



## Installation Data Sheet - Screw Blower

Series: FBS.2

Document Number: TI.BIDS-044

Version: 1.0

Revision Date: 04/24/2023

### Package Model

FBS 720 STC (L & M)

### Electrical Data

Horsepower	60	75	100
Voltage (3ph/60Hz)	460V	460V	460V
Short Circuit Current Rating (SCCR) [kA] 460V/3ph/60Hz	50	50	50
Package FLA +/- 10%	83	99	132
Disconnect Fuse [Amp]	100	110	150
Recommended Wire Size (75°C or higher) [AWG]	1 x 4 x 2	1 x 4 x 1/0	1 x 4 x 3/0
Maximum Feed Terminal [AWG]	See wiring diagram		

### Motor Data

Insulation Class	F	F	F
Enclosure Type	TEFC	TEFC	TEFC
Type	ASM (IE4)	ASM (IE4)	ASM (IE4)

#### Notes:

1. Time delay (dual element) fuse; Class J  $\leq$  600A (e.g. AJT).
2. Fuse and wire sizes determined in accordance to NEC 240.6, 430.52 and tables 250.122, 430.248, 430.250.
3. Breaker should be suitable for a heavy duty starting load and of inverse time delay design that complies to regulations outlines in NEC 430.52.
4. Ground wire size should be equal to conductor size.

### Oil System Data

Drive End Capacity [qt.]	2.7
Gear End Capacity [qt.]	2.3
Oil Type (Synthetic)	G-680

### Working Pressure

FBS 720 L STC pr	Continued working pressures below 2.2 psig are not permitted
FBS 720 M STC pr	Continued working pressures below 4.4 psig are not permitted

### Package Connections

HP	60	75	100
Width [in.]	57 1/2	57 1/2	57 1/2
Depth [in.]	92 1/2	92 1/2	92 1/2
Height [in.]	77 15/16	77 15/16	77 15/16
Floor [sq.ft.]	36 73/78	36 73/78	36 73/78
Weight [lb.]	4440	4605	4782
Connection Size [Inlet (optional)]	8" Pipe	8" Pipe	8" Pipe
Connection Size [Outlet]	8" ANSI 125/150	8" ANSI 125/150	8" ANSI 125/150



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## General Information

### Floating Relay Contacts

Contacts:

- X12: 1 and 2                      Operation
- X12: 3 and 4                      Ready for operation
- X12: 5 and 6                      Group Alarm
- X12: 7 and 8                      Group Warning

### Remote On/Off

Contacts (not floating): powered 24 VDC

- X15: 5 and 6

Function:

- from open to closed: Machine switches on
- from closed to open: Machine switches off

### Ambient and Intake Conditions

- Permissible ambient temperature [°F]\* +32 - +113
- Permissible intake temperature [°F]\* +5 to +113
- Relative humidity [%] 0 - 80
- Maximum elevation [ft.asl]\* 3280

*\*contact Kaeser about deviations in temperature or altitude*

### External Alarm

Contacts (not floating): powered 24 VDC

DI: 1.08

Function:

- the machine will switch off in the event of this external fault

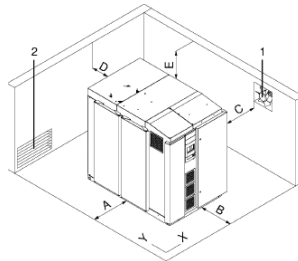
## Ventilation of Blower Room

Air Inlet Opening	5.5 sq.ft.
Cooling Fan Capacity (forced ventilation)	3310 cfm
Max Heat Rejection	30,000 BTU/hr

Ventilation values based on 1950 CFM(FAD) @ 14.7 psia dP, 100 hp, maximum room ambient of 109°F, Suction temperature of 100°F, 9 ft of discharge pipe

### Model shown for reference only

Actual duct size may vary with installation



- 1 Exhaust Fan
- 2 Ventilation Inlet Air Opening

Foundation in the cross direction (X) must be level, inclination max. 0.8°

Foundation in the longitudinal direction (Y) must be level, inclination max. 2.0°

### Recommended machine placement and dimensions:

#### Inches

- A Left side clearance = See Table 1
- B Front clearance = See Table 1
- C Right side clearance = See Table 1
- D Back clearance = 39.4
- E Height clearance = See Table 1

Table 1

Machine	Installation Type	Clearance A	Clearance B	Clearance C	Clearance E
FBS 720 L pr, FBS 720 M pr	Beside another machine	13.8	59.1	13.8	59.1
FBS 720 L pr, FBS 720 M pr	Next to a wall	19.7	59.1	19.7	59.1

\*The foundation must be firm, level and capable of bearing the weight of the machine.

It is recommended to extract the exhaust air from the upper third of the room as this is where the heat collects. The room ventilation openings should be arranged that the current of cooling air flowing through the room passes over the blower inlet and exhaust ports and, if possible, should leave no stagnant air in the room. (A thermal short circuit must be avoided, i.e. discharged cooling air must not find its way to the cooling air inlet.)

The blower must not be positioned so near to a wall that the inflow of cooling air is obstructed.

Pipework should be insulated against heat emission.

If the blower station is located in the middle of a large hall its exhaust air can be extracted by means of a duct positioned above the exhaust port (illustrated in broken lines).

