

DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

APPLICATION F	OR HCAI SPECIAL SEISMIC	OFFICE USE ONLY
	PREAPPROVAL (OSP)	APPLICATION #: OSP-0447
HCAI Special Seismic	c Certification Preapproval (OSP)	
Type: New X	Renewal	
Manufacturer Informa	ation	
Manufacturer: Amico	Source	
Manufacturer's Technical	Representative: James Lewis	
Mailing Address: 600 Pri	ime Place, Hauppauge, NY 11788	
Telephone: (631) 940-8	559 Email: JLewis@amico.com	1
	FORCODECON	
Product Information	150 · · · · · · · · · · · · · · · · · · ·	0,
Product Name: Medical (Gas and Vacuum Systems	
Product Type: Medical A	Air and Vacuum Systems	2
Product Model Number:	See attachments	Ĩ
General Description:	Painted carbon steel skids. Units contain air pumps, filters and sensors. Control panel enclosures are pain	
Mounting Description:	See Certified Product Tables, -	
Tested Seismic Enhance	ments: Seismic enhancements made to the test ur anomalies during the tests shall be incorpo	nits and/or modifications required to address rated into the production units.
Applicant Information		ter .
Applicant Company Nam	e: Dynamic Certification Laboratories	
Contact Person: Kelly L	aplace	
Mailing Address: 1315 G	Greg Parkway #109, Sparks, NV 89431	
Telephone: (775) 358-50	085 Email: kelly@shaketest.co	m
Title: Business Manager		

HCA



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

alifornia Licensed Structural Engineer Responsible for the Engineering and Test Report(s)
ompany Name: THE VMC GROUP
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ertification Method
GR-63-Core X ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3
Other (Please Specify):
FOR CODE CO
esting Laboratory
ompany Name: DYNAMIC CERTIFICATION LABORATORY (DCL)
ontact Person: Kelly Laplace
ailing Address: 1315 Greg St., Ste 109, Sparks NV 89431
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O DATE: 06/20/2023
PLT COT
DATE: 06/20/2023

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



STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

Seismic Parameters

Desig	n Basis of Equipment or Components	(Fp/Wp) =	1.5 (rigidly mounted	control panels)), 4.5 (all other units)
	SDS (Design spectral response accele	eration at sh	ort period, g) = 2.0		
	ap (Amplification factor) =	2.5			
	Rp (Response modification factor) =	6.0 (standa	lone control panels, ri	gidly mounted); 2.0 (all other units)
	Ω_0 (System overstrength factor) =	2.0			
	Ip (Importance factor) =	1.5			
	z/h (Height ratio factor) =	1			
	Natural frequencies (Hz) =	See Attach	ment		
	Overall dimensions and weight =	See Attach	mentODF		
		EDFO	- CON	10,	
HCA	Approval (For Office Use Only)	Approval	Expires on 06/20/2	029	
Date:	6/20/2023		OSP-0447	R I	
Name	e: Mohammad Karim			Title:	Supervisor, Health Facilities
Speci	al Seismic Certification Valid Up to: SE	os (g) = 2.0	ohammad Karim 0	z/h =	1
Condi	tion of Approval (if applicable):	DATE	: 06/20/2023		
		PRNIA E	PUIL DING CO	DF: DV	

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

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Table 1 - Special Seismic Certification

Certified Components -

Modular Skid Mounted Scroll Air Compressors



DCL Project: 73815-2201

Manufacturer: Amico Source

Product Line: Medical Air and Vacuum Systems; Modular Skid Mounted Scroll Air Compressors

Certified Product Construction: Painted carbon steel frame. Control panel is painted carbon steel, NEMA 1/12.

Mounting Description: Units are flexible base mounted with neoprene pads. Standalone control panel UUT2D is rigid base mounted to manufacturer provided stand.

Certified Seismic Level: Sps=2.00g, z/h=1.0

Model	НР	Custom	Total Number of	Total Number of	Maximum Number of Vertically Stacked	Max.	Dimensions (in	ches)⁵	Max. Operating	Unit
widdei	ΠP	System	Compressor Skids	Compressors	Compressors per Skid	Height	Width ⁶	Depth	Weight (lb) ⁵	Unit
A-xxx-D-080P-SS-N-020-46063-TS	2	Duplex		2	2	73.0	67.0	74.0	1,370	UUT1 ¹
A-SCD-x-080P-SS-N-xxx-xxxxx-xx				WILLIN Werd Maren		1				
A-SCD-x-120P-SS-N-xxx-xxxxx-xx	2, 3, 5, 7.5, 10, 15,	Duplex -	1-3	OSD	-04472	73.0 - 99.0	67.0 - 230.0	74.0 - 109.5	1 270 0 270	
A-SCD-x-200P-SS-N-xxx-xxxxx-xx	20	Hexaplex		200	-04472	73.0 - 99.0	67.0 - 230.0	74.0 - 109.5	1,370 - 8,279	Interpolated ^{3,4}
A-SCD-x-240P-SS-N-xxx-xxxxx-xx										
A-xxx-D-240P-SS-N-200-20863-TS	20	Duplex	1 RV	Moham	mad K ² rim	99.0	138.0	109.5	4,960	UUT2A,B,C,D ^{2,3}
Notes:				wonam	Hau Nahihi 🔤					•
1. UUT1 tested with a 2 hp scroll pump	in the top position, and a	1 hp reciprocation	ng pump in the bottom	position.						
2. UUT2 tested with a 20 hp scroll pump	o in the bottom position a	nd a 20 hp recir	procating pump in the t	top position	120/2022					

<u>_____</u>

3. Hexaplex control panel, filters and largest HP pumps tested in duplex unit UUT2. Units are modular in nature, and UUT2 is representative of subcomponents in the largest hexaplex unit. Dimensions and operating weight listed are for UUT2A,B,C,D combined.

4. Duplex systems consist of (1) two-high compressor skid, Triplex systems have (1) one-high and (1) two-high compressor skids, Quadruplex systems have (2) two-high compressor skids, Pentaplex systems have (1) one-high and (2) two-high compressor skids, and Hexaplex systems have (3) two-high compressor skids. All skids are structurally independent and flexibly connected.

5. The max. dimensions and weights reflect the complete system as it would be installed in the field. The max. weight and dimension ranges start from the maxiumum weight and dimensions of the smallest or lightest skids of a duplex system to the heaviest and largest skids of a hexaplex system combined for the interpolated models.

6. The width of extrapolated units expands beyond the largest tested unit width due to the arrangment of extra skids in the width direction

Table 2 - Special Seismic Certification Certified Components -

Modular Skid Mounted Reciprocating Air Compressors



DCL Project: 73815-2201

Manufacturer: Amico Source

Product Line: Medical Air and Vacuum Systems; Modular Skid Mounted Reciprocating Air Compressors

Certified Product Construction: Painted carbon steel frame. Control panel is painted carbon steel, NEMA 1/12.

Mounting Description: Units are flexible base mounted with neoprene pads. Standalone control panel UUT2D is rigid base mounted on manufacturer provided stand.

Certified Seismic Level: S_{DS}=2.00g, z/h=1.0

B de del		Custom	Total Number of		Maximum Number of	Max.	Dimensions (ir	iches)⁵	Max. Operating	11-2
Model	HP	System	Compressor Skids	of Compressors	Vertically Stacked Compressors per Skid	Height	Width ⁶	Depth	Weight (lb)⁵	Unit
A-xxx-D-080P-SS-N-010-46063-TS	1	Duplex	, ST	2	2	73.0	67.0	74.0	1,370	UUT1 ¹
A-RED-D-080P-SS-N-xxx-xxxxx-xx						Z				
A-RED-D-120P-SS-N-xxx-xxxxxxxxx	1, 2, 3, 5, 7.5, 10,	Duplex -	1-3 2-65F	00004473	73.0 - 99.0	67.0 - 230.0	74.0 - 109.5	1 270 0 217		
A-RED-D-200P-SS-N-xxx-xxxxx-xx	15, 20	Hexaplex		05P	-0447²	73.0 - 99.0	67.0 - 230.0	74.0 - 109.5	1,370 - 8,317	Interpolated ^{3,4}
A-RED-x-240P-SS-N-xxx-xxxxx-xx										
A-xxx-D-240P-SS-N-200-20863-TS	20	Duplex	1 RV	Moram	mad Karim	99.0	138.0	109.5	4,960	UUT2A,B,C,D ^{2,3}
Notes:			יט	: Woham	mau Namm					
1. UUT1 tested with a 2 hp scroll pump i	n the top position, and a	1 hp reciprocati	<mark>ng pu</mark> mp in the botton	n position.						
2. UUT2 tested with a 20 hp scroll pump	in the bottom position, a	and a 20 hp re <mark>cip</mark>	procating pump in the	top position.	/20/2023					
 Hexaplex control panel, filters and larg JUT2A,B,C,D combined. 	gest HP pumps tested in	duplex unit UU	2. Units are modular	in nature, and UU	T2 is representative of subcon	nponents in the la	argest hexaplex u	nit. Dimensions a	nd operating weight liste	ed are for
 Duplex systems consist of (1) two-higl compressor skids, and Hexaplex system 						have (2) two-high	n compressor skie	ls, Pentaplex syst	ems have (1) one-high	and (2) two-high
5. The max. dimensions and weights refl the heaviest and largest skids of a hexag				he max. weight and	d dimension ranges start from	the maxiumum w	eight and dimens	sions of the smalle	est or lightest skids of a	duplex system to

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6. The width of extrapolated units expands beyond the largest tested unit width due to the arrangment of extra skids in the width direction.

Table 3 - Special Seismic CertificationCertified Options -Air Systems



DCL Project: 73815-2201

Manufacturer: Amico Source

Product Line: Medical Air and Vacuum Systems; Air Compressors

Product Construction: Painted carbon steel frames, painted carbon steel enclosures, NEMA 1/12

Mounting Description: Units are flexible base mounted with neoprene pads. Standalone control panels are rigidly mounted to wall or manufacturerprovided stand.

		4	A-B-C-D-E-F-G-H-I-J	
/ariable	Definition	Allowable Value	Allowable Value Description	Unit
А	Air Compressor or Vacuum	A	Air	UUT1,2
B Technology		SCD	Scroll Medical Air Compressor	UUT1,2
Б	recimology	RED	Reciprocating Medical Air Compressor	UUT1,2
		D	Duplex	UUT1,2
		TFU	Triplex	Extrapolated ¹
С	System Size	Q	Quadruplex	Extrapolated ¹
		P	Pentaplex	Extrapolated ¹
		H	Hexaplex	Extrapolated ¹
	-	080P	80 Gallon	UUT1
D	Tank Size	120P	120 Gallon	Interpolated
D	Tank Size	200P	200 Gallon	Interpolated
		240P	240 Gallon	UUT2
E	Configuration	ss BY: Mo	Modular Skid Mounted	UUT1,2
F	Standar <mark>d</mark>	N	NFPA	UUT1,2
		010	1 HP	UUT1
		011 DATE	1 HP 0/20/2023	Same as UUT1
		020	2 HP	UUT1
		021	2 HP	Interpolated
		030	3 HP	Interpolated
		031	3 HP	Interpolated
		050	5HP	Interpolated
G ²	НР	051	5 HP	Interpolated
G	пг	075	7.5HP	Interpolated
		076	7.5 HP	Interpolated
		100	10 HP	Interpolated
		101	10 HP	Interpolated
		150	15 HP	Interpolated
		151	15 HP	Interpolated
		200	20 HP	UUT2
		201	20 HP	Same as UUT2
		20863	208/3/60	UUT2
н	Power	23063	230/3/60	Interpolated
		46063	460/3/60	UUT1
	Company	т	Hitachi	UUT1,2
I	Component	S	Touch Screen	UUT1,2

Notes:

1. Hexaplex control panel, filters and largest HP pumps tested in duplex unit UUT2. Units are modular in nature, and UUT2 subcomponents are representative of subcomponents in the largest hexaplex units.

2. Allowable values for the "G" variable ending in 1 or 6 are high-pressure models. The only difference between the high-pressure and standardpressure models is the coupling size. The unit construction, weight, dimensions, and subcomponents remain identical to the tested standardpressure systems.

Certified Components - Vertical Tank Mounted Vac	uum Pumps						
DCL Project: 73815-2201							TORIES,LL
Manufacturer: Amico Source							
Product Line: Medical Air and Vacuum Syst	ems; Vertical Tank Mou	nted Vacuur	n Pumps				
Certified Product Construction: Painted car	bon steel frame. Contro	ol panel is pa	inted carbon s	teel, NEMA 1	/12.		
Mounting Description: Units are flexible ba	se mounted with neopre	ene pads.					
Certified Seismic Level: S _{DS} =2.00g, z/h=1.0		<u>r CO</u>	DFC				
Model	HP	System	Max.	Dimensions (inches)	Max. Operating	Unit
			Height	Width	Depth	Weight (lb)	
		Vacuum Sy	stem - Claw			1	
V-CCD-D-030P-TS-N-xxx-xxxxx-xxMxxx	2		89.0	49.0	47.0	1,040	Extrapolated
V-xxx-D-060P-TS-N-xxx-46063-xxMxSx	2		89.0	49.0	47.0	1,040	UUT3 ¹
V-CCD-D-060P-TS-N-xxx-xxxxx-xxMxxx		Duplex	0447		m		
V-CCD-D-080P-TS-N-xxx-xxxxx-xxMxxx	2, 3, 4, 5.4	Dapier	85.0 - 89.0	50.0	48.5	1,040 - 1,110	Interpolated
V-CCD-D-120P-TS-N-xxx-xxxxx-xxMxxx	BY: M	bhamn	had Kar	im 🔍			
V-xxx-D-120P-TS-N-xxx-20863-xxMxSx	5.4		85.0	50.0	48.5	1,110	UUT5 ³
	Vacuu	ım System -	Rotary Lubric	ated			
V-RVL-D-030P-TS-N-xxx-xxxxx-xxMxxx		06/2	40/ _{89.0} JZ	3 49.0	47.0	1,040	Extrapolated
V-xxx-D-060P-TS-N-xxx-46063-xxMxSx			89.0	49.0	47.0	1,040	UUT3 ¹
V-RVL-D-060P-TS-N-xxx-xxxxx-xxMxxx		Duplex				4.400	Interpolated
V-RVL-D-080P-TS-N-xxx-xxxxx-xxMxxx	1, 1.5, 2, 3, 5, 7.5		85.0 - 89.0	47.0 - 49.0	47.0 - 64.0	1,430	Interpolated
V-xxx-D-120P-TS-N-xxx-20863-xxMxSx	7,5		85.0	47.0	64.0	1,430	UUT4 ²
		cuum Syste	m - Rotary Dr				
/-xxx-D-120P-TS-N-xxx-20863-xxMxSx	0.5	OILL	85.0	50.0	48.5	1,110	UUT5 ³
/-RVD-D-030P-TS-N-xxx-xxxxx-xxMxxx						· ·	
V-RVD-D-060P-TS-N-xxx-xxxxx-xxMxxx	0.5, 0.75, 1.2, 1.7, 3,	Duploy	95.0	47.0 50.0	10 5 64 0	1 420	F () ()
V-RVD-D-080P-TS-N-xxx-xxxxx-xxMxxx	4, 5.4, 7.4	Duplex	85.0	47.0 - 50.0	48.5 - 64.0	1,430	Extrapolated
V-RVD-D-120P-TS-N-xxx-xxxxx-xxMxxx							
V-xxx-D-120P-TS-N-xxx-20863-xxMxSx	7.4		85.0	47.0	64.0	1,430	UUT4 ²
 UUT3 tested with 1 hp rotary lubricated pump a UUT4 tested with 7.5 hp rotary lubricated pump UUT5 tested with 5.4 hp claw pump and 0.5 hp 	p and 7.4 hp rotary dry pun	np.					

Table 5 - Special Seismic Cer Certified Components -							
Horizontal Tank Mounted Va	acuum Pumps)) D(
						DYN	
DCL Project: 73815-2201							FICATION
Manufacturer: Amico Source							
Product Line: Medical Air and Vacuum Syste	ms: Horizontal Tank Mountee	d Vacuum Pu	mps				
Certified Product Construction: Painted carb			•	EMA 1/12.			
Mounting Description: Units are flexible base	e mounted with neoprene pa	ds.					
Certified Seismic Level: S _{DS} =2.00g, z/h=1.0							
	Va	cuum Syste	m - Claw				
Model	HPOR	System	Max.	Dimensions	inches)	Max. Operating	Unit
Model	FOR	System	Height	Width	Depth	Weight (lb)	onic
/-xxx-D-060P-TH-N-xxx-46063-xxMxSx	2		62.0	39.0	70.0	960	UUT6 ¹
V-CCD-D-060P-TH-N-xxx-xxxxx-xxMxxx					~		
V-CCD-D-080P-TH-N-xxx-xxxxx-xxMxxx			5. VI XXXX	VIII C	Z		
V-CCD-D-120P-TH-N-xxx-xxxxx-xxMxxx	2, 3, 4, 5.4, 6.4, 7.5	Duplex	62.0 - 75.0	<u> 39.0 - 46.5</u>	70.0 - 97.0	960 - 2,040	Interpolated
V-CCD-D-200P-TH-N-xxx-xxxxx-xxMxxx	05	SP-04	447		C		
V-CCD-D-240P-TH-N-xxx-xxxxx-xxMxxx					T		
V-xxx-D-240P-TH-N-xxx-20863-xxMxSx	7.5		75.0	<u>46.5</u>	97.0	2,040	UUT7 ²
	BY Vacuum	System - Rol	tary Lubricate	em 🚺			
V-xxx-D-060P-TH-N-xxx-46063-xxMxSx		18888888	62.0	39.0	70.0	960	UUT6 ¹
V-RVL-D-060P-TH-N-xxx-xxxxx-xxMxxx				TT and the second s			
V-RVL-D-080P-TH-N-xxx-xxxxx-xxMxxx	DATE:	06/20)/2023	B 🛒	\sim		
V-RVL-D-120P-TH-N-xxx-xxxxx-xxMxxx	1, 1.5, 2, 3, 5, 7.5, 10	Duplex	62.0 - 75.0	39.0 - 46.5	70.0 - 97.0	960 - 2,040	Interpolated
V-RVL-D-200P-TH-N-xxx-xxxxx-xxMxxx			HHH	HHH	0		
V-RVL-D-240P-TH-N-xxx-xxxxx-xxMxxx			MMM	KRY,			
V-xxx-D-240P-TH-N-xxx-20863-xxMxSx	10		75.0	46.5	97.0	2,040	UUT7 ²
		um System -				r	
V-xxx-D-120P-TH-N-xxx-46063-xxxxSx	0.5, 7.5		63.0	50.0	86.0	1,270	UUT8 ³
/-RVD-D-060P-TH-N-xxx-xxxxx-xxxxxx	0.5, 0.75, 1.2, 1.7, 3, 4, 5.4,	ILD.	63.0 - 77.0	50.0 - 55.0	86.0 - 100.0	1,270 - 2,250	Estern close d
V-RVD-D-080P-TH-N-xxx-xxxxx-xxxxxx V-RVD-D-120P-TH-N-xxx-xxxxx-xxxxxx	7.4, 7.5, 8.9, 10.7, 12.1		03.0 - 11.0	50.0 - 55.0	00.0 - 100.0	1,270 - 2,230	Extrapolated ⁵
V-RVD-D-200P-TH-N-xxx-xxxxx-xxxxx	0.5, 0.75, 1.2, 1.7, 3, 4, 5.4,	Duplex					
/-RVD-D-240P-TH-N-xxx-xxxxx-xxxxxx	7.4, 7.5, 8.9, 10.7, 12.1		77.0	55.0	100.0	2,250	Interpolated
/-xxx-D-240P-TH-N-xxx-20863-xxxxSx	7.4, 12.1		77.0	55.0	100.0	2,250	UUT9 ⁴
/-RVD-D-240P-TH-N-xxx-xxxxx-xxxxxx	12.1		77.0	55.0	100.0	2,475	Extrapolated
Notes: . UUT6 tested with 2 hp claw pump and 1 hp rota 2. UUT7 tested with 7.5 hp claw pump and 10 hp 3. UUT8 tested with one 0.5 hp rotary dry Busch p	rotary lubricated pump.	lecker pump.					
4. UUT9 tested with one 7.4 hp rotary dry Busch p			I.				
5. 60 gallon receiver tank tested in UUT6.	, and and any orally only	painp					

Table 6 - Special Seismic Certification

Certified Components -

Modular Skid Mounted Claw Vacuum Pumps



DCL Project: 73815-2201

Manufacturer: Amico Source

Product Line: Medical Air and Vacuum Systems; Modular Skid Mounted Claw Vacuum Pumps

Certified Product Construction: Painted carbon steel frame. Control panel is painted carbon steel, NEMA 1/12.

Mounting Description: Units are flexible base mounted with neoprene pads.

Certified Seismic Level: S_{DS}=2.00g, z/h=1.0

Model	НР	System	Total Number	Total Number of	Maximum Number of Vertically Stacked	Max. D	Dimensions (inc	ches)⁵	Max. Operating	Unit
Model	nr	System	of Pump Skids	Pumps	Pumps per Skid	Height	Width ⁶	Depth	Weight (lb)⁵	Onit
V-CCD-x-080P-SS-N-xxx-xxxxx-xxMxxW										
V-CCD-x-120P-SS-N-xxx-xxxxx-xxMxxW	2, 3, 4, 5.4, 6.4, 7.5	Duplex -	1-2	2-6		99.0	67.0 - 149.0	70.5	1.686 - 5.672	Eutropalated ³
V-CCD-x-200P-SS-N-xxx-xxxxx-xxMxxW	2, 3, 4, 5.4, 6.4, 7.5	Hexaplex				99.0	07.0 - 149.0	70.5	1,000 - 5,072	Extrapolated ³
V-CCD-x-240P-SS-N-xxx-xxxxx-xxMxxW	Q		03	-044						
V-CCD-T-080P-SS-N-xxx-46063-xxMVxW	2, 15	Triplex	1.1.1.1.1	3	3	<mark>9</mark> 9.0	73.0	70.5	3,670	UUT11 ²
V-CCD-x-080P-SS-N-xxx-xxxxx-xxMxxW		R	V Moha	mmad	Karim					
V-CCD-x-120P-SS-N-xxx-xxxxx-xxMxxW	10, 15	Duplex -	1.1.1.1.1.1.3.8888	2-6		96.0 - 99.0	71.0 - 149.0	85.0	2.307 - 7.148	Eutropalate d ⁴
V-CCD-x-200P-SS-N-xxx-xxxxx-xxMxxW	10, 15	Hexaplex	1-3	2-0	Z	90.0 - 99.0	71.0 - 149.0	0.00	2,307 - 7,140	Extrapolated ⁴
V-CCD-x-240P-SS-N-xxx-xxxxx-xxMxxW			$ATF \cdot C$	6/20/2	023					
V-CCD-D-240P-SS-N-150-20863-xxMVxW	15	Duplex		2	2	96.0 ¹	73.0	85.0	3,920 ¹	UUT10 ¹

- CODE

Notes:

1. Units are modular in nature, and UUT10 is representative of subcomponents in the largest hexaplex unit. Hexaplex control panel is standalone and was tested in UUT16. Maximum dimensions and weight for UUT10 listed above includes standalone hexaplex control panel is standalone and was tested in UUT16.

2. UUT11 tested with a 15 hp claw pump in the top and center positions, and a 2 hp claw pump in the bottom position.

3. Duplex systems consist of (1) two-high pump skid, Triplex systems have (1) three-high pump skid, Quadruplex systems have (1) one-high and (1) three-high pump skids, Pentaplex systems have (1) two-high and (1) three-high pump skids, and Hexaplex systems have (2) three-high pump skids if the hp rating of the pumps is less than or equal to 7.5 hp. All skids are structurally independent and flexibly connected.

4. Duplex systems consist of (1) two-high pump skid, Triplex systems have (1) two-high and (1) one-high pump skid, Quadruplex systems have (2) two-high pump skids, Pentaplex systems have (1) one-high and (2) two-high pump skids, and Hexaplex systems have (3) two-high pump skids if the pump hp rating is 10 hp or greater. All skids are structurally independent and flexibly connected.

5. The max. dimensions and weights reflect the complete system as it would be installed in the field. The max. weight and dimension ranges start from the maxiumum weight and dimensions of the smallest or lightest skids of a duplex system to the heaviest and largest skids of a hexaplex system combined for the extrapolated models.

6. The width of extrapolated units expands beyond the largest tested unit width due to the arrangment of extra modular skids in the width direction.

Table 7 - Special Seismic Certification Certified Components -Modular Skid Mounted Lubricated Rotary Vane Vacuum Pumps



DCL Project: 73815-2201

Manufacturer: Amico Source

Product Line: Medical Air and Vacuum Systems; Modular Skid Mounted Lubricated Rotary Vane Vacuum Pumps

Certified Product Construction: Painted carbon steel frame. Control panel is painted carbon steel, NEMA 1/12.

Mounting Description: Units are flexible base mounted with neoprene pads.

Certified Seismic Level: S_{DS}=2.00g, z/h=1.0

			Total Number	Total	Maximum Number of	Max.	Dimensions (inc	:hes)⁵	Max. Operating	
Model	HP	System	of Pump Skids	Number of Pumps	Vertically Stacked Pumps per Skid	Height	Width ⁸	Depth	Weight (lb) ⁵	Unit
/-RVL-x-060P-SS-N-xxx-xxxxx-xxxxSx		1								
/-RVL-x-080P-SS-N-xxx-xxxxx-xxxxSx										
/-RVL-x-120P-SS-N-xxx-xxxxx-xxxxSx	1, 1.5, 2, 3, 5, 7.5, 10	Duplex - Hexaplex	1 - 2	2 - 6	3	93.0	67.0 - 149.0	55.0	767 - 5,966	Extrapolated ³
/-RVL-x-200P-SS-N-xxx-xxxxx-xxxxSx			OS	P_044	7	2				
/-RVL-x-240P-SS-N-xxx-xxxxx-xxxxSx						Π				
/-xxx-T-060P-SS-N-xxx-46063-xxxxSx	10	Triplex	******	3	3	<mark>9</mark> 3.0	67.0	55.0	3,194 ⁷	UUT14 ²
/-RVL-x-060P-SS-N-xxx-xxxxx-xxxxSx	0	B	Y:Moha	mmad	Karim	0				
/-RVL-x-080P-SS-N-xxx-xxxxx-xxxxSx			MUMMAAAAAAAAA							
/-RVL-x-120P-SS-N-xxx-xxxxx-xxxxSx	10, 15, 20, 25	Duplex - Hexaplex	1 - 3	2 - 6	2	<mark>9</mark> 9.0	67.0 - 184.0	79.5	1,904 - 12,056	Extrapolated 4
/-RVL-x-200P-SS-N-xxx-xxxxx-xxxxSx		Пеларісл	ATE: C	6/20/2	023					
/-RVL-x-240P-SS-N-xxx-xxxxx-xxxxSx			1	2222755555	C Vereneren	v /				
/-xxx-D-240P-SS-N-xxx-20863-xxxxSW	25	Duplex	1	2	2	99.0	94.3	79.5	4,637 ⁷	UUT12 ^{1,6}

1. UUT12 tested with a 25 hp rotary lubricated Busch pump in the top position, and a 25 hp rotary dry Becker pump in the bottom position.

2. UUT14 tested with a 10 hp rotary lubricated Busch pump in the top position, a 7.5 hp rotary dry Becker pump in the middle position and a 7.4 hp rotary dry Busch pump in the bottom position.

3. Duplex systems consist of (1) two-high pump skid, Triplex systems have (1) three-high pump skid, Quadruplex systems have (1) one-high and (1) three-high pump skids, Pentaplex systems have (1) two-high and (1) three-high pump skids, and Hexaplex systems have (2) three-high pump skids if the hp rating of the pumps is less than or equal to 10 hp. All skids are structurally independent and flexibly connected.

4. Duplex systems consist of (1) two-high pump skid, Triplex systems have (1) two-high and (1) one-high pump skid, Quadruplex systems have (2) two-high pump skids, Pentaplex systems have (1) one-high pump skids, and Hexaplex systems have (3) two-high pump skids if the pump hp rating is 10 hp or greater. All skids are structurally independent and flexibly connected.

5. The max. dimensions and weights reflect the complete system as it would be installed in the field. The max. weight and dimension ranges start from the maxiumum weight and dimensions of the smallest or lightest skids of a duplex system to the heaviest and largest skids of a hexaplex system combined for the extrapolated models.

6. Hexaplex control panel, filters and largest HP pumps tested in duplex unit UUT12. Units are modular in nature, and UUT12 is representative of subcomponents in the largest hexaplex unit.

7. Maximum operating weight listed for UUT12 and UUT14 are for heaviest pumps (weight for UUT12 includes separate skid-mounted control panel, as tested in UUT16).

8. The width of extrapolated units expands beyond the largest tested unit width due to the arrangment of extra modular skids in the width direction.

Table 8 - Special Seismic CertificationCertified Components -Modular Skid Mounted Dry Rotary Vane Vacuum Pumps



DCL Project: 73815-2201

Manufacturer: Amico Source

Product Line: Medical Air and Vacuum Systems; Modular Skid Mounted Dry Rotary Vane Vacuum Pumps

Certified Product Construction: Painted carbon steel frame. Control panel is painted carbon steel, NEMA 1/12.

Mounting Description: Units are flexible base mounted with neoprene pads.

Certified Seismic Level: S_{DS}=2.00g, z/h=1.0

1 4-44		-	Total Number	Total	Maximum Number of	Max. D	imensions (inc	hes) ⁶	Max. Operating	11.14
Model	HP	System	of Pump Skids	Number of Pumps	Vertically Stacked Pumps per Skid	Height	Width ⁹	Depth	Weight (lb) ⁶	Unit
V-RVD-x-060P-SS-N-xxx-xxxxx-xxxxxx				MW A W						
V-RVD-x-080P-SS-N-xxx-xxxxx-xxxxxx			MMM1							
V-RVD-x-120P-SS-N-xxx-xxxxx-xxxxxx	0.5, 0.75, 1.2, 1.7, 3, 4, 5.4, 7.4,	Duplex - Hexaplex	1 - 2	2-6	3	93.0	67.0 - 146.0	55.0	771 - 3,936	Extrapolated ⁴
V-RVD-x-200P-SS-N-xxx-xxxxx-xxxxxx		Пеларіел	0S	2-044		i)				
V-RVD-x-240P-SS-N-xxx-xxxxx-xxxxxx										
V-xxx-T-060P-SS-N-xxx-46063-xxxxSx	7.4, 7.5	Triplex	VIII	3	3	<mark>9</mark> 3.0	67.0	55.0	2,626 ⁸	UUT14 ³
V-xxx-D-240P-SS-N-xxx-20863-xxMxSW	0.5, 7.4	Duplex	T. Mona	nm ₂ au		<mark>10</mark> 3.0	67.0	55.0	1,460	UUT13 ²
V-RVD-x-060P-SS-N-xxx-xxxxx-xxxxW										
V-RVD-x-080P-SS-N-xxx-xxxxx-xxxxW				612012	022					
V-RVD-x-120P-SS-N-xxx-xxxxx-xxxxW	8.9, 10.7, 12.1, 17.7, 25	Duplex - Hexaplex	AT <u></u> ,E ₃ : 0	6/20/2	023 2	9 <mark>3.</mark> 0 - 103.0	67.0 - 149.0	79.5	1,584 - 8,486	Extrapolated 1,5
V-RVD-x-200P-SS-N-xxx-xxxxx-xxxxW		Tievapiex			ARREAR C	5/				
V-RVD-x-240P-SS-N-xxx-xxxxx-xxxxW				▲ 3333						
V-xxx-D-240P-SS-N-xxx-20863-xxxxSW	25	Duplex		2	2	99.0	94.3	79.5	4,200 ⁸	UUT12 ^{1,7}

a CODr

Notes:

1. UUT12 tested with a 25 hp rotary lubricated Busch pump in the top position, and a 25 hp rotary dry Becker pump in the bottom position.

2. UUT13 tested with a 0.5 hp rotary dry Busch pump in the bottom position, and a 7.4 hp rotary dry Busch pump in the top position.

3. UUT14 tested with a 10 hp rotary lubricated Busch pump in the top position, a 7.5 hp rotary dry Becker pump in the middle position and a 7.4 hp rotary dry Busch pump in the bottom position.

4. Duplex systems consist of (1) two-high pump skid, Triplex systems have (1) three-high pump skid, Quadruplex systems have (1) one-high and (1) three-high pump skids, Pentaplex systems have (1) two-high and (1) three-high pump skids, and Hexaplex systems have (2) three-high pump skids if the hp rating is less than or equal to 7.5 hp. All skids are structurally independent and flexibly connected.

5. Duplex systems consist of (1) two-high pump skid, Triplex systems have (1) three-high pump skid, Quadruplex systems have (1) one-high and (1) three-high pump skids, Pentaplex systems have (1) two-high and (1) three-high pump skids, and Hexaplex systems have (2) three-high pump skids if the pump hp rating is greater than or equal to 8.9 hp. All skids are structurally independent and flexibly connected.

6. The max. dimensions and weights reflect the complete system as it would be installed in the field. The max. weight and dimension ranges start from the maxiumum weight and dimensions of the smallest or lightest skids of a duplex system to the heaviest and largest skids of a hexaplex system combined for the extrapolated models.

7. Largest HP pumps tested in duplex unit UUT12. Units are modular in nature, and UUT12 is representative of subcomponents in the largest hexaplex unit.

8. Maximum operating weight listed for UUT12 and UUT14 are for heaviest pumps.

9. The width of extrapolated units expands beyond the largest tested unit width due to the arrangment of extra modular skids in the width direction.

Table 9 - Special Seismic Certification Certified Options -





DYNA

CERTIFICATION LABORATORIES,LLC

MIC

DCL Project: 73815-2201 Manufacturer: Amico Source

Product Line: Medical Air and Vacuum Systems; Vacuum Pumps

Product Construction: Painted carbon steel frames, painted carbon steel enclosures, NEMA 1/12

Mounting Description: Units are flexible base mounted with neoprene pads. Standalone control panels are rigidly mounted to wall or manufacturerprovided stand.

			A-B-C-D-E-F-G-H-I-J	
ariable	Definition	Allowable Value	Allowable Value Description	Unit
А	Air Compressor or Vacuum	v	Vacuum	UUT3-14
		RVL	Rotary Vane Lubricated	UUT3,4,6,7,12-14
В	Technology	CCD	Dry Contactless Claw	UUT3,5,6,7,10,11
		RVD	Rotary Vane Dry	UUT4,5,8,9,12-14
		D	Duplex	UUT3-10,12,13
		т	Triplex	UUT11,14
С	System Size	a D	Quadruplex	Extrapolated*
		PEOP	Pentaplex	Extrapolated*
		H .	Hexaplex	Extrapolated*
		030P	30 Gallon	Extrapolated
	1	060P	60 Gallon	UUT3,6,14
		080P	80 Gallon	UUT11
D	Tank Size	120P	120 Gallon	UUT4,5,8
	4	200P	200 Gallon 44	Interpolated
		240P	240 Gallon	UUT7,9,10,12,13
		SS	Modular Skid Mounted	UUT10-14
E	Configuration	TS BY: MO	Vertical Tank Mounted	UUT3-5
-	computed		Horizontal Tank Mounted	UUT6-9
F	Standard	N	NFPA	UUT3-14
Г	Stalluaru	005 DATE:		UUT5,8,13
			0.5 hp/20/2023	
		010	1 hp	UUT3,6
		012	1.2 hp	Interpolated
		015	1.5 hp	Interpolated
		017	1.7 hp	Interpolated
		020	2 hp	UUT3,6,11
		030	3 hp	Interpolated
		050	5 hp	Interpolated
G	НР	054	5.4 hp	UUT5
		064	6.4 hp	Interpolated
		074	7.4 hp	UUT4,9,13,14
		075	7.5 hp	UUT4,7,8,14
		100	10 hp	UUT7,11,14
		121	12.1 hp	UUT9
		150	15 hp	UUT10
		177	17.7 hp	Interpolated
		200	20 hp	Interpolated
		250	25 hp	UUT12
		20863	208/3/60	UUT4,5,7,9,10,12,13
н	Power	23063	230/3/60	Interpolated
		46063	460/3/60	UUT3,6,8,11,14
		E(_)	Expandable (To System Size)	Extrapolated*
		м	Busch	UUT3-14
	Component	N	Becker	UUT8,9,12,14
	Component	v	VFD	UUT10,11
		S	Touch Screen	UUT6-9,12
		w	Welded Base	UUT10,12

Table 10 - Special Seismic Certification Certified Components -Rigid Base Mounted Controllers on Panel Stand without Seismic Bracing



DCL Project: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical Air and Vacuum System; Standalone Controllers

Certified Product Construction: Painted carbon steel frame. Control panel is painted carbon steel, NEMA 1/12.

Mounting Description: Rigid base mounted

Model	MED	Technology	Number of	НР	Velterer	Max. Dimensions (in)		ns (in)	Panel Stand Model Number	Max. Operating	Unit
Widdel	MFR	Technology	Pumps Controlled	HP	Voltage	Height ¹	Width	Depth	Panel Stand Wodel Number	Weight ¹ (lb)	Unit
MA/MV 7/8 204-015-460	Axecon for Amico	Direct start and VFD	Duplex	1.5	460	54.0	24.0	11.5	STEEL-PDL-APANEL	158	UUT15
Notes: 1. Height and weight include manufacturer-	provided stand.	RF	()SP	-0447	7					



Certified (Special Seismic Options - Mounted Cont		(()) D	CL
Panel Stai	nd Without Seis			NAMIC IFICATION RATORIES,LLC
DCL Project: 73	Axecon for Amico			
•	Medical Air and Vacuum	Systems: Standalone	Controllers	
	uction: Painted carbon s	OK	JUL C	
	<i>ription:</i> Rigid base mour			
Would in the pese	nption. Rigid base mou		ntrol Panel Model Chart	
			-C-D-E-F-G	
Variable	Definition	Allowable Value S	P-0447Allowable Value Description	Unit
	Medical Air or	MA	Medical air control panel	UUT15
A	Vacuum	MVRV Moha	Medical vacuum control panel	UUT15
		7 DY. MODA	7000 unit (direct start)	UUT15
В	Technology	8	8000 unit (VFD)	UUT15
С	Number of Pumps Controlled	2 DATE: 0	Duplex	UUT15
D	Temperature Sensor	0	Temperature Switch only	UUT15
U	Allowance	1	1 RTD Sensor per pump	UUT15
E	Screen	4 A	5.7" Color Touch Screen	UUT15
F	НР	015 RI	1.5 hp	UUT15

Certified Components - Rigid Base Mounted Con	trollers on	Panel Stand W	/ithout Seis	mic B	racing) DC							
DCL Project: 73815-2201										DYNA CERTIFIC LABORATO	CATION						
Manufacturer: Axecon for Amico										LABORATO	RIE3,220						
Product Line: Medical Air and Vacuum	n System: Standa	alone Controllers															
Certified Product Construction: Painte			nainted carbon st	el NFM	۵ 1/12												
Mounting Description: Rigid base mou					. 1/ 12.												
Certified Seismic Level: S _{DS} =2.00g, z/h=			ORC	<u>:OD</u>	FCO												
			Number of	ŴŴŴ	F O	Max	Dimensio	ons (in)									
Model	MFR	Technology	Pumps	HP	Voltage	\underline{P}			Panel Stand Model Number	Max. Operating Weight (lb)	Unit						
			Controlled			Height ¹	Width	Depth	Number	Weight (ib)							
MA/MV 7 604-200-208-BAC-WM ²			WHITE WILL WE AND A STATE OF A ST				2										
(A-XXX-D-240P-SS-N-200-20863-TS	Axecon for Amico	Direct start	Hexaplex S	P_20 4	208	71.0	51.5	29.5	STEEL-PDL-WELDED-1	750	UUT2D						
Control Panel Skid)	/ 11100						T										
MA 7 4XX-XXX-XXX (-BAC-WM)																	
MV 7 4XX-XXX-XXX (-BAC-WM)	1		BY: Moha Quadruplex	mmaq	i karin	n case											
MA 8 4XX-XXX-XXX (-BAC-WM)			Quadruplex														
MV 8 4XX-XXX-XXX (-BAC-WM)			DATE: 0	6/20	2023		\sim										
MA 7 5XX-XXX-XXX (-BAC-WM)					Y					32273355	2222222222						
MV 7 5XX-XXX-XXX (-BAC-WM)	Axecon for	Direct start and VFD	Pentaplex	1 20	- 20 208 - 460	71.0 - 🤇	51.5 -	29.5 -	STEEL-PDL-WELDED	750 - 960	Interpolated						
MA 8 5XX-XXX-XXX (-BAC-WM)	Amico	Direct start and VID	r entaplex	1 - 20	200 - 400	93.0	53.5	31.8	STELL-FDL-WELDED	750 - 900	Interpolated						
MV 8 5XX-XXX-XXX (-BAC-WM)					() ADDDD	h°											
MA 7 6XX-XXX-XXX (-BAC-WM)			AD		IG C												
MV 7 6XX-XXX-XXX (-BAC-WM)			Hexaplex	LDI	NO												
MA 8 6XX-XXX-XXX (-BAC-WM)			Похаріох														
MV 8 6XX-XXX-XXX (-BAC-WM)																	
MA/MV 7/8 605-200-208-BAC-WM	Axecon for Amico	Direct start and VFD	Hexaplex	20	208	93.0	53.5	31.8	STEEL-PDL-WELDED	960	UUT16						
Notes:																	

.

Certified C Rigid Base	Mounted Cont d Without Seis	trollers on		CL NAMIC IFICATION ATORIES,LLC	
	Axecon for Amico				
Product Line: N	ledical Air and Vacuum	Systems; Standalone (Controllers		
Product Constru	ction: Painted carbon s	teel enclosures, NEMA	A 1/12		
	iption: Rigid base mour		OUE CO.		
		Standalone Co	ntrol Panel Model Chart		
		A-B-	C-D-E-F-G-H		
Variable	Definition	Allowable Value	Allowable Value Description	Unit	
	Medical Air or	MA	Medical air control panel	UUT2D, UUT16	
A	Vacuum	MV OS	Medical vacuum control panel	UUT2D, UUT16	
		7	7000 unit (direct start)	UUT2D, UUT16	
В	Technology	8	8000 unit (VFD)	UUT16	
С	Numb <mark>er</mark> of Pumps Controlled	BY: Mohai		UUT2D, UUT16	
		0	Temperature Switch only	UUT2D, UUT16	
		DALE 0	1RTD Sensor per pump	Extrapolated	
D	Temperature Sensor Allowance	2	2 RTD Sensor per pump	Extrapolated	
	Anowance	3	3 RTD Sensor per pump	Extrapolated	
		4	4 RTD Sensor per pump	UUT16	
-	Course	4	5.7" Color Touch Screen	UUT2D	
E	Screen	5 4 0	7.5" Color Touch Screen	UUT16	
E	HP	200 BUI	20 hp	UUT2D, UUT16	
F	ЧР	250	25 hp	Extrapolated	
		200	200V	Extrapolated	
		208	208V	UUT2D, UUT16	
		220	220V	Extrapolated	
G	Valtaga	230	230V	Extrapolated	
G	Voltage	240	240V	Extrapolated	
		440	440V	Extrapolated	
		460	460V	Extrapolated	
		480	480V	Extrapolated	
		BAC	BacNet Protocol	UUT2D, UUT16	
н	Add on	wм	Wireless Modem	UUT2D, UUT16	

Table 14 - Special Seismic Certification **Certified Components -Rigid/Flexible Wall Mounted Controllers**



DCL Project: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical Air and Vacuum System; Standalone Controllers

Certified Product Construction: Painted carbon steel frame. Control panel is painted carbon steel, NEMA 1/12.

Mounting Description: Rigid mounted to rigid/flexible wall Certified Seismic Level: Sps=2.00g, z/h=1.0

Model ¹	MFR	Technology	Number of Pumps	НР	Voltage	Max.	Dimensio	ons (in)	Max. Operating	Unit
Wodel	WIFK	Technology	Controlled	nr	voitage	Height	Width	Depth	Weight (lb)	Onic
	Ś	itandalone Control Par	nels Rigid moun	ted to rigi	d/flexible v	vall	<u> </u>			
MV2202-30	Axecon for Amico	Direct Start	Duplex	1	460	24	24	8	72	UUT17A,B
MA2202-XX		RV· Mo	hammad k	arim						
MV3203-XX			hammad K	aiiii						
MA3203-XX										
MV2302-XX			06/20/20	23	\mathbb{Z}^{\sim}					
MA2302-XX	Avenue for Amira			1.00	200 100	04.40	04.00	0.40	70 404	lute un el etc.
MV3303-XX	Axecon for Amico	Direct Start	Triplex	1-20	200-480	24-40	24-32	8-10	72-181	Interpolate
MA3303-XX				(SDD-	$\langle \cdot \rangle$					
MV2402-XX		RNIAR		cO						
MA2402-XX		AB	Quadruplex	5						
MV3403-XX			DILDIT							
MA3403-65	Axecon for Amico	Direct Start	Quadruplex	20	208	40	32	10	181	UUT18A,B

Rigid and Fle		lounted Contr	ollers)) DCL DYNAMIC CERTIFICATIO LABORATORIES,LL
Manufacturer: Axe	econ for Amico			
Product Line: Med	ical Air and Vacuum	Systems; Standalone C	Controllers	
Product Construction	on: Painted carbon s	steel enclosures, NEMA	1/12 005	
Mounting Descript	ion: Rigid mounted t	to rigid/flexible wall	On the one	
		Standa	Ione Control Panel Model Chart	
			A-B-C-D-E-F	
Variable	Definition	Allowable Value	Allowable Value Description	Unit
А	Medical Vacuum	MY	Medical vacuum control panel	UUT17A,17B,18A,18B
В	Technology	2	2000 unit (ECO,direct start)	UUT17A,17B
В	Technology	3 BY:N	3000 unit (Premium, direct start)	UUT18A,18B
		2	Duplex	UUT17A,17B
С	Control Panel Size	3 DAT	Triplex5/20/2023	Interpolated
		4 / / / /	Quadruplex	UUT18A,18B
D	Temperature Sensor Allowance	0	Temperature Switch only	UUT17A,17B,18A,18B
E	Screen	2	2.5" Monochromic Touch Screen	UUT17A,17B
	Screen	3	3.5" Color Touch Screen	UUT18A,18B
		30	30 Amperage	UUT17A,17B
F	Amp Rating	50	50 Amperage	Interpolated
		65	65 Amperage	UUT18A,18B

Table 16 - Special Seis Certified Components		1011)) DC	
Rigid/Flexible Base M		alone Contro	ollers on Pan	el Sta	nd and	Brace	d at T	qo			
								•		DYNA	
CL Project: 73815-2201										LABORATO	
Manufacturer: Axecon for Amico											
Product Line: Medical Air and Vac	uum System; Standal	one Controllers									
Certified Product Construction: Pa	inted carbon steel fra	me. Control panel is	painted carbon ste	el, NEMA	1/12.						
Mounting Description: Rigid/Flexib	ole base mounted										
Certified Seismic Level: S _{DS} =2.00g,	z/h=1.0		OR	CO	DFr						
2			Number of		101010 Conner	Max. I	Dimensio	ns ¹ (in)		Max. Operating	
Model ²	MFR	Technology	Pumps Controlled	HP	Voltage	Height	Width	Depth	Panel Stand Model Number	Weight ¹ (lb)	Unit
	I	Sta	andalone Control P	anels - Ba	se Mounte	d (Rigid o	or Flexibl	e)			
MV2202-30				Maria	460	48	24	23	STEEL-PDL-APANEL Braced at	152	UUT19A.
		RFL	0	SP-(9447			20	Тор	102	00110/1,
MA2202-XX			Duplex				1	TI			
MV3203-XX			DV								
MA3203-XX			BY: Mo	hamn	had Ka	rim	19999				
MV2302-XX MA2302-XX	<u> </u>										
MA2302-XX MV3303-XX	Axecon for Amico	Direct Start	Triplex	1-20	208-480	48-64	24-32	<mark>23-</mark> 30	STEEL-PDL-APANEL Braced at Top	152-268	Interpolate
MA3303-XX	7411100						i T	\mathcal{S}	ιορ		
MV2402-XX				+		<i>HHH</i>					
MA2402-XX						(AAB)					
MV3403-XX			Quadruplex								
MA3403-65			VAR	_20	- 208	64	32	30	STEEL-PDL-APANEL Braced at Top	268	UUT20A,
lotes:				ALL	911 > 3				1 100		L

Rigid and Fl		lounted Contr	ollers)) DCL DYNAMIC CERTIFICATION LABORATORIES,LLO
Anufacturer: A	xecon for Amico			
Product Line: Me	dical Air and Vacuum	Systems; Standalone C	Controllers	
Product Construct	tion: Painted carbon s	teel enclosures, NEMA	1/12	
Aounting Descrip	tion: Rigid and flexibl	e base mounted	THINK ANDE COA.	
		Standal	one Control Panel Model Chart	
			A-B-C-D-E-F	
Variable	Definition	Allowable Value	Allowable Value Description	Unit
А	Medical Vacuum	MY	Medical vacuum control panel	UUT19A,19B,20A,20b
В	Tashnalagu	2	2000 unit (ECO, direct start)	UUT19A,19B
В	Technology	3 BY:W	3000 unit (Premium, direct start)	UUT20A,20B
		2	Duplex	UUT19A,B
С	Control Panel Size	3 DAT	Triplex / 20/2023	Interpolated
		47 800 8	Quadruplex	UUT20A,B
D	Temperature Sensor Allowance	0	Temperature Switch only	UUT19A,19B,20A,20B
Е	Screen	2	2.5" Monochromic Touch Screen	UUT19A,19B
	Screen	3	3.5" Color Touch Screen	UUT20A,20B
		30	30 Amperage	UUT19A,19B
F	Amp Rating	50	50 Amperage	Interpolated
		65	65 Amperage	UUT20A,20B

Table 18 - Special Seismic Certification Certified Subcomponents -Modular Skid Mounted Air Systems



DCL Project: 73815-2201

Manufacturer: Amico Source

Product Line: Medical Air and Vacuum Systems; Modular Skid Mounted Air Compressors

Mounting Configuration: Flexible Base (Neoprene)

Certified Seismic Level: S _{DS} =2.00g,	z/h=1.0					
		Medical Air	System Compressors			
Model Number	Manufacturer	Technology	НР	Configuration	Material	Unit
SRL-2.2CUM			2			UUT1
SRL-2.2CUM			3			Interpolated
SRL-5.5CUM			5	Modular skid		Interpolated
SRL-5.5CUM		Scroll Pump	7.5	mounted (stacking		Interpolated
SRL-7.5CUM		2DC		configuration)		Interpolated
SRL-5.5CUM		FORC	15 0			Interpolated
SRL-7.5CUM			20			UUT2A
0.75OU	Hitachi		1		Aluminum	UUT1
1.5OU			2	E.		Interpolated
2.20U			3	121		Interpolated
3.70U	REVIE	Reciprocating	2-044 5	Modular skid mounted (stacking		Interpolated
5.5OU		Pump	7.5	configuration)		Interpolated
7.500		BY: Mohar	nmad k ¹⁰ arim			Interpolated
11.0OU			15			Interpolated
15.0OU			20			UUT2A
		DATE: 0	6/20/2023			
			Tank			
Model Number	Manufacturer	Туре	Capacity	Materi	ial	Unit
302414			80			UUT1
302421	Manchester	Vertical Tank	120	Carbon S	iteel	Interpolated
302426			200	carbonic		Interpolated
302428		YA RIII	240			UUT2B
		501	LDING			
			Dryer			
Model Number	Manufacturer		escription	Material	Weight (lb.)	Unit
Dryspell Plus 10			10 CFM	4	46	UUT1

Model Number	Manufacturer	Description	Material	Weight (lb.)	Unit
Dryspell Plus 10		10 CFM		46	UUT1
Dryspell Plus 20		20 CFM		64	Interpolated
Dryspell Plus 30		30 CFM		86	Interpolated
Dryspell Plus 45		45 CFM		108	Interpolated
Dryspell Plus 60	T data	60 CFM	AL	134	Interpolated
Dryspell Plus 100	Trident	100 CFM	Aluminum	234	Interpolated
Dryspell Plus 125		125 CFM		262	Interpolated
Dryspell Plus 200		200 CFM		472	Interpolated
Dryspell Plus 250		250 CFM		525	Interpolated
Dryspell Plus 300		300 CFM		564	UUT2C

Table 18 - Special Seismic Certification Certified Subcomponents -Modular Skid Mounted Air Systems (Continued)

(()) DCL DYNAMIC CERTIFICATION LABORATORIES,LLC

DCL Project: 73815-2201

Manufacturer: Amico Source

Product Line: Medical Air and Vacuum Systems; Modular Skid Mounted Air Compressors

Mounting Configuration: Flexible Base (Neoprene)

		Filters/ Moisture Separator			
Model Number	Manufacturer	Description	Material	Weight (lb.)	Unit
CSL-842-050HC		1/2" Inlet Filter		3	Extrapolate
CSL-842-075HC		3/4" Inlet Filter		3	UUT1
CSL-842-100HC	Solberg	1" Inlet Filter	Carbon Steel	3	Interpolate
CSL-848-125HC		1 1/4" Inlet Filter		5	Interpolate
CSL-848-150HC		1 1/2" Inlet Filter		5	UUT2C
F901D-04G		1/2" Pre Filter		3	UUT1
F901H-04G		1/2" After Filter		3	UUT1
F901D-06G		3/4" Pre Filter		7	Interpolate
F901H-06G		3/4" After Filter		7	Interpolate
F901D-08G		1" Pre Filter		7	Interpolate
F901H-08G		1" After Filter	4	7	Interpolate
F901D-10G	Numatics	1 1/4" Pre Filter	Aluminum	9	Interpolate
F901H-10G	RFL	11/4" After Filter		9	Interpolate
F901D-12G		1 1/2" Pre Filter	m	9	Interpolate
F901H-12G		1 1/2" After Filter		9	Interpolate
F901D-16G		BY: Moh 2"Pre Filter Karim		23	UUT2C
F901H-16G		2" After Filter		23	UUT2C
	-	DATE: 08/109/2023			
Model Number	Manufacturer	Description	Mater		Unit
EA2-TX	Michell	Dew Point Sensor	Stainless		UUT1,2C
4035-RF	GFG	CO Transmitter (RF Version)	Carbon	Steel	UUT1,2C



Table 19 - Special Seismic Certification Certified Subcomponents -Vertical Tank Mounted Vacuum Systems



DCL Project: 73815-2201

Manufacturer: Amico Source

Product Line: Medical Air and Vacuum Systems; Vertical Tank Mounted Vacuum Pumps

Mounting Configuration: Flexible Base (Neoprene)

		Vacuum S	System Pumps	5			
Model Number	Manufacturer	Technology	НР	Voltage Tested	Voltage Certified	Material	Unit
RC0021			1.0	208			UUT3
RC0025			1.5				Interpolate
RC0040			2.0		208 or 460		Interpolate
RC0063		Rotary Vane	3.0				Interpolate
RC0100		Lubricated	DL5.0		208 01 400		Interpolate
RC0101			5.0	011			Interpolat
RC0155			5.0				Interpolat
RC0205			7.5	460			UUT4
MM1104		WWWWWWWWWWWW	2.0	208			UUT3
MM1144	Pusch	Contactless Claw	3.07		208 or 460	Cast Iron	Interpolat
MM1102	Busch	Contactiess claw	4.0	j	208 01 400		Interpolat
MM1142			5.4	208			UUT5
SV 1010C		BY: Moham	imag Ka	rim 208	0		UUT5
SV 1016C			0.75				Interpolat
SV 1025C			1201.200	03			Interpolat
SV 1040C		DATL. 00	1.7		208 or 460		Interpolat
SV 1063B	CRI	Rotary Vane Dry	3.0		200 01 400		Interpolat
SV 1080B			4.0				Interpolat
SV 1100C			5.4	Novy			Interpolat
SV 1140C			7.4	460			UUT4
		BIJI	DING			-	
		UIL	Tank				
Model Number	Manufacturer	Туре	Capacity		Material		Unit
302408			30	1			Extrapolat
302412	Manchester	Vertical Tank with	60	1	Carbon Steel		UUT3
302419		Top Plate	80]			Interpolat
302424			120				UUT4, UU ⁻

Table 20 - Special Seismic Certification Certified Subcomponents -Horizontal Tank Mounted Vacuum Systems



DCL Project: 73815-2201

Manufacturer: Amico Source

Product Line: Medical Air and Vacuum Systems; Horizontal Tank Mounted Vacuum Pumps

Mounting Configuration: Flexible Base (Neoprene)

		Vacu	um System Pump	S					
Model Number	Manufacturer	Technology	HP	Voltage Tested	Voltage Certified	Material	Unit		
RC0021			1.0	460			UUT6		
RC0025			1.5				Interpolate		
RC0040			2.0				Interpolate		
RC0063			3.0				Interpolate		
RC0100		Rotary Vane Lubricated	5.0		208 or 460		Interpolate		
RC0101			5.0		208 or 460		Interpolate		
RC0155		FOR	5.0 - (On			Interpolate		
RC0205	1		7.5	- MA			Interpolate		
RC0255	1		10.0				Interpolate		
RC0305			10.0	208	V		UUT7		
MM1104			2.0	460	2		UUT6		
MM1144	Busch	09	$P_{3.0}/7$		0		Interpolate		
MM1102	Busch	Contections Clause	4.0				Interpolate		
MM1142	1 /	Contactless Claw	5.4		208 or 460	Castilara	Interpolate		
MM1202		BY: Moha	immead K	arim 🔍		Cast Iron	Interpolate		
MM1252			7.5	208			UUT7		
SV 1010C			0.5	460			UUT8		
SV 1016C		DATE: (06/20.75/20	23	\sim		Interpolate		
SV 1025C			1.2	Caracarara	N		Interpolate		
SV 1040C	.r.				1.7	KARARA (9		Interpolate
SV 1063B					Rotary Vane Dry	3.0			
SV 1080B	1		4.0		208 or 460		Interpolate		
SV 1100C			PNIA	5.4	co^{\vee}	208 or 460		Interpolate	
SV 1140C	1	ARI	7.4	208			UUT9		
VTLF2.200			- 7.5	460			UUT8		
VTLF2.250	1 Dealers	Determitiens Dr	8.9				Interpolate		
VTLF2.250SK	Becker	Rotary Vane Dry	10.7				Interpolate		
VTLF 2.400	1		12.1	208			UUT9		
			-	•			•		
			Tank						
Model Number	Manufacturer	Туре	Capacity		Material		Unit		
302693			60				UUT6		
303977	1		80				Interpolate		
302700	Manchester	Horizontal Tank with Top Plate	120		Carbon Steel		Interpolate		
302701	1	Plate	200				UUT8		
303181	1		240	1			UUT7,9		

Table 21 - Special Seismic CertificationCertified Subcomponents -Modular Skid Mounted Vacuum Systems



DCL Project: 73815-2201

Manufacturer: Amico Source

Product Line: Medical Air and Vacuum Systems; Modular Skid Mounted Vacuum Pumps

Mounting Configuration: Flexible Base (Neoprene)

	Vacuum System Pumps							
Model Number	Manufacturer	Technology	НР	Voltage Tested	Voltage Certified	Material	Unit	
RC0021			1.0				Extrapola	
RC0025			1.5				Extrapola	
RC0040			2.0				Extrapola	
RC0063			3.0				Extrapola	
RC0100		OR CODF	5.0	N/A			Extrapola	
RC0101		FUIT	5.0	~			Extrapola	
RC0155	Busch	Rotary Vane Lubricated	5.0		208 or 460	Cast Iron	Extrapola	
RC0205			7.5				Extrapola	
RC0255			10.0				Extrapola	
RC0305	II II		710.0	460			UUT14	
RC0400		037-044	15.0	N/A			Interpola	
RC0502			20.0	N/A			Interpola	
RC0630		Y: Mohammad	K25.00	208			UUT12	
MM1104			2.0	460			UUT1:	
MM1144			3.0				Interpola	
MM1102		Busch Contactless Claw	4.0	d S			Interpola	
MM1142			5.4				Interpola	
MM1202	Busch		6.4	N/A	208 or 460	Cast Iron	Interpola	
MM1252			7.5	Dr'			Interpola	
MM1322			10.0				Interpola	
MM1402		ARUTIDIN	10.0				Interpola	
MM1502		OILDIN	15.0	208, 460			UUT10,	
SV 1010C			0.5	208			UUT13	
SV 1016C			0.75				Interpola	
SV 1025C			1.2				Interpola	
SV 1040C	Durach	Potony) /or a Dry	1.7	NI / A			Interpola	
SV 1063B	Busch	Rotary Vane Dry	3.0	N/A			Interpola	
SV 1080B			4.0				Interpola	
SV 1100C			5.4		208 or 460	Cast Iron	Interpola	
SV 1140C			7.4	208, 460			UUT13	
VTLF2.200			7.5	460			UUT14	
VTLF2.250	7		8.9				Interpola	
VTLF2.250SK	Becker	Rotary Vane Dry	10.7	N/A			Interpola	
VTLF 2.400			12.1				Interpola	
VTLF 2.500			17.7 / 25	208			UUT12	

Table 22 - Special Seismic Certification **Certified Subcomponents -**Modular Skid Mounted Vacuum Systems (Continued)



Unit UUT14

UUT11

Interpolated

Interpolated

UUT10,12,13

DCL Project: 73815-2201

302428

Manufacturer: Amico Source Product Line: Medical Air and Vacuum Systems; Modular Skid Mounted Vacuum Pumps Mounting Configuration: Flexible Base (Neoprene) Certified Seismic Level: S_{DS}=2.00g, z/h=1.0 Tank **Model Number** Manufacturer Туре Capacity Material 302410 60 302414 80 302421 120 Manchester Vertical Tank **Carbon Steel** 200 302426



Table 23 - Special Seismic Certification Certified Subcomponents -Rigid Base Mounted Controllers on STEEL-PDL-APANEL Stand without Seismic Bracing



DCL Project: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical Air and Vacuum Systems; Standalone Controllers

Mounting Configuration: Rigid Base

		Controller Subcomponent	S		
Model Number	Manufacturer	Description	Material	Weight (lb.)	Unit
LC1D12F7	Schneider Electric	Contactor	Plastic Cover	1	UUT15
LC1D32F7	Schneider Electric	Contactor	Plastic Cover	1	Same as UUT15
LRD06				<1	Same as UUT15
LRD07				<1	UUT15
LRD08		ORCODES		<1	Same as UUT15
LRD10		FURCEPL	DA	<1	Same as UUT15
LRD12			1/2	<1	Same as UUT15
LRD14	Schneider Electric	Overload relay	Plastic Cover	<1	Same as UUT15
LRD16			XXXX Z	<1	Same as UUT15
LRD21				<1	Same as UUT15
LRD22		OSP-0447		<1	Same as UUT15
LRD32				<1	Same as UUT15
LRD35		RV Mohammad Kai	tim	<1	Same as UUT15
ATV312HU11M3X		DT. Monannia ra		4	Same as UUT15
ATV312HU11N4				4	UUT15
ATV312HU15M3X	Schneider E <mark>lectric</mark>	Variable frequency drive/202	3 Plastic Cover	4	Same as UUT15
ATV312HU15N4	Y			4	Same as UUT15
ATV312HU22M3X				4	Same as UUT15
HJL36015				5	UUT15
HJL36020				5	Same as UUT15
HJL36030				5	Same as UUT15
HJL36040	Schneider Electric	Molded case circuit breaker	Plastic	5	Same as UUT15
HJL36060		TEBT		5	Same as UUT15
HJL36080				5	Same as UUT15
HJL36100				5	Same as UUT15
9421⊔3	Schneider Electric	Operating mechanism for circuit breaker	Carbon Steel	6	UUT15
LBA361104	Schneider Electric	Class 9080 power distribution block	Plastic	<1	UUT15
TF250D1	Schneider Electric	Class 9070 control transformer	Carbon Stock	9	Same as UUT15
TF150D50	Schneider Electric	class 9070 control transformer	Carbon Steel	9	UUT15
MG24426	Schneider Electric	Control circuit breaker, 2A	Plastic Cover	<1	UUT15
MG24425	Schneider Electric	Control circuit breaker, 1A	Plastic Cover	<1	UUT15
TM221C24R	Schneider Electric	PLC base controller	Plastic Cover	1	UUT15

Table 24 - Special Seismic Certification Certified Subcomponents -Rigid Base Mounted Controllers on STEEL-PDL-APANEL Stand without Seismic Bracing (Continued)



DCL Project: 73815-2	2201				
Manufacturer: Axec	on for Amico				
Product Line: Medica	al Air and Vacuum Syste	ms; Standalone Controllers			
Mounting Configurat	ion: Rigid Base				
Certified Seismic Leve	el: S _{DS} =2.00g, z/h=1.0				
		Controller Subcomponent	S		
Model Number	Manufacturer	Description	Material	Weight (lb.)	Unit
TM3TI4	Schneider Electric	Analog expansion card, 4 universal inputs	Plastic Cover	<1	UUT15
TM3AM6	Schneider Electric	Analog expansion card, 4 inputs, 2 outputs	Plastic Cover	<1	UUT15
TM2ARI8LT	Schneider Electric	Analog expansion card, 8 PT100/PT1000 inputs	Plastic Cover	<1	UUT15
TM3DI16	Schneider Electric	Digital expansion module, 16 inputs	Plastic Cover	<1	UUT15
TM3DQ16R	Schneider Electric	Digital expansion module, 16 outputs	Plastic Cover	<1	UUT15
TMC2SL1	Schneider Electric	Serial communication module —	Plastic Cover	<1	UUT15
TM168D23CS	Schneider Electric	Bacnet bridge PLC base	Plastic Cover	2	UUT15
TM168BACS	Schneider <mark>Electric</mark>	Bacnet module MS/TP	Plastic Cover	<1	UUT15
HMISTU855	Schneider <mark>Electric</mark>	BY: M57htmmad Kar	Plastic Cover	2	UUT15
ZB4BK1333	Schneider <mark>Electric</mark>	Illuminated 3-pos. switch, maintained	Plastic	<1	UUT15
ZB4BK1733	Schneider Electric	Illuminated 3-pos. switch, 202 spring return from left	3 Plastic	<1	UUT15
NSYCCOTHIF	Schneider Ele <mark>ctric</mark>	Thermostat	Plastic Cover	<1	UUT15
7F.05.0.000.2000				2	UUT15
7F.05.0.000.3000		Exhaust filter	Plastic	2	Same as UUT15
7F.05.0.000.4000		Exhaust filter	Plastic	2	Same as UUT15
7F.05.0.000.5000	Finder	RITIDING		2	Same as UUT15
7F.50.8.120.2055	Filder	SOILDING		5	UUT15
7F.50.8.120.3100		Exhaust fan	Plastic	5	Same as UUT15
7F.50.8.120.4370			Flastic	5	Same as UUT15
7F.50.8.120.5500				5	Same as UUT15
MS2-H50	Keyence Corp.	24VDC 2A power supply	Plastic Cover	1	UUT15
TMB-86-531	Floyd Bell, Inc.	Audible alarm annunciator	Plastic Cover	1	UUT15
KLDR1/2				<1	Same as UUT15
KLDR1				<1	UUT15
KLDR2				<1	Same as UUT15
KLDR3				<1	Same as UUT15
KLDR4	Littelfuse	Europ	Melamine	<1	Same as UUT15
FLM2	LILLEHUSE	Fuses	weidtille	<1	Same as UUT15
FLM3				<1	Same as UUT15
FLM4				<1	Same as UUT15
FLM5				<1	Same as UUT15
FLM10				<1	Same as UUT15
WM302408NC	Rittal	Enclosure, NEMA 1/12	Carbon Steel	68	UUT15

Table 25 - Special Seismic Certification Certified Subcomponents -Rigid Base Mounted Controllers on STEEL-PDL-WELDED or STEEL-PDL-WELDED-1 Stand



DCL Project: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical Air and Vacuum Systems; Standalone Controllers

Mounting Configuration: Rigid Base

Controller Subcomponents						
Model Number	Manufacturer	Description	Material	Weight (lb.)	Unit	
LC1D12F7				1	Extrapolated ¹	
LC1D32F7				1	Extrapolated ¹	
LC1D50AF7	Cohnoidar Flastria	Contactor	Diastia aquar	2	Interpolated	
LC1D65AF7	Schneider Electric	Contactor	Plastic cover	2	UUT2D	
LC1D80F7	OF7	4	Interpolated			
LC1D115F7	1	FUNCTION	O_{Λ}	6	UUT16	
LRD06			D,	<1	Extrapolated ¹	
LRD07				<1	Extrapolated ¹	
LRD08	~			<1	Extrapolated ¹	
LRD10	LT.		5	<1	Extrapolated ¹	
LRD12	A	05P-0447		<1	Extrapolated ¹	
LRD14				<1	Extrapolated ¹	
LRD16		BY: Mohammad Ka	rim	<1	Extrapolated ¹	
LRD21				<1	Extrapolated ¹	
LRD22	Schneider Ele <mark>ctric</mark>	Overload relay	Plastic Cover	<1	Extrapolated ¹	
LRD32		DATE: 06/20/202	23	<1	Extrapolated ¹	
LRD35	Y		STREET STREET	<1	Extrapolated ¹	
LRD340				1	Interpolated	
LRD350				1	Interpolated	
LRD365	1			1	UUT2D	
LRD3363	1	A DI ISI DINIG	0	1	Interpolated	
LRD4865		PNIA BUILDING CODE	2	Interpolated		
LRD5367				2	UUT16	
ATV312HD11M3X				24	Same as UUT16	
ATV312HD11N4				24	Same as UUT16	
ATV312HD15M3X	Schneider Electric	Variable frequency drive	Plastic Cover	24	UUT16	
ATV312HD15N4				24	Same as UUT16	
9421LJ3	Schneider Electric	Operating mechanism for circuit breaker	Carbon Steel	6	UUT2D,16	
LBA363106	Schneider Electric	Class 9080 power distribution block	Plastic	2	UUT2D,16	
MG24426	Schneider Electric	Control circuit breaker, 2A	Plastic Cover	<1	UUT2D,16	
MG24425	Schneider Electric	Control circuit breaker, 1A	Plastic Cover	<1	UUT2D,16	
TM221CE40R	Schneider Electric	PLC base controller	Plastic Cover	1	UUT2D,16	
TF500D50				17	UUT2D	
TF750D1	Schneider Electric	Class 9070 control transformer	Carbon Steel	18	Interpolated	
TF750D50				21	UUT16	

Table 26 - Sp	ecial Seismic Ce	rtification			
Certified Sub	components -		())) 🗋	
	•	lers on STEEL-PDL-		"	
-				DY	NAMIC
WELDED or S	IEEL-PDL-WELD	ED-1 Stand (Continued)			TIFICATION
				LABL	IRAI ORIES,EEG
DCL Project: 73815-3	2201				
Manufacturer: Axec					
		ms; Standalone Controllers			
Mounting Configura	tion: Rigid Base				
	<i>el:</i> S _{DS} =2.00g, z/h=1.0				
		Controller Subcomponer	nts		
Model Number	Manufacturer	Description	Material	Weight (lb.)	Unit
HJL36015				5	Same as UUT2D,16
HJL36020				5	Same as UUT2D,16
HJL36030				5	Same as UUT2D,16
HJL36040		OR CODE		5	Same as UUT2D,16
HJL36060		FUTURE	O_{1}	5	Same as UUT2D,16
HJL36080			AN.	5	Same as UUT2D,16
HJL36100				5	UUT2D,16
FAL34015	Schneider Electric	Molded case circuit breaker	Plastic	5	Same as UUT2D,16
FAL34020	4	OSP-0447	6	5	Same as UUT2D,16
FAL34030	A A	037-0447	m l	5	Same as UUT2D,16
FAL34040				5	Same as UUT2D,16
FAL34060		BY: Mohammad Ka	irim 🤍 O	5	Same as UUT2D,16
FAL34080				5	Same as UUT2D,16
FAL34100				5	Same as UUT2D,16
TNACTIA	Coha oidea Electrici	Analog expansion card,		-1	
TM3TI4	Schneider Electric	4 universal inputs	Plastic Cover	<1	UUT2D,16
TM3AM6	Schneider Electric	Analog expansion card, 4 inputs, 2 outputs	Plastic Cover	<1	UUT16
TM2ARI8LT	Schneider Electric	Analog expansion card, 8 PT100/PT1000 inputs	Plastic Cover	<1	UUT2D,16
TM3DI16	Schneider Electric	Digital expansion module, 16 inputs	Plastic Cover	<1	UUT16
TM3DQ16R	Schneider Electric	Digital expansion module, 16 outputs	Plastic Cover	<1	UUT2D,16
TMC2SL1	Schneider Electric	Serial communication module	Plastic Cover	<1	UUT16
TM168D23CS	Schneider Electric	Bacnet bridge PLC base	Plastic Cover	2	UUT16
TM168BACS	Schneider Electric	Bacnet module MS/TP	Plastic Cover	<1	UUT16
HMISTU855	Schneider Electric	5.7" HMI	Plastic Cover	2	UUT2D
HMIGTO4310	Schneider Electric	7.5" HMI	Plastic Cover	4	UUT16
ZB4BK1333	Schneider Electric	Illuminated 3-pos. switch, maintained	Plastic	<1	UUT16
ZB4BK1733	Schneider Electric	Illuminated 3-pos. switch, spring return from left	Plastic	<1	UUT2D,16
NSYCCOTHIF	Schneider Electric	Thermostat	Plastic Cover	<1	UUT16

Table 27 - Special Seismic Certification									
Certified Subcomponents - ((())) DCL									
Rigid Base Mounted Controllers on STEEL-PDL-									
-	WELDED or STEEL-PDL-WELDED-1 Stand (Continued)								
					TIFICATION RATORIES,LLC				
DCL Project: 73815-22	201								
Manufacturer: Axeco									
Product Line: Medica	l Air and Vacuum Syste	ms; Standalone Controllers							
Mounting Configurati	-								
Certified Seismic Level	: S _{DS} =2.00g, z/h=1.0								
		Controller Subcomponer	nts						
Model Number	Manufacturer	Description	Material	Weight (lb.)	Unit				
7F.05.0.000.2000				2	Same as UUT16				
7F.05.0.000.3000		Exhaust filter	Plastic	2	Same as UUT16				
7F.05.0.000.4000		COD-		2	Same as UUT16				
7F.05.0.000.5000	Finder	OR CODE C		2	UUT16				
7F.50.8.120.2055	rinder		On	5	Same as UUT16				
7F.50.8.120.3100		Exhaust fan	Plastic	5	Same as UUT16				
7F.50.8.120.4370		Exiladist fait	ridstre	5	Same as UUT16				
7F.50.8.120.5500				5	UUT16				
MS2-H50	Keyence Corp.	24VDC 2A power supply	Plastic Cover	1	UUT2D,16				
TMB-86-531	Floyd Bell, Inc.	Audible alarm annunciator	Plastic Cover	1	UUT2D,16				
KLDR1/2				<1	Same as UUT2D,16				
KLDR1		BY: Mohammad Ka	irim 🔍 O	<1	Same as UUT2D,16				
KLDR2				<1	Same as UUT2D,16				
KLDR3				<1	UUT2D				
KLDR4		DATE: 06/20/202		<1	UUT16				
FLM2	Littelfuse	Fuses	Melamine	<1	Same as UUT2D,16				
FLM3	Y			<1	Same as UUT2D,16				
FLM4				<1	Same as UUT2D,16				
FLM5				<1	UUT2D				
FLM10		A RITE STATE		<1	UUT16				
TS8245.500		POILDING		403	UUT2D				
+TS8145.235	Rittal	Enclosure, NEMA 1/12	Carbon Steel		00120				
TS8265.500 + TS8165.235		· · · · · · · · · · · · · · · · · · ·		395	UUT16				

Table 28 - Special Seismic Certification Certified Subcomponents -Rigid and Flexible Wall Mounted Controllers



lanufacturer: Axec		ems; Standalone Controllers			
	•				
	tion: Rigid and Flexible el: S _{DS} =2.00g, z/h=1.0	waii			
	ei. 3 _{DS} =2.00g, 2/11=1.0	Controller Sub	components		
Model Number	Manufacturer	Description	Material	Weight (lb.)	Unit
LC1D12F7				1	UUT17A,B
LC1D32F7	-			1	Interpolated
LC1D50AF7	Schneider Electric	Contactor	Plastic Cover	2	Interpolated
LC1D65AF7	-			2	Interpolated
LC1D80F7	4	DCOI		4	UUT18A,18B
LRD06		FORCOL	PE CON	<1	UUT17A,B
LRD07				<1	Interpolated
LRD08				<1	Interpolated
LRD10				<1	Interpolated
LRD12				<1	Interpolated
LRD12	REVIE	OSP-0	447	<1	Interpolated
LRD16				<1	Interpolated
LRD21				<1	Interpolated
LRD22	Schneider Electric	B Overload relay	Plastic Cover	<	Interpolated
LRD32				<1	Interpolated
LRD35			0/2023	<1	Interpolated
LRD340		DATE: UO/Z	0/2023	1	Interpolated
LRD350				5 1	Interpolated
LRD365				1	Interpolated
LRD3363				1	Interpolated
LRD4865				2	UUT18A,B
LRD5367		ADU		2	Same as UUT18A,
HJL36015		BUILD	INO	5	Same as UUT17A, UUT18A,B
	-				Same as UUT17A,
HJL36020				5	UUT18A,B
HJL36030				5	Same as UUT17A, UUT18A,B
HJL36040				5	Same as UUT17A, UUT18A,B
HJL36060				5	Same as UUT17A, UUT18A,B
HJL36080	Schneider Electric	Molded case circuit breaker	Plastic	5	Same as UUT17A, UUT18A,B
HJL36100				5	Same as UUT17A, UUT18A,B
FAL34015				5	UUT17A,B
FAL34020]			5	Interpolated
FAL34030]			5	Interpolated
FAL34040]			5	Interpolated
FAL34060]			5	Interpolated
FAL34080				5	Interpolated
FAL34100	1			5	UUT18A,B

Table 29 - Special Seismic Certification Certified Subcomponents -Rigid and Flexible Wall Mounted Controllers (Continued)



DCL Project: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical Air and Vacuum Systems; Standalone Controllers

Mounting Configuration: Rigid and Flexible Wall

Certified Seismic Level: S_{DS}=2.00g, z/h=1.0

		Controller Subco	omponents		
Model Number	Manufacturer	Description	Material	Weight (lb.)	Unit
TF250D1				8	Extrapolated ¹
TF150N12	Color side a Flanstain	Class 9070 control	Caula an Chaol	10	UUT17A,17B
TF500D1	Schneider Electric	transformer	Carbon Steel	13	Interpolated
TF750D1		200)r	18	UUT18A,18B
TWDLCAA24DRF	Schneider Electric	PLC base controller	Plastic Cover	1	UUT17A,17B
TWDLCAA40DRF	Schneider Electric	PLC base controller	Plastic Cover	1	UUT18A,18B
TM2AMI4LT	Schneider Electric	Analog expansion card, 4 universal inputs	Plastic Cover	<1	UUT17A,B, UUT18A,
TM2DRA16RT	Schneider Electric	Digital expansion module, 16 outputs	44 Plastic Cover	<1	UUT18A,B
TWDNAC485T	Schneid <mark>er Elect</mark> ric	Serial communication module	Plastic Cover	<1	UUT18A,B
TM172PDG428	Schnei <mark>der</mark> El <mark>ec</mark> tric	Bacnet PLC base module	Plastic Cover	2	UUT18A,B
HMISTO512	Schneid <mark>er Elect</mark> ric	2.5" HMI	Plastic Cover	1	UUT17A,B
HMISTU655	Schneid <mark>er Electr</mark> ic	D ∆ 3.5"HMI 06/20	Plastic Cover	1	UUT18A,B
ZB4BA6	Schneider Electric	Push button, blue	Plastic Cover	<1	UUT17A,B, UUT18A
ABL8REM24030	Schneider Electric	24VDC 3A power supply	Plastic Cover		UUT18A,B
KLDR1/2				<1	UUT17A,B
KLDR1				<1	Interpolated
KLDR2		PNIA BUILD		<1	Interpolated
KLDR3		ARITIN	NG	<1	Interpolated
KLDR4	Littelfuse	Fuses	Melamine	<1	UUT18A,B
FLM2	Littenuse	ruses	Weidmine	<1	UUT17A,B
FLM3				<1	Same as UUT17A,
FLM4				<1	Same as UUT17A,
FLM5				<1	Same as UUT17A,
FLM10				<1	Same as UUT17A,
NSYS3DC6620				31	UUT17A,B
NSYS3DC8620	Schneider Electric	Enclosure, NEMA 1/12	Carbon Steel	45	Interpolated
NSYS3DC10825				72	UUT18A,B

1. Extrapolated subcomponent is equivalent in function, mounting, and construction to the tested subcomponents.

Certified Sub	ecial Seismic Ce components - xible Base Mou	ertification nted Controllers on S	TEEL-PDL-))) [
	d Braced at Top			C	ERTIFICATION
DCL Project: 73815-	2201				
Manufacturer: Axec					
,		ms; Standalone Controllers			
	tion: Rigid and Flexible I				
	el: S _{DS} =2.00g, z/h=1.0				
eer tijlea belonne zer	505 2.008, 2, 11 1.0	Controller Subcom	ponents		
Model Number	Manufacturer	Description	Material	Weight (lb.)	Unit
LC1D12F7		Description		1	UUT19A,B
LC1D32F7				1	Interpolated
LC1D50AF7	Schneider Electric	Contactor	Plastic Cover	2	Interpolated
		contactor		2	
LC1D65AF7 LC1D80F7	1			4	Interpolated UUT20A,B
		ORCODI		4	UUT19A,B
LRD06	1	FUNCTION	LON.	<1	,
LRD07 LRD08			MS.	<1	Interpolated
				<1	Interpolated
LRD10	REVIE		VIIII T	<1	Interpolated
LRD12				<1	Interpolated
LRD14		OSP-04	47	<1	Interpolated
LRD16				<1	Interpolated
LRD21	Schneider Electric	BYOverload retaynman		<1	Interpolated
LRD22	Schneider Electric	Difendaniaanumac	Ka Plastic Cover	<1	Interpolated
LRD32					Interpolated
LRD35		DATF: 06/20/	2023	<1	Interpolated
LRD340		DATE. 00/20/			Interpolated
LRD350				1	Interpolated
LRD365				1	Interpolated
LRD3363				1	Interpolated
LRD4865			$\mathbf{O}^{\mathbf{V}}$	2	UUT20A,B
LRD5367		ARITIDI	G	2	Same as UUT20A,B
HJL36015		DUILDI	NC I	5	Same as UUT19A,B, UUT20A,B
1111 20022	1				Same as UUT19A,B,
HJL36020	ļ			5	UUT20A,B
HJL36030				5	Same as UUT19A,B, UUT20A,B
HJL36040				5	Same as UUT19A,B, UUT20A,B
HJL36060				5	Same as UUT19A,B, UUT20A,B
HJL36080	Schneider Electric	Molded case circuit breaker	Plastic	5	Same as UUT19A,B, UUT20A,B
HJL36100				5	Same as UUT19A,B, UUT20A,B
FAL34015				5	UUT19A,B
FAL34020				5	Interpolated
FAL34030	ļ			5	Interpolated
FAL34040	ļ			5	Interpolated
FAL34060	ļ			5	Interpolated
FAL34080	ļ			5	Interpolated
FAL34100				5	UUT20A,B

Table 31 - Special Seismic Certification Certified Subcomponents - Rigid and Flexible Base Mounted Controllers on Panel Stand and Braced at Top (Continued)							
Braced at To	(Continued)				ERTIFICATION		
DCL Project: 73815-	2201						
Manufacturer: Axec	on for Amico						
Product Line: Medic	al Air and Vacuum Syste	ems; Standalone Controllers					
Mounting Configurat	tion: Rigid and Flexible	Base					
Certified Seismic Lev	el: Sds=2.0g, z/h=1.0						
		Controller Subcom	ponents				
Model Number	Manufacturer	Description	Material	Weight (lb.)	Unit		
TF250D1				8	Extrapolated ¹		
TF150N12	Schneider Electric		Carlan Staal	10	UUT19A,B		
TF500D1	Schneider Electric	Class 9070 control transformer	Carbon Steel	13	Interpolated		
TF750D1	1			18	UUT20A,B		
TWDLCAA24DRF	Schneider Electric	PLC base controller	Plastic Cover	1	UUT19A,B		
				4			

TWDLCAA24DRF	Schneider Electric	PLC base controller	Plastic Cover	1	UUT19A,B
TWDLCAA40DRF	Schneider Electric	PLC base controller	Plastic Cover	1	UUT20A,B
TM2AMI4LT	Schneider Electric	Analog expansion card, 4 universal inputs	Plastic Cover	<1	UUT19A,B, UUT20A,B
TM2DRA16RT	Schneider Electric	Digital expansion module, 16 outputs	Plastic Cover	<1	UUT20A,B
TWDNAC485T	Schneider Electric	Serial communication module	47 Plastic Cover	<1	UUT20A,B
TM172PDG428	Schneide <mark>r Electri</mark> c	Bacnet PLC base module	Plastic Cover	2	UUT20A,B
HMISTO512	Schneide <mark>r Electr</mark> ic	2.5" HMI	Plastic Cover	1	UUT19A,B
HMISTU655	Schneide <mark>r</mark> Electric	DY. 3.5" HMP mmac	Plastic Cover		UUT20A,B
ZB4BA6	Schneide <mark>r Electr</mark> ic	Push button, blue	Plastic Cover	<1	UUT19A,B, UUT20A,B
ABL8REM24030	Schneide <mark>r Electric</mark>	24VDC 3A power supply	Plastic Cover	1	UUT20A,B
KLDR1/2		DATE. 00/2012		<1	UUT19A,B
KLDR1				<1	Interpolated
KLDR2			GMelamine	<1	Interpolated
KLDR3				<1	Interpolated
KLDR4	Littelfuse	Fuses		<1	UUT20A,20B
FLM2	Litteiluse	PULA Fuses BUILDIN		<1	UUT19A,B
FLM3		POILDI		<1	Same as UUT19A,B
FLM4				<1	Same as UUT19A,B
FLM5				<1	Same as UUT19A,B
FLM10				<1	Same as UUT19A,B
NSYS3DC6620				31	UUT19A,B
NSYS3DC8620	Schneider Electric	Enclosure, NEMA 1/12	Carbon Steel	45	Interpolated
NSYS3DC10825				72	UUT20A,B
Note: 1. Extrapolated subco	mponents are equivale	nt in function, mounting, and const	ruction to the tested subco	mponents.	

Table 32 - Special Seismic Certification Tested Components - Medical Air and Vacuum Systems



DCL Project: 73815-2201

Manufacturer: Amico Source

Product Line: Medical Air and Vacuum Systems

Tested Product Construction: Painted carbon steel frames, painted carbon steel enclosures, NEMA 1/12

Mounting Description: Units are flexible base mounted with neoprene pads. Standalone control panels are rigidly mounted to a wall or manufacturer-provided stand.

Certified Seismic Level: S_{DS}=2.00g, z/h=1.0 Dimensions (inches) Weight System Control **DCL** Test Model Number System Manufacture Technology Configuration Pump HP Voltage Mounting Unit Size Panel Size Height Width Depth (lb) eport Numbe Scroll / 1 hp (reciprocating) A-XXX-D-080P-SS-N-020-46063-TS Air Amico Modular Skid Mounted 460 Duplex Duplex 73.0 67.0 74.0 1,370 71743-1501 UUT1 **Reciprocating Air** 2 hp (scroll) A-XXX-D-240P-SS-N-200-20863-TS Scroll / 20 hp (scroll) Air Amico Modular Skid Mounted 208 Duplex Hexaplex 96.0 46.0 80.0 1,940 71743-1501 UUT2A (Pump skid) **Reciprocating Air** 20 hp (reciprocating) Flexible base (neoprene) A-XXX-D-240P-SS-N-200-20863-TS Scroll / 20 hp (scroll) Modular Skid Mounted 208 80.0 710 71743-1501 UUT2B Air Amico Duplex Hexaplex 99.0 46.0 20 hp (reciprocating) (Receiver tank skid) Reciprocating Air A-XXX-D-240P-SS-N-200-20863-TS Scroll / 20 hp (scroll) 1.560 71743-1501 UUT2C 208 79.0 Air Amico Modular Skid Mounted Duplex Hexaplex 70.0 46.0 Reciprocating Air 20 hp (reciprocating) (Drver skid) Rigid base on MA/MV 7 604-200-208-BAC-WM Scroll / 20 hp (scroll) STEEL-PDL-Hexaplex 29.5 750 71743-1501 UUT2D Axecon for Amico Modular Skid Mounted Duplex 71.0 51.5 Air 208 (A-XXX-D-240P-SS-N-200-20863-TS **Reciprocating Air** 20 hp (reciprocating) WELDED-1 Control panel skid) Stand 1 hp (rotary lubricated) 2 hp (claw) Claw / Vertical Tank Mounted 208 Duplex 47.0 UUT3 V-xxx-D-060P-TS-N-xxx-46063-xxMxSx Vacuum Amico Duplex 89.0 49.0 1,040 71743-1501 Rotary Lubricated 7.4 hp (rotary dry) Rotary Lubricated V-xxx-D-120P-TS-N-xxx-20863-xxMxSx Amico Vertical Tank Mounted 7.5 hp (rotary 460 Duplex Duplex 85.0 47.0 64.0 1,430 71743-1501 UUT4 Vacuum Rotary Dry lubricated) Claw / 0.5 hp (rotary dry) V-xxx-D-120P-TS-N-xxx-20863-xxMxSx Amico Vertical Tank Mounted 208 Duplex Duplex 85.0 50.0 48.5 1,110 71743-1501 UUT5 Vacuum Rotary Dry 5.4 hp (claw) Claw / 1 hp (rotary lubricated) UUT6 V-xxx-D-060P-TH-N-xxx-46063-xxMxSx Vacuum Amico Horizontal Tank Mounte 460 Duplex Duplex 62.0 39.0 70.0 960 71743-1501 Rotary Lubricated 2 hp (claw) 7.5 hp (claw) Claw / V-xxx-D-240P-TH-N-xxx-20863-xxMxSx Iorizontal Tank Mounted 10 hp (rotary 208 Duplex 75.0 46.5 97.0 2,040 UUT7 Vacuum Amico Duplex 71743-1501 Rotary Lubricated lubricated) 0.5 hp (rotary dry) V-xxx-D-120P-TH-N-xxx-46063-xxxxSx Horizontal Tank Mounte Duplex 63.0 50.0 86.0 1,270 71743-1501 UUT8 Vacuum Amico Rotary Dry 460 Duplex 7.5 hp (rotary dry) Flexible base (neoprene) 7.4 hp (rotary dry) V-xxx-D-240P-TH-N-xxx-20863-xxxxSx Vacuum Amico Rotary Dry Horizontal Tank Mounte 208 Duplex Duplex 77.0 55.0 100.0 2,250 71743-1501 UUT9 12.1 hp (rotary dry) V-CCD-D-240P-SS-N-150-20863-xxMVxW Vacuum Amico Claw Modular Skid Mounted 15 hp (claw) 208 Duplex Hexaplex* 96.0 73.0 55.0 2,960 71743-1501 UUT10 2 hp (claw) Modular Skid Mounted 460 70.5 3,670 71743-1501 UUT11 V-CCD-T-080P-SS-N-xxx-46063-xxMVxW Vacuum Amico Claw Triplex Triplex 99.0 73.0 15 hp (claw) 25 hp (rotary dry) Rotary Lubricated V-xxx-D-240P-SS-N-xxx-20863-xxxxSW Modular Skid Mounted 208 99.0 79.5 4,200 73815-2301 UUT12 Vacuum Amico 25 hp (rotary Duplex Hexaplex* 94.3 Rotary Dry lubricated) Rotary Lubricated 0.5 hp (rotary dry) Modular Skid Mounted 1,460 71743-1501 UUT13 V-xxx-D-240P-SS-N-xxx-20863-xxMxSW 103.0 67.0 55.0 Vacuum Amico 208 Duplex Duplex 7.4 hp (rotary dry) Rotary Dry 7.4 hp (rotary dry) Rotary Lubricated 7.5 hp (rotary dry) V-xxx-T-060P-SS-N-xxx-46063-xxxxSx Amico Modular Skid Mounted 460 Triplex Triplex 93.0 67.0 55.0 2,390 71743-1501 UUT14 Vacuum Rotary Drv 10 hp (rotary lubricated) *UUT10 and UUT12 hexaplex control panel is standalone and was shake tested in UUT16
Table 33 - Special Seismic Certification **Tested Components - Standalone Controllers**



DCL Test

eport Numbe

71743-1501

Unit

UUT15

Mounting

Rigid base on

STEEL-PDL-

APANEL Stand Rigid base on

Dimensions (inches) Weight

(lb)

158

Height Width Depth

24.0 11.5

54.0

DCL Project: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical Air and Vacuum Systems; Standalone Controllers

Tested Product Construction: Painted carbon steel frames, painted carbon steel enclosures, NEMA 1/12

Mounting Description: Units are flexible base mounted with neoprene pads. Standalone control panels are rigid base mounted.

Certified Seismic Level: S_{DS}=2.00g, z/h=1.0 Panel Stand Model Control Model Number System Manufacturer Technology Configuration Pump HP Voltage Number Panel Size MA/MV 7/8 204-015-460 Air or N/A xecon for Amico N/A N/A 460 STEEL-PDL-APANEL Duplex (standalone control panel) Vacuum MA

MA/MV 7/8 605-200-208-BAC-WM (standalone control panel)	Air or Vacuum	Axecon for Amico	N/A	N/A	N/A	208	STEEL-PDL-WELDED	Hexaplex	93.0	53.5	31.8	960	STEEL-PDL- WELDED Stand	71743-1501	UUT16
MV2202-30 (standalone control panel)	Air or Vacuum	Axecon for Amico	N/A	N/A	N/A	460	N/A	Duplex	24	24	12	72	Rigid wall	72076-1601	UUT17A
MV2202-30 (standalone control panel)	Air or Vacuum	Axecon for Amico	N/A	N/A	OSM-04	460	N/A	Duplex	24	24	12	72	Flexible wall	72076-1601	UUT17B
MV3403-65 (standalone control panel)	Air or Vacuum	Axecon for Amico	N/A	N/A	N/A	208	N/A	Quadraplex	40	32	10	181	Rigid wall	72076-1601	UUT18A
MV3403-65 (standalone control panel)	Air or Vacuum	Axecon for Amico	N/A	BY:N	lohamma	d Ka	Irim _{N/A}	Quadraplex	40	32	10	181	Flexible wall	72076-1601	UUT18B
MV2202-30 (standalone control panel)	Air or Vacuum	Axecon for Amico	N/A	MAT	E: 06/20	/2602	STEEL-PDL-APANEL	Duplex	48	24	23	152	Rigid base on STEEL-PDL- APANEL Stand, Braced at Top	72076-1601	UUT19A
MV2202-30 (standalone control panel)	Air or Vacuum	Axecon for Amico	N/A	N/A	N/A	460	STEEL-PDL-APANEL	Duplex	48	24	23	152	Flexible base on STEEL-PDL- APANEL Stand, Braced at Top	72076-1601	UUT19B
MV3403-65 (standalone control panel)	Air or Vacuum	Axecon for Amico	N/A	NA		208	STEEL-PDL-APANEL	Quadraplex	64	32	30	268	Rigid base on STEEL-PDL- APANEL Stand, Braced at Top	72076-1601	UUT20A
MV3403-65 (standalone control panel)	Air or Vacuum	Axecon for Amico	N/A	N/A	N/A	208	STEEL-PDL-APANEL	Quadraplex	64	32	30	268	Flexible base on STEEL-PDL- APANEL Stand, Braced at Top	72076-1601	UUT20B

UUT1 DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: A-XXX-D-080P-SS-N-020-46063-TS

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

460V duplex unit with duplex control panel, stack mounted, 1hp reciprocating air compressor, 2hp scroll compressor, 80 gallon vertical tank, 10 cfm dryer, 3/4" inlet filter, 1/2" pre- and after filter, dew point sensor and CO transmitter.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			OR 4	UT Propertie	5			
Operating Weight		Dim	ensions (inch	Lowest Natural Frequency (Hz)				
(lb)			Height	Width	Depth	Side-Side (X)	Front-Back (Y)	Vertical (Z)
1,370	UUT1		73.0	67.0	74.0	7.3	7.8	16.8
			Seism	ic Test Param	eters	4		
Building Code	Test Criteria	Sds (g)	z/h	P_MAA	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.50	1.0	1.5	4.00	3.00	1.67	0.67

Unit Mounting Description: OBY: Mohammad Karim O

The unit was flexibly base mounted to the shake table with (9) 1/2" diameter Grade 5 bolts, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16.



UUT1 Overall View

UUT2A DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: A-XXX-D-240P-SS-N-200-20863-TS (pump skid)

Product Construction Summary:

Painted carbon steel skid.

Options / Component Summary:

208V duplex unit, stack mounted, 20hp reciprocating air compressor, 20hp scroll compressor

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			L	IUT Propertie	5			
Operating Weight		Dim	ensions (inch	Lowest Natural Frequency (Hz)				
(lb)			Height	Width	Depth	Side-Side (X)	Front-Back (Y)	Vertical (Z)
1,940	UUT2	UUT2A		46.0	80.0	3.3	4.3	5.0
		S	Seism	ic Test Paran	neters	4		
Building Code	Test Criteria	Sds (g)	z/h		Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.33	0.53

Unit Mounting Description:

The unit was flexibly base mounted to the shake table with (4) 1/2" diameter Grade 5 bolts, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16.



UUT2A Overall View

UUT2B DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: A-XXX-D-240P-SS-N-200-20863-TS (receiver tank skid)

Product Construction Summary:

Painted carbon steel skid.

Options / Component Summary:

240 gallon vertical tank

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			L	JUT Properties								
Operating Weight		Din	nensions (inch	Lowest Natural Frequency (Hz)								
(lb)			Height	Width	Depth	Side-Side (X)	Front-Back (Y)	Vertical (Z)				
710	UUT	2B	99.0	46.0	80.0	6.3	5.3	17.3				
	Seismic Test Parameters											
Building Code	Test Criteria	Sds (g)	z/h	5P-@44	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)				
CBC 2022	ICC-ES AC156	2.00	BY:¹i⁰loh	ammad I	Karim	2.40	1.33	0.53				

Unit Mounting Description:

The unit was flexibly base mounted to the shake table with (4) 1/2" diameter Grade 5 bolts, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16.



UUT2B Overall View

UUT2C DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: A-XXX-D-240P-SS-N-200-20863-TS (dryer skid)

Product Construction Summary:

Painted carbon steel skid

Options / Component Summary:

208V, 300 cfm dryer, 1-1/2" inlet filter, 2" pre- and after filter, dew point sensor and CO transmitter.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			ORU	JUT Properties				
Operating Weight (lb)		Dim	ensions (inch	Lowest Natural Frequency (Hz)				
		SE	Height	Width	Depth	Side-Side (X)	Front-Back (Y)	Vertical (Z)
1,560	UUT2	<u>2</u> C	70.0	46.0	79.0	6.5	4.8	15.0
	-		Seism	ic Test Param	eters	2	•	
Building Code	Test Criteria	Sds (g)	z/h	SP-044	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.50	1.0	1.5	4.00	3.00	1.67	0.67
Unit Mounting Doc	crintion	5 E	3Y:Moh	ammad I	Karim	0		

Unit Mounting Description:

Flexible base mounted: the unit was attached to the shake table with (4) 1/2" diameter Grade 5 bolts, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16.



UUT2C Overall View

UUT2D DCL Report 71743-1501 **UNIT UNDER TEST (UUT) Summary Sheet**



DCL Project Number: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical vacuum and air units

Model Number: MA/MV 7 604-200-208-BAC-WM (A-XXX-D-240P-SS-N-200-20863-TS Control Panel Skid)

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

208V hexaplex control panel.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			RU	UT Properties	Ca			
Operating Weight		Dim	ensions (inch	Lowest Natural Frequency (Hz)				
(lb)		1F	Height	Width	Depth	Front-Back (X)	Side-Side (Y)	Vertical (Z)
750	UUT2D		71.0	51.5	29.5	7.8	20.3	21.3
			Seismi	c Test Parame	eters	2	-	
Building Code	Test Criteria	Sds (g)	z/h	P-044	7 Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.50	1.0	1.5	4.00	3.00	1.67	0.67
Unit Mounting Des	cription:		SY: Mona	ammad r	Karim 🦷			

Unit Mounting Description:

Rigid base mounted: the unit was attached to the manufacturer-provided stand (Amico Part Number STEEL-PDL-WELDED-1) with (4) 3/8" x 3 Grade 5 hex cap screws, 3/8" flat washers, lock nuts, and 5/16" flat washers. The stand was mounted to the shake table with (8) 1/2" diameter Grade 5 bolts.



UUT2D Overall View

UUT3 DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: V-xxx-D-060P-TS-N-xxx-46063-xxMxSx

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

208V duplex unit with duplex control panel, vertical tank mounted, 1hp rotary vane lubricated pump, 2hp contactless claw pump, 60 gallon vertical tank with top plate

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			FONU	UT Properties				
Operating Weight		Dim	ensions (inch	Lowest Natural Frequency (Hz)				
(Ib)		S	Height	Width	Depth	Front-Back (X)	Side-Side (Y)	Vertical (Z)
1,040	UUT	3	89.0	49.0	47.0	5.3	4.3	8.8
			Seism	ic Test Param	eters	5		
Building Code	Test Criteria 🕻	Sds (g)	z/h	P=044	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	Y: Moha	ammad I	3.20 Karim	2.40	1.33	0.53

Unit Mounting Description:

Flexible base mounted: the unit was attached to the shake table with (4) 1/2" diameter Grade 5 bolts, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16.



UUT3 Overall View

UUT4 DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: V-xxx-D-120P-TS-N-xxx-20863-xxMxSx

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

460V duplex unit with duplex control panel, vertical tank mounted, 7.5hp rotary vane lubricated pump, 7.4hp rotary vane dry pump, 120 gallon vertical tank with top plate.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

		-	FUI	UT Properties	-On			
Operating Weight		Dim	ensions (inche	Lowest Natural Frequency (Hz)				
(lb)	(lb)		Height Width Depth		Front-Back (X)	Side-Side (Y)	Vertical (Z)	
1,430	UUT	4	85.0	47.0	64.0	5.8	5.5	6.3
		<u>I</u>	Seismi	ic Test Parame	eters			
Building Code	Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00 B	SY: 1 ∕9oha	amr h ād k	Kari ^{3.20}	2.40	1.33	0.53

Unit Mounting Description:

Flexible base mounted: the unit was attached to the shake table with (4) 1/2" diameter Grade 5 bolts, (4) 1/4" thick 2"x2" A36 washers, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16.



UUT5 DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: V-xxx-D-120P-TS-N-xxx-20863-xxMxSx

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

208V duplex unit with duplex control panel, vertical tank mounted, 0.5hp rotary vane dry pump, 5.4hp contactless claw pump, 120 gallon vertical tank with top plate.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			OR 4	UT Properties	5							
Operating Weight		Dim	ensions (inch	Lowest Natural Frequency (Hz)								
(lb)			Height	. Width	Depth	Depth Front-Back (X)		Vertical (Z)				
1,110	UUT	5	85.0	50.0	48.5	7.0	5.3	9.5				
	Seismic Test Parameters											
Building Code	Test Criteria	Sds (g)	z/h		Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)				
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.33	0.53				

Unit Mounting Description:

Flexible base mounted: the uni<mark>t was a</mark>ttached to the shake table with (4) 1/2" diameter Grade 5 b<mark>olts, 3/</mark>16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16.

BY: Mohammad Karim



UUT5 Overall View

UUT6 DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: V-xxx-D-060P-TH-N-xxx-46063-xxMxSx

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

460V duplex unit with duplex control panel, horizontal tank mounted, 1hp rotary vane lubricated pump, 2hp contactless claw pump, 60 gallon horizontal tank.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			EORU	IUT Propertie	5			
Operating Weight		Dim	ensions (inch	Lowest Natural Frequency (Hz)				
(lb)		N	Height	Width	Depth	Front-Back (X)	Side-Side (Y)	Vertical (Z)
960	UUT	5	62.0	39.0	70.0	7.0	6.8	13.0
		SVH	Seism	ic Test Param	eters	2		
Building Code	Test Criteria	Sds (g)	z/h	P-1044	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.50	1.0	1.5	4.00	3.00	1.67	0.67

Unit Mounting Description:

Flexible base mounted: the unit was attached to the shake table with (4) 1/2" diameter Grade 5 bolts, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16.



UUT7 DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: V-xxx-D-240P-TH-N-xxx-20863-xxMxSx

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

208V duplex unit with duplex control panel, horizontal tank mounted, 10hp rotary vane lubricated pump, 7.5hp contactless claw pump, 240 gallon horizontal tank.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

		EOR	JUT Propertie	s			
Operating Weight	P	imensions (inch	Lowest Natural Frequency (Hz)				
(lb)	N	Height	Width	Depth	Front-Back (X)	Side-Side (Y)	Vertical (Z)
2,040	UUT7	75.0	46.5	97.0	5.5	6.0	9.3
		Seism	nic Test Param	eters	2		
Building Code	Test Criteria	z/h	3P-1944	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156 2.50	1.0	1.5	4.00	3.00	1.67	0.67

Unit Mounting Description:

Flexible base mounted: the unit was attached to the shake table with (4) 1/2" diameter Grade 5 bolts, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16.



UUT7 Overall View

UUT8 DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: V-xxx-D-120P-TH-N-xxx-46063-xxxxSx

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

460V duplex unit with duplex control panel, horizontal tank mounted, 0.5hp rotary vane dry pump, 7.5hp rotary vane dry pump, 120 gallon horizontal tank.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

	-	- FO U	UT Properties	CON			
	Dim	ensions (inche	Lowest Natural Frequency (Hz)				
I		Height	Width Depth		Front-Back (X)	Side-Side (Y)	Vertical (Z)
UUT	8	63.0	50.0	86.0	5.3	5.8	15.0
	<u> </u>	Seismi	ic Test Param	eters	10		
Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
ICC-ES AC156	2.00	}Y:₩oha	amr 11 5ad I	Kar ^{3.20}	2.40	1.33	0.53
	UUT Test Criteria	UUT8 Test Criteria Sds (g)	Dimensions (inche Height UUT8 63.0 Seismi Test Criteria Sds (g) z/h	Dimensions (inches) Height Width UUT8 63.0 50.0 Seismic Test Parameter Test Criteria Sds (g) z/h Ip	Height Width Depth UUT8 63.0 50.0 86.0 Seismic Test Parameters Aflx-H (g) Aflx-H (g)	Dimensions (inches) Lowest N Height Width Depth Front-Back (X) UUT8 63.0 50.0 86.0 5.3 Seismic Test Parameters Test Criteria Sds (g) z/h Ip Aflx-H (g) Arig-H (g)	Dimensions (inches) Lowest Natural Frequent Height Width Depth Front-Back (X) Side-Side (Y) UUT8 63.0 50.0 86.0 5.3 5.8 Seismic Test Parameters Test Criteria Sds (g) Z/h Ip Aflx-H (g) Arig-H (g) Aflx-V (g)

Unit Mounting Description:

Flexible base mounted: the unit was attached to the shake table with (4) 1/2" diameter Grade 5 bolts, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16. Factory installed pump isolators were replaced with 1,020 load capacity, M10x1.50 thread size, 2-3/8" diameter, 25mm high, 5mm deflection, standard deflection vibration isolators (MSC part number 62006465), using M3VHB tape between the motor and the isolator, and 1/4" plate washers.



UUT8 Overall View

UUT9 DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: V-xxx-D-240P-TH-N-xxx-20863-xxxxSx

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

208V duplex unit with duplex control panel, horizontal tank mounted, 7.4hp rotary vane dry pump, 12.1hp rotary vane dry pump, 240 gallon horizontal tank.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			FUTU	UT Properties	5 OA			
Operating Weight	Dimensions (inches)						latural Frequen	cy (Hz)
(lb)		I.S.	Height	Width	Depth	Front-Back (X)	Side-Side (Y)	Vertical (Z)
2,250	UUT	9	77.0	55.0	100.0	3.8	5.3	8.3
		<u>I</u>	Seism	ic Test Param	eters			
Building Code	Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	SY:₩oha	amr 1 15ad	Kar ^{3.20}	2.40	1.33	0.53

Unit Mounting Description:

Flexible base mounted: the unit was attached to the shake table with (4) 1/2" diameter Grade 5 bolts, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16.



UUT9 Overall View

UUT10 DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: V-CCD-D-240P-SS-N-150-20863-xxMVxW

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

208V duplex unit, stack mounted, (2) 15hp contactless claw pumps, 240 gallon vertical tank.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			EORU	UT Properties				
Operating Weight		Din	nensions (inch	Lowest N	latural Frequen	cy (Hz)		
(lb)		NK	Height	Width	Depth	Front-Back (X)	Side-Side (Y)	Vertical (Z)
2,960	UUT	10	96.0	73.0	55.0	5.3	6.8	8.5
			Seism	ic Test Param	eters	2		
Building Code	Test Criteria	Sds (g)	z/hOS	5P-6044	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.50	1.0 SV • Mob	1.5 ammad l	4.00 Carim	3.00	1.67	0.67

Unit Mounting Description:

Flexible base mounted: the unit was attached to the shake table with (6) 1/2" diameter Grade 5 bolts, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16. In addition, 1/4" plate washers were added to all receiver tank- to skid mounting locations.



UUT10 Overall View

UUT11 DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: V-CCD-T-080P-SS-N-xxx-46063-xxMVxW

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

460V triplex unit with triplex control panel, stack mounted, 2hp and 15 hp contactless claw pumps, 80 gallon vertical tank.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

		FUTU	UT Properties	-On			
Dimensions (inches)						latural Frequen	cy (Hz)
		Height	Width	Depth	Front-Back (X)	Side-Side (Y)	Vertical (Z)
UUT1	11	99.0	73.0	70.5	4.0	5.0	9.5
	II.	Seism	ic Test Param	eters	6		
Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
ICC-ES AC156	2.50 E	SY:Noh	amr h ād	Kar ^{4.00}	3.00	1.67	0.67
	UUT: Test Criteria	UUT11 Test Criteria Sds (g)	Dimensions (inch Height UUT11 99.0 Seism Test Criteria Sds (g) z/h	Dimensions (inches) Height Width UUT11 99.0 73.0 Seismic Test Param Test Criteria Sds (g) z/h Ip	Height Width Depth UUT11 99.0 73.0 70.5 Seismic Test Parameters Test Criteria Sds (g) z/h Ip Aflx-H (g)	Dimensions (inches) Lowest N Height Width Depth Front-Back (X) UUT11 99.0 73.0 70.5 4.0 Seismic Test Parameters Test Criteria Sds (g) z/h Ip Aflx-H (g)	Lowest Natural Frequent Dimensions (inches) Lowest Natural Frequent Height Width Depth Front-Back (X) Side-Side (Y) UUT11 99.0 73.0 70.5 4.0 5.0 Seismic Test Parameters Test Criteria Sds (g) Z/h Ip Aflx-H (g) Arig-H (g) Aflx-V (g)

Unit Mounting Description:

Flexible base mounted: the unit was attached to the shake table with (8) 1/2" diameter Grade 5 bolts, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16. All factory installed pump isolators were replaced with VMC TTB-750 isolators.



UUT11 Overall View

UUT12 DCL Report 73815-2201 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: V-xxx-D-240P-SS-N-xxx-20863-xxxxSW

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

208V duplex unit, stack mounted, 25 hp rotary vane dry and 25 hp rotary vane lubricated pumps, 240 gallon vertical tank.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			U	UT Properties								
Operating Weight		Dim	ensions (inch	Lowest N	latural Frequen	cy (Hz)						
(lb)			Height	Width	Depth	Front-Back (X)	Vertical (Z)					
4,200	UUT1	2	99.0	94.3	79.5	5.0	4.5	10.0				
	Seismic Test Parameters											
Building Code	Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)				
CBC 2022	ICC-ES AC156	2.00	1.0 ⁰ S	P- <u>0</u> 44	3.20	2.40	1.33	0.53				

Unit Mounting Description:

Flexible base mounted: the unit was attached to the shake table with (8) 1/2" diameter Grade 5 bolts, flat washers, 3/16" thick 4"x4" carbon steel plates, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc. Model CNP-16. In addition, (4) 1.75"x1.75"x1/4" carbon steel plate washers between the top of the manufacturer-provided mounting channels and flat washers were used to mount the pump skid to the shake table interface plate.

*Pre-test retrofit: extended M12 threaded rods were used to connect the pumps to the VMC-M12-1000 isolators.



UUT13 DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: V-xxx-D-240P-SS-N-xxx-20863-xxMxSW

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

208V duplex unit with duplex control panel, stack mounted, 0.5hp rotary vane dry and 7.4 hp rotary vane dry pumps, 240 gallon vertical tank.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			FUNU	UT Properties	s On			
Operating Weight		Dim	nensions (inch	Lowest N	latural Frequen	cy (Hz)		
(lb)		Height Width Depth Front-Back (Side-Side (Y)	Vertical (Z)
1,460	UUT	13	103.0	67.0	55.0	6.8	7.0	22.0
		<u>I</u>	Seism	ic Test Param	eters			
Building Code	Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.50 E	SY:₩oha	amr 1 15ad	Karfm	3.00	1.67	0.67

Unit Mounting Description:

Flexible base mounted: the unit was attached to the shake table with (8) 1/2" diameter Grade 5 bolts, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16.



UUT13 Overall View

UUT14 DCL Report 71743-1501 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Amico Source

Product Line: Medical vacuum and air units

Model Number: V-xxx-T-060P-SS-N-xxx-46063-xxxxSx

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

460V triplex unit with triplex control panel, stack mounted, 7.4hp and 7.5hp rotary vane dry pumps and 10 hp rotary vane lubricated pump, 60 gallon vertical tank.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			FONU	UT Propertie	s COA						
Operating Weight		Din	nensions (inche	Lowest N	latural Frequen	cy (Hz)					
(Ib)		S	Height	Width	Depth	Front-Back (X)	nt-Back (X) Side-Side (Y)				
2,390	UUT1	14	93.0	67.0	55.0	4.8	5.3	14.3			
			Seismi	ic Test Param	eters	5					
Building Code	Test Criteria 🕻	Sds (g)	z/h	P-044	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)			
CBC 2022	ICC-ES AC156	2.00	Y: Moha	1.5 ammad	3.20 Karim	2.40	1.33	0.53			

Unit Mounting Description:

Flexible base mounted: the unit was attached to the shake table with (6) 1/2" diameter Grade 5 bolts, 3/16" thick 4"x4" carbon steel plate, and 4"x4" combination cork and neoprene isolation pads by Vibration Isolation Co., Inc., Model CNP-16. The existing factory-installed motor isolators on the middle motor were replaced with 1,020 load capacity, M10x1.50 thread size, 2-3/8" diameter, 25mm high, 5mm deflection, standard deflection vibration isolators (MSC part number 62006465), using M3VHB tape between the motor and the isolator, and 1/4" plate washers. In addition, 1/4" plate washers were added to all receiver tank- to skid mounting locations.



UUT14 Overall View

UUT15 DCL Report 72076-1601 UNIT UNDER TEST (UUT) Summary Sheet

(()) DCL DYNAMIC CERTIFICATION LABORATORIES,LLC

DCL Project Number: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical vacuum and air units

Model Number: MA/MV 7/8 204-015-460 (standalone control panel)

Product Construction Summary:

Painted carbon steel frame. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

Contactor, relay, VFD, circuit breaker, power distribution block, transformer, PLC controller, expansion cards, communication module, Bacnet, 5.7" HMI, switches, thermostat, filter, fan, 24VDC power supply, annunciator, fuses.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			FUI	UT Properties	-On					
Operating Weight		Dimensions (inches)						Lowest Natural Frequency (Hz)		
(lb)	is in the second s		Height	Width	Depth Front-Back (X) Side		Side-Side (Y)	le-Side (Y) Vertical (Z)		
158	UUT1	15	54.0	24.0	.0 11.5 20.3	10.8	>33.3			
		<u>I</u>	Seism	ic Test Param	eters					
Building Code	Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)		
CBC 2022	ICC-ES AC156	2.50 E	SY:₩oha	amr 11 5ad	Karfm	3.00	1.67	0.67		

Unit Mounting Description:

Rigid base mounted: the unit was attached to the manufacturer-provided stand (Amico Part Number STEEL-PDL-APANEL) with (8) 3/8" diameter Grade 5 bolts, (4) on each side of the stand. The stand was mounted to the shake table with (8) 3/8" diameter Grade 5 bolts, (4) in each leg.



UUT15 Overall View

UUT16 DCL Report 72076-1601 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical vacuum and air units

Model Number: MA/MV 7/8 605-200-208-BAC-WM (standalone control panel)

Product Construction Summary:

Painted carbon steel skid. Control panel is painted carbon steel, NEMA 1/12.

Options / Component Summary:

Contactor, relay, VFD, circuit breaker, power distribution block, transformer, PLC controller, expansion cards, communication module, Bacnet, 5.7" HMI, switches, thermostat, filter, fan, 24VDC power supply, annunciator, fuses.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			TFU	UT Properties	5 ONA							
Operating Weight	Dimensions (inches)					latural Frequen	cy (Hz)					
(lb)			Height	Width	Depth	Front-Back (X)	Side-Side (Y)	Vertical (Z)				
960	UUT	16	93.0	53.5	31.8	18.5	5.5	23.5				
	Seismic Test Parameters											
Building Code	Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)				
CBC 2022	ICC-ES AC156	D 2.50	8Y:10loh	amr h ad I	Karian	3.00	1.67	0.67				

Unit Mounting Description:

Rigid base mounted: the unit was attached to the manufacturer-provided stand (Amico Part Number STEEL-PDL-WELDED) with (8) 1/2" diameter Grade 5 bolts (4 at the back and 2 on each side of the unit) The stand was mounted to the shake table with with (10) 1/2" diameter Grade 5 bolts.



UUT16 Overall View

UUT17A DCL Report 72076-1601 **UNIT UNDER TEST (UUT) Summary Sheet**



DCL Project Number: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical vacuum and air units

Model Number: MV2202-30 (standalone control panel)

Product Construction Summary:

Control panel enclosure is painted carbon steel, NEMA 1/12.

Options / Component Summary:

Overload relay, circuit breaker, transformer, PLC base controller, analog expansion card, 2.5" HMI display, push button, and fuses.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

		1		JUT Properties				
Operating Weight		Dimensions (inches)					latural Frequen	cy (Hz)
(lb)		15	Height	Width	Depth	Front-Back (Y)	Side-Side (X)	Vertical (Z)
72	UUT1	7A –	24.0	24.0	8.0	N/A	N/A	N/A
	/	2 M	Seism	ic Test Param	eters	1 m	-	
Building Code	Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022 ICC-ES	ICC-ES AC156	2.00	BY:10loh	ammad I	Karim	3.00	1.67	0.67
CBC 2022	ICC-L3 ACI30	2.50	0.0	1.5	5.20	3.00	1.07	0.07

Unit Mounting Description:

TF·06/20/2023)Δ Rigid wall mounted: the unit was attached to the test wall with (4) 3/8" Grade 5 bolts at the back of the enclosure. The test wall was rigidly mounted to the shake table.



06/20/2023

UUT17B DCL Report 72076-1601 **UNIT UNDER TEST (UUT) Summary Sheet**



DCL Project Number: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical vacuum and air units

Model Number: MV2202-30 (standalone control panel)

Product Construction Summary:

Control panel enclosure is painted carbon steel, NEMA 1/12.

Options / Component Summary:

Overload relay, circuit breaker, transformer, PLC base controller, analog expansion card, 2.5" HMI display, push button, and fuses.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

		1		UT Properties				
Operating Weight		Dimensions (inches)					latural Frequen	cy (Hz)
(lb)		15	Height	Width	Depth	Front-Back (Y)	Side-Side (X)	Vertical (Z)
72	UUT1	7в	24.0	24.0	8.0	N/A	N/A	N/A
		A III	Seism	ic Test Param	eters	1 m	•	
Building Code	Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022 ICC-	ICC-ES AC156	2.00	BY:10loh	ammad I	Karim	3.00	1.67	0.67
CBC 2022	ICC-L3 ACI30	2.50	0.0	1.5	5.20	3.00	1.07	0.07

Unit Mounting Description:

Unit Mounting Description: Flexible wall mounted: the unit was attached to the test wall with (4) 3/8" Grade 5 bolts at the back of the enclosure. The test wall was mounted to the shake table with (4) VMC MSSH-1E-2000 spring mounts.



UUT17B Overall View

UUT18A DCL Report 72076-1601 **UNIT UNDER TEST (UUT) Summary Sheet**



DCL Project Number: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical vacuum and air units

Model Number: MV3403-65 (standalone control panel)

Product Construction Summary:

Control panel enclosure is painted carbon steel, NEMA 1/12.

Options / Component Summary:

Contactor, circuit breaker, transformer, PLC base controller, analog expansion card, digital expansion module, serial communication module, Bacnet PLC base module, 3.5" HMI display and power supply.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

		1		UT Properties								
Operating Weight		Dimensions (inches)					latural Frequen	cy (Hz)				
(lb)		1×1	Height	Width	Depth	Front-Back (Y)	Side-Side (X)	Vertical (Z)				
181	UUT1	8A	40.0	32.0	10.0	N/A	N/A	N/A				
	Seismic Test Parameters											
Building Code	Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)				
CBC 2022 ICC-ES A	ICC-ES AC156	2.00	BY:10loh	ammad I	Karim	3.00	1.67	0.67				
CBC 2022	ICC-ES ACISO	2.50	0.0	1.5	5.20	5.00	1.07	0.67				

Unit Mounting Description:

Unit Mounting Description: Rigid wall mounted: the unit was attached to the test wall with (4) 3/8" Grade 5 bolts at the back of the enclosure. The test wall was rigidly mounted to the shake table.



UUT18B DCL Report 72076-1601 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical vacuum and air units

Model Number: MV3403-65 (standalone control panel)

Product Construction Summary:

Control panel enclosure is painted carbon steel, NEMA 1/12.

Options / Component Summary:

Contactor, circuit breaker, transformer, PLC base controller, analog expansion card, digital expansion module, serial communication module, Bacnet PLC base module, 3.5" HMI display and power supply.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

				UT Properties	M/S							
Operating Weight		Dimensions (inches)					latural Frequen	cy (Hz)				
(lb)			Height	Width	Depth	Front-Back (Y)	Side-Side (X)	Vertical (Z)				
181	UUT1	8B	40.0	32.0	10.0	10.0 N/A	N/A	N/A				
	Seismic Test Parameters											
Building Code	Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)				
CBC 2022 ICC	ICC-ES AC156	2.00	BY:100h	ammad k		3.00	1.67	0.67				
CDC 2022	ICC-ES ACISO	2.50	0.0	1.5	5.20	5.00	1.07	0.07				

Unit Mounting Description:

DATE: 06/20/2023

Flexible wall mounted: the unit was attached to the test wall with (4) 3/8" Grade 5 bolts at the back of the enclosure. The test wall was mounted to the shake table with (4) VMC MSSH-1E-2000 spring mounts.



UUT18B Overall View

UUT19A DCL Report 72076-1601 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical vacuum and air units

Model Number: MV2202-30 (standalone control panel)

Product Construction Summary:

Painted carbon steel stand. Control panel enclosure is painted carbon steel, NEMA 1/12.

Options / Component Summary:

Overload relay, circuit breaker, transformer, PLC base controller, analog expansion card, 2.5" HMI display, push button, and fuses.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

			FUNU	UT Properties	On			
Operating Weight		Dim	ensions (inch	Lowest Natural Frequency (Hz)				
(lb)		L'S	Height	Width	Depth	Front-Back (Y)	Side-Side (X)	Vertical (Z)
152	UUT19	A	48.0	24.0	23.0	>33.3	24.0	>33.3
Note: Dimensions a	and weight includ	e stand and s	eismic bracing	P_044	7			
			Seism	ic Test Param	eters	- m		
Building Code	Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	6Y . <u>1.0</u> 0ha	amn⊴ad∣	Karim	3.00	1.67	0.67
CBC 2022	ICC-ES ACISO	2.50	0.0	1.5	3.20	3.00		

Unit Mounting Description:

Rigid base mounted: the unit was attached to its manufacturer-provided stand with (6) 3/8" Grade 5 bolts. The stand was mounted to the shake table interface plate with (8) 3/8" diameter Grade 5 bolts. The unit's seismic bracing was attached to the enclosure and to the shake table interface plate with (2) each 3/8" Grade 5 bolts.

DATE: 06/20/2023



UUT19A Overall View

UUT19B DCL Report 72076-1601 **UNIT UNDER TEST (UUT) Summary Sheet**



DCL Project Number: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical vacuum and air units

Model Number: MV2202-30 (standalone control panel)

Product Construction Summary:

Painted carbon steel stand. Control panel enclosure is painted carbon steel, NEMA 1/12.

Options / Component Summary:

Overload relay, circuit breaker, transformer, PLC base controller, analog expansion card, 2.5" HMI display, push button, and fuses.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties									
Operating Weight	Dir	Dimensions (inches)					Lowest Natural Frequency (Hz)		
(lb)	L.	Height	Width	Depth	Front-Back (Y)	Side-Side (X)	Vertical (Z)		
152	UUT19A	48.0	24.0	23.0	5.5	6.5	9.5		
Note: Dimensions and	ote: Dimensions and weight include stand and seismic bracing. P-0447								

			Seism	nic Test Param	eters			
Building Code	Test Criteria	Sds (g)	BY:z∕n∕loh	amn p ad I	Afix-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022 ICC-ES AC156		2.00	1.0	1 5	3.20	3.00	1 67	0.67
	2.50	0.0	1.5 DG/20/2	0.23	3.00	1.67	0.07	
Unit Mounting De	scription:		JAIL.	0012012	020			

Unit Mounting Description:

Flexible base mounted: the unit was attached to its manufacturer-provided stand with (6) 3/8" Grade 5 bolts. The stand was mounted to the shake table interface plate with (8) 3/8" diameter Grade 5 bolts. The unit's seismic bracing was attached to the enclosure and to the shake table interface plate with (2) each 3/8" Grade 5 bolts. Interface plate mounted to shake table surface with (4) VMC MSSH-1E-2000 spring mounts.



UUT19B Overall View

UUT20A DCL Report 72076-1601 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical vacuum and air units

Model Number: MV3403-65 (standalone control panel)

Product Construction Summary:

Painted carbon steel stand. Control panel enclosure is painted carbon steel, NEMA 1/12.

Options / Component Summary:

Contactor, circuit breaker, transformer, PLC base controller, analog expansion card, digital expansion module, serial communication module, Bacnet PLC base module, 3.5" HMI display and power supply.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties									
Operating Weight	Din	Dimensions (inches)					cy (Hz)		
(lb)	L.	Height	Width	Depth	Front-Back (Y)	Side-Side (X)	Vertical (Z)		
268	UUT20A	64.0	32.0	30.0	9.5	14.0	22.5		
Note: Dimensions a	nd weight includ <mark>e stan</mark> d and s	seismic bracing	SP-044	1	1.7				

Seismic Test Parameters								
Building Code	Test Criteria	Sds (g)	BY • z/h oh	amn ⁱ ad I	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022 ICC-ES AC156		2.00	1.0	1.5	3.20	3.00	1.67	0.67
	2.50	0.0		5.20	5.00	1.67	0.67	
Unit Mounting Description:								

Unit Mounting Description:

Rigid base mounted: the unit was attached to its manufacturer-provided stand with (8) 3/8" Grade 5 bolts. The stand was mounted to the shake table interface plate with (8) 3/8" diameter Grade 5 bolts. The unit's seismic bracing was attached to the enclosure and to the shake table interface plate with (2) each 3/8" Grade 5 bolts.



UUT20A Overall View

UUT20B DCL Report 72076-1601 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number: 73815-2201

Manufacturer: Axecon for Amico

Product Line: Medical vacuum and air units

Model Number: MV3403-65 (standalone control panel)

Product Construction Summary:

Painted carbon steel stand. Control panel enclosure is painted carbon steel, NEMA 1/12.

Options / Component Summary:

Contactor, circuit breaker, transformer, PLC base controller, analog expansion card, digital expansion module, serial communication module, Bacnet PLC base module, 3.5" HMI display and power supply.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

		OF	UT Properties				
Operating Weight	D	Dimensions (inches)					cy (Hz)
(lb)	L'	Height	Width	Depth	Front-Back (Y)	Side-Side (X)	Vertical (Z)
268	UUT20B	64.0	32.0	30.0	5.5	6.5	9.5
Note: Dimensions a	nd weight includ <mark>e stan</mark> d and	d seismic bracing	SP-044	1	12		

A fly 11 (a)			
Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
2 20	2.00	1.67	0.67
3.20	3.00	1.07	0.07
	3.20		

Unit Mounting Description:

Flexible base mounted: the unit was attached to its manufacturer-provided stand with (8) 3/8" Grade 5 bolts. The stand was mounted to the shake table interface plate with (8) 3/8" diameter Grade 5 bolts. The unit's seismic bracing was attached to the enclosure and to the shake table interface plate with (2) each 3/8" Grade 5 bolts. Interface plate mounted to shake table surface with (4) VMC MSSH-1E-2000 spring mounts.



UUT20B Overall View





