



Installation Data Sheet
 Series: 1:1 Direct Drive CSDX.6 SFC
 Document No.: TI-DATA-2023-SFC 75M 90M 110M
 Preliminary Data Release Date: 05/30/2023

Version 1.1

Model	SFC 75M					SFC 90M					SFC 110M								
Rated Pressure [psig]	100	110	125	150	175	217	100	110	125	150	175	217	100	110	125	150	175	217	
I. COOLING DATA																			
Cooling System Available [Std., Opt.]						A/C, W/C					A/C, W/C					TBD			
Standard Ambient Temp. Range [°F]						40 - 115					40 - 115					TBD			
VENTILATION OF COMPRESSOR ROOM																			
Air Inlet Opening [sq. ft. free area] (A/C) Z						20.5					23.7					TBD			
Air Inlet Opening [sq. ft. free area] (W/C) Z						5.4					6.5					TBD			
Solution A (forced ventilation with exhaust fan) as shown in service manual																			
Cooling Fan Capacity [CFM] (A/C)						15,892					18,834					TBD			
Cooling Fan Capacity [CFM] (W/C)						3,532					4,120					TBD			
Solution B (exhaust air used for space heating) as shown in service manual																			
Internal Cooling Fan Capacity [CFM] (A/C)						7,063					8,240					TBD			
Internal Cooling Fan Capacity [CFM] (W/C)						1,001					1,001					TBD			
Max. Additional Pressure Drop for Ducts [inch Water Column] (A/C) (W/C)						0.24 / 0.12					0.24 / 0.12					TBD			
Exhaust Air Opening Reference Dimensions (L x W) [in]						39 x 39					39 x 39					TBD			
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.																			
Model shown for reference only Actual Duct size may vary with installation																			
<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="color: gray;">Coming Soon</div> </div> <div style="border: 1px solid red; padding: 2px; margin-top: 5px;">Solution B Exhaust Duct</div> <div style="border: 1px solid blue; padding: 2px; margin-top: 5px;">Ventilation of Compressor Room Z</div>																			
AIR COOLED DATA																			
Internal Cooling Fan Capacity [CFM]						7,063					8,240					TBD			
Approach Temp. [°F]						12.6					12.6					TBD			
Typical Heat Rejected [BTU / HR]						302,000					TBD					TBD			
Fan Motor [HP]						4.0					4.0					4.0			
WATER COOLED DATA																			
Type of heat exchangers						Stainless steel, plate type					Stainless steel, plate type					TBD			
Internal Cooling Fan Capacity [CFM]						1,001					1,001					TBD			
Approach Temp. [°F]						1.8					1.8					TBD			
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			
Max. inlet water temperature [°F]						TBD					TBD					TBD			
Min. cooling water flow [gpm]						TBD					TBD					TBD			
Pressure drop across compressor package [psi] WITHOUT cooling water throttling valve						TBD					TBD					TBD			
Pressure drop across compressor package [psi] WITH cooling water throttling valve						TBD					TBD					TBD			



Installation Data Sheet
 Series: 1:1 Direct Drive CSDX.6 SFC
 Document No.: TI-DATA-2023-SFC 75M 90M 110M
 Preliminary Data Release Date: 05/30/2023

Version 1.1

Model	SFC 75M					SFC 90M					SFC 110M							
Rated Pressure [psig]	100	110	125	150	175	217	100	110	125	150	175	217	100	110	125	150	175	217

II. ELECTRICAL DATA *Electrical data may vary in accordance with motor manufacturer's specifications. Motors are EISA compliant.*

Drive Motor																			
Motor HP						100					125					150			
Insulation Class						F					F					F			
Standard Voltage						460V					460V					460V			
Type						SynRM					SynRM					SynRM			
FAN MOTOR (A/C)																			
Insulation Class						F					F					F			
Fan Motor [HP]						4.0					4.0					4.0			
Full Load Amps [FLA] @ 460V/3ph/60Hz						TBD					TBD					TBD			
Full Load Amps [FLA] @ 575V/3ph/60Hz						TBD					TBD					TBD			
FAN MOTOR (W/C)																			
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			
TOTAL PACKAGE DATA (A/C)																			
<p style="font-size: small;">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.</p>																			
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p style="font-size: x-small; margin: 0;">three-phase star (wye); 4-wire; grounded neutral</p> </div> <div style="text-align: center;"> <p style="font-size: x-small; margin: 0;">three-phase star (wye); 3-wire; grounded neutral</p> </div> </div>																			
Continuous Duty [Hours per day]						24					24					TBD			
Control Cabinet Class (NEMA)						12					12					TBD			
Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz						50					50					TBD			
Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz						TBD					TBD					TBD			
Package Full Load Amps @ 460V/3ph/60Hz [FLA]						152					180					TBD			
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					225					250					TBD			
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.					4/0 AWG per phase and ground					300 kcmil per phase and ground					TBD			
Recommended Disconnect Wire Size [AWG/kcmil] @ 575V/3ph/60Hz						TBD					TBD					TBD			
TOTAL PACKAGE DATA (W/C)																			
Package Full Load Amps @ 460V/3ph/60Hz [FLA]						148					176					TBD			
Package Full Load Amps @ 575V/3ph/60Hz [FLA]						TBD					TBD					TBD			



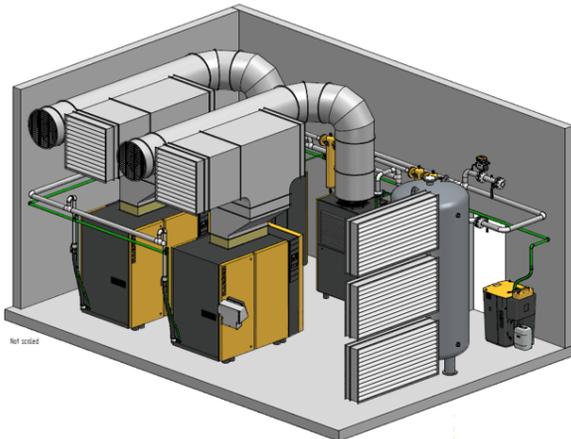
Installation Data Sheet
Series: 1:1 Direct Drive CSDX.6 SFC
Document No.: TI-DATA-2023-SFC 75M 90M 110M
Preliminary Data Release Date: 05/30/2023
Version 1.1

Model	SFC 75M						SFC 90M						SFC 110M					
	100	110	125	150	175	217	100	110	125	150	175	217	100	110	125	150	175	217
INSTALLATION and MAINTENANCE DATA																		
A/C with Super Soundproofing [dB(A)]	SOUND PRESSURE LEVEL [Measured in dB(A) according to ISO 2151 using ISO 9614-2]						74						TBD					
W/C with Super Soundproofing [dB(A)]	73						74						TBD					
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]							3											
Condensate Drain Connection [NPT]							1/4											
Width [inches]							82 5/8											
Depth [inches]							50 3/8											
Height [inches]							76 3/4											
Floor Space [sq. ft.]							28 85/94											
Weight (A/C) [lb]	3,748						4,123						TBD					
Weight (W/C) [lb]	3,748						4,123						TBD					
COMPRESSOR FLUID DATA																		
Fluid Capacity (A/C) [gal]	14.4						14.4						TBD					
Fluid Capacity (W/C) [gal]	12						12						TBD					
Flow Rate [gal/min]	34.3						34.3						TBD					
Typical Oil Consumption [fl. Oz./100 h]	14						TBD						TBD					
Standard Fluid Type	Sigma S-460						Sigma S-460						Sigma S-460					
MAINTENANCE PARTS																		
Air Inlet Filter							4E0302.0											
Filter Mat (optional)							6.1945.0											
Filter Mat for Control Cabinet							7.4519.00040 (x4) & 7.4519.00010 (x2)											
Fluid Filter							6.4693.0											
Fluid Separator Kit							6.3623.0											
Maintenance Kit for Optional 5-year warranty							ANAKCSDX6SFS											
Maintenance Kit for Optional 5-year warranty, with food-grade lubricant							ANAKCSDX6SFF											

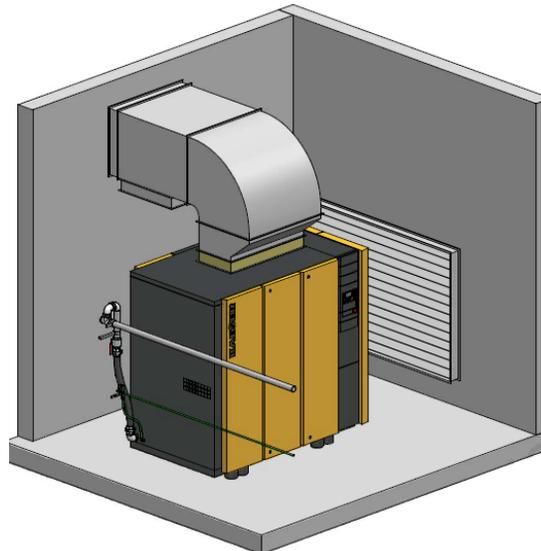
Model Rated Pressure [psig]	SFC 75M						SFC 90M				SFC 110M						
	100	110	125	150	175	217	100	110	125	150	175	217	100	110	125	150	175

SAMPLE SKETCHES

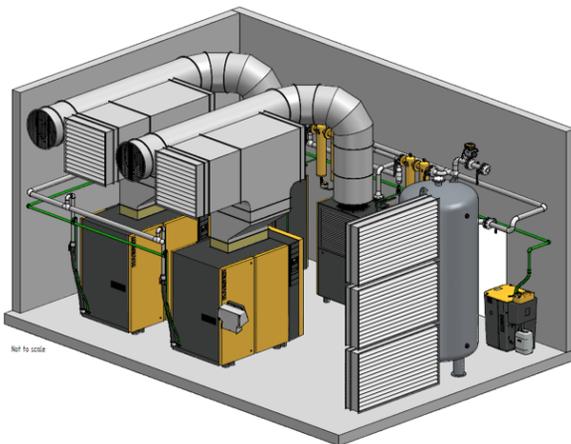
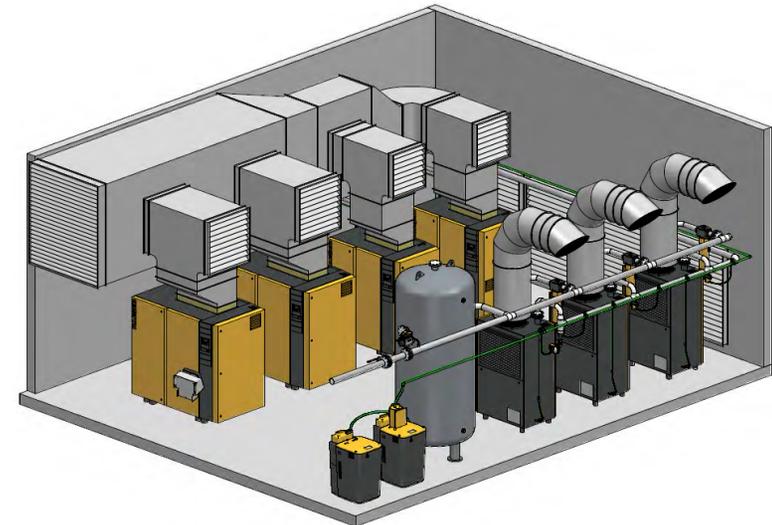
Sample Installation Planning
Examples of room ventilation and ductwork
 Please note the upsizing required for compressor exhaust ducts



2x CSDX 125 / 2x TF 174 / 2x FFG-185D



Duct / Pipe connection CSDX.6



2x CSDX 125 / 2x TF 340 / 2x FFG-185D

Example designs only, not for construction purposes.