Installation Data Sheet - Screw Blower

Series: EBS.2
Document Number: TI.BIDS-041
Version: 1.3
Revision Date: 04/24/2023

Package Model	EBS 410 C STC (L & M) - Compact		
Electrical Data			
Horsepower	**30**	**40**	**50**
Voltage (3ph/60Hz)	460V	460V	460V
Short Circuit Current Rating (SCCR) [kA] 460V/3ph/60Hz	50	50	50
Package FLA +/- 10%	41.3	56.8	67.8
Disconnect Fuse [Amp]	50	70	80
Recommended Wire Size (75°C or higher) [AWG]	1 x 4 x 6	1 x 4 x 4	1 x 4 x 3
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 ≤ 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.]	1.2		
Gear End Capacity [qt.]	1.5		
Oil Type (Synthetic)	G-680		
Working Pressure			
EBS 410 C L STC pr	Continued working pressures below 2.2 psig are not permitted		
EBS 410 C M STC pr	Continued working pressures below 4.4 psig are not permitted		
Package Connections			
HP	**30**	**40**	**50**
Width [in.]	50 1/3	50 1/3	50 1/3
Depth [in.]	75 5/8	75 5/8	75 5/8
Height [in.]	71 5/8	71 5/8	71 5/8
Floor [sq.ft.]	26 3/7	26 3/7	26 3/7
Weight [lb.]	2452	2628	2712
Connection Size [in.]	6	6	6
Type [inlet (optional) and outlet]	Pipe	Pipe	Pipe

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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

Ambient and Intake Conditions

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

**contact Kaeser about deviations in temperature or altitude*

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

External Alarm

Contacts (not floating): powered 24 VDC
DI: 1.08
Function:
- the machine will switch off in the event of this external fault

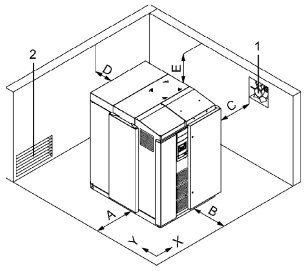
Ventilation of Blower Room

Air Inlet Opening	3.2 sq. ft
Cooling Fan Capacity (forced ventilation)	670 CFM
Max Heat Rejection	15,350 BTU/Hr

Ventilation values based on 1040cfm @ 12.7 psig ΔP, 50Hp and ambient inlet. Max. room temp. = 113° F and cooling air temp = 100° F. Discharge piping length = 5ft.

Model shown for reference only

Actual duct size may vary with installation



1 Exhaust Fan
2 Ventilation Inlet Air Opening
X Cross direction
Y Longitudinal direction

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

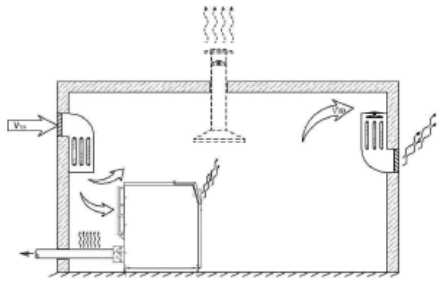
Foundation in the longitudinal direction (Y) must be level, inclination max. 2.0°

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

Recommended machine placement and dimensions:

		Inches
A	Left side clearance =	See table
B	Front clearance =	43.3
C	Right side clearance =	See table
D	Back clearance =	39.3
E	Height clearance =	32

Recommended Installation	A	C
Beside another machine	3.9	3.9
Beside a wall	11.8	11.8



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).