| KAESER<br>Compressors   | Installation Data Sheet<br>Series: 1:1 Belt Drive SM.3 SFC<br>Document No.: TI-DATA-2018-SFC 8T<br>Version: 1.8<br>Revision Date: 04/17/2023   |                               |                                      |                          |              |                                      |     |  |  |  |
|---|--|-------------------------------|--------------------------------------|--------------------------|--------------|--------------------------------------|-----|--|--|--|
| Model   |  | SFC 8T                        |                                      |                          |              |                                      |     |  |  |  |
| Rated Pressure [psig]   |  | 110                           | 125                                  | 145                      | 160          | 175                                  | 217 |  |  |  |
| I. COOLING DATA   |  |                               |                                      |                          |              |                                      |     |  |  |  |
| Cooling System Available [Std., Opt.]   |  |                               |                                      |                          | /C           |                                      |     |  |  |  |
| Standard Ambient Temp. Range [°F]   |  | 40 - 115                      |                                      |                          |              |                                      |     |  |  |  |
| VENTILATION OF COMPRESSOR ROOM<br>Air Inlet Opening [sq. ft. free area] (A/C) Z   |  |                               |                                      | 3                        | 5.2          |                                      |     |  |  |  |
| Solution A (forced ventilation with exhaust fan) as shown in service manual<br>Cooling Fan Capacity [CFM] (A/C)   |  | 2,354                         |                                      |                          |              |                                      |     |  |  |  |
| Solution B (exhaust air used for space heating) as shown in service   | e manual   |                               |                                      |                          |              |                                      |     |  |  |  |
| Internal Cooling Fan Capacity [CFM] (A/C)   |  | Compressor Dryer              |                                      |                          |              |                                      |     |  |  |  |
|   |  |                               | 1,                                   | 295                      |              | 5                                    | 06  |  |  |  |
| Max. Additional Pressure Drop for Ducts [inch Water Column] (A/C)   |  |                               |                                      | 0                        | .12          |                                      |     |  |  |  |
| Exhaust Air Opening Reference Dimensions (L x W) [in]   | See drawing for actual dimensions. The actual individual<br>duct dimension will vary for every installation based on<br>actual length, number and type of bends, accessories etc.  | 26 x 26 (dryer is not ducted) |                                      |                          |              |                                      |     |  |  |  |
| Model shown for reference only<br>Actual Duct size may vary with installation   | A B Z  |                               |                                      |                          |              |                                      |     |  |  |  |
| Solution A Exhaust Fan Solution B Exhaust Duct  |  |                               |                                      |                          |              |                                      |     |  |  |  |
| Ventilation of Compressor Room Z  | 40   |                               |                                      |                          |              |                                      |     |  |  |  |
|   |  |                               |                                      |                          |              |                                      |     |  |  |  |
| AIR COOLED DATA   |  |                               |                                      |                          |              |                                      |     |  |  |  |
| Internal Cooling Fan Capacity [CFM]   |  |                               |                                      | 1,2                      | 295          | -                                    |     |  |  |  |
| Approach Temp. [°F]   | Reference conditions: 14.5 psia, 30% relative humidity and<br>68°F inlet air temperature.  | 12.                           | .6                                   | 1                        | 0.8          |                                      | 9   |  |  |  |
| Typical Heat Rejected [BTU / HR]  |  |                               |                                      |                          | ,000         |                                      |     |  |  |  |
| II. ELECTRICAL DATA   | Electrical data may vary in accordance with mot  | tor manufact                  | urer's spec                          | ifications. M            | otors are El | SA compliant                         |     |  |  |  |
| DRIVE MOTOR   |  |                               |                                      |                          |              |                                      |     |  |  |  |
| Motor HP  |  |                               |                                      | 1                        | 10           |                                      |     |  |  |  |
| Insulation Class  | lation Class   |                               |                                      | F                        |              |                                      |     |  |  |  |
| Standard Voltage  |  | 460V/3ph/60Hz                 |                                      |                          |              |                                      |     |  |  |  |
| Full Load Amps [FLA] @ 460V/3ph/60Hz  |  | 12                            |                                      |                          |              |                                      |     |  |  |  |
| TOTAL PACKAGE DATA (A/C)<br>Do NOT operate package on any unsymmetrical power supply. Also do<br>example, a three-phase (open) delta or three-phase star with non-groun<br>three-phase power supply transformer with a WYE configuration output<br>phase supply the phase angles and voltages are all the same. Other por | ded neutral. The machine requires a symmetrical as shown on the right. In a symmetrical three-   | ž ·                           | three-phase<br>4-wire;<br>grounded r | e star (wye);<br>neutral | Curthy       | three-phase<br>3-wire;<br>grounded n |     |  |  |  |
| Continuous Duty [Hours per day]   |  | 24                            |                                      |                          |              |                                      |     |  |  |  |
| Control Cabinet Class (NEMA)  |  | 12                            |                                      |                          |              |                                      |     |  |  |  |
| Short Circuit Current Rating (SCCR) [kA] @ 460V/3ph/60Hz  | Field installed fuse required, see below*  |                               |                                      |                          |              |                                      |     |  |  |  |
| Package Full Load Amps @ 460V/3ph/60Hz [FLA]  | *Time delay (dual element) fuse; Class J ≤ 600A (e.g. AJT) /   |                               |                                      | 2                        | 22           |                                      |     |  |  |  |
| Recommended Disconnect Fuse Size [Amps] @ 460V/3ph/60Hz   | Class J > 600A (e.g. A4T) /<br>Class L > 600A (e.g. A4BQ).<br>Based on 2020 NEC 240.6, 430.52, and Tables 430.52,<br>430.248, and 430.250  | 30                            |                                      |                          |              |                                      |     |  |  |  |
| Recommended Disconnect Wire Size [AWG/kcmil] @ 460V/3ph/60Hz  | The following multi-strand copper core wires are given<br>according to 2020 NEC 310.14, 310.15, 310.16 and table<br>310.16 adjusted for 40°C ambient temperature. If other local<br>conditions prevail, for example high temperature, the cross<br>section should be checked and adjusted according to 2020<br>NEC 110.14(C), 220.3, 310.14, 310.15, 310.16, 430.6,<br>430.22, 430.24, 670.4(A) and other local codes. | 8 AWG per phase and ground    |                                      |                          |              |                                      |     |  |  |  |

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|---|---|---------------|-------------|-----|-----|-----|-----|--|--|--|
|   | Revision Date: 04/17/2023   |               |             |     |     |     |     |  |  |  |
| Model   |   |               | SFC 8T      |     |     |     |     |  |  |  |
| Rated Pressure [ps  | sig]  | 110           | 125         | 145 | 160 | 175 | 217 |  |  |  |
| INSTALLATION and MAINTENANCE DATA<br>A/C with Super Soundproofing [dB(A)] | SOUND PRESSURE LEVEL [Measured in dB(A) according<br>to ISO 2151 using ISO 9614-2]                              | 68            |             |     |     |     |     |  |  |  |
| A/C Air Discharge [inches NPT or Flange]                                  | to 130 2131 using 130 3014-2  | 3/4 NPT       |             |     |     |     |     |  |  |  |
| Power Input Conduit Opening(s) [inches]                                   |   | 1 5/8         |             |     |     |     |     |  |  |  |
| Condensate Drain Connection [NPT]   |   | 1/4           |             |     |     |     |     |  |  |  |
| Width [inches]  |   | 24 3/4        |             |     |     |     |     |  |  |  |
| Depth [inches]  |   | 43            |             |     |     |     |     |  |  |  |
| Height [inches]   |   | 43 1/4        |             |     |     |     |     |  |  |  |
| Floor Space [sq. ft.]   |   |               | 7 3/7       |     |     |     |     |  |  |  |
| Weight [lb]   | Weight may vary based on airend selected.   |               | 717         |     |     |     |     |  |  |  |
| COMPRESSOR FLUID DATA   |   |               |             | ·   |     |     |     |  |  |  |
| Fluid Capacity (A/C) [gal]  |   | 1.1           |             |     |     |     |     |  |  |  |
| Flow Rate [gal/min]   |   | 2.4           |             |     |     |     |     |  |  |  |
| Typical Oil Consumption [fl. Oz./100 h]                                   |   | 1.24          |             |     |     |     |     |  |  |  |
| Standard Fluid Type   |   | Sigma S-460   |             |     |     |     |     |  |  |  |
| MAINTENANCE PARTS   |   |               |             |     |     |     |     |  |  |  |
| Air Inlet Filter  |   | 6.5212.0      |             |     |     |     |     |  |  |  |
| Filter Mat (optional)   |   | 5.3353.0      |             |     |     |     |     |  |  |  |
| Filter Mat for Control Cabinet  |   | 6.3572.0 (4x) |             |     |     |     |     |  |  |  |
| luid Filter   |   |               | 6.3462.1    |     |     |     |     |  |  |  |
| Fluid Separator Kit   |   | 6.3795.1      |             |     |     |     |     |  |  |  |
| Maintenance Kit for Optional 5-year warranty                              |   | ANAKSM3SFCS   |             |     |     |     |     |  |  |  |
| Maintenance Kit for Optional 5-year warranty, with food-grade lubricant   |   |               | ANAKSM3SFCF |     |     |     |     |  |  |  |
| DRYER DATA - FOR T MODELS   |   |               |             |     |     |     |     |  |  |  |
| Dryer Model   |   | ABT 15        |             |     |     |     |     |  |  |  |
| Maximum Inlet Air Pressure (Compressed Air at Inlet to Dryer) [psig]      |   | 232           |             |     |     |     |     |  |  |  |
| Nominal Pressure Drop at Rated Flow [psid]                                |   | 2.8           |             |     |     |     |     |  |  |  |
| Rated Dewpoint [°F] at Standard Conditions                                | Reference conditions: 14.5 psia, 30% relative humidity and<br>68°F inlet air temperature.                       |               |             | 3   | 8   |     |     |  |  |  |
| REFRIGERATION SYSTEM DATA - FOR T MODELS                                  |   |               |             |     |     |     |     |  |  |  |
| Compressor Type   |   | AE4430Y-GS    |             |     |     |     |     |  |  |  |
| BTU/Refrigeration ASHRAE  |   | 2832          |             |     |     |     |     |  |  |  |
| Outlet Air Temperature (Nominal at Rated Conditions) [°F]                 | Reference conditions: 14.5 psia, 30% relative humidity and<br>68°F inlet air temperature.                       |               |             |     | 4   |     |     |  |  |  |
| Refrigerant Type  |   | R-513A        |             |     |     |     |     |  |  |  |
| GWP (Global Warming Potential)  |   | 631           |             |     |     |     |     |  |  |  |
| CO2 equivalent [t]  |   | 0.25          |             |     |     |     |     |  |  |  |
| Refrigerant Charge [lb]   |   | 0.86          |             |     |     |     |     |  |  |  |
| Air Flow Across Condenser [CFM]   |   |               |             | 50  | 06  |     |     |  |  |  |

