

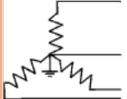
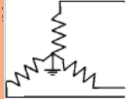


Installation Data Sheet
 Series: 1:1 Direct Drive CSDX.6
 Document No.: TI-DATA-2023-CSD 145T 175T
 Preliminary Data Release Date: 05/30/2023
 Version 1.1

Model Rated Pressure [psig]	CSD 145 T					CSD 175 T					
	100	110	125	150	175	100	110	125	150	175	217
I. COOLING DATA											
Cooling System Available [Std., Opt.]	AC / WC					AC / WC					
Standard Ambient Temp. Range [°F]	40-115					40-115					
VENTILATION OF COMPRESSOR ROOM											
Air Inlet Opening [sq. ft. free area] (A/C) Z	19.4					23.7					
Air Inlet Opening [sq. ft. free area] (W/C) Z	3.2					3.2					
Solution A (forced ventilation with exhaust fan) as shown in service manual											
Cooling Fan Capacity [CFM] (A/C)	14,714					17,657					
Cooling Fan Capacity [CFM] (W/C)	2,354					2,766					
Solution B (exhaust air used for space heating) as shown in service manual											
Internal Cooling Fan Capacity [CFM] (A/C)	7,063					8,240					
Internal Cooling Fan Capacity [CFM] (W/C)	1,001					1,001					
Max. Additional Pressure Drop for Ducts [inch Water Column] (A/C) (W/C)	0.24 / 0.12					0.24 / 0.12					
Exhaust Air Opening Reference Dimensions (L x W) [in]	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. 39 x 39					39 x 39					
Model shown for reference only Actual Duct size may vary with installation											
Solution A Exhaust Fan											
Solution B Exhaust Duct											
Ventilation of Compressor Room Z											
<i>Coming Soon</i>											
AIR COOLED DATA											
Internal Cooling Fan Capacity [CFM]	7,063					8,240					
Approach Temp. [°F]	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature. 14.4 12.6 10.8					18 14.4 12.6 10.8 9					
Typical Heat Rejected [BTU / HR]	Based on highest input kW of machine. 319,500					378,500					
Fan Motor [HP]	4.0					4.0					
WATER COOLED DATA											
Type of heat exchangers	stainless steel, plate type					stainless steel, plate type					
Internal Cooling Fan Capacity [CFM]	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					
Typical Heat Rejected into Cooling Water [BTU / HR]	Based on highest input kW of machine. 301,000					358,500					
Heat Rejected into Cooling Air [BTU / HR]	TBD					TBD					
Max. outlet temperature [°F]	Discharge temperature limited for non-treated water (to prevent calcification). TBD					TBD					
Temperature differential between inlet water and max. discharge water temperature [°F]	TBD		TBD		TBD		TBD		TBD		
Max. inlet water temperature [°F]	TBD		TBD		TBD		TBD		TBD		
Min. cooling water flow [gpm]	TBD		TBD		TBD		TBD		TBD		
Pressure drop across compressor package [psi] WITHOUT cooling water throttling valve	TBD		TBD		TBD		TBD		TBD		
Pressure drop across compressor package [psi] WITH cooling water throttling valve	TBD		TBD		TBD		TBD		TBD		



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II. ELECTRICAL DATA <i>Electrical data may vary in accordance with motor manufacturer's specifications. Motors are EISA compliant.</i>												
DRIVE MOTOR												
Motor HP				100						125		
Insulation Class				F						F		
Standard Voltage				460/3/60						460/3/60		
Full Load Amps [FLA] @ 230V/3ph/60Hz				235						N/A		
Full Load Amps [FLA] @ 460V/3ph/60Hz				114						135		
Full Load Amps [FLA] @ 575V/3ph/60Hz				97						109		
FAN MOTOR (A/C)												
Insulation Class				F						F		
Fan Motor [HP]				4.0						4.0		
Full Load Amps [FLA] @ 230V/3ph/60Hz				TBD						N/A		
Full Load Amps [FLA] @ 460V/3ph/60Hz				TBD						TBD		
Full Load Amps [FLA] @ 575V/3ph/60Hz				TBD						TBD		
FAN MOTOR (W/C)												
Insulation Class				F						F		
Fan Motor [HP], Single Speed				0.13						0.13		
Full Load Amps [FLA] @ 230V/3ph/60Hz				1.45						N/A		
Full Load Amps [FLA] @ 460V/3ph/60Hz				1.45						1.45		
Full Load Amps [FLA] @ 575V/3ph/60Hz				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.						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				Field installed fuse required, see below*			50					50
Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz				Field installed fuse required, see below*			50					50
Package Full Load Amps @ 230V/3ph/60Hz [FLA]							301					N/A
Package Full Load Amps @ 460V/3ph/60Hz [FLA]							147					172
Package Full Load Amps @ 575V/3ph/60Hz [FLA]							124					138
Recommended Disconnect Fuse Size [Amps] @ 230V/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			450					N/A
Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz							200			250		
Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz							175			200		
Recommended Disconnect Wire Size [AWG/kcmil] @ 230V/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.			2 x 4/0 AWG per phase and ground		N/A			
Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz							4/0 AWG per phase and ground		2 x 1/0 AWG per phase and ground			
Recommended Disconnect Wire Size [AWG/kcmil] @ 575V/3ph/60Hz							3/0 AWG per phase and ground		3/0 AWG per phase and ground			
TOTAL PACKAGE DATA (W/C)												
Package Full Load Amps @ 230V/3ph/60Hz [FLA]							294					-
Package Full Load Amps @ 460V/3ph/60Hz [FLA]							143					168
Package Full Load Amps @ 575V/3ph/60Hz [FLA]							122					136



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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]					72					76	
W/C with Super Soundproofing [dB(A)]						72					76	
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]						2-1/4 NPT						
Condensate Drain Connection [NPT]						1/4 NPT						
Width [inches]						98.25						
Depth [inches]						50.5						
Height [inches]						76.75						
Floor Space [sq. ft.]						34 4/9						
Weight (A/C) [lb]	Weight may vary based on airend selected.					4,784					5,093	
Weight (W/C) [lb]						4,784					5,093	
COMPRESSOR FLUID DATA												
Fluid Capacity (A/C) [gal]						14.5					14.5	
Fluid Capacity (W/C) [gal]						13.2					13.2	
Flow Rate [gal/min]						34.3					34.3	
Typical Oil Consumption [fl. Oz./100 h]						14.8					17.5	
Standard Fluid Type						S-460					S-460	
MAINTENANCE PARTS												
Air Inlet Filter						4E0302.0						
Filter Mat (optional)						6.1945.0						
Filter Mat for Control Cabinet						7.4519.0 (x2)						
Fluid Filter						6.4693.0						
Fluid Separator Kit						6.3623.0						
Maintenance Kit for Optional 5-year warranty						ANAKCSDX6S						
Maintenance Kit for Optional 5-year warranty, with food-grade lubricant						ANAKCSDX6F						
DRYER DATA - FOR T MODELS												
Dryer Model						ABT 200					ABT 200	
Maximum Inlet Air Pressure (Compressed Air at Inlet to Dryer) [psig]						232					232	
Nominal Pressure Drop at Rated Flow [psid]						TBD					TBD	
Rated Pressure Dewpoint [°F] at Standard Conditions	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature.					37.4					37.4	
Pressure Dewpoint per ISO 8573-1						TBD						
REFRIGERATION SYSTEM DATA - FOR T MODELS												
Compressor Type						TBD					TBD	
BTU/Refrigeration ASHRAE						TBD					TBD	
Outlet Air Temperature (Nominal at Rated Conditions) [°F]	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature.					TBD					TBD	
Refrigerant Type						R-513A					R-513A	
GWP (Global Warming Potential)						631					631	
CO2 equivalent [t]						0.69					0.69	
Refrigerant Charge [lb]						2.4					2.4	
Air Flow Across Condenser [CFM]						2,530					2,530	

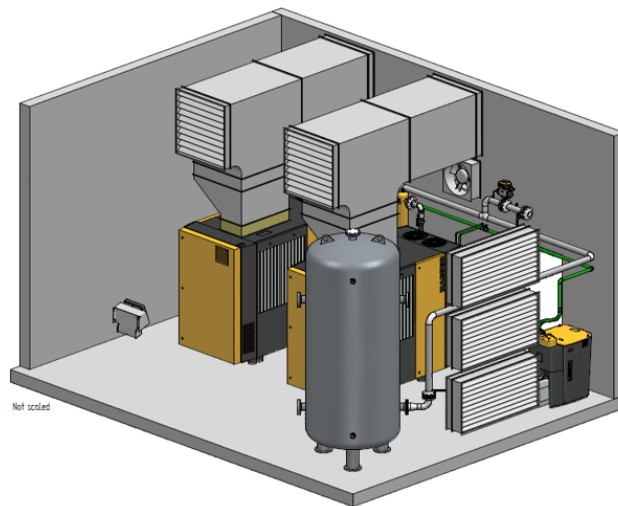


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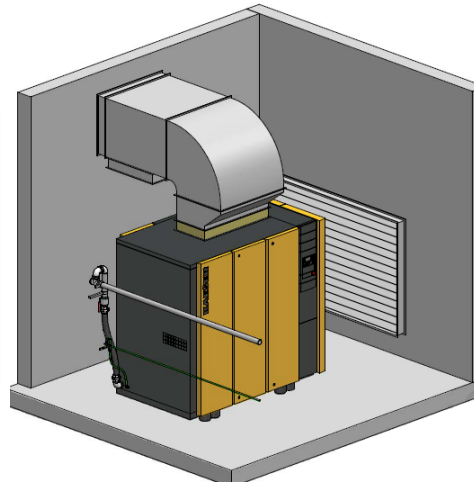
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Rated Pressure [psig]											

SAMPLE SKETCHES

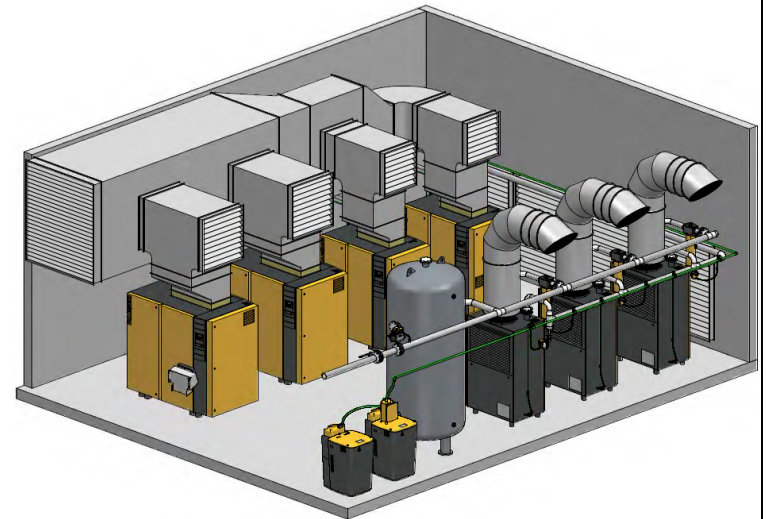
Sample Installation Planning
Examples of room ventilation and ductwork
Please note the upsizing required for compressor exhaust ducts



2x CSD 125 T / 2x FE-185D



Duct / Pipe connection CSDX.6



Example designs only, not for construction purposes.