

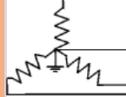
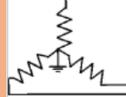


**Installation Data Sheet**  
**Series: 1:1 Direct Drive ASD.4 SFC**  
**Document No.: TI-DATA-2019-SFC 18 22 30S 30**  
**Version: 2.9**  
**Revision Date: 04/17/2023**

Model	SFC 18		SFC 22		SFC 30S					SFC 30					
Rated Pressure [psig]	110	125	110	125	110	125	145	175	190	110	125	145	175	190	217
<b>I. COOLING DATA</b>															
Cooling System Available [Std., Opt.]	A/C		A/C		A/C					A/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	6.5		7.5		8.6					9.7					
<b>Solution A (forced ventilation with exhaust fan) as shown in service manual</b>															
Cooling Fan Capacity [CFM] (A/C)	4709		5,297		6,474					7,652					
<b>Solution B (exhaust air used for space heating) as shown in service manual</b>															
Internal Cooling Fan Capacity [CFM] (A/C)	2649		2,649		2,649					3,119					
Max. Additional Pressure Drop for Ducts [inch Water Column] (A/C)	0.24		0.24		0.24					0.16					
Exhaust Air Opening Reference Dimensions (L x W) [in]	23 x 23		23 x 23		23 x 23					23 x 23					
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>AIR COOLED DATA</b>															
Internal Cooling Fan Capacity [CFM]	2649		2,649		2,649					3,119					
Approach Temp. [°F]	10.8		10.8		12.6		10.8			16.2		12.6			
Typical Heat Rejected [BTU / HR]	78,500		92,000		104,000					125,000					
<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	25		30		40					40					
Insulation Class	F		F		F					F					
Standard Voltage	460V/3ph/60Hz		460V/3ph/60Hz		460V/3ph/60Hz					460V/3ph/60Hz					
Type	SynRM(IES2)		SynRM(IES2)		SynRM(IES2)					SynRM(IES2)					
<b>FAN MOTOR (A/C)</b>															
Insulation Class	F		F		F					F					
Fan Motor [HP], oilcooler   aircooler	0.75		0.75		0.75					0.75					
Full Load Amps [FLA] @ 460V/3ph/60Hz	1.5		1.5		1.5					1.5					
Full Load Amps [FLA] @ 575V/3ph/60Hz	CF		CF		CF					CF					



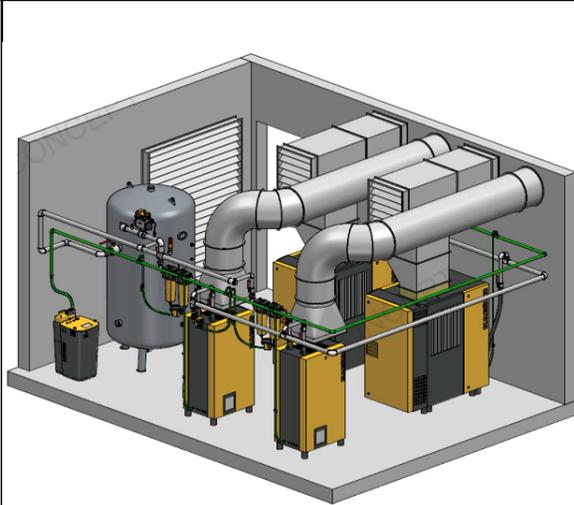
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**Series: 1:1 Direct Drive ASD.4 SFC**  
**Document No.: TI-DATA-2019-SFC 18 22 30S 30**  
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Model	SFC 18		SFC 22		SFC 30S			SFC 30								
	Rated Pressure [psig]		110	125	110	125	110	125	145	175	190	110	125	145	175	190
<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	24	24	24	24	24	24	24	24	24	24
Control Cabinet Class (NEMA)			12	12	12	12	12	12	12	12	12	12	12	12	12	12
Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz	Field installed fuse required, see below*		50	50	50	50	50	50	50	50	50	50	50	50	50	50
Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz	Field installed fuse required, see below*		CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF
Package Full Load Amps @ 460V/3ph/60Hz [FLA]			42	50	54	64										
Package Full Load Amps @ 575V/3ph/60Hz [FLA]			CF	41	CF	49										
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		60	70	80	90										
Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz			CF	60	CF	70										
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.		6 AWG per phase and ground	4 AWG per phase and ground	4 AWG per phase and ground	3 AWG per phase and ground										
Recommended Disconnect Wire Size [AWG/kcmil] @ 575V/3ph/60Hz			CF	6 AWG per phase and ground	CF	4 AWG per phase and ground										
<b>III. 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	69	69	70										
A/C Air Discharge [inches NPT]			1 1/4	1 1/4	1 1/4	1 1/4										
Power Input Conduit Opening(s) [inches]			2 1/4	2 1/4	2 1/4	2 1/4										
Condensate Drain Connection [NPT]			1/4	1/4	1/4	1/4										
Width [inches]			60 5/8	60 5/8	60 5/8	60 5/8										
Depth [inches]			35 3/8	35 3/8	35 3/8	35 3/8										
Height [inches]			60 1/4	60 1/4	60 1/4	60 1/4										
Floor Space [sq. ft.]			14 8/9	14 8/9	14 8/9	14 8/9										
Weight (A/C) [lb]	Weight may vary based on airend selected.		1543	1,565	1,669	1,753										
<b>COMPRESSOR FLUID DATA</b>																
Fluid Capacity (A/C) [gal]						4.2										
Flow Rate [gal/min]						7.9										
Typical Oil Consumption [fl. Oz./100 h]			3.49	4.04	4.58	5.38										
Standard Fluid Type			Sigma S-460													
<b>MAINTENANCE PARTS</b>																
Air Inlet Filter			6.4143.0													
Filter Mat (optional)			6.1943.00050 (2x)													
Filter Mat for Control Cabinet			7.4519.00040 (3x)													
Fluid Filter			6.4778.0													
Fluid Separator Kit			6.3669.0													
Maintenance Kit for Optional 5-year warranty			ANAKASD4SFC5													
Maintenance Kit for Optional 5-year warranty, with food-grade lubricant			ANAKASD4SFCF													

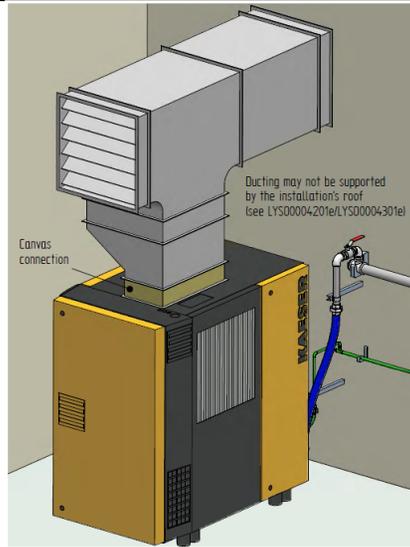
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**SAMPLE SKETCHES**

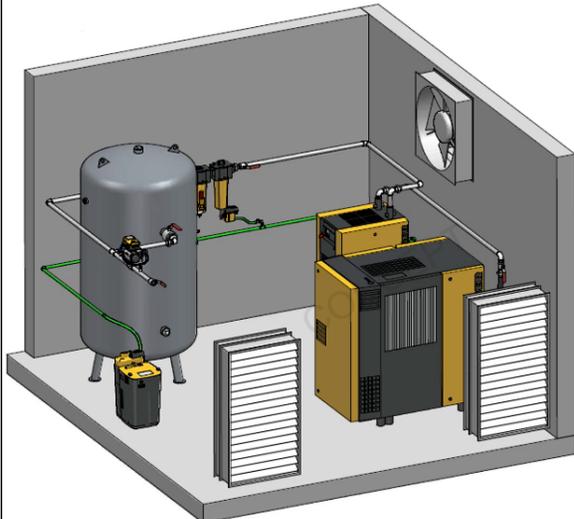
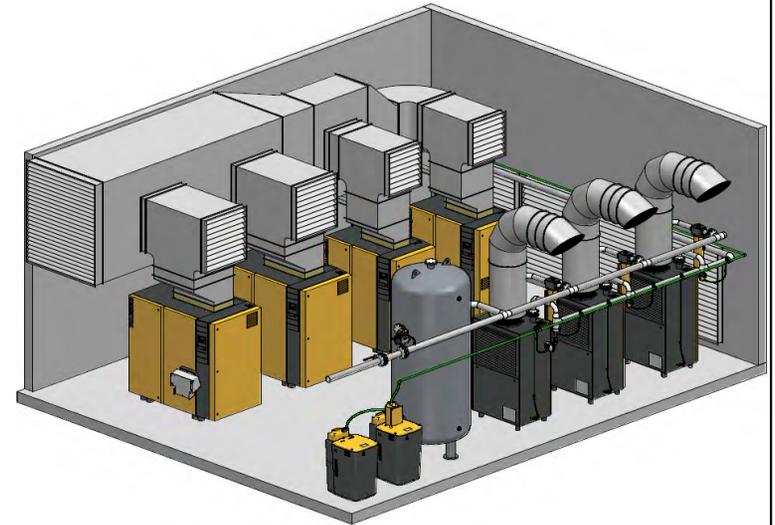
**Sample Installation Planning**  
**Examples of room ventilation and ductwork**  
 Please note the upsizing required for compressor exhaust ducts



2x ASD 40 / 2x TD 67 / 2x F83 KE/KA



Duct / pipe connection ASD



ASD 40 / TD 67 / F83KE/KA

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