



Installation Data Sheet
 Series: 1:1 Belt Drive AS.3 SFC
 Document No.: TI-DATA-2014-AS SFC 18ST 22ST
 Version: 2.7
 Revision Date: 04/17/2023

Model	SFC 18ST						SFC 22ST														
	110	125	145	160	190	217	110	125	145	160	190	217									
Rated Pressure [psig]																					
I. COOLING DATA																					
Cooling System Available [Std., Opt.]	A/C						A/C														
Standard Ambient Temp. Range [°F]	40 - 115						40 - 115														
VENTILATION OF COMPRESSOR ROOM																					
Air Inlet Opening [sq. ft. free area] (A/C) Z	7.5						8.6														
Solution A (forced ventilation with exhaust fan) as shown in service manual																					
Cooling Fan Capacity [CFM] (A/C)	5,886						7,063														
Solution B (exhaust air used for space heating) as shown in service manual																					
Internal Cooling Fan Capacity [CFM] (A/C)	Compressor			Dryer			Compressor			Dryer											
	2,354			883			2,943			883											
Max. Additional Pressure Drop for Ducts [inch Water Column] (A/C)	0.24						0.16														
Exhaust Air Opening Reference Dimensions (L x W) [in]	26 x 26						26 x 26														
<p>Model shown for reference only Actual Duct size may vary with installation</p>																					
Solution A Exhaust Fan																					
Solution B Exhaust Duct																					
Ventilation of Compressor Room Z																					
AIR COOLED DATA																					
Internal Cooling Fan Capacity [CFM]	2,354						2,943														
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		
Typical Heat Rejected [BTU / HR]	81,000						100,000														
Fan Motor [HP], oilcooler/aircooler	0.75						0.75														
II. ELECTRICAL DATA <i>Electrical data may vary in accordance with motor manufacturer's specifications. Motors are EISA compliant.</i>																					
DRIVE MOTOR																					
Motor HP	25						30														
Insulation Class	F						F														
Standard Voltage	460V/3ph/60Hz						460V/3ph/60Hz														
Full Load Amps [FLA] @ 460V/3ph/60Hz	30						34														
FAN MOTOR (A/C)																					
Insulation Class	F						F														
Fan Motor [HP], oilcooler aircooler	0.75						0.75														
Full Load Amps [FLA] @ 460V/3ph/60Hz	1.47						1.47														
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.																					
three-phase star (wye); 4-wire; grounded neutral three-phase star (wye); 3-wire; grounded neutral																					
Continuous Duty [Hours per day]	24						24														
Control Cabinet Class (NEMA)	12						12														
Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz	50						50														
Package Full Load Amps @ 460V/3ph/60Hz [FLA]	48						57														
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						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.						4 AWG per phase and ground														



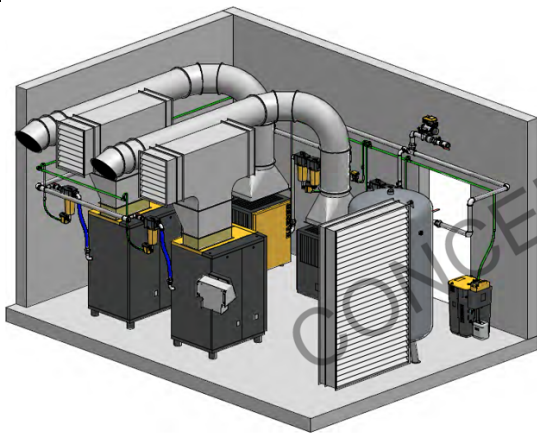
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INSTALLATION and MAINTENANCE DATA												
A/C with Super Soundproofing [dB(A)]	SOUND PRESSURE LEVEL [Measured in dB(A) according to ISO 2151 using ISO 9614-2]					70	72					
A/C Air Discharge [inches NPT or Flange]	1 1/4 NPT					1 1/4 NPT						
Power Input Conduit Opening(s) [inches]	2 1/4					2 1/4						
Condensate Drain Connection [NPT]	1/4					1/4						
Width [inches]	31 1/2					31 1/2						
Depth [inches]	57 1/2					57 1/2						
Height [inches]	60 1/4					60 1/4						
Floor Space [sq. ft.]	12 4/7					12 4/7						
Weight (A/C) [lb]	Weight may vary based on airend selected.					1,378	1,422					
COMPRESSOR FLUID DATA												
Fluid Capacity (A/C) [gal]	2.9					2.9						
Flow Rate [gal/min]	6.3					6.3						
Typical Oil Consumption [fl. Oz./100 h]	3.2					3.7						
Standard Fluid Type	Sigma S-460					Sigma S-460						
MAINTENANCE PARTS												
Air Inlet Filter						6.4163.0						
Filter Mat (optional)						5.6143.0						
Filter Mat for Control Cabinet						6.3572.0 (x2)						
Fluid Filter						6.3463.0						
Fluid Separator Kit						6.3789.1						
Maintenance Kit for Optional 5-year warranty						ANAKAS3SFCS2						
Maintenance Kit for Optional 5-year warranty, with food-grade lubricant						ANAKAS3SFCF2						
DRYER DATA - FOR T MODELS												
Dryer Model	ABT 40					ABT 40						
Maximum Inlet Air Pressure (Compressed Air at Inlet to Dryer) [psig]	232					232						
Nominal Pressure Drop at Rated Flow [psid]	2.8					2.8						
Rated Dewpoint [°F] at Standard Conditions	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature.					38	38					
REFRIGERATION SYSTEM DATA - FOR T MODELS												
Compressor Type	RK5480-U					RK5480-U						
BTU/Refrigeration ASHRAE	7865					7865						
Outlet Air Temperature (Nominal at Rated Conditions) [°F]	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature.					73	73					
Refrigerant Type	R-513A					R-513A						
GWP (Global Warming Potential)	631					631						
CO2 equivalent [t]	0.26					0.26						
Refrigerant Charge [lb]	0.9					0.9						
Air Flow Across Condenser [CFM]	883					883						

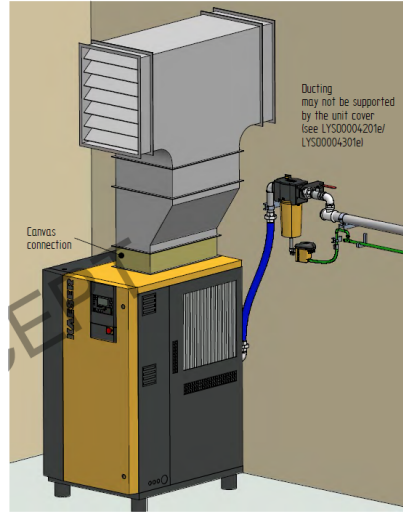
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SAMPLE SKETCHES

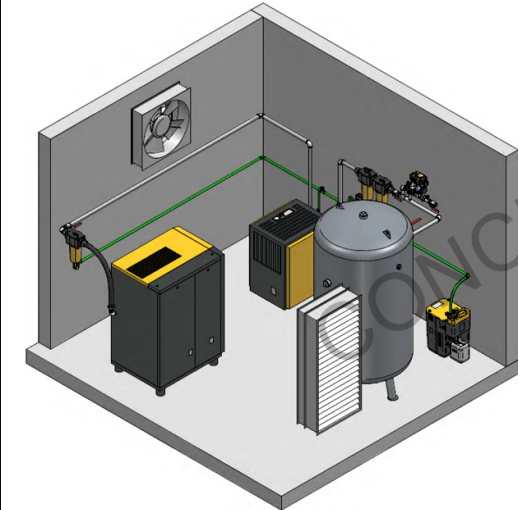
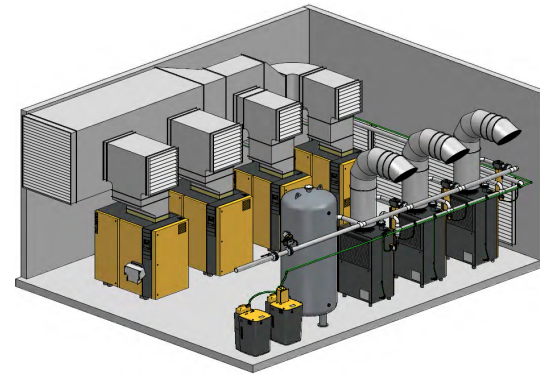
Sample Installation Planning
Examples of room ventilation and ductwork
 Please note the upsizing required for compressor exhaust ducts



2x AS 30 / 2x TC 44 / 2x F46KE/KA Sample Layout



Duct / Pipe connection AS



AS 30 / TC 44 / F46KE/KA Sample Layout

Example designs only, not for construction purposes.