.7	10	380V-480V, 12A	EXTRAP
024-40329-101, ABB 024A-2	9.0	4.9	18.6	15	200V-240V, 24.2A	EXTRAP
024-40329-102, ABB 031A-2	9.0	4.9	18.6	15	200V-240V, 30.8A	EXTRAP
024-40329-003, ABB 023A-4	9.0	4.9	18.6	15	380V-480V, 23A	EXTRAP
024-40329-003, ABB 023A-4	9.0	4.9	18.6	15	380V-480V, 23A	EXTRAP
024-40329-202, ABB 011A-6	9.0	4.9	18.6	15	500V-600V, 11A	EXTRAP
024-40329-203, ABB 017A-6	9.0	4.9	18.6	15	500V-600V, 17A	EXTRAP
024-40329-201, ABB 09A0-6	9.0	4.9	18.6	15	500V-600V, 9.0A	EXTRAP
024-40329-103, ABB 046A-2	9.0	8.0	19.3	26	200V-240V, 46.2A	EXTRAP
024-40329-104, ABB 059A-2	9.0	8.0	19.3	26	200V-240V, 59.3A	UUT 4
024-40329-004, ABB 027A-4	9.0	8.0	19.3	26	380V-480V, 27A	INTERP
024-40329-005, ABB 034A-4	9.0	8.0	19.3	26	380V-480V, 34A	INTERP
024-40329-006, ABB 044A-4	9.0	8.0	19.3	26	380V-480V, 44A	INTERP
024-40329-204, ABB 022A-6	9.0	8.0	19.3	26	500V-600V, 22A	INTERP
024-40329-007, ABB 052A-4	10.1	8.0	25.0	42	380V-480V, 52A	INTERP
024-40329-008, ABB 065A-4	10.1	8.0	25.0	42	380V-480V, 65A	UUT 4
MOUNTING:	Mounted within unit.			SEISMIC LEVEL:	$S_{DS} = 1.95g$ for $z/h = 1$ $I_p = 1.5$	
NOTES:	Construction/Options: Model number uniquely identifies manufacturer, materials, and configuration of subcomponents.					

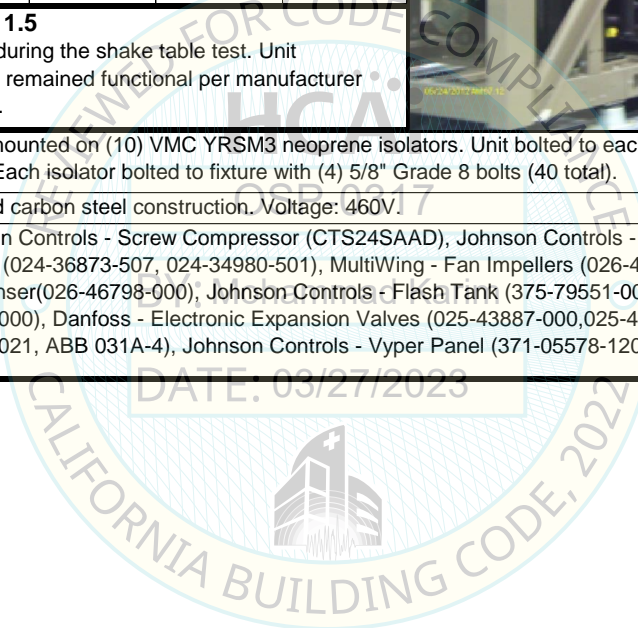
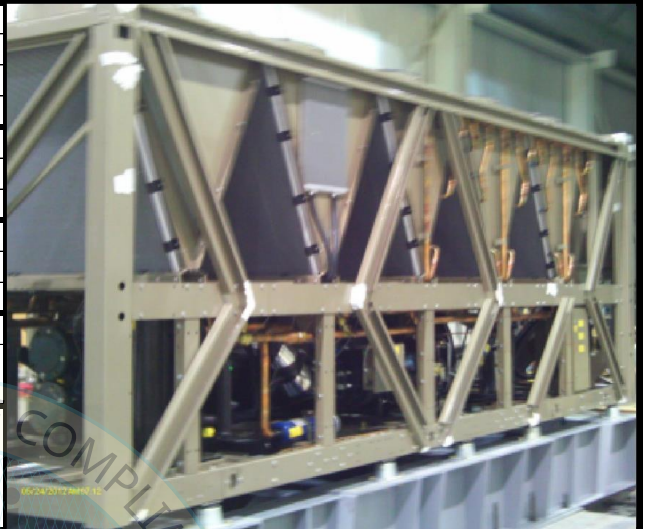
ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SPECIAL SEISMIC CERTIFICATION

UUT 1

DOCUMENT NO.: 21043CR1.1

MANUFACTURER:		JOHNSON CONTROLS, INC.				
MODEL NUMBER:		YVAA0165B, QTC4165HB				
UNIT FUNCTION:		AIR-COOLED CHILLER				
SERIAL NUMBER:		N/A				
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
252.0	93.0	96.0	13,801	6.9	4.7	9.0
CODE & CRITERIA:		2022 CBC		ICC-ES AC156		
TEST LABORATORY:		ERDC-CERL, Champaign, IL				
REPORT: 2011-0263-TR-003 (dated 5/10/2013), tested on 5/24/2012						
S _{DS} (g)	z/h	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
1.95	1	3.12	2.34	1.31	0.53	
1.95	0					
IMPORTANCE FACTOR, I_p = 1.5						
Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:		Floor mounted on (10) VMC YRSM3 neoprene isolators. Unit bolted to each isolator with (1) 5/8" Grade 8 bolt (10 total). Each isolator bolted to fixture with (4) 5/8" Grade 8 bolts (40 total).				
CONSTRUCTION:		Painted carbon steel construction. Voltage: 460V.				
SUBCOMPONENTS:		Johnson Controls - Screw Compressor (CTS24SAAD), Johnson Controls - Evaporator (FFE230), Regal Beloit - Fan Motors (024-36873-507, 024-34980-501), MultiWing - Fan Impellers (026-41594-000, 026-41942-000), Sanhua - Condenser(026-46798-000), Johnson Controls - Flash Tank (375-79551-000), Johnson Controls - Oil Separator (375-93290-000), Danfoss - Electronic Expansion Valves (025-43887-000,025-44027-000), ABB - AYK550 Drive (024-34335-021, ABB 031A-4), Johnson Controls - Vyper Panel (371-05578-120).				



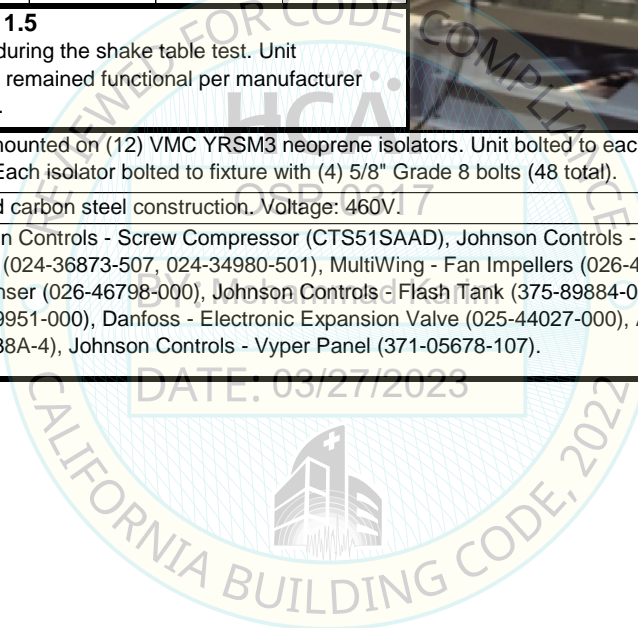
ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SPECIAL SEISMIC CERTIFICATION

UUT 2

DOCUMENT NO.: 21043CR1.1

MANUFACTURER:		JOHNSON CONTROLS, INC.				
MODEL NUMBER:		YVAA0343E, QTC4340SE				
UNIT FUNCTION:		AIR-COOLED CHILLER				
SERIAL NUMBER:		N/A				
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
428.1	93.0	96.0	22,193	7.0	3.6	8.0
CODE & CRITERIA:		2022 CBC		ICC-ES AC156		
TEST LABORATORY:		ERDC-CERL, Champaign, IL				
REPORT: 2011-0263-TR-003 (dated 5/10/2013), tested on 11/8/2012						
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
1.95	1	3.12	2.34	1.31	0.53	
1.95	0					
IMPORTANCE FACTOR, I_p = 1.5						
Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:		Floor mounted on (12) VMC YRSM3 neoprene isolators. Unit bolted to each isolator with (1) 5/8" Grade 8 bolt (12 total). Each isolator bolted to fixture with (4) 5/8" Grade 8 bolts (48 total).				
CONSTRUCTION:		Painted carbon steel construction. Voltage: 460V.				
SUBCOMPONENTS:		Johnson Controls - Screw Compressor (CTS51SAAD), Johnson Controls - Evaporator (FFE331), Regal Beloit - Fan Motors (024-36873-507, 024-34980-501), MultiWing - Fan Impellers (026-41594-000, 026-41942-000), Sanhua - Condenser (026-46798-000), Johnson Controls - Flash Tank (375-89884-000), Johnson Controls - Oil Separator (375-89951-000), Danfoss - Electronic Expansion Valve (025-44027-000), ABB - AYK550 Drive (024-34335-022, ABB 038A-4), Johnson Controls - Vyper Panel (371-05678-107).				



ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SPECIAL SEISMIC CERTIFICATION

UUT 4

DOCUMENT NO.: 21043CR1.1

MANUFACTURER:		JOHNSON CONTROLS, INC.				
MODEL NUMBER:		YLAA0048H46X				
UNIT FUNCTION:		AIR-COOLED CHILLER				
SERIAL NUMBER:		N/A				
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
100.2	93.7	94.2	3,900	5.8	4.4	9.5
CODE & CRITERIA:		2022 CBC		ICC-ES AC156		
TEST LABORATORY:		ENVIRONMENTAL TESTING LABORATORY				
REPORT: 21043TR1.1 (dated 9/7/2022), tested on 12/8/2021						
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.68	0.68	
2.5	0					
IMPORTANCE FACTOR, I_p = 1.5						
Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:		Floor mounted on (4) VMC YRSM3 neoprene isolators. Unit bolted to each isolator with (1) 5/8" Grade 8 bolt (4 total). Each isolator bolted to fixture with (2) 5/8" Grade 8 bolts (8 total).				
CONSTRUCTION:		Painted carbon steel construction. Voltage: 460V & 200-208V.				
SUBCOMPONENTS:		Copeland - Compressor (ZP154KCE), Alfa Laval - Evaporator (ACH500-102), Sanhua - Condenser (026-45535-000), Regal Beloit - Motor (024-36873-507), MultiWing - Impeller (026-41594-000), ABB - AYK550-UH-***A-+K465 Drive (024-34335-012, 024-34336-023), ABB - AYK580-01-***A-+P940 Drive (024-40329-104, 024-40329-008), Westermeyer - Liquid Receiver (026-45013-000).				

