



# INDUSTRIAL BELT DRIVE 40

## Ambient (Unheated) Air Curtain

### Data Sheet

For Door Heights To 40' (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) |
|--------------|-------------------|---------------------------|------------------------|------------------|------------------------|-------------------|------------|---------------|
| IB40-C-1096A | 96.00             | 10,835                    | 4,071                  | 21,714           | 85%                    | 21.2              | 1 @ 20     | 1126          |
| IB40-C-1108A | 108.00            | 10,835                    | 3,449                  | 20,691           | 83%                    | 21.2              | 1 @ 20     | 1170          |
| IB40-C-1120A | 116.00            | 10,835                    | 4,103                  | 26,445           | 85%                    | 26.5              | 1 @ 25     | 1245          |
| IB40-C-1132A | 132.00            | 10,835                    | 3,684                  | 27,016           | 83%                    | 26.5              | 1 @ 25     | 1355          |
| IB40-C-1144A | 144.00            | 10,835                    | 3,449                  | 27,588           | 82%                    | 26.5              | 1 @ 25     | 1465          |
| IB40-C-1156A | 156.00            | 10,835                    | 3,275                  | 28,385           | 82%                    | 26.5              | 1 @ 25     | 1575          |
| IB40-C-1168A | 168.00            | 10,835                    | 3,932                  | 36,696           | 85%                    | 31.8              | 1 @ 30     | 1695          |
| IB40-C-1180A | 180.00            | 10,835                    | 3,727                  | 37,268           | 83%                    | 31.8              | 1 @ 30     | 1805          |
| IB40-C-1192A | 192.00            | 10,835                    | 4,071                  | 43,427           | 85%                    | 42.4              | 1 @ 40     | 2130          |
| IB40-C-1204A | 204.00            | 10,835                    | 3,742                  | 42,405           | 83%                    | 42.4              | 1 @ 40     | 2491          |
| IB40-C-1216A | 216.00            | 10,835                    | 3,449                  | 41,382           | 83%                    | 42.4              | 1 @ 40     | 2535          |
| IB40-C-2240A | 236.00            | 10,835                    | 4,034                  | 52,889           | 85%                    | 52.9              | 2 @ 25     | 2590          |
| IB40-C-1240A | 236.00            | 10,835                    | 4,034                  | 52,889           | 85%                    | 52.9              | 1 @ 50     | 2690          |

#### NOTES:

1. The IB40-1240A is only recommended for tandem mounted units. Otherwise, it is recommended to use the IB40-2240A 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 IB40-C-1096A

| Distance from Nozzle (in) | 40   | 80   | 120  | 160  | 200  | 240  | 280  | 320  | 360  | 400  | 440  |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Core Velocity (FPM)       | 6523 | 3696 | 3018 | 2613 | 2337 | 2134 | 1976 | 1848 | 1742 | 1653 | 1576 |
| Distance from Nozzle (ft) | 91%  | 95%  | 97%  | 97%  | 97%  | 96%  | 97%  | 98%  | 98%  | 99%  | 99%  |

## MODEL NUMBER CONFIGURATION

**IB40-C-1 096 A D-F T-SS**

| Series | Version | # of Motors | Opening Width | Heat      | Voltage                                                            | Intake           | Motor Location   | Opt. Cabinet Finish                   |
|--------|---------|-------------|---------------|-----------|--------------------------------------------------------------------|------------------|------------------|---------------------------------------|
| IB40   | C       | 1,2         | 096" - 240"   | A=Ambient | D=208/3/60<br>E=240/3/60<br>H=480/3/60<br>I=600/3/60<br>T=380/3/50 | T=Top<br>F=Front | T=Top<br>F=Front | SS=Stainless Steel<br>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-470  
April, 2023

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# INDUSTRIAL BELT DRIVE 40

Ambient (Unheated) Air Curtain  
Electrical Performance Sheet

|                                                              |          | 208/3/60 (voltage code D)<br>TOTAL MOTOR AMP DRAW |                  |                            |        | 240/3/60 (voltage code E)<br>TOTAL MOTOR AMP DRAW |                            |        |                  | 480/3/60 (voltage code H)<br>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                        |  |  |
| IB40-C-1096A<br>IB40-C-1108A                                 | 1 @ 20   | 1                                                 | 53.0             | 125                        | 1      | 47.0                                              | 100                        | 1      | 23.5             | 50                                                |  |  |
| IB40-C-1120A<br>IB40-C-1132A<br>IB40-C-1144A<br>IB40-C-1156A | 1 @ 25   | 1                                                 | 65.0             | 150                        | 1      | 59.0                                              | 125                        | 1      | 29.3             | 60                                                |  |  |
| IB40-C-1168A<br>IB40-C-1180A                                 | 1 @ 30   | 1                                                 | 78.0             | 175                        | 1      | 70.0                                              | 150                        | 1      | 35.0             | 75                                                |  |  |
| IB40-C-1192A<br>IB40-C-1204A<br>IB40-C-1216A                 | 1 @ 40   | 1                                                 | 104.0            | 250                        | 1      | 92.0                                              | 250                        | 1      | 46.0             | 100                                               |  |  |
| IB40-C-2240A                                                 | 2 @ 25   | 1                                                 | 130.0            | 300                        | 1      | 118.0                                             | 250                        | 1      | 58.6             | 125                                               |  |  |
| IB40-C-1240A                                                 | 1 @ 50   | 1                                                 | 126.0            | 250                        | 1      | 112.0                                             | 250                        | 1      | 56.0             | 125                                               |  |  |

|                                                              |          | 600/3/60 (voltage code I)<br>TOTAL MOTOR AMP DRAW |                  |                               |           |                  | 380/3/50 (voltage code T)<br>TOTAL MOTOR AMP DRAW |  |  |
|--------------------------------------------------------------|----------|---------------------------------------------------|------------------|-------------------------------|-----------|------------------|---------------------------------------------------|--|--|
| MODEL                                                        | Qty @ HP | #<br>CKTS                                         | AMPS PER CIRCUIT | BREAKER RATING<br>PER CIRCUIT | #<br>CKTS | AMPS PER CIRCUIT | BREAKER RATING<br>PER CIRCUIT                     |  |  |
| IB40-C-1096A<br>IB40-C-1108A                                 | 1 @ 20   | 1                                                 | 19.0             | 40                            | 1         | 29.3             | 60                                                |  |  |
| IB40-C-1120A<br>IB40-C-1132A<br>IB40-C-1144A<br>IB40-C-1156A | 1 @ 25   | 1                                                 | 23.4             | 50                            | 1         | 36.0             | 75                                                |  |  |
| IB40-C-1168A<br>IB40-C-1180A                                 | 1 @ 30   | 1                                                 | 28.1             | 60                            | 1         | 44.0             | 90                                                |  |  |
| IB40-C-1192A<br>IB40-C-1204A<br>IB40-C-1216A                 | 1 @ 40   | 1                                                 | 37.0             | 90                            | 1         | 54.0             | 125                                               |  |  |
| IB40-C-2240A                                                 | 2 @ 25   | 1                                                 | 46.8             | 100                           | 1         | 72.0             | 150                                               |  |  |
| IB40-C-1240A                                                 | 1 @ 50   | 1                                                 | 45.0             | 90                            | 1         | 65.0             | 150                                               |  |  |

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EP-470  
August, 2022

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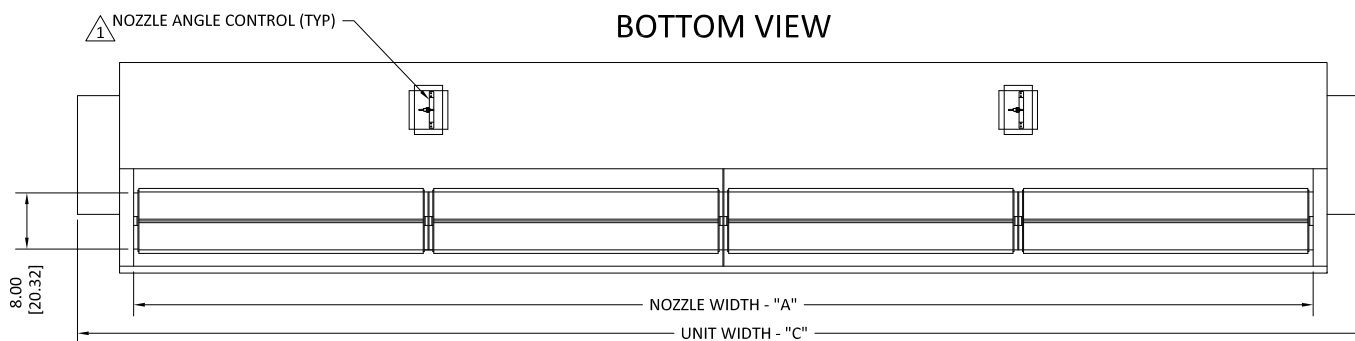
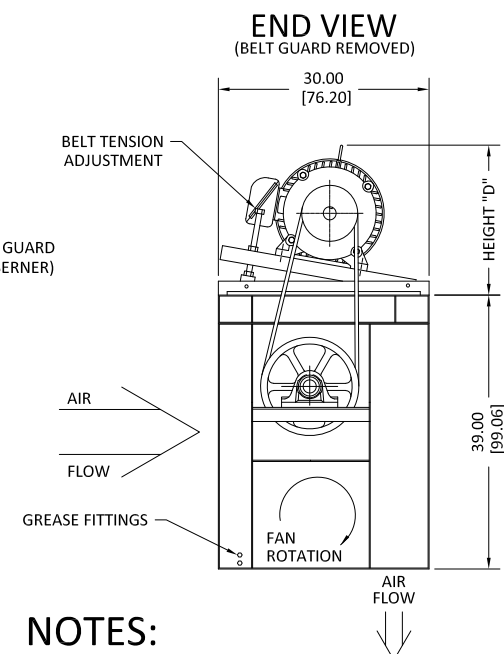
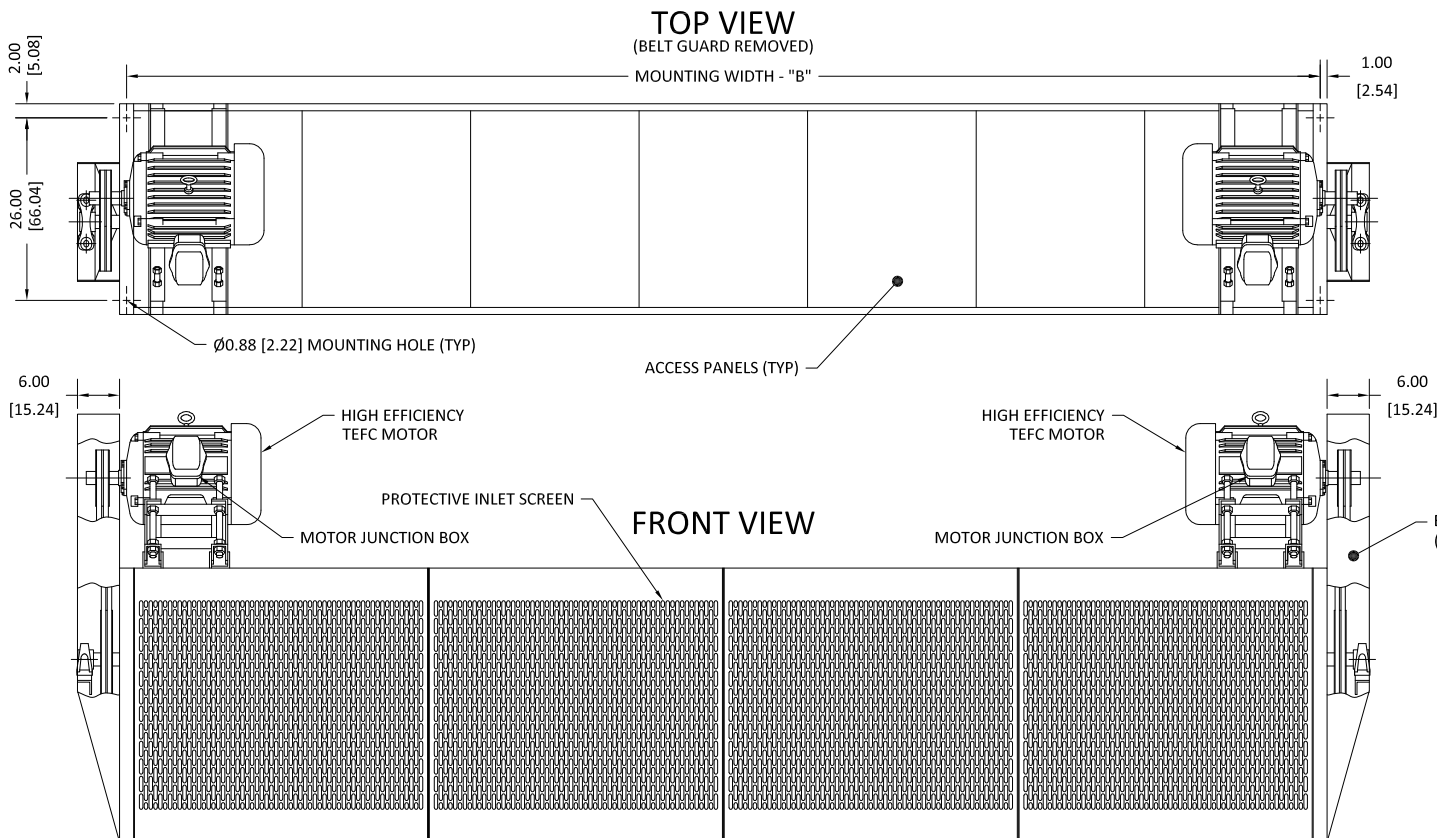
| MODEL           | NOZZLE WIDTH<br>"A" | MOUNTING WIDTH<br>"B" | UNIT WIDTH<br>"C" | MAX MOTOR HEIGHT<br>"D" |
|-----------------|---------------------|-----------------------|-------------------|-------------------------|
| IB40-C-1096A-FT | 96.00 [243.84]      | 98.00 [248.92]        | 106.00 [269.24]   | 22.00 [55.88]           |
| IB40-C-1108A-FT | 108.00 [274.32]     | 110.00 [279.40]       | 118.00 [299.72]   | 22.00 [55.88]           |
| IB40-C-1120A-FT | 116.00 [294.64]     | 118.00 [299.72]       | 126.00 [320.04]   | 22.00 [55.88]           |
| IB40-C-1132A-FT | 132.00 [335.28]     | 134.00 [340.36]       | 142.00 [360.68]   | 22.00 [55.88]           |
| IB40-C-1144A-FT | 144.00 [365.76]     | 146.00 [370.84]       | 154.00 [391.16]   | 25.00 [63.50]           |
| IB40-C-1156A-FT | 156.00 [396.24]     | 158.00 [401.32]       | 166.00 [421.64]   | 25.00 [63.50]           |
| IB40-C-1168A-FT | 168.00 [426.72]     | 170.00 [431.80]       | 178.00 [452.12]   | 25.00 [63.50]           |
| IB40-C-1180A-FT | 180.00 [457.20]     | 182.00 [462.28]       | 190.00 [482.60]   | 25.00 [63.50]           |
| IB40-C-1192A-FT | 192.00 [487.68]     | 194.00 [492.76]       | 202.00 [513.08]   | 28.00 [71.12]           |
| IB40-C-1204A-FT | 204.00 [518.16]     | 206.00 [523.24]       | 214.00 [543.56]   | 28.00 [71.12]           |
| IB40-C-1216A-FT | 216.00 [548.64]     | 218.00 [553.72]       | 226.00 [574.04]   | 28.00 [71.12]           |
| IB40-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.  | IB40-C-AMB-FT1 | TITLE: <b>BERNER</b><br>MODEL IB40-C AIR CURTAIN<br>FRONT INTAKE TOP MOTOR AMBIENT SYSTEM |                                            |   |
| DATE      | 05AUG2022      |                                                                                           |                                            |   |
| BY        | S. Beil        |                                                                                           |                                            |   |
| CHECK     | -              |                                                                                           |                                            |   |
| JOB NO.   | -              |                                                                                           | BERNER INTERNATIONAL LLC<br>NEW CASTLE, PA |   |

# IB40-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  $\phi$ .
- 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<br>"A" | MOUNTING WIDTH<br>"B" | UNIT WIDTH<br>"C" | MAX MOTOR HEIGHT<br>"D" |
|-----------------|---------------------|-----------------------|-------------------|-------------------------|
| IB40-C-2240A-FT | 236.00 [599.44]     | 238.00 [604.52]       | 252.00 [640.08]   | 22.00 [55.88]           |

|           |                |        |                                            |
|-----------|----------------|--------|--------------------------------------------|
| PROJECT   |                | REV    | A                                          |
| LOCATION  |                |        |                                            |
| ARCHITECT |                |        |                                            |
| ENGINEER  |                |        |                                            |
| DWG. NO.  | IB40-C-AMB-FT2 | TITLE: | <b>BERNER</b>                              |
| DATE      | 06JUN2022      |        | MODEL IB40-C AIR CURTAIN                   |
| BY        | D.Johnson      |        | FRONT INTAKE TOP MOTOR AMBIENT SYSTEM      |
| CHECK     | -              |        |                                            |
| JOB NO.   | -              |        | BERNER INTERNATIONAL LLC<br>NEW CASTLE, PA |

[illegible]

| MODEL           | NOZZLE WIDTH<br>"A" | MOUNTING WIDTH<br>"B" | UNIT WIDTH<br>"C" | MAX MOTOR DEPTH<br>"D" |
|-----------------|---------------------|-----------------------|-------------------|------------------------|
| IB40-C-1096A-TF | 96.00 [243.84]      | 98.00 [248.92]        | 106.00 [269.24]   | 24.50 [62.23]          |
| IB40-C-1108A-TF | 108.00 [274.32]     | 110.00 [279.40]       | 118.00 [299.72]   | 24.50 [62.23]          |
| IB40-C-1120A-TF | 116.00 [294.64]     | 118.00 [299.72]       | 126.00 [320.04]   | 24.50 [62.23]          |
| IB40-C-1132A-TF | 132.00 [335.28]     | 134.00 [340.36]       | 142.00 [360.68]   | 24.50 [62.23]          |
| IB40-C-1144A-TF | 144.00 [365.76]     | 146.00 [370.84]       | 154.00 [391.16]   | 27.50 [69.85]          |
| IB40-C-1156A-TF | 156.00 [396.24]     | 158.00 [401.32]       | 166.00 [421.64]   | 27.50 [69.85]          |
| IB40-C-1168A-TF | 168.00 [426.72]     | 170.00 [431.80]       | 178.00 [452.12]   | 27.50 [69.85]          |
| IB40-C-1180A-TF | 180.00 [457.20]     | 182.00 [462.28]       | 190.00 [482.60]   | 27.50 [69.85]          |
| IB40-C-1192A-TF | 192.00 [487.68]     | 194.00 [492.76]       | 202.00 [513.08]   | 32.50 [82.55]          |
| IB40-C-1204A-TF | 204.00 [518.16]     | 206.00 [523.24]       | 214.00 [543.56]   | 32.50 [82.55]          |
| IB40-C-1216A-TF | 216.00 [548.64]     | 218.00 [553.72]       | 226.00 [574.04]   | 32.50 [82.55]          |
| IB40-C-1240A-TF | 236.00 [599.44]     | 238.00 [604.52]       | 246.00 [624.84]   | 32.50 [82.55]          |

Tandem mounted only

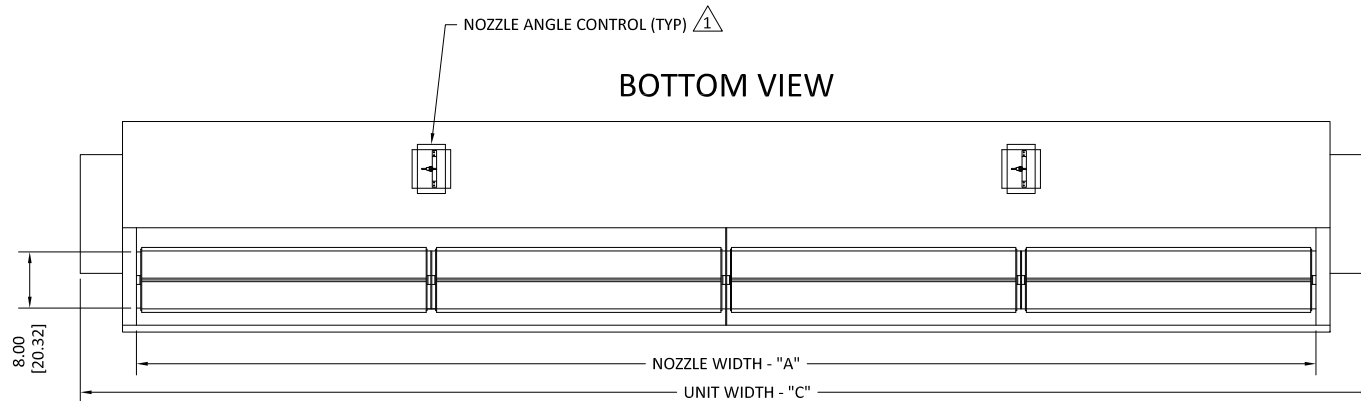
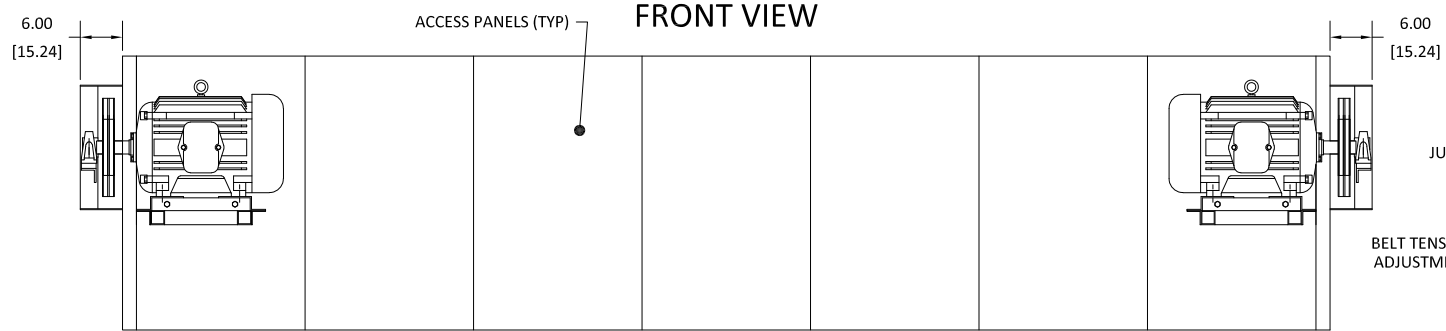
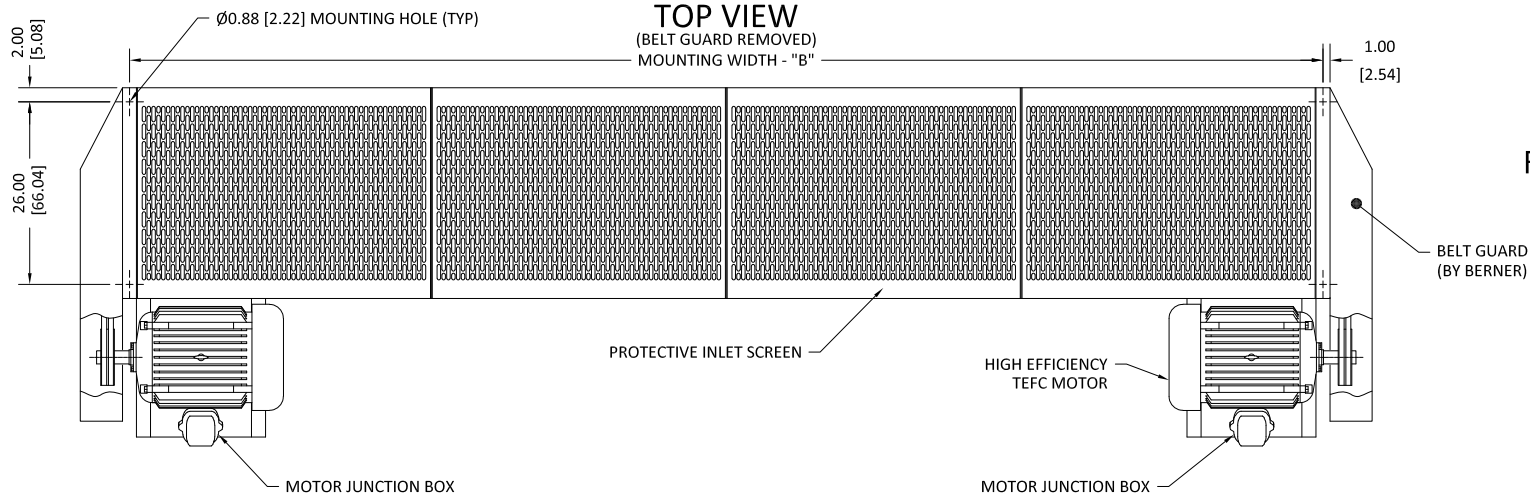
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|-----------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| PROJECT   |                | REV/                                                                                                                                                             | C |
| LOCATION  |                |                                                                                                                                                                  |   |
| ARCHITECT |                |                                                                                                                                                                  |   |
| ENGINEER  |                |                                                                                                                                                                  |   |
| DWG. NO.  | IB40-C-AMB-TF1 | TITLE: <b>BERNER</b><br><b>MODEL IB40-C AIR CURTAIN</b><br><b>TOP INTAKE FRONT MOTOR AMBIENT SYSTEM</b><br><br><b>BERNER INTERNATIONAL LLC</b><br>NEW CASTLE, PA |   |
| DATE      | 05AUG2022      |                                                                                                                                                                  |   |
| BY        | S. Beil        |                                                                                                                                                                  |   |
| CHECK     | -              |                                                                                                                                                                  |   |
| JOB NO.   | -              |                                                                                                                                                                  |   |

# IB40-C

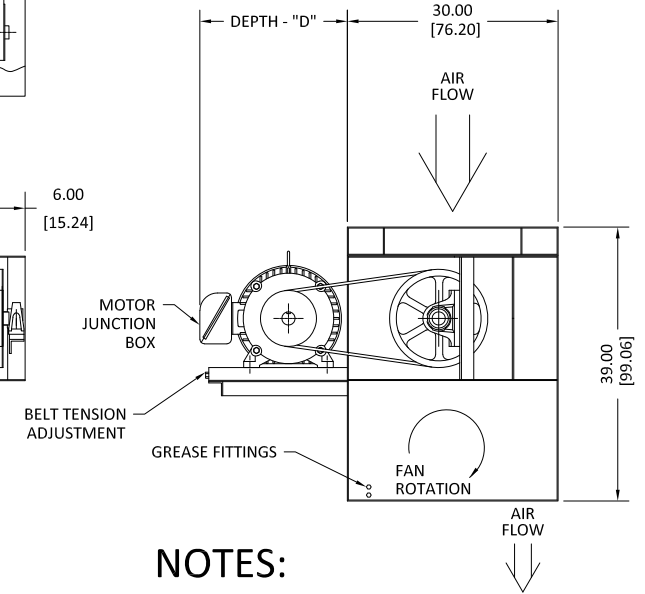
## AMBIENT SYSTEM

### TOP INTAKE

### FRONT MOTOR MOUNT



END VIEW  
(BELT GUARD REMOVED)



## NOTES:

- AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF  $\phi$ .
- ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
- FIELD VERIFY DIMENSIONS.
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- DIMENSIONS IN INCHES [CENTIMETERS].

| MODEL           | NOZZLE WIDTH<br>"A" | MOUNTING WIDTH<br>"B" | UNIT WIDTH<br>"C" | MAX MOTOR DEPTH<br>"D" |
|-----------------|---------------------|-----------------------|-------------------|------------------------|
| IB40-C-2240A-TF | 236.00 [599.44]     | 238.00 [604.52]       | 252.00 [640.08]   | 24.50 [62.23]          |

|           |                |        |                                            |
|-----------|----------------|--------|--------------------------------------------|
| PROJECT   |                | REV    | A                                          |
| LOCATION  |                |        |                                            |
| ARCHITECT |                |        |                                            |
| ENGINEER  |                |        |                                            |
| DWG. NO.  | IB40-C-AMB-TF2 | TITLE: | BERNER                                     |
| DATE      | 06JUN2022      |        | MODEL IB40-C AIR CURTAIN                   |
| BY        | D.Johnson      |        | TOP INTAKE FRONT MOTOR AMBIENT SYSTEM      |
| CHECK     | -              |        |                                            |
| JOB NO.   | -              |        | BERNER INTERNATIONAL LLC<br>NEW CASTLE, PA |