



Installation Data Sheet - Screw Blower

Series: EBS.2

Document Number: TI.BIDS-018

Version: 1.3

Revision Date: 04/24/2023

Package Model	EBS 410 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%	81.9	97.9	130.9
Disconnect Fuse [Amp]	100	125	160
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
Insulation Class			
Insulation Class	F	F	F
Enclosure Type			
Enclosure Type	TEFC	TEFC	TEFC
Type			
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 L STC pr	Continued working pressures below 2.2 psig are not permitted		
EBS 410 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.]	75 1/8	75 1/8	75 1/8
Height [in.]	77 1/2	77 1/2	77 1/2
Floor [sq.ft.]	30	30	30
Weight [lb.]	3172	3353	3527
Connection Size [in.]	6	6	6
Type [inlet (optional) and outlet]	Pipe	Pipe	Pipe



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General Information

<p style="text-align: center;"><i>Floating Relay Contacts</i></p> <p>Contacts:</p> <ul style="list-style-type: none"> - X12: 1 and 2 Operation - X12: 3 and 4 Ready for operation - X12: 5 and 6 Group Alarm - X12: 7 and 8 Group Warning 	<p style="text-align: center;"><i>Ambient and Intake Conditions</i></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Permissible ambient temperature [°F]*</td> <td style="text-align: right;">+32 - 113</td> </tr> <tr> <td>Permissible intake temperature [°F]*</td> <td style="text-align: right;">+5 - 113</td> </tr> <tr> <td>Relative humidity [%]</td> <td style="text-align: right;">0 - 80</td> </tr> <tr> <td>Maximum elevation [ft.asl]*</td> <td style="text-align: right;">3280</td> </tr> </table> <p style="text-align: right; font-size: small;"><i>*contact Kaeser about deviations in temperature or altitude</i></p>	Permissible ambient temperature [°F]*	+32 - 113	Permissible intake temperature [°F]*	+5 - 113	Relative humidity [%]	0 - 80	Maximum elevation [ft.asl]*	3280
Permissible ambient temperature [°F]*	+32 - 113								
Permissible intake temperature [°F]*	+5 - 113								
Relative humidity [%]	0 - 80								
Maximum elevation [ft.asl]*	3280								
<p style="text-align: center;"><i>Remote On/Off</i></p> <p>Contacts (not floating): powered 24 VDC</p> <p>-X15: 5 and 6</p> <p>Function:</p> <ul style="list-style-type: none"> - from open to closed: Machine switches on - from closed to open: Machine switches off 	<p style="text-align: center;"><i>External Alarm</i></p> <p>Contacts (not floating): powered 24 VDC</p> <p>DI: 1.08</p> <p>Function:</p> <ul style="list-style-type: none"> - 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)	715 CFM
Max Heat Rejection	19,100 BTU/Hr

Ventilation values based on 1419cfm @ 15 psig ΔP, 100Hp 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 =	31.5

Recommended Installation	A	C
Beside another machine	5.9	5.9
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).