

F E S  
ENGINEERING DATA SHEET  
SINGLE ROTARY SCREW COMPRESSOR PACKAGE  
MICROPROCESSOR II

575

Signed by Quality Control -- SAM, 4/16/87

Job No. 87-0078-0301

Date: 3/11/87

Job Name: TROPICANA PRODUCTS, INC.

Rev.: \_\_\_\_\_

&

Project Engineer: RW:tl

Location: BRADENTON, FL

Draftsman: \_\_\_\_\_

Operating Conditions

Refrigerant: R- 717 Pkg. Model 575 T.R. 489.5 BHP 657.3

TEMP.                      PRESS.

Sat. Suction            10 ° F.            23.8 psig

Sat. Econ Suction      \_\_\_\_\_ ° .

Sat. Discharge         95 ° F.            181.1 psig

ITEM	COMPONENT	FES PART NO.	QTY.	DESCRIPTION/REMARKS
1	Compressor	Model 575	1	FES P.O. <u>A32969</u> SERIAL NO. <u>2512535</u> Vi <u>3.6</u>
2	Compressor Motor	Reliance	1	H.P. <u>700</u> FRAME <u>E5010S</u> RPM <u>3600</u> ODP [ ] VOLT: <u>4160</u> PHASE <u>3</u> HERTZ <u>60</u> TEFC [ ] FLA <u>153</u> LRA <u>785</u> S.F. <u>1.15</u> WPI [X] SERIAL NO. _____ FURNISHED BY: FES [X] CUSTOMER [ ] MOUNTED BY: FES [ ] CUSTOMER [X]
3	Starter		1	TYPE: <u>ATL</u> SIZE: _____ DWG. NO. <u>035-00551C</u> OVERLOADS: TYPE _____ SIZE _____ FURNISHED BY: FES [ ] CUSTOMER [X]
			1	CURRENT TRANSFORMER: <u>200:5</u>

ITEM	COMPONENT	FES PART NO.	QTY.	DESCRIPTION/REMARKS
4	Oil Separator N/B 2927 R-717 [X] R-22 [ ]	031-00172D	1	DIA. <u>30"</u> WSL <u>132"</u> DWP <u>250</u> SPEC. INFORMATION: _____ DIA. _____ WSL _____ DWP _____ SPEC. INFORMATION: _____
5	Compressor Coupling Compressor Hub 351 Motor Hub 351 Sleeve 351	300-00005C-014 300-00005C-038 300-00005C-068	1 1 1	MOTOR SHAFT DIA. = <u>2-7/8"</u>
6	Oil Pump Motor H.S. [X] L.S. [ ]	210-000030	1	H.P. <u>7-1/2</u> FRAME <u>254T</u> RPM <u>1200</u> , ODP <u>460/3/60</u> , FLA <u>10.6</u> LRA <u>64</u> S.F. <u>1.15</u> H.P. _____ FRAME _____ RPM <u>1200</u> , ODP <u>460/3/60</u> , FLA _____ LRA _____ S.F. _____
<u>TEMPERATURE PROBES</u>				
7	Separator Oil, 1T	715-00006A	1	5" Well
8	Inlet Oil, 2T	715-00006A	1	4" Well
9	Discharge, 3T	715-00006A	1	5" Well
10	Suction, 4T	715-00006A	1	7" Well
11	Process, 5T (Option)	715-00006A	0	Installed by: FES [ ] Customer [ ]
<u>PRESSURE TRANSDUCERS</u>				
12	Suction 1TD	745-000180	1	0 - 100 PSIA
13	Discharge, 2TD	745-000190	1	0 - 500 PSI
14	Inlet Oil, 3TD	745-000190	1	0 - 500 PSI
15	Filter Outlet Oil, 4TD	745-000190	1	0 - 500 PSI
16	Filter Inlet Oil, 5TD	745-000190	1	0 - 500 PSI

ITEM	COMPONENT	FES PART NO.	QTY.	ITEM	COMPONENT	FES PART NO.	QTY.
17	Coalescer R-717 [X] R-22 [ ]	030-00065B	8	31	SOC TX Valve H.S. [X] L.S. [ ]	370-000460	1
18	Oil Pump R-717 [X] #2404259 R-22 [ ] H.S. [X] L.S. [ ]	290-000040-000	1	32*	SOC Sol. Valve H.S. [X] 7SOL L.S. [ ]	370-000470	1
19	Oil Pump Coupling Pump Hub Motor Hub H.S. [X] Motor Hub L.S. [ ] Sleeve	300-000010 300-000030 300-000040	1 1 1	33	SOC Strainer H.S. [X] L.S. [ ]	370-000490	1
20	Oil Regulator	370-001700-100	1	34	SOC Press. Red. Valve	370-000400	1
21	Suction Check Valve 8"	370-000060	1	35	Hot Gas Solenoid 11SOL L.S. [ ]		
22	Suction Strainer Screen 8"	030-00161B-003	1	*Minimum recommended field SOC line should be at least: (a) Equivalent to the SOC line inlet valve on single units, (b) One size larger than the larger valve on dual units.			
23	Discharge Check R-717 [X] R-22 [ ] 5"	370-000110	1				
24	Load/Unload Solenoid 2SOL/3SOL	370-003480-005	1				
25	Relief 250# R-717 [X] Valve 300# R-22 [ ]	370-001160	2				
26	Oil Heater Nema 1 [X] Nema 4 [ ] 110 Volt [X] 220 Volt [ ]	715-000050-000	2				
27	Oil Filter Cartridge	030-00097A	3				
28	Oil Strainer Screen	030-00051B	1				
29	Float Valve w/strainer	030-002330 370-000280	1 1				
30	Unloader Meter Valve	370-000180	2				

ITEM	COMPONENT	STANDARD OPTIONS		QTY.	DESCRIPTION/REMARKS
		FES	PART NO.		
36	Package Suction Valve	R-717	[X] 361-00038M-000	1	Type <u>W-L Globe,</u> S.W., H.W. Size <u>8"</u> Mounted [ ] Ship-Loose [ ]
37	Package Disch. Valve	R-717	[X] 361-00036M-000	1	Type <u>W-L Globe,</u> S.W., H.W. Size <u>5"</u> Mounted [ ] Ship-Loose [ ]
<u>OIL COOLER APPLICATION</u>					
38	Oil Cooler				SIZE _____ Tube Material _____ H.S. [ ] L.S. [ ]
39	Water Regulating Valve				SIZE _____ "x _____ Way H.S. [ ] L.S. [ ]
40	Oil Regulating Temperature Switch ØTS		[ ]		ADJUSTABLE SET @ _____ ° F.
41	Thermostatic Oil Temperature Regulating Valve (Option)				Cartridge set at _____ ° F. (Fixed)
<u>SUBCOOLER APPLICATION</u>					
42	Liquid Ref. Subcooler		[ ]		Size _____
43	TX-Valve		[ ]		
44	Sol. Valve 9SOL		[ ]		
45	Liquid Strainer		[ ]		
46	Back Pressure Reg.		[ ]		
47	Economizer Suction Check Valve		[ ]		
48	Economizer Suction Strainer		[ ]		
49	Relief Valve	250# R-717	[ ]		With liquid relief tag no. 599-78348S for field piping requirements.
		300# R-22	[ ]		

ITEM	COMPONENT	FES PART NO.	QTY.	DESCRIPTION/REMARKS
50	Package Electrical		1	Standard Micro. [X] Other <u>UL #H557046</u>
51	Package Paint		1	Standard [X] Other _____
52	Oil Charge	560-000290-055	140	Gallons      Type <u>Synthetic</u>
				Grade <u>FES #1</u>
				Brand <u>CPI</u>
				Supplied By: FES      [X] Customer      [ ]

MECHANICAL DRAWINGS:

<u>031-00036D-002</u>	General Arrangement
<u>030-00009C</u>	Piping Schematic

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MICROPROCESSOR II CONTROL PANEL

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Job No. 87-0078-0301

Date: 3/11/87

Rev.: \_\_\_\_\_

Project Engineer: RW:tl

Refrigerant: R- 717 Pkg. Model 575 Type Enclosure: Nema 4

Environment: Non-hazardous   
 Hazardous  Class \_\_\_\_\_ Group \_\_\_\_\_ Division \_\_\_\_\_

Type Oil Cooling: Standard "SOC"   
 Water cooled w/2-way water regulating valve   
 Water cooled w/3-way water regulating valve   
 Water cooled w/thermostatic valve   
 Other: \_\_\_\_\_

Type Program: HPCO Limit: 225 psig  Units: American   
 S.I.  Language: English   
 Metric  \_\_\_\_\_

Capacity Control: Pressure  Temperature  Oil Pump Type: Full Flow   
 Pre-Lube

A.C. Line Frequency: 60 Hz. , 50 Hz.

ITEM	COMPONENT	FES PART NO.	QTY.	DESCRIPTION/REMARKS
1	Microprocessor II Electrical Panel		1	
2	Program	725-00300A-001		

MICROPROCESSOR II CONTROL PANEL

OPTIONS (Last three digits of I.D. number cross-correlates to line number on Option Diagram.)

<u>ITEM</u>	<u>COMPONENT</u>	<u>FES I.D. NO.</u>	<u>QTY.</u>	<u>DESCRIPTION/REMARKS</u>
3	Aux. Safety #1	036-00571D-001	1	With legend [ ] Description _____
4	Aux. Safety #2	036-00571D-002	1	With legend [ ] Description _____
5	Aux. Safety #4	036-00571D-003	1	With legend [ ] Description _____
6	Aux. Safety #5	036-00571D-004	0	With legend [ ] Description _____
7	Aux. Pre-Alarm #1	036-00571D-005	1	With legend [ ] Description _____
8	Aux. Pre-Alarm #2	036-00571D-006	1	With legend [ ] Description _____
9	Aux. Pre-Alarm #3	036-00571D-007	0	With legend [ ] Description _____
10	Aux. Pre-Alarm #4	036-00571D-008	0	With legend [ ] Description _____
11	Aux. Pre-Alarm #5	036-00571D-009	0	With legend [ ] Description _____
12	Aux. Pre-Alarm #6	036-00571D-010	0	With legend [ ] Description _____
13	Pre-Alarm Status	036-00571D-011	0	
14	Remote Control & Sequence	036-00571D-012	0	

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OPTIONS (Last three digits of I.D. number cross-correlates to line number on Option Diagram.)

ITEM	COMPONENT	FES I.D. NO.	QTY.	DESCRIPTION/REMARKS
15	Slide Valve Position Setpoint #3	036-00571D-013	0	
16	Remote Pushbutton	036-00571D-014	0	
17	Keypad Lockout	036-00571D-015	0	All Keys [ ] Numeric Keys [ ]
18	Process Temperature	036-00571D-016	0	
19	Capacity Control Press/Temp Select	036-00571D-017	0	
20	Capacity Control Point #2	036-00571D-018	0	
21	Compr. Starter Isolation Relay	036-00571D-019	0	
22	#1 Oil Pump Starter Isolation Relay	036-00571D-020	0	
23	#2 Oil Pump	036-00571D-021	0	
24	#2 Oil Pump Starter Isolation Relay	036-00571D-022	0	
25	Timer	036-00571D-023	0	
26	Control Status	036-00571D-024	0	
27	Third Oil Heater	036-00571D-025	0	

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<u>ITEM</u>	<u>COMPONENT</u>	<u>FES I.D. NO.</u>	<u>QTY.</u>	<u>DESCRIPTION/REMARKS</u>
28	Panel Air Purge	036-00571D-026	0	
29	Division 2 w/Panel Air Purge	036-00571D-027	0	
30	Power Failure Reset	036-00571D-028	0	
31	Motorized Check Valve	036-00571D-029	0	
32	Tele-Data Port: RS-232 Compat. Conn. [ ] System Configuration [ ]		0	Refer to separate Tele-Data Port "Engineering Data Sheet" and associated instruction manual.

ELECTRICAL DRAWINGS:

<u>035-00570D</u>	Elem. Control Diagram
<u>87-0078-0301-5C</u>	Field & Starter Diagram
<u>036-00571D</u>	Option Diagram
<u>035-00576D</u>	Connection Diagram