



**Installation Data Sheet**  
**Series: 1:1 Direct Drive CSD.6 SFC**  
**Document No.: TI-DATA-2023-CSD SFC 45T 55T 75ST**  
**Preliminary Data Release Date: 05/30/2023**  
**Version 1.1**

Model	SFC 45 T			SFC 55 T				SFC 75S T							
Rated Pressure [psig]	100	110	125	110	125	145	175	190	217	110	125	145	175	190	217
<b>I. COOLING DATA</b>															
Cooling System Available [Std., Opt.]	A/C, W/C			A/C, W/C				A/C, W/C							
Standard Ambient Temp. Range [°F]	40 - 115			40 - 115				40 - 115							
<b>VENTILATION OF COMPRESSOR ROOM</b>															
Air Inlet Opening [sq. ft. free area] (A/C) <b>Z</b>	16.1			19.4				23.7							
Air Inlet Opening [sq. ft. free area] (W/C) <b>Z</b>	6.5			7.5				7.5							
<b>Solution A (forced ventilation with exhaust fan) as shown in service manual</b>															
Cooling Fan Capacity [CFM] (A/C)	12,949			15,303				18,246							
Cooling Fan Capacity [CFM] (W/C)	4,414			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)	Compressor		Dryer		Compressor		Dryer		Compressor		Dryer				
	5,003		TBD		5,886		TBD		6,474		TBD				
Internal Cooling Fan Capacity [CFM] (W/C)	1,001			1,001				1,001							
Max. Additional Pressure Drop for Ducts [inch Water Column] (A/C)   (W/C)	0.32 / 0.16			0.32 / 0.16				0.24 / 0.16							
Exhaust Air Opening Reference Dimensions (L x W) [in]	35 x 35			35 x 35				35 x 35							
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.															
<b>Model shown for reference only</b> <b>Actual Duct size may vary with installation</b>															
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid green; padding: 2px;">Solution A Exhaust Fan</div> <div style="border: 1px solid red; padding: 2px;">Solution B Exhaust Duct</div> <div style="border: 1px solid blue; padding: 2px;">Ventilation of Compressor Room Z</div> </div>															
<div style="border: 1px solid gray; padding: 5px; width: fit-content; margin: auto;">Coming Soon</div>															
<b>AIR COOLED DATA</b>															
Internal Cooling Fan Capacity [CFM]	5,003			5,886				6,474							
Approach Temp. [°F]	12.6			14.4	12.6	10.8	12.6	TBD	TBD						
Typical Heat Rejected [BTU / HR]	186,500			225,000				284,500							
Fan Motor [HP]	2.5			2.5				2.5							
<b>WATER COOLED DATA</b>															
Type of heat exchangers	stainless steel, plate type			stainless steel, plate type				stainless steel, plate type							
Internal Cooling Fan Capacity [CFM]	1,001			1,001				1,001							
Approach Temp. [°F]	1.8			1.8				1.8							
Typical Heat Rejected into Cooling Water [BTU / HR]	TBD			TBD				TBD							
Heat Rejected into Cooling Air [BTU / HR]	TBD			TBD				TBD							
Max. outlet temperature [°F]	TBD			TBD				TBD							
Temperature differential between inlet water and max. discharge water temperature [°F]	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD						
Max. inlet water temperature [°F]	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD						
Min. cooling water flow [gpm]	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD						
Pressure drop across compressor package [psi] WITHOUT cooling water throttling valve	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD						
Pressure drop across compressor package [psi] WITH cooling water throttling valve	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD						



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<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	60			75				100							
Insulation Class	F			F				F							
Standard Voltage	460V			460V				460V							
Type	SynRM			SynRM				SynRM							
<b>FAN MOTOR (A/C)</b>															
Insulation Class	F			F				F							
Fan Motor [HP]	2.5			2.5				2.5							
Full Load Amps [FLA] @ 460V/3ph/60Hz	TBD			TBD				TBD							
Full Load Amps [FLA] @ 575V/3ph/60Hz	TBD			TBD				TBD							
<b>FAN MOTOR (W/C)</b>															
Insulation Class	F			F				F							
Fan Motor [HP], Single Speed	0.13			0.13				0.13							
Full Load Amps [FLA] @ 460V/3ph/60Hz	1.45			1.45				1.45							
Full Load Amps [FLA] @ 575V/3ph/60Hz	CF			CF				CF							
<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.															
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p><b>three-phase star (wye); 4-wire; grounded neutral</b></p> </div> <div style="text-align: center;">  <p><b>three-phase star (wye); 3-wire; grounded neutral</b></p> </div> </div>															
Continuous Duty [Hours per day]	24			24				24							
Control Cabinet Class (NEMA)	12			12				12							
Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz	Field installed fuse required, see below*			50				50							
Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz	Field installed fuse required, see below*			TBD				TBD							
Package Full Load Amps @ 460V/3ph/60Hz [FLA]	99			116				142							
Package Full Load Amps @ 575V/3ph/60Hz [FLA]	TBD			TBD				TBD							
Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz	*Time delay (dual element) fuse; Class J ≤ 600A (e.g. AJT) / Class L > 600A (e.g. A4BQ). Based on 2020 NEC 240.6, 430.52, and Tables 430.52, 430.248, and 430.250			125				150				200			
Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz	TBD			TBD				TBD							
Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz	The following multi-strand copper core wires are given according to 2020 NEC 310.14, 310.15, 310.16 and table 310.16 adjusted for 40°C ambient temperature. If other local conditions prevail, for example high temperature, the cross section should be checked and adjusted according to 2020 NEC 110.14(C), 220.3, 310.14, 310.15, 310.16, 430.6, 430.22, 430.24, 670.4(A) and other local codes.			1/0 AWG per phase and ground				2/0 AWG per phase and ground				4/0 AWG per phase and ground			
Recommended Disconnect Wire Size [AWG/kcmil] @ 575V/3ph/60Hz	TBD			TBD				TBD							
<b>TOTAL PACKAGE DATA (W/C)</b>															
Package Full Load Amps @ 460V/3ph/60Hz [FLA]	97			114				140							
Package Full Load Amps @ 575V/3ph/60Hz [FLA]	TBD			TBD				TBD							



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<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]			68				70				73			
W/C with Super Soundproofing [dB(A)]	68			70				73							
A/C Air Discharge [inches NPT or Flange]				2 NPT											
W/C Air Discharge [inches NPT or Flange]				2 NPT											
Cooling Water Connection [inches NPT or Flange]				1 1/4											
Power Input Conduit Opening(s) [inches]				2 1/4											
Condensate Drain Connection [NPT]				1/4 NPT											
Width [inches]				89											
Depth [inches]				43 1/4											
Height [inches]				74 3/4											
Floor Space [sq. ft.]				26.73											
Weight (A/C) [lb]	Weight may vary based on airend selected.			3,461				3,505				3,571			
Weight (W/C) [lb]				3,461				3,505				3,571			
<b>COMPRESSOR FLUID DATA</b>															
Fluid Capacity (A/C) [gal]	9.2			9.2				9.2							
Fluid Capacity (W/C) [gal]	8.1			8.1				8.1							
Flow Rate [gal/min]	21.1			21.1				21.1							
Typical Oil Consumption [fl. Oz./100 h]	8.7			10.3				12.9							
Standard Fluid Type	Sigma S-460			Sigma S-460				Sigma S-460							
<b>MAINTENANCE PARTS</b>															
Air Inlet Filter				4E0302.0											
Filter Mat (optional)				6.1687.0 (x2)											
Filter Mat for Control Cabinet				7.4519.00040 (x5)											
Fluid Filter				6.4493.0											
Fluid Separator Kit				6.3571.0											
Maintenance Kit for Optional 5-year warranty				ANAKCSD6SFCS											
Maintenance Kit for Optional 5-year warranty, with food-grade lubricant				ANAKCSD6SFCF											
<b>DRYER DATA - FOR T MODELS</b>															
Dryer Model	ABT132			ABT132				ABT132							
Maximum Inlet Air Pressure (Compressed Air at Inlet to Dryer) [psig]	TBD			TBD				TBD							
Nominal Pressure Drop at Rated Flow [psid]	0.9			0.4				0.6							
Rated Pressure Dewpoint [°F] at Standard Conditions	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature.			38				38				38			
Pressure Dewpoint per ISO 8573-1.				Class 4 - 6 based on ambient conditions											
<b>REFRIGERATION SYSTEM DATA - FOR T MODELS</b>															
Compressor Type	TBD			TBD				TBD							
BTU/Refrigeration ASHRAE	TBD			TBD				TBD							
Outlet Air Temperature (Nominal at Rated Conditions) [°F]	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature.			TBD				TBD				TBD			
Refrigerant Type				R-513A											
GWP (Global Warming Potential)				631											
CO2 equivalent [t]				0.66											
Refrigerant Charge [lb]				2.29											
Air Flow Across Condenser [CFM]				TBD											

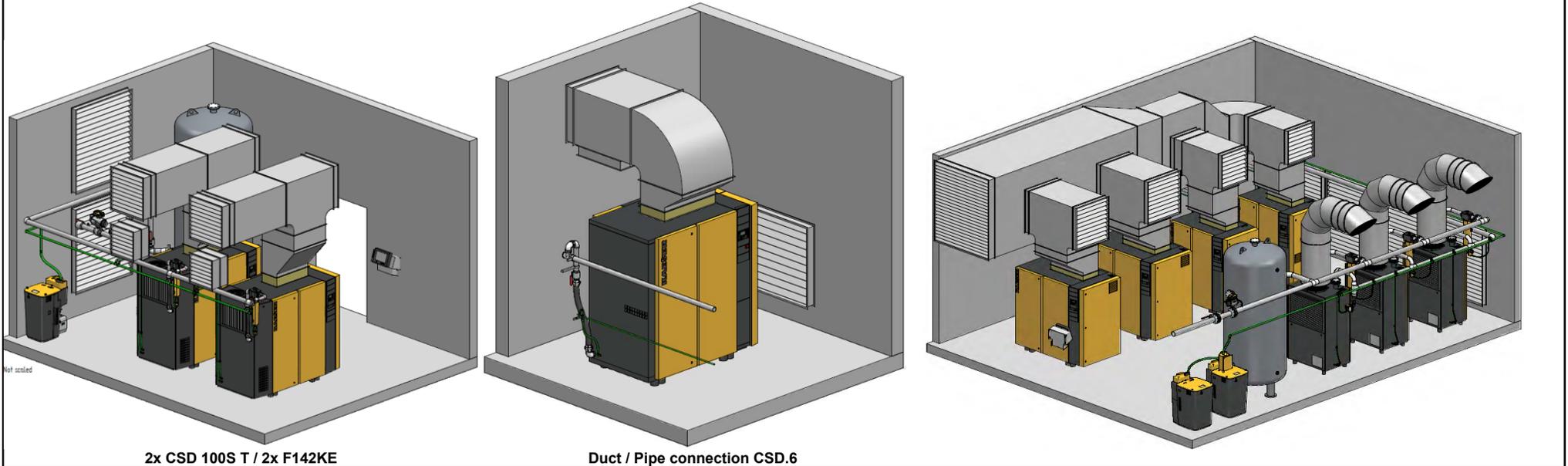


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**SAMPLE SKETCHES**

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



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