



# INDUSTRIAL DIRECT DRIVE 16

## Direct Gas Heated Air Curtain

### Data Sheet

For Door Heights To 16' (environmental separation)

#### STANDARD CONSTRUCTION

- Single speed T.E.A.O. motor(s) - direct drive
- Gray powder coated exterior (Optional: Custom Color or Stainless)
- Split cabinet construction for fan assembly removal
- Top Mounting only
- Front air intake (Optional: top)
- High efficiency Pro-V Nozzle
- Factory mounted duct transition with bottom access panels
- Factory mounted modulating direct fired heater with FM/IRI gas train
  - Factory mounted wired heater control panel
  - Steel cabinet with gray finish
  - Spark ignited intermittent pilot

**2 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(s) @ hp | Heater Output (MBH) | Gas Train Size | Air Temp. Rise (°F) | Net Wt. Air Curtain (lbs) | Net Wt. Duct Trans. (lbs) | Net Wt. Burner Box (lbs) |
|-------------|-------------------|--------------------------|------------------------|------------------|------------------------|-------------------|---------------|---------------------|----------------|---------------------|---------------------------|---------------------------|--------------------------|
| IDC16-1060D | 60.00             | 5,145                    | 3,302                  | 5,359            | 85%                    | 2.80              | 1 @ 3         | 232.7               | 3/4"           | 40°                 | 370                       | 82                        | 220                      |
| IDC16-1072D | 72.00             | 5,005                    | 2,944                  | 6,256            | 91%                    | 2.90              | 1 @ 3         | 272.2               | 3/4"           | 40°                 | 410                       | 97                        | 220                      |
| IDC16-1084D | 84.00             | 4,644                    | 2,732                  | 6,772            | 89%                    | 3.00              | 1 @ 3         | 293.9               | 3/4"           | 40°                 | 450                       | 112                       | 220                      |
| IDC16-1096D | 96.00             | 5,352                    | 3,148                  | 8,920            | 87%                    | 4.10              | 1 @ 5         | 387.6               | 3/4"           | 40°                 | 550                       | 121                       | 260                      |
| IDC16-1108D | 108.00            | 5,236                    | 3,080                  | 9,817            | 86%                    | 4.20              | 1 @ 5         | 426.0               | 3/4"           | 40°                 | 670                       | 136                       | 260                      |
| IDC16-1120D | 117.00            | 6,012                    | 3,627                  | 12,526           | 87%                    | 4.80              | 1 @ 7.5       | 544.4               | 3/4"           | 40°                 | 705                       | 136                       | 340                      |
| IDC16-1132D | 132.00            | 5,602                    | 3,296                  | 12,839           | 86%                    | 4.90              | 1 @ 7.5       | 557.2               | 3/4"           | 40°                 | 755                       | 154                       | 340                      |
| IDC16-1144D | 144.00            | 5,225                    | 3,074                  | 13,062           | 85%                    | 5.40              | 1 @ 7.5       | 567.1               | 3/4"           | 40°                 | 795                       | 169                       | 340                      |
| IDC16-1156D | 156.00            | 4,943                    | 2,908                  | 13,388           | 84%                    | 5.50              | 1 @ 7.5       | 581.9               | 3/4"           | 40°                 | 845                       | 178                       | 380                      |
| IDC16-2168D | 168.00            | 5,203                    | 3,061                  | 15,176           | 89%                    | 7.00              | 1 @ 5, 1 @ 3  | 658.8               | 3/4"           | 40°                 | 950                       | 193                       | 380                      |
| IDC16-2180D | 180.00            | 5,143                    | 3,026                  | 16,073           | 87%                    | 7.10              | 1 @ 5, 1 @ 3  | 698.2               | 3/4"           | 40°                 | 1,015                     | 202                       | 420                      |
| IDC16-2192D | 192.00            | 5,352                    | 3,148                  | 17,840           | 87%                    | 8.20              | 2 @ 5         | 774.2               | 3/4"           | 40°                 | 1,080                     | 217                       | 420                      |

#### NOTES:

1. Operation at 50 Hz will generate approximately a 17% reduction in performance.
2. Performance data based on AMCA licensed data from unheated units.
3. Maximum leaving air temperature shall not exceed 120°F.
4. Duct transition and direct fired gas heater are factory mounted to air curtain and each require individual support.
5. Gas supply pressure: minimum 1 psi, maximum 5 psi.
6. Vertically mounted direct gas heated air curtain not available.
7. Gas train size is not the main gas supply line size.

See sheet EP-429 for amp draws/total load requirements.

### MODEL NUMBER CONFIGURATION

**IDC16-1 060 D D-F-SS**

| Series | # of Motors | Opening Width | Heat                | Voltage  | Intake           | Opt. Cabinet Finish                   |
|--------|-------------|---------------|---------------------|--|------------------|---------------------------------------|
| IDC16  | 1, 2        | 060" - 192"   | D=Direct Gas Heated | 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 | SS=Stainless Steel<br>CC=Custom Color |

Sound level measured 10' (3m) from the unit in free field:  
3, 5, 7½, (5 + 3) & (5 + 5) hp motor(s):  
68 dBA, 70 dBA, 71 dBA, 72 dBA & 73 dBA

Berner reserves the right to alter specifications without prior notice.

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111 Progress Ave. / New Castle / PA / 16101 / USA

DS-429  
July, 2015



# INDUSTRIAL DIRECT DRIVE 16

## Direct Gas Heated Air Curtain

### Electrical Performance Sheet

| MODEL  | Qty @ HP       | 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 |                  |                            |
|--|----------------|---|------------------|----------------------------|---|------------------|----------------------------|---|------------------|----------------------------|
|  |                | # CKTS  | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT | # CKTS  | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT | # CKTS  | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT |
| IDC16-1060D<br>IDC16-1072D<br>IDC16-1084D                | 1 @ 3          | 1   | 16.7             | 25                         | 1   | 15.3             | 25                         | 1   | 7.7              | 15                         |
| IDC16-1096D<br>IDC16-1108D                               | 1 @ 5          | 1   | 20.6             | 35                         | 1   | 18.9             | 35                         | 1   | 9.5              | 20                         |
| IDC16-1120D<br>IDC16-1132D<br>IDC16-1144D<br>IDC16-1156D | 1 @ 7.5        | 1   | 26.6             | 50                         | 1   | 25.1             | 45                         | 1   | 12.6             | 25                         |
| IDC16-2168D<br>IDC16-2180D                               | 1 @ 3<br>1 @ 5 | 1   | 33.7             | 50                         | 1   | 31.1             | 60                         | 1   | 15.6             | 25                         |
| IDC16-2192D  | 2 @ 5          | 1   | 37.6             | 60                         | 1   | 34.7             | 60                         | 1   | 17.4             | 25                         |

| MODEL  | Qty @ HP       | 600/3/60 (voltage code I)<br>TOTAL MOTOR AMP DRAW |                  |                            | 380/3/50 (voltage code T)<br>TOTAL MOTOR AMP DRAW |                  |                            |
|--|----------------|---|------------------|----------------------------|---|------------------|----------------------------|
|  |                | # CKTS  | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT | # CKTS  | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT |
| IDC16-1060D<br>IDC16-1072D<br>IDC16-1084D                | 1 @ 3          | 1   | 5.2              | 15                         | 1   | 7.9              | 15                         |
| IDC16-1096D<br>IDC16-1108D                               | 1 @ 5          | 1   | 7.6              | 15                         | 1   | 9.7              | 20                         |
| IDC16-1120D<br>IDC16-1132D<br>IDC16-1144D<br>IDC16-1156D | 1 @ 7.5        | 1   | 9.8              | 20                         | 1   | 11.0             | 20                         |
| IDC16-2168D<br>IDC16-2180D                               | 1 @ 3<br>1 @ 5 | 1   | 13.7             | 20                         | 1   | 15.6             | 20                         |
| IDC16-2192D  | 2 @ 5          | 1   | 13.9             | 20                         | 1   | 17.4             | 25                         |

\* Includes 750VA transformer load for gas fired burner panel.

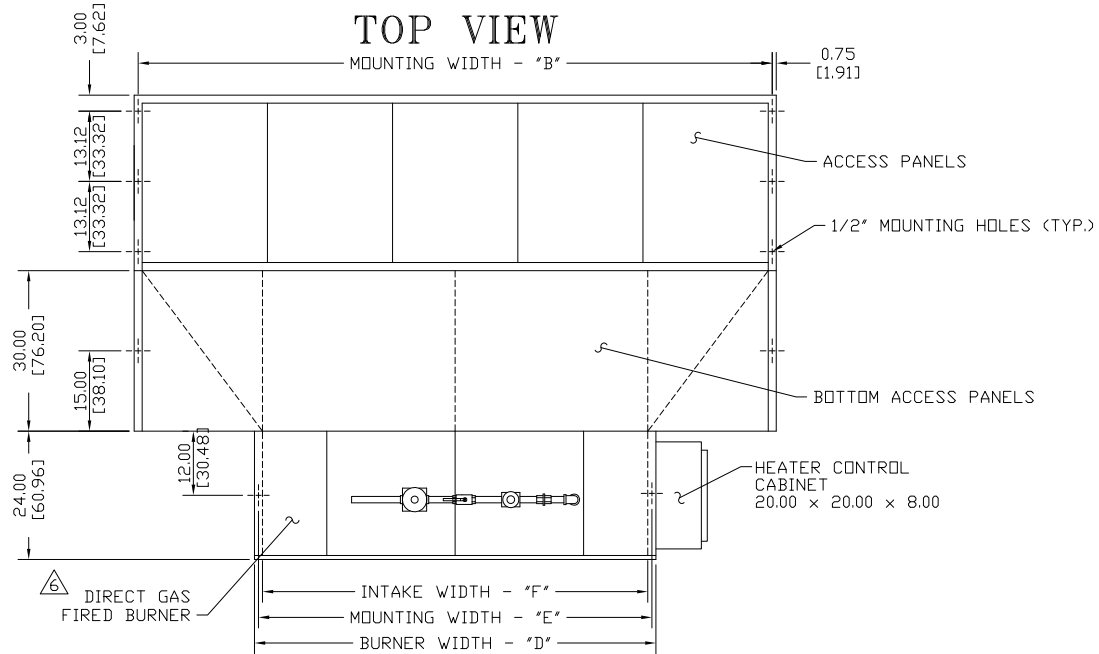
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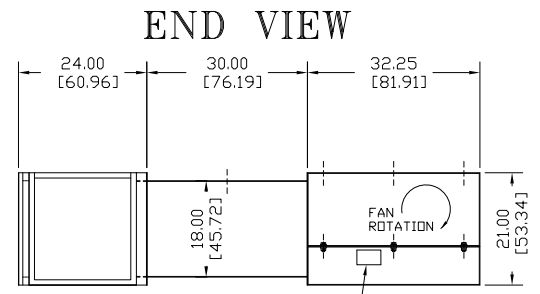
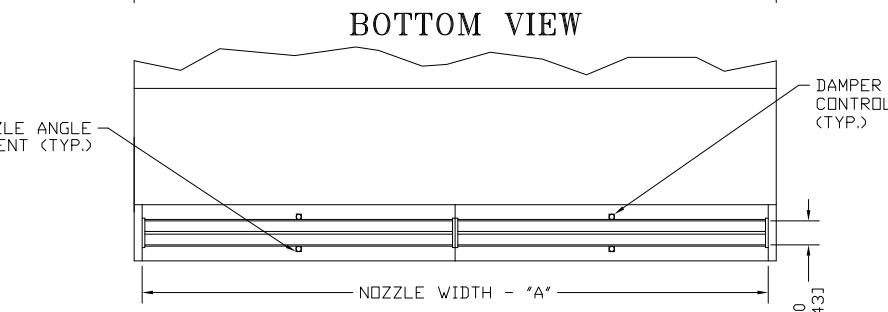
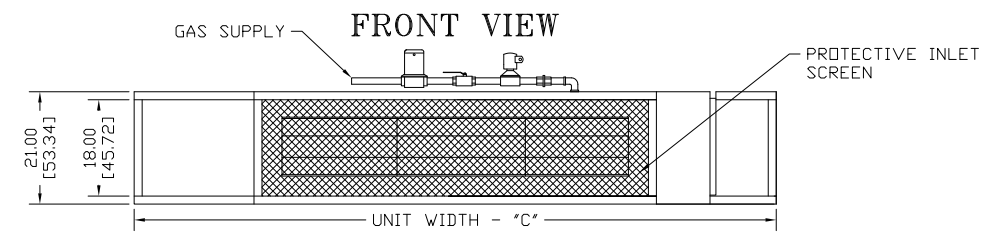
EP-429  
December, 2018

# IDC 16

## DIRECT GAS FIRED ONE HEATER SYSTEM FRONT INTAKE



**CAUTION:**  
HEATER IS EQUIPPED FOR A MAXIMUM GAS SUPPLY PRESSURE OF 1# TO 5#.



ONE JUNCTION BOX PER MOTOR  
(STANDARD FOR REMOTE PANEL)  
2.75 x 4.50 x 2.00

- 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 'D' IN MODEL NUMBER DESIGNATES, DIRECT GAS HEATED UNIT. 'F' DESIGNATES FRONT INTAKE, 'T' IS TOP MOTOR.
  - 7 SUPPORT DIRECT GAS HEATERS SEPARATELY FROM UNIT.
  - 8 DIMENSIONS IN INCHES [CENTIMETERS].

| MODEL         | NOZZLE WIDTH 'A' | MOUNTING WIDTH 'B' | UNIT WIDTH 'C'  | BURNER WIDTH 'D' | MOUNTING WIDTH 'E' | INTAKE WIDTH 'F' |
|---------------|------------------|--------------------|-----------------|------------------|--------------------|------------------|
| IDC16-1060D-F | 60.00 [152.40]   | 61.50 [156.21]     | 63.00 [160.02]  | 39.00 [99.06]    | 37.50 [95.25]      | 36.00 [91.44]    |
| IDC16-1072D-F | 72.00 [182.88]   | 73.50 [186.69]     | 75.00 [190.50]  | 39.00 [99.06]    | 37.50 [95.25]      | 36.00 [91.44]    |
| IDC16-1084D-F | 84.00 [213.36]   | 85.50 [217.17]     | 87.00 [220.98]  | 39.00 [99.06]    | 37.50 [95.25]      | 36.00 [91.44]    |
| IDC16-1096D-F | 96.00 [243.84]   | 97.50 [247.65]     | 99.00 [251.46]  | 51.00 [129.54]   | 49.50 [125.73]     | 48.00 [121.92]   |
| IDC16-1108D-F | 108.00 [274.32]  | 109.50 [278.13]    | 111.00 [281.94] | 51.00 [129.54]   | 49.50 [125.73]     | 48.00 [121.92]   |
| IDC16-1120D-F | 117.00 [297.18]  | 118.50 [300.99]    | 120.00 [304.80] | 75.00 [190.50]   | 73.50 [186.69]     | 72.00 [182.88]   |
| IDC16-1132D-F | 132.00 [335.28]  | 133.50 [339.09]    | 135.00 [342.90] | 75.00 [190.50]   | 73.50 [186.69]     | 72.00 [182.88]   |
| IDC16-1144D-F | 144.00 [365.76]  | 145.50 [369.57]    | 147.00 [373.38] | 75.00 [190.50]   | 73.50 [186.69]     | 72.00 [182.88]   |
| IDC16-1156D-F | 156.00 [396.24]  | 157.50 [400.05]    | 159.00 [403.86] | 87.00 [220.98]   | 85.50 [217.17]     | 84.00 [213.36]   |
| IDC16-2168D-F | 168.00 [426.72]  | 169.50 [430.53]    | 171.00 [434.34] | 87.00 [220.98]   | 85.50 [217.17]     | 84.00 [213.36]   |
| IDC16-2180D-F | 180.00 [457.20]  | 181.50 [461.01]    | 183.00 [464.82] | 99.00 [251.46]   | 97.50 [247.65]     | 96.00 [243.84]   |
| IDC16-2192D-F | 192.00 [487.68]  | 193.50 [491.49]    | 195.00 [495.30] | 99.00 [251.46]   | 97.50 [247.65]     | 96.00 [243.84]   |

|           |            |   |
|-----------|------------|---|
| PROJECT   |            |   |
| LOCATION  |            |   |
| ARCHITECT |            |   |
| ENGINEER  |            |   |
| DWG. NO.  | IDC16-DGF1 | TITLE: <b>BERNER</b>                          |
| DATE      | 04APR2021  | MODEL IDC16 AIR CURTAIN                       |
| BY        | S. BEIL    | DIRECT GAS FIRED - ONE HEATER SYSTEM          |
| REPLACES  | 03DEC19    |   |
| BY        | N. GRADY   | BERNER INTERNATIONAL CORP.<br>NEW CASTLE, PA. |