Installation Data Sheets – 575V Screw Blowers

April 2023

Table of Contents

For individual files, please consult factory.

STC – 575V

Installation Data Sheet - Screw Blower (575V)

Series: CBS.2
Document Number: TI.BIDS-042
Version: 1.4
Revision Date: 04/24/2023

Package Model	CBS 121 STC (L & M)				
Electrical Data					
Horsepower	**10**	**15**	**20**	**25**	**30**
Voltage (3ph/60Hz)	575	575	575	575	575
Short Circuit Current Rating (SCCR) [kA] 575V/3ph/60Hz	50	50	50	50	50
Package FLA +/- 10%	12	16.7	23.5	26.5	33
Disconnect Fuse [Amp]	15	20	30	30	35
Recommended Wire Size (75°C or higher) [AWG]	1 x 4 x 14	1 x 4 x 12	1 x 4 x 10	1 x 4 x 10	1 x 4 x 8
Motor Data					
Insulation Class	F	F	F	F	F
Enclosure Type	TEFC	TEFC	TEFC	TEFC	TEFC
Type	ASM (IE4)	ASM (IE4)	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.]	0.97				
Gear End Capacity [qt.]	1.11				
Oil Type (Synthetic)	G-680				
Working Pressure					
CBS 121 L STC pr	Continued working pressures below 2.2 psig are not permitted				
CBS 121 M STC pr	Continued working pressures below 4.4 psig are not permitted				
Package Connections					
HP	**10**	**15**	**20**	**25**	**30**
Width [in.]	43 5/8	43 5/8	43 5/8	43 5/8	43 5/8
Depth [in.]	53 7/8	53 7/8	53 7/8	53 7/8	53 7/8
Height [in.]	66 5/8	66 5/8	66 5/8	66 5/8	66 5/8
Floor [sq.ft.]	16 1/3	16 1/3	16 1/3	16 1/3	16 1/3
Weight [lb.]	1321	1321	1343	1376	1442
Connection Size [in.]	3	3	3	3	3
Type [inlet (optional) and outlet]	Pipe	Pipe	Pipe	Pipe	Pipe

Installation Data Sheet - Screw Blower (575V)

Series: CBS.2
Document Number: TI.BIDS-042
Version: 1.4
Revision Date: 04/24/2023

Package Model	CBS 121 STC (L & M)

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 suction 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	1.9 sq. ft
Cooling Fan Capacity (forced ventilation)	662 cfm
Max Heat Rejection	13,320 BTU/HR

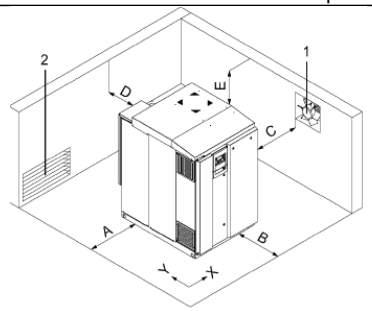
Ventilation values based on 430 cfm @ 15 psig ΔP, 30Hp and ambient inlet. Max. room temp. = 113° F and cooling air temp = 95° F. Discharge piping length = 5ft.

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

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

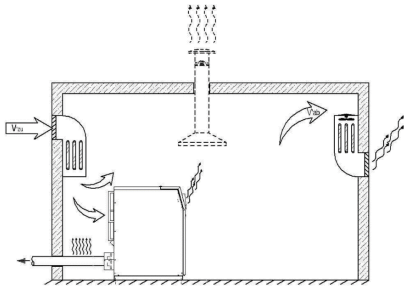


Recommended machine placement and dimensions:

		Inches
A	Left side clearance =	3.9
B	Front clearance =	43.3
C	Right side clearance =	3.9
D	Back clearance =	39.4
E	Height clearance =	31.5

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°



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).

Installation Data Sheet - Screw Blower (575V)

Series: DBS.2
Document Number: TI.BIDS-037
Version: 1.4
Revision Date: 04/24/2023

Package Model	DBS 221 STC (L & M)				
Electrical Data					
Horsepower	**20**	**25**	**30**	**40**	**50**
Voltage (3ph/60Hz)	575	575	575	575	575
Short Circuit Current Rating (SCCR) [kA] 575V/3ph/60Hz	50	50	50	50	50
Package FLA +/- 10%	23.8	26.8	33.3	45.8	53.8
Disconnect Fuse [Amp]	30	30	40	60	60
Recommended Wire Size (75°C or higher) [AWG]	1 x 4 x 10	1 x 4 x 10	1 x 4 x 8	1 x 4 x 6	1 x 4 x 4
Motor Data					
Insulation Class	F	F	F	F	F
Enclosure Type	TEFC	TEFC	TEFC	TEFC	TEFC
Type	ASM (IE4)	ASM (IE4)	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.]	0.97				
Gear End Capacity [qt.]	1.11				
Oil Type (Synthetic)	G-680				
Working Pressure					
DBS 221 L STC pr	Continued working pressures below 2.2 psig are not permitted				
DBS 221 M STC pr	Continued working pressures below 4.4 psig are not permitted				
Package Connections					
HP	**20**	**25**	**30**	**40**	**50**
Width [in.]	43 5/8	43 5/8	43 5/8	43 5/8	43 5/8
Depth [in.]	59 3/16	59 3/16	59 3/16	59 3/16	59 3/16
Height [in.]	66 5/8	66 5/8	66 5/8	66 5/8	66 5/8
Floor [sq.ft.]	18	18	18	18	18
Weight [lb.]	1744	1777	1843	2024	2112
Connection Size [in.]	4	4	4	4	4
Type [inlet (optional) and outlet]	Pipe	Pipe	Pipe	Pipe	Pipe

Installation Data Sheet - Screw Blower (575V)

Series: DBS.2
Document Number: TI.BIDS-037
Version: 1.4
Revision Date: 04/24/2023

Package Model	DBS 221 STC (L & M)

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 suction 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

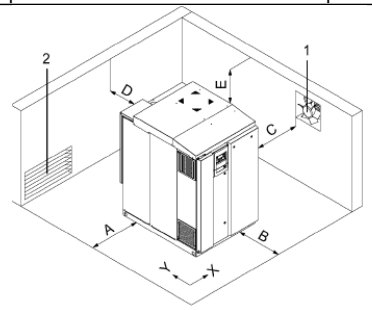
Air Inlet Opening	2.6 sq. ft
Cooling Fan Capacity (forced ventilation)	730 cfm
Max Heat Rejection	18,441 BTU/HR

Ventilation values based on 968 cfm @ 15 psig ΔP, 100Hp and ambient inlet. Max. room temp. = 113° F and cooling air temp = 95° 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

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

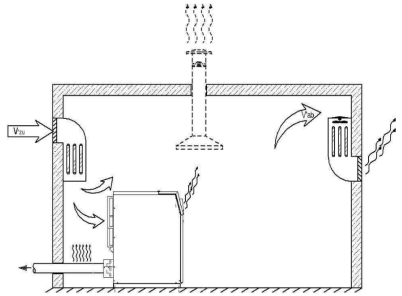


Recommended machine placement and dimensions:

		Inches
A	Left side clearance =	3.9
B	Front clearance =	43.3
C	Right side clearance =	3.9
D	Back clearance =	39.4
E	Height clearance =	31.5

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°



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).

Installation Data Sheet - Screw Blower (575V)

Series: EBS.2
Document Number: TI.BIDS-038
Version: 1.3
Revision Date: 04/24/2023

Package Model	EBS 410 C STC (L & M)		
Electrical Data			
Horsepower	**30**	**40**	**50**
Voltage (3ph/60Hz)	575	575	575
Short Circuit Current Rating (SCCR) [kA] 575V/3ph/60Hz	50	50	50
Package FLA +/- 10%	33	45.5	53.5
Disconnect Fuse [Amp]	40	60	60
Recommended Wire Size (75°C or higher) [AWG]	1 x 4 x 8	1 x 4 x 6	1 x 4 x 4
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 410C L STC pr	Continued working pressures below 2.2 psig are not permitted		
EBS 410C 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

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

**contact Kaeser about deviations in temperature or altitude*

Installation Data Sheet - Screw Blower (575V)

Series: EBS.2
Document Number: TI.BIDS-038
Version: 1.3
Revision Date: 04/24/2023

Package Model	EBS 410 C STC (L & M)

Remote On/Off	*External Alarm*
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	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

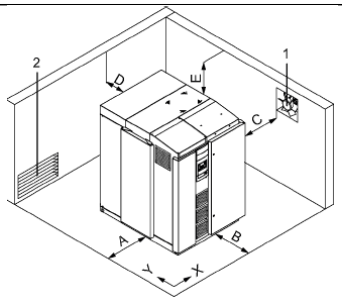
Air Inlet Opening	3.2 sq. ft
Cooling Fan Capacity (forced ventilation)	670 CFM
Max Heat Rejection	15,350 BTU/Hr

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



Recommended machine placement and dimensions:

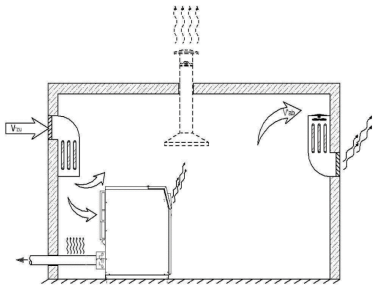
		Inches
A	Left side clearance =	See table
B	Front clearance =	43.3
C	Right side clearance =	See table
D	Back clearance =	39.3
E	Height clearance =	31.5

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 and capable of bearing the weight of the machine.

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).

Installation Data Sheet - Screw Blower (575V)

Series: EBS.2
Document Number: TI.BIDS-043
Version: 1.3
Revision Date: 04/24/2023

Package Model	EBS 410 STC (L & M)		
Electrical Data			
Horsepower	**60**	**75**	**100**
Voltage (3ph/60Hz)	575	575	575
Short Circuit Current Rating (SCCR) [kA] 575V/3ph/60Hz	50	50	50
Package FLA +/- 10%	67.6	78.6	108.6
Disconnect Fuse [Amp]	80	90	125
Recommended Wire Size (75°C or higher) [AWG]	1 x 4 x 3	1 x 4 x 2	1 x 4 x 1/0
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 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

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

**contact Kaeser about deviations in temperature or altitude*

Installation Data Sheet - Screw Blower (575V)

Series: EBS.2
Document Number: TI.BIDS-043
Version: 1.3
Revision Date: 04/24/2023

Package Model	EBS 410 STC (L & M)

Remote On/Off	*External Alarm*
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	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

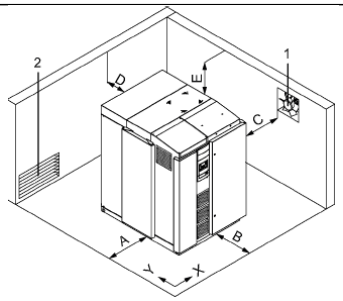
Air Inlet Opening	3.2 sq. ft
Cooling Fan Capacity (forced ventilation)	715 CFM
Max Heat Rejection	19,100 BTU/Hr

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



Recommended machine placement and dimensions:

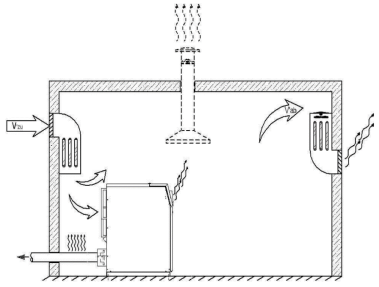
		Inches
A	Left side clearance =	See table
B	Front clearance =	43.3
C	Right side clearance =	See table
D	Back clearance =	39.4
E	Height clearance =	32.0

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 and capable of bearing the weight of the machine.

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).

Installation Data Sheet - Screw Blower (575V)

Series: FBS.2
Document Number: TI.BIDS-048
Version: 1.0
Revision Date: 04/24/2023

Package Model	FBS 720 STC (L & M)		
Electrical Data			
Horsepower	**60**	**75**	**100**
Voltage (3ph/60Hz)	575V	575V	575V
Short Circuit Current Rating (SCCR) [kA] 575V/3ph/60Hz	50	50	50
Package FLA +/- 10%	68.4	79.4	109.4
Disconnect Fuse [Amp]	80	90	125
Recommended Wire Size (75°C or higher) [AWG]	1x4x3	1x4x2	1x4x1/0
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 ≤ 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

Installation Data Sheet - Screw Blower (575V)

Series: FBS.2
Document Number: TI.BIDS-048
Version: 1.0
Revision Date: 04/24/2023

Package Model	FBS 720 STC (L & M)

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 suction 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

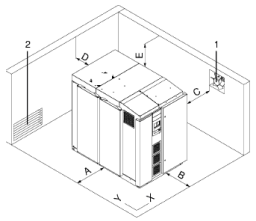
Actual duct size may vary with installation

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°

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

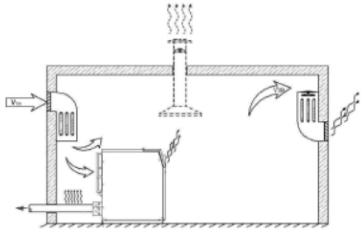


Recommended machine placement and dimensions:

		Inches
A	Left side clearance =	See Table 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



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).

Installation Data Sheet - Screw Blower (575V)

Series: GBS.1
Document Number: TI.BIDS-049
Version: 1.0
Revision Date: 04/24/2023

Package Model	GBS 1050 STC (L&M)				
Electrical Data					
Horsepower	**100**	**125**	**150**	**175**	**200**
Voltage (3ph/60Hz)	575V	575V	575V	575V	575V
Short Circuit Current Rating (SCCR) [kA] 575V/3ph/60Hz	50	50	50	50	50
Package FLA +/- 10%	109.7	131.7	156.7	186.7	223.7
Disconnect Fuse [Amp]	125	150	175	225	250
Recommended Wire Size (75°C or higher) [AWG]	1 x 4 x 1/0	1 x 4 x 3/0	2 x 4 x 1/0	2 x 4 x 1/0	2 x 4 x 2/0
Maximum Feed Terminal [AWG]	See wiring diagram				
Motor Data					
Insulation Class	F	F	F	F	F
Enclosure Type	TEFC	TEFC	TEFC	TEFC	TEFC
Type	ASM (IE4)	ASM (IE4)	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.]	5.1				
Gear End Capacity [qt.]	5.1				
Oil Type (Synthetic)	G-680				
Working Pressure					
GBS 1050 L SFC pr	Continued working pressures below 4.4 psig are not permitted				
GBS 1050 M SFC pr	Continued working pressures below 6.5 psig are not permitted				
Package Connections					
HP	**100**	**125**	**150**	**175**	**200**
Width [in.]	73 15/16	73 15/16	73 15/16	73 15/16	73 15/16
Depth [in.]	106 11/16	106 11/16	106 11/16	106 11/16	106 11/16
Height [in.]	89	89	89	89	89
Floor [sq.ft.]	54 7/9	54 7/9	54 7/9	54 7/9	54 7/9
Weight [lb.]	7330	7628	7925	8444	8620
Connection Size [Inlet (optional)]	10" Pipe	10" Pipe	10" Pipe	10" Pipe	10" Pipe
Connection Size [Outlet]	10" ANSI 125/150	10" ANSI 125/150	10" ANSI 125/150	10" ANSI 125/150	10" ANSI 125/150

Installation Data Sheet - Screw Blower (575V)

Series: GBS.1
Document Number: TI.BIDS-049
Version: 1.0
Revision Date: 04/24/2023

Package Model	GBS 1050 STC (L&M)

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 VD
-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 suction 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	11 sq.ft.
Cooling Fan Capacity (forced ventilation)	2800 cfm
Max Heat Rejection	58,043 BTU/hr

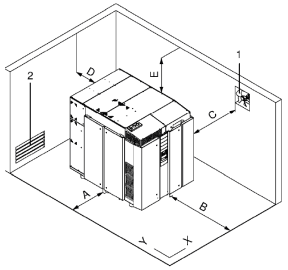
Ventilation values based on 3664 CFM(FAD) @ 14.5 psig dP, 200 hp, maximum room ambient of 113°F, Suction temperature of 104°F, 9 ft of discharge pipe

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°

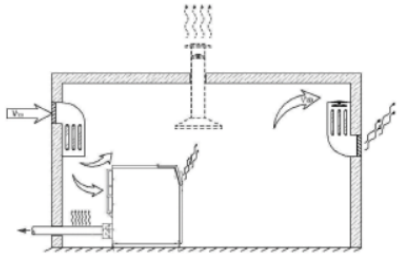
*The foundation must be firm, level and capable of bearing the weight of the machine.



Recommended machine placement and dimensions:

		Inches
A	Left side clearance =	32.0
B	Front clearance =	66.9
C	Right side clearance =	32 or 66.9
D	Back clearance =	39.4
E	Height clearance =	59.1

For Clearance C: 32 inches with hoist above machine **or** 66.9 inches for hoist required at side of 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).

Installation Data Sheets – 575V Screw Blowers

April 2023

Amendments

Revision Date	Revisions Made
05/18/2020	Original – 575V machines
10/19/2020	Updated EBS to EBS.2 (410 and 410C); updated CBS/DBS motor type.
4/12/2021	Updated fuse and wire size wording/tables in all. Added Feed Terminal to FBS.
4/24/2023	Removed FBS 660; added FBS 720. Added GBS 1050. Updated FLA and connection wording for CBS, DBS, EBS/ EBS C.