

Installation Data Sheet

Series: 1:1 Direct Drive CSDX.5 SFC Document No.: TI-DATA-2018-SFC 90ST 110ST

Version: 1.3 Revision Date: 06/01/2020

	Revision Date: 06/01/2020											
Model Detect Pressure Insiel			SFC 90ST	100		440	405	SFC 1	Т	100 01=		
	ed Pressure [psig]	110 125 1	45 175	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 - 1	115			
VENTILATION OF COMPRESSOR ROOM												
Air Inlet Opening [sq. ft. free area] (A/C) Z			25.8					30.1				
Air Inlet Opening [sq. ft. free area] (W/C) Z			9.7					10.	8			
Solution A (forced ventilation with exhaust fan) as shown in se	rvice manual											
Cooling Fan Capacity [CFM] (A/C)			20,012									
Cooling Fan Capacity [CFM] (W/C)			7,652					8,24	40			
Solution B (exhaust air used for space heating) as shown in se	rvice manual											
Internal Cooling For Consoity [CEM] (A/C)		Compressor		Dryer		Co	mpresso	r		Dryer		
Internal Cooling Fan Capacity [CFM] (A/C)		6,474	2943		7,651				2943			
Internal Cooling Fan Capacity [CFM] (W/C)			3,943					3,94	43			
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		40 x 40					40 x	40			
Exhaust All Opening Reference Dimensions (E x vv) [in]	installation based on actual length, number and type of bends, accessories etc.		40 X 40					40 1	40			
Model shown for reference only	B		Re	commen	ded mack	hine plac	ement a	nd				
Actual Duct size may vary with installation	A J				dimens	ensions				inches		
					Compres	sor to Du	uct clear	ance =		15		
			L			Left si	ide clear	ance =		15		
		R										
A Exhaust Fan						Right side clearance =				50		
A Exhaust Fah	- 15 T									50		
B Exhaust Air Duct		F		Front clear			earance =		50			
	40											
Z Inlet Air Opening			ВК				Back clearance =			40		
	50											
			н			Height clearance =				140		
			п			пец	grit Ciear	ance =		140		
AIR COOLED DATA												
Internal Cooling Fan Capacity [CFM]			6,474					7,65	51			
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]			307,500					371,0	000			
Fan Motor [HP]			1.3					1.9	9			
WATER COOLED DATA												
Type of heat exchangers		stainles		stainless steel, plate type				ype				
Internal Cooling Fan Capacity [CFM]		3943				3943				y 1		
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]			305,000			367,500				00		
Heat Rejected into Cooling Air [BTU / HR]			25,180					26,834				
Max. outlet temperature [°F]	Discharge temperature limited for non-treated water (to prevent calcification).	122			12							
Temperature differential between inlet water and max. discharge w		20			50 20					50		
Max. inlet water temperature [°F]			104 68				104		68			
Min. cooling water flow [gpm]				12			35	14				
Pressure drop across compressor package [psi] WITHOUT cooling water throttling valve		30 9					11.6					
Pressure drop across compressor package [psi] WITH cooling water throttling valve		28		7			38		8			
	or an ottoring vario	20		•			33					

KAESER COMPRESSORS

Installation Data Sheet

Series: 1:1 Direct Drive CSDX.5 SFC Document No.: TI-DATA-2018-SFC 90ST 110ST

Version: 1.3

Mode Ratod Prosuro [psig] 10 125 145 175 190 217 10 125 145 175 190 217 10 218 145 180 218 180 218 180 218 180 218 180 218 180 218 180 218 180 218 180 218 180 218 180 218 180 218 180 218 180	Version: 1.3 Revision Date: 06/01/2020															
Record DATA Description			SFC	90ST					SFC	110ST						
SANSE MOTOR	Rated Pressure [psig]			125 145	175	190	217	110	125	145	175	190	0 217			
Motor HP	II. ELECTRICAL DATA	Electrical data may vary in accordance with motor manufacturer's specifications. Motors are El	ISA complian	t.												
Motor HP	DRIVE MOTOR															
F					100					1	25					
Sandard Voltage			F						F							
Full Load Amps [FLA] @ 459V3ghv60Hz 156 188 18			460V/3ph/60Hz						460V/3ph/60Hz							
Full Load Amps FLA @ 575V/3ph90Hz F	<u> </u>		· · · · · · · · · · · · · · · · · · ·						-							
Fam Mortor (IPC) 1.3 1.9 1.9 1.3 1.9 1.9 1.0 1.9 1.0 1.9 1.0 1.9 1.0																
Insulation Class F																
Fam Motor [HP] 1.3 1.9					F						F					
Full Load Amps FLA @ 579/3p/60Pt2 2.9 2.9 CF				1.3						1.9						
Full Load Amps FLA @ 575V/3ph/60Hz FF											2.9					
Fam Mortor (NVC)																
Fam Motor [HP], Single Speed																
Full Load Amps [FLA] @ 460V/3ph/60Hz Full Load Amps [FLA] @ 460V/3ph/60Hz 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 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. Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmii] @ 460V/3ph/60Hz Recommen			F						F							
Full Load Amps [FLA] @ 460V/3ph/60Hz Full Load Amps [FLA] @ 460V/3ph/60Hz 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 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. Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmii] @ 460V/3ph/60Hz Recommen	Fan Motor [HP], Single Speed		0.13						0.13							
Full Load Amps [FLA] @ 575V/3ph/60Hz TOTAL PACKAGE DATA (NC) 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. Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Package Full Load Amps @ 460V/3ph/60Hz [FLA] Dual-element time-delay fuse; based on 2017 NEC 240.6, 430.52, and Tables 430.52, 430.248, and 490.220. 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ Based on 2017 NEC 110.14(C), 220.3, 310.15. Table 310.15(B)(2)(a), 310.15(B)(3)(a), 430.8, 430.22. 460V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 500 CF			1.45													
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 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. Continuous Duty [Hours per day] Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 575V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 430 24 24 24 24 24 25 CF CF CF CF CF CF CF CF CF C			CF													
(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. Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz CF CF Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Associated and Size [Amps] @ 575V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 430.24 and 670.4(A). Use multi-strand copper core wire. Size calculated based on 400C ambient temperature, with 60°C insulation rated wire for 100A and larger. TOTAL PACKAGE DATA (WC) Package Full Load Amps @ 460V/3ph/60Hz [FLA] 183 **Wire; grounded neutral wire for 100A and larger. **Awire; grounded neutral star (wye), 4-wire; grounded neutral supplies are not suitable. 24 24 24 25 CF CF CF CF CF CF CF CF CF C																
Control Cabinet Class (NEMA) 12 12 12 12 15 15 15 15	(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							The second secon								
Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz 50 50 50 50 50 50 50 5	(open) delta or three-phase star with non-grounded neutral.	The machine requires a symmetrical three-phase power supply transformer with a WYE cal three-phase supply the phase angles and voltages are all the same. Other power		4-wire	;				\\\	3-wire;			e);			
Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz FLA 156 184 184	(open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric	The machine requires a symmetrical three-phase power supply transformer with a WYE cal three-phase supply the phase angles and voltages are all the same. Other power		4-wire ground	; ded neutr			Luz T	<u></u>	3-wire; ground	led neut		e);			
Package Full Load Amps @ 460V/3ph/60Hz [FLA] 156 184 Package Full Load Amps @ 575V/3ph/60Hz [FLA] CF CF Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 430.250. For Sylvaph/60Hz Size [AWG/kcmil] @ 430.248 and 670.4(A). Use multi-strand copper core wire. Size aclaulated based on 400C 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. For Sylvaph/60Hz FLA]	(open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day]	The machine requires a symmetrical three-phase power supply transformer with a WYE cal three-phase supply the phase angles and voltages are all the same. Other power		4-wire ground	; ded neutr			74 T	<u></u>	3-wire; ground	led neut		e);			
Package Full Load Amps @ 575V/3ph/60Hz FLA Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 430.250. Recommended Disconnect Wire Size [AWG/kcmil] @ 430.24 and 670.4(A), Use multi-strand copper core wire, Size calculated based on 400C 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. Package Full Load Amps @ 460V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz CF	 (open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz 	The machine requires a symmetrical three-phase power supply transformer with a WYE cal three-phase supply the phase angles and voltages are all the same. Other power		4-wire ground	; ded neutr 24 12				<u> </u>	3-wire; ground	l ed neut 24 12		e);			
Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 430.250. 575V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 430.24 and 670.4(A). Use multi-strand copper core wire. Size calculated based on 400 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. Package Full Load Amps @ 460V/3ph/60Hz [FLA] Dual-element time-delay fuse; based on 2017 NEC 240.6, 430.52, and Tables 430.52, 430.248,and 430.250. CF CF CF CF CF CF CF CF CF C	 (open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz 	The machine requires a symmetrical three-phase power supply transformer with a WYE cal three-phase supply the phase angles and voltages are all the same. Other power		4-wire ground	; ded neutr 24 12 50 CF				<u></u>	3-wire;	led neut 24 12 50 CF		e);			
A60V/3ph/60Hz Dual-element time-delay fuse; based on 2017 NEC 240.6, 430.52, and Tables 430.52, 430.248, and A30.250. S75V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ A60V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ A60V/3ph/60Hz A30.24 and 670.4(A). Use multi-strand copper core wire. Size calculated based on 400C 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. A40 AWG per phase and ground	(open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA]	The machine requires a symmetrical three-phase power supply transformer with a WYE cal three-phase supply the phase angles and voltages are all the same. Other power		4-wire ground	; ded neutr 24 12 50 CF 156				<u></u>	3-wire; ground	24 12 50 CF 84		e);			
A6UV/3ph/60Hz Dual-element time-delay fuse; based on 2017 NEC 240.6, 430.52, and Tables 430.52, 430.248, and 430.250. CF CF	(open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Package Full Load Amps @ 575V/3ph/60Hz [FLA]	The machine requires a symmetrical three-phase power supply transformer with a WYE cal three-phase supply the phase angles and voltages are all the same. Other power		4-wire ground	; ded neutr 24 12 50 CF 156				<u></u>	3-wire; ground	24 12 50 CF 84		e);			
S75V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 430.24 and 670.4(A). Use multi-strand copper core wire. Size calculated based on 400C 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. TOTAL PACKAGE DATA (W/C) Package Full Load Amps @ 460V/3ph/60Hz [FLA] 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, 400 AWG per phase and ground 300 kcmil per phase and ground temperature rated wire for 100A and larger. CF CF CF 155 183	(open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Package Full Load Amps @ 575V/3ph/60Hz [FLA] Recommended Disconnect Fuse Size [Amps] @	The machine requires a symmetrical three-phase power supply transformer with a WYE cal three-phase supply the phase angles and voltages are all the same. Other power supplies are not suitable.	- Lu-Inn	4-wire ground	; ded neutr 24 12 50 CF 156 CF				<u></u>	3-wire; ground	led neut 24 12 50 CF 84 CF		e);			
Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/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 40oC 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. TOTAL PACKAGE DATA (W/C) Package Full Load Amps @ 460V/3ph/60Hz [FLA] 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 40oC ambient temperature rated wire for 100A and larger. CF CF CF 183	(open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Package Full Load Amps @ 575V/3ph/60Hz [FLA] Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz	The machine requires a symmetrical three-phase power supply transformer with a WYE cal three-phase supply the phase angles and voltages are all the same. Other power supplies are not suitable. Dual-element time-delay fuse; based on 2017 NEC 240.6, 430.52, and Tables 430.52, 430.248, and	- Crain	4-wire ground	; ded neutr 24 12 50 CF 156 CF				<u></u>	3-wire; ground	led neut 24 12 50 CF 84 CF		e);			
460V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ temperature, with 60°C insulation rated wire for 100A and larger. Package Full Load Amps @ 460V/3ph/60Hz [FLA] 430.24 and 670.4(A). Use multi-strand copper core wire. Size calculated based on 40oC ambient temperature rated wire for 100A and larger. CF CF CF CF 183 183	(open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Package Full Load Amps @ 575V/3ph/60Hz [FLA] Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @	The machine requires a symmetrical three-phase power supply transformer with a WYE cal three-phase supply the phase angles and voltages are all the same. Other power supplies are not suitable. Dual-element time-delay fuse; based on 2017 NEC 240.6, 430.52, and Tables 430.52, 430.248, and	- Crain	4-wire ground	24 12 50 CF 156 CF				<u></u>	3-wire; ground	24 12 50 CF 84 CF		e);			
Recommended Disconnect Wire Size [AWG/kcmil] @ 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. TOTAL PACKAGE DATA (W/C) Package Full Load Amps @ 460V/3ph/60Hz [FLA] CF CF 183	(open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Package Full Load Amps @ 575V/3ph/60Hz [FLA] Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz	The machine requires a symmetrical three-phase power supply transformer with a WYE cal three-phase supply the phase angles and voltages are all the same. Other power supplies are not suitable. Dual-element time-delay fuse; based on 2017 NEC 240.6, 430.52, and Tables 430.52, 430.248, and	- Crain	4-wire ground	24 12 50 CF 156 CF				<u></u>	3-wire; ground	24 12 50 CF 84 CF		e);			
temperature rated wire for 100A and larger. TOTAL PACKAGE DATA (W/C) Package Full Load Amps @ 460V/3ph/60Hz [FLA]	(open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Package Full Load Amps @ 575V/3ph/60Hz [FLA] Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @	Dual-element time-delay fuse; based on 2017 NEC 240.6, 430.52, and Tables 430.52, 430.248, and 430.250. 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,	L The second sec	4-wire ground	24 12 50 CF 156 CF 200 CF	al			300 kc	3-wire; ground	led neut 24 12 50 CF 84 CF 250 CF	ral				
Package Full Load Amps @ 460V/3ph/60Hz [FLA]	(open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Package Full Load Amps @ 575V/3ph/60Hz [FLA] Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz	Dual-element time-delay fuse; based on 2017 NEC 240.6, 430.52, and Tables 430.52, 430.248, and 430.250. 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 400C ambient temperature, with 60°C insulation rated wire if package FLA x 1.25 is less than 100A or 75°C	4/	4-wire ground O AWG per p	24 12 50 CF 156 CF 200 CF ohase and	al			300 kc	3-wire; ground	led neut 24 12 50 CF 84 CF 250 CF hase an	ral				
	(open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Package Full Load Amps @ 575V/3ph/60Hz [FLA] Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz	Dual-element time-delay fuse; based on 2017 NEC 240.6, 430.52, and Tables 430.52, 430.248, and 430.250. 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 400C ambient temperature, with 60°C insulation rated wire if package FLA x 1.25 is less than 100A or 75°C	4/	4-wire ground O AWG per p	24 12 50 CF 156 CF 200 CF ohase and	al			300 kc	3-wire; ground	led neut 24 12 50 CF 84 CF 250 CF hase an	ral				
Package Full Load Amps @ 575V/3ph/60Hz [FLA]	(open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Package Full Load Amps @ 575V/3ph/60Hz [FLA] Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 575V/3ph/60Hz	Dual-element time-delay fuse; based on 2017 NEC 240.6, 430.52, and Tables 430.52, 430.248, and 430.250. 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 400C ambient temperature, with 60°C insulation rated wire if package FLA x 1.25 is less than 100A or 75°C	4/	4-wire ground O AWG per p	24 12 50 CF 156 CF 200 CF ohase and	al			300 kc	3-wire; ground	led neut 24 12 50 CF 84 CF 250 CF hase an	ral				
	(open) delta or three-phase star with non-grounded neutral. configuration output as shown on the right. In a symmetric Continuous Duty [Hours per day] Control Cabinet Class (NEMA) Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz Short Circuit Current Rating (SCCR) [kA] @ 575V/3ph/60Hz Package Full Load Amps @ 460V/3ph/60Hz [FLA] Package Full Load Amps @ 575V/3ph/60Hz [FLA] Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 575V/3ph/60Hz Recommended Disconnect Wire Size [AWG/kcmil] @ 575V/3ph/60Hz	Dual-element time-delay fuse; based on 2017 NEC 240.6, 430.52, and Tables 430.52, 430.248, and 430.250. 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 400C ambient temperature, with 60°C insulation rated wire if package FLA x 1.25 is less than 100A or 75°C	4/	4-wire ground	24 12 50 CF 156 CF 200 CF chase and CF	al			300 kc	3-wire; ground	led neut 24 12 50 CF 84 CF 50 CF CF CF	ral				

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KAESER COMPRESSORS

Installation Data Sheet

Series: 1:1 Direct Drive CSDX.5 SFC Document No.: TI-DATA-2018-SFC 90ST 110ST

Version: 1.3 Revision Date: 06/01/2020

Model Model			SFC 90ST						SFC 110ST				
Rated Pressure [psig]			125 145	175	190	217 1	10 125	145	175	190	217		
INSTALLATION and MAINTENANCE DATA													
A/C with Super Soundproofing [dB(A)]			7	73				7	4				
W/C with Super Soundproofing [dB(A)]	300ND FRE330RE LEVEL IMEASURED ID ODIA) ACCORDIDATOR ASSOCIATION A			72 73									
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 NP	Γ						
Power Input Conduit Opening(s) [inches]						1 x 2 1/2	,						
Condensate Drain Connection [NPT]		2 x 1/4											
Width [inches]		98 7/8											
Depth [inches]						50 3/4							
Height [inches]					76	3/4 A/C, 78	/8 W/C						
Floor Space [sq. ft.]		34 6/7											
Weight (A/C) [lb]	Weight was a language and a specimental and a stand		4,1		4,332								
Weight (W/C) [lb]	Weight may vary based on airend selected.		4,1	112				4,3	32				
COMPRESSOR FLUID DATA													
Fluid Capacity (A/C) [gal]			13	3.7				13	3.7				
Fluid Capacity (W/C) [gal]		13		13.2									
Flow Rate [gal/min]	33.0						33	.0					
Typical Oil Consumption [fl. Oz./100 h]			12.8						.3				
Standard Fluid Type			Sigma M-460						M-460				
MAINTENANCE PARTS			<u> </u>										
Air Inlet Filter					6	5.4148.1 + 6.4	993.0						
Filter Mat (optional)			6.1945.0 (x2)										
Filter Mat for Control Cabinet		7.4519.00040 (x1), 7.4519.00010 (x4)											
Fluid Filter		6.4693.0											
Fluid Separator Kit		6.3623.0											
Maintenance Kit for Optional 5-year warranty			ANAKCSDX5SFS										
Maintenance Kit for Optional 5-year warranty, with food-grade lubricant			ANAKCSDX5SFF										
DRYER DATA - FOR T MODELS													
Dryer Model			ABT	165				ABT	165				
Maximum Inlet Air Pressure (Compressed Air at Inlet to Dryer) [psig]			2:	32				23	32				
Nominal Pressure Drop at Rated Flow [psid]			1	.5				1	5				
Rated Dewpoint [°F] at Standard Conditions	e. 38 38												
REFRIGERATION SYSTEM DATA - FOR T MODELS													
Compressor Type			MLZ021	T4LP9A				MLZ021	T4LP9A				
BTU/Refrigeration ASHRAE			19,		19,900								
Outlet Air Temperature (Nominal at Rated Conditions) [°F]	Reference conditions: 14.5 psia, 30% relative humidity and 68°F inlet air temperature.	. 78											
Refrigerant Type		R-5	513A				R-5	13A					
GWP (Global Warming Potential)				31				6	31				
CO2 equivalent [t]				.1				1	1				
Refrigerant Charge [lb]			4	.0				4	0				
Air Flow Across Condenser [CFM]				943				2,9	43				