# ADVANSOR CO2 Rack Specifications



Adam's Fairacre Farms Inc. Adams Faircare Farms Nys Route 211 Middletown, New York USA 10940

Salesman: Paul Hensley Applications: Darrin Finney

Revision Level:

Reference 127258.0

Configuration Name - Configuration

General	
Refrigerant type	ü R-744
Compressor class Rack frame isolation type	ü Mixed
Refrigerant identifier	ü Cork & rubber pads
	ü Stenciled on compressor
Discharge	
Discharge pressure rating	ü 1885 psig/130 Bar
Solenoid valve manufacturer	ü *GSR
Special group notes	ü install 3 way gas cooler bypass valve
iquid	and the year cooler bypass valve
Insulation thickness	:: 2/4"all
Provide liquid receiver	ü 3/4" wall
- location	ü ü On rack frame
- type	
- idle pressure rating	ü Vertical
- operating pressure rating	ü 1305 psig/90 bar
- size	ü 870 psig/60 bar
- quantity	ü SE:V14x63
- insulate the receiver	ü One (1) ü
- insulation thickness	
Liquid solenoid valve manufacturer	ü 3/4" wall ü *Sporlan
Special group notes	
ap and group notes	
	reciver pressure must be increased dew to
uction	system desighn
LT group pressure rating MT group pressure rating	ü 425 psig/30 bar
Suction items insulation thickness	ü 650 psig/45 bar
LT group accumulator	ü 3/4" wall
Provide a suction filter	ü no
- suction filter manufacturer	ü
- install suction filter on	ü *Danfoss
- filter is factory installed	ü MT group
	ü
echanical	
Ball valve manufacturer	ü *Sanhua
Provide crankcase heaters	ü

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Adams Faircare Farms

Nys Route 211

Middletown, New York USA

10940

Reference 127258.0

Configuration Name - Configuration

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Revision Level:

Designato	HVAC	(*) Denotes Hillphoenix default vendor. Subject to change without notice.
Oil		
Oil class	ü	Polyol Ester
- brand preference	ü	BSE85K
- shipped loose	ü	502001
Oil Float type	ü	OMB-JB1 for LT, HBSO1 sensor and aux GSR
		solenoid for MT
- manufacturer	ü	Emerson
- service valve type	ü	Ball valve
Separator design type/class	ü	Coalescent with external reservoir
- manufacturer	ü	Westermeyer
Electrical		
Control panel orientation	ü	End of rack
Provide phase loss protection applied	ü	Per rack
- selected model	ü	HP Default
- protected by	ü	Fuses
Compressor overcurrent protection by	ü	Circuit breakers
Compressor or motor MOPD sizing basis	ü	125%
- circuit breaker manufacturer	ü	Square 'D'
Contactor type	ü	Contactor
- manufacturer	ü	Square 'D'
- class	ü	IEC
Power point connection type	ü	Two
Elec defrost contactor manufacturer [if	ü	*Siemens
applicable]		Sidifficial
Elec defrost circuit breaker manufacturer [if	ü	*Siemens
applicable]		
Flexible conduit type and application	ü	Any flex type & raceway acceptable
Time delay manufacturer (where applicable)	ü	*Crouzet
Alarm		
Provide monitoring via controller for the	ü	
following:		
- suction header temperature	ü	
- liquid drain line temperature	ü	
- discharge line temperature	ü	Per rack
- ambient temperature	ü	
- phase loss	ü	Per rack
- oil failure	ü	Per compressor
- refrigerant leak detection	ü	

# Quote Summary ADVANSOR CO2 Rack Specifications



Salesman: Paul Hensley

Adam's Fairacre Farms Inc.

Adams Faircare Farms

Nys Route 211

Middletown, New York USA

10940

Reference 127258.0

Applications: Darrin Finney

Revision Level:

Reference 12/258.0 Conf	on Name - Configuration	
Controller	(*) Denotes Hillphoenix default vendor. Subject to change without notice	à.
Utilize a rack controller - manufacturer - monitor leak detection - programming by Special group notes	CPC Controller Mfg Controller to be	
	MFG CPC MFG#845-2400	
Loads	CPC EINSTEIN II Enhanced Building Controller BX400 Vend # 835-0400 8) Air Handlers (AHU) 40) AHU Zones 48) Lighting Controls 32) Heat/Cool 32) RTU 64) RCB Surface/Frame or Flush/Panel Mount	
Service valves - bypass type	Both None	
Hot gas valve manufacturer (where applicable) - suction stop valve type	Sporlan CDST	
Special Instructions		
D		

Drawings

Rack HVAC and Pump Skid componnets on commen frame

Hillphoenix	Onix		3: 127258	Adams Faircare	Job Name: 127258 Adams Faircare Farms Store: Middletown, New York US	lletown, New Yo	ork US		Design Team	Team	1000000		ASHRAE Design	sign			_	Hillphoenix	Hillshoppic Defriceration Economic	ND ***
		- 15	r: Adam's	Customer: Adam's Fairacre Farms Inc.	70,		Project Lead		Inside Sales Mechanical	nical Electrical	cal Structural		Elev 0.4% DB 0.4% MCWB	.4% MCWB	Master Revision: 0	0 :		2016 Gees Mill Road Convers GA 30012	Road Convers	Systems CA 30012
	A 2 BOTTER COMMUNITY	Name & ID	3: Rack HV	Name & ID: Rack HVAC [127258-22]				Finney	À.		Somashekhar	skhar 365	95	74	Last Edit	Last Edit: 11/05/21 16:09:29	9:29	Voice 770.285	Voice 770.285.3100 Fax 770,285.3076	0.285.3076
General		Discharge / Oil	-	ď	Docoivor	County	1													
		D. B.			eceivei		Suchon/Liquid neader	Jer	Electri	Electrical/EMS										
	1			Receiver Located	On Rack Frame	Group Name	43*	Pow	ower Point	Rack/PDB										
	Check valve	ON.		Receiver Type	Vertical	- suct insulation	34" wall		- voltane	AGNONIA	I									
- Identifier marking Note 1	Oil Separator	TCO	COS5-15A	- size	SE:V14x63	Filter Model		1	SACAMODO ACADO	Sec avenue										
Ambient Temp (1 yr.)   96	Oll Reservoir	TOR	OR8-5A	- Demograph rating	1305 nainiBO has	-		T	TO T	1 And 4 and 6 and 6	5									
Requirements 1,380,000	- Sightplass			- rating trains	POTACL O SOLD V	1		I I I I	Ower Ports	Secondary/PDB	908									
		1000	2000	- Indian valve	1			- VG	- voltage											
	On App	Deg	VCD	- 3 way service valve				- W	- MCA/MOPD/SCCR	12/15/10K										
	- galons			- 80% pumpdown	200			Inter	nternal Branch	Compressor Contr	Contr									
	Oil Alarm Per		Per compressor	- insulation	3/4" wal			ion-	- voltace	120/80/1										
	- indicator lamp	oN dr		Drier				W.	- MCANADANGOOD	T	T									
- HR avail 50% 1,118,995				Drain Regulator	ICMT-C				Dinger   new Mardel	T	T									
- HR avail 35% 783,297								T	of Loss model	Ť	T									
Stub Orientation No								LINEX	riexible Conduct type	Note 2	7									
								19	- include low voltage	No.	1									
		-																		
	DBC IA	-						EMS		-										
- duaminy								99.	- controller mfg	CPC	Γ									
	I							lebom -	del	RX-400 E2E	Т									
					The second secon			- fail	- failsafe type		T									
			-	-	a power load			* power load			]			And address of	(1) of the second larger (4) and 1 and 1					
Suction Group 43° - DX Circuit ID & Description	cuit ID & Descript	tion			Electric Defrost			Fans			Stub Size			Circuit Co.	Circuit Sendoe/Central Values		-	-	200	
Load Description	Model No	Nete BTU GPM	PM Temp	Flec Amns 1	Protection C.	Conturber W.	The American		H	-		-		Circuit Se	vice/control van	/es	Dual Temp		Probes Indicat	Indicator/Switch
A/C Loop	front	1280 0 NIA	1 AE	4-	+	Т	PINE VIIIDS 1	Linician	Contactor	Wire Lin	Suct	HG	Elec Liq	Liquid Elec	Suction	Elec Hot Gas	Ctrl Locate	Failsafe R	D Ref	Def Cut
-AHIF1		100	H		1						4		BV w/ChkBypass	kBypass	BV w/ChkBypass					
AHILO			+							5A	S 7/8*		BV w/ChkBypass	KBypass	BV w/ChkBypass					
4111.0		1	+							1-1/8"	1-58.		BV w/ChkBypass	SByDess	BV w/ChirBymase					
2014			4							1-3/8-	·8- 2-1/8-		BV w/ChkBynass	Sympton	BV w/ChiBurness					1
-KHO-4		(159.0) NA	4							7/8*	3* 1-1/8*		BV w/ChiRiston	Burnson	Or other base					
-AHU-S		(28.0) NA	A 45							1/2"	+	-	RV with Repage	Burgee	BY WCHKBypass					
Summary: Suction Group 43°	in Group 43° Red	uirement: 13	BOK BTUH	Canacity 1 84	Requirement: 1380K BTI IH Canacily: 1 845 4K BTI IH Loadion: 110 192	Too: 110 19/. T	This around in 10s	Obl of the or	Salar Salar		Laco			- candida	llow w.c.uvpbess				-	
							me group is too to the system total. Liquid temperature, 35 P	o an ma sk	Stell Ioldi. Li	idnia terribera	inte, 35 r									
1		Compressor Selections	or Selection	ons			Over	Overcurrent	3	Contactor						Accessories				
Fos ISD		LRA		%	Suct	Unl Weight Oil (o	Oil (oz) Size Protection	otection Wire	Type S	Model Model	HF	CH UL	ULCoil	HPC	1.9C	OFC	Officer	Elber Life	-	1001
-		425	548.4	30%		534 99	150 FXD63B150L	B150L 1/0		5		0		7106632,117			+	1	mecann	VFD
~			324.2	18%	7/8" 1-1/8" 0	421 92	80 80136080	080 4	IEC	65 LC1D85AG7				7406623.447		1	-		-	134U4968
10			324.2	18%		421 92		90 4	DEC	65 LC1D65AG7		0		7106533.117						
4	4FTC-30-2NU-00 59.3			18%	7/8" 1-1/8" 0	421 92	80 801.36080	180	H	65 LC1D65AG7		0		740653 447						
Suction Group 43° 5 4FTC-30	P-2NU-00 59.3	3 245 30.0	324.2	392.8 18% 7.	7/8" 1-1/8" 0	421 92		180	FC R5	RS I CADREAG?				7400000		-				
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			VFD	1341 (4060	2000													
			Injection															
			Filler										Kevisions					
			Onroat									-	Kevi		ummary			
	Accessories	200	Orc											- 0	Dy S			
		100	7 77					0					The second second	Dan Dan	Nev Date			
	The second second	Sett	1	7106533-117	7106533,117		/106533-11/	7106533-117	TANGEST AAT	11000001								
		III Coil																
		HF CH III		0	0	-	-	0	-			Notes					otable	
Contactor	tactor	Model		-	C1D85AG7	CIDEGACT	Tourse of the last	CIDESAGZ	C1D65AG7							(1) Stenciled on compressor	(2) Any flex type & raceway acceptable	
200		Type Size	200	0	1 EC   65	1 59 031		EC 65	IEC 65 L							(1) Stencile	(2) Any flex	
rent		on Wre	1	200	+	7		+	4		* Downer from cack		THE RESIDENCE IN COLUMN 2 IN C	VFD				
Overcurrent	1	Size Protection	160 EVDESORENI	130 14000130	8U 18UL36080	BD1.36090	00000100	90 901 39000	80 80136080		0. 1			NH HA		94x36		
		Oil (oz)	go	000	75	92	60	70	92					VI LV	ŀ	22/x94x36		
		Weight	534	100	74	421	107	75	421					Est Wt	200	83/3		
		Suct Uni	1,308-		0/1	1-1/8	4,118		1-1/6					Split				
	ŀ	Usen	-1/8"	710.	1	7/8" 1.	7/8" 4.	t	7/8		D are for all.		L	L.L.				
	0.70	70	30%	700	200	18%	18%	l	18%	-	pacity and I	enser	40000	Voitage Amps Nativity	40	H		
tions	THE PERSON NAMED IN	THE	656.8	302 6	2000	392.8	392.8		392.8		ser. The ca	Condenser		Se Amp	200	1		
Compressor Selections	TIP COLUMN	Capaci	50.0 548.4	234.2	ı	324.2	3242		324.2		ach conden		A	M VOILE	1260			
ompres	TDA TIB		425 50.1	245 30.0	200	245 30.0	245 30.0	200	242 30.0		es are for e		Conception TT Course of	CAUS AP	8 12			
3	Н	411	106.1	1.07	4	59,3	59.3		282		MOPD value		TT.	TI A	B 050	-		
The second second	Model	Januari .	6DTE-50-2NU-00	4FTC-30-2NLI-00		4F1C-30-2NU-00	4FTC-30-2NU-00	ACTO 30 3411 00	TI CONTENDED		The event of multiple condensers, the weight, amps and MOPD values are for each condenser. The capacity and TD are for all,		Model	t	TSDC2-CO2-402-24 R 1845 150	1		
The same of the sa	Poe Ner	100		2 4		2	4	,	-		e condense		1	1	TSDC2-C			
The state of the s	Clause II	and deposits	Suction Group 43*	Suction Group 43°	-	Suction Group 431	Suction Group 43*	Common Common A'24	Section Company		in the event of multiple		Me. On	t	BAC 1			

Condenser Specifications

Hillphoenix

A DOVER COMPANY

Adam's Fairacre Farms Inc.

Job Name: Adams Faircare Farms

Address: Nys Route 211

City/State: Middletown, New York USA

Postal Code: 10940 Reference: 127258 Date: 11-Feb-2022

Salesman: Paul Hensley Applications: Darrin Finney

All items shipped direct from manufacturer to the jobsite location as listed above

SPECIAL: \*Dock height\*

Model		Manufactur	er Moto	r Voltage	Co	ntrol Vo	Itage	Т	ag For	Est. Weight	Overall LWH
TSDC2-C02-4	02-24.8	BAC	46	0/60/3		208/60			ck HVAC	8,973	227x94x98
Refrigerant	Cond Temp	Requirement	Capacity	Estimated	TD	FPI	Connec	ot Sizo	Fan Count		
744	88	2,237,990	1,845,359	8.0	-		1-1		ran Count	Fan CFM 89,482	Motor RPN 1250

Selected Options (\*) Denotes Custom

.. (\*) Coil Connections on Opposite Side of Control Panel and Water

.. (\*) Modbus RS485 Communication Card with Alarms (requires coordi

.. (\*) NeededAnalog Fan Control Signal plus Alarms (requires spare

Standrd features include:

- Single point electrical connection

- Direct drive VSEC motors

- Whisper Quiet Fans

- State of the art EcoFlex controls

- On-Demand Adiabatic™ Pre-Cooler

- Daily automatic sump clean out

- Manual discrete spray system

- Epoxy coated coil

Special Instructions

Provide CPC air over coil temperature probe.



A DOVER COMPANY

#### Adam's Fairacre Farms Inc.

Adams Faircare Farms Nys Route 211 Middletown, New York USA 10940

Reference: 127258.0

Configuration Name - Configuration

Salesman: Paul Hensley Applications: Darrin Finney

Date: 11-Feb-2022

Description: Overview of Skid Assembly (DSN4FP-7.5-C-4)

Detail: The 4" medium temperature pump station will be located as a stand alone unit and have an integral electrical control panel powered from store or another source. The control panel will include motor starters, relays, controller I/O boards, and additional components as required.

Each pump is installed in parallel and can handle 50% of total flow. The fluid system is designed for a nominal 320 gpm with 35% propylene glycol at 50 feet system head. The system will include air separation device w/automatic air vent, expansion tank, system pressure relief valve, overflow tank w/cover, temperature sensors, pressure transducers installed on the main fluid supply and return lines, vent and drain access fittings, supply and return isolation valves, pump differential pressure switch, and suction guide with integral cleanable strainers.

The skid base assembly frame will be built to accommodate all components as described with integral drain pan(s) and drain connection(s).

Insulation: All fluid pumps, chilled fluid lines and components shall have an insulation thickness of 1".

**Loose Parts Summary** 



A DOVER COMPANY

Adam's Fairacre Farms Inc.

Adams Faircare Farms Nys Route 211 Middletown, New York USA 10940

Reference: 127258

Configuration - Facility Status Display

Salesman: Paul Hensley Applications: Darrin Finney

Date: 11-Feb-2022

Qty	Model	Part Number	Description	
1		98350		-

#### **Loose Parts Summary**

Hillphoenix

Adam's Fairacre Farms Inc.

Adams Faircare Farms Nys Route 211 Middletown, New York USA 10940

Reference: 127258

Configuration - Job Loose Parts Group

Salesman: Paul Hensley Applications: Darrin Finney

Date: 11-Feb-2022

A DOVER COMPANY

Qty	Model	Part Number	Description
1	201-2112	92258	PROBE,DUCT,TEMPERATURE,#201-2112
2	275-0145	98536	CPC,RLDS END OF LINE FILTER,4 PC
2	270-4401	98540	CPC,RLDS 1/4in POLY TUBING,250 FT
1	NDSQ-14	86010	RELAY,BASE,14 PIN,NDSQ-14
1	SKMPL-4C-24VAC	86923	RELAY,24VAC,14 PIN,SKMPL4C24VAC
1	808-2108	99588	RLDS,CO2 LEAK DETECTOR,8 ZONE
4	HXR-1050-HP	95461	HEAT EXCH,SHELL,5/8 IN X3/8 IN,HXR1050HP
1	640-0056	91115	TRANS,1P,56VA,MV-P,24V-S,3 BOARD,CPC
1	810-3760	98706	RLDS GATEWAY BOARD
46	#KIP33Q2	89076	VIBRATION ISOLATOR, FIBERGLS #KIP33Q2
l	GSKT-600YT-1-1/4	102029	[Rack HVAC] GASKET,STNR,1-1/4,600YSWS
2	90-127TK	104626	[Rack HVAC] FILTER,COALESCENT,90-127TK,TCOS5-13A/15A
5	915128-03	96872	[Rack HVAC] OIL,POE,BSE85K,CO2,1GAL, BITZER
1	027H0181	94095	[Rack HVAC] MAGNETIC TOOL FOR MANUAL OPERATIO
1	MH052	05503	[Rack HVAC] SEALANT,THREAD,PERMABOND,MH052
1	31403	01963	[Rack HVAC] TAPE,HD TEFLON THREAD SEAL 1/2 IN X 520
2	023U1394, 023U1392	93764	[Suction Group 43°] CORE,LIQ,48CU IN,HI WTR,48-DM
3	3X6 VIB	80769	[Rack Frame HVAC] VIBRATION ISOLATOR,PAD,CORK #3X6 VI
l	0467273	100219	[Rack HVAC] FITTING,COUP,THREADED,CS,1/4FNPT
l	BVMF-4N-PK-S	107526	[Rack HVAC] VLV,BALL,CO2,1/4IN FPT X MPT, 3000psig
	423003-131280	100532	[Rack HVAC] FITTING,FLARE,7/16-20UNFX1/4NPT
l	04-C-04-SS	102047	[Rack HVAC] FITTING,HEX,CAP,7/16-20UNF
L	GSKT-600YT-1	102030	[Rack HVAC] GASKET,STNR,1,600YSWS

### WARRANTY

Our Reference: 127258

Adams Faircare Farms Nys Route 211

Middletown, New York USA

Description: Advansor Booster System Model: PS\_B\_CU Voltage: 460/60/3 Identifier: Rack HVAC Serial: Refrigerant: R-744

120 CON 120 CO				90.0
Suction Group Id	Position	Model	Serial	Warranty Type
Suction Group 43° Suction Group 43°	1	6DTE-50-2NU-00	TBD	Standard
Suction Group 43°	2	4FTC-30-2NU-00 4FTC-30-2NU-00	TBD	Standard
Suction Group 43°	4	4FTC-30-2NU-00	TBD TBD	Standard Standard
Suction Group 43º	5	4FTC-30-2NU-00	TBD	Standard

Hillphoenix ("Seller") warranties the above listed manufactured product to be free from defects in material and workmanship under normal use and maintenance for a period of fourteen (14) months from the date of original shipment. A new or rebuilt part to replace any defective part will be provided without charge, provided the defective part is returned to the manufacturer. The replacement part assumes the unused portion of the warranty and in no way constitutes an extension thereof.

The compressor manufacturer provides a standard one (1) year warranty on the compressor(s) denoted above and they or their representative should be contacted for repair or replacement during that time period. If applicable, where an extended warranty is indicated for an item above, an additional four (4) year replacement warranty will be in effect. This extended warranty period is in addition to the standard one (1) year warranty.

THE SELLER DISCLAIMS ALL WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE.

The warranty and extended warranty (if applicable), shall not apply to or cover:

- 1. Any component or any part thereof which has been subject to accident, alteration, negligence, misuse or abuse, operation on low or improper voltage, or which has not been operated in accordance with the manufacturer's recommendation, or if the serial number of the unit has been altered, defaced or removed.
- Damages caused by fire, flood, vandalism or other forces of nature.
- 3. Labor costs for replacement of parts, or for freight, shipping expenses, sales tax or upgrading.
- 4. Products damaged by improper installation.
- 5. When installation and startup forms are not properly completed and returned within two (2) weeks after startup.

Purchaser's sole remedy for the Seller's negligence, breach of any warranty, including, if applicable, any implied warranty in tort, and for any other breach of any contractual or tort obligation or duty, is repair or replacement of defective parts by the Seller subject to the terms and conditions stated above, or in the event the Seller fails to repair or replace within a reasonable time, refund of the purchase price by the Seller.

The Seller shall not be liable under any circumstances for any consequential damages, including loss of profits, additional labor cost, loss of refrigerant or food products, or injury to personnel or property caused by defective material or parts or for any delay in its performance hereunder due to causes beyond its control. The foregoing shall constitute the sole and exclusive remedy of any purchaser and sole and exclusive liability of Seller in connection with this product. We neither assume, nor authorize any other person to assume, for us any other liability in connection with or pertaining to our product.

Mail all claims to: Hillphoenix 2016 Gees Mill Road Conyers, GA 30013 USA (770) 285-3100

For technical service contact (800) 518-6630 or fax your request to (770) 285-3070