



Visit our web site: [www.bmil.com](http://www.bmil.com)

## PRODUCT DATA MANUAL

FRIO  VERDE

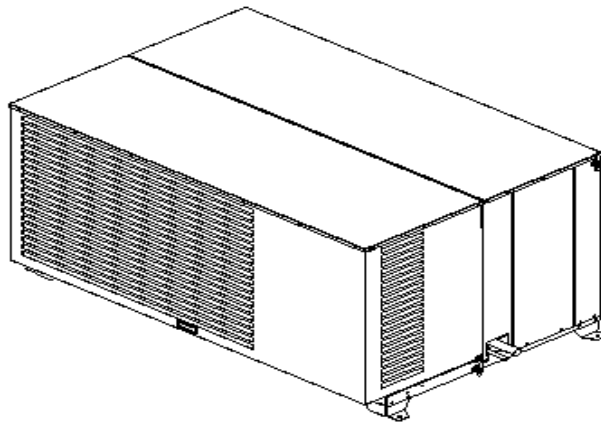
**Medium and Low Temperature**

**50HZ**

### NOMENCLATURE

**OCZ-XXX-1S41-3-FV-MT**

**OCZ-XXX-1T41-3-FV-LT**



### TABLE OF CONTENTS

	<b>Page</b>
Capacity Data .....	2-6
Dimensional Data .....	7
Specifications .....	8
Electrical Data .....	9
Typical Piping diagram .....	10-11
Unit Spacing Diagram .....	12

**FRIO VERDE****50HZ****MEDIUM TEMPERATURE CAPACITY BTU/H****R404A/R410A**

FRIO VERDE MODEL	SST (F °)	SST (C °)	AMBIENT TEMPERATURE (Deg F)			
			85	90	95	100
<b>OCZ-020-1S41-3-FV-MT</b> Main Compressor ZB19KCE Subcool Compressor RGA5510BXD	35	1.7	33827	33133	32411	31660
	30	-1.1	31029	30403	29750	29055
	25	-3.9	28396	27834	27245	26615
	20	-6.7	25936	25432	24891	24332
	15	-9.4	23640	23189	22703	22190
	10	-12.2	21499	21089	20653	20191
	5	-15.0		19138	18748	18325
<b>OCZ-025-1S41-3-FV-MT</b> Main Compressor ZB21KCE Subcool Compressor RGA5510BXD	35	1.7	39776	38933	38040	37114
	30	-1.1	36507	35733	34927	34073
	25	-3.9	33428	32734	31995	31237
	20	-6.7	30549	29916	29265	28568
	15	-9.4	27850	27285	26700	26073
	10	-12.2	25333	24839	24296	23731
	5	-15.0	22988	22539	22062	21545
<b>OCZ-030-1S41-3-FV-MT</b> Main Compressor ZB26KCE Subcool Compressor RGA5510BXD	35	1.7	45673	44644	43575	42467
	30	-1.1	41924	40998	40034	39013
	25	-3.9	38393	37562	36694	35771
	20	-6.7	35104	34346	33567	32734
	15	-9.4	32017	31340	30628	29879
	10	-12.2	29124	28533	27896	27222
	5	-15.0	26437	25901	25322	24727
<b>OCZ-040-1S41-3-FV-MT</b> Main Compressor ZB30KCE Subcool Compressor RGA5512BXD	35	1.7	53446	52211	50933	49609
	30	-1.1	49077	47946	46793	45595
	25	-3.9	44962	43948	42911	41809
	20	-6.7	41113	40206	39257	38282
	15	-9.4	37502	36693	35858	34964
	10	-12.2	34134	33413	32652	31849
	5	-15.0	30992	30350	29658	28948
<b>OCZ-050-1S41-3-FV-MT</b> Main Compressor ZB38KCE Subcool Compressor ZP20K5E	35	1.7	67633	66155	64623	63034
	30	-1.1	62095	60765	59353	57912
	25	-3.9	56876	55680	54431	53102
	20	-6.7	51989	50918	49772	48592
	15	-9.4	47421	46463	45434	44351
	10	-12.2	43156	42285	41363	40387
	5	-15.0	36161	38386	37547	36670
<b>OCZ-060-1S41-3-FV-MT</b> Main Compressor ZB45KCE Subcool Compressor ZP25K5E	35	1.7	79778	78089	76368	74509
	30	-1.1	73218	71699	70083	68430
	25	-3.9	67044	65681	64225	62703
	20	-6.7	61272	60027	58719	57345
	15	-9.4	55860	54748	53575	52315
	10	-12.2	50814	49804	48733	47618
	5	-15.0	46093	45193	44234	43197

**FRIO VERDE****50HZ**

**MEDIUM TEMPERATURE CAPACITY BTU/H  
R404A/R410A**

FRIO VERDE MODEL	SST (F °)	SST (C °)	AMBIENT TEMPERATURE (Deg F)			
			85	90	95	100
<b>OCZ-070-1S41-3-FV-MT</b> Main Compressor <b>ZB50KCE</b> Subcool Compressor <b>ZP25K5E</b>	35	1.7	92943	91123	89185	87149
	30	-1.1	85296	83638	81887	80021
	25	-3.9	78115	76615	75004	73258
	20	-6.7	71344	69925	68405	66759
	15	-9.4	64898	63572	62121	60463
	10	-12.2	58794	57482	55018	54349
<b>OCZ-075-1S41-3-FV-MT</b> Main Compressor <b>ZB58KCE</b> Subcool Compressor <b>ZP25K5E</b>	35	1.7	101931	99872	97676	95417
	30	-1.1	93604	91734	89808	87718
	25	-3.9	85774	84102	82359	80446
	20	-6.7	78399	76887	75253	73508
	15	-9.4	71436	70043	68515	66860
	10	-12.2	64862	63548	62087	60479
<b>OCZ-080-1S41-3-FV-MT</b> Main Compressor <b>ZB66KCE</b> Subcool Compressor <b>ZP31K5E</b>	35	1.7	115529	112947	110315	107625
	30	-1.1	106112	103828	101443	99042
	25	-3.9	97265	95207	93131	90944
	20	-6.7	88969	87189	85269	83311
	15	-9.4	81228	79621	77943	76150
	10	-12.2	74000	72543	71038	69416
<b>OCZ-090-1S41-3-FV-MT</b> Main Compressor <b>ZB76KCE</b> Subcool Compressor <b>ZP42K5E</b>	35	1.7	139530	136819	133941	130938
	30	-1.1	128199	125742	123176	120482
	25	-3.9	117524	115345	113052	110579
	20	-6.7	107434	105495	103439	101204
	15	-9.4	97992	96219	94363	92327
	10	-12.2	89086	87486	85758	83919
<b>OCZ-120-1S41-3-FV-MT</b> Main Compressor <b>ZB92KCE</b> Subcool Compressor <b>ZP42K5E</b>	35	1.7	162127	158605	154960	151169
	30	-1.1	149075	145923	142721	139310
	25	-3.9	136817	134124	131261	128263
	20	-6.7	125425	123029	120476	117847
	15	-9.4	114733	112604	110423	108073
	10	-12.2	104741	102888	100942	98837
	5	-15.0	95347	93727	91982	90164

**FRIO VERDE****50HZ****LOW TEMPERATURE CAPACITY BTU/H  
R404A/R410A**

FRIO VERDE MODEL	SST (F °)	SST (C °)	AMBIENT TEMPERATURE (Deg F)			
			85	90	95	100
<b>OCZ-020-1T41-3-FV-LT</b>  Main Compressor ZF08K4E Subcool Compressor RGA5453BXD	0	-17.8	17203	16890	16552	16192
	-5	-20.6	15631	15363	15065	14754
	-10	-23.3	14169	13935	13685	13412
	-15	-26.1	12811	12613	12390	12160
	-20	-28.9	11551	11382	11192	10986
	-25	-31.7		10231	10071	9894
	-30	-34.4				8852
	-35	-37.2			7978	7787
	-40	-40				6802
<b>OCZ-025-1T41-3-FV-LT</b>  Main Compressor ZF09K4E Subcool Compressor RGA5453BXD	0	-17.8	18804	18439	18060	17655
	-5	-20.6	17086	16776	16445	16098
	-10	-23.3	15490	15223	14943	14647
	-15	-26.1	14008	13786	13545	13291
	-20	-28.9	12627	12443	12239	12022
	-25	-31.7	11347	11193	11025	10845
	-30	-34.4		10025	9888	9740
	-35	-37.2			8823	8654
	-40	-40				7557
<b>OCZ-030-1T41-3-FV-LT</b>  Main Compressor ZF11K4E Subcool Compressor RGA5453BXD	0	-17.8	22829	22364	21875	21357
	-5	-20.6	20785	20388	19957	19499
	-10	-23.3	18888	18544	18176	17773
	-15	-26.1	17128	16832	16512	16166
	-20	-28.9	15487	15239	14969	14673
	-25	-31.7	13964	13758	13525	13268
	-30	-34.4	12541	12364	12168	11943
	-35	-37.2	11202	11054	10883	10693
	-40	-40		9811	9666	9495
<b>OCZ-035-1T41-3-FV-LT</b>  Main Compressor ZF13K4E Subcool Compressor RGA5453BXD	0	-17.8	26319	25703	25067	24399
	-5	-20.6	23901	23360	22791	22194
	-10	-23.3	21636	21165	20672	20147
	-15	-26.1	19526	19115	18695	18250
	-20	-28.9	17556	17212	16857	16482
	-25	-31.7	15728	15443	15153	14849
	-30	-34.4	14023	13803	13578	13352
	-35	-37.2	12454	12292	12127	11968
	-40	-40	10997	10894	10796	10706

**FRIO VERDE****50HZ****LOW TEMPERATURE CAPACITY BTU/H  
R404A/R410A**

FRIO VERDE MODEL	SST (F °)	SST (C °)	AMBIENT TEMPERATURE (Deg F)			
			85	90	95	100
<b>OCZ-040-1T41-3-FV-LT</b>  Main Compressor ZF15K4E Subcool Compressor RGA5471BXD	0	-17.8	32692	31920	31093	30241
	-5	-20.6	29685	28999	28280	27528
	-10	-23.3	26870	26278	25661	25007
	-15	-26.1	24257	23754	23224	22676
	-20	-28.9	21819	21392	20954	20499
	-25	-31.7	19548	19201	18845	18479
	-30	-34.4	17420	17142	16863	16592
	-35	-37.2		15215	15012	14820
	-40	-40		13394	13263	13154
<b>OCZ-050-1T41-3-FV-LT</b>  Main Compressor ZF18K4E Subcool Compressor RGA5510BXD	0	-17.8	39590	38801	37976	37111
	-5	-20.6	35981	35308	34601	33840
	-10	-23.3	32643	32075	31462	30811
	-15	-26.1	29555	29069	28552	27987
	-20	-28.9	26691	26289	25836	25370
	-25	-31.7	24028	23688	23311	22911
	-30	-34.4	21544	21258	20946	20602
	-35	-37.2		18968	18707	18416
	-40	-40			16520	16152
<b>OCZ-070-1T41-3-FV-LT</b>  Main Compressor ZF24K4E Subcool Compressor RGA5510BXD	0	-17.8	47973	47012	46017	44936
	-5	-20.6	43681	42865	41994	41038
	-10	-23.3	39669	38980	38236	37410
	-15	-26.1	35945	35365	34715	33999
	-20	-28.9	32471	31957	31399	30776
	-25	-31.7	29190	28763	28279	27717
	-30	-34.4	26100	25728	25290	24792
	-35	-37.2	23158	22814	22420	21947
	-40	-40		19999	19618	19173
<b>OCZ-090-1T41-3-FV-LT</b>  Main Compressor ZF33K4E Subcool Compressor RGA5512BXD	0	-17.8	64787	63309	61764	60149
	-5	-20.6	58956	57688	56331	54908
	-10	-23.3	53503	52427	51247	50029
	-15	-26.1	48241	47479	46506	45455
	-20	-28.9	43624	42847	42004	41110
	-25	-31.7	39082	38436	37733	36984
	-30	-34.4	34736	34198	33623	33008
	-35	-37.2	30499	30072	29593	29101
	-40	-40		25965	25597	25191

**FRIO VERDE****50HZ**

**LOW TEMPERATURE CAPACITY BTU/H  
R404A/R410A**

FRIO VERDE MODEL	SST (F °)	SST (C °)	AMBIENT TEMPERATURE (Deg F)			
			85	90	95	100
<b>OCZ-100-1T41-3-FV-LT</b>  <b>Main Compressor</b> <b>ZF40K4E</b> <b>Subcool Compressor</b> <b>ZP20K5E</b>	0	-17.8	81730	79962	78075	76129
	-5	-20.6	74366	72847	71216	69494
	-10	-23.3	67528	66204	64803	63285
	-15	-26.1	61139	60016	58793	57486
	-20	-28.9	55157	54187	53145	52023
	-25	-31.7	49556	48737	47851	46867
	-30	-34.4	44265	43571	42795	41961
	-35	-37.2	39261	38664	37992	37247
	-40	-40		33940	33342	32686
<b>OCZ-150-1T41-3-FV-LT</b>  <b>Main Compressor</b> <b>ZF48K4E</b> <b>Subcool Compressor</b> <b>ZP20K5E</b>	0	-17.8	97376	95218	92915	90502
	-5	-20.6	88625	86721	84723	82581
	-10	-23.3	80408	78772	77011	75188
	-15	-26.1	72766	71365	69850	68243
	-20	-28.9	65650	64426	63125	61710
	-25	-31.7	58987	57940	56823	55600
	-30	-34.4	52761	51860	50873	49811
	-35	-37.2	46921	46135	45271	44337
	-40	-40	41419	40716	39943	39120

# FRIO VERDE

## 50HZ

### DIMENSIONAL DATA (OUTDOOR DIMENSIONS)

FRIO VERDE MODEL	WIDTH		DEPTH		HEIGHT		SHIPPING WEIGHT	
	Inches	mm	Inches	mm	Inches	mm	Lbs	Kgs
OCZ-020-1S41-3-FV-MT	43 1/4	1099	41 1/8	1045	40 5/8	1031.875	382	173
OCZ-025-1S41-3-FV-MT	43 1/4	1099	41 1/8	1045	40 5/8	1031.875	405	183
OCZ-030-1S41-3-FV-MT	43 1/4	1099	41 1/8	1045	40 5/8	1031.875	429	194
OCZ-040-1S41-3-FV-MT	46 1/4	1175	47 1/8	1197	40 1/2	1028.7	484	219
OCZ-050-1S41-3-FV-MT	66 1/4	1683	47 1/8	1197	40 1/2	1028.7	553	251
OCZ-060-1S41-3-FV-MT	66 1/4	1683	47 1/8	1197	40 1/2	1028.7	576	261
OCZ-070-1S41-3-FV-MT	66 1/4	1683	47 1/8	1197	40 1/2	1028.7	747	338
OCZ-075-1S41-3-FV-MT	87 1/4	2216	48 5/8	1235	45 1/2	1156	875	396
OCZ-080-1S41-3-FV-MT	87 1/4	2216	48 5/8	1235	45 1/2	1156	880	399
OCZ-090-1S41-3-FV-MT	87 1/4	2216	48 5/8	1235	45 1/2	1156	895	405
OCZ-120-1S41-3-FV-MT	87 1/4	2216	48 5/8	1235	45 1/2	1156	1117	506
OCZ-020-1T41-3-FV-LT	43 1/4	1099	41 1/8	1045	40 5/8	1032	382	173
OCZ-025-1T41-3-FV-LT	43 1/4	1099	41 1/8	1045	40 5/8	1032	405	183
OCZ-030-1T41-3-FV-LT	43 1/4	1099	41 1/8	1045	40 5/8	1032	429	194
OCZ-035-1T41-3-FV-LT	43 1/4	1099	41 1/8	1045	40 5/8	1032	462	209
OCZ-040-1T41-3-FV-LT	43 1/4	1099	41 1/8	1045	40 5/8	1032	484	219
OCZ-050-1T41-3-FV-LT	46 1/4	1175	47 1/8	1197	40 1/2	1029	553	251
OCZ-070-1T41-3-FV-LT	66 1/4	1683	47 1/8	1197	40 1/2	1029	747	338
OCZ-090-1T41-3-FV-LT	66 1/4	1683	47 1/8	1197	40 1/2	1029	895	405
OCZ-100-1T41-3-FV-LT	87 1/4	2216	48 5/8	1235	45 1/2	1156	985	446
OCZ-150-1T41-3-FV-LT	87 1/4	2216	48 5/8	1235	45 1/2	1156	1117	506

# FRIO VERDE

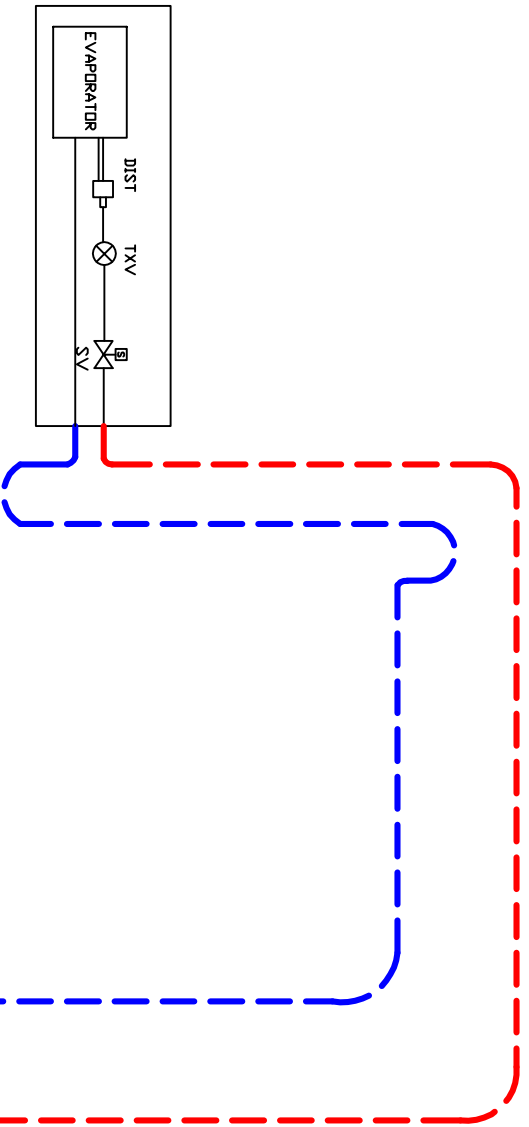
## 50HZ

### SPECIFICATIONS

FRIO VERDE MODEL	UNIT CONNECTIONS				LINE SIZING (100 FT)				PIPE INSULATION		RECEIVER REFRIGERANT			
	SUCTION (OD)		LIQUID (OD)		SUCTION (OD)		LIQUID (OD)		THICKNESS		STANDARD		OVERSIZED	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	SUCTION	LIQUID	Lbs	Kgs	Lbs.	Kgs.
OCZ-020-1S41-3-FV-MT	5/8	16	3/8	10	7/8	22	1/2	13	1	1	14	6	19	9
OCZ-025-1S41-3-FV-MT	7/8	22	3/8	10	1 1/8	29	1/2	13	1	1	14	6	19	9
OCZ-030-1S41-3-FV-MT	7/8	22	1/2	13	1 1/8	29	1/2	13	1	1	14	6	19	9
OCZ-040-1S41-3-FV-MT	7/8	22	1/2	13	1 1/8	29	5/8	16	1	1	24	11	51	23
OCZ-050-1S41-3-FV-MT	7/8	22	1/2	13	1 1/8	29	5/8	16	1	1	24	11	51	23
OCZ-060-1S41-3-FV-MT	1 1/8	29	5/8	16	1 1/8	29	5/8	16	1	1	24	11	51	23
OCZ-070-1S41-3-FV-MT	1 1/8	29	5/8	16	1 3/8	35	5/8	16	1	1	24	11	51	23
OCZ-075-1S41-3-FV-MT	1 1/8	29	5/8	16	1 3/8	35	7/8	22	1	1	51	23	68	31
OCZ-080-1S41-3-FV-MT	1 3/8	35	5/8	16	1 3/8	35	7/8	22	1	1	51	23	68	31
OCZ-090-1S41-3-FV-MT	1 3/8	35	5/8	16	1 3/8	35	7/8	22	1	1	51	23	68	31
OCZ-120-1S41-3-FV-MT	1 5/8	41	7/8	22	1 5/8	41	7/8	22	1	1	51	23	68	31
OCZ-020-1T41-3-FV-LT	5/8	16	3/8	10	7/8	22	1/2	13	1	1	14	6	19	9
OCZ-025-1T41-3-FV-LT	7/8	22	3/8	10	1 1/8	29	1/2	13	1	1	14	6	19	9
OCZ-030-1T41-3-FV-LT	7/8	22	1/2	13	1 1/8	29	1/2	13	1	1	14	6	19	9
OCZ-035-1T41-3-FV-LT	7/8	22	1/2	13	1 1/8	29	1/2	13	1	1	24	11	51	23
OCZ-040-1T41-3-FV-LT	7/8	22	1/2	13	1 1/8	29	1/2	13	1	1	24	11	51	23
OCZ-050-1T41-3-FV-LT	7/8	22	1/2	13	1 3/8	35	1/2	13	1	1	24	11	51	23
OCZ-070-1T41-3-FV-LT	1 3/8	35	5/8	16	1 3/8	35	5/8	16	1	1	24	11	51	23
OCZ-090-1T41-3-FV-LT	1 3/8	35	5/8	16	1 5/8	41	5/8	16	1	1	51	23	68	31
OCZ-100-1T41-3-FV-LT	1 5/8	41	7/8	22	1 5/8	41	7/8	22	1	1	51	23	68	31
OCZ-150-1T41-3-FV-LT	1 5/8	41	7/8	22	2 1/8	54	7/8	22	1	1	68	31	125	57

**FRIO VERDE****50HZ****ELECTRICAL DATA****OUTDOOR AIR COOLED CONDENSER CONDENSING UNIT R-404A COPELAND SCROLL COMPRESSOR**

FRIO VERDE MODEL	MAIN COMPRESSOR	SUBCOOL COMPRESSOR	POWER SUPPLY	RLA	LRA	MCA	MOPD
				208/3/60	208/3/60	208/3/60	208/3/60
OCZ-020-1S41-3-FV-MT	ZB19KCE	RGA5510	200-220/3/50	10.0	63.0	21.0	31.0
OCZ-025-1S41-3-FV-MT	ZB21KCE	RGA5510	200-220/3/50	12.1	77.0	23.6	35.7
OCZ-030-1S41-3-FV-MT	ZB26KCE	RGA5510	200-220/3/50	13.2	88.0	25.0	38.2
OCZ-040-1S41-3-FV-MT	ZB30KCE	RGA5512	200-220/3/50	15.7	115.0	28.1	43.8
OCZ-050-1S41-3-FV-MT	ZB38KCE	ZP20K5E	200-220/3/50	22.1	128.0	45.5	67.6
OCZ-060-1S41-3-FV-MT	ZB45KCE	ZP25K5E	200-220/3/50	22.5	156.0	40.9	63.4
OCZ-070-1S41-3-FV-MT	ZB50KCE	ZP25K5E	200-220/3/50	28.6	196.0	51.5	80.1
OCZ-075-1S41-3-FV-MT	ZB58KCE	ZP25K5E	200-220/3/50	30.7	195.0	54.1	84.8
OCZ-080-1S41-3-FV-MT	ZB66KCE	ZP31K5E	200-220/3/50	30.0	225.0	54.9	84.9
OCZ-090-1S41-3-FV-MT	ZB76KCE	ZP42K5E	200-220/3/50	41.4	239.0	75.8	117.2
OCZ-120-1S41-3-FV-MT	ZB92KCE	ZP42K5E	200-220/3/50	52.9	350.0	90.1	143.0
OCZ-020-1T41-3-FV-LT	ZF08K4E	RGA5453	200-220/3/50	9.6	63.0	17.4	27.0
OCZ-025-1T41-3-FV-LT	ZF09K4E	RGA5453	200-220/3/50	9.6	77.0	17.4	27.0
OCZ-030-1T41-3-FV-LT	ZF11K4E	RGA5453	200-220/3/50	12.1	88.0	20.5	32.6
OCZ-035-1T41-3-FV-LT	ZF13K4E	RGA5453	200-220/3/50	13.2	99.0	21.9	35.1
OCZ-040-1T41-3-FV-LT	ZF15K4E	RGA5471	200-220/3/50	18.9	123.0	29.9	48.8
OCZ-050-1T41-3-FV-LT	ZF18K4E	RGA5510	200-220/3/50	21.8	156.0	35.8	57.6
OCZ-070-1T41-3-FV-LT	ZF24K4E	RGA5510	200-220/3/50	26.1	189.0	44.0	70.1
OCZ-090-1T41-3-FV-LT	ZF33K4E	RGA5512	200-220/3/50	35.0	278.0	55.2	90.2
OCZ-100-1T41-3-FV-LT	ZF40K4E	ZP20K5E	200-220/3/50	45.0	350.0	80.0	125.0
OCZ-150-1T41-3-FV-LT	ZF48K4E	ZP20K5E	200-220/3/50	55.0	425.0	92.5	147.5

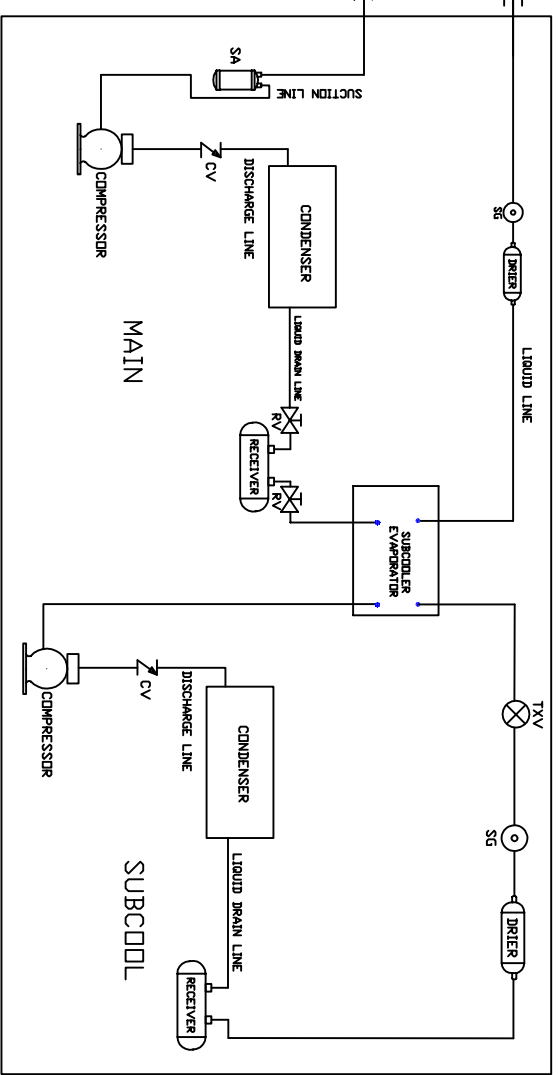


## NOTES

- All 90° Long Radius
- ACR Tubing
- All welding 15% Silver Solder

## DRAWING LEGEND

- DIST: Distributor  
 TXV: Thermostatic expansion valve  
 SG: Sight Glass  
 SA: Suction Accumulator  
 CV: Check Valve  
 RV: Rotolock Valve

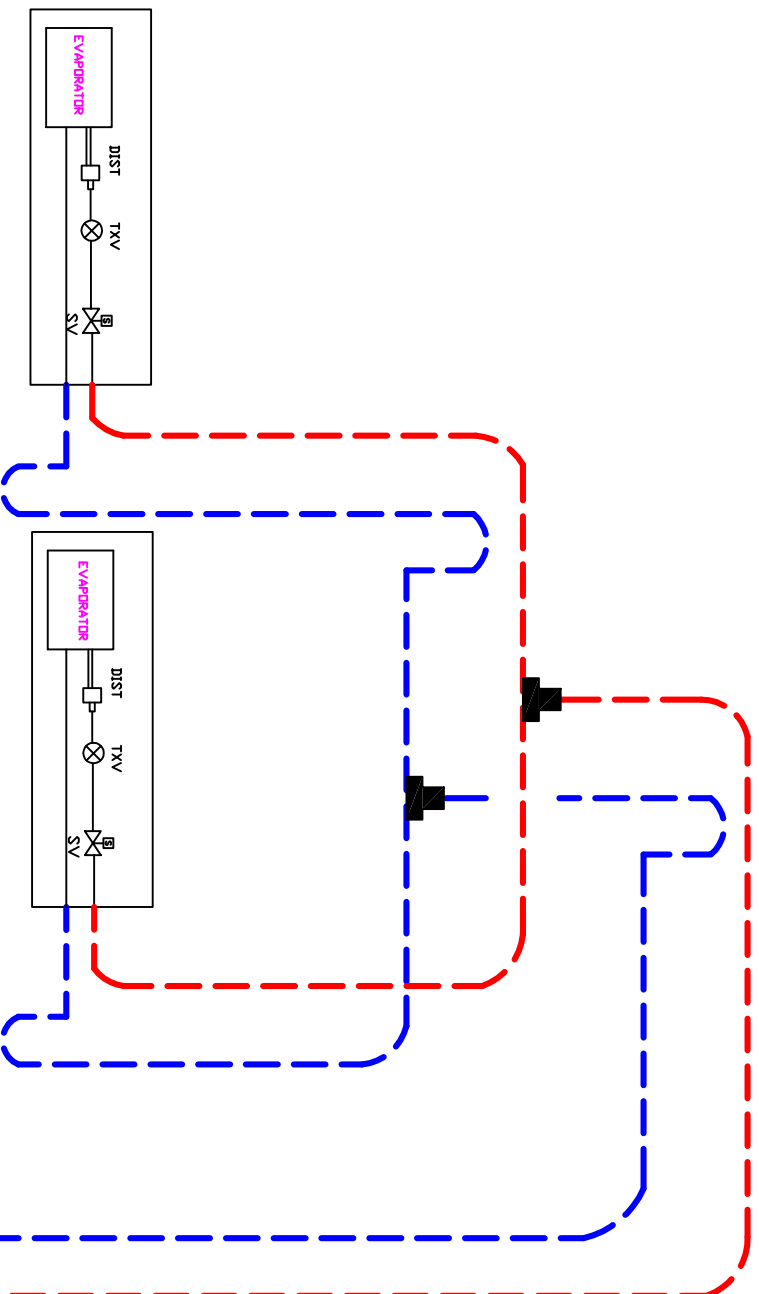


## FRIDO VERDE CONDENSING UNIT

1' WALL THICKNESS INSULATION REQUIRED FOR SUCTION LINE  
 1' WALL THICKNESS INSULATION REQUIRED FOR LIQUID LINE

---	FIELD INSTALLATION
---	FACTORY INSTALLATION
- - -	LIQUID LINE
- - -	SUCTION LINE

# PIPING DIAGRAM ONE EVAPORATOR



## NOTES

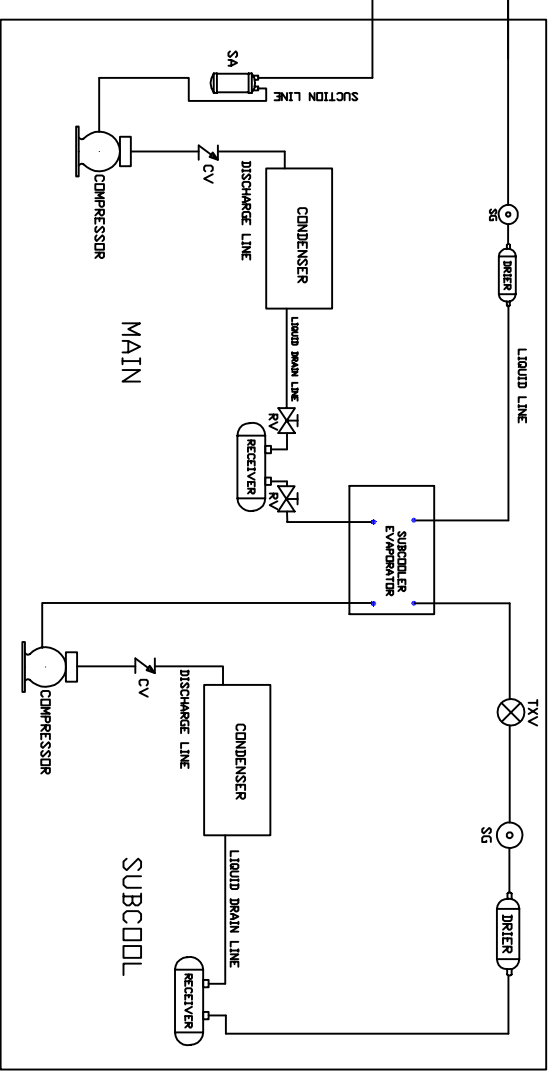
- All 90° Long Radius
- ACR Tubing
- All welding 15% Silver Solder

## DRAWING LEGEND

- DIST: Distributor  
 TXV: Thermostatic expansion valve  
 SG: Sight Glass  
 SA: Suction Accumulator  
 CV: Check Valve  
 RV: Rotolock Valve

---	FIELD INSTALLATION
—	FACTORY INSTALLATION
- - -	LIQUID LINE
- - -	SUCTION LINE

## FRID VERDE CONDENSING UNIT

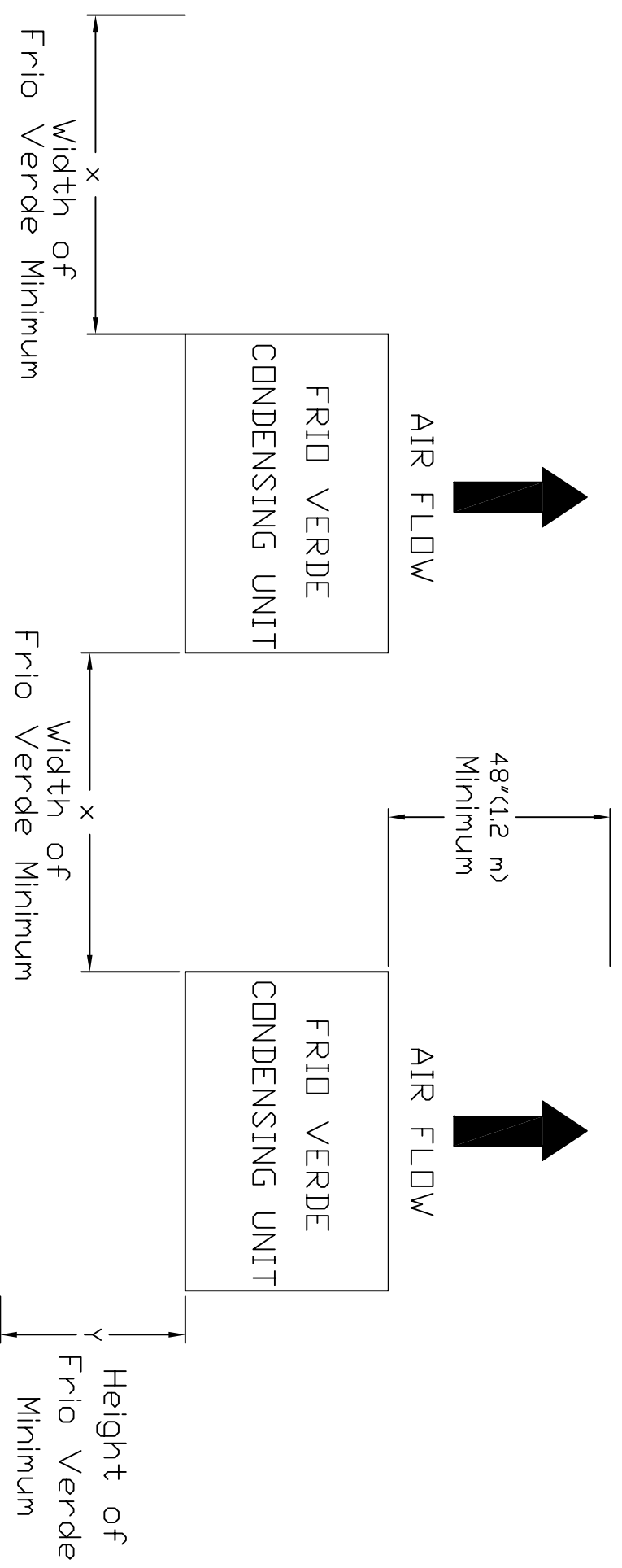


1' WALL THICKNESS INSULATION REQUIRED FOR SUCTION LINE  
 1' WALL THICKNESS INSULATION REQUIRED FOR LIQUID LINE

# PIPING DIAGRAM TWO EVAPORATORS

# FRIO VERDE

## MINIMUM CLEARANCE



### NOTES:

- The Frio Verde Condensing Unit should be positioned to allow adequate space for performing service work using the guidelines shown above.
- No roof above this equipment.