



**Installation Data Sheet**  
 Series: 1:1 Direct Drive DSD.3 SFC  
 Document No.: TI-DATA-2016-SFC 75 90 110 132S  
 Version: 2.2  
 Revision Date: 04/17/2023

Model	SFC 75		SFC 90			SFC 110					SFC 132S					
	110	125	110	125	145	110	125	145	175	217	110	125	145	175	217	
<b>Rated Pressure [psig]</b>																
<b>I. COOLING DATA</b>																
Cooling System Available [Std., Opt.]	A/C, W/C		A/C, W/C			A/C, W/C					A/C, W/C					
Standard Ambient Temp. Range [°F]	40 - 115		40 - 115			40 - 115					40 - 115					
<b>VENTILATION OF COMPRESSOR ROOM</b>																
Air Inlet Opening [sq. ft. free area] (A/C) Z	21.5		23.7			30.1					34.5					
Air Inlet Opening [sq. ft. free area] (W/C) Z	4.3		5.4			6.5					7.5					
<b>Solution A (forced ventilation with exhaust fan) as shown in service manual</b>																
Cooling Fan Capacity [CFM] (A/C)	16,480		18,835			25,543					26,846					
Cooling Fan Capacity [CFM] (W/C)	4,120		4,120			5,297					5,886					
<b>Solution B (exhaust air used for space heating) as shown in service manual</b>																
Internal Cooling Fan Capacity [CFM] (A/C)	6,474		7,652			10,006					11,772					
Internal Cooling Fan Capacity [CFM] (W/C)	1,471		1,471			1,471					1,471					
Max. Additional Pressure Drop for Ducts [inch Water Column] (A/C)   (W/C)	0.40 / 0.16		0.40 / 0.16			0.40 / 0.16					0.32 / 0.16					
Exhaust Air Opening Reference Dimensions (L x W) [in]	54 x 54		54 x 54			54 x 54					54 x 54					
See drawing for actual dimensions. The actual individual duct dimension will vary for every installation based on actual length, number and type of bends, accessories etc.																
<p><b>Model shown for reference only</b>  <b>Actual Duct size may vary with installation</b></p>																
<b>Solution A Exhaust Fan</b>																
<b>Solution B Exhaust Duct</b>																
<b>Ventilation of Compressor Room Z</b>																
<b>AIR COOLED DATA</b>																
Internal Cooling Fan Capacity [CFM]	6,474		7,652			10,006					11,772					
Approach Temp. [°F]	10.8		12.6			14.4		12.6			16.2		14.4			12.6
Typical Heat Rejected [BTU / HR]	313,000		372,000			426,000					489,000					
Fan Motor [HP], oilcooler   aircooler	4 / 1		4 / 1			4 / 1					4 / 1					
<b>WATER COOLED DATA</b>																
Type of heat exchangers	stainless steel, plate-type		stainless steel, plate-type			stainless steel, plate-type					stainless steel, plate-type					
Internal Cooling Fan Capacity [CFM]	1,471		1,471			1,471					1,471					
Approach Temp. [°F]	1.8		1.8			1.8					1.8					
Typical Heat Rejected into Cooling Water [BTU / HR]	309,500		369,000			416,500					482,000					
Heat Rejected into Cooling Air (Compressor) [BTU / HR]	20,000		24,000			27,000					31,000					
Heat Rejected into Cooling Air (Frequency-Controller) [BTU / HR]	10,000		12,000			13,500					15,500					
Max. outlet temperature [°F]	132		132			132					132					
Temperature differential between inlet water and max. discharge water temperature [°F]	27	54	27	54	27	54	27	54	27	54	27	54	27	54		
Max. inlet water temperature [°F]	105	77	105	77	105	77	105	77	105	77	105	77	105	77		
Min. cooling water flow [gpm]	22.9	11.4	27.3	13.6	30.8	15.4	35.7	17.6								
Pressure drop across compressor package [psi] WITHOUT cooling water throttling valve	4.5	2.9	6	2.9	6	3.6	7.3	4.4								
Pressure drop across compressor package [psi] WITH cooling water throttling valve	5	4	7	4	9	5	11	5								



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<b>Rated Pressure [psig]</b>															
<b>II. ELECTRICAL DATA</b> <i>Electrical data may vary in accordance with motor manufacturer's specifications. Motors are EISA compliant.</i>															
<b>DRIVE MOTOR</b>															
Motor HP	100		125			150					175				
Insulation Class	F		F			F					F				
Standard Voltage	460V/3ph/60Hz		460V/3ph/60Hz			460V/3ph/60Hz					460V/3ph/60Hz				
Full Load Amps [FLA] @ 460V/3ph/60Hz	117		143			177					205				
Full Load Amps [FLA] @ 575V/3ph/60Hz	CF		CF			144					164				
<b>FAN MOTOR (A/C) Oilcooler</b>															
Insulation Class	F		F			F					F				
Fan Motor [HP]	4		4			4					4				
Full Load Amps [FLA] @ 460V/3ph/60Hz	6.0		6.0			6.0					6.0				
Full Load Amps [FLA] @ 575V/3ph/60Hz	CF		CF			4.8					4.8				
<b>FAN MOTOR (A/C) Aircooler</b>															
Insulation Class	F		F			F					F				
Fan Motor [HP]	1		1			1					1				
Full Load Amps [FLA] @ 460V/3ph/60Hz	1.76		1.76			1.76					1.76				
Full Load Amps [FLA] @ 575V/3ph/60Hz	CF		CF			1.41					1.41				
<b>FAN MOTOR (W/C)</b>															
Insulation Class	F		F			F					F				
Fan Motor [HP], Single Speed	0.4		0.4			0.4					0.4				
Full Load Amps [FLA] @ 460V/3ph/60Hz	0.6		0.6			0.6					0.6				
Full Load Amps [FLA] @ 575V/3ph/60Hz	CF		CF			1.2					1.2				
<b>TOTAL PACKAGE DATA (A/C)</b>															
Do NOT operate package on any unsymmetrical power supply. Also do NOT operate package on power supplies like, for example, a three-phase (open) delta or three-phase star with non-grounded neutral. The machine requires a symmetrical three-phase power supply transformer with a WYE configuration output as shown on the right. In a symmetrical three-phase supply the phase angles and voltages are all the same. Other power supplies are not suitable.					 <b>three-phase star (wye); 4-wire; grounded neutral</b>					 <b>three-phase star (wye); 3-wire; grounded neutral</b>					
Continuous Duty [Hours per day]	24		24			24					24				
Control Cabinet Class (NEMA)	12		12			12					12				
Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz	65		65			65					65				
Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz	CF		CF			65					65				
Package Full Load Amps @ 460V/3ph/60Hz [FLA]	177		203			247					247				
Package Full Load Amps @ 575V/3ph/60Hz [FLA]	CF		CF			171					201				
Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz	250		300			350					350				
Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz	CF		CF			250					300				
Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz	1 x 250 MCM per phase and ground		2 x 1/0 AWG per phase and ground			2 x 3/0 AWG per phase and ground					2 x 3/0 AWG per phase and ground				
Recommended Disconnect Wire Size [AWG/kcmil] @ 575V/3ph/60Hz	CF		CF			1 x 250 MCM per phase and ground					1 x 300 MCM per phase and ground				
<b>TOTAL PACKAGE DATA (W/C)</b>															
Package Full Load Amps @ 460V/3ph/60Hz [FLA]	173		199			243					243				
Package Full Load Amps @ 575V/3ph/60Hz [FLA]	CF		CF			167					197				



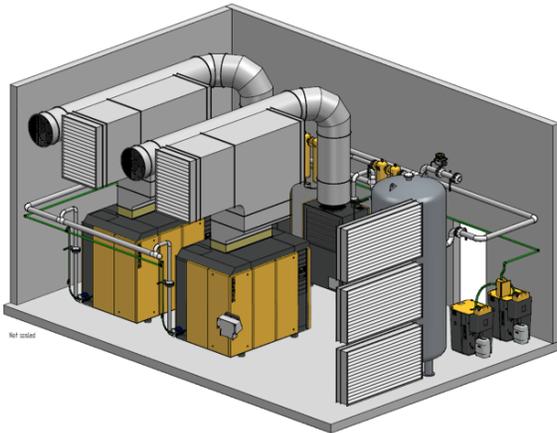
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Rated Pressure [psig]	110	125	110	125	145	110	125	145	175	217	110	125	145	175	217
<b>INSTALLATION and MAINTENANCE DATA</b>															
A/C with Super Soundproofing [dB(A)]	SOUND PRESSURE LEVEL [Measured in dB(A) according to ISO 2151 using ISO 9614-2]														
W/C with Super Soundproofing [dB(A)]	71	72	74					75							
A/C Air Discharge [inches NPT or Flange]	69	69	70					71							
W/C Air Discharge [inches NPT or Flange]	2 1/2 ASME B16.5 class 150														
Cooling Water Connection [inches NPT or Flange]	2 1/2 ASME B16.5 class 150														
Power Input Conduit Opening(s) [inches]	1 1/2 ASME B16.5 class 150														
Condensate Drain Connection [NPT]	2 x 3 in.		2 x 3 in.			2 x 3 in.					2 x 3 in.				
Width [inches]	1/2		1/2			1/2					1/2				
Depth [inches]	105 7/8														
Height [inches]	68 1/8														
Floor Space [sq. ft.]	84 1/2														
Weight (A/C) [lb]	50														
Weight (W/C) [lb]	7,033		7,341			7,363					8,091				
Weight may vary based on airend selected.															
<b>COMPRESSOR FLUID DATA</b>															
Fluid Capacity (A/C) [gal]	18.5														
Fluid Capacity (W/C) [gal]	15.3														
Flow Rate [gal/min]	35.7		35.7			35.7					35.7				
Typical Oil Consumption [fl. Oz./100 h]	14.69		17.29			19.79					22.71				
Standard Fluid Type	Sigma S-460														
<b>MAINTENANCE PARTS</b>															
Air Inlet Filter	4E0303.0														
Filter Mat (optional)	6.1943.00040 (x4)														
Filter Mat for Control Cabinet	7.4519.00010 (x4) + 7.4519.00040 (x1) + 5.3353.00050 (x1)														
Fluid Filter	6.4493.0 (x2)														
Fluid Separator Kit	6.4273.0														
Maintenance Kit for Optional 5-year warranty	ANAKDSDSFC3S														
Maintenance Kit for Optional 5-year warranty, with food-grade lubricant	ANAKDSDSFC3F														

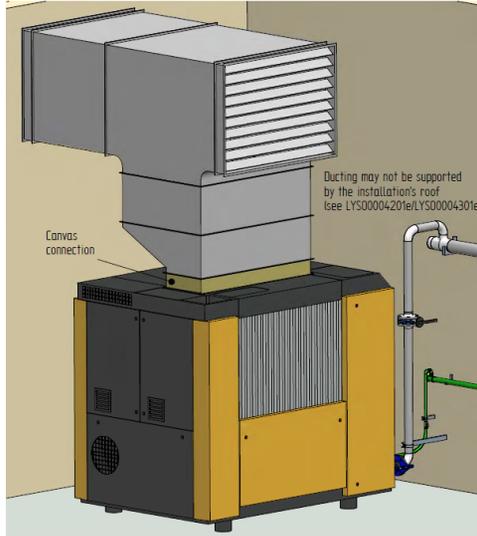
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	Rated Pressure [psig]		110	125	110	125	145	110	125	145	175	217	110	125	145	175

**SAMPLE SKETCHES**

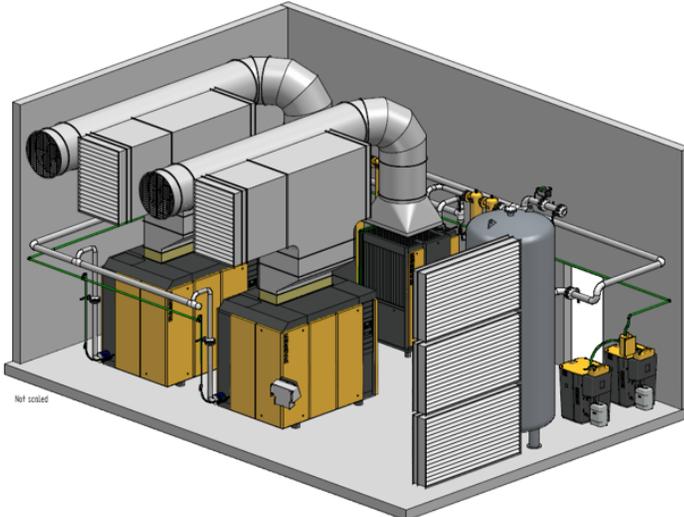
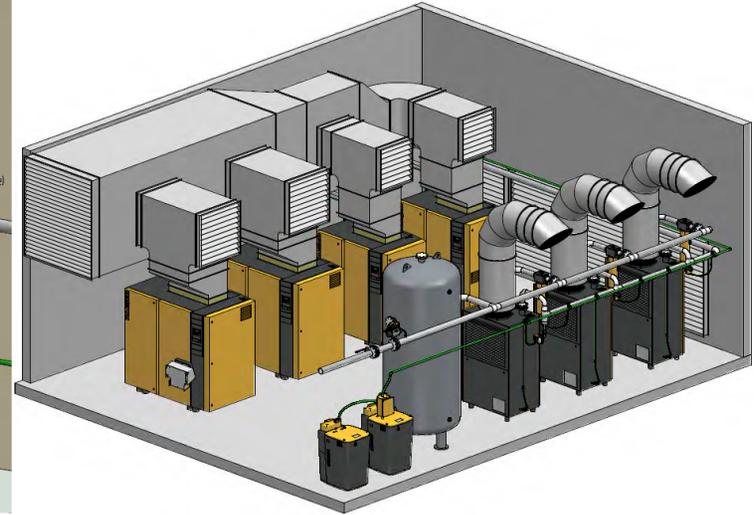
**Sample Installation Planning**  
**Examples of room ventilation and ductwork**  
 Please note the upsizing required for compressor exhaust ducts



2x DSD 175 / 2x TF280 / 2x FFG-283D



Duct / pipe connection DSD



2x DSD 175 / 2x TH 451 / 2x FFG-283D

**Example designs only, not for construction purposes.**