



Código :915105 Motoc"DISCUS"-2DF3F16K0-TFD200-B22/502--

## 2DF3-0300-TFD

HCFC, R-22 ,Mid Point, 50 Hz, 3 - Phase, 380/420 V  
Low Temperature

Estado de Producción: This model is obsolete and is no longer in production for both OEM and service replacement.

### Rendimiento

Evap(°C)/Cond (°C)	-31.7/40.6	-40/40.6
RG(°C)/Liq(°C)	18.3/40.6	18.3/40.6
Capacidad (Watts):	3200	1710
Potencia (Watts):	2370	1730
Corriente (Amps):	7.2	6.7
EER (COP):	1.35	1
Flujo de Masa(g/s):	18.5	9.8
Potencia del Sonido (dBA):	0 Ave 0 Max	
Vibración(mm(peak-peak)):	0 Ave 0 Max	

### Mecánico

Número de Cilindros:	2	CIR (meters^3/hr):	0.423
Medida de Calibre (mm):	66.6	CFH (meters^3/hr):	21.294
Recorrida (mm):	35.0		
Lago Total (mm):	590.55	Largo (mm):	295.4
Ancho Total (mm):	392.18	Ancho (mm):	279.4
Altura Total (mm):	434.09	Altura (mm):	460.5*
Medida de Succión(in):	1 3/8	Sweat	
Medida de Descarga (in):	7/8	Sweat	
Carga Inicial de Aceite (liter):	2.37		
Recarga de Aceite (liter):	2.13		
Peso Neto (kg):	147.42		
HorsePower	3.0		
* Altura total del compresor sobre patas de montaje Copeland originales.			

### Eléctrico

LRA-Alto*:	52.0	UL File No.:	SA-2337	Corriente Operativa Máx.(Amps):	
LRA-Bajo*:		UL File Date:	13-Jul-1988	MCC (Amps):	10.5
LRA-Medio Bobinado:		Archivo CSA No.:	LR3104C	RPM:	
RLA (=MCC/1.4; use for contactor selection):	7.5				
RLA (=MCC/1.56; use for breaker & wire size selection):	6.7				
*Baja y Alta, se refieren respectivamente, a los límites inferior y superior del rango de voltaje de trabajo para el cual el motor está aproba					

### Aplicaciones Alternativas

Refrigerante	Frecuencia(Hz)	Fase	Voltaje	Aplicación
R-12 CFC	60	3	460	High Temperature
R-12 CFC	60	3	460	Medium Temperature
R-22 HCFC	60	3	460	Low Temperature
R-502 CFC	60	3	460	Low Temperature
R-12 CFC	50	3	380/420	
R-12 CFC	50	3	380/420	High Temperature
R-502 CFC	50	3	380/420	Low Temperature

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### Componentes Eléctricos

#### Estator

Resistencia: +-7%

Tensión entre fases: 2.68

Tensión de línea: 0.0

#### Protector térmico interno

N° de Parte 071-0429-23

Descripción de Uso:

Nombre del Vendedor:

T I

**Condiciones operativas**

18.3 C Return Gas  
 0 K Subcooling  
 35 C Ambient Air Over

**50 Operación en Hz**

# LOW TEMPERATURE

**Use only with Demand Cooling®  
 Refer to AE 4-1287**

**2DF3-0300-TFD**

COPELAMETIC® HCFC-22  
 DISCUS® COMPRESSOR  
 TFD 380/420-3-50

**Condensing Temperature C****(Sat Dew Pt Pressure, bar)****Evaporating Temperature C (Sat Dew Pt Pressure, bar)**

	54 (21.3)	40 (1) (19.4)	35 (1.3) (17.3)	30 (1.6) (15.3)	25 (2) (13.5)	20 (2.4) (11.9)	18 (2.6) (10.4)
<b>C</b>	1115	1295	1510	1735	1970	2220	2490
<b>P</b>	1530	1600	1670	1730	1760	1750	1710
<b>A</b>	6.6	6.7	6.7	6.7	6.7	6.7	6.7
<b>M</b>	7.1	8	9	9.9	10.8	11.7	12.8
<b>E</b>	0.73	0.81	0.9	1	1.12	1.27	1.46
<b>%</b>	47	48.8	50	50.7	51.5	52.9	55.3
	1690	1945	2255	2560	2865	3200	3500
	2020	2060	2100	2110	2100	2060	1980
	6.9	6.9	7	7	6.9	6.9	6.9
	10.8	12	13.4	14.6	15.7	16.9	18
	0.84	0.95	1.08	1.21	1.36	1.54	1.77
	49.1	51.5	53.4	54.8	55.9	57.4	59.5
	2545	2875	3250	3650	4050	4400	4800
	2520	2530	2530	2500	2450	2370	2250
	7.3	7.3	7.3	7.3	7.2	7.2	7.1
	23.8	17.8	19.5	20.9	22.2	23.5	24.7
	1.01	1.14	1.3	1.46	1.65	1.86	2.13
	53.5	55.8	57.8	59.1	60.1	61.2	62.8
	3700	4100	4600	5050	5500	5950	6350
	3020	2990	2940	2880	2790	2670	2510
	7.8	7.8	7.7	7.6	7.6	7.5	7.3
	23.8	25.4	27.3	28.9	30.3	31.6	32.9
	1.22	1.37	1.55	1.75	1.97	2.22	2.54
	58.4	60.4	62	63	63.7	64.3	65.3
	5100	5600	6150	6700	7250	7750	8200
	3490	3420	3340	3230	3090	2930	2730
	8.3	8.2	8.1	8	7.9	7.7	7.5
	33.1	35	37	38.7	40.2	41.5	42.6
	1.47	1.63	1.85	2.08	2.34	2.64	3.01
	63.1	64.7	65.9	66.5	66.6	66.7	66.9
	5750	6300	6900	7450	8000	8550	9050
	3660	3590	3480	3350	3200	3020	2810
	8.5	8.4	8.3	8.1	8	7.8	7.6
	37.4	39.3	41.4	43.1	44.6	45.9	47
	1.57	1.75	1.98	2.23	2.5	2.82	3.22
	64.9	66.3	67.3	67.7	67.6	67.5	67.4

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## Partes de Servicio

<u>Referencia</u>	<u>Componente</u>	<u>Cantidad</u>	<u>Descripción</u>	<u>Comentarios</u>
1	020-0756-00	1	GASKET-CYLINDER HEAD	
2	998-1661-29	1	VALVE PLATE KIT	
3	020-0757-00	1	GASKET-VALVE PLATE	
4	020-0104-00	1	GASKET-HOUSING COVER	
5	020-0732-00	1	GASKET-OIL PUMP	2942708
6	998-0008-33	1	OIL PUMP KIT	WITH OIL PUMP BOLTSGASKETS& ADAPTER RING
7	510-0191-00	1	VALVE-SCHRADER TEE	INSTALLED IN OIL PUMP
8	020-0159-00	1	GASKET-BOTTOM PLATE	
9	003-0099-00	1	PLATE-BOTTOM	
10	998-0002-02	1	SIGHT GLASS KIT	
11	998-0513-03	1	OIL SCREEN KIT	
12	918-0028-01	1	HEATER-CC--100W/240V	WELD
12	918-0028-00	1	HEATER-CC--100W/120V	WELD
13	020-0012-11	1	GASKET-SERVICE VALVE	DISCHARGE
14	998-0510-12	1	SERV VALVE KIT 7/8 SWT	7/8 SWT2 BOLT DISCHARGE
15	998-5100-00	1	SUCT & DISCH VALVE KIT	WITH VALVESGASKETS& BOLTS
16	020-0709-00	1	GASKET-STATOR COVER	
17	005-0650-03	1	COVER-STATOR	
18	020-0012-09	1	GASKET-SERVICE VALVE	2880908 SUCTION
19	998-0510-11	1	SERV VALVE KIT 1 3/8 SWT	1 3/8 SWT2 BOLTSUCTION
20	020-0146-00	1	GASKET-TERM MTG PLATE	
21	062-0058-00	1	BOX-TERMINAL	
22	005-0163-00	1	COVER-TERMINAL BOX	
24	521-0018-00	1	TERMINAL-FUSED CLUSTER	
25	020-0844-02	1	SEAL	FOR T CLUSTER 521-0018-00
27	998-0429-23	1	PROTECTOR & GASKET KIT	
28	998-0700-07	1	OIL CONTROL BRKT KIT	
30	527-0105-00	1	SPACER-MOUNTING ASSM	
34	510-0142-00	1	VALVE-OIL CHECK ASSM	2852661
36	998-1669-06	1	GASKET SET	
38	998-1000-12	1	DEMAND COOL KIT	120V/50/60 HZ
38	998-1001-13	1	DEMAND COOL 120V/50 HZ	
42	030-0187-00	1	SLEEVE-HEATER	REQUIRED WHEN USING CCH
43	020-0678-00	1	GASKET-CLOSURE PLATE	
44	020-0297-13	1	GASKET-SENTRONIC SENSOR	
45	020-0844-04	1	SEAL-SIGHT GLASS	2042028
46	585-1066-02	1	CONTROL-OIL PROTECT GP	

<u>Referencia</u>	<u>Componente</u>	<u>Cantidad</u>	<u>Descripción</u>	<u>Comentarios</u>
47	998-0162-00	1	SENTRONIC SENSOR KIT	
48	998-0283-02	1	KIT-CABLE	
49	998-1000-22	1	DEMAND COOLING KIT	240V 50/60 HZ
49	998-1001-23	1	DEMAND COOL 240V/ 50 HZ	
50	998-0513-04	1	SUCTION SCREEN KIT	
51	921-0227-00	1	CONNECTOR BLOCK KIT	
52	020-0012-11	2	GASKET-SERVICE VALVE	GASKET REQUIRED ON BOTH SIDES OF MUFFLER PLATE
53	003-0020-02	1	PLATE-MUFFLER	
54	910-0352-00	1	DEMAND COOL VLV & COIL	COIL VOLTAGE 120V/50/60HZ
54	910-0352-01	1	DEMAND COOL VLV & COIL	COIL VOLTAGE 240V/50/60HZ

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### Accesorios

<u>Número de Pa</u>	<u>Descripción</u>
006-0200-00	Spring. Internal, between the valve plate, & unloader piston. (Unloader Spring)
020-1004-00	Cover plate gasket 003-0021-00. When replacing standard model 9RC or 9RS with unloading added, replace with unloader models 9RP or 9RT.
023-0039-01	Coil, 120v, Alco - Demand cooling valve (Unloader Valve)
023-0039-02	Coil, 240v, Alco - Demand cooling valve (Unloader Valve)
023-0042-01	Solenoid Coil 120v, 50/60 Hz, Parker - Demand cooling valve
023-0042-02	Solenoid Coil 240v, 50/60 Hz, Parker - Demand cooling valve
024-0200-00	Fan Guard - Top, for Head Cooling Fan
030-0187-00	Heater Sleeve, well style - Order well separately
083-0118-00	Fan Blade - for Head Cooling Fan
085-0109-00	Temperature Probe-Standard 41" - Demand Cooling
085-0109-01	Temperature Probe-10 ft cable - Demand Cooling
085-0110-00	Control Module 120v 50/60 Hz - Demand Cooling
085-0110-01	Control Module 240v 50/60 Hz - Demand Cooling
085-0160-00	3 Phase Voltage Monitor. For use with all Copeland 3 Phase Compressors. Consult model family nomenclature for electrical definition in the model number.
510-0351-00	Demand Cooling Valve 50/60 Hz Alco
510-0352-00	Demand Cooling Valve & Coil, 120v, 50/60 Hz, Alco
510-0352-01	Demand Cooling Valve & Coil, 240v, 50/60 Hz Alco
585-1066-02	Sentronic Oil Pressure Control - Kit includes Sentronic oil pressure control, screws to mount control, oil pressure sensor, and sensor gaskets. Control mounting brackets are supplied on service replacement compressors.
918-0009-00	Crankcase Heater, 120v, 65w, bolt on. For usage on specific Copeland Copelametic & Discus Compressor except deep sump models. Includes crankcase heater, and reference drawings.
918-0009-01	Crankcase Heater, 240v, 65w, bolt on. For usage on specific Copeland Copelametic, & Discus Compressor except deep sump models. Includes crankcase heater, and reference drawings.
918-0009-02	Crankcase Heater, 480v, 65w, bolt on. For usage on specific Copeland Copelametic, & Discus Compressor except deep sump models. Includes crankcase heater, and reference drawings.
918-0009-03	Crankcase Heater, 600v, 65w, bolt on. For usage on specific Copeland Copelametic, & Discus Compressor except deep sump models. Includes crankcase heater, and reference drawings.
918-0028-00	Crankcase Heater 120v, 100w insertion. For usage on specific Copeland Copelametic, & Discus Compressors. Use with Heater Well 030-0186-00 and 030-0187-00.
918-0028-01	Crankcase Heater 240v, 100w insertion. For usage on specific Copeland Copelametic, & Discus Compressors. Use with Heater Well 030-0186-00 and 030-0187-00.
998-0045-00	End plate kit. Kit includes end plate & end plate gasket for the unloader valve.
998-0161-01	Sentronic Oil Control - Control only, supplied with 44" cable as standard
998-0162-00	Kit includes sensor, gaskets, and cable.
998-0283-02	Standard Sentronic cable is 44" long. The extension cable is 12 ft long and must be wired into the control. Kit 998-0283-02 includes instructions.
998-0550-00	Fan Motor Blade & Guard Assembly 230v, Does not include mounting bracket. Must be ordered separately
998-0550-01	Fan Motor Blade & Guard Assembly 460v, Does not include mounting bracket. Must be ordered separately
998-0550-02	Fan Motor Blade & Guard Assembly 115v, Does not include mounting bracket. Must be ordered separately
998-0550-03	Fan Motor 230v. Includes fan motor mounted to bottom guard
998-0550-04	Fan Motor 460v. Includes fan motor mounted to bottom guard
998-0550-05	Fan Motor 115v. Includes fan motor mounted to bottom guard
998-0574-11	Fan Mounting Kit. Vertical fan mount on top of compressor head
998-0683-00	Shipping Plate, Gasket, and Bolt (Discharge all 2D) (Discharge) (Suction & Discharge) 2 kits required

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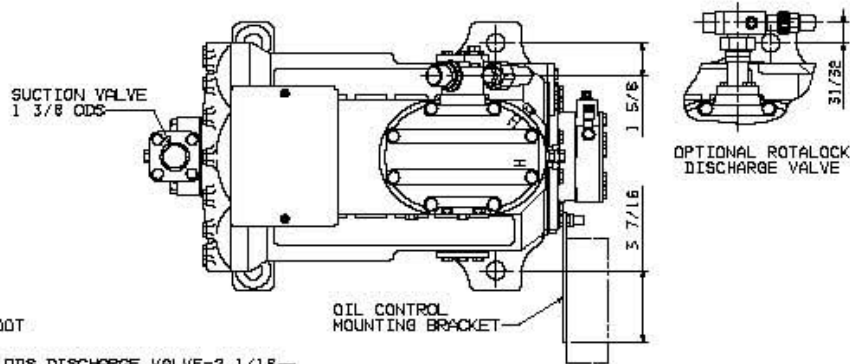


### Accesorios

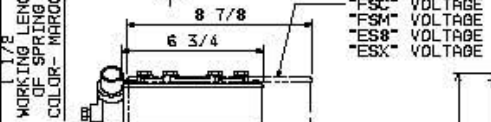
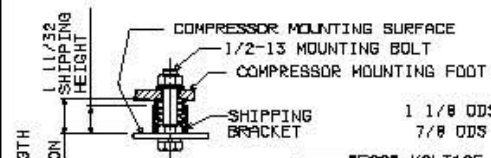
<u>Número de Pa</u>	<u>Descripción</u>
998-0683-01	Shipping Plate, Gasket, and Bolt (Suction all 2) (Discharge all 3D, 4D, 4R, 6D, 6R & 9R) (Suction) (Suction 5, 6, 7 1/2, 9, & 10 12 HP)
998-0683-02	Shipping Plate, Gasket, and Bolt (Suction 6R, 10, 15 & 20 HP)
998-0700-09	Control Mounting Bracket Kit
998-1000-12	Demand Cooling Kit 120v / 60Hz
998-1000-22	Demand Cooling Kit 240v / 60Hz
998-1001-12	Demand Cooling Kit 120v / 50Hz
998-1001-22	Demand Cooling Kit 240v / 50Hz
998-AB52-01	Akylbenzene Oil. Approved for use with specific Copeland Semi Hermetic After Market Compressors. Consult model family nomenclatures for oil identifier in the model number.
998-E022-01	Polyol Ester Oil. Approved for use with specific Copeland Hermetic & Semi Hermetic models. Consult specific model family nomenclatures for oil identifier in the model number.

MODEL	A	B	OLD MODEL NUMBER
2DA3RS0K	2 1/2	19 1/2	2DA3-050
2DA3F23K	3 1/2	20 1/2	2DA3-060
2DA3R09K	3 1/2	20 1/2	2DA3-075
2DB3R61K	2 1/2	19 1/2	2DB3-050
2DB3F25K	3 1/2	20 1/2	2DB3-060
2DC3R53K	3 1/2	20 1/2	2DC3-050
2DC3R55K	3 1/2	20 1/2	2DC3-050
2DF3F16K	3 1/2	20 1/2	2DF3-030
2DD3R63K	3 1/2	20 1/2	2DD3-050
2DL3F20K	3 1/2	20 1/2	2DL3-040
2DL3R70K	3 1/2	20 1/2	2DL3-075

SPECIFICATIONS	
ES8-157	DESCRIPTION
ES81-157	CLEARANCE
ES91-250	IDENTIFICATION
ES92-155	CONVERSION-METRIC
ES92-187	HAZARDOUS SUBSTANCES



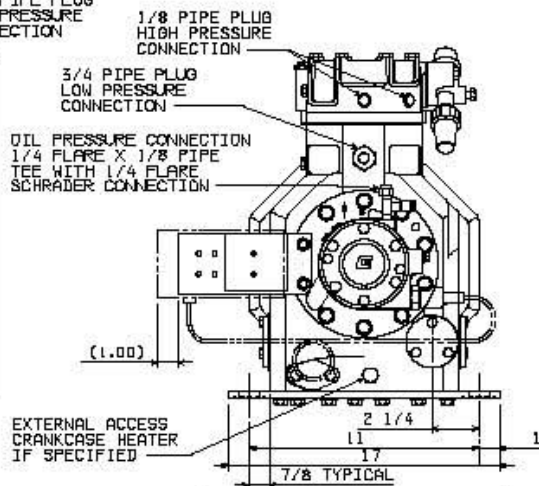
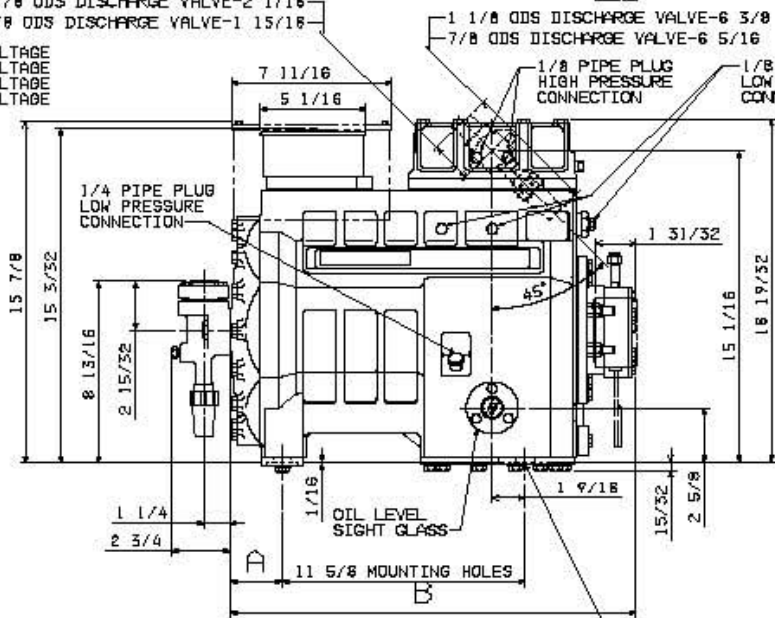
NOTE:  
 ALL TOLERANCES ARE ±3/32 EXCEPT INDUSTRY STANDARDS APPLY TO FITTINGS AND VALVES.



- FS9- VOLTAGE
- FSM- VOLTAGE
- ES8- VOLTAGE
- ESX- VOLTAGE

1 1/8 ODS DISCHARGE VALVE-2 1/16  
 7/8 ODS DISCHARGE VALVE-1 15/16

1 1/8 ODS DISCHARGE VALVE-6 5/8  
 7/8 ODS DISCHARGE VALVE-6 5/16



7/8 DIA THRU  
 1 9/16 DIA C BORE 5/32 DEEP  
 2 MOUNTING HOLES

7/8 DIA THRU  
 1 9/16 DIA C BORE 1/8 DEEP  
 2 MOUNTING HOLES



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