

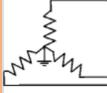


Installation Data Sheet
 Series: 1:1 Belt Drive Airtower
 Document No.: TI-DATA-2008-Airtower 3C-7.5C
 Version: 2.5
 Revision Date: 04/17/2023

Model	3C			4C			5C			7.5C		
Rated Pressure [psig]	125	160		125	160	217	125	160	217	125	160	217
I. COOLING DATA												
Cooling System Available [Std., Opt.]	A/C			A/C			A/C			A/C		
Standard Ambient Temp. Range [°F]	40 - 105			40 - 105			40 - 105			40 - 105		
Ventilation of Compressor Room												
Air Inlet Opening [sq. ft. free area] (A/C) Z	2.2			2.2			2.2			2.2		
Solution A (forced ventilation with exhaust fan) as shown in service manual												
Cooling Fan Capacity [CFM] (A/C)	883			1,001			1,236			1,530		
<p>Model shown for reference only Actual Duct size may vary with installation</p>												
Solution A Exhaust Fan												
Ventilation of Compressor Room Z												
AIR COOLED DATA												
Internal Cooling Fan Capacity [CFM]	895			895			1,030			1,089		
Typical Heat Rejected [BTU / HR]	10,500			13,000			17,000			22,000		
II. ELECTRICAL DATA <i>Electrical data may vary in accordance with motor manufacturer's specifications. Motors are EISA compliant.</i>												
DRIVE MOTOR												
Motor HP	3			4			5			7.5		
Insulation Class	F			F			F			F		
Standard Voltage	208-230-460V/3Ph/60Hz			208-230-460V/3Ph/60Hz			208-230-460V/3Ph/60Hz			208-230-460V/3Ph/60Hz		
Full Load Amps [FLA] @ 208V/3ph/60Hz	8			10.1			14.4			18		
Full Load Amps [FLA] @ 230V/3ph/60Hz	7.4			10.7			14.4			18.8		
Full Load Amps [FLA] @ 460V/3ph/60Hz	3.7			5.1			7.2			9		
Full Load Amps [FLA] @ 575V/3ph/60Hz	3			4.1			5.8			7.2		
FAN MOTOR (A/C)												
Insulation Class	B			B			B			B		
Fan Motor [HP], oilcooler aircooler	0.1			0.1			0.1			0.1		
Full Load Amps [FLA] @ 115V/1ph/60Hz	0.73			0.73			0.73			0.73		



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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			24													
Control Cabinet Class (NEMA)	12					12			12													
Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz	Field installed fuse required, see below*																					
Package Full Load Amps @ 208V/1ph/60Hz [FLA]	-					-			25													
Package Full Load Amps @ 208V/3ph/60Hz [FLA]	9.4					12			15													
Package Full Load Amps @ 230V/1ph/60Hz [FLA]	-					-			23													
Package Full Load Amps @ 230V/3ph/60Hz [FLA]	8.6					11			15													
Package Full Load Amps @ 460V/3ph/60Hz [FLA]	4.3					5.5			7.6													
Package Full Load Amps @ 575V/3ph/60Hz [FLA]	3.5					4.4			6.1													
Recommended Disconnect Fuse Size [Amps] @ 208V/1ph/60Hz	-					-			45													
Recommended Disconnect Fuse Size [Amps] @ 208V/3ph/60Hz	15					15			20													
Recommended Disconnect Fuse Size [Amps] @ 230V/1ph/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																					
Recommended Disconnect Fuse Size [Amps] @ 230V/3ph/60Hz												-					-			40		
Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz												15					15			20		
Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz												10					10			10		
Recommended Disconnect Fuse Size [Amps] @ 208V/3ph/60Hz	6					10			10													
Recommended Disconnect Wire Size [AWG/kcmil] @ 208V/1ph/60Hz	-					-			8 AWG per phase and ground													
Recommended Disconnect Wire Size [AWG/kcmil] @ 208V/3ph/60Hz	14 AWG per phase and ground					14 AWG per phase and ground			12 AWG per phase and ground													
Recommended Disconnect Wire Size [AWG/kcmil] @ 230V/1ph/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.																					
Recommended Disconnect Wire Size [AWG/kcmil] @ 230V/3ph/60Hz												-					-			8 AWG per phase and ground		
Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz												14 AWG per phase and ground					14 AWG per phase and ground			12 AWG per phase and ground		
Recommended Disconnect Wire Size [AWG/kcmil] @ 575V/3ph/60Hz												14 AWG per phase and ground					14 AWG per phase and ground			14 AWG per phase and ground		



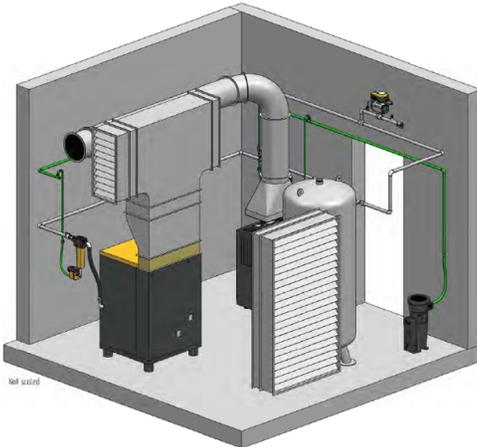
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INSTALLATION and MAINTENANCE DATA											
A/C with Super Soundproofing [dB(A)]	SOUND PRESSURE LEVEL [Measured in dB(A) according to ISO 2151 using ISO 9614-2]					69		70		70	
A/C Air Discharge [inches NPT or Flange]	3/4 NPT		3/4 NPT			3/4 NPT			3/4 NPT		
Power Input Conduit Opening(s) [inches]	1 1/2		1 1/2			1 1/2			1 1/2		
Condensate Drain Connection [NPT]	1/4		1/4			1/4			1/4		
Air Receiver Tank Size [gal]	56.8		56.8			56.8			56.8		
Width [inches]	24 3/8		24 3/8			24 3/8			24 3/8		
Depth [inches]	38 5/8		38 5/8			38 5/8			38 5/8		
Height [inches]	58		58			58			58		
Floor Space [sq. ft.]	6 1/2		6 1/2			6 1/2			6 1/2		
Weight (A/C) [lb]	Weight may vary based on airend selected.					628		628		639	
COMPRESSOR FLUID DATA											
Fluid Capacity (A/C) [qt]	3		3			3			3		
Flow Rate [gal/min]	1.7		1.7			1.7			1.7		
Typical Oil Consumption [fl. Oz./100 h]	0.3		0.4			0.53			0.7		
Standard Fluid Type	Sigma S-460		Sigma S-460			Sigma S-460			Sigma S-460		
MAINTENANCE PARTS											
Air Inlet Filter						6.4212.0					
Filter Mat (optional)						5.0857.0					
Fluid Filter						6.3461.1					
Fluid Separator Kit						6.4334.1					
Maintenance Kit for Optional 5-year warranty						AN5YRKTAIRT					
Maintenance Kit for Optional 5-year warranty, with food-grade lubricant						AN5YRKTAIRTF					
DRYER DATA - FOR T MODELS											
Dryer Model	CT4		CT4			CT8	CT4		CT8	CT4	
Standard Voltage	115/1/60		115/1/60			115/1/60		115/1/60			
Full Load Amps [FLA]	3.2		3.2			5.1	3.2		5.1	3.2	
Recommended Disconnect Wire Size [AWG/kcmil]	14 AWG per phase and ground		14 AWG per phase and ground			14 AWG per phase and ground		14 AWG per phase and ground			
Recommended Disconnect Fuse Size [Amps]	15		15			15		15			
Maximum Inlet Air Pressure (Compressed Air at Inlet to Dryer) [psig]	232		232			232		232			
Nominal Pressure Drop at Rated Flow [psid]	3		3			3		3			
Rated Dewpoint [°F] at Standard Conditions	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature.					43		43		43	
REFRIGERATION SYSTEM DATA - FOR T MODELS											
Compressor Type	GL 60 TG		GL 60 TG			GL 60 TG		GL 60 TG			
BTU/Refrigeration ASHRAE	1750		1750			1750		1750			
Outlet Air Temperature (Nominal at Rated Conditions) [°F]	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature.					85		85		85	
Refrigerant Type	R-513A		R-513A			R-513A		R-513A			
GWP (Global Warming Potential)	631		631			631		631			
CO2 equivalent [t]	0.1		0.1			0.2	0.1		0.2	0.1	
Refrigerant Charge [lb]	0.37		0.37			0.55	0.37		0.55	0.37	
Air Flow Across Condenser [CFM]	306		306			441		441			

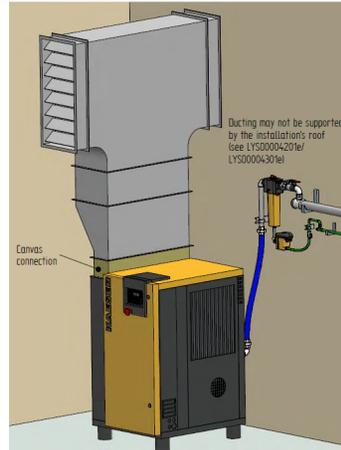
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Rated Pressure [psig]	125	160		125	160	217	125	160	217	125	160	217

SAMPLE SKETCHES

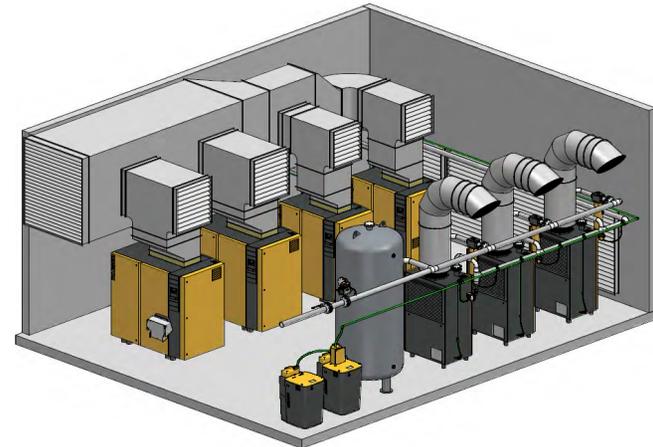
Sample Installation Planning
Examples of room ventilation and ductwork
 Please note the upsizing required for compressor exhaust ducts



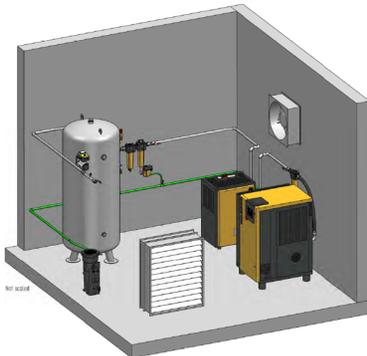
SK 20 / TB 26 / F26KE / F26KA Sample Layout



Duct / Pipe connection SX



Example designs only, not for construction purposes.



SK 20 / TB 26 / F26KE / F26KA Sample Layout