

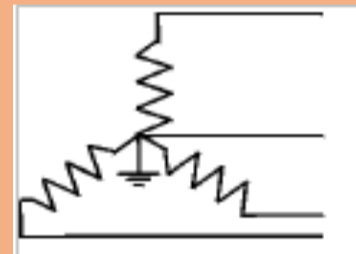
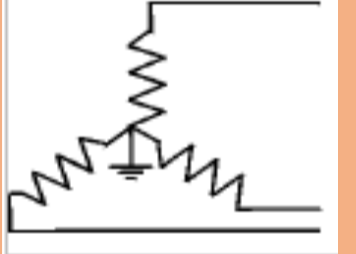


Installation Data Sheet
 Series: 1:1 Direct Drive CSD.5 SFC
 Document No.: TI-DATA-2018-CSD SFC 45 55 75S
 Version: 1.2
 Revision Date: 06/01/2020

Model Rated Pressure [psig]	SFC 45					SFC 55					SFC 75S																																							
	110	125	145	175	190	217	110	125	145	175	190	217	110	125	145	175	190	217																																
I. COOLING DATA																																																		
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																																							
VENTILATION OF COMPRESSOR ROOM																																																		
Air Inlet Opening [sq. ft. free area] (A/C) Z	14.0					16.2					20.5																																							
Air Inlet Opening [sq. ft. free area] (W/C) Z	4.3					4.3					5.4																																							
Solution A (forced ventilation with exhaust fan) as shown in service manual																																																		
Cooling Fan Capacity [CFM] (A/C)	11,183					12,949					15,892																																							
Cooling Fan Capacity [CFM] (W/C)	2,649					2,943					3,532																																							
Solution B (exhaust air used for space heating) as shown in service manual																																																		
Internal Cooling Fan Capacity [CFM] (A/C)	5,709					5,709					6,474																																							
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]	32 x 32					32 x 32					32 x 32																																							
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.																																																		
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>Model shown for reference only Actual Duct size may vary with installation</p> <p>A Exhaust Fan</p> <p>B Exhaust Air Duct</p> <p>Z Inlet Air Opening</p> </div> <div style="width: 35%; text-align: center;"> </div> <div style="width: 30%;"> <p>Recommended machine placement and dimensions</p> <p>Compressor to Duct clearance = 15</p> <p>L Left side clearance = 15</p> <p>R Right side clearance = 40</p> <p>F Front clearance = 50</p> <p>BK Back clearance = 40</p> <p>H Height clearance = 140</p> </div> </div>																																																		
AIR COOLED DATA																																																		
Internal Cooling Fan Capacity [CFM]	5,709					5,709					6,474																																							
Approach Temp. [°F]	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature.					12.6					10.8					9					14.4					12.6					10.8					16.2					14.4					12.6				
Typical Heat Rejected [BTU / HR]	181,500					219,500					280,000																																							
Fan Motor [HP]	1.5					1.5					1.7																																							
WATER COOLED DATA																																																		
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]	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature.					1.8					1.8					1.8																																		
Heat Rejected into Cooling Water [BTU / HR]	178,000					216,000					276,000																																							
Heat Rejected into Cooling Air [BTU / HR]	16,322					19,672					23,699																																							
Max. outlet temperature [°F]	Discharge temperature limited for non-treated water (to prevent calcification).					120					120					120																																		
Temperature differential between inlet water and max. discharge water temperature [°F]	20					50					20					50					20					50																								
Max. inlet water temperature [°F]	104					68					104					68					104					68																								
Min. cooling water flow [gpm]	16.6					6.7					20.2					8.1					25.0					10.0																								
Pressure drop across compressor package [psi] WITHOUT cooling water throttling valve	5.8					2.9					8.7					2.9					13.1					2.9																								
Pressure drop across compressor package [psi] WITH cooling water throttling valve	15					5					20					5					32					6																								



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Rated Pressure [psig]	110	125	145	175	190	217	110	125	145	175	190	217	110	125	145	175	190	217						
II. ELECTRICAL DATA <i>Electrical data may vary in accordance with motor manufacturer's specifications. Motors are EISA compliant.</i>																								
DRIVE MOTOR																								
Motor HP	60						75						100											
Insulation Class	F						F						F											
Standard Voltage	460V/3ph/60Hz						460V/3ph/60Hz						460V/3ph/60Hz											
Full Load Amps [FLA] @ 460V/3ph/60Hz	93						114						152											
Full Load Amps [FLA] @ 575V/3ph/60Hz	CF						CF						CF											
FAN MOTOR (A/C)																								
Insulation Class	F						F						F											
Fan Motor [HP]	1.5						1.5						1.7											
Full Load Amps [FLA] @ 460V/3ph/60Hz	2.5						2.5						2.9											
Full Load Amps [FLA] @ 575V/3ph/60Hz	CF						CF						CF											
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)																								
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>three-phase star (wye); 4-wire; grounded neutral</p> </div> <div style="text-align: center;">  <p>three-phase star (wye); 3-wire; grounded neutral</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	50						50						50											
Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz	CF						CF						CF											
Package Full Load Amps @ 460V/3ph/60Hz [FLA]	94						111						137											
Package Full Load Amps @ 575V/3ph/60Hz [FLA]	CF						CF						CF											
Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz	Dual-element time-delay fuse; based on 2017 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							CF						CF						CF					
Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz	Based on 2017 NEC 110.14(C), 220.3, 310.15, Table 310.15(B)(2)(a), 310.15(B)(3)(a), 430.6, 430.22, 430.24 and 670.4(A). Use multi-strand copper core wire. Size calculated based on 40oC ambient temperature, with 60°C insulation rated wire if package FLA x 1.25 is less than 100A or 75°C temperature rated wire for 100A and larger.						1/0 AWG per phase and ground						2/0 AWG per phase and ground						3/0 AWG per phase and ground					
Recommended Disconnect Wire Size [AWG/kcmil] @ 575V/3ph/60Hz							CF						CF						CF					
TOTAL PACKAGE DATA (W/C)																								
Package Full Load Amps @ 460V/3ph/60Hz [FLA]	92						109						135											
Package Full Load Amps @ 575V/3ph/60Hz [FLA]	CF						CF						CF											



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INSTALLATION and MAINTENANCE DATA																		
A/C with Super Soundproofing [dB(A)]	73						74						75					
W/C with Super Soundproofing [dB(A)]	71						72						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 NPT											
Power Input Conduit Opening(s) [inches]							1 x 2 1/4											
Condensate Drain Connection [NPT]							1/4											
Width [inches]							69 1/4											
Depth [inches]							43 3/4											
Height [inches]							74 3/4 A/C, 76 1/8 W/C											
Floor Space [sq. ft.]							21											
Weight (A/C) [lb]	2,652						2,784						2,829					
Weight (W/C) [lb]	2,652						2,784						2,829					
COMPRESSOR FLUID DATA																		
Fluid Capacity (A/C) [gal]	9.5						9.5						9.5					
Fluid Capacity (W/C) [gal]	9.5						9.5						9.5					
Flow Rate [gal/min]	19.8						19.8						19.8					
Typical Oil Consumption [fl. Oz./100 h]	7.8						9.4						11.6					
Standard Fluid Type	Sigma M-460						Sigma M-460						Sigma M-460					
MAINTENANCE PARTS																		
Air Inlet Filter							6.4149.1 & 6.5993.0											
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							ANAKCSD5SFCS											
Maintenance Kit for Optional 5-year warranty, with food-grade lubricant							ANAKCSD5SFCF											