



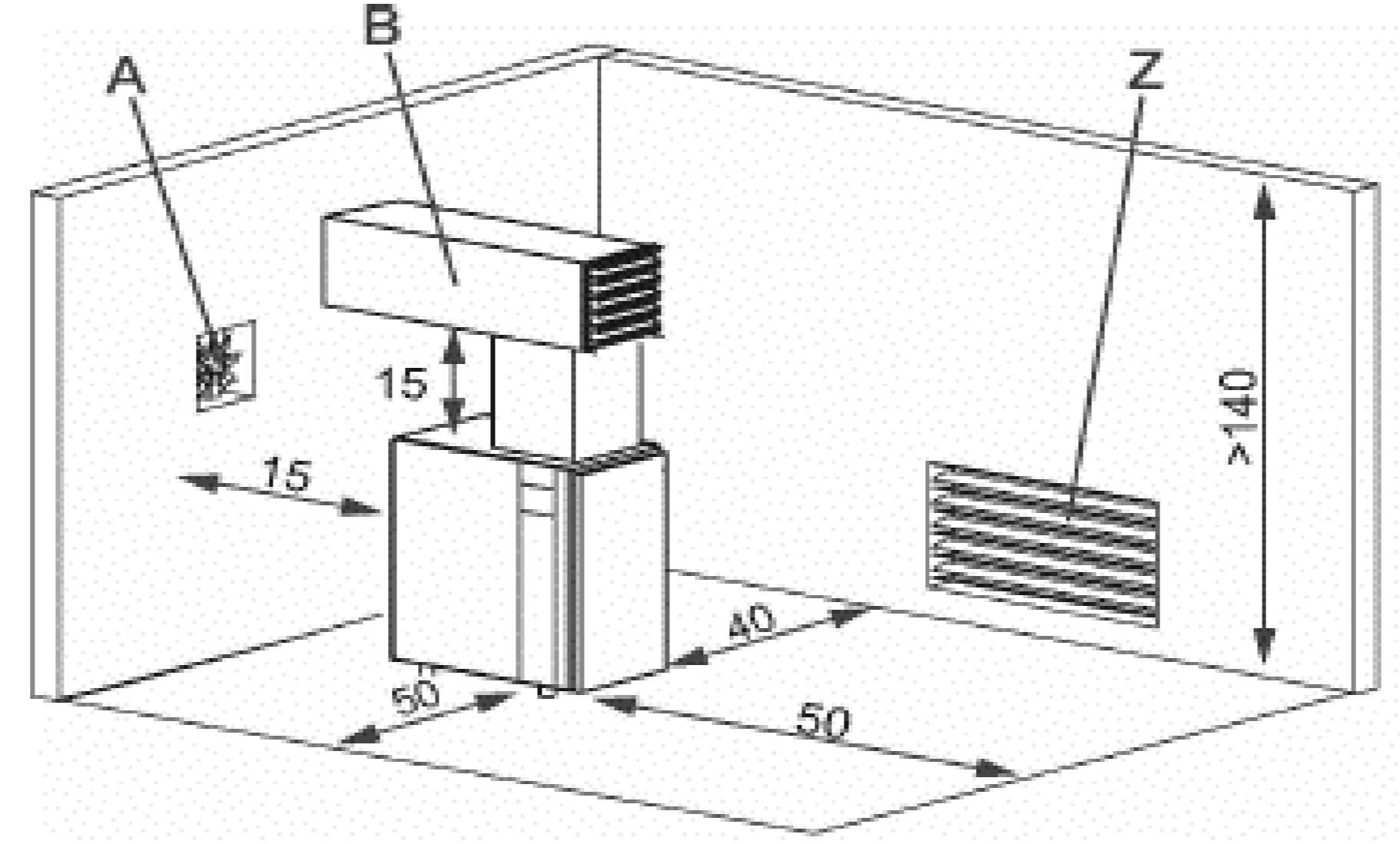
Installation Data Sheet
 Series: 1:1 Direct Drive CSDX.5
 Document No.: TI-DATA-2018-CSD 100T 125T
 Version: 1.2
 Revision Date: 06/01/2020

Model	CSD 100T						CSD 125T					
	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					
Standard Ambient Temp. Range [°F]	40 - 115						40 - 115					
VENTILATION OF COMPRESSOR ROOM												
Air Inlet Opening [sq. ft. free area] (A/C) Z	25						29					
Air Inlet Opening [sq. ft. free area] (W/C) Z	8.6						8.6					
Solution A (forced ventilation with exhaust fan) as shown in service manual												
Cooling Fan Capacity [CFM] (A/C)	18,834						21,777					
Cooling Fan Capacity [CFM] (W/C)	6,474						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		
	6,474			2,943			7,651			2,943		
Internal Cooling Fan Capacity [CFM] (W/C)	3,943						3,943					
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.						40 x 40					

Model shown for reference only
 Actual Duct size may vary with installation

- A Exhaust Fan
- B Exhaust Air Duct
- Z Inlet Air Opening



Recommended machine placement and dimensions		inches
	Compressor to Duct clearance =	15
L	Left side clearance =	15
R	Right side clearance =	50
F	Front clearance =	50
BK	Back clearance =	40
H	Height clearance =	140

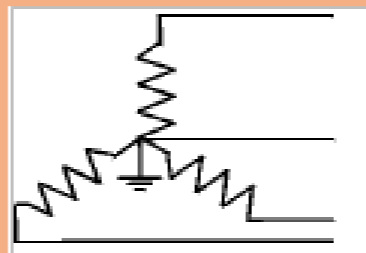
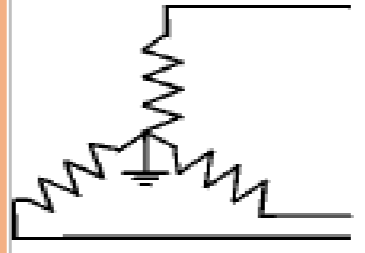
AIR COOLED DATA												
Internal Cooling Fan Capacity [CFM]	6,474						7,651					
Approach Temp. [°F]	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature.						12.6 10.8 9 12.6 10.8 9					
Typical Heat Rejected [BTU / HR]	314,000						368,000					
Fan Motor [HP]	1.3						1.9					
WATER COOLED DATA												
Type of heat exchangers	stainless steel, plate type						stainless steel, plate type					
Internal Cooling Fan Capacity [CFM]	3,943						3,943					
Approach Temp. [°F]	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature.						5.4 5.4					
Heat Rejected into Cooling Water [BTU / HR]	318,000						371,500					
Heat Rejected into Cooling Air [BTU / HR]	27,347						31,745					
Max. outlet temperature [°F]	Discharge temperature limited for non-treated water (to prevent calcification).						122 122					
Temperature differential between inlet water and max. discharge water temperature [°F]	20			50			20			50		
Max. inlet water temperature [°F]	104			68			104			68		
Min. cooling water flow [gpm]	30			12			35			14		
Pressure drop across compressor package [psi] WITHOUT cooling water throttling valve	7			2			9			2		
Pressure drop across compressor package [psi] WITH cooling water throttling valve	36			7			48			9		



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II. ELECTRICAL DATA *Electrical data may vary in accordance with motor manufacturer's specifications. Motors are EISA compliant.*

DRIVE MOTOR													
Motor HP	100						125						
Insulation Class	F						F						
Standard Voltage	460V/3ph/60Hz						460V/3ph/60Hz						
Full Load Amps [FLA] @ 230V/3ph/60Hz	235						270						
Full Load Amps [FLA] @ 460V/3ph/60Hz	114						135						
Full Load Amps [FLA] @ 575V/3ph/60Hz	97						109						
FAN MOTOR (A/C)													
Enclosure Type	TEFC						TEFC						
Insulation Class	F						F						
Fan Motor [HP]	1.3						1.9						
Full Load Amps [FLA] @ 230V/3ph/60Hz	6.0						6.0						
Full Load Amps [FLA] @ 460V/3ph/60Hz	2.9						2.9						
Full Load Amps [FLA] @ 575V/3ph/60Hz	2.5						2.5						
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						1.45						
Full Load Amps [FLA] @ 460V/3ph/60Hz	1.45						1.45						
Full Load Amps [FLA] @ 575V/3ph/60Hz	1.45						1.45						
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						
Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz	50						50						
Package Full Load Amps @ 230V/3ph/60Hz [FLA]	292						328						
Package Full Load Amps @ 460V/3ph/60Hz [FLA]	142						164						
Package Full Load Amps @ 575V/3ph/60Hz [FLA]	120						132						
Recommended Disconnect Fuse Size [Amps] @ 230V/3ph/60Hz	Dual-element time-delay fuse; based on 2017 NEC 240.6, 430.52, and Tables 430.52, 430.248, and 430.250.						400						
Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz							200						
Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz							175						
Recommended Disconnect Wire Size [AWG/kcmil] @ 230V/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 40°C 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.						2 x 4/0 AWG per phase						
Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz							2 x 2 AWG per phase and ground						
Recommended Disconnect Wire Size [AWG/kcmil] @ 575V/3ph/60Hz							2/0 AWG per phase and ground						
TOTAL PACKAGE DATA (W/C)													
Package Full Load Amps @ 230V/3ph/60Hz [FLA]	287						323						
Package Full Load Amps @ 460V/3ph/60Hz [FLA]	140						162						
Package Full Load Amps @ 575V/3ph/60Hz [FLA]	119						131						



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INSTALLATION and MAINTENANCE DATA												
A/C with Super Soundproofing [dB(A)]	72						73					
W/C with Super Soundproofing [dB(A)]	71						72					
A/C Air Discharge [inches NPT or Flange]	2 NPT						2 NPT					
W/C Air Discharge [inches NPT or Flange]	2 NPT						2 NPT					
Cooling Water Connection [inches NPT or Flange]	2 x 1 1/4 NPT						2 x 1 1/4 NPT					
Power Input Conduit Opening(s) [inches]	2 x 2 1/4						2 x 2 1/4					
Condensate Drain Connection [NPT]	2 @ 1/4						2 @ 1/4					
Width [inches]	98 3/4						98 3/4					
Depth [inches]	50 3/4						50 3/4					
Height [inches]	76 3/4 A/C, 78 1/8 W/C						76 3/4 A/C, 78 1/8 W/C					
Floor Space [sq. ft.]	34 4/5						34 4/5					
Weight (A/C) [lb]	4,310						4,729					
Weight (W/C) [lb]	4,310						4,729					
COMPRESSOR FLUID DATA												
Fluid Capacity (A/C) [gal]	13.7						13.7					
Fluid Capacity (W/C) [gal]	13.2						13.2					
Flow Rate [gal/min]	33						33					
Typical Oil Consumption [fl. Oz./100 h]	12.3						14.1					
Standard Fluid Type	Sigma M-460						Sigma M-460					
MAINTENANCE PARTS												
Air Inlet Filter	6.4148.1 + 6.4993.0						6.4148.1 + 6.4993.0					
Filter Mat (optional)	6.1945.0 (2x)						6.1945.0 (2x)					
Filter Mat for Control Cabinet	7.4519.0 (2x)						7.4519.0 (2x)					
Fluid Filter	6.4693.0						6.4693.0					
Fluid Separator Kit	6.3623.0						6.3623.0					
Maintenance Kit for Optional 5-year warranty	ANAKCSDX5S						ANAKCSDX5S					
Maintenance Kit for Optional 5-year warranty, with food-grade lubricant	ANAKCSDX5F						ANAKCSDX5F					
DRYER DATA - FOR T MODELS												
Dryer Model	ABT 165						ABT 165					
Maximum Inlet Air Pressure (Compressed Air at Inlet to Dryer) [psig]	232						232					
Nominal Pressure Drop at Rated Flow [psid]	1.5						1.5					
Rated Pressure Dewpoint [°F] at Standard Conditions	38						38					
Pressure Dewpoint per ISO 8573-1	Class 4 - 6 based on ambient conditions.						Class 4 - 6 based on ambient conditions.					
REFRIGERATION SYSTEM DATA - FOR T MODELS												
Compressor Type	MLZ021T4LP9A						MLZ021T4LP9A					
BTU/Refrigeration ASHRAE	19,900						19,900					
Outlet Air Temperature (Nominal at Rated Conditions) [°F]	78						78					
Refrigerant Type	R-513A						R-513A					
GWP (Global Warming Potential)	631						631					
CO2 equivalent [t]	1.1						1.1					
Refrigerant Charge [lb]	4.0						4.0					
Air Flow Across Condenser [CFM]	2,943						2,943					