

	OFFICE	USE ONLY
APPLICATION FOR OSHPD SPECIAL SEISMIC CERTIFICATION PREAPPROVAL (OSP)		
	APPLICATION #:	OSP – 0535
OSHPD Special Seismic Certification Preapproval (OSP)		
Type: 🛛 New 🗌 Renewal		
Manufacturer Information		
Manufacturer: Johnson Controls, Inc.		
Manufacturer's Technical Representative: <u>Cameron Boyce</u>		
Mailing Address: _ 5005 York Drive, Norman, OK 73069		_
Telephone: 405-419-6830	on.w.boyce@jci.com	
Product Information	MA	
Product Name: Direct Fit	T	
Product Type: Rooftop Units – Air Conditioning Units and Heat Pum	ps R	
Product Model Number: <u>See attachment</u> (List all unique product identification numbers and/or part numbers) Othy J Pila General Description: <u>Air Conditioning and Heat Pump Units, 3 – 12.5 Top</u>	nd	
All Air Conditioning and Heat Pump Units may components that are certified for spring isolate Mounting Description:	ed curb mounting are exp	
Applicant Information	ODE.	
Applicant Information Applicant Company Name: The VMC Group		
Contact Person: _ John P. Giuliano, PE		
Mailing Address: _ 113 Main Street, Bloomingdale, NJ 07403		
Telephone: (973) 838-1780 Email: john.gi	uliano@thevmcgroup.cc	<u>om</u>
I hereby agree to reimburse the Office of Statewide Health F accordance with the California Administrative Code, 2016.	Planning and Develo	opment review fees in
Signature of Applicant:Company Name:COMPANY NAMY NAME:COMPANY NAMY NAME:COMPANY NAMY NAMY NAME:COMPANY NAM		e: <u>6/3/2020</u>
"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)	MMM	OSHPD Page 1 of 3



California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)
Company Name: The VMC Group
Name: Mr. Kenneth Tarlow California License Number: SE2851
Mailing Address:113 Main Street, Bloomingdale, NJ 07403
Telephone: (973) 838-1780 Email: <u>ken.tarlow@thevmcgroup.com</u>
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: ☑ Other (Please Specify):
BY:Timothy J Piland
Testing Laboratory DATE: 07/10/2020
Company Name: Dynamic Certification Laboratory
Contact Name: Kelly Laplace
Mailing Address: 1315 Greg Street, Sparks, Nevada 89431
Telephone: 775-358-5085 Email: kelly@shaketest.com

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

Seismic Parameters	ers
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Design in accordance with ASCE 7-10 Chapter 13: 🛛 Yes 🗌 No
Rigid: $1.50 (z/h = 1.0); 1.13 (z/h = 0);$ Design Basis of Equipment or Components (F_p/W_p) = Isolated: $4.50 (z/h = 1.0); 1.88 (z/h = 0)$
S_{DS} (Design spectral response acceleration at short period, g) = 2.0 (z/h = 1) 2.5 (z/h = 0)
a_p (In-structure equipment or component amplification factor) = <u>2.5</u>
R _p (Equipment or component response modification factor) = <u>6.0 (Rigid) 2.0 (Isolated)</u>
Ω_0 (System overstrength factor) = 2.0
I _p (Importance factor) = 1.5
z/h (Height factor ratio) = <u>1 (S_{DS} = 2.00); 0 (S_{DS} = 2.50)</u>
Equipment or Component Natural Frequencies (Hz) = <u>See Attachment</u>
Overall dimensions and weight (or range thereof) = <u>See Attachment</u>
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) =
Ω_0 (System overstrength factor) = BY: Timothy J Piland
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:
List of Attachments Supporting Special Seismic Certification
☐ Test Report(s) ☐ Drawings ☐ Calculations ⊠ Manufacturer's Catalog
Other(s) (Please Specify):
OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2025
Signature: Date: July 10, 2020
Print Name: Timothy J Piland Title: SSE
Special Seismic Certification Valid Up to: $S_{DS}(g)$ = See Above z/h = See Above
Condition of Approval (if applicable):
"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"
STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY DSH-FD-759 (REV 12/16/15) Page 3 of 3 Page 3 of 3

Model	Efficiency Rating ¹	Nominal Cooling Capacity [tons]	Length ² [in]	Width ² [in]	Height ^{2,3} [in]	Curb Heights [in]	Cabinet Material	MFR	Curb Weights⁴ [lbs]	Max Operating Weight ⁵ [lbs]	Mounting Configuration ¹²	UUT ^{6,7,8,9,10,11}
ZQG04	14 SEER	3	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	165 or 260	806	Rigid, Spring Isolated	1a, 1b, 1c, 1d
ZXG04	Standard	3	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	165 or 260	853	Rigid, Spring Isolated	Interpolated
ZYG04	Mid	3	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	165 or 260	865	Rigid, Spring Isolated	Interpolated
ZQG05	14 SEER	4	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	165 or 260	876	Rigid, Spring Isolated	Interpolated
ZXG05	Standard	4	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	165 or 260	890	Rigid, Spring Isolated	Interpolated
ZYG05	Mid	4	74.1	48.9	40.6	14	Galvanized Carbon Steel	JCI	165 or 260	956	Rigid, Spring Isolated	Interpolated
ZQG06	14 SEER	5	74.1	48.9	40.6	14	Galvanized Carbon Steel	JCI	165 or 260	953	Rigid, Spring Isolated	Interpolated
ZXG06	Standard	5	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	165 or 260	922	Rigid, Spring Isolated	Interpolated
ZYG06	Mid	5	74.1	48.9	40.6	14	Galvanized Carbon Steel	JCI	165 or 260	974	Rigid, Spring Isolated	Interpolated
ZXG07	Standard	6	74.1	48.9	4 <mark>0.6</mark>	14	Galvanized Carbon Steel	JCI	165 or 260	984	Rigid, Spring Isolated	Interpolated
ZYG07	Mid	6	87.1	61.7	4 <mark>0.6</mark>	14	Galvanized Carbon Steel	JCI	200 or 315	1142	Rigid, Spring Isolated	Interpolated
ZXGA7	Standard	6	74.1	48.9	40.6	/// 14 3Y:	Galvanized Carbon Steel	JCI	165 or 260	984	Rigid, Spring Isolated	Interpolated
ZYGA7	Mid	6	87.1	61.7	4 <mark>0.6</mark>	14	Galvanized Carbon Steel	JCI	200 or 315	1142	Rigid, Spring Isolated	Interpolated
ZXG08	Standard	7.5	87.1	61.7	4 <mark>0.6</mark>	14	Galvanized Carbon Steel	JCI	200 or 315	1231	Rigid, Spring Isolated	Interpolated
ZYG08	Mid	7.5	87.2	61.7	48.6	14 ^{JA}	Galvanized Carbon Steel	JCI	200 or 315	1318	Rigid, Spring Isolated	Interpolated
ZXG09	Standard	8.5	87.2	61.7	48.6 🤇	14	Galvanized Carbon Steel	JCI	200 or 315	1292	Rigid, Spring Isolated	Interpolated
ZYG09	Mid	8.5	87.2	61.7	48.6	14	Galvanized Carbon Steel	JCP	200 or 315	1318	Rigid, Spring Isolated	Interpolated
ZXG12	Standard	10	87.2	61.7	48.6	14	Galvanized Carbon Steel	JCI	200 or 315	1323	Rigid, Spring Isolated	Interpolated
ZYG12	Mid	10	87.2	61.7	55.3	14	Galvanized Carbon Steel	JCI	200 or 315	1346	Rigid, Spring Isolated	Interpolated
ZXG14	Standard	12.5	87.2	61.7	55.3	14	Galvanized Carbon Steel	JCI	200 or 315	1382	Rigid, Spring Isolated	4a, 4b, 4c, 4d
Notes:							DOILDING					

Table 1 - Certified Product Matrix - Gas Powered AC Units

1. Difference between efficiency ratings is length of copper piping, number of check valves, number of rows in condenser coils

2. Dimensions do not include overhang/stacked subcomponents

3. Height does not include curb height

4. Curb weight not included in Max Operating Weight

5. Max operating weights assume all of the most massive subcomponents are installed

6. All units are installed on a 3-3/4" galvanized carbon steel base rail

7. UUT Xa is the first configuration of the unit to be tested in the rigid mounting configuration

8. UUT Xb is UUT Xa but tested in the isolated mounting configuration

9. UUT Xc is the second configuration of the unit in the rigid mounting configuration

10. UUT Xd is UUT Xc but tested in the isolated mounting configuration

11. X is the UUT number, e.g. 1, 2, 3, 4, 5, 6.

12. For spring isolated mounting, only appropriate internal components for VFDs, Power Exhausts, and Low Ambient Accessory Kits may be used per the permitted mounting configurations of the respective subcomponent tables 7, 11, and 23.

Model	Efficiency Rating ¹	Nominal Cooling Capacity [tons]	Length ² [in]	Width ² [in]	Height ^{2,3} [in]	Curb Heights [in]	Cabinet Material	MFR	Curb Weights⁴ [lbs]	Max Operating Weight ⁵ [lbs]	Mounting Configuration ¹²	UUT ^{6,7,8,9,10,11}
ZQE04	14 SEER	3	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	200	788	Rigid	Extrapolated
ZXE04	Standard	3	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	200	807	Rigid	Extrapolated
ZYE04	Mid	3	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	200	819	Rigid	Extrapolated
ZQE05	14 SEER	4	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	200	825	Rigid	Extrapolated
ZXE05	Standard	4	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	200	836	Rigid	Extrapolated
ZYE05	Mid	4	74.1	48.9	40.6	14	Galvanized Carbon Steel	JCI	200	902	Rigid	Extrapolated
ZQE06	14 SEER	5	74.1	48.9	40.6	14	Galvanized Carbon Steel	JCI	200	904	Rigid	Extrapolated
ZXE06	Standard	5	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	200	868	Rigid	Extrapolated
ZYE06	Mid	5	74.1	48.9	40.6	14	Galvanized Carbon Steel	JCI	200	920	Rigid	Extrapolated
ZXE07	Standard	6	74.1	48.9	4 <mark>0.6</mark>	14	Galvanized Carbon Steel	JCI	200	930	Rigid	Extrapolated
ZYE07	Mid	6	87.1	61.7	40.6	14	Galvanized Carbon Steel	JCI	200 or 315	1072	Rigid	2a
ZXEA7	Standard	6	74.1	48.9	4 <u>0.6</u>	14 <u>8</u> Y:	Galvanized Carbon Steel	JCI	200	930	Rigid	Interpolated
ZYEA7	Mid	6	87.1	61.7	4 <mark>0.6</mark>	14	Galvanized Carbon Steel	JCI	200	1072	Rigid	Interpolated
ZXE08	Standard	7.5	87.2	61.7	4 <mark>0.6</mark>	14	Galvanized Carbon Steel	JCI	200	1129	Rigid	Interpolated
ZYE08	Mid	7.5	87.2	61.7	48 <mark>.6</mark>	14 ^{JA}	Galvanized Carbon Steel	JCI	200	1216	Rigid	Interpolated
ZXE09	Standard	8.5	87.2	61.7	48.6 🤇	14	Galvanized Carbon Steel	JCI	200	1190	Rigid	Interpolated
ZYE09	Mid	8.5	87.2	61.7	48.6	14	Galvanized Carbon Steel	JCP	200	1216	Rigid	Interpolated
ZXE12	Standard	10	87.2	61.7	48.6	14	Galvanized Carbon Steel	JCI	200	1217	Rigid	Interpolated
ZYE12	Mid	10	87.2	61.7	55.3	14/2	Galvanized Carbon Steel	JCI	200	1240	Rigid	Interpolated
ZXE14	Standard	12.5	87.2	61.7	55.3	14	Galvanized Carbon Steel	JCI	200	1270	Rigid	3a
Notes:							DOILDIN					

Table 2a - Certified Product Matrix - Electric Powered AC Units - Rigid Mounting

1. Difference between efficiency ratings is length of copper piping, number of check valves, number of rows in condenser coils

2. Dimensions do not include overhang/stacked subcomponents

3. Height does not include curb height

4. Curb weight not included in Max Operating Weight

5. Max operating weights assume all of the most massive subcomponents are installed

6. All units are installed on a 3-3/4" galvanized carbon steel base rail

7. UUT Xa is the first configuration of the unit to be tested in the rigid mounting configuration

8. UUT Xb is UUT Xa but tested in the isolated mounting configuration

9. UUT Xc is the second configuration of the unit in the rigid mounting configuration

10. UUT Xd is UUT Xc but tested in the isolated mounting configuration

11. X is the UUT number, e.g. 1, 2, 3, 4, 5, 6.

Table 2b - Certified Product Matrix - Electric Powered AC Units - Sping Isolated Mounting

Model	Efficiency Rating ¹	Nominal Cooling Capacity [tons]	Length ² [in]	Width ² [in]	Height ^{2,3} [in]	Curb Heights [in]	Cabinet Material	MFR	Curb Weights ⁴ [lbs]	Max Operating Weight ⁵ [lbs]	Mounting Configuration ¹²	UUT ^{6,7,8,9,10,11}
ZYE07	Mid	6	87.1	61.7	40.6	14	Galvanized Carbon Steel	JCI	200 or 315	1072	Spring Isolated	2b

Notes:

1. Difference between efficiency ratings is length of copper piping, number of check valves, number of rows in condenser coils

2. Dimensions do not include overhang/stacked subcomponents

3. Height does not include curb height

4. Curb weight not included in Max Operating Weight

5. Max operating weights assume all of the most massive subcomponents are installed

6. All units are installed on a 3-3/4" galvanized carbon steel base rail

7. UUT Xa is the first configuration of the unit to be tested in the rigid mounting configuration

8. UUT Xb is UUT Xa but tested in the isolated mounting configuration

9. UUT Xc is the second configuration of the unit in the rigid mounting configuration

10. UUT Xd is UUT Xc but tested in the isolated mounting configuration

11. X is the UUT number, e.g. 1, 2, 3, 4, 5, 6.

BY:Timothy Piland 12. For spring isolated mounting, only appropriate internal components for VFDs, Power Exhausts, and Low Ambient Accessory Kits may be used per the permitted mounting configurations



Model	Efficiency Rating ¹	Nominal Cooling Capacity [tons]	Length ² [in]	Width ² [in]	Height ^{2,3} [in]	Curb Heights [in]	Cabinet Material	MFR	Curb Weights ⁴ [lbs]	Max Operating Weight ⁵ [lbs]	Mounting Configuration ¹²	UUT ^{6,7,8,9,10,11}
XQE04	14 SEER	3	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	165 or 260	867	Rigid, Spring Isolated	Extrapolated
XYE04	Mid	3	74.1	48.9	32.5	14	Galvanized Carbon Steel	JCI	165 or 260	831	Rigid, Spring Isolated	5a, 5b
XQE05	14 SEER	4	74.1	48.9	40.6	14	Galvanized Carbon Steel	JCI	165 or 260	892	Rigid, Spring Isolated	Interpolated
XYE05	Mid	4	74.1	48.9	40.6	14	Galvanized Carbon Steel	JCI	165 or 260	952	Rigid, Spring Isolated	Interpolated
XQE06	14 SEER	5	74.1	48.9	40.6	14	Galvanized Carbon Steel	JCI	165 or 260	965	Rigid, Spring Isolated	Interpolated
XYE06	Mid	5	74.1	48.9	40.6	14	Galvanized Carbon Steel	JCI	165 or 260	991	Rigid, Spring Isolated	Interpolated
XXEA7	Standard	6	74.1	48.9	40.6	14	Galvanized Carbon Steel	JCI	165 or 260	990	Rigid, Spring Isolated	Interpolated
XYE07	Mid	6	87.1	61.7	40.6	14	Galvanized Carbon Steel	JCI	200 or 315	1199	Rigid, Spring Isolated	Interpolated
XYEA7	Mid	6	87.1	61.7	40.6	14	Galvanized Carbon Steel	JCI	200 or 315	1199	Rigid, Spring Isolated	Interpolated
XXE08	Standard	7.5	87.2	61.7	4 <mark>8.6</mark>	14	Galvanized Carbon Steel	JCI	200 or 315	1314	Rigid, Spring Isolated	Interpolated
XYE08	Mid	7.5	87.2	61.7	5 <mark>5.3</mark>	14	Galvanized Carbon Steel	JCI	200 or 315	1398	Rigid, Spring Isolated	Interpolated
XXE09	Standard	8.5	87.2	61.7	4 <mark>8.6</mark>	/// 1 43Y:	Galvanized Carbon Steel	JCI	200 or 315	1363	Rigid, Spring Isolated	Interpolated
XXE12	Standard	10	87.2	61.7	5 <mark>5.3</mark>	14	Galvanized Carbon Steel	JCI	200 or 315	1398	Rigid, Spring Isolated	Interpolated
XYE09	Mid	8.5	87.2	61.7	<mark>5</mark> 5.3	14	Galvanized Carbon Steel	JCI	200 or 315	1399	Rigid, Spring Isolated	6a, 6b

Table 3 - Certified Product Matrix - Heat Pump Units

Notes:

1. Difference between efficiency ratings is length of copper piping, number of check valves, number of rows in condenser coils

2. Dimensions do not include overhang/stacked subcomponents

3. Height does not include curb height

4. Curb weight not included in Max Operating Weight

5. Max operating weights assume all of the most massive subcomponents are installed

6. All units are installed on a 3-3/4" galvanized carbon steel base rail

7. UUT Xa is the first configuration of the unit to be tested in the rigid mounting configuration

8. UUT Xb is UUT Xa but tested in the isolated mounting configuration

9. UUT Xc is the second configuration of the unit in the rigid mounting configuration

10. UUT Xd is UUT Xc but tested in the isolated mounting configuration

11. X is the UUT number, e.g. 1, 2, 3, 4, 5, 6.

12. For spring isolated mounting, only appropriate internal components for VFDs, Power Exhausts, and Low Ambient Accessory Kits may be used per the permitted mounting configurations of the respective subcomponent tables 7, 11, and 23.

Model / Part Number	Equipment Rating [BTU/hr]	Weight [Ibs]	Material	Manufacturer	Mounting Configuration	UUT
ZP31K5E	31,000	48.1	Carbon Steel	Copeland	Rigid Curb, Spring Isolated Curb	Extrapolated
ZP31K6E	31,000	48.1	Carbon Steel	Copeland	Rigid Curb, Spring Isolated Curb	1a, 1b, 1c, 1d, 5a, 5b
ZP38K5E	38,000	67	Carbon Steel	Copeland	Rigid Curb, Spring Isolated Curb	Interpolated
ZP38K6E	38,000	67	Carbon Steel	Copeland	Rigid Curb, Spring Isolated Curb	Interpolated
ZP40K6E	40,000	67	Carbon Steel	Copeland	Rigid Curb, Spring Isolated Curb	Interpolated
ZP42K5E	42,000	67	Carbon Steel	Copeland	Rigid Curb, Spring Isolated Curb	Interpolated
ZP42K6E	42,000	67	Carbon Steel	Copeland D	Rigid Curb, Spring Isolated Curb	6a ¹ , 6b ¹
ZP44K5E	44,000	68.2	Carbon Steel	Copeland	Rigid Curb, Spring Isolated Curb	6a ¹ , 6b ¹
ZP51K5E	51,000	71.7	Carbon Steel	Copeland	Rigid Curb, Spring Isolated Curb	Interpolated
ZP51K6E	51,000	71.7	Carbon Steel	Copeland	Rigid Curb, Spring Isolated Curb	Interpolated
ZP54K5E	54,000	71.6	Carbon Steel	Copeland	Rigid Curb, Spring Isolated Curb	Interpolated
ZPS60K5E	60,000	75.6	Carbon Steel	Ti Copeland Di	Rigid Curb, Spring Isolated Curb	Interpolated
ZP61K5E	61,000	77.2	Carbon Steel	Copeland	Rigid Curb, Spring Isolated Curb	3a, 4a, 4b, 4c, 4d
ZP61KCE	61,500	88.8	Carbon Steel	Copeland	Rigid Curb, Spring Isolated Curb	2a, 2b

Table 4 - Certified Subcomponents - Compressors

1. UUT 6 operates with two compressors

Table 5 - Certified Subcomponents - Outdoor Fans

Model / Part Number	Blade Diameter [in]	Permitted Pitch [Degrees]	Number of Blades	Material MA BUILDIN	Manufacturer	Mounting Configuration	UUT
1033410	22	22	3	Steel	Revcor	Rigid Curb, Spring Isolated Curb	1a, 1b 1c, 1d, 5a, 5b
291590	22	27	3	Steel	Revcor	Rigid Curb, Spring Isolated Curb	5a, 5b
267738	22	30	3	Steel	Revcor	Rigid Curb, Spring Isolated Curb	2a, 2b
8877	30	18	3	Aluminum	Revcor	Rigid Curb, Spring Isolated Curb	Interpolated
168146	30	24	3	Aluminum	Revcor	Rigid Curb, Spring Isolated Curb	4a, 4b
5163302	22	26	3	Aluminum	Lau	Rigid Curb, Spring Isolated Curb	2a, 2b
1033631	30	30	4	Aluminum	Lau	Rigid Curb, Spring Isolated Curb	3a, 4a, 4b, 4c, 4d
168146	30	24	3	Steel	Lau	Rigid Curb, Spring Isolated Curb	4c, 4d
8877	30	18	3	Steel	Lau	Rigid Curb, Spring Isolated Curb	6a, 6b

1. All fans weigh less than 5 lbs

Model / Part Number	Voltage	Equipment Rating [HP]	Manufacturer	Weight [lbs]	Mounting Configuration	UUT
1030103	208/230	0.25	Regal Beloit - Gentec	11.9	Rigid Curb	1a, 1c
1030104	460	0.25	Regal Beloit - Gentec	11.9	Rigid Curb	Interpolated
1030105	575	0.25	Regal Beloit - Gentec	11.9	Rigid Curb	Interpolated
1030106	208/230	0.5	Regal Beloit - Gentec	14.3	Rigid Curb	5a
1030107	460	0.5	Regal Beloit - Gentec	14.3	Rigid Curb	Interpolated
1030108	575	0.5	Regal Beloit - Gentec	14.3	Rigid Curb	Interpolated
7193	208/230	1.5	A. Q. Smith	41.6	Rigid Curb	4a, 4c, 6a
7194	460	1.5	A. O. Smith	41.6	Rigid Curb	Interpolated
7195	575	1.5	A. O. Smith	41.6	Rigid Curb	3a

Table 6a - Certified Subcomponents - Outdoor Fan Motors - Rigid Mounting

Table 6b - Certified Subcomponents - Outdoor Fan Motors - Spring Isolated Mounting

Model / Part Number	Voltage	Equipment Rating [HP]	Manufacturer	Weight [lbs]	Mounting Configuration	UUT
1030103	208/230	0.25	Regal Beloit - Gentec	land ^{11.9}	Spring Isolated Curb	1b, 1d
1030104	460	0.25	Regal Beloit - Gentec	11.9	Spring Isolated Curb	Interpolated
1030105	575	0.25	Regal Beloit - Gentec	11.9	Spring Isolated Curb	Interpolated
1030106	208/230	0.5	Regal Beloit - Gentec 0/202	14.3	Spring Isolated Curb	5b
1030107	460	0.5	Regal Beloit - Gentec	14.3 🔍	Spring Isolated Curb	Interpolated
1030108	575	0.5	Regal Beloit - Gentec	14.3	Spring Isolated Curb	Interpolated
7193	208/230	1.5	A. O. Smith	41.6	Spring Isolated Curb	4b, 4d, 6b



Table 7a - Certified Subcomponents - VFD - Rigid Mounting

Model / Part Number	Equipment Rating [HP]	Voltage	Manufacturer	Weight [lbs]	Mounting Configuration	UUT
FR-D720-070-NA	1.50	240V	Mitsubishi	3.09	Rigid Curb	<u>6a</u>
FR-D740-036-NA	1.50	480V	Mitsubishi	3.09	Rigid Curb	Interpolated
FR-D720-100-NA	3.00	240V	Mitsubishi	3.09	Rigid Curb	Interpolated
FR-D740-050-NA	3.00	480V	Mitsubishi	3.31	Rigid Curb	Interpolated
FR-D740-080-NA	5.00	480V	Mitsubishi	3.31	Rigid Curb	Interpolated
FR-D720-165-NA	5.00	240V	Mitsubishi	3.97005	Rigid Curb	Interpolated
FR-E560-1.5K-NA	1.50	575V	Mitsubishi	FU14.41	Rigid Curb	Interpolated
FR-E560-2.2K-NA	3.00	575V	Mitsubishi	4.41	Rigid Curb	Interpolated
FR-E560-3.7K-NA	5.00	575V	Mitsubishi	8.38	Rigid Curb	3a 3a

Table 7b - Certified Subcomponents - VFD - Spring Isolated Mounting

Model / Part Number	Equipment Rating [HP]	Voltage	Manufacturer	Weight [lbs]	Mounting Configuration	UUT
FR-D720-070-NA	1.50	240V	Mitsubishi _P	v.Timð:09v J Pi	Spring Isolated Curb	6b

Table 8 - Certified Subcomponents - Direct Drive Blower Motor

Model / Part Number	Equipment Rating [HP]	Voltage	Manufacturer	Mounting Configuration	UUT
5SME39NXL070	0.75	208/230	Regal Beloit - Gentec	Rigid Curb, Spring Isolated Curb	1a, 1b
5SME39SXL069	1	208/230	Regal Beloit - Gentec	Rigid Curb, Spring Isolated Curb	5a, 5b



Model / Part Number	Equipment Rating [HP]	Voltage	Manufacturer	Mounting Configuration	UUT
5K49MN4855Z	1.5	575	Regal Beloit - Gentec	Rigid Curb	2a, 6a
5K39TN4851Z	2	460	Regal Beloit - Gentec	Rigid Curb	Interpolated
5K49WN4852Z	3	460	Regal Beloit - Gentec	Rigid Curb	Interpolated
5K49WN4857Z	3	575	Regal Beloit - Gentec	Rigid Curb	Interpolated
5K49QN4853Z	5	208	Regal Beloit - Gentec	Rigid Curb	4a
36P249T139G1	5.25	575	Baldor R CODE	Rigid Curb	3a

Table 9a - Certified Subcomponents - Belt Drive Blower Motor - Rigid Mounting

Table 9b - Certified Subcomponents - Belt Drive Blower Motor - Spring Isolated Mounting

Model / Part Number	Equipment Rating [HP]	Voltage	Manufacturer	Mounting Configuration	UUT
5K49MN4855Z	1.5	575	-Regal Beloit - Gentec-0535	Spring Isolated Curb	2b, 6b
5K39TN4851Z	2	460	Regal Beloit - Gentec	Spring Isolated Curb	Interpolated
5K49WN4852Z	3	460	Regal Beloit - Gentec	Spring Isolated Curb	Interpolated
5K49WN4857Z	3	575	Regal Beloit - Gentecy J Plan	C Spring Isolated Curb	Interpolated
5K49QN4853Z	5	208	Regal Beloit - Gentec	Spring Isolated Curb	4b



Model / Part Number	Size [in]	Rating	Manufacturer	Mounting Configuration	UUT
276-160-160	16 x 16	MERV 4	Koch	Rigid Curb	Extrapolated
102-800-032	18 x 16	MERV 6	Koch	Rigid Curb	Extrapolated
116-700-925	19 x 16	MERV 7	Koch	Rigid Curb	Extrapolated
276-160-200	16 x 20	MERV 8	Koch	Rigid Curb	Extrapolated
102-800-016	18 x 20	MERV 10	Koch	Rigid Curb	Extrapolated
116-700-007	19 x 20	MERV 11	Koch p CODE	Rigid Curb	Extrapolated
274-140-200	16 x 25	MERV 12	Koch	Rigid Curb	1 a
102-800-017	18 x 25	MERV 14	Koch	Rigid Curb	Interpolated
116-700-008	19 x 25	MERV 15	Koch	Rigid Curb	Interpolated
276-200-200-058	20 x 20	MERV 16	Koch D1111	Rigid Curb	3a, 6a
102-800-019	22 x 20	MERV 18	Koch	Rigid Curb	Extrapolated
116-700-009	23 x 20	MERV 19	Koch OSP-053	Rigid Curb	Extrapolated
198-488-052	17 x 16	MERV 5	American Air	Rigid Curb	Extrapolated
198-500-092	17 x 20	MERV 9	American Air	Rigid Curb	Extrapolated
198-600-092	17 x 25	MERV 13	American Air	Rigid Curb	1a
198-700-092	21 x 20	MERV 17	American Air	Rigid Curb	3a Sa

Table 10a - Certified Subcomponents - Filters - Rigid Mounting

Table 10b - Certified Subcomponents - Filters - Spring Isolated Mounting

Model / Part Number	Size [in]	Rating	Manufacturer	Mounting Configuration	UUT
276-160-160	16 x 16	MERV 4	Koch	Spring Isolated Curb	Extrapolated
102-800-032	18 x 16	MERV 6	Koch	Spring Isolated Curb	Extrapolated
116-700-925	19 x 16	MERV 7	Koch BULDIN	Spring Isolated Curb	Extrapolated
276-160-200	16 x 20	MERV 8	Koch	Spring Isolated Curb	Extrapolated
102-800-016	18 x 20	MERV 10	Koch	Spring Isolated Curb	Extrapolated
116-700-007	19 x 20	MERV 11	Koch	Spring Isolated Curb	Extrapolated
274-140-200	16 x 25	MERV 12	Koch	Spring Isolated Curb	1b
102-800-017	18 x 25	MERV 14	Koch	Spring Isolated Curb	Interpolated
116-700-008	19 x 25	MERV 15	Koch	Spring Isolated Curb	Interpolated
276-200-200-058	20 x 20	MERV 16	Koch	Spring Isolated Curb	6b
102-800-019	22 x 20	MERV 18	Koch	Spring Isolated Curb	Extrapolated
116-700-009	23 x 20	MERV 19	Koch	Spring Isolated Curb	Extrapolated
198-488-052	17 x 16	MERV 5	American Air	Spring Isolated Curb	Extrapolated
198-500-092	17 x 20	MERV 9	American Air	Spring Isolated Curb	Extrapolated
198-600-092	17 x 25	MERV 13	American Air	Spring Isolated Curb	1b

Notes:

Model / Part Number	Accessory Kit Number	Weight [lbs]	Voltage	Material	Manufacturer	Mounting Configuration	UUT
Power Exhaust Vertical Flow	2PE04704206	39	208/230	Galvanized Carbon Steel	Ruskin Rooftop Systems	Rigid Curb	5a
Power Exhaust Vertical Flow	2PE04704225	39	208/230	Galvanized Carbon Steel	Ruskin Rooftop Systems	Rigid Curb	Interpolated
Power Exhaust Vertical Flow	2PE04704246	39	460	Galvanized Carbon	Ruskin Rooftop Systems	Rigid Curb	Interpolated
Power Exhaust Vertical Flow	2PE04704258	39	575	Galvanized Carbon Steel	Ruskin Rooftop Systems	Rigid Curb	Interpolated
Power Exhaust Vertical Flow	2PE04704306	39	208/230	Galvanized Carbon Steel	Ruskin Rooftop Systems	Rigid Curb	Interpolated
Power Exhaust Vertical Flow	2PE04704325	39	2 <mark>08/23</mark> 0	Galvanized Carbon Steel	Ruskin Rooftop Systems	Rigid Curb	Interpolated
Power Exhaust Vertical Flow	2PE04704346	39	460	Galvanized Carbon	Ruskin Rooftop	Rigid Curb	Interpolated
Power Exhaust Vertical Flow	2PE04704358	39	575	Galvanized Carbon Steel	Ruskin Rooftop Systems	Rigid Curb	3а

Table 11a - Certified Subcomponents - Power Exhaust - Rigid Mounting

Table 11b - Certified Subcomponents - Power Exhaust - Spring Isolated Mounting

Model / Part Number	Accessory Kit Number	Weight [lbs]	Voltage	Material	Manufacturer	Mounting Configuration	UUT
Power Exhaust Vertical Flow	2PE04704206	39	208/230	Galvanized Carbon Steel	Ruskin Rooftop Systems	Spring Isolated Curb	5b

Model / Part Number	Model Number	Weight [lbs]	Voltage	Material	Manufacturer	Mounting Configuration	UUT
2EE04706724	Vertical Flow	63	208/230, 460, 575	Galvanized Carbon Steel	Ruskin Rooftop Systems	Rigid Curb	5a
2EE04706824	Vertical Flow	96	208/230, 460, 575	Galvanized Carbon Steel	Ruskin Rooftop Systems	Rigid Curb	За
2EE04707024	Horizontal Flow	75	208/230, 460, 575	Galvanized Carbon	Ruskin Rooftop Systems	Rigid Curb	1a
2EE04707124	Horizontal Flow	81	208/230, 460, 575	Galvanized Carbon Steel	Ruskin Rooftop Systems	Rigid Curb	Interpolated
2EE04707224	Horizontal Flow	105	208/230, 460, 575	Galvanized Carbon Steel	Ruskin Rooftop Systems	Rigid Curb	Interpolated
2EE04707324	Horizontal Flow	102	208/230, 460, 575	Galvanized Carbon Steel	Ruskin Rooftop Systems	Rigid Curb	4a

Table 12a - Certified Subcomponents - Economizer - Rigid Mounting

Table 12b - Certified Subcomponents - Economizer - Spring Isolated Mounting

Model / Part Number	Model Number	Weight [lbs]	Voltage	Material	Manufacturer	Mounting Configuration	UUT
2EE04706724	Vertical Flow	63	208/230, 460, 575	Galvanized Carbon Steel	Ruskin Rooftop Systems	Spring Isolated Curb	5b
2EE04707024	Horizontal Flow	75	208/230, 460, 575	Galvanized Carbon Steel	Ruskin Rooftop Systems	Spring Isolated Curb	1b
2EE04707124	Horizontal Flow	81	208/230, 460, 575	Galvanized Carbon Steel	Ruskin Rooftop	Spring Isolated Curb	Interpolated
2EE04707224	Horizontal Flow	105	208/230, 460, 575	Galvanized Carbon Steel	Ruskin Rooftop Systems	Spring Isolated Curb	Interpolated
2EE04707324	Horizontal Flow	102	208/230, 460, 575	Galvanized Carbon Steel	Ruskin Rooftop Systems	Spring Isolated Curb	4b

Table 13 - Certified Subcomponents - Control Systems

Model / Part Number	Description	Material	Manufacturer	Mounting Configuration	UUT
Smart Equipment	Standard	PCB	JCI	Rigid Curb, Spring Isolated Curb	1a, 1b, 1c, 1d, 2a, 2b, 3a, 4a, 4b, 4c, 4d, 5a, 5b, 6a, 6b
Surveyor	Integration	PCB	Venstar	Rigid Curb, Spring Isolated Curb	3a, 4a, 4b
ALC	Integration	PCB	EMC	Rigid Curb, Spring Isolated Curb	2a, 2b, 5a, 5b

Table 14 - Certified Subcomponents - Condenser Coils

Model / Part Number	Number of Rows	Fins per Inch	Material	Manufacturer	Mounting Configuration	UUT
5287141	2	15	Copper	JCITOL	Rigid Curb, Spring Isolated Curb	Extrapolated
5277792	2	17	Copper	JCI	Rigid Curb, Spring Isolated Curb	Extrapolated
5023749	2	17	Copper	JCI	Rigid Curb, Spring Isolated Curb	5a, 5b
5152963	3	13	Copper	050-0533	Rigid Curb, Spring Isolated Curb	Interpolated
5158114	3	17	Copper with ElectroFin® Coating	y:Timo <mark>lf</mark> hy J Pi	Rigid Curb, Spring Isolated Curb	6a, 6b



Model / Part Number	Width [mm / in]	Tubes	Systems	Material	Manufacturer	Mounting Configuration	UUT
961356	16 / 0.063	76	1	Aluminum	Sanhua	Rigid Curb	1a, 1c
961354	20 / 0.787	74	1	Aluminum	Sanhua	Rigid Curb	Interpolated
999310	20 / 0.787	96	1	Aluminum	Sanhua	Rigid Curb	Interpolated
999491	25 / 0.984	96	1	Aluminum	Sanhua	Rigid Curb	2a
986845	25 / 0.984	96	2	Aluminum	Sanhua	Rigid Curb	Interpolated
961355	25 / 0.984	117	2	Aluminum	Sanhua	Rigid Curb	Interpolated
995635	32 / 1.260	117	2	Aluminum	Sanhua	Rigid Curb	4a
995635	32 / 1.260	117	2	Aluminum with ElectroFin® Coating	Sanhua	Rigid Curb	За

Table 15a - Certified Subcomponents - Condenser Coils (Micro Channel) - Rigid Mounting

OSP-0535 Table 15b - Certified Subcomponents - Condenser Coils (Micro Channel) Spring Isolated Mounting

Model / Part Number	Width [mm / in]	Tubes	Systems	y:Tin <mark>matéria</mark> i J Pi	Manufacturer	Mounting Configuration	UUT
961356	16 / 0.063	76	1	Aluminum	Sanhua	Spring Isolated Curb	1b, 1d
961354	20 / 0.787	74	1 /////	ATE: Aluminum 202	Sanhua 🛛	Spring Isolated Curb	Interpolated
999310	20 / 0.787	96		Aluminum	Sanhua /	Spring Isolated Curb	Interpolated
999491	25 / 0.984	96	1	Aluminum	Sanhua	Spring Isolated Curb	2b
986845	25 / 0.984	96	2	Aluminum	Sanhua	Spring Isolated Curb	Interpolated
961355	25 / 0.984	117	2 0	Aluminum	Sanhua	Spring Isolated Curb	Interpolated
995635	32 / 1.260	117	2	Aluminum	Sanhua	Spring Isolated Curb	4b

Model / Part Number	Number of Rows	Weight [lbs]	Fins per Inch	Material	Manufacturer	Mounting Configuration	UUT
999134	2	22	15	Copper Tubes with Aluminum Housing	Luvata	Rigid Curb	1a, 1c
999144	3	29	15	Copper Tubes with Aluminum Housing	Luvata	Rigid Curb	5a
999149	4	38	15	Copper Tubes with Aluminum Housing	Luvata	Rigid Curb	Interpolated
999151	3	43	15	Copper Tubes with Aluminum Housing	Luvata	Rigid Curb	Interpolated
999156	3	47	15	Copper Tubes with Aluminum Housing	Luvata	Rigid Curb	2a
999154	4	51	215	Copper Tubes with Aluminum Housing	Luvata	Rigid Curb	Interpolated
999157	3	65	15	Copper Tubes with Aluminum Housing	Luvata	Rigid Curb	Interpolated
5162718	4	77	O ₁₅	Copper Tubes with Aluminum Housing	Luvata	Rigid Curb	Interpolated
999158	4	77	15	ACopper Tubes with Aluminum Housing	Luvata	Rigid Curb	4a, 6a
999158	4	77	15	Copper with ElectroFin® Coating	Luvata	Rigid Curb	За
				NIABUILDIN	GCOV		

Table 16a - Certified Subcomponents - Evaporating Coils - Rigid Mounting

Model / Part Number	Number of Rows	Weight [lbs]	Fins per Inch	Material	Manufacturer	Mounting Configuration	UUT
999134	2	22	15	Copper Tubes with Aluminum Housing	Luvata	Spring Isolated Curb	1b, 1d
999144	3	29	15	Copper Tubes with Aluminum Housing	Luvata	Spring Isolated Curb	5b
999149	4	38	15	Copper Tubes with Aluminum Housing	Luvata	Spring Isolated Curb	Interpolated
999151	3	43	15	Copper Tubes with Aluminum Housing	Luvata	Spring Isolated Curb	Interpolated
999156	3	47	15	Copper Tubes with Aluminum Housing	Luvata	Spring Isolated Curb	2b
999154	4	51	15	Copper Tubes with Aluminum Housing	Luvata	Spring Isolated Curb	Interpolated
999157	3	65	15	Copper Tubes with Aluminum Housing	Luvata	Spring Isolated Curb	Interpolated
5162718	4	77	O15	Copper Tubes with Aluminum Housing	Luvata	Spring Isolated Curb	Interpolated
999158	4	77	15 🛛	Copper Tubes with Aluminum Housing	0 Luvata	Spring Isolated Curb	4b, 6b
			PL-KO	PNIA BUILDIN	G CODE 201		

Table 16b - Certified Subcomponents - Evaporating Coils - Spring Isolated Mounting

Model / Part Number	Number of Tubes	Stage	Material	Manufacturer	Mounting Configuration	
1043666	3	1		JCI	Rigid Curb, Spring Isolated Curb	1c, 1d
1043666	3	2		JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1043669	5	1		JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1043669	5	2		JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1045536	6	1	Aluminized	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1045536	6	2	Carbon Steel	JCIODE	Rigid Curb, Spring Isolated Curb	Interpolated
1043671	5	2	Carbon Steer	FULJCI	Rigid Curb, Spring Isolated Curb	Interpolated
1164373	7	2		JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1043673	7	2			Rigid Curb, Spring Isolated Curb	Interpolated
1043675	9	2		JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1045538	10	2		JCI	Rigid Curb, Spring Isolated Curb	4c, 4d
1043665	3	1	R	OScr-053	Rigid Curb, Spring Isolated Curb	1a, 1b
1043667	3	1		JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1043667	3	2			Rigid Curb, Spring Isolated Curb	Interpolated
1043668	5	1			Rigid Curb, Spring Isolated Curb	Interpolated
1043670	5	1		JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1043670	5	2		ATE: 070 0/202	Rigid Curb, Spring Isolated Curb	Interpolated
1164372	6	1	Stainless Steel	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1045537	6	1	Otali liess Oteel	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1045537	6	2		JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1043672	5	2	· ^ `	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1164374	7	2		JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1043674	7	2		A BICI DIN	Rigid Curb, Spring Isolated Curb	Interpolated
1043676	9	2		JCI	Rigid Curb, Spring Isolated Curb	Interpolated
1045539	10	2		JCI	Rgid Curb, Spring Isolated Curb	4a, 4b

Table 17 - Certified Subcomponents - Heat Exchanger Tubes

Table 18 - Certified Subcomponents - Heat Exchanger Gas Valve

Model / Part Number	Number of Screws	Stage	Material	Manufacturer	Mounting Configuration	UUT
993801	One Screw	Single	Cast Aluminum	White Rogers	Rigid Curb, Spring Isolated Curb	1a, 1b, 1c, 1d
993802	Two Screws	Two-Stage	Cast Aluminum	White Rogers	Rigid Curb, Spring Isolated Curb	Interpolated
993803	Two Screws	Two-Stage	Cast Aluminum	White Rogers	Rigid Curb, Spring Isolated Curb	4a, 1b, 4c, 4d

Table 19 - Certified Subcomponents - Electric Heaters

Model / Part Number	Output [kW]	Voltage ¹	Manufacturer	Mounting Configuration	UUT
2EK04510625	6.5	208/230		Rigid Curb, Spring Isolated Curb	5a, 5b
2EK04510646	6	460	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04510725	6	208/230	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04510746	6	460	OSCP-0535	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04511058	9.2	575	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04511125	10.5	208/230		Rigid Curb, Spring Isolated Curb	Interpolated
2EK04511146	11.5	460	CIY J PI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04511458	13.8	575	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04511446	14	460	ATE 070 0/202	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04511625	16	208/230	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04511725	16	208/230	JCI +	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04511746	16.5	460	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04511758	17	575	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04512358	23	575	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04510625	6.5	208/230	ABICIUNIN	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04512525	24.8	208/230	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04512646	25.5	460	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04512658	25.7	575	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04512846	27.8	460	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04513225	32	208/230	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04513346	33	460	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04513458	34	575	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04514246	41.7	460	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
2EK04514225	42.4	208/230	JCI	Rigid Curb, Spring Isolated Curb	3a, 6a, 6b

1. 208/230 units house the largest fuses and contactors as compared to the 460 & 575

Table 20 - Certified Subcomponents - Motorized Outside Air Damper

Model / Part Number	Voltages	Material	Manufacturer	Mounting Configuration	UUT
2MD04704224	208/230, 460, 575	Galvanized Carbon Steel	Ruskin Rooftop Systems	Rigid Curb, Spring Isolated Curb	5a, 5b
2MD04704324	208/230, 460, 575	Galvanized Carbon Steel	Ruskin Rooftop Systems	Rigid Curb, Spring Isolated Curb	2a, 2b

Table 21 - Certified Subcomponents - Enthalpy Kits

Model / Part Number	Voltages	Material	Manufacturer	Mounting Configuration	UUT
2EC0401	208/230, 460, & 575	Sheet Metal Bracket	OJCHPL	Rigid Curb, Spring Isolated Curb	Extrapolated ¹
2EC0402	208/230, 460, & 575	Sheet Metal Bracket	0 96 7-0535	Rigid Curb, Spring Isolated Curb	2a, 2b, 4a, 4b

1. Model 2EC0402 is a dual version of model 2EC0401

Table 22 - Certified Subcomponents - Natural Gas / Propane Conversion Kits¹

Model / Part Number	Description	Material	AT Manufacturer 02	Weight [lbs]	Mounting Configuration	UUT
1HA0454	Natural Gas - High Altitude ²	Brass	Key Gas / White Rogers	< 5 lbs	Rigid Curb, Spring Isolated Curb	Extrapolated
1HA0455	Natural Gas - High Altitude ²	Brass	Key Gas / White Rogers	5 lbs	Rigid Curb, Spring Isolated Curb	Extrapolated
1NP0456	Propane	Brass	Key Gas / White Rogers	< 5 lbs	Rigid Curb, Spring Isolated Curb	1a, 1b
1NP0457	Propane	Brass	Key Gas / White Rogers	< 5 lbs	Rigid Curb, Spring Isolated Curb	4a, 4b
1HA0458	Propane High Altitude	Brass	Key Gas / White Rogers	< 5 lbs	Rigid Curb, Spring Isolated Curb	1c, 1d
1HA0459	Propane High Altidude	Brass	Key Gas / White Rogers	< 5 lbs	Rigid Curb, Spring Isolated Curb	4c, 4d

1. Extrapolated subcomponents are idential to those tested in 1c & 4c with exception to the diameter of the valve orifice & the valve spring

Table 23 - Certified Subcomponents - Low Ambient Accessory Kits - Rigid Mounting

Model / Part Number	Voltage ¹	Material	Manufacturer	Mounting Configuration	UUT
2LA04704725	208/230V	Sheet Metal Bracket	JCI	Rigid Curb	1a
2LA04704746	460V	Sheet Metal Bracket	JCI	Rigid Curb	Interpolated
2LA04704758	575V	Sheet Metal Bracket	JCI	Rigid Curb	Interpolated
2LA04704825	208/230V	Sheet Metal Bracket	JCI	Rigid Curb	Interpolated
2LA04704846	460V	Sheet Metal Bracket	JCI	Rigid Curb	Interpolated
2LA04704858	575V	Sheet Metal Bracket	RJCIODE	Rigid Curb	Interpolated
2LA04704946	460V	Sheet Metal Bracket	JCI	Rigid Curb	Interpolated
2LA04704958	575V	Sheet Metal Bracket	JCI	Rigid Curb	Interpolated
2LA04704925 ¹	208/230V	Sheet Metal Bracket		Rigid Curb	<u>3a</u>

1. 460/575 units are depopulated versions of the 208/230 units

Table 23 - Certified Subcomponents - Low Ambient Accessory Kits - Spring Isolated Mounting

Model / Part Number	Voltage ¹	Material	BY: TManufacturer Pi	land Mounting Configuration	UUT
2LA04704725	208/230V	Sheet Metal Bracket	JCI	Spring Isolated Curb	1b

Table 24 - Certified Subcomponents - Fault Detection and Diagnostics (FDD)

Model / Part Number	Voltage	Material	Manufacturer	Mounting Configuration	UUT
2FDD61		Sheet Metal Bracket	JCI	Rigid Curb, Spring Isolated Curb	4a, 4b
2FDD62	208/230, 460,	Sheet Metal Bracket	JCI	Rigid Curb, Spring Isolated Curb	Interpolated
5126433	& 575	Sheet Metal Bracket	Jeildin	Rigid Curb, Spring Isolated Curb	2a, 2b
5181673		Sheet Metal Bracket	JCI	Rigid Curb, Spring Isolated Curb	6a, 6b

THE VMC GROUP		UN	IIT UNC Summ	DER TE Mary S		UT)		UUT-1a 98538-17	01, UUT-1a
Model Line			Me	odel Numb	er		Ν	Manufacture	
Direct Fit				ZQG04			John	son Controls	s, Inc.
			Product Co	onstructior	Summary				
Air Conditioning Unit, 3 Rail	Ton Cooling	Capacity, C	alvanized Ca	arbon Steel	Cabinet and	116-Gauge S	Sheet Metal,	Carbon Stee	el Base
			Options / Su	bcompone	ent Summar	y			
Compressor: Copeland, Koch and American Air, Luvata, Heat Exchanger and White Rogers, Low Notes: UUT dimensions subcomponents). Curbs	Economizer: r Tubes: JCI, Ambient Acc	: Ruskin Ro Heat Excha cessory Kit:	ooftop System anger Gas Va JCI FOR ured dimensio	ns, Conden alve: White CODE ons and weig	sor Coils (M Rogers, Nat	licro Channel tural Gas and sions include	I): Sanhua, E I Propane Co overhang/st	Evaporating onversion Ki tacked	Coils:
				JT Properti		YZ -			
Weight		6-1		ons[in]5.	35	MAN I	Lowes	st Nat. Freq.	. [Hz]
[lbs]	Len	ath	Wid	01-0-01	He	ight	F-B	S-S	V
520	73		py.Tim ⁴⁷			33	30.5	25.0	>33.3
		UUTI	lighest Pass		FIGIU			-	-
Building Code	Test C		S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
			DA15.0	7/10/20	29.50	3.20	2.40	-	-
CBC 2016	ICC-ES	AC156	2.50	0.00	1.50	2	-	1.67	0.67
				Mounting D		~~/			
Air Conditioning Unit is I made "z-clips". Rigid VI			Mounted to Sh		using (12) 1				dousion

THE VMC GROUP	UN	NIT UNI Summ	DER TE Mary S		UT)		UUT-1b	01, UUT-1b
Model Line		М	odel Numb	er		Ν	Anufacture	
Direct Fit			ZQG04			John	son Controls	s, Inc.
		Product C	onstructior	n Summary				
Air Conditioning Unit, 3 ⁻ Rail	Ton Cooling Capacity, (Galvanized C	arbon Steel	Cabinet and	d 16-Gauge S	Sheet Metal,	Carbon Ste	el Base
		Options / Su	Ibcompone	ent Summar	у			
Koch and American Air, Luvata, Heat Exchanger and White Rogers, Low Notes: UUT dimensions subcomponents). Curbs	Tubes: JCI, Heat Exch Ambient Accessory Kit: and weights are measu	anger Gas Va JCI FOF	alve: White	Rogers, Nat	ural Gas and	d Propane C	onversion Ki tacked	Colls: t: Keygas
	S.	U	UT Properti	es	12			
Weight	R.	Dimensi		35	1 St	Lowes	st Nat. Freq	. [Hz]
[lbs]	Length	Wie		He	ight	F-B	S-S	V
520	7 <mark>3</mark>	py.Tim	Zthy II	Diland	33	4.5	4.5	15.5
		Highest Pase	sed Seismi	c Run Infor	mation 🔵			
Building Code	Test C <mark>riteria</mark>	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC156	^{DA} 2.00 ⁻ U	1.00	1ZY.50	3.20	2.40	-	-
010 10 10		2.50	0.00	1.50	20	-	1.67	0.67
Air Conditioning Unit is N			Mounting D		V		(a) a	
custom made "z-clips. I	solated VMC P6200-01		UUT-1b		sing (12) 1/2"	" Grade 5 Bc	olts.	

	ED DSHOD	2
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UUT-1c

	, Inc.
Product Construction Summary Air Conditioning Unit, 3 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Sheet Metal, Carbon Ste Rail	
Air Conditioning Unit, 3 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Sheet Metal, Carbon Ste Rail	el Base
Rail	el Base
Options / Subcomponent Summary	
Coils: Luvata, Heat Exchanger Tubes: JCI, Heat Exchanger Gas Valve: White Rogers, Propane High Altitude Conversior Keygas and White Rogers Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include overhang/stacked subcomponents). Curbs are not implied nor intended to be certified. Curb Properties: 165lbs, 71" L x 41" W x 14" H.	Kit:
UUT Properties	
Weight Dimensions [in] Lowest Nat. Freq	[Hz]
[lbs] Length Width 0535 Height F-B S-S	V
640 73 59 33 21.5 19.5	26.5
UUT Highest Passed Seismic Run Information	
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 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2.40 -	-
2.50 0.00 1.67	0.67
Test Mounting Details	



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UUT-1d

Model Line		Me	odel Numb	er	!	N	Manufacture	<u>،r</u>
Direct Fit			ZQG04			John	son Controls	s, Inc.
	I	Product Co	onstruction	Summary	, _			
Air Conditioning Unit, 3 ⁻ Rail	Ton Cooling Capacity, G	Jalvanized Ca	arbon Steel	Cabinet and	d 16-Gauge ິ	Sheet Metal,	Carbon Stee	el Base
		Options / Su	bcompone	nt Summa	ry			
Coils: Luvata, Heat Exch Keygas and White Roge		at Exchanger C	Gas Valve: \	White Roge	ers, Propane F	High Altitude	e Conversion	
	s and weights are measu s are not implied nor inte							
	4		JT Propertie	es	Y			
Weight	L.	Dimensio	ons [in]		13	Lowes	st Nat. Freq.	. [Hz]
[lbs]	Length	Wid			eight	F-B	S-S	v
640	7 <mark>3</mark>	59	TELEVILLA		33	4.5	4.5	15.0
		Highest Pass	ed Seismir	Run Infor	mation			
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 2016	ICC-ES AC156	2.00	1.00	1.50	3.20	2.40		-
0202010		2.50	0.00	² 1.50	- /	-	1.67	0.67
	C'AV		Mounting D		121			
	Mounted to the Isolated Isolated VMC P6200-01	19 Curb is Mo						DOITS VIA



THE VMC GROUP		UNIT UNI Sump	DER TI Mary S		UT)		UUT-1e	01, UUT-1e
Model Line	e	Μ	lodel Numb	er		· ·	Manufacture	
	-							
Direct Fit			ZQG04			John	son Controls	s, Inc.
				n Summary				
Air Conditioning Unit, 3 Rail	Ton Cooling Capac	ity, Galvanized C	arbon Steel	Cabinet and	d 16-Gauge S	Sheet Metal,	Carbon Ste	el Base
		Options / Su	ubcompone	ent Summar	ry			
Notes: UUT dimensions subcomponents). Curb		r intended to be o	certified. Cu	urb propertie				
			UT Propert	ies		Lawa	at Nat Fram	<u></u>
Weight [Ibs]	Length		ons [in] dth		eight	F-B	st Nat. Freq S-S	.[HZ] V
590	73	<u></u>	(45P-0585		33	г-в 12.0	3-3 8.5	v 11.5
000		UT Highest Pas	01 00	<u>v</u> u		12.0	0.0	11.5
Building Code	Test Criteria	S _{DS} (g)	t⊢z/h ∣	Dilaled	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
		2 00	1.00	1.50	3.20	2.40	-	-
CBC 2016	ICC-ES AC156	2.50	0.00	1.50	/	-	1.67	0.67
Air Conditioning Unit is			Mounting [
the curb via (6) Ruskin using (6) 5/8" Grade 5 I		RNIA E	ws each. Ru		netal Curb-1F	RC0456 is M	lounted to Sh	nake Table
All units maintaine	ed structural integrity	and functionality	/ after AC-1	56 test; UUT	was full of o	perating cor	ntent during	testing

(SI)	ED DSHRO	2
CERT	\mathbf{N}	EAPPROL
	HE VMC GROU	VEOP

UUT-2a

98538-1701, UUT-2a

Model Line Model Number Manufacturer Direct Fit ZYE07 Johnson Controls, Inc. **Product Construction Summary**

Air Conditioning Unit, 6 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Sheet Metal, Carbon Steel Base Rail

Options / Subcomponent Summary

Compressor: Copeland, Fan: Lau, Control Systmes: EMC, Condensor Coils (Micro Channel): Sanhua, Evaporating Coils: Luvata, Motorized Outside Air Damper: Ruskin Rooftop Systems, Entahlpy Kits: JCI, Fault Detection and Diagnostics: JCI

Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include overhang/stacked subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 200lbs, 82" L x 54" W x 14" H.

L.	Dimensi	ons Lin 1			1		
		ous Fin T	21) I	7	Lowes	st Nat. Freq.	. [Hz]
Length	Wi	dth	He	eight	F-B	S-S	V
87 2-	Œ	©P-05	35 -	49	13.5	16.5	18
UUT	Highest Pas	sed Seism	ic Run Infor	mation			
Test C <mark>riteri</mark> a	S _{DS} (g)	oth z/h	Piland	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.00	1.50	3.20	2.40	-	-
JU-ES AU 156	2.50	0.00	1.50	- /	-	1.67	0.67
	UUT	UUT Highest PasTest CriteriaSDS (g)CC-ES AC1562.002.50	UUT Highest Passed SeismTest CriteriaSps (g)z/hCC-ES AC1562.001.002.500.00	UUT Highest Passed Seismic Run Infor Test Criteria Sps (g) z/h Ilp 2.00 1.00 1.50	UUT Highest Passed Seismic Run Information Test Criteria Sps (g) z/h Ip AFLX-H (g) CC-ES AC156 2.00 1.00 1.50 3.20	UUT Highest Passed Seismic Run Information Test Criteria S _{DS} (g) z/h IP A _{FLX-H} (g) A _{RIG-H} (g) CC-ES AC156 2.00 1.00 1.50 3.20 2.40	UUT Highest Passed Seismic Run Information Test Criteria Sps (g) z/h IP AFLX-H (g) AFLX-H (g) AFLX-V (g) CC-ES AC156 2.00 1.00 1.50 3.20 2.40 - 2.50 0.00 1.50 - - 1.67

Test Mounting Details

Air Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" Grade 5 bolts via custom made 'z-clips". Rigid VMC P6000-023 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts.



THE DESHAD AREADING	10	NIT UNC Summ	DER TE 1ARY S		UT)		UUT-2b	
The Ville Skiddle							98538-17	01, UUT-2b
Model Line		Мо	odel Numb	er		Π	Manufacture	er
Direct Fit			ZYE07			John	son Controls	s, Inc.
		Product Co	onstruction	Summary				
Air Conditioning Unit, 6 Rail	Ton Cooling Capacity,	Galvanized Ca	arbon Steel	Cabinet and	d 16-Gauge S	Sheet Metal,	Carbon Ste	el Base
		Options / Su	bcompone	nt Summai	у			
Motorized Outside Air D Notes: UUT dimensions subcomponents). Curb	and weights are meas	ured dimensio	copr ns and weig	phts (dimen	sions include	overhang/s	tacked	
		UU	JT Propertie	es	4			
Weight		Dimensio	ons [in]		12	Lowe	st Nat. Freq	. [Hz]
[lbs]	Length	Wid	₩P-053	35 Не	ight m	F-B	S-S	V
820	87	76	3		49	3.0	3.0	7
	UUT	Highest Pass	ed Seismic	Run Infor	mation			
Building Code	Test C <mark>riteri</mark> a	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC156	2.00	1.00	1.50	3.20	2.40	-	-
		2.50	0.00	1.50	- / -	-	1.67	0.67
Air Conditioning Unit is	C		Nounting D		2			
custom made "z-clips".	Isolated VMC P6200-0		UT-2b	ake Table u	using (12) 1/2	2" Grade 5 B	olts.	

All units maintained structural integrity and functionality after AC-156 test; UUT was full of operating content during testing

1,270 87 83 49 UUT Highest Passed Seismic Run Information Building Code Test Criteria S _{DS} (g) z/h I _P A _{FLX-H} (g) A _R				
Direct Fit ZXE14 Product Construction Summary Air Conditioning Unit ,12.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge SI Rail Options / Subcomponent Summary Compressor: Copeland, Fans: Lau, Fan Motors: A.O. Smith, VFD: Mitsubishi, Belt Drive Blower Motol American Air, Economizer: Ruskin Rooftop Systems, Control Systems: Venstar, Condensor Coils (Mi Evaporating Coils: Luvata, Electric Heaters: JCI, Low Ambient Accessory Kit: JCI Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include ove subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 200lbs, 82" L x UUT Properties Weight Dimensions [in] I [Ibs] Length Width Height 1,270 87 83 49 - UUT Highest Passed Seismic Run Information Building Code Test Criteria Sps(g) Z/h Ip AFLXH (g) AR CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2 Kir Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" Grade 5 Bolts.		ι	UUT-3a	I
Direct Fit ZXE14 Product Construction Summary Air Conditioning Unit ,12.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge SI Rail Options / Subcomponent Summary Compressor: Copeland, Fans: Lau, Fan Motors: A.O. Smith, VFD: Mitsubishi, Belt Drive Blower Motol American Air, Economizer: Ruskin Rooftop Systems, Control Systems: Venstar, Condensor Coils (Mi Evaporating Coils: Luvata, Electric Heaters: JCI, Low Ambient Accessory Kit: JCI Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include ove subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 200lbs, 82" L x UUT Properties Weight Dimensions [in] I [Ibs] Length Width Height 1,270 87 83 49 - UUT Highest Passed Seismic Run Information Building Code Test Criteria Sps(g) Z/h Ip AFLXH (g) AR CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2 Kir Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" Grade 5 Bolts.	\bigcirc			′01, UUT-3a
Product Construction Summary Air Conditioning Unit ,12.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge SI Rail Options / Subcomponent Summary Compressor: Copeland, Fans: Lau, Fan Motors: A.O. Smith, VFD: Mitsubishi, Belt Drive Blower Motor American Air, Economizer: Ruskin Rooftop Systems, Control Systems: Venstar, Condensor Coils (Mi Evaporating Coils: Luvata, Electric Heaters: JCI, Low Ambient Accessory Kit: JCI Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include ove subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 200lbs, 82" L x UUT Properties Weight Dimensions [in] I [lbs] Length Width Height 1 1,270 87 83 49 1 UUT Highest Passed Seismic Run Information Building Code Test Criteria Sps(g) z/h I Test Mounting Details Air Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" Grade 5 Bolts.	Model Line	Ma	lanufacture	؛r
Air Conditioning Unit ,12.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge SI Rail Options / Subcomponent Summary Compressor: Copeland, Fans: Lau, Fan Motors: A.O. Smith, VFD: Mitsubishi, Belt Drive Blower Moto American Air, Economizer: Ruskin Rooftop Systems, Control Systems: Venstar, Condensor Coils (Mi Evaporating Coils: Luvata, Electric Heaters: JCI, Low Ambient Accessory Kit: JCI Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include ove subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 200lbs, 82" L x UUT Properties Weight Dimensions [in] [Ibs] Length Width Height 1,270 87 83 49 UUT Highest Passed Seismic Run Information Building Code Test Criteria Subscore 2.00 1,270 87 82 49 UUT Highest Passed Seismic Run Information Building Code Test Criteria Subscore 2.00 1.00 1.50 2.50 0.00 2.50 0.00 1.50 3.20 2.50 1.50 2.50 0.00 <td>Direct Fit</td> <td>Johnso</td> <td>son Controls</td> <td>s, Inc.</td>	Direct Fit	Johnso	son Controls	s, Inc.
Options / Subcomponent Summary Compressor: Copeland, Fans: Lau, Fan Motors: A.O. Smith, VFD: Mitsubishi, Belt Drive Blower Motor American Air, Economizer: Ruskin Rooftop Systems, Control Systems: Venstar, Condensor Coils (Mit Evaporating Coils: Luvata, Electric Heaters: JCl, Low Ambient Accessory Kit: JCl Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include ove subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 200lbs, 82" L x UUT Properties Weight Dimensions [in] I [Ibs] Length Width - Height I 1,270 87 83 49 I UUT Highest Passed Seismic Run Information Building Code Test Criteria Sps (g) z/h Ip A _{FLX+H} (g) A _R CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2 Test Mounting Details Air Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" G" Test Mounting Details				
Compressor: Copeland, Fans: Lau, Fan Motors: A.O. Smith, VFD: Mitsubishi, Belt Drive Blower Motor American Air, Economizer: Ruskin Rooftop Systems, Control Systems: Venstar, Condensor Coils (Mitexaporating Coils: Luvata, Electric Heaters: JCl, Low Ambient Accessory Kit: JCl Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include ove subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 200lbs, 82" L x UUT Properties Weight Dimensions [in] [lbs] Length Width Height 1,270 87 83 49 1 UUT Highest Passed Seismic Run Information Building Code Test Criteria Sps (g) z/h Ip AFLX+H (g) AR CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2 Test Mounting Details Air Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" G" "Test Mounting Details	-	uge Sheet Meta	al, Carbon S	Steel Base
American Air, Economizer: Ruskin Rooftop Systems, Control Systems: Venstar, Condensor Coils (Mi Evaporating Coils: Luvata, Electric Heaters: JCI, Low Ambient Accessory Kit: JCI Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include ove subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 200lbs, 82" L x Weight UUT Properties Ilbs] Length Width UUT Highest Passed Seismic Run Information UUT Highest Passed Seismic Run Information Building Code Test Criteria Sps (g) z/h I_P AFLX-H (g) AR CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2 Air Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" G "z-clips". Rigid VMC P6000-023 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts.				
Weight [Ibs] Dimensions [in] 1,270 87 83 49 UUT Highest Passed Seismic Run Information Building Code Test Criteria S _{DS} (g) Z/h Ip A _{FLX-H} (g) A _R CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2 Test Mounting Details Air Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" G "z-clips". Rigid VMC P6000-023 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts. 1/2" Grade 5 Bolts.	merican Air, Economi vaporating Coils: Luva otes: UUT dimensions	bils (Micro Chan de overhang/sta	nnel): Sanhu acked	
Weight [lbs] Dimensions [in] 1,270 87 83 49 UUT Highest Passed Seismic Run Information Building Code Test Criteria S _{DS} (g) z/h Ip A _{FLX-H} (g) A _R CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2 Test Mounting Details Air Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" G "z-clips". Rigid VMC P6000-023 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts. 1/2" Grade 5 Bolts.				
Length Width -05 Height 1,270 87 83 49 10 UUT Highest Passed Seismic Run Information UUT Highest Passed Seismic Run Information AFLX-H (g) AR Building Code Test Criteria SDS (g) 2/h IP AFLX-H (g) AR CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2 Test Mounting Details Air Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" G "z-clips". Rigid VMC P6000-023 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts.	M/a in h t	Lowest	t Nat. Freq	[H7]
1,270 87 83 49 UUT Highest Passed Seismic Run Information Building Code Test Criteria S _{DS} (g) Z/h Ip A _{FLX-H} (g) A _R CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2 Test Mounting Details Air Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" G "z-clips". Rigid VMC P6000-023 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts.	-	F-B	S-S	v
UUT Highest Passed Seismic Run Information Building Code Test Criteria S _{DS} (g) Z/h I _P A _{FLX-H} (g) A _R CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2 Test Mounting Details Air Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" G "z-clips". Rigid VMC P6000-023 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts.		г-в 10.5	15.0	>33.3
Building Code Test Criteria S _{DS} (g) z/h I _P A _{FLX-H} (g) A _R CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2.00 2.50 0.00 1.50 3.20 2.00 2.50 0.00 1.50 - 2.00 1.00 1.50 3.20 2.00 2.50 0.00 1.50 - - 1.00 1.50 - 1.00 1.50 -	1,270	10.5	13.0	>00.0
CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20	Building Code) А _{гід-н} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016 ICC-ES AC156 2.50 0.00 1.50 - Test Mounting Details Air Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" G "z-clips". Rigid VMC P6000-023 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts.	_	2.40	-	-
Air Conditioning Unit is Mounted to Rigid P6000-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" G "z-clips". Rigid VMC P6000-023 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts.	CBC 2016	-	1.67	0.67
"z-clips". Rigid VMC P6000-023 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts.				l
			olts via cus	tom made

THE VMC GROUP	ι	INIT UNI MMUQ	DER TE Mary S		UT)		UUT-4a 98538-17	1 701, UUT-4a
Model Line		M	lodel Numb	er		N	Vanufacture	
Direct Fit			ZXG14 Johnson Controls, Ir					
 	I	Product C	onstruction	Summary				
Air Conditioning Unit ,12 Rail	.5 Ton Cooling Cap			-		je Sheet Me	tal, Carbon S	Steel Base
		Options / Su	ubcompone	ent Summar	r y			
Compressor: Copeland, Economizer: Ruskin Roo Luvata, Heat Exchanger Fault Detection and Diag Notes: UUT dimensions subcomponents). Curbs	oftop Systems, Contr Tubes: JCI, Heat E gnostics: JCI and weights are me	trol Systems: Ver Exchanger Gas V FOF	nstar, Conde alve: White CODE ons and weig	ensor Coils (Rogers, Ent	(Micro Chann thalpy Kits: JC sions include	nel): Sanhua CI, Propane overhang/st	i, Evaporating Conversion tacked	
	1,5	U	UT Properti	ies	YZ			
Weight	P	A	ons[in]5.	35		Lowes	st Nat. Freq.	. [Hz]
[lbs]	Length		dth	He	eight	F-B	S-S	V
1,120	87		0thv II		49	15.0	15.0	15.0
	U	UT Highest Pase		Pliano-			L	1
Building Code	Test C <mark>riteria</mark>	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
_	100 50 40156	DATE: U	7/10/20	29.50	3.20	2.40	-	-
CBC 2016	ICC-ES AC156	2.50	0.00	1.50	67	-	1.67	0.67
		Test	Mounting D	etails	~~/			J
made "z-clips". Rigid VN	/IC P6000-023 Curb		Shake Table	C.V	/2" Grade 5 I	Bolts.		

1U				UT)				
	M	odel Numb	or		N			
		ZXG14			John	son Controls	s, Inc.	
			-					
2.5 Ton Cooling Capaci	ity, Galvanized	I Carbon St	eel Cabinet	and 16-Gaug	ge Sheet Me	tal, Carbon S	Steel Base	
	Options / Su	bcompone	ent Summa	ry				
r Tubes: JCI, Heat Excl gnostics: JCI and weights are meas	hanger Gas Va FOR sured dimensio	alve: White	Rogers, En Constant ghts (dimen	thalpy Kits: Jo	CI, Propane	Conversion		
	UL	JT Properti	es	NZ				
A			35	Min /	Lowes	st Nat. Freq	. [Hz]	
Length		01 00	He	eight	F-B	S-S	V	
8 <mark>7</mark>	By Tim ⁶⁰	thy I	Piland	49	3.0	3.0	6.0	
	Highest Pass	sed Seismi	c Run Infor	mation 🔾				
Test C <mark>riteria</mark>	S _{DS} (g)	z/1/h		A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
ICC-ES AC156			1.50	3.20	2.40	-	-	
T	2.50		1.50	5	-	1.67	0.67	
	23 Curb is Mo	ounted to Sh						
	2.5 Ton Cooling Capaci Fans: Revcor and Lau oftop Systems, Control r Tubes: JCl, Heat Excl gnostics: JCl and weights are meas s are not implied nor in Length 87 UUT Test Criteria ICC-ES AC156 Mounted to Isolated VM	Main Product Cd 2.5 Ton Cooling Capacity, Galvanized Options / Su Sans: Revcor and Lau, Fan Motors: oftop Systems, Control Systems: Ver r Tubes: JCI, Heat Exchanger Gas Va gnostics: JCI and weights are measured dimensions s are not implied nor intended to be composed UU Dimension s are not implied nor intended to be composed UU Dimension S are not implied nor intended to be composed UU Dimension S are not implied nor intended to be composed UU Dimension S are not implied nor intended to be composed UU Dimension S are not implied nor intended to be composed UU Dimension S are not implied nor intended to be composed UU Dimension S are not implied nor intended to be composed UU Bost Criteria Sps (g) ICC-ES AC156 2.00 ICO 2.50 Test N Mounte	Model Numb ZXG14 Product Construction ZXG14 Product Construction ZXG14 Options / Subcompone S Ton Cooling Capacity, Galvanized Carbon St Options / Subcompone Fans: Revcor and Lau, Fan Motors: A.O. Smith oftop Systems, Control Systems: Venstar, Condumer of Systems, Control Systems: Venstar, Condumer of Systems: JCl, Heat Exchanger Gas Valve: White gnostics: JCl UUT Propertion and weights are measured dimensions and weights are not implied nor intended to be certified. Cult UUT Propertion UUT Highest Passed Seismi Test Criteria Sps (g) z/h Quo UUT Highest Passed Seismi Test Criteria Sps (g) z/h Quo 1.00 Colspan="2">Colspan="2"	SUMMARY SHEET Model Number ZXG14 ZXG14 Product Construction Summary 2.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet Options / Subcomponent Summary Z.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet Options / Subcomponent Summary Fans: Revcor and Lau, Fan Motors: A.O. Smith, Belt Drive looftop Systems, Control Systems: Venstar, Condensor Coils r Tubes: JCl, Heat Exchanger Gas Valve: White Rogers, Engostics: JCl and weights are measured dimensions and weights (dimen si are not implied nor intended to be certified. Curb properties UUT Properties UUT Properties UUT Highest Passed Seismic Run Infor Test Criteria Sps (g) z/h Ip Quot 1.00 1.50 IDUT Highest Passed Seismic Run Infor Test Criteria Sps (g) z/h Ip ICC-ES AC156 2.00 1.00 1.50 Ip ICC-ES AC156 2.00 1.00 1.50 <td colspaned="" curb="" is="" mounted="" p6200-023="" shake="" table<="" td="" to="" vmc=""><td>Model Number ZXG14 Product Construction Summary 2.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Options / Subcomponent Summary Fans: Revcor and Lau, Fan Motors: A.O. Smith, Belt Drive Blower Motor oftop Systems, Control Systems: Venstar, Condensor Coils (Micro Chanr r Tubes: JCl, Heat Exchanger Gas Valve: White Rogers, Enthalpy Kits: JC gnostics: JCl and weights are measured dimensions and weights (dimensions include to be certified. Curb properties; 315lbs, 82 uUT Properties UUT Properties UUT Highest Passed Seismic Run Information Test Criteria Sps (g) 2.00 1.00 1.50 3.20 ICC-ES AC156 2.00 1.00 2.50 0.00 1.50 Test Mounting Details Mounted to Isolated VMC P6200-023 Curb Using (30) 1/4" TEK Screws a Isolated VMC P6200-023 Curb is Mounted to Shake Table using (12) 1/2</td><td>Model Number M ZXG14 John Product Construction Summary 2.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Sheet Me Options / Subcomponent Summary Fans: Revcor and Lau, Fan Motors: A.O. Smith, Belt Drive Blower Motor: Regal Belo oftop Systems, Control Systems: Venstar, Condensor Coils (Micro Channel): Sanhua r Tubes: JCl, Heat Exchanger Gas Valve: White Rogers, Enthalpy Kits: JCl, Propane gnostics: JCl and weights are measured dimensions and weights (dimensions include overhang/si s are not implied nor intended to be certified. 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Smith, Belt Drive Blower Motor oftop Systems, Control Systems: Venstar, Condensor Coils (Micro Chanr r Tubes: JCl, Heat Exchanger Gas Valve: White Rogers, Enthalpy Kits: JC gnostics: JCl and weights are measured dimensions and weights (dimensions include to be certified. Curb properties; 315lbs, 82 uUT Properties UUT Properties UUT Highest Passed Seismic Run Information Test Criteria Sps (g) 2.00 1.00 1.50 3.20 ICC-ES AC156 2.00 1.00 2.50 0.00 1.50 Test Mounting Details Mounted to Isolated VMC P6200-023 Curb Using (30) 1/4" TEK Screws a Isolated VMC P6200-023 Curb is Mounted to Shake Table using (12) 1/2</td> <td>Model Number M ZXG14 John Product Construction Summary 2.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Sheet Me Options / Subcomponent Summary Fans: Revcor and Lau, Fan Motors: A.O. Smith, Belt Drive Blower Motor: Regal Belo oftop Systems, Control Systems: Venstar, Condensor Coils (Micro Channel): Sanhua r Tubes: JCl, Heat Exchanger Gas Valve: White Rogers, Enthalpy Kits: JCl, Propane gnostics: JCl and weights are measured dimensions and weights (dimensions include overhang/si s are not implied nor intended to be certified. Curb properties: 315lbs, 82" L x 54" W UUT Properties UUT Properties UUT Highest Passed Seismic Run Information UUT Highest Passed Seismic Run Information Test Criteria Sps (g) 2.00 1.00 1.50 3.0 UUT Highest Passed Seismic Run Information Test Mounting Details - Mounted to Isolated VMC P6200-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" Grade 5 B</td> <td>UU1-4b SUMMARY SHEET Worker Street Manufacture Manufacture ZXG14 Manufacture Droduct Construction Summary 2.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Sheet Metal, Carbon Steel Cabinet and 16-Gauge Sheet Metal, Carbon Steel Steer Stee</td>	Model Number ZXG14 Product Construction Summary 2.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Options / Subcomponent Summary Fans: Revcor and Lau, Fan Motors: A.O. Smith, Belt Drive Blower Motor oftop Systems, Control Systems: Venstar, Condensor Coils (Micro Chanr r Tubes: JCl, Heat Exchanger Gas Valve: White Rogers, Enthalpy Kits: JC gnostics: JCl and weights are measured dimensions and weights (dimensions include to be certified. Curb properties; 315lbs, 82 uUT Properties UUT Properties UUT Highest Passed Seismic Run Information Test Criteria Sps (g) 2.00 1.00 1.50 3.20 ICC-ES AC156 2.00 1.00 2.50 0.00 1.50 Test Mounting Details Mounted to Isolated VMC P6200-023 Curb Using (30) 1/4" TEK Screws a Isolated VMC P6200-023 Curb is Mounted to Shake Table using (12) 1/2	Model Number M ZXG14 John Product Construction Summary 2.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Sheet Me Options / Subcomponent Summary Fans: Revcor and Lau, Fan Motors: A.O. Smith, Belt Drive Blower Motor: Regal Belo oftop Systems, Control Systems: Venstar, Condensor Coils (Micro Channel): Sanhua r Tubes: JCl, Heat Exchanger Gas Valve: White Rogers, Enthalpy Kits: JCl, Propane gnostics: JCl and weights are measured dimensions and weights (dimensions include overhang/si s are not implied nor intended to be certified. Curb properties: 315lbs, 82" L x 54" W UUT Properties UUT Properties UUT Highest Passed Seismic Run Information UUT Highest Passed Seismic Run Information Test Criteria Sps (g) 2.00 1.00 1.50 3.0 UUT Highest Passed Seismic Run Information Test Mounting Details - Mounted to Isolated VMC P6200-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" Grade 5 B	UU1-4b SUMMARY SHEET Worker Street Manufacture Manufacture ZXG14 Manufacture Droduct Construction Summary 2.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Sheet Metal, Carbon Steel Cabinet and 16-Gauge Sheet Metal, Carbon Steel Steer Stee

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UUT-4c

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Model Line	•	Μ	lodel Numb	ber		Γ	Manufacture	₽r
Direct Fit			ZXG14			John	son Controls	s, Inc.
		Product C	onstruction	n Summary				
Conditioning Unit ,1	2.5 Ton Cooling Capacit			-	and 16-Gaug	ge Sheet Me	tal, Carbon S	Steel Base
ail	. .				·	-		
		Options / Su	ubcompone	ent Summar	у			
ompressor: Copeland ogers, Propane High /	, Fans: Lau, Fan Motors Altitude Kit: JCI	: A.O. Smith,	Heat Excha	anger Tubes:	: JCI, Heat E	xchanger G	as Valve: Wł	nite
otes: UUT dimensions	and weights are measu	ured dimensio	ons and wei	ahts (dimens	sions include	overhang/s	tacked	
	s are not implied nor int							
		C U	UT Properti	ies				
Weight	4		ons [in]		4	Lowe	st Nat. Freq.	. [Hz]
[lbs]	Length	4	dth	He	ight	F-B	S-S	V
1,120	87	6	6P-05	35 4	19	18.0	15.0	30.0
	UUT	Highest Pas	sed Seismi	c Run Infor	mation			
Building Code	Test C <mark>riteri</mark> a	S _{DS} (g)	oth z/h	Piland	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC156	2.00	1.00	1.50	3.20	2.40	-	-
000 2010		2.50	0.00	1.50	-	-	1.67	0.67
		Test	Mounting D	Details				
	Mounted to Rigid VMC I						ide 5 bolts vi	a custom
ade z-clips. Rigid v	MC P6000-023 Curb is				72 Grade 5	Bolts.		
		OPA COM	UUT-40	by				
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All units maintained structural integrity and functionality after AC-156 test; UUT was full of operating content during testing

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UUT-4d

98538-1701, UUT-4d Model Line Model Number Manufacturer Direct Fit ZXG14 Johnson Controls, Inc. **Product Construction Summary** Air Conditioning Unit ,12.5 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Sheet Metal, Carbon Steel Base Rail **Options / Subcomponent Summary** Compressor: Copeland, Fans: Lau, Fan Motors: A.O. Smith, Heat Exchanger Tubes: JCI, Heat Exchanger Gas Valve: White Rogers, Propane High Altitude Kit: JCI Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include overhang/stacked subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 315lbs, 82" L x 54" W x 20" H. **UUT** Properties Dimensions [in] Lowest Nat. Freq. [Hz] Weight [lbs] Width Height F-B V Length S-S 1,120 87 60 49 6.0 5.5 11.5 UUT Highest Passed Seismic Run Information **Building Code** Test Criteria S_{DS}(g) ⊾z/h A_{RIG-H} (g) A_{FLX-V} (g) A_{RIG-V}(g) A_{FLX-H} (g) 1.00 1.50 3.20 2.40 2.00 ICC-ES AC156 CBC 2016 2.50 0.00 1.50 -1.67 0.67 -**Test Mounting Details** Air Conditioning Unit is Mounted to Isolated VMC P6200-023 Curb Using (30) 1/4" TEK Screws and (6) 1/2" Grade 5 bolts via custom made "z-clips". Isolated VMC P6200-023 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts. UUT-4d

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							98538-17	01, UUT-4e
Model Line	9	Μ	odel Numb	er		I	Manufacture	er
Direct Fit			ZXG14			John	ison Controls	s, Inc.
		Product C	onstructior	n Summary				
Air Conditioning Unit ,1 Rail	2.5 Ton Cooling Capacit	y, Galvanize	d Carbon St	eel Cabinet	and 16-Gaug	ge Sheet Me	etal, Carbon S	Steel Base
		Options / Su	ubcompone	nt Summa	ry			
	kin Rooftop Systems s and weights are measu os are not implied nor into							
		OFU		COA				
			UT Properti	es		Lawa	of Not From	<u></u>
Weight [lbs]	Length		ons [in] _ dth		eight	F-B	st Nat. Freq S-S	. [H2] V
1,120	87 engli	-	6P-05	_	5 49		3-3 7.0	v 8.5
1,120		Highest Pas				6.0	7.0	0.0
Building Code	Test Criteria	S _{DS} (g)	seu Seisiini +⊢z/h	Dila ^l nd	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
		2.00	1.00	2112hd 1.50	3.20	2.40		~RIG-V (9)
CBC 2016	ICC-ES AC156	2.50	0.00	1.50	-	-	1.67	0.67
		DATE: O	Mounting D	100			1.07	0.07
	Mounted to Ruskin 1RC ovided clip9 with (4) 1/4" Bolts.	TEK screws						

Model Line Model Number Manufacturer Direct Fit XYE04 Johnson Controls, Inc. Product Construction Summary Heat Pump Unit, 3 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Sheet Metal, Carbon Steel Base Ra Options / Subcomponent Summary Compressor: Copeland, Fans: Revcor, Fan Motors: Regal Beloit - Gentec, Direct Drive Blower Motor: Regal Beloit - Gentec, Economizer: Ruskin Rooftop Systems, Control Systems: EMC, Condensor Coils: JCI, Evaporating Coils: Luvata, Electric Heate JCI, Motorized Outside Air Damper: Ruskin Rooftop Systems Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include overhang/stacked subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 165lbs, 71" L x 41" W x 14" H. UUT Properties Weight Dimensions [in] Lowest Nat. Freq. [Hz] UUT Highest Passed Seismic Run Information UUT Highest Passed Seismic Run Information Building Code Test Criteria Sps (g) Z/h Ie AFLX+(g) AFLEX-(g) AFLEX-(g) AFLEX-(g)	THE VMC GROUP	L	JNIT UNE Sumn	DER TE Mary S		UT)		UUT-5a	I
Direct Fit XYE04 Johnson Controls, Inc. Product Construction Summary Heat Pump Unit, 3 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Sheet Metal, Carbon Steel Base Ra Options / Subcomponent Summary Compressor: Copeland, Fans: Revcor, Fan Motors: Regal Beloit - Gentec, Direct Drive Blower Motor: Regal Beloit - Gentec, Economizer: Ruskin Rooftop Systems, Control Systems: EMC, Condensor Coils: JCI, Evaporating Coils: Luvata, Electric Heate JCI, Motorized Outside Air Damper: Ruskin Rooftop Systems Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include overhang/stacked subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 165lbs, 71° L x 41° W x 14° H. UUT Properties Weight Dimensions [in] Lowest Nat. Freq. [Hz] [Ibs] Length Width Height F-B S-S M 620 74 74 33 27.0 25.0 31 UUT Highest Passed Seismic Run Information UUT Highest Passed Seismic Run Information Ext Criteria Sos (g) 2/n Ie Art.v (g) Art.ev(g) Art.ev(g) Art.ev(g) Art.ev(g) Art.ev(g) Art.ev(g) Art.ev(g) Art.ev(g) Art.ev(g) <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>98538-17</td><td>′01, UUT-5a</td></t<>								98538-17	′01, UUT-5a
Product Construction Summary Heat Pump Unit, 3 Ton Cooling Capacity, Galvanized Carbon Steel Cabinet and 16-Gauge Sheet Metal, Carbon Steel Base Ra Options / Subcomponent Summary Compressor: Copeland, Fans: Revcor, Fan Motors: Regal Beloit - Gentec, Direct Drive Blower Motor: Regal Beloit - Gentec, Economizer: Ruskin Rooftop Systems, Control Systems: EMC, Condensor Coils: JCI, Evaporating Coils: Luvata, Electric Heate JCI, Motorized Outside Air Damper: Ruskin Rooftop Systems Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include overhang/stacked subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 165lbs, 71° L x 41° W x 14° H. UUT Properties Weight Dimensions [in] Lowest Nat. Freq. [Hz] [Ibs] Length Width Height F-B S-S M Good 74 74 33 27.0 25.0 31 UUT Highest Passed Seismic Run Information Building Code Test Criteria Sos (g) Z/n Ie Arts.+ (g)	Model Line		М	odel Numb	er		Ν	Manufacture)r
Uptions / Subcomponent Summary Options / Subcomponent Summary Compressor: Copeland, Fans: Revcor, Fan Motors: Regal Beloit - Gentec, Direct Drive Blower Motor: Regal Beloit - Gentec, Economizer: Ruskin Rooftop Systems, Control Systems: EMC, Condensor Coils: JCI, Evaporating Coils: Luvata, Electric Heate JCI, Motorized Outside Air Damper: Ruskin Rooftop Systems Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include overhang/stacked subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 165lbs, 71" L x 41" W x 14" H. UUT Properties Weight Dimensions [in] Lowest Nat. Freq. [Hz] [Ibs] Length Width F-B S-S M 620 74 74 33 27.0 25.0 31 UUT Highest Passed Seismic Run Information Building Code Test Criteria Sog (g) 2/h Ip AFLX-V (g) ARIGE Compression Guide State to Rigid VMC P6000-019 Curb USing (30) 1/4" TEK Screws and (6) 1/2" Grade 5 bolts via cust made "z-clips". Rigid VMC P6000-019 Curb USing (30) 1/4" TEK Screws and (6) 1/2" Grade 5 bolts via cust made "z-clips". Rigid VMC P6000-019 Curb USing (30) 1/4" TEK Screws and (6) 1/2" Grade 5 bolts via cust made "z-clips". Rigid VMC P6000-019 Curb Is Mounted to Shake Table using (12) 1/2" Grade	Direct Fit			XYE04			John	son Controls	s, Inc.
Options / Subcomponent Summary Compressor: Copeland, Fans: Revcor, Fan Motors: Regal Beloit - Gentec, Direct Drive Blower Motor: Regal Beloit - Gentec, Economizer: Ruskin Rooftop Systems, Control Systems: EMC, Condensor Coils: JCI, Evaporating Coils: Luvata, Electric Heate JCI, Motorized Outside Air Damper: Ruskin Rooftop Systems Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include overhang/stacked subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 165lbs, 71° L x 41° W x 14° H. UUT Properties Weight Dimensions [in] Lowest Nat. Freq. [Hz] [lbs] Length Width Height F-B S-S N 620 74 74 33 27.0 25.0 31 UUT Highest Passed Seismic Run Information UUT Highest Passed Seismic Run Information Ecc-ES AC156 2.00 1.00 1.50 3.20 2.40 - - CBC 2016 ICC-ES AC156 Curb Sing (30) 1/4° TEK Screws and (6) 1/2° Grade 5 bolts via cust made "z-clips". Rigid VMC P6000-019 Curb Is Mounted to Shake Table using (12) 1/2° Grade 5 Bolts. UUT -5a			Product Co	onstructior	Summary				
Compressor: Copeland, Fans: Revcor, Fan Motors: Regal Beloit - Gentec, Direct Drive Blower Motor: Regal Beloit - Gentec, Economizer: Ruskin Rooftop Systems, Control Systems: EMC, Condensor Coils: JCI, Evaporating Coils: Luvata, Electric Heate JCI, Motorized Outside Air Damper: Ruskin Rooftop Systems Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include overhang/stacked subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 165lbs, 71" L x 41" W x 14" H. UUT Properties Weight Dimensions [in] Length Width 620 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 74 70 150 74 74 74	Heat Pump Unit, 3 Ton (Cooling Capacity, Ga	alvanized Carbor	n Steel Cabi	inet and 16-	Gauge Shee	t Metal, Cark	oon Steel Ba	ise Rail
Economizer: Ruskin Rooftop Systems: EMC, Condensor Coils: JCI, Evaporating Coils: Luvata, Electric Heate JCI, Motorized Outside Air Damper: Ruskin Rooftop Systems Notes: UUT dimensions and weights are measured dimensions and weights (dimensions include overhang/stacked subcomponents). Curbs are not implied nor intended to be certified. Curb properties: 165lbs, 71" L x 41" W x 14" H. UUT Properties Weight Length Length Lowest Nat. Freq. [Hz] [1bs] Length Width 620 74 74 33 27.0 25.0 31 UUT Highest Passed Seismic Run Information Building Code Test Criteria Sps (g) 2/h Ip AFLX+I (g) AFLX-V (g) ARLG CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2.40 -<			Options / Su	lbcompone	ent Summai	ry			
Weight [Ibs] Lowest Nat. Freq. [Hz] [Ibs] Length Width Height F-B S-S N 620 74 74 33 27.0 25.0 31 UUT Highest Passed Seismic Run Information Building Code Test Criteria S _{DS} (g) Z/h Ip AFLX-H (g) AFLX-V (g) ARIG CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2.40 - - - 1.67 0.1 CBC 2016 ICC-ES AC156 2.00 1.00 1.50 - - 1.67 0.1 Test Mounting Details Air Conditioning Unit is Mounted to Rigid VMC P6000-019 Curb Using (30) 1/4" TEK Screws and (6) 1/2" Grade 5 bolts via cust made "z-clips". Rigid VMC P6000-019 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts. UUT-5a	Economizer: Ruskin Rod JCI, Motorized Outside / Notes: UUT dimensions	oftop Systems, Contr Air Damper: Ruskin F and weights are me	rol Systems: EM Rooftop Systems asured dimension	IC, Condens s ons and weig	sor Coils: JC	CI, Evaporatin	ng Coils: Luv	ata, Electric	
Weight [Ibs] Length Dimensions [in] Lowest Nat. Freq. [Hz] [Ibs] Length Width Height F-B S-S N 620 74 74 33 27.0 25.0 31 UUT Highest Passed Seismic Run Information UUT Highest Passed Seismic Run Information A _{FLX+1} (g) A _{FLX-V} (g) A _{RIG-H} (g)				UT Properti	20				
Ibs1 Length Width Height F-B S-S M 620 74 74 33 27.0 25.0 31 UUT Highest Passed Seismic Run Information Building Code Test Criteria Sps(g) Z/h Ip AFLX+I (g) ARIG-H (g) AFLX-V (g) ARIG CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2.40 - - - - - 1.67 0. Length Width Jest Mounting Details Air Conditioning Unit is Mounted to Rigid VMC P6000-019 Curb Using (30) 1/4" TEK Screws and (6) 1/2" Grade 5 bolts via cust made "z-clips". Rigid VMC P6000-019 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts. UUT-5a	Weight	2			<u> </u>	YZ I	Lowe	st Nat. Freq	[Hz]
620 74 74 33 27.0 25.0 31 UUT Highest Passed Seismic Run Information Building Code Test Criteria Sps (g) z/h IP AFLX+I (g) ARIG-H (g) AFLX-V (g) ARIG CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2.40 -		Length			85 Не	eight		-	v
UUT Highest Passed Seismic Run Information Building Code Test Criteria Sps (g) z/h Ip AFLX-H (g) ARIG-H (g) AFLX-V (g) ARIG CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2.40 -					~~	- T			31.5
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} CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2.40 - - 1.67 0.1 Test Mounting Details Air Conditioning Unit is Mounted to Rigid VMC P6000-019 Curb Using (30) 1/4" TEK Screws and (6) 1/2" Grade 5 bolts via cust made "z-clips". Rigid VMC P6000-019 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts. UUT-5a									Ç
CBC 2016 ICC-ES AC156 2.00 1.00 1.50 3.20 2.40 - - - 1.67 0.1 Test Mounting Details Air Conditioning Unit is Mounted to Rigid VMC P6000-019 Curb Using (30) 1/4" TEK Screws and (6) 1/2" Grade 5 bolts via cust made "z-clips". Rigid VMC P6000-019 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts. UUT-5a UUT-5a	Building Code		BY: HHH	лну о і	Filanu		A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
2.50 0.00 1.50 - - 1.67 0.1 Test Mounting Details Air Conditioning Unit is Mounted to Rigid VMC P6000-019 Curb Using (30) 1/4" TEK Screws and (6) 1/2" Grade 5 bolts via cust made "z-clips". Rigid VMC P6000-019 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts. UUT-5a			2.00	1.00	1.50	3.20			
Air Conditioning Unit is Mounted to Rigid VMC P6000-019 Curb Using (30) 1/4" TEK Screws and (6) 1/2" Grade 5 bolts via cust made "z-clips". Rigid VMC P6000-019 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts. UUT-5a		ICC-ES ACTO	DA 2.50	0.00	129.50	7 - 7	-	1.67	0.67
made "z-clips". Rigid VMC P6000-019 Curb is Mounted to Shake Table using (12) 1/2" Grade 5 Bolts.		C	Test f	Mounting D	etails	2			
				Shake Table UUT-5a SUILDI	using (12) 1				

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Model Line		,	Model Numb	er		1	Manufacture	
Direct Fit			XYE04			Johnson Controls, Inc.		
	· · · · ·	Produc	t Construction	n Summary	 /			
Heat Pump Unit, 3 Ton (Cooling Capacity	, Galvanized Car	bon Steel Cabi	inet and 16-	-Gauge Sheet	t Metal, Cark	oon Steel Ba	ise Rail
		=	/ Subcompone		-			
Compressor: Copeland, Economizer: Ruskin Roc JCI, Motorized Outside A Notes: UUT dimensions	oftop Systems, Co Air Damper: Rusk and weights are	control Systems: I kin Rooftop Syste measured dimen	EMC, Condens ems nsions and weig	sor Coils: JC	CI, Evaporatin	ng Coils: Luv e overhang/st	vata, Electric	
subcomponents). Curbs	; are not implied	nor intended to b	e certifiea. Cu	In Properue	es: 26010s, 7 1	"LX41 VV	х 20° н.	
			UUT Properti	ies	T			
Weight		d 1 famous	nsions [in]		4/3	Lowes	st Nat. Freq	. [Hz]
[lbs]	Length	Ξ/ I	WidthP-053	35 не	eight	F-B	S-S	V
620	7 <mark>4</mark>		74	<u>A A TITYYYYYYYYVIAAA A</u>	33	5.5	5.5	11.0
		UUT Highest P	assed Seismi	c Run Infor	rmation			_
Building Code	Test Criteri	ia S _{DS} (g)) z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC1	2.00	07/10/20	1.50	3.20	2.40	-	-
•••••		2.50	0.00	1.50	- / - /	-	1.67	0.67
			est Mounting D		151			<u> </u>
Heat Pump Unit is Moun custom made "z-clips".								; via

THE WE GROUP	UI	NIT UNE Summ	DER TE Mary S		UT)		UUT-6a	I
							98538-17	701, UUT-6a
Model Line		М	odel Numb	er		Γ	Manufacture	ər
Direct Fit			XYE09			John	son Controls	s, Inc.
		Product C	onstruction	Summary				
Heat Pump Unit, 8.5 Tor	n Cooling Capacity, Ga	alvanized Carb	on Steel Ca	binet and 1	6-Gauge She	eet Metal, Ca	arbon Steel I	Base Rail
		Options / Su	ubcompone	nt Summai	·у			
Compressor: Copeland, Koch, Condensor Coils: Notes: UUT dimensions subcomponents). Curbs	JCI, Evaporating Coils and weights are meas	s: Luvata, Elec	tric Heaters	: JCI, Fault	Detection an	d Diagnostic	tacked	nec, riners.
	4	U	UT Properti	es	4			
Weight		Dimensio	ons [in]		12	Lowe	st Nat. Freq	. [Hz]
[lbs]	Length	Wid	dthP-053	35 Не	ight m	F-B	S-S	V
1,120	87	6	0	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	49	15.0	15.0	25.0
	UUT	Highest Pass	sed Seismi	c Run Infor	mation			
Building Code	Test C <mark>riteria</mark>	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC156	2.00	1.00	1.50	3.20	2.40	-	-
000 2010		2.50	0.00	⁷² 1.50	- /	-	1.67	0.67
Heat Pump Unit is Mour "z-clips". Rigid VMC P6		ted to Shake T				1/2" Grade 5	bolts via cu	stom made
All units maintaine	d structural integrity ar	nd functionality	after AC-1	56 test; UUT	was full of c	perating cor	ntent during	testing

THE VMC GROUP	١U	NIT UNC Summ	DER TE 1ARY S		UT)		UUT-6b)
\smile							98538-17	01, UUT-6t
Model Line		Мо	odel Numb	er		Γ	Manufacture	er
Direct Fit			XYE09			John	son Controls	s, Inc.
		Product Co	onstruction	Summary				
eat Pump Unit, 8.5 To	n Cooling Capacity, Ga			=	6-Gauge She	eet Metal, Ca	arbon Steel I	Base Rail
		Options / Sul	bcompone	nt Summai	у			
och, Condensor Coils:	, Fans: Lau, Fan Motors JCI, Evaporating Coils:	: Luvata, Elect	tric Heaters	: JCI, Fault	Detection an	d Diagnostic	s: JCI	ntec, Filters
	and weights are measured are not implied nor int	ended to be co	ertified. Cu	rb Propertie				
	L.	And the second s	JT Properti	es	T			
Weight	4	Dimensio		h	ME		st Nat. Freq	
[lbs] 1,120	Length 87	60	<u>thP-053</u>		49	F-B	S-S	V
1,120	-	Highest Pass		λετεγγγγγγγλλλλο		3.5	3.0	7.0
	001	riigilest i ass		liana		A ()		A (m)
Building Code	Test Criteria	Sps (a)	z/h	l D				
Building Code	Test Criteria	S _{DS} (g) 2.00	z/h 1.00	ι _P	A _{FLX-H} (g) 3.20	А_{RIG-H} (g) 2.40	A _{FLX-V} (g) -	A _{RIG-V} (g) -
CBC 2016	Test Criteria ICC-ES AC156	2.00 2.50 Test M	1.00 0.00 Mounting D	1.50 29 .50 etails	3.20	2.40 -	- 1.67	- 0.67