



INDUSTRIAL BELT DRIVE 50

Ambient (Unheated) Air Curtain

Data Sheet

For Door Heights To 50' (environmental separation)

STANDARD CONSTRUCTION

- Single speed T.E.F.C. motor - belt drive
- Gray powder coated exterior (Optional: Custom Color or Stainless)
- Split cabinet construction for fan assembly removal
- Removable access panels
- Top Mounting only
- Front air intake (Optional: top)
- High efficiency Pro-V Nozzle
- Motor location top right (Optional: top left, front left or front right)

5 Year
Limited
Warranty



MODEL	Nozzle Width (in)	Max. Vel. at Nozzle (fpm)	Avg. Outlet Vel. (fpm)	Air Volume (cfm)	Outlet Vel. Uniformity	Power Rating (kW)	Motor @ HP	Net Wt. (lbs)
IB50-C-1096A	96.00	11,560	4,344	23,165	85%	26.5	1 @ 25	1176
IB50-C-1108A	108.00	11,560	3,679	22,075	83%	26.5	1 @ 25	1220
IB50-C-1120A	116.00	11,560	4,378	28,213	85%	31.8	1 @ 30	1265
IB50-C-1132A	132.00	11,560	3,930	28,823	83%	31.8	1 @ 30	1375
IB50-C-1144A	144.00	11,560	3,679	29,433	82%	31.8	1 @ 30	1485
IB50-C-1156A	156.00	11,560	3,494	30,283	82%	31.8	1 @ 30	1595
IB50-C-1168A	168.00	11,560	4,195	39,150	85%	42.4	1 @ 40	1890
IB50-C-1180A	180.00	11,560	3,976	39,760	83%	42.4	1 @ 40	2000
IB50-C-1192A	192.00	11,560	4,344	46,331	85%	52.9	1 @ 50	2230
IB50-C-1204A	204.00	11,560	3,992	45,240	83%	52.9	1 @ 50	2691
IB50-C-1216A	216.00	11,560	3,679	44,149	83%	52.9	1 @ 50	2735
IB50-C-2240A	236.00	11,560	4,304	56,426	85%	63.5	2 @ 30	2670
IB50-C-1240A	236.00	11,560	4,304	56,426	85%	63.5	1 @ 60	2815

NOTES:

1. The IB50-1240A is only recommended for tandem mounted units. Otherwise, it is recommended to use the IB50-2240 unit for single unit installations.
2. Operation at 50 Hz will generate approximately a 17% reduction in air performance.
3. Vertically mounted Industrial Belt Drive air curtains not available.

VELOCITY PROFILE: Model IB50-C-1096A

Distance from Nozzle (in)	40	80	120	160	200	240	280	320	360	400	440	480	520	560
Core Velocity (FPM)	6958	4142	3381	2927	2619	2391	2213	2071	1952	1852	1774	1691	1624	1565
Distance from Nozzle (ft)	92%	95%	97%	97%	98%	96%	98%	98%	97%	98%	98%	99%	98%	99%

MODEL NUMBER CONFIGURATION

IB50-C-1 096 A D-F T-SS

Series	Version	# of Motors	Opening Width	Heat	Voltage	Intake	Motor Location	Opt. Cabinet Finish
IB50	C	1,2	096" - 240"	A=Ambient	D=208/3/60 E=240/3/60 H=480/3/60 I=600/3/60 T=380/3/50	T=Top F=Front	T=Top F=Front	SS=Stainless Steel CC=Custom Color

Berner reserves the right to alter specifications without prior notice.

www.berner.com Berner International 800.245.4455
111 Progress Ave. / New Castle / PA / 16101 / USA

DS-480
April, 2023

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INDUSTRIAL BELT DRIVE 50

Ambient (Unheated) Air Curtain

Electrical Performance Sheet

		208/3/60 (voltage code D) TOTAL MOTOR AMP DRAW			240/3/60 (voltage code E) TOTAL MOTOR AMP DRAW			480/3/60 (voltage code H) TOTAL MOTOR AMP DRAW		
MODEL	Qty @ HP	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT
IB50-C-1096A IB50-C-1108A	1 @ 25	1	65.0	150	1	59.0	125	1	29.3	60
IB50-C-1120A IB50-C-1132A IB50-C-1144A IB50-C-1156A	1 @ 30	1	78.0	175	1	70.0	150	1	35.0	75
IB50-C-1168A IB50-C-1180A	1 @ 40	1	104.0	250	1	92.0	250	1	46.0	100
IB50-C-1192A IB50-C-1204A IB50-C-1216A	1 @ 50	1	126.0	250	1	112.0	250	1	56.0	125
IB50-C-2240A	2 @ 30	1	156.0	300	1	140.0	300	1	70.0	150
IB50-C-1240A	1 @ 60	1	159.0	300	1	158.0	300	1	79.0	175

		600/3/60 (voltage code I) TOTAL MOTOR AMP DRAW			380/3/50 (voltage code T) TOTAL MOTOR AMP DRAW		
MODEL	Qty @ HP	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT
IB50-C-1096A IB50-C-1108A	1 @ 25	1	23.4	50	1	36.0	75
IB50-C-1120A IB50-C-1132A IB50-C-1144A IB50-C-1156A	1 @ 30	1	28.1	60	1	44.0	90
IB50-C-1168A IB50-C-1180A	1 @ 40	1	37.0	90	1	54.0	125
IB50-C-1192A IB50-C-1204A IB50-C-1216A	1 @ 50	1	45.0	90	1	65.0	150
IB50-C-2240A	2 @ 30	1	56.1	125	1	88.0	200
IB50-C-1240A	1 @ 60	1	55.0	125	1	80.0	175

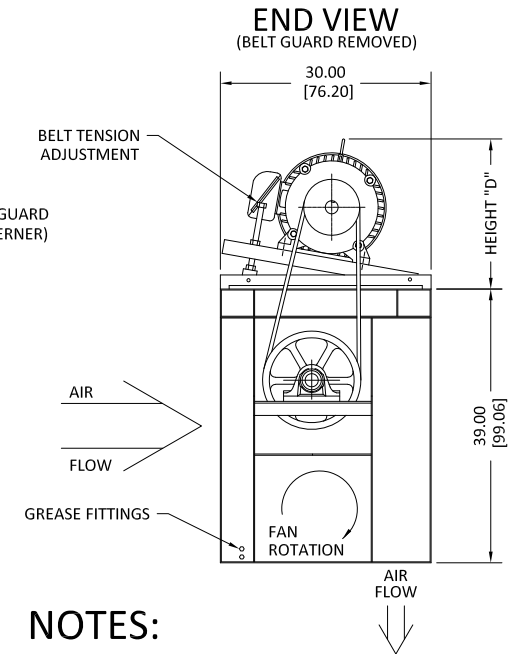
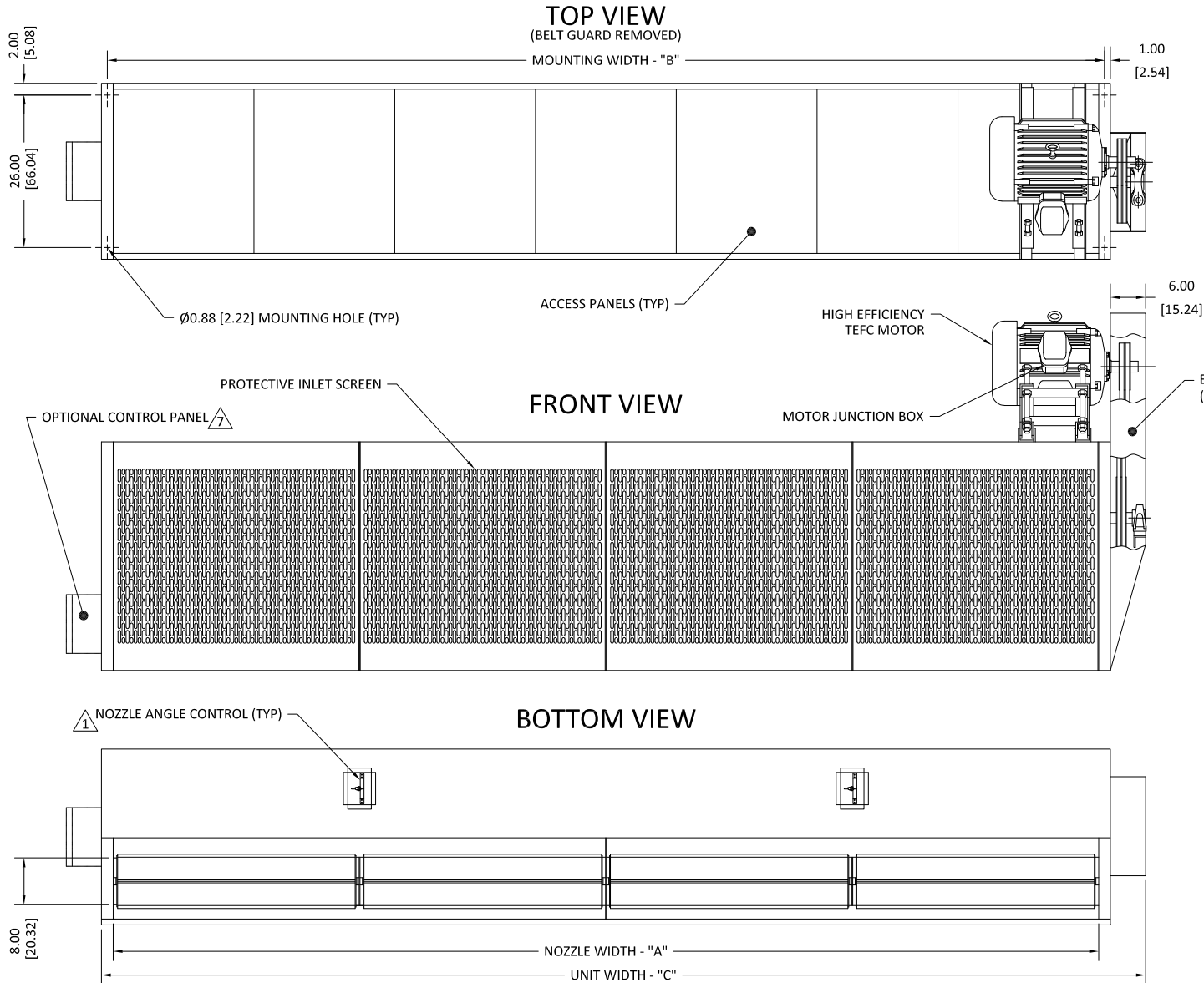
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www.berner.com Berner International 800.245-4455
111 Progress Ave. / New Castle / PA / 16101 / USA

EP-480
August, 2022

IB50-C

AMBIENT SYSTEM FRONT INTAKE TOP MOTOR MOUNT



NOTES:

- AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF ϕ .
- ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
- FIELD VERIFY DIMENSIONS.
- ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
- ADEQUACY OF SUPPORTING STRUCTURE IS TO BE VERIFIED BY A PROFESSIONAL STRUCTURAL ENGINEER.
- LETTER "A" IN MODEL NUMBER DESIGNATES, AN AMBIENT UNIT. "F" DESIGNATES FRONT INTAKE, "T" IS TOP MOTOR.
- OPTIONAL CONTROL PANEL AVAILABLE: LEFT HAND MOUNT, RIGHT HAND MOUNT, OR REMOTE. PLEASE SPECIFY.
- MOTOR MOUNT LOCATION AS SHOWN, OPPOSITE AND FRONT MOUNTING LOCATION AVAILABLE, PLEASE SPECIFY.
- DIMENSIONS IN INCHES [CENTIMETERS].

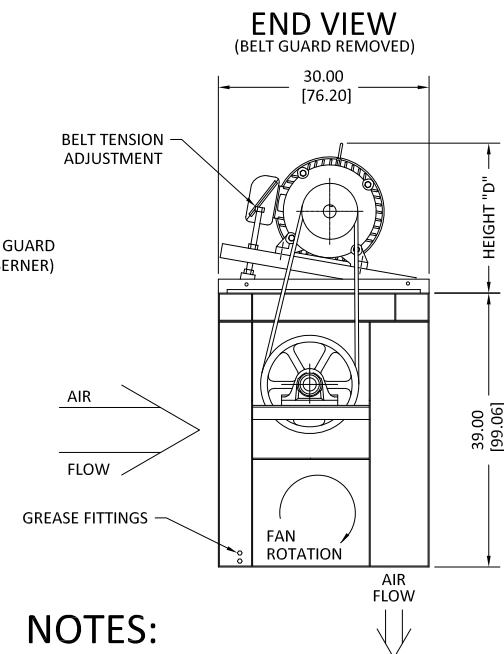
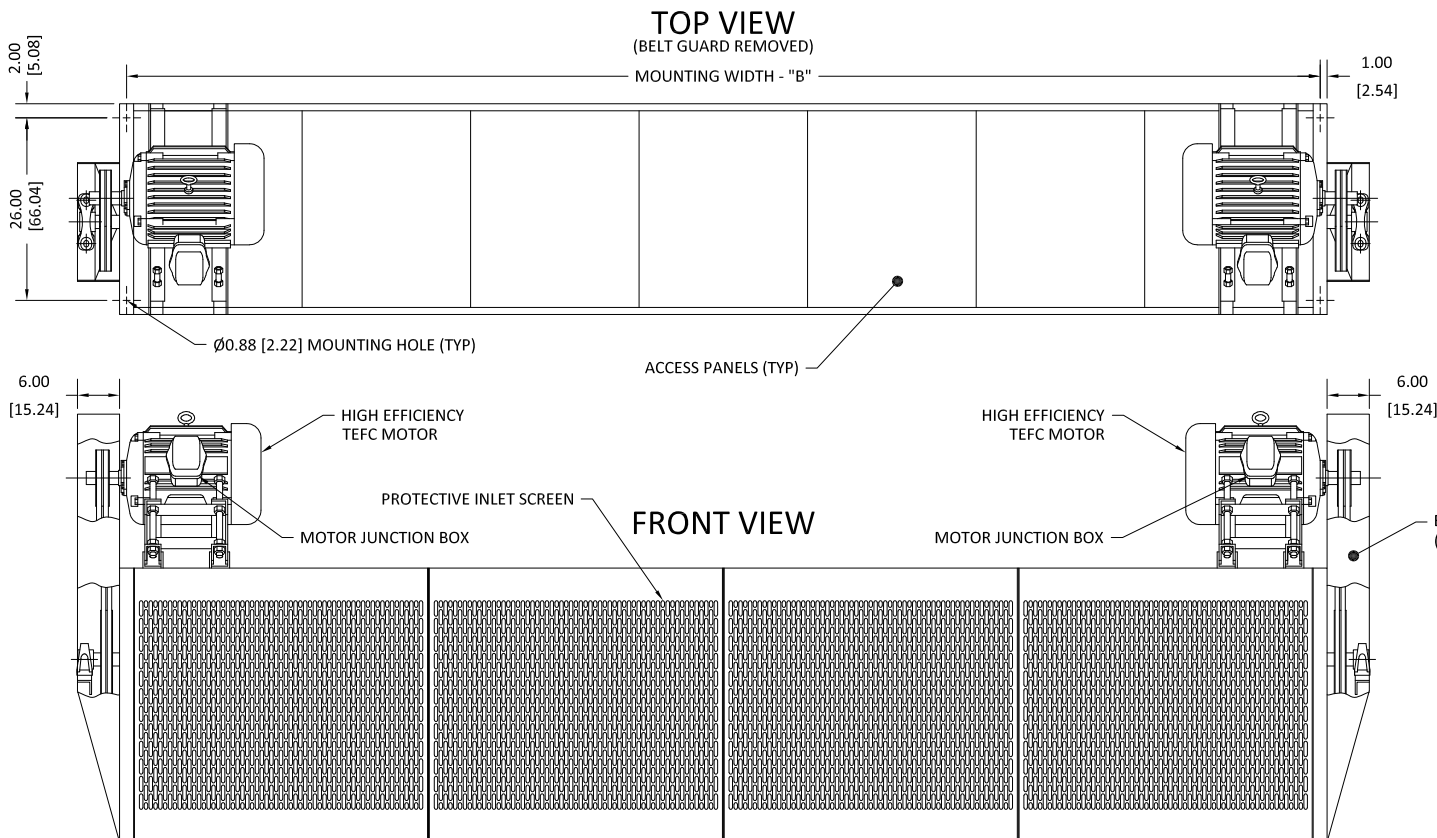
MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	UNIT WIDTH "C"	MAX MOTOR HEIGHT "D"
IB50-C-1096A-FT	96.00 [243.84]	98.00 [248.92]	106.00 [269.24]	22.00 [55.88]
IB50-C-1108A-FT	108.00 [274.32]	110.00 [279.40]	118.00 [299.72]	22.00 [55.88]
IB50-C-1120A-FT	116.00 [294.64]	118.00 [299.72]	126.00 [320.04]	25.00 [63.50]
IB50-C-1132A-FT	132.00 [335.28]	134.00 [340.36]	142.00 [360.68]	25.00 [63.50]
IB50-C-1144A-FT	144.00 [365.76]	146.00 [370.84]	154.00 [391.16]	25.00 [63.50]
IB50-C-1156A-FT	156.00 [396.24]	158.00 [401.32]	166.00 [421.64]	25.00 [63.50]
IB50-C-1168A-FT	168.00 [426.72]	170.00 [431.80]	178.00 [452.12]	28.00 [71.12]
IB50-C-1180A-FT	180.00 [457.20]	182.00 [462.28]	190.00 [482.60]	28.00 [71.12]
IB50-C-1192A-FT	192.00 [487.68]	194.00 [492.76]	202.00 [513.08]	28.00 [71.12]
IB50-C-1204A-FT	204.00 [518.16]	206.00 [523.24]	214.00 [543.56]	28.00 [71.12]
IB50-C-1216A-FT	216.00 [548.64]	218.00 [553.72]	226.00 [574.04]	28.00 [71.12]
IB50-C-1240A-FT	236.00 [599.44]	238.00 [604.52]	246.00 [624.84]	28.00 [71.12]

Tandem mounted only

PROJECT	REV C	
LOCATION		
ARCHITECT		
ENGINEER		
DWG. NO.	IB50-C-AMB-FT1	TITLE: BERNER MODEL IB50-C AIR CURTAIN FRONT INTAKE TOP MOTOR AMBIENT SYSTEM
DATE	05AUG2022	
BY	S. Beil	BERNER INTERNATIONAL LLC NEW CASTLE, PA
CHECK	-	
JOB NO.	-	

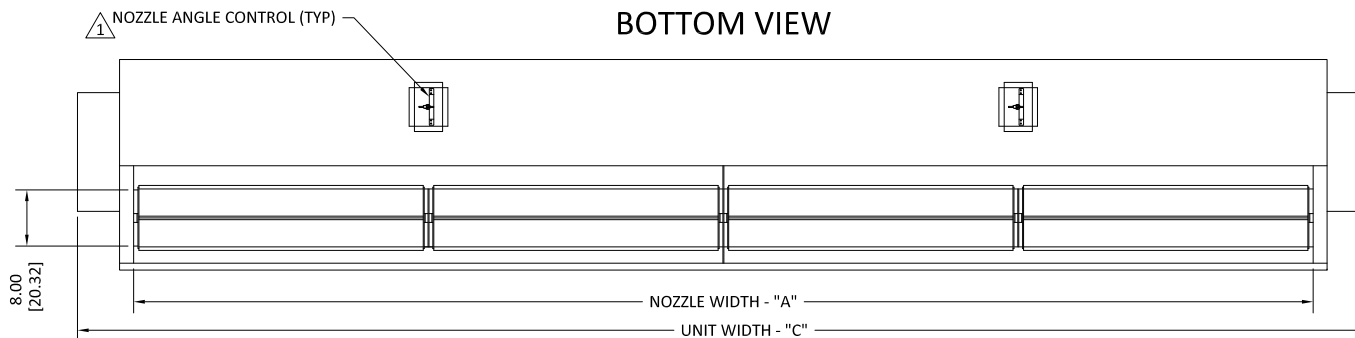
IB50-C

AMBIENT SYSTEM FRONT INTAKE TOP MOTOR MOUNT



NOTES:

- 1 AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF C.
- 2 ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
- 3 FIELD VERIFY DIMENSIONS.
- 4 ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
- 5 ADEQUACY OF SUPPORTING STRUCTURE IS TO BE VERIFIED BY A PROFESSIONAL STRUCTURAL ENGINEER.
- 6 LETTER "A" IN MODEL NUMBER DESIGNATES, AN AMBIENT UNIT. "F" DESIGNATES FRONT INTAKE, "T" IS TOP MOTOR.
- 7 DIMENSIONS IN INCHES [CENTIMETERS].



MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	UNIT WIDTH "C"	MAX MOTOR HEIGHT "D"
IB50-C-2240A-FT	236.00 [599.44]	238.00 [604.52]	252.00 [640.08]	25.00 [63.50]

PROJECT		REV	A
LOCATION			
ARCHITECT			
ENGINEER			
DWG. NO.	IB50-C-AMB-FT2	TITLE:	BERNER
DATE	06JUN2022		MODEL IB50-C AIR CURTAIN
BY	D.Johnson		FRONT INTAKE TOP MOTOR AMBIENT SYSTEM
CHECK	-		
JOB NO.	-		BERNER INTERNATIONAL LLC NEW CASTLE, PA

IB50-C

**AMBIENT SYSTEM
TOP INTAKE
FRONT MOTOR MOUNT**

TOP VIEW
(BELT GUARD REMOVED)
MOUNTING WIDTH - "B"

26.00 [66.04]
2.00 [5.08]
1.00 [2.54]

Ø0.88 [2.22] MOUNTING HOLE (TYP)

PROTECTIVE INLET SCREEN

HIGH EFFICIENCY TEFC MOTOR

BELT GUARD (BY BERNER)

END VIEW
(BELT GUARD REMOVED)

DEPTH - "D"
30.00 [76.20]

AIR FLOW

39.00 [99.06]

MOTOR JUNCTION BOX

BELT TENSION ADJUSTMENT

GREASE FITTINGS

FAN ROTATION

FRONT VIEW

ACCESS PANELS (TYP)

OPTIONAL CONTROL PANEL

BOTTOM VIEW

NOZZLE ANGLE CONTROL (TYP)

NOZZLE WIDTH - "A"

UNIT WIDTH - "C"

8.00 [20.32]

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IB50-C-1132A-TF	132.00 [335.28]	134.00 [340.36]	142.00 [360.68]	27.50 [69.85]
IB50-C-1144A-TF	144.00 [365.76]	146.00 [370.84]	154.00 [391.16]	30.50 [77.47]
IB50-C-1156A-TF	156.00 [396.24]	158.00 [401.32]	166.00 [421.64]	30.50 [77.47]
IB50-C-1168A-TF	168.00 [426.72]	170.00 [431.80]	178.00 [452.12]	32.50 [82.55]
IB50-C-1180A-TF	180.00 [457.20]	182.00 [462.28]	190.00 [482.60]	32.50 [82.55]
IB50-C-1192A-TF	192.00 [487.68]	194.00 [492.76]	202.00 [513.08]	32.50 [82.55]
IB50-C-1204A-TF	204.00 [518.16]	206.00 [523.24]	214.00 [543.56]	32.50 [82.55]
IB50-C-1216A-TF	216.00 [548.64]	218.00 [553.72]	226.00 [574.04]	32.50 [82.55]
IB50-C-1240A-TF	236.00 [599.44]	238.00 [604.52]	246.00 [624.84]	32.50 [82.55]

Tandem mounted only

PROJECT	REV C	
LOCATION		
ARCHITECT		
ENGINEER		
DWG. NO.	IB50-C-AMB-TF1	TITLE: BERNER
DATE	05AUG2022	MODEL IB50-C AIR CURTAIN
BY	S. Beil	TOP INTAKE FRONT MOTOR AMBIENT SYSTEM
CHECK	-	BERNER INTERNATIONAL LLC NEW CASTLE, PA
JOB NO.	-	

MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	UNIT WIDTH "C"	MAX MOTOR DEPTH "D"
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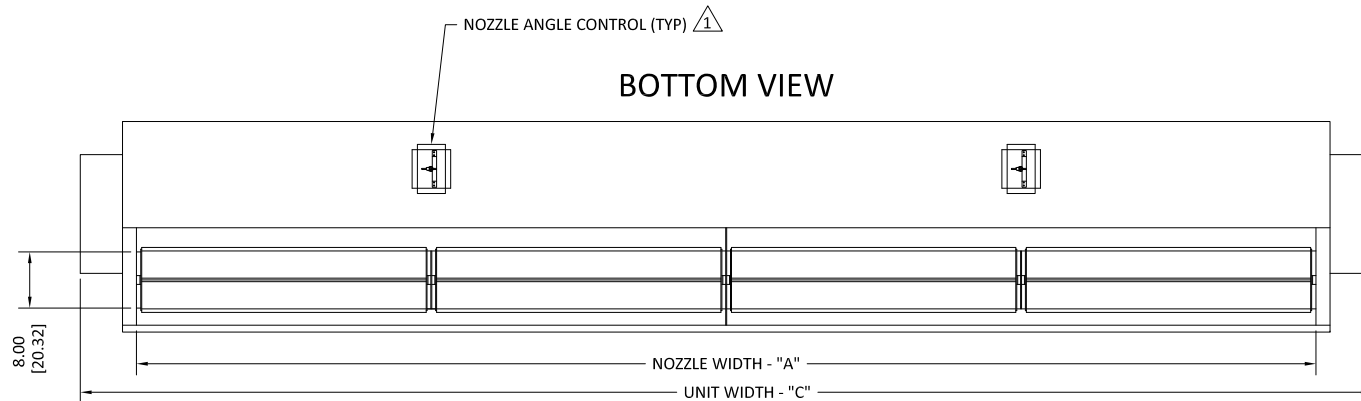
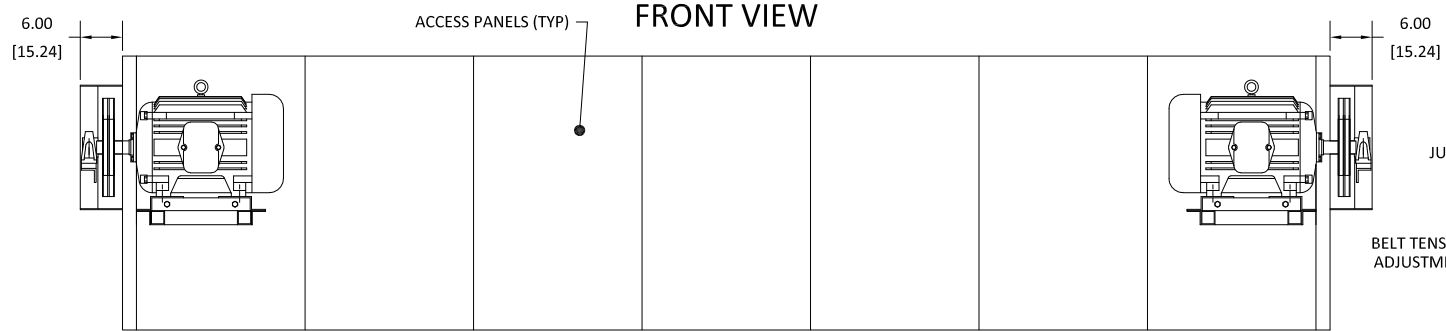
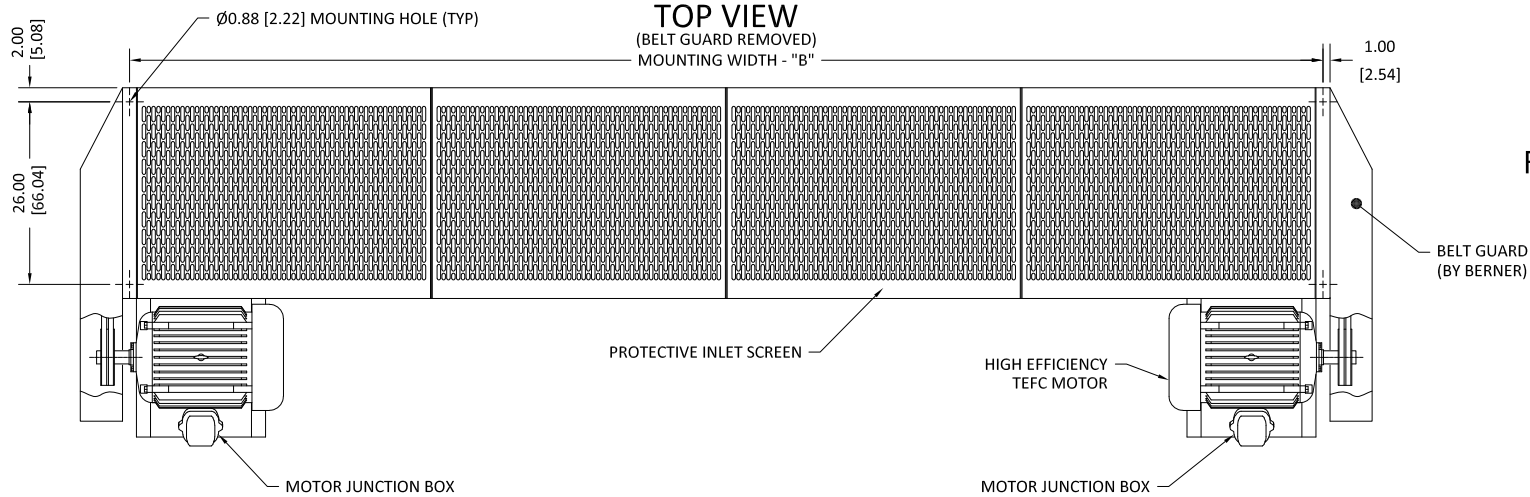
PROJECT		REV	
LOCATION			
ARCHITECT			
ENGINEER			
DWG. NO.	IB50-C-AMB-TF1	TITLE:	 MODEL IB50-C AIR CURTAIN TOP INTAKE FRONT MOTOR AMBIENT SYSTEM
DATE	05AUG2022		
BY	S. Beil		
CHECK	-		
JOB NO.	-		
		BERNER INTERNATIONAL LLC NEW CASTLE, PA	

IB50-C

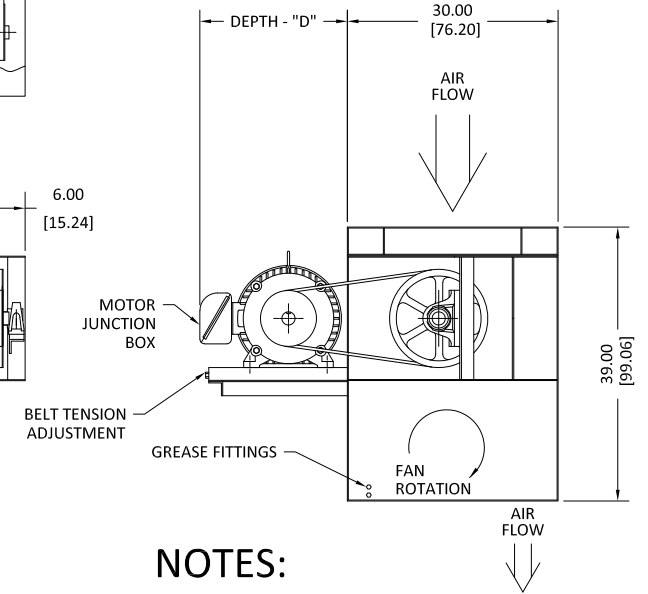
AMBIENT SYSTEM

TOP INTAKE

FRONT MOTOR MOUNT



END VIEW
(BELT GUARD REMOVED)



NOTES:

- 1 AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF ϕ .
- 2 ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
- 3 FIELD VERIFY DIMENSIONS.
- 4 ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
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PROJECT		REV	A
LOCATION			
ARCHITECT			
ENGINEER			
DWG. NO.	IB50-C-AMB-TF2	TITLE:	BERNER
DATE	06JUN2022		MODEL IB50-C AIR CURTAIN
BY	D.Johnson		TOP INTAKE FRONT MOTOR AMBIENT SYSTEM
CHECK	-		
JOB NO.	-		BERNER INTERNATIONAL LLC NEW CASTLE, PA