KAESER Compressors	Installation Data Sheet Series: 1:1 Direct Drive CSDX.6 Document No.: TI-DATA-2023-CSD 145 1 Preliminary Data Release Date: 05/30/20 Version 1.1												
Model			0	SD 145	1			CSD 175					
Rated Pressure [psi	iql	100	110	125	150 175	100	110	125 150	17	75 217			
I. COOLING DATA	<u></u>		· ·			1	<b>I</b> I						
Cooling System Available [Std., Opt.]			A	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 servic	e manual												
Cooling Fan Capacity [CFM] (A/C)				14,714		1		17.657					
Cooling Fan Capacity [CFM] (W/C)				2.354		2.766							
		I		,				_,					
Solution B (exhaust air used for space heating) as shown in servic	ce manual			7.000		1		0.040					
Internal Cooling Fan Capacity [CFM] (A/C)				7,063		8,240							
Internal Cooling Fan Capacity [CFM] (W/C) Max. Additional Pressure Drop for Ducts [inch Water Column] (A/C)   (W/C)			0	1,001	<u>ົ</u>	1,001							
Exhaust Air Opening Reference Dimensions (L x W) [in]	See drawing for actual dimensions. The actual individual duct	0.24 / 0.12					0.24 / 0.12						
	dimension will vary for every installation based on actual length, number and type of bends, accessories etc.	39 x 39				39 x 39							
Solution A Exhaust Fan Solution B Exhaust Duct Ventilation of Compressor Room Z	Coming Soon												
AIR COOLED DATA													
Internal Cooling Fan Capacity [CFM]				7,063		1		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.		3	313,500		372,500							
Fan Motor [HP]		4.0			4.0								
WATER COOLED DATA													
Type of heat exchangers		s	stainless steel, plate typ			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]	Discharge temperature limited for non-tracted water (ta	TBD TB			TBD								
Max. outlet temperature [°F]	Discharge temperature limited for non-treated water (to prevent calcification).		TBD TRD TRD			TBD	тр						

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Installation Data Sheet Series: 1:1 Direct Drive CSDX.6 Document No.: TI-DATA-2023-CSD 145 175 Preliminary Data Release Date: 05/30/2023 Version 1.1											
Model				CSD 145			CSD 175	5			
Rated Pressure [psi	g]	100	110	125 15	50 175	100 110	125 15	0 175 217			
II. ELECTRICAL DATA	Electrical data may vary in accordance with mot	or manu	Ifacture	er's specific	ations. Mot	tors are EISA	compliant.				
DRIVE MOTOR											
Motor HP		1		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			100				
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)						1					
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.		444	h	three-phas 4-wire; grounded	e star (wye neutral	r Ang	three-phas 3-wire; grounded	se star (wye); 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]				289			N/A				
Package Full Load Amps @ 460V/3ph/60Hz [FLA]				140		165					
Package Full Load Amps @ 575V/3ph/60Hz [FLA]				119		133					
Recommended Disconnect Fuse Size [Amps] @ 230V/3ph/60Hz	*Time delay (dual element) fuse; Class J ≤ 600A (e.g. AJT) /	400					N/A				
Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz	Class L > 600A (e.g. A4BQ). Based on 2020 NEC 240.6, 430.52, and Tables 430.52,	200					250				
Recommended Disconnect Fuse Size [Amps] @ 575V/3ph/60Hz	430.248, and 430.250	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	2 x 4/0 AWG per phase and ground				N/A					
Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz	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			er phase and		2 x 1/0 AWG per phase and ground					
Recommended Disconnect Wire Size [AWG/kcmil] @ 575V/3ph/60Hz	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.	2/0 A	AWG pe	er phase and	ground	3/0 AWG per phase and ground					
TOTAL PACKAGE DATA (W/C)											
Package Full Load Amps @ 230V/3ph/60Hz [FLA]				281		N/A					
Package Full Load Amps @ 460V/3ph/60Hz [FLA]				137		162					
Package Full Load Amps @ 575V/3ph/60Hz [FLA]				117			131				

KAESER       Installation Data Sheet         COMPRESSORS       Series: 1:1 Direct Drive CSDX.6         Document No.: TI-DATA-2023-CSD 145 175         Preliminary Data Release Date: 05/30/2023         Version 1.1														
Model			CSD 14	5				CSD	175					
Rated Pressure [psig]		100	110	125	150	175	100	110	125		175	217		
INSTALLATION and MAINTENANCE DATA						1 1		1	1					
A/C with Super Soundproofing [dB(A)] SOUND PRESSURE LEVEL [M	leasured in dB(A) according			72					7	6				
W/C with Super Soundproofing [dB(A)] to	ISO 2151 using ISO 9614-2]			72					7	6				
A/C Air Discharge [inches NPT or Flange]		2 NPT												
W/C Air Discharge [inches NPT or Flange]						2	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]		82.75												
Depth [inches]		50.5												
Height [inches]		76.75												
Floor Space [sq. ft.]		29												
Weight (A/C) [lb]	ry based on airend selected.	4,167 4,475												
Weight (W/C) [lb]		4,167					4,475							
COMPRESSOR FLUID DATA		1												
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-4	160				
MAINTENANCE PARTS		1												
Air Inlet Filter							0302.0							
Filter Mat (optional)		6.1945.0												
Filter Mat for Control Cabinet		7.4519.0 (x2)												
Fluid Filter		6.4693.0												
Fluid Separator Kit							623.0							
Maintenance Kit for Optional 5-year warranty		ANAKCSDX6S												
Maintenance Kit for Optional 5-year warranty, with food-grade lubricant						ANAK	CSDX	6F						

