

Model	DSG 180-2 SFC i.HOC			DSG 220-2 SFC i.HOC			DSG 260-2 SFC i.HOC			DSG 290-2 SFC i.HOC		
	100	125	145	100	125	145	100	125	145	100	125	145

I. Cooling Data												
Rated Pressure [psig]	DSG 180-2 SFC i.HOC			DSG 220-2 SFC i.HOC			DSG 260-2 SFC i.HOC			DSG 290-2 SFC i.HOC		
Cooling System Available [Std., Opt.]	A/C, W/C			A/C, W/C			A/C, W/C			A/C, W/C		
Standard Ambient Temp. Range [°F]	40 - 115			40 - 115			40 - 115			40 - 115		
Ventilation Inlet Air Opening [sq. ft. free area] (A/C) Z	25.8			31.2			42			47.4		
Ventilation Inlet Air Opening [sq. ft. free area] (W/C) Z	4.3			5.4			6.5			7.5		
Max. Additional Pressure Drop for Ducts [inch Water Column] (A/C) (W/C)	0.80 / 0.32			0.64 / 0.32			0.48 / 0.32			0.32 / 0.32		
Exhaust Air Opening Reference Dimensions (L x W) [in.]												

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

A Exhaust Air Duct

B Additional Exhaust Duct

Z Ventilation Inlet Air Opening

05-S1705

Air-cooled Data												
Internal Cooling Fan Capacity [CFM]	14,126			14,126			14,126			14,126		
Water-cooled Data												
Internal Cooling Fan Capacity [CFM]	2,649			2,649			2,649			2,649		
Cooling Water Connection [inches NPT]	1 1/2			1 1/2			1 1/2			1 1/2		
Cooling Water Flow f. Heating Up $\Delta T=18^{\circ}F$ [gal/min]	43.6			52			62.9			76.6		77.1
Cooling Water Pressure Loss at $\Delta T=18^{\circ}F$ [psi]	5.8			8.7			13.1			21.8		

II. Electrical Data

Do NOT operate package on any unsymmetrical power supply. Also do NOT operate package on power supplies, 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

Drive Motor												
Motor [hp]	<i>Electrical data may vary in accordance with motor manufacturer's specifications. Motors are EISA compliant. Main power supply and overcurrent protection must be installed by a qualified electrician in accordance with NEC, OSHA, and any applicable local codes.</i>											
NEMA Nominal Efficiency %	96.2%			95.8%			95.8%			96.2%		
Enclosure Type	IP55 (TEFC)			IP55 (TEFC)			IP55 (TEFC)			IP55 (TEFC)		
Insulation Class	F			F			F			F		
Standard Voltage	460V/3ph/60Hz			460V/3ph/60Hz			460V/3ph/60Hz			460V/3ph/60Hz		
Full Load Amps [FLA]	163			189			231			285		
Fan Motor (A/C)												
Insulation Class	F			F			F			F		
Fan Motor [hp]	7.5			7.5			7.5			7.5		
Nominal Efficiency %	91.0%			91.0%			91.0%			91.0%		
Full Load Amps [FLA]	10.3			10.3			10.3			10.3		
Fan Motor (W/C)												
Insulation Class	F			F			F			F		
Fan Motor [hp]	0.75			0.75			0.75			0.75		
Nominal Efficiency %	77.0%			77.0%			77.0%			77.0%		
Full Load Amps [FLA]	1.47			1.47			1.47			1.47		



**Dry-running Screw Compressor
Installation Data Sheet**

Doc: TI-IDS-2014-DSG SFC RD
Version: 1.7
Rev. Date: 02/04/2022

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	100	125	145	100	125	145	100	125	145	100	125	145			
Total Package Data (A/C)															
Control Cabinet Class (NEMA)	12			12			12			12					
Short Circuit Current Rating [kA rms sym]	Field installed fuse required, see below*			50			50			50					
Package Full Load Amps [FLA]	274			274			332			397					
Recommended Disconnect Fuse Size [Amps]	*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			350			350			400			500		
Recommended Disconnect Wire Size [AWG/kcmil]	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 3/0 AWG per phase			2 x 3/0 AWG per phase			2 x 250 kcmil per phase			2 x 300 kcmil per phase		
Minimum Recommended Ground Wire Size	We recommend using 1 full size conductor for the ground. The minimum ground wire size given above is per the 2020 NEC Table 250.122.			2 x 3/0 AWG per phase			2 x 3/0 AWG per phase			2 x 250 kcmil per phase			2 x 300 kcmil per phase		
Total Package Data (W/C)															
Package Full Load Amps [FLA]	266			266			324			389					
Recommended Disconnect Fuse Size [Amps]	*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			350			350			400			500		
Recommended Disconnect Wire Size [AWG/kcmil]	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 3/0 AWG per phase			2 x 3/0 AWG per phase			2 x 4/0 AWG per phase			2 x 300 kcmil per phase		
Minimum Recommended Ground Wire Size	We recommend using 1 full size conductor for the ground. The minimum ground wire size given above is per the 2020 NEC Table 250.122.			2 x 3/0 AWG per phase			2 x 3/0 AWG per phase			2 x 4/0 AWG per phase			2 x 300 kcmil per phase		
III. Basic Specifications															
Super Soundproofing [dB(A)] w/o ducting (A/C) (W/C)	Measured in dB(A) according to ISO 2151 using ISO 9614-2. Tolerance +/- 3 dB(A).			81 / 70			81 / 71			82 / 74			84 / 75		
Super Soundproofing [dB(A)] with ducting (A/C) (W/C)				79 / 70			79 / 71			80 / 74			82 / 75		
A/C Air Discharge [inches Flange]	3 ASME B16.5 class 150			3 ASME B16.5 class 150			3 ASME B16.5 class 150			3 ASME B16.5 class 150					
Total Oil Charge (A/C) [gal]	12.4			12.4			12.4			12.4					
Total Oil Charge (W/C) [gal]	11.9			11.9			11.9			11.9					
Maximum Altitude [ft.]	Higher altitudes are permissible only after consultation with the manufacturer.			1,640			1,640			1,640			1,640		
Power Input Conduit Opening(s) [in.]	2 x Ø 3"			2 x Ø 3"			2 x Ø 3"			2 x Ø 3"					
Dimensions (W x D x H) [in.] (A/C)	168 1/8 x 68 7/8 x 93 7/8			168 1/8 x 68 7/8 x 93 7/8			168 1/8 x 68 7/8 x 93 7/8			168 1/8 x 68 7/8 x 93 7/8					
Dimensions (W x D x H) [in.] (W/C)	168 1/8 x 68 7/8 x 81 1/8			168 1/8 x 68 7/8 x 81 1/8			168 1/8 x 68 7/8 x 81 1/8			168 1/8 x 68 7/8 x 81 1/8					
Weight [lb] (A/C)	11,574			11,795			12,125			12,566					
Weight [lb] (W/C)	10,913			11,133			11,464			11,905					
IV. i.HOC System Data															
Blower Motor Nominal Power [hp]	9.7			9.7			9.7			9.7					
Blower Motor Speed [rpm]	5,710			5,710			5,710			5,710					
Blower Motor Efficiency [%]	85%			85%			85%			85%					
Drum Motor Nominal Power [hp]	0.16			0.16			0.16			0.16					
Drum Motor Speed [rpm]	1,690			1,690			1,690			1,690					
Drum Motor Efficiency [%]	62%			62%			62%			62%					