



Bulletin HRV05



HOODED ROOF VENTILATORS

Models: HRD, HRR, HRB, HTB
Direct Drive and Belt Drive

MOVING YOUR WAY

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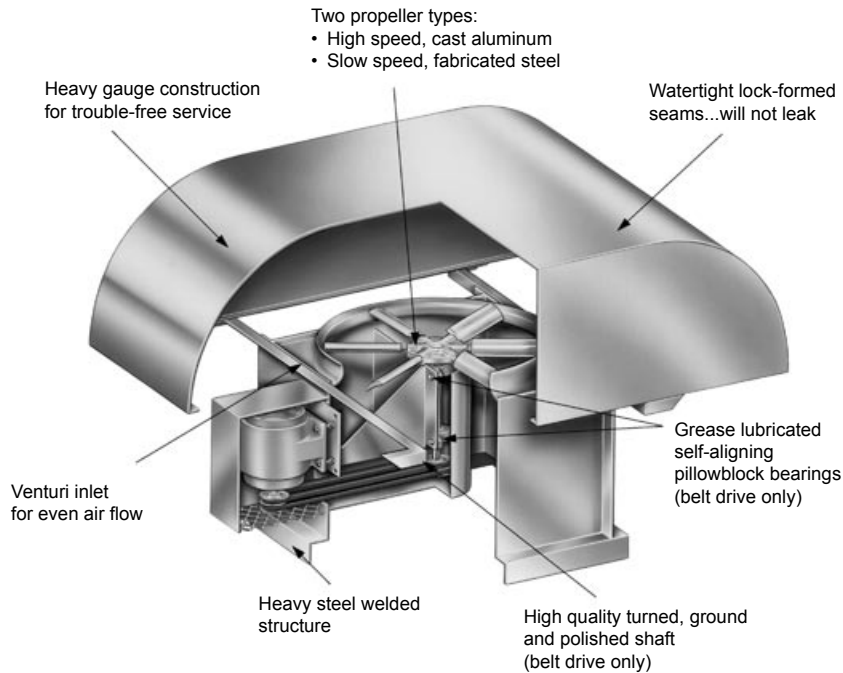
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Following publication of this catalog changes may have been made in standard equipment, options and the like that would not be included. We reserve the right to make changes at any time, without notice, to models, specifications, options, availability, etc. This bulletin illustrates the appearance of PennBarry products at the time of publication and we reserve the right to make changes in design and construction at anytime without notice. Your local sales representative is the best source for current information.

General Information

HRD/HRR/HRB/HTB - Hooded Roof Ventilators

Hooded Roof Ventilators move large volumes of air efficiently, quietly and with low discharge velocities. They combine venturi design with the latest developments in T-hood construction for long trouble-free service under difficult weather or outside vibration conditions. Watertight, overlapping seams and heavy gauge materials insure against leakage. PennBarry Hooded Roof Ventilators are designed for aerodynamic efficiency and employ a choice of two propeller types: high speed, cast aluminum and slow speed, fabricated steel. Available in direct drive and belt drive models, they serve supply, exhaust, reversible, gravity-vent and filtered air applications. Shafts for belt drive models are specially machined, turned, ground and polished, and mounted in relubricatable ball bearings to assure trouble-free service.



Models

HRD – Direct Drive

- Recommended when little or no foreign matter is present in airstream
- Combines low profile design with low maintenance advantages of direct drive system
- Prop diameters from 18" thru 72"

HRB – Belt Drive

- Motor and drive in airstream
- Recommended for relatively clean air and moderate temperatures
- Enables use of standard speed motors at lower blade speeds
- Prop diameters from 24" thru 72"

HRR – Belt Drive

- Motor and drive out of airstream
- Allows use of standard components with hot or dirty air
- Enables use of standard speed motors at lower blade speeds
- Prop diameters from 24" thru 72"

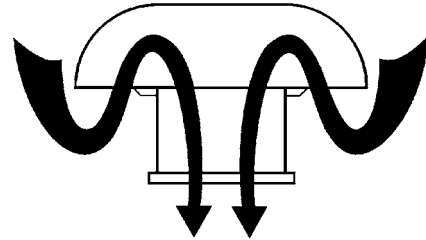
HTB – Belt Drive, Large T-Hood

- Motor and drive in airstream
- Consult factory for reversible airflow or direct drive applications
- Available with 091 cast aluminum prop only
- Prop diameters from 84" thru 120"

Wide Choice of Applications

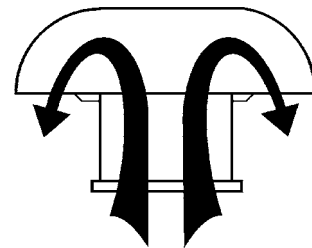
Air Supply Model

Air Supply models introduce air into the building for either general air makeup or to handle specific, localized conditions. They provide air intake to match exhaust requirements. The Filtered Air option combines a powered air supply with a filter equipped hood to provide clean air from an outside contaminated environment.



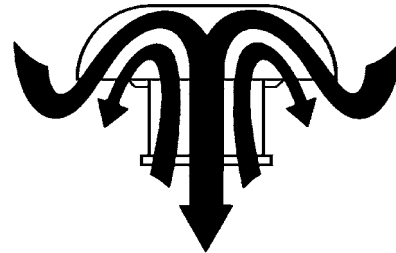
Power Exhaust Model

Power Exhaust models remove heat, moisture or contaminants, such as fumes, smoke and grease. They are applicable to meeting specific code requirements or simply recognized good engineering practice. Ideal for applications where the desired outlet velocity is too low for an upblast roof ventilator.



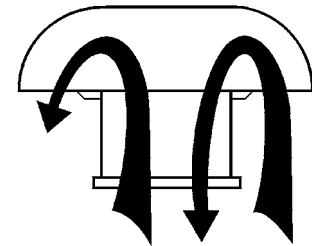
Reversible Air Flow Model

Reversible Air Flow models utilize a reversible propeller for equal air flow in both directions. They can act in either a supply or exhaust mode as conditions dictate. Not available with the 097 fabricated steel propeller.



Gravity Vent Model

Gravity Vent units are constructed similar to the standard Hooded Roof Ventilators except that no fan is provided. This unit is commonly used to vent hot air trapped beneath the roof, or to form the intake of an air supply system with the fan located in the duct system.

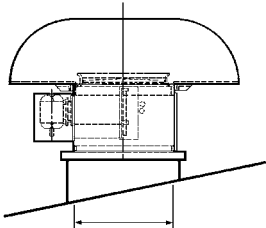


Options and Accessories

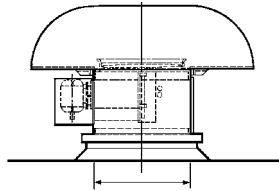
HRD/HRR/HRB/HTB - Hooded Roof Ventilators

Insulated Roof Curbs

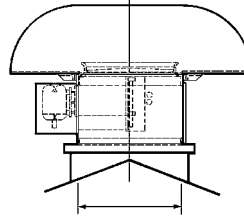
Insulated roof curbs are matched to the fan size. Roof curbs allow maximum ease of installation and insure proper fit. They are available for flat, sloped or ridge roof mounting. Please specify fan size, flat, sloped or ridge mounting and roof pitch when ordering.



Slope



Flat

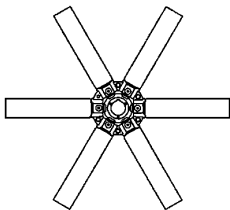


Ridge

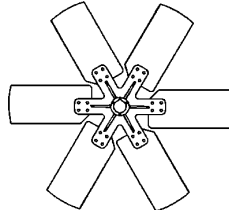
Propeller Types

Two aerodynamically efficient propeller types are available:

- 6-blade cast aluminum (091)
- Fabricated slow speed steel (097)



091 - CAST ALUMINUM



097 - FABRICATED STEEL

Filtered Hoods

Filtered hoods include filter racks, disposable filters, as well as a larger hood if required. Permanent cleanable filters are also available.

Oversize Hoods

Oversize hoods lower the air intake or discharge velocity and adapt the next larger fan size hood to the fan size needed.

Motor Operated Dampers

Motor operated dampers are center pivoted, parallel blade for either supply, exhaust or reversible flow. Dampers are arranged for power opening, spring closing unless otherwise specified.

Walk-In Construction

Walk-in construction on Large T-Hood fans increases stack height, adds a full stack height door and access platform. Walk-in construction also allows maintenance personnel considerably more room and accessibility inside the unit.

Extended Lubrication Lines

Extended lubrication lines to the outside of the fan housing permit relubrication of fan bearings from above the roof. Extended lube lines are standard on model HRR Hooded Roof Ventilators.

Birdscreens

Standard birdscreens are 3/4" non-flattened expanded metal welded in place. An optional sheet metal frame, bolted in place and removable for access to the propeller is available.

Backdraft Dampers

Backdraft dampers are gravity closing for exhaust and spring closed or counter balanced for supply. Dampers are not available for reversible flow units.

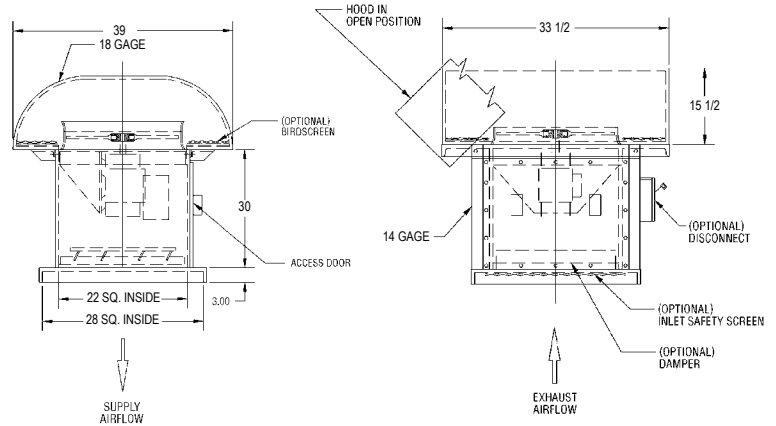
Direct Drive Fan Data - HRD

Hooded Roof Ventilators

018

| | |
|---|-----------------------------|
| Prop Diameter = 18 in. | Fan Weight = 180 lbs. |
| Maximum RPM = 1750 | Tip Speed, FPM = 4.71 x RPM |
| Maximum Motor Frame Size = 184 | |
| Inlet & Outlet Diameter (Area) = 18.19 in. (1.80 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | | |
|------|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|-----|--|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | |
| 097* | 1150 | 22 | 2827 | 0.18 | 2560 | 0.20 | 2183 | 0.21 | | | | | | | | | | | |
| | | 28 | 3312 | 0.23 | 3004 | 0.25 | 2588 | 0.26 | | | | | | | | | | | |
| | 1750 | 22 | 4301 | 0.63 | 4136 | 0.65 | 3954 | 0.68 | 3748 | 0.71 | 3512 | 0.73 | 3210 | 0.74 | 2741 | 0.72 | | | |
| | | 28 | 5040 | 0.81 | 4860 | 0.90 | 4644 | 0.90 | 4406 | 0.89 | 4143 | 0.92 | 3810 | 0.94 | 3333 | 0.95 | | | |

| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | | |
|------|------|-------|-------|------|---------|------|---------|------|---------|-----|---------|-----|---------|-----|---------|-----|-------|-----|--|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | |
| 091 | 1150 | 14 | 1644 | 0.04 | 1166 | 0.04 | | | | | | | | | | | | | |
| | | 18 | 1918 | 0.04 | 1364 | 0.05 | | | | | | | | | | | | | |
| | | 22 | 2268 | 0.06 | 1608 | 0.07 | | | | | | | | | | | | | |
| | | 26 | 2445 | 0.07 | 1865 | 0.08 | | | | | | | | | | | | | |
| | | 30 | 2772 | 0.10 | 2166 | 0.11 | | | | | | | | | | | | | |
| | 1750 | 14 | 2502 | 0.13 | 2225 | 0.14 | 1907 | 0.14 | | | | | | | | | | | |
| | | 18 | 2919 | 0.15 | 2594 | 0.17 | 2217 | 0.18 | | | | | | | | | | | |
| | | 22 | 3451 | 0.23 | 3056 | 0.24 | 2615 | 0.25 | | | | | | | | | | | |
| | | 26 | 3721 | 0.26 | 3385 | 0.28 | 2990 | 0.29 | | | | | | | | | | | |
| | | 30 | 4219 | 0.36 | 3849 | 0.38 | 3449 | 0.40 | | | | | | | | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 props are suitable for exhaust or supply applications, however, 097 props are NOT reversible. For reversible flow, select a 091 prop and add .39 VP loss for equal airflow in both directions.

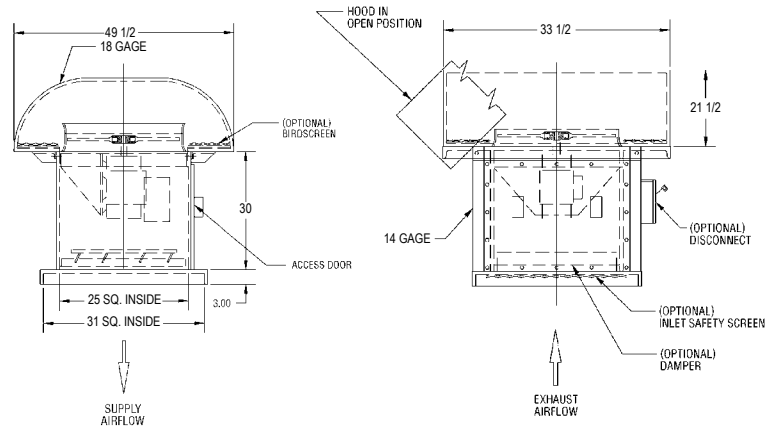
HRD - Direct Drive Fan Data

Hooded Roof Ventilators

021

| | |
|---|-----------------------------|
| Prop Diameter = 21 in. | Fan Weight = 220 lbs. |
| Maximum RPM = 1750 | Tip Speed, FPM = 5.50 x RPM |
| Maximum Motor Frame Size = 184 | |
| Inlet & Outlet Diameter (Area) = 21.22 in. (2.46 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 097* | 1150 | 22 | 4448 | 0.39 | 4184 | 0.41 | 3814 | 0.44 | 3306 | 0.45 | | | | | | | | |
| | | 28 | 5259 | 0.50 | 4917 | 0.56 | 4490 | 0.55 | 3931 | 0.58 | | | | | | | | |
| | 1750 | 22 | 6830 | 1.36 | 6638 | 1.40 | 6436 | 1.44 | 6219 | 1.49 | 5975 | 1.53 | 5705 | 1.56 | 5382 | 1.58 | 4485 | 1.58 |
| | | 28 | 8003 | 1.75 | 7793 | 1.90 | 7567 | 1.98 | 7300 | 1.93 | 7021 | 1.92 | 6722 | 1.96 | 6369 | 2.00 | 5413 | 2.06 |

| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|------|-------|-------|------|---------|------|---------|------|---------|------|---------|-----|---------|-----|---------|-----|-------|-----|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 091 | 1150 | 14 | 2611 | 0.08 | 2094 | 0.09 | | | | | | | | | | | | |
| | | 18 | 3046 | 0.09 | 2444 | 0.11 | | | | | | | | | | | | |
| | | 22 | 3601 | 0.14 | 2880 | 0.15 | | | | | | | | | | | | |
| | | 26 | 3883 | 0.16 | 3258 | 0.17 | | | | | | | | | | | | |
| | | 30 | 4402 | 0.22 | 3742 | 0.24 | | | | | | | | | | | | |
| | 1750 | 14 | 3973 | 0.28 | 3657 | 0.29 | 3310 | 0.30 | 2893 | 0.31 | | | | | | | | |
| | | 18 | 4636 | 0.33 | 4263 | 0.36 | 3853 | 0.38 | 3381 | 0.39 | | | | | | | | |
| | | 22 | 5480 | 0.49 | 5021 | 0.52 | 4544 | 0.54 | 3987 | 0.55 | | | | | | | | |
| | | 26 | 5909 | 0.57 | 5529 | 0.59 | 5104 | 0.61 | 4594 | 0.62 | | | | | | | | |
| | | 30 | 6699 | 0.78 | 6270 | 0.81 | 5832 | 0.84 | 5324 | 0.86 | | | | | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 props are suitable for exhaust or supply applications, however, 097 props are NOT reversible. For reversible flow, select a 091 prop and add .39 VP loss for equal airflow in both directions.

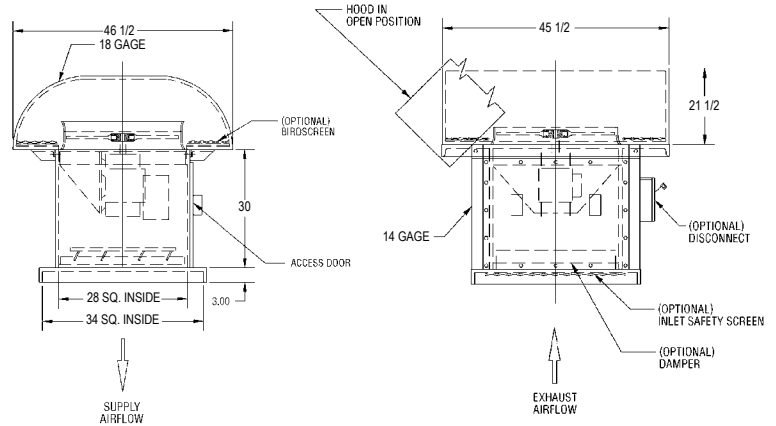
Direct Drive Fan Data - HRD

Hooded Roof Ventilators

024

| | |
|---|-----------------------------|
| Prop Diameter = 24 in. | Fan Weight = 250 lbs. |
| Maximum RPM = 1750 | Tip Speed, FPM = 6.28 x RPM |
| Maximum Motor Frame Size = 184 | |
| Inlet & Outlet Diameter (Area) = 24.25 in. (3.21 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | | |
|------|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|-----|---------|-----|-------|-----|--|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | |
| 097* | 870 | 22 | 5069 | 0.33 | 4600 | 0.36 | 3943 | 0.38 | | | | | | | | | | | |
| | | 28 | 5939 | 0.42 | 5398 | 0.46 | 4671 | 0.48 | | | | | | | | | | | |
| | 1150 | 22 | 6700 | 0.75 | 6361 | 0.79 | 5981 | 0.84 | 5511 | 0.87 | 4867 | 0.88 | | | | | | | |
| | | 28 | 7850 | 0.97 | 7481 | 1.10 | 7019 | 1.05 | 6500 | 1.09 | 5800 | 1.13 | | | | | | | |

| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|-----|-------|-----|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 091 | 1150 | 14 | 3897 | 0.15 | 3328 | 0.17 | 2543 | 0.17 | | | | | | | | | | |
| | | 18 | 4547 | 0.18 | 3875 | 0.21 | 2998 | 0.22 | | | | | | | | | | |
| | | 22 | 5375 | 0.27 | 4571 | 0.29 | 3543 | 0.30 | | | | | | | | | | |
| | | 26 | 5796 | 0.31 | 5101 | 0.33 | 4180 | 0.35 | | | | | | | | | | |
| | | 30 | 6571 | 0.43 | 5818 | 0.46 | 4899 | 0.48 | | | | | | | | | | |
| | 1750 | 14 | 5930 | 0.54 | 5572 | 0.56 | 5187 | 0.58 | 4768 | 0.59 | 4273 | 0.60 | | | | | | |
| | | 18 | 6920 | 0.65 | 6503 | 0.68 | 6047 | 0.72 | 5562 | 0.74 | 5000 | 0.76 | | | | | | |
| | | 22 | 8180 | 0.96 | 7655 | 0.99 | 7127 | 1.03 | 6556 | 1.05 | 5889 | 1.06 | | | | | | |
| | | 26 | 8820 | 1.11 | 8402 | 1.14 | 7915 | 1.17 | 7415 | 1.19 | 6803 | 1.21 | 6070 | 1.22 | | | | |
| | | 30 | 10000 | 1.51 | 9512 | 1.56 | 9012 | 1.61 | 8512 | 1.65 | 7891 | 1.68 | 7158 | 1.71 | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 props are suitable for exhaust or supply applications, however, 097 props are NOT reversible. For reversible flow, select a 091 prop and add .39 VP loss for equal airflow in both directions.

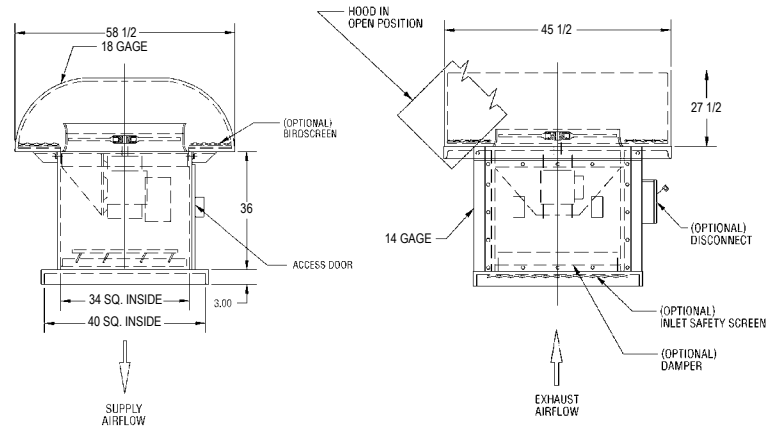
HRD - Direct Drive Fan Data

Hooded Roof Ventilators

027

| | |
|---|-----------------------------|
| Prop Diameter = 27 in. | Fan Weight = 340 lbs. |
| Maximum RPM = 1750 | Tip Speed, FPM = 7.07 x RPM |
| Maximum Motor Frame Size = 184 | |
| Inlet & Outlet Diameter (Area) = 27.28 in. (4.06 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | | |
|------|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|-----|--|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | |
| 097* | 870 | 22 | 7217 | 0.59 | 6698 | 0.63 | 6057 | 0.67 | 5115 | 0.9 | | | | | | | | | |
| | | 28 | 8456 | 0.76 | 7869 | 0.85 | 7136 | 0.84 | 6120 | 0.89 | | | | | | | | | |
| | 1150 | 22 | 9540 | 1.36 | 9163 | 1.41 | 8746 | 1.47 | 8268 | 1.53 | 7712 | 1.57 | 6988 | 1.59 | 5812 | 1.53 | | | |
| | | 28 | 11177 | 1.75 | 10767 | 1.95 | 10270 | 1.94 | 9722 | 1.92 | 9105 | 1.98 | 8317 | 2.04 | 7153 | 2.05 | | | |

| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|-----|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 091 | 1150 | 14 | 5548 | 0.28 | 4916 | 0.29 | 4179 | 0.30 | | | | | | | | | | |
| | | 18 | 6475 | 0.33 | 5731 | 0.36 | 4861 | 0.39 | | | | | | | | | | |
| | | 22 | 7654 | 0.49 | 6753 | 0.52 | 5735 | 0.54 | | | | | | | | | | |
| | | 26 | 8252 | 0.57 | 7483 | 0.60 | 6574 | 0.62 | | | | | | | | | | |
| | | 30 | 9357 | 0.77 | 8512 | 0.82 | 7589 | 0.86 | | | | | | | | | | |
| | 1750 | 14 | 8443 | 0.97 | 8040 | 1.00 | 7620 | 1.03 | 7180 | 1.05 | 6687 | 1.07 | 6124 | 1.08 | 5240 | 1.08 | | |
| | | 18 | 9853 | 1.17 | 9384 | 1.22 | 8883 | 1.27 | 8358 | 1.31 | 7805 | 1.34 | 7159 | 1.38 | 6376 | 1.39 | | |
| | | 22 | 11647 | 1.73 | 11057 | 1.78 | 10464 | 1.83 | 9858 | 1.87 | 9194 | 1.90 | 8439 | 1.92 | 7545 | 1.91 | | |
| | | 26 | 12558 | 2.00 | 12108 | 2.04 | 11560 | 2.09 | 11014 | 2.12 | 10423 | 2.15 | 9733 | 2.18 | 8934 | 2.20 | | |
| | | 30 | 14238 | 2.73 | 13680 | 2.80 | 13130 | 2.87 | 12568 | 2.92 | 11983 | 2.98 | 11284 | 3.03 | 10488 | 3.07 | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 props are suitable for exhaust or supply applications, however, 097 props are NOT reversible. For reversible flow, select a 091 prop and add .39 VP loss for equal airflow in both directions.

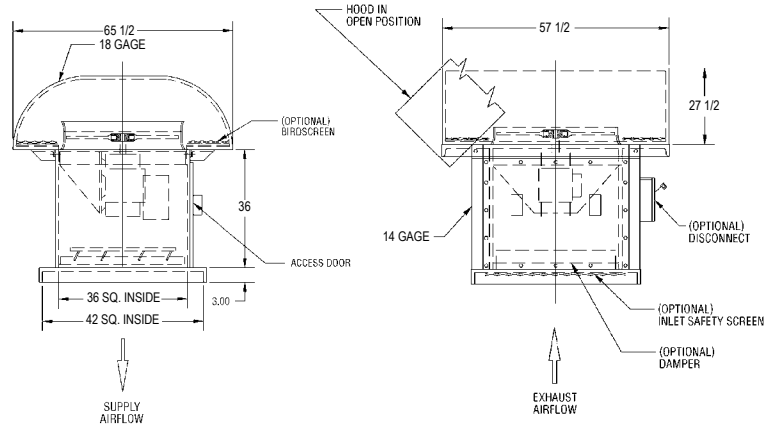
Direct Drive Fan Data - HRD

Hooded Roof Ventilators

030

| | |
|---|-----------------------------|
| Prop Diameter = 30 in. | Fan Weight = 380 lbs. |
| Maximum RPM = 1750 | Tip Speed, FPM = 7.85 x RPM |
| Maximum Motor Frame Size = 215 | |
| Inlet & Outlet Diameter (Area) = 30.31 in. (5.01 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | | |
|------|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|-----|--|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | |
| 097* | 870 | 22 | 10096 | 1.06 | 9530 | 1.12 | 8876 | 1.18 | 8002 | 1.22 | | | | | | | | | |
| | | 28 | 14547 | 2.76 | 14020 | 2.99 | 13413 | 3.11 | 12635 | 3.06 | | | | | | | | | |
| | 1150 | 22 | 13345 | 2.45 | 12926 | 2.53 | 12478 | 2.60 | 11986 | 2.69 | 11424 | 2.76 | 10759 | 2.81 | 9841 | 2.83 | | | |
| | | 28 | 15635 | 3.15 | 15179 | 3.43 | 14666 | 3.55 | 14076 | 3.47 | 13442 | 3.47 | 12710 | 3.56 | 11755 | 3.62 | | | |

| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | | |
|------|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|-----|--|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | |
| 091 | 1150 | 14 | 7761 | 0.50 | 7069 | 0.52 | 6292 | 0.54 | | | | | | | | | | | |
| | | 18 | 9057 | 0.60 | 8242 | 0.64 | 7323 | 0.68 | | | | | | | | | | | |
| | | 22 | 10707 | 0.89 | 9707 | 0.93 | 8637 | 0.97 | | | | | | | | | | | |
| | | 26 | 11544 | 1.03 | 10708 | 1.06 | 9753 | 1.09 | | | | | | | | | | | |
| | | 30 | 13089 | 1.39 | 12153 | 1.46 | 11175 | 1.51 | | | | | | | | | | | |
| | 1750 | 14 | 11811 | 1.76 | 11363 | 1.79 | 10909 | 1.83 | 10424 | 1.87 | 9914 | 1.90 | 9350 | 1.92 | 8639 | 1.93 | | | |
| | | 18 | 13783 | 2.11 | 13262 | 2.18 | 12722 | 2.25 | 12147 | 2.31 | 11554 | 2.37 | 10905 | 2.42 | 10171 | 2.45 | | | |
| | | 22 | 16293 | 3.12 | 15637 | 3.19 | 14980 | 3.26 | 14315 | 3.32 | 13625 | 3.38 | 12856 | 3.42 | 12001 | 3.44 | | | |
| | | 26 | 17567 | 3.61 | 17067 | 3.67 | 16487 | 3.73 | 15878 | 3.78 | 15254 | 3.82 | 14590 | 3.87 | 13805 | 3.91 | | | |
| | | 30 | 19918 | 4.92 | 19307 | 5.02 | 18691 | 5.11 | 18066 | 5.20 | 17432 | 5.28 | 16753 | 5.36 | 15978 | 5.43 | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 props are suitable for exhaust or supply applications, however, 097 props are NOT reversible. For reversible flow, select a 091 prop and add .39 VP loss for equal airflow in both directions.

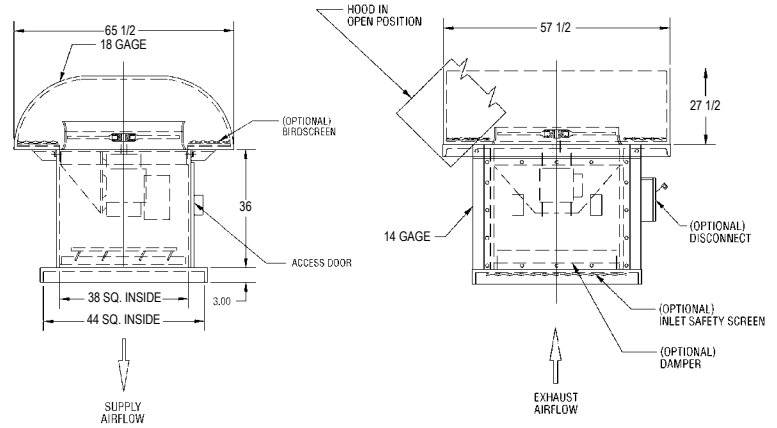
HRD - Direct Drive Fan Data

Hooded Roof Ventilators

032

| | |
|---|-----------------------------|
| Prop Diameter = 32 in. | Fan Weight = 400 lbs. |
| Maximum RPM = 1750 | Tip Speed, FPM = 8.38 x RPM |
| Maximum Motor Frame Size = 215 | |
| Inlet & Outlet Diameter (Area) = 32.33 in. (5.70 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 097* | 870 | 22 | 12015 | 1.38 | 11418 | 1.44 | 10755 | 1.52 | 9926 | 1.58 | 8830 | 1.61 | 6533 | 1.44 | | | | |
| | | 28 | 14077 | 1.77 | 13430 | 2.01 | 12614 | 1.93 | 11704 | 1.99 | 10503 | 2.06 | 8275 | 2.05 | | | | |
| | 1150 | 22 | 15881 | 3.18 | 15435 | 3.27 | 14966 | 3.36 | 14465 | 3.47 | 13899 | 3.56 | 13273 | 3.63 | 12527 | 3.69 | 10469 | 3.68 |
| | | 28 | 18607 | 4.09 | 18121 | 4.42 | 17597 | 4.62 | 16979 | 4.51 | 16333 | 4.47 | 15639 | 4.57 | 14823 | 4.67 | 12622 | 4.80 |

| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 091 | 1150 | 14 | 9237 | 0.65 | 8505 | 0.68 | 7701 | 0.70 | 6737 | 0.71 | | | | | | | | |
| | | 18 | 10779 | 0.78 | 9916 | 0.83 | 8965 | 0.88 | 7871 | 0.91 | | | | | | | | |
| | | 22 | 12742 | 1.15 | 11677 | 1.20 | 10571 | 1.25 | 9284 | 1.27 | | | | | | | | |
| | | 26 | 13739 | 1.33 | 12858 | 1.37 | 11872 | 1.41 | 10693 | 1.45 | | | | | | | | |
| | | 30 | 15577 | 1.81 | 14581 | 1.89 | 13566 | 1.95 | 12390 | 2.01 | 10666 | 2.05 | | | | | | |
| | 1750 | 14 | 14056 | 2.28 | 13578 | 2.32 | 13101 | 2.37 | 12586 | 2.41 | 12065 | 2.45 | 11500 | 2.48 | 10905 | 2.50 | 9441 | 2.53 |
| | | 18 | 16403 | 2.74 | 15847 | 2.82 | 15281 | 2.90 | 14673 | 2.98 | 14053 | 3.05 | 13402 | 3.11 | 12701 | 3.16 | 11029 | 3.24 |
| | | 22 | 19390 | 4.05 | 18690 | 4.13 | 17990 | 4.21 | 17286 | 4.29 | 16579 | 4.36 | 15800 | 4.42 | 14972 | 4.46 | 13044 | 4.49 |
| | | 26 | 20907 | 4.68 | 20373 | 4.75 | 19772 | 4.82 | 19121 | 4.89 | 18474 | 4.94 | 17828 | 4.99 | 17052 | 5.05 | 15325 | 5.14 |
| | | 30 | 23704 | 6.38 | 23053 | 6.50 | 22399 | 6.61 | 21732 | 6.72 | 21065 | 6.82 | 20399 | 6.91 | 19638 | 7.00 | 17900 | 7.16 |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 props are suitable for exhaust or supply applications, however, 097 props are NOT reversible. For reversible flow, select a 091 prop and add .39 VP loss for equal airflow in both directions.

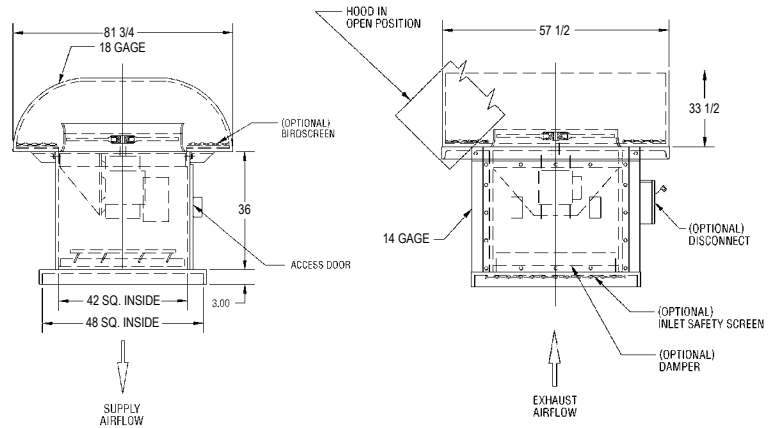
Direct Drive Fan Data - HRD

Hooded Roof Ventilators

036

| | |
|---|-----------------------------|
| Prop Diameter = 36 in. | Fan Weight = 550 lbs. |
| Maximum RPM = 1150 | Tip Speed, FPM = 9.42 x RPM |
| Maximum Motor Frame Size = 256 | |
| Inlet & Outlet Diameter (Area) = 36.38 in. (7.72 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-----|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|-----|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 097* | 695 | 22 | 13666 | 1.27 | 12808 | 1.34 | 11784 | 1.42 | 10435 | 1.48 | 7729 | 1.36 | | | | | | |
| | | 28 | 16011 | 1.63 | 15055 | 1.83 | 13589 | 1.79 | 12385 | 1.88 | 9715 | 1.90 | | | | | | |
| | 870 | 22 | 17107 | 2.48 | 16443 | 2.58 | 15710 | 2.69 | 14876 | 2.78 | 13914 | 2.86 | 12675 | 2.91 | 10712 | 2.82 | | |
| | | 28 | 20043 | 3.19 | 19320 | 3.55 | 18448 | 3.54 | 17488 | 3.50 | 16418 | 3.61 | 15058 | 3.71 | 13088 | 3.75 | | |

| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|-----|-------|-----|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 091 | 870 | 14 | 9950 | 0.50 | 8836 | 0.54 | 7553 | 0.56 | | | | | | | | | | |
| | | 18 | 11611 | 0.61 | 10301 | 0.66 | 8777 | 0.71 | | | | | | | | | | |
| | | 22 | 13725 | 0.90 | 12138 | 0.95 | 10354 | 0.99 | | | | | | | | | | |
| | | 26 | 14799 | 1.04 | 13444 | 1.09 | 11851 | 1.12 | | | | | | | | | | |
| | | 30 | 16779 | 1.41 | 15290 | 1.49 | 13673 | 1.56 | | | | | | | | | | |
| | 1150 | 14 | 13152 | 1.16 | 12334 | 1.21 | 11455 | 1.25 | 10488 | 1.27 | 9329 | 1.29 | | | | | | |
| | | 18 | 15348 | 1.40 | 14395 | 1.48 | 13353 | 1.55 | 12242 | 1.60 | 10909 | 1.65 | | | | | | |
| | | 22 | 18142 | 2.07 | 16944 | 2.15 | 15738 | 2.22 | 14427 | 2.27 | 12861 | 2.30 | | | | | | |
| | | 26 | 19561 | 2.39 | 18604 | 2.46 | 17941 | 2.52 | 16331 | 2.57 | 14916 | 2.61 | | | | | | |
| | | 30 | 22179 | 3.26 | 21064 | 3.37 | 19923 | 3.47 | 18765 | 3.55 | 17326 | 3.64 | 15608 | 3.69 | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 props are suitable for exhaust or supply applications, however, 097 props are NOT reversible. For reversible flow, select a 091 prop and add .39 VP loss for equal airflow in both directions.

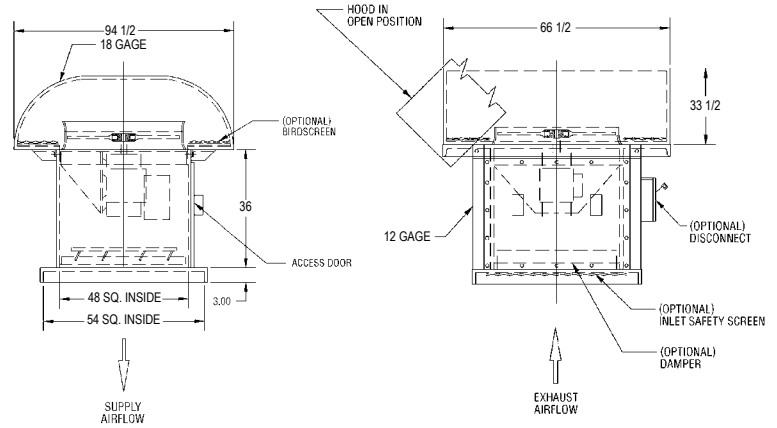
HRD - Direct Drive Fan Data

Hooded Roof Ventilators

042

| | |
|---|------------------------------|
| Prop Diameter = 42 in. | Fan Weight = 750 lbs. |
| Maximum RPM = 1150 | Tip Speed, FPM = 11.00 x RPM |
| Maximum Motor Frame Size = 256 | |
| Inlet & Outlet Diameter (Area) = 42.44 in. (9.82 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-----|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 097* | 695 | 22 | 21701 | 2.74 | 20731 | 2.85 | 19643 | 3.00 | 18335 | 3.10 | 16718 | 3.19 | 14440 | 3.18 | | | | |
| | | 28 | 25426 | 3.51 | 24370 | 3.97 | 23050 | 3.86 | 21589 | 3.91 | 19825 | 4.05 | 17368 | 4.13 | | | | |
| | 870 | 22 | 27165 | 5.37 | 26391 | 5.51 | 25575 | 5.68 | 24705 | 5.86 | 23713 | 6.00 | 22626 | 6.12 | 21308 | 6.22 | 17545 | 6.16 |
| | | 28 | 31828 | 6.89 | 30984 | 7.46 | 30069 | 7.79 | 28998 | 7.59 | 27870 | 7.55 | 26665 | 7.72 | 25225 | 7.89 | 21264 | 8.10 |

| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|-----|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 091 | 870 | 14 | 15800 | 1.09 | 14528 | 1.14 | 13129 | 1.18 | 11439 | 1.20 | | | | | | | | |
| | | 18 | 18437 | 1.31 | 16938 | 1.40 | 15286 | 1.48 | 13378 | 1.54 | | | | | | | | |
| | | 22 | 21795 | 1.94 | 19947 | 2.03 | 18024 | 2.11 | 15765 | 2.15 | | | | | | | | |
| | | 26 | 23500 | 2.24 | 21969 | 2.32 | 20259 | 2.38 | 18191 | 2.44 | | | | | | | | |
| | | 30 | 26644 | 3.06 | 24916 | 3.18 | 23156 | 3.29 | 21091 | 3.39 | | | | | | | | |
| | 1150 | 14 | 20885 | 2.52 | 19930 | 2.59 | 18941 | 2.65 | 17900 | 2.71 | 16753 | 2.75 | 15487 | 2.78 | 13915 | 2.80 | | |
| | | 18 | 24371 | 3.03 | 23262 | 3.15 | 22082 | 3.27 | 20848 | 3.37 | 19548 | 3.46 | 18052 | 3.54 | 16296 | 3.58 | | |
| | | 22 | 28809 | 4.47 | 27412 | 4.59 | 26011 | 4.71 | 24595 | 4.82 | 23039 | 4.91 | 21306 | 4.96 | 19272 | 4.96 | | |
| | | 26 | 31063 | 5.17 | 29998 | 5.28 | 28711 | 5.38 | 27417 | 5.47 | 26064 | 5.54 | 24473 | 5.62 | 22667 | 5.68 | | |
| | | 30 | 35219 | 7.06 | 33918 | 7.23 | 32598 | 7.39 | 31266 | 7.54 | 29935 | 7.67 | 28303 | 7.81 | 26506 | 7.91 | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 props are suitable for exhaust or supply applications, however, 097 props are NOT reversible. For reversible flow, select a 091 prop and add .39 VP loss for equal airflow in both directions.

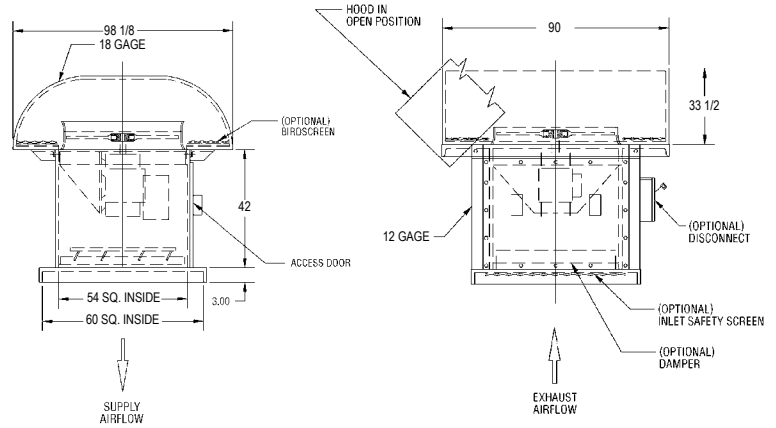
Direct Drive Fan Data - HRD

Hooded Roof Ventilators

048

| | |
|--|------------------------------|
| Prop Diameter = 48 in. | Fan Weight = 950 lbs. |
| Maximum RPM = 1150 | Tip Speed, FPM = 12.57 x RPM |
| Maximum Motor Frame Size = 256 | |
| Inlet & Outlet Diameter (Area) = 48.50 in. (12.83 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-----|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|-----|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 097* | 695 | 22 | 32393 | 5.33 | 31285 | 5.51 | 30083 | 5.71 | 28796 | 5.92 | 27241 | 6.06 | 25411 | 6.19 | 23098 | 6.24 | | |
| | | 28 | 37953 | 6.85 | 36746 | 7.53 | 35345 | 7.66 | 33810 | 7.43 | 32086 | 7.64 | 30082 | 7.84 | 27611 | 8.01 | | |

| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|------|-------|-------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 091 | 870 | 14 | 23584 | 2.12 | 22143 | 2.21 | 20596 | 2.27 | 18901 | 2.32 | 16889 | 2.35 | | | | | | |
| | | 18 | 27522 | 2.56 | 25845 | 2.69 | 24010 | 2.82 | 22056 | 2.92 | 19758 | 3.01 | | | | | | |
| | | 22 | 32533 | 3.77 | 30422 | 3.91 | 28297 | 4.04 | 25994 | 4.14 | 23279 | 4.19 | | | | | | |
| | | 26 | 35078 | 4.36 | 33395 | 4.49 | 31434 | 4.60 | 29410 | 4.68 | 26935 | 4.76 | 23958 | 4.80 | | | | |
| | | 30 | 39771 | 5.96 | 37807 | 6.15 | 35796 | 6.33 | 33780 | 6.48 | 31260 | 6.63 | 28274 | 6.73 | | | | |
| | 1150 | 14 | 31175 | 4.90 | 30084 | 5.01 | 28994 | 5.12 | 27812 | 5.21 | 26623 | 5.29 | 25313 | 5.35 | 23954 | 5.39 | 20342 | 5.46 |
| | | 18 | 36379 | 5.90 | 35111 | 6.09 | 33812 | 6.26 | 32424 | 6.43 | 30999 | 6.59 | 29513 | 6.71 | 27873 | 6.84 | 23981 | 6.99 |
| | | 22 | 43003 | 8.72 | 41407 | 8.90 | 39810 | 9.08 | 38201 | 9.25 | 36568 | 9.41 | 34790 | 9.54 | 32866 | 9.63 | 28347 | 9.65 |
| | | 26 | 46368 | 10.10 | 45151 | 10.20 | 43767 | 10.40 | 42281 | 10.60 | 40805 | 10.70 | 39309 | 10.80 | 37514 | 10.90 | 33442 | 11.10 |
| | | 30 | 52571 | 13.80 | 51085 | 14.00 | 49591 | 14.30 | 48069 | 14.50 | 46548 | 14.70 | 45026 | 14.90 | 43238 | 15.10 | 39192 | 15.40 |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 props are suitable for exhaust or supply applications, however, 097 props are NOT reversible. For reversible flow, select a 091 prop and add .39 VP loss for equal airflow in both directions.

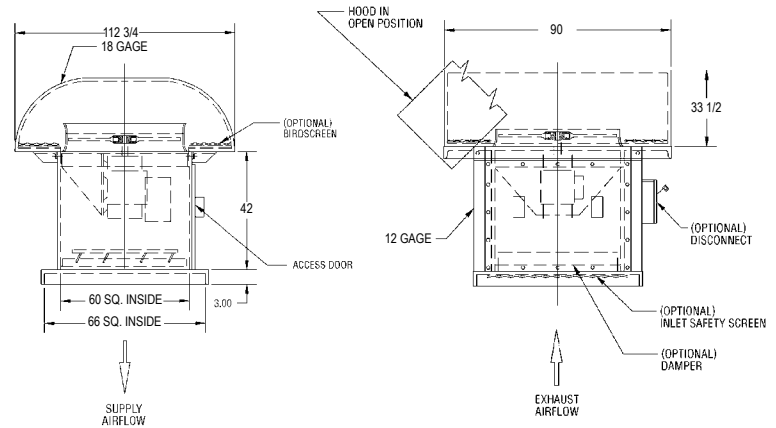
HRD - Direct Drive Fan Data

Hooded Roof Ventilators

054

| | |
|--|------------------------------|
| Prop Diameter = 54 in. | Fan Weight = 1050 lbs. |
| Maximum RPM = 1050 | Tip Speed, FPM = 14.14 x RPM |
| Maximum Motor Frame Size = 256 | |
| Inlet & Outlet Diameter (Area) = 54.56 in. (16.24 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-----|-------|-------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 097* | 695 | 22 | 46122 | 9.61 | 44876 | 9.86 | 45376 | 10.10 | 42177 | 10.40 | 40646 | 10.70 | 38896 | 10.90 | 36929 | 11.10 | 31628 | 11.20 |
| | | 28 | 54039 | 12.30 | 52681 | 13.30 | 51241 | 14.00 | 49518 | 13.70 | 44745 | 13.50 | 45806 | 13.70 | 43636 | 14.00 | 38053 | 14.50 |

| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-----|-------|-------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-----|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 091 | 695 | 14 | 26826 | 1.95 | 24788 | 2.04 | 22568 | 2.11 | 19953 | 2.15 | | | | | | | | |
| | | 18 | 31304 | 2.35 | 28900 | 2.50 | 26257 | 2.64 | 23248 | 2.74 | | | | | | | | |
| | | 22 | 37004 | 3.47 | 34031 | 3.62 | 30966 | 3.76 | 27436 | 3.84 | | | | | | | | |
| | | 26 | 39889 | 4.01 | 37452 | 4.15 | 34698 | 4.26 | 31506 | 4.36 | 27423 | 4.41 | | | | | | |
| | 870 | 30 | 45237 | 5.47 | 42459 | 5.69 | 39626 | 5.88 | 36419 | 6.06 | 32336 | 6.18 | | | | | | |
| | | 14 | 33580 | 3.83 | 31958 | 3.94 | 30264 | 4.05 | 28496 | 4.14 | 26501 | 4.19 | 24208 | 4.23 | | | | |
| | | 18 | 39186 | 4.61 | 37301 | 4.80 | 35283 | 4.99 | 33165 | 5.15 | 30921 | 5.29 | 28326 | 5.42 | 25038 | 5.43 | | |
| | | 22 | 46321 | 6.80 | 43947 | 7.00 | 41564 | 7.19 | 39118 | 7.36 | 36432 | 7.48 | 33364 | 7.55 | 29747 | 7.50 | | |
| | | 26 | 49946 | 7.86 | 48135 | 8.04 | 45926 | 8.21 | 43728 | 8.33 | 41332 | 8.45 | 38539 | 8.58 | 35287 | 8.64 | | |
| | | 30 | 56628 | 10.70 | 54418 | 11.00 | 52170 | 11.30 | 49907 | 11.50 | 47533 | 11.70 | 44701 | 11.90 | 41462 | 12.10 | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 props are suitable for exhaust or supply applications, however, 097 props are NOT reversible. For reversible flow, select a 091 prop and add .39 VP loss for equal airflow in both directions.

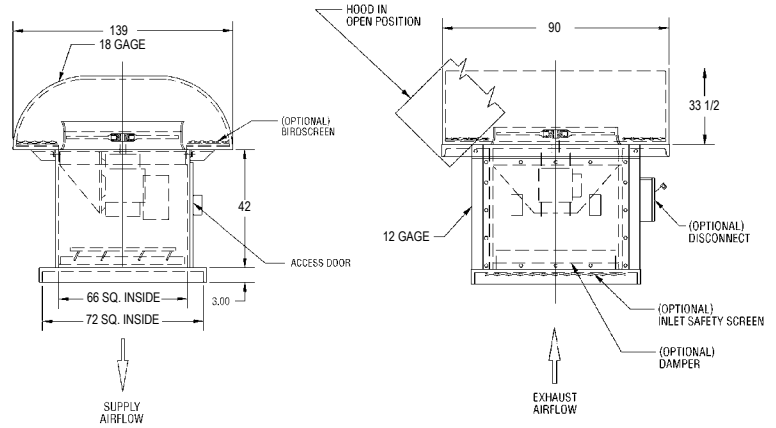
Direct Drive Fan Data - HRD

Hooded Roof Ventilators

060

| | |
|--|------------------------------|
| Prop Diameter = 60 in. | Fan Weight = 1400 lbs. |
| Maximum RPM = 870 | Tip Speed, FPM = 15.71 x RPM |
| Maximum Motor Frame Size = 256 | |
| Inlet & Outlet Diameter (Area) = 60.63 in. (20.05 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-----|-------|-------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 091 | 695 | 14 | 36798 | 3.30 | 34542 | 3.43 | 32120 | 3.54 | 29466 | 3.61 | 26310 | 3.66 | | | | | | |
| | | 18 | 42941 | 3.98 | 40317 | 4.19 | 37445 | 4.39 | 34386 | 4.54 | 30778 | 4.68 | | | | | | |
| | | 22 | 50760 | 5.87 | 47457 | 6.09 | 44131 | 6.29 | 40526 | 6.45 | 36266 | 6.51 | | | | | | |
| | | 26 | 54731 | 6.79 | 52096 | 6.98 | 49027 | 7.15 | 45855 | 7.28 | 41978 | 7.41 | 37310 | 7.46 | | | | |
| | | 30 | 62053 | 9.27 | 58980 | 9.57 | 55833 | 9.85 | 52672 | 10.10 | 48725 | 10.30 | 44041 | 10.50 | | | | |
| | 870 | 14 | 46063 | 6.48 | 44261 | 6.64 | 42436 | 6.80 | 40471 | 6.92 | 38459 | 7.03 | 36125 | 7.10 | 33701 | 7.16 | | |
| | | 18 | 53754 | 7.80 | 51658 | 8.07 | 49475 | 8.33 | 47181 | 8.58 | 44766 | 8.78 | 42238 | 8.97 | 39355 | 9.15 | | |
| | | 22 | 63541 | 11.50 | 60903 | 11.80 | 58264 | 12.10 | 55601 | 12.30 | 52789 | 12.50 | 49771 | 12.70 | 46438 | 12.80 | | |
| | | 26 | 68512 | 13.30 | 66501 | 13.60 | 64150 | 13.80 | 61698 | 14.00 | 59262 | 14.20 | 54514 | 14.30 | 53444 | 14.50 | | |
| | | 30 | 77678 | 18.20 | 75223 | 18.60 | 72743 | 18.90 | 70229 | 19.30 | 67714 | 19.60 | 65013 | 19.90 | 61909 | 20.20 | 54457 | 20.60 |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 props are suitable for exhaust or supply applications, however, 097 props are NOT reversible. For reversible flow, select a 091 prop and add .39 VP loss for equal airflow in both directions.

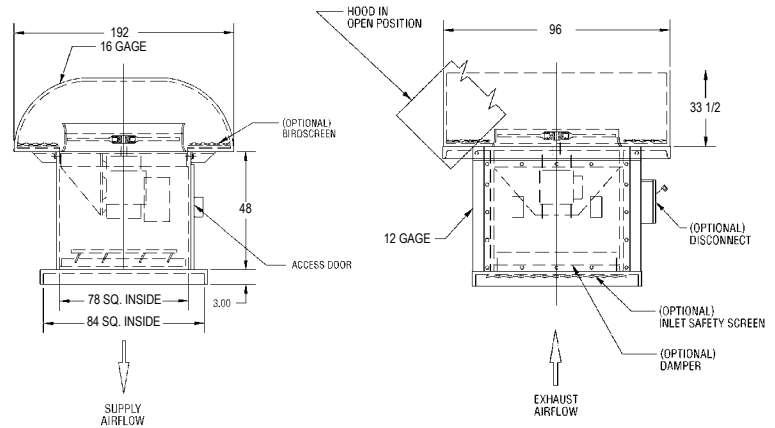
HRD - Direct Drive Fan Data

Hooded Roof Ventilators

072

| | |
|--|------------------------------|
| Prop Diameter = 72 in. | Fan Weight = 2000 lbs. |
| Maximum RPM = 695 | Tip Speed, FPM = 18.85 x RPM |
| Maximum Motor Frame Size = 365 | |
| Inlet & Outlet Diameter (Area) = 72.75 in. (28.87 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | RPM | PITCH | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-----|-------|--------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-----|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| 091 | 695 | 14 | 63586 | 8.22 | 60880 | 8.44 | 58100 | 8.65 | 55150 | 8.82 | 51997 | 8.95 | 48624 | 9.05 | 44434 | 9.11 | | |
| | | 18 | 74202 | 9.89 | 71055 | 10.30 | 67737 | 10.60 | 64288 | 11.00 | 60599 | 11.20 | 56551 | 11.50 | 51925 | 11.70 | | |
| | | 22 | 87713 | 14.60 | 83749 | 15.00 | 79780 | 15.40 | 75779 | 15.70 | 71440 | 16.00 | 66691 | 16.10 | 61269 | 16.20 | | |
| | | 26 | 94575 | 16.90 | 91554 | 17.20 | 87956 | 17.50 | 84279 | 17.80 | 80619 | 18.00 | 76208 | 18.30 | 71332 | 18.50 | | |
| | | 30 | 107228 | 23.10 | 103540 | 23.60 | 99803 | 24.10 | 96026 | 24.60 | 92249 | 25.00 | 87870 | 25.40 | 82965 | 25.70 | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 props are suitable for exhaust or supply applications, however, 097 props are NOT reversible. For reversible flow, select a 091 prop and add .39 VP loss for equal airflow in both directions.

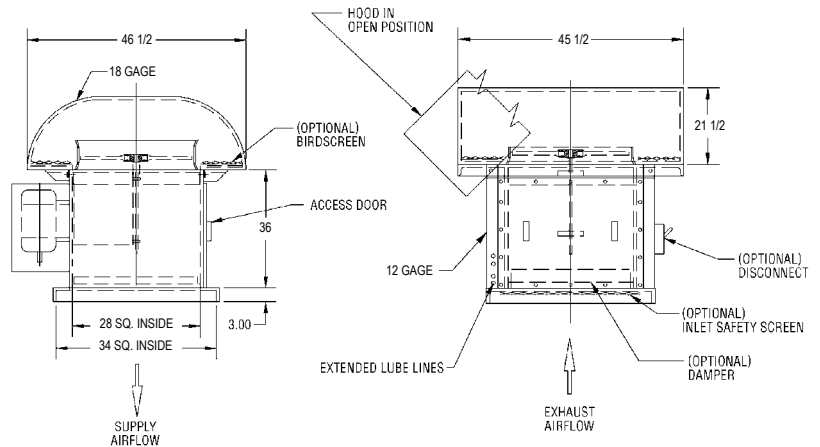
Belt Drive Fan Data - HRR

Hooded Roof Ventilators

024

| | |
|---|--------------------------------|
| Prop Diameter = 24 in. | Maximum Motor Frame Size = 215 |
| Fan Weight = 270 lbs. | Tip Speed, FPM = 6.28 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 0.7397 F (091) = 0.253 | |
| Inlet & Outlet Diameter (Area) = 24.25 in. (3.21 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 3852 | 569 | 0.12 | 674 | 0.22 | 786 | 0.36 | 902 | 0.53 | 1025 | 0.75 | | | | | | |
| | 4494 | 664 | 0.18 | 754 | 0.30 | 847 | 0.44 | 943 | 0.62 | 1043 | 0.83 | | | | | | |
| | 5136 | 759 | 0.27 | 837 | 0.40 | 916 | 0.55 | | | | | | | | | | |
| | 5778 | 854 | 0.39 | 924 | 0.53 | 994 | 0.70 | 1067 | 0.88 | 1142 | 1.10 | 1216 | 1.33 | 1295 | 1.59 | 1455 | 2.19 |
| | 6420 | 949 | 0.53 | 1012 | 0.69 | 1075 | 0.87 | 1137 | 1.05 | 1205 | 1.28 | 1273 | 1.52 | 1339 | 1.77 | 1478 | 2.36 |
| | 7062 | 1044 | 0.71 | 1100 | 0.88 | 1157 | 1.07 | 1216 | 1.27 | 1274 | 1.49 | 1335 | 1.74 | 1397 | 2.01 | 1522 | 2.59 |
| | 7704 | 1139 | 0.92 | 1190 | 1.11 | 1243 | 1.31 | 1296 | 1.52 | 1348 | 1.75 | 1404 | 2.00 | 1459 | 2.28 | 1572 | 2.87 |
| | 8346 | 1234 | 1.17 | 1280 | 1.37 | 1330 | 1.59 | 1378 | 1.81 | 1428 | 2.05 | 1474 | 2.30 | 1528 | 2.58 | 1631 | 3.19 |
| 8988 | 1329 | 1.46 | 1372 | 1.67 | 1418 | 1.91 | 1463 | 2.15 | 1508 | 2.40 | 1553 | 2.66 | 1597 | 2.93 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 3852 | 811 | 0.11 | 993 | 0.23 | 1147 | 0.37 | 1281 | 0.53 | 1408 | 0.70 | 1526 | 0.89 | 1642 | 1.10 | 1878 | 1.59 |
| | 4494 | 947 | 0.17 | 1108 | 0.31 | 1246 | 0.46 | 1371 | 0.64 | 1485 | 0.82 | 1597 | 1.02 | 1699 | 1.23 | 1898 | 1.70 |
| | 5136 | 1082 | 0.26 | 1227 | 0.41 | 1352 | 0.58 | 1467 | 0.77 | 1576 | 0.97 | 1675 | 1.18 | 1774 | 1.40 | 1955 | 1.88 |
| | 5778 | 1217 | 0.67 | 1348 | 0.54 | 1462 | 0.72 | 1571 | 0.92 | 1671 | 1.14 | 1767 | 1.36 | 1856 | 1.60 | 2031 | 2.10 |
| | 6420 | 1352 | 0.50 | 1472 | 0.69 | 1579 | 0.89 | 1678 | 1.10 | 1773 | 1.33 | 1862 | 1.57 | 1949 | 1.82 | 2108 | 2.35 |
| | 7062 | 1487 | 0.67 | 1598 | 0.87 | 1697 | 1.09 | 1788 | 1.31 | 1878 | 1.56 | 1964 | 1.82 | 2044 | 2.08 | 2199 | 2.64 |
| | 7704 | 1623 | 0.87 | 1725 | 1.09 | 1818 | 1.32 | 1904 | 1.56 | 1986 | 1.82 | 2068 | 2.09 | 2146 | 2.37 | 2293 | 2.96 |
| | 8346 | 1758 | 1.10 | 1853 | 1.34 | 1940 | 1.59 | 2023 | 1.85 | 2099 | 2.12 | 2175 | 2.40 | 2250 | 2.70 | | |
| 8988 | 1893 | 1.38 | 1982 | 1.64 | 2064 | 1.90 | 2142 | 2.18 | 2216 | 2.46 | 2285 | 2.75 | 2357 | 3.06 | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 props are suitable for exhaust or supply applications, however, 097 props are NOT reversible. For reversible flow, select a 091 prop and add .39 VP loss for equal airflow in both directions.

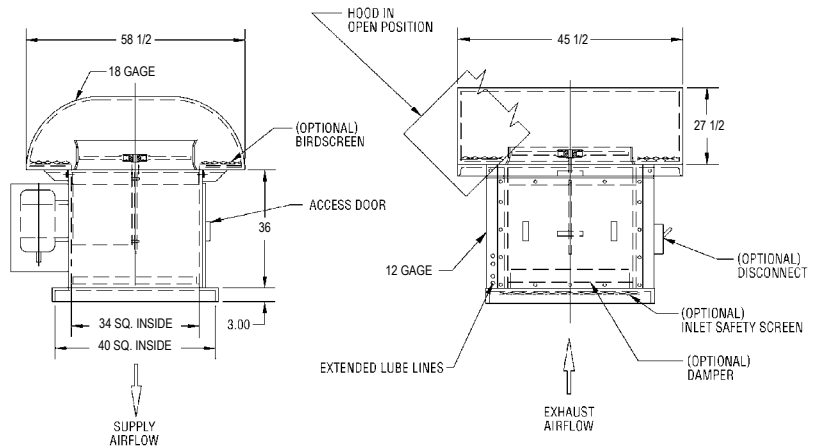
HRR - Belt Drive Fan Data

Hooded Roof Ventilators

027

| | |
|--|--------------------------------|
| Prop Diameter = 27 in. | Maximum Motor Frame Size = 215 |
| Fan Weight = 370 lbs. | Tip Speed, FPM = 7.07 x RPM |
| Maximum BHP = $F \text{ (RPM/1000)}^3$ F (097) = 1.333 F (091) = 0.456 | |
| Inlet & Outlet Diameter (Area) = 27.28 in. (4.06 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 4872 | 506 | 0.15 | 599 | 0.28 | 699 | 0.45 | 801 | 0.67 | 911 | 0.95 | 1021 | 1.36 | | | | |
| | 5684 | 590 | 0.23 | 670 | 0.38 | 753 | 0.56 | 838 | 0.78 | 927 | 1.05 | | | | | | |
| | 6496 | 674 | 0.34 | 744 | 0.51 | 814 | 0.70 | 890 | 0.93 | 965 | 1.19 | 1042 | 1.49 | 1122 | 1.83 | | |
| | 7308 | 759 | 0.49 | 821 | 0.67 | 883 | 0.88 | 948 | 1.12 | 1015 | 1.39 | 1081 | 1.68 | 1151 | 2.01 | 1293 | 2.78 |
| | 8120 | 843 | 0.67 | 899 | 0.87 | 955 | 1.10 | 1010 | 1.33 | 1071 | 1.62 | 1131 | 1.92 | 1190 | 2.24 | 1314 | 2.98 |
| | 8932 | 927 | 0.90 | 978 | 1.11 | 1028 | 1.35 | 1080 | 1.61 | 1132 | 1.89 | 1186 | 2.20 | 1242 | 2.54 | 1352 | 3.28 |
| | 9744 | 1012 | 1.16 | 1057 | 1.40 | 1105 | 1.65 | 1152 | 1.93 | 1198 | 2.21 | 1247 | 2.53 | 1296 | 2.88 | 1397 | 3.63 |
| | 10556 | 1096 | 1.48 | 1137 | 1.73 | 1182 | 2.01 | 1224 | 2.29 | 1266 | 2.59 | 1310 | 2.90 | 1357 | 3.27 | 1449 | 4.04 |
| 11368 | 1180 | 1.85 | 1219 | 2.11 | 1260 | 2.41 | 1299 | 2.71 | 1340 | 3.03 | 1380 | 3.36 | 1419 | 3.70 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 4872 | 721 | 0.14 | 862 | 0.29 | 1019 | 0.47 | 1138 | 0.67 | 1252 | 0.89 | 1356 | 1.13 | 1459 | 1.39 | 1669 | 2.01 |
| | 5884 | 841 | 0.22 | 984 | 0.39 | 1107 | 0.59 | 1219 | 0.80 | 1320 | 1.04 | 1419 | 1.29 | 1510 | 1.56 | 1687 | 2.16 |
| | 6496 | 961 | 0.32 | 1090 | 0.52 | 1201 | 0.73 | 1304 | 0.97 | 1400 | 1.22 | 1488 | 1.49 | 1577 | 1.77 | 1738 | 2.38 |
| | 7308 | 1081 | 0.46 | 1198 | 0.68 | 1299 | 0.91 | 1396 | 1.16 | 1485 | 1.44 | 1570 | 1.72 | 1650 | 2.02 | 1805 | 2.66 |
| | 8120 | 1201 | 0.63 | 1308 | 0.87 | 1403 | 1.12 | 1491 | 1.39 | 1575 | 1.69 | 1654 | 1.99 | 1732 | 2.31 | 1874 | 2.97 |
| | 8932 | 1321 | 0.84 | 1419 | 1.10 | 1508 | 1.38 | 1589 | 1.66 | 1669 | 1.97 | 1745 | 2.30 | 1816 | 2.63 | 1954 | 3.33 |
| | 9744 | 1441 | 1.10 | 1532 | 1.38 | 1615 | 1.67 | 1692 | 1.98 | 1765 | 2.30 | 1838 | 2.64 | 1907 | 3.00 | 2038 | 3.74 |
| | 10556 | 1562 | 1.39 | 1646 | 1.70 | 1724 | 2.01 | 1797 | 2.34 | 1865 | 2.67 | 1933 | 3.03 | 2000 | 3.41 | | |
| 11368 | 1682 | 1.74 | 1761 | 2.07 | 1834 | 2.40 | 1903 | 2.75 | 1969 | 3.11 | 2031 | 3.47 | 2094 | 3.87 | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

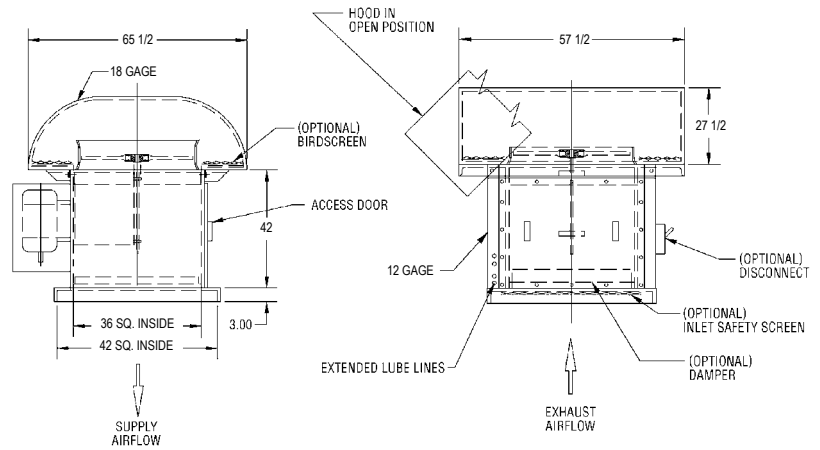
Belt Drive Fan Data - HRR

Hooded Roof Ventilators

030

| | |
|---|--------------------------------|
| Prop Diameter = 30 in. | Maximum Motor Frame Size = 256 |
| Fan Weight = 420 lbs. | Tip Speed, FPM = 7.85 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 2.06 F (091) = 0.73 | |
| Inlet & Outlet Diameter (Area) = 30.31 in. (5.01 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 6060 | 459 | 0.18 | 543 | 0.35 | 633 | 0.56 | 726 | 0.84 | 826 | 1.18 | 936 | 1.64 | 1016 | 2.15 | | |
| | 7070 | 535 | 0.29 | 608 | 0.47 | 683 | 0.70 | 760 | 0.97 | 840 | 1.30 | 926 | 1.69 | 1016 | 2.15 | | |
| | 8080 | 612 | 0.43 | 674 | 0.64 | 738 | 0.87 | 807 | 1.16 | 874 | 1.48 | 945 | 1.86 | 1017 | 2.27 | | |
| | 9090 | 688 | 0.61 | 738 | 0.84 | 801 | 1.10 | 859 | 1.39 | 920 | 1.73 | 980 | 2.09 | 1043 | 2.50 | 1172 | 3.45 |
| | 10100 | 764 | 0.84 | 815 | 1.09 | 866 | 1.36 | 916 | 1.66 | 971 | 2.01 | 1025 | 2.39 | 1079 | 2.78 | 1191 | 3.71 |
| | 11470 | 829 | 1.12 | 887 | 1.39 | 932 | 1.68 | 979 | 2.00 | 1026 | 2.35 | 1136 | 2.74 | 1125 | 3.15 | 1225 | 4.08 |
| | 12120 | 918 | 1.45 | 959 | 1.74 | 1002 | 2.06 | 1045 | 2.40 | 1086 | 2.75 | 1131 | 3.15 | 1175 | 3.58 | 1266 | 4.51 |
| | 13130 | 994 | 1.84 | 1031 | 2.16 | 1072 | 2.50 | 1110 | 2.85 | 1149 | 3.23 | 1188 | 3.61 | 1230 | 4.06 | 1313 | 5.02 |
| 14140 | 1070 | 2.30 | 1106 | 2.63 | 1142 | 3.00 | 1178 | 3.38 | 1215 | 3.77 | 1251 | 4.18 | 1286 | 4.60 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 6060 | 654 | 0.17 | 800 | 0.36 | 923 | 0.58 | 1031 | 0.83 | 1134 | 1.11 | 1229 | 1.41 | 1323 | 1.73 | 1512 | 2.50 |
| | 7070 | 762 | 0.27 | 892 | 0.49 | 1004 | 0.73 | 1105 | 1.00 | 1196 | 1.29 | 1286 | 1.61 | 1368 | 1.94 | 1529 | 2.68 |
| | 8080 | 872 | 0.40 | 989 | 0.65 | 1089 | 0.91 | 1182 | 1.20 | 1269 | 1.52 | 1349 | 1.85 | 1429 | 2.20 | 1575 | 2.96 |
| | 9090 | 980 | 0.57 | 1086 | 0.84 | 1178 | 1.13 | 1266 | 1.45 | 1346 | 1.79 | 1424 | 2.14 | 1495 | 2.51 | 1636 | 3.31 |
| | 10100 | 1089 | 0.79 | 1186 | 1.09 | 1272 | 1.40 | 1352 | 1.73 | 1428 | 2.10 | 1500 | 2.48 | 1570 | 2.86 | 1698 | 3.69 |
| | 11110 | 1198 | 1.05 | 1287 | 1.37 | 1368 | 1.72 | 1441 | 2.07 | 1513 | 2.45 | 1582 | 2.86 | 1646 | 3.27 | 1772 | 4.15 |
| | 12120 | 1307 | 1.37 | 1389 | 1.72 | 1464 | 2.08 | 1534 | 2.46 | 1600 | 2.86 | 1666 | 3.29 | 1728 | 3.73 | 1847 | 4.65 |
| | 13130 | 1416 | 1.74 | 1492 | 2.11 | 1563 | 2.50 | 1630 | 2.91 | 1691 | 3.33 | 1752 | 3.77 | 1812 | 4.24 | | |
| 14140 | 1525 | 2.17 | 1597 | 2.57 | 1663 | 2.99 | 1725 | 3.42 | 1785 | 3.87 | 1841 | 4.32 | 1898 | 4.81 | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

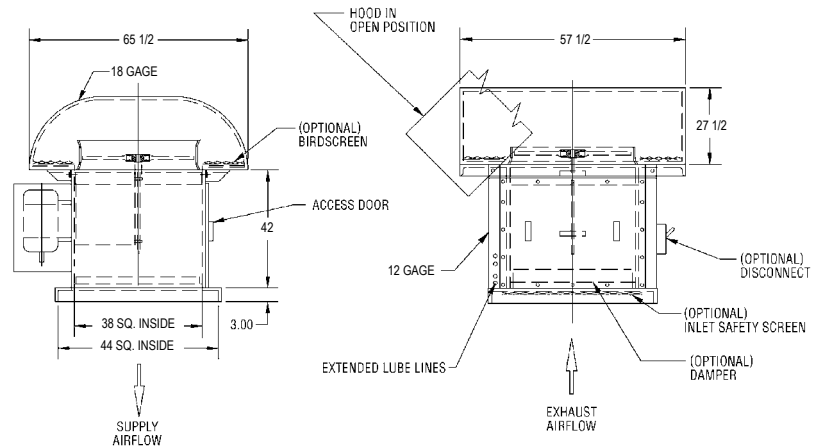
HRR - Belt Drive Fan Data

Hooded Roof Ventilators

032

| | |
|---|--------------------------------|
| Prop Diameter = 32 in. | Maximum Motor Frame Size = 256 |
| Fan Weight = 470 lbs. | Tip Speed, FPM = 8.38 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 3.117 F (091) = 1.066 | |
| Inlet & Outlet Diameter (Area) = 32.33 in. (5.70 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 6852 | 427 | 0.20 | 506 | 0.39 | 590 | 0.64 | 676 | 0.95 | 769 | 1.34 | 862 | 1.91 | 946 | 2.43 | | |
| | 7994 | 499 | 0.33 | 566 | 0.53 | 636 | 0.79 | 708 | 1.10 | 782 | 1.47 | 862 | 1.91 | 946 | 2.43 | | |
| | 9136 | 570 | 0.49 | 628 | 0.72 | 688 | 0.99 | 751 | 1.31 | 814 | 1.68 | 880 | 2.10 | 947 | 2.57 | | |
| | 10278 | 641 | 0.69 | 683 | 0.95 | 746 | 1.24 | 800 | 1.57 | 857 | 1.95 | 912 | 2.36 | 971 | 2.83 | 1091 | 3.90 |
| | 11420 | 712 | 0.95 | 759 | 1.23 | 806 | 1.54 | 853 | 1.88 | 904 | 2.27 | 955 | 2.70 | 1005 | 3.15 | 1109 | 4.19 |
| | 12562 | 763 | 1.26 | 826 | 1.57 | 868 | 1.90 | 912 | 2.26 | 956 | 2.66 | 1002 | 3.10 | 1048 | 3.57 | 1141 | 4.61 |
| | 13704 | 855 | 1.64 | 893 | 1.97 | 933 | 2.33 | 973 | 2.71 | 1011 | 3.11 | 1053 | 3.56 | 1095 | 4.05 | 1180 | 5.10 |
| | 14846 | 926 | 2.08 | 961 | 2.44 | 998 | 2.83 | 1034 | 3.23 | 1071 | 3.65 | 1106 | 4.09 | 1146 | 4.60 | 1223 | 5.68 |
| 15988 | 997 | 2.60 | 1030 | 2.98 | 1064 | 3.39 | 1098 | 3.82 | 1132 | 4.27 | 1165 | 4.73 | 1198 | 5.21 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 6852 | 609 | 0.19 | 745 | 0.40 | 860 | 0.66 | 961 | 0.94 | 1056 | 1.25 | 1145 | 1.59 | 1232 | 1.96 | 1408 | 2.82 |
| | 7994 | 710 | 0.31 | 831 | 0.55 | 935 | 0.83 | 1029 | 1.13 | 1114 | 1.46 | 1198 | 1.82 | 1274 | 2.19 | 1424 | 3.03 |
| | 9136 | 812 | 0.46 | 921 | 0.73 | 1014 | 1.03 | 1101 | 1.36 | 1182 | 1.72 | 1257 | 2.09 | 1331 | 2.49 | 1467 | 3.35 |
| | 10278 | 913 | 0.65 | 1012 | 0.95 | 1097 | 1.28 | 1179 | 1.64 | 1253 | 2.02 | 1326 | 2.42 | 1393 | 2.84 | 1523 | 3.74 |
| | 11420 | 1015 | 0.89 | 1105 | 1.23 | 1185 | 1.58 | 1259 | 1.96 | 1330 | 2.37 | 1397 | 2.80 | 1462 | 3.24 | 1581 | 4.17 |
| | 12562 | 1116 | 1.19 | 1199 | 1.55 | 1274 | 1.94 | 1342 | 2.34 | 1409 | 2.77 | 1473 | 3.23 | 1533 | 3.70 | 1650 | 4.69 |
| | 13704 | 1218 | 1.55 | 1294 | 1.94 | 1364 | 2.35 | 1429 | 2.78 | 1490 | 3.23 | 1552 | 3.72 | 1610 | 4.22 | 1720 | 5.26 |
| | 14846 | 1319 | 1.97 | 1390 | 2.39 | 1456 | 2.83 | 1518 | 3.29 | 1575 | 3.77 | 1632 | 4.27 | 1688 | 4.80 | | |
| 15988 | 1421 | 2.45 | 1487 | 2.91 | 1549 | 3.38 | 1607 | 3.87 | 1663 | 4.38 | 1715 | 4.89 | 1768 | 5.45 | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

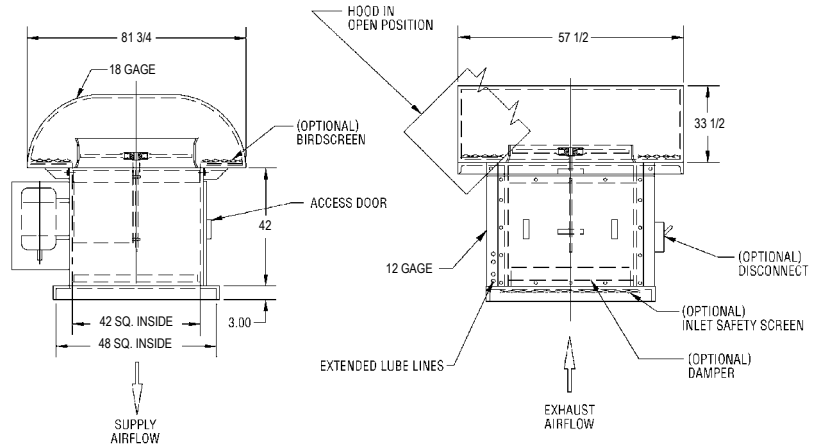
Belt Drive Fan Data - HRR

Hooded Roof Ventilators

036

| | |
|---|--------------------------------|
| Prop Diameter = 36 in. | Maximum Motor Frame Size = 256 |
| Fan Weight = 640 lbs. | Tip Speed, FPM = 9.42 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 5.611 F (091) = 1.775 | |
| Inlet & Outlet Diameter (Area) = 36.38 in. (7.72 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 8664 | 379 | 0.26 | 449 | 0.49 | 524 | 0.81 | 601 | 1.20 | 683 | 1.69 | | | | | | |
| | 10108 | 443 | 0.41 | 503 | 0.67 | 565 | 1.00 | 629 | 1.39 | 695 | 1.86 | 766 | 2.42 | 841 | 3.08 | | |
| | 11552 | 506 | 0.61 | 558 | 0.91 | 611 | 1.24 | 667 | 1.66 | 724 | 2.12 | 782 | 2.65 | 842 | 3.25 | | |
| | 12996 | 569 | 0.87 | 616 | 1.20 | 663 | 1.56 | 711 | 1.99 | 761 | 2.47 | 811 | 2.99 | 863 | 3.58 | 970 | 4.93 |
| | 14440 | 632 | 1.20 | 674 | 1.55 | 716 | 1.95 | 758 | 2.37 | 803 | 2.87 | 849 | 3.42 | 893 | 3.99 | 985 | 5.31 |
| | 15884 | 695 | 1.59 | 733 | 1.98 | 771 | 2.40 | 810 | 2.86 | 849 | 3.36 | 890 | 3.92 | 931 | 4.52 | 1014 | 5.83 |
| | 17328 | 759 | 2.07 | 793 | 2.48 | 829 | 2.94 | 864 | 3.43 | 898 | 3.93 | 936 | 4.50 | 972 | 5.12 | 1048 | 6.45 |
| | 18772 | 822 | 2.63 | 853 | 3.07 | 887 | 3.57 | 918 | 4.08 | 951 | 4.62 | 983 | 5.16 | 1018 | 5.81 | 1087 | 7.18 |
| 20216 | 885 | 3.29 | 914 | 3.76 | 945 | 4.29 | 975 | 4.83 | 1005 | 5.39 | 1035 | 5.98 | 1065 | 6.58 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 8664 | 555 | 0.27 | 686 | 0.56 | 807 | 0.94 | 918 | 1.37 | 1018 | 1.85 | 1110 | 2.39 | 1195 | 2.98 | 1352 | 4.34 |
| | 10108 | 647 | 0.43 | 761 | 0.76 | 868 | 1.16 | 970 | 1.62 | 1064 | 2.13 | 1150 | 2.67 | 1232 | 3.28 | 1382 | 4.62 |
| | 11552 | 740 | 0.65 | 840 | 1.01 | 934 | 1.43 | 1027 | 1.92 | 1115 | 2.46 | 1197 | 3.04 | 1276 | 3.65 | 1420 | 5.01 |
| | 12996 | 832 | 0.92 | 923 | 1.32 | 1008 | 1.78 | 1091 | 2.29 | 1171 | 2.85 | 1250 | 3.47 | 1323 | 4.11 | 1462 | 5.49 |
| | 14440 | 925 | 1.26 | 1007 | 1.70 | 1084 | 2.19 | 1159 | 2.73 | 1235 | 3.32 | 1305 | 3.95 | 1377 | 4.64 | 1509 | 6.08 |
| | 15884 | 1017 | 1.68 | 1092 | 2.16 | 1162 | 2.68 | 1233 | 3.25 | 1300 | 3.86 | 1369 | 4.53 | 1433 | 5.22 | 1560 | 6.75 |
| | 17328 | 1110 | 2.18 | 1178 | 2.70 | 1244 | 3.26 | 1309 | 3.86 | 1372 | 4.50 | 1434 | 5.19 | 1496 | 5.92 | | |
| | 18772 | 1202 | 2.77 | 1265 | 3.33 | 1327 | 3.93 | 1386 | 4.56 | 1446 | 5.24 | 1503 | 5.94 | 1561 | 6.70 | | |
| 20216 | 1295 | 3.46 | 1353 | 4.06 | 1412 | 4.70 | 1467 | 5.36 | 1522 | 6.07 | 1577 | 6.81 | | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

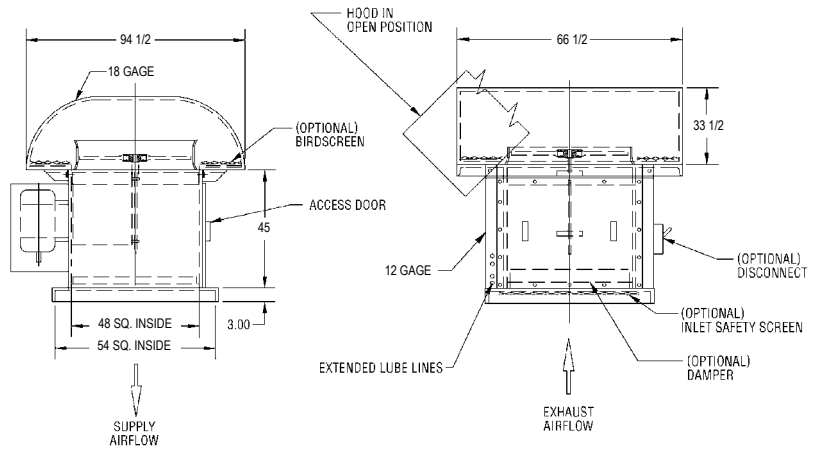
HRR - Belt Drive Fan Data

Hooded Roof Ventilators

042

| | |
|--|--------------------------------|
| Prop Diameter = 42 in. | Maximum Motor Frame Size = 286 |
| Fan Weight = 840 lbs. | Tip Speed, FPM = 11.00 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 12.119 F (091) = 3.836 | |
| Inlet & Outlet Diameter (Area) = 42.44 in. (9.82 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 11784 | 325 | 0.35 | 385 | 0.67 | 449 | 1.10 | 515 | 1.63 | 586 | 2.30 | | | | | | |
| | 13748 | 379 | 0.56 | 431 | 0.92 | 484 | 1.36 | 539 | 1.90 | 596 | 2.53 | 657 | 3.29 | | | | |
| | 15712 | 433 | 0.83 | 476 | 1.23 | 523 | 1.69 | 572 | 2.26 | 620 | 2.89 | 670 | 3.61 | | | | |
| | 17676 | 488 | 1.19 | 527 | 1.63 | 568 | 2.12 | 609 | 2.70 | 652 | 3.35 | 695 | 4.06 | 740 | 4.86 | 831 | 6.71 |
| | 19640 | 542 | 1.63 | 578 | 2.11 | 614 | 2.65 | 649 | 3.22 | 688 | 3.91 | 727 | 4.65 | 765 | 5.42 | 844 | 7.22 |
| | 21804 | 596 | 2.16 | 628 | 2.69 | 661 | 3.27 | 694 | 3.89 | 728 | 4.56 | 762 | 5.33 | 798 | 6.14 | 869 | 7.93 |
| | 23568 | 650 | 2.81 | 679 | 3.38 | 710 | 4.00 | 740 | 4.66 | 770 | 5.34 | 802 | 6.12 | 833 | 6.96 | 898 | 8.77 |
| | 25532 | 704 | 3.57 | 731 | 4.18 | 760 | 4.85 | 787 | 5.54 | 815 | 6.27 | 842 | 7.02 | 872 | 7.90 | 931 | 9.76 |
| 27496 | 758 | 4.46 | 783 | 5.11 | 810 | 5.82 | 835 | 6.56 | 861 | 7.33 | 887 | 8.12 | 912 | 8.95 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 11784 | 475 | 0.37 | 588 | 0.76 | 692 | 1.27 | 787 | 1.86 | 872 | 2.51 | 951 | 3.25 | 1024 | 4.06 | 1158 | 5.91 |
| | 13748 | 555 | 0.59 | 652 | 1.03 | 744 | 1.57 | 831 | 2.20 | 911 | 2.90 | 986 | 3.63 | 1056 | 4.46 | 1184 | 6.28 |
| | 15712 | 634 | 0.88 | 720 | 1.37 | 801 | 1.95 | 880 | 2.61 | 956 | 3.35 | 1028 | 4.14 | 1093 | 4.97 | 1217 | 6.82 |
| | 17676 | 713 | 1.25 | 790 | 1.80 | 864 | 2.42 | 935 | 3.12 | 1003 | 3.88 | 1071 | 4.72 | 1134 | 5.59 | 1253 | 7.47 |
| | 19640 | 792 | 1.71 | 862 | 2.31 | 929 | 2.98 | 993 | 3.71 | 1058 | 4.52 | 1119 | 5.38 | 1180 | 6.31 | 1293 | 8.28 |
| | 21604 | 871 | 2.28 | 935 | 2.93 | 996 | 3.64 | 1056 | 4.42 | 1114 | 5.25 | 1173 | 6.16 | 1228 | 7.10 | 1337 | 9.17 |
| | 23568 | 951 | 2.96 | 1009 | 3.67 | 1066 | 4.43 | 1121 | 5.25 | 1175 | 6.12 | 1229 | 7.06 | 1282 | 8.05 | | |
| | 25532 | 1030 | 3.76 | 1084 | 4.52 | 1137 | 5.34 | 1187 | 6.19 | 1239 | 7.12 | 1288 | 8.07 | 1338 | 9.11 | | |
| 27456 | 1109 | 4.70 | 1159 | 5.51 | 1209 | 6.39 | 1256 | 7.28 | 1304 | 8.25 | 1351 | 9.26 | | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

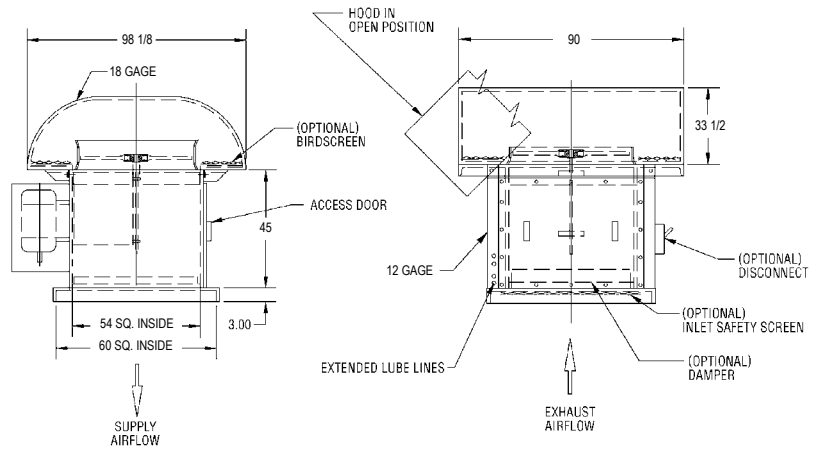
Belt Drive Fan Data - HRR

Hooded Roof Ventilators

048

| | |
|--|--------------------------------|
| Prop Diameter = 48 in. | Maximum Motor Frame Size = 286 |
| Fan Weight = 1100 lbs. | Tip Speed, FPM = 12.57 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 23.63 F (091) = 7.48 | |
| Inlet & Outlet Diameter (Area) = 48.50 in. (12.83 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 15396 | 264 | 0.46 | 337 | 0.87 | 393 | 1.43 | 451 | 2.13 | 512 | 3.01 | | | | | | |
| | 17962 | 332 | 0.73 | 377 | 1.20 | 423 | 1.78 | 472 | 2.48 | 522 | 3.31 | 574 | 4.30 | | | | |
| | 20528 | 379 | 1.09 | 418 | 1.61 | 458 | 2.21 | 500 | 2.95 | 543 | 3.77 | 586 | 4.71 | 631 | 5.78 | | |
| | 23094 | 427 | 1.55 | 462 | 2.13 | 497 | 2.78 | 533 | 3.53 | 571 | 4.38 | 608 | 5.31 | 647 | 6.35 | 727 | 8.77 |
| | 25660 | 474 | 2.13 | 506 | 2.76 | 537 | 3.46 | 568 | 4.21 | 602 | 5.11 | 636 | 6.07 | 669 | 7.09 | 739 | 9.43 |
| | 28226 | 522 | 2.83 | 550 | 3.52 | 578 | 4.27 | 607 | 5.08 | 637 | 5.96 | 667 | 6.96 | 698 | 8.02 | 761 | 10.40 |
| | 30792 | 569 | 3.67 | 595 | 4.41 | 621 | 5.23 | 648 | 6.08 | 674 | 6.98 | 702 | 8.00 | 729 | 9.09 | 786 | 11.50 |
| | 33358 | 616 | 4.67 | 640 | 5.46 | 665 | 6.34 | 689 | 7.24 | 713 | 8.20 | 737 | 9.17 | 763 | 10.30 | 815 | 12.80 |
| 35924 | 664 | 5.83 | 685 | 6.68 | 709 | 7.61 | 731 | 8.57 | 754 | 9.58 | 776 | 10.60 | 798 | 11.70 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 15396 | 416 | 0.48 | 514 | 1.00 | 605 | 1.66 | 689 | 2.43 | 763 | 3.26 | 832 | 4.25 | 896 | 5.31 | 1014 | 7.71 |
| | 17982 | 485 | 0.77 | 571 | 1.35 | 651 | 2.06 | 727 | 2.86 | 798 | 3.78 | 863 | 4.75 | 924 | 5.83 | 1036 | 8.20 |
| | 20528 | 555 | 1.15 | 630 | 1.79 | 701 | 2.54 | 770 | 3.41 | 836 | 4.38 | 898 | 5.41 | 957 | 6.49 | 1065 | 8.91 |
| | 23094 | 624 | 1.63 | 692 | 2.35 | 756 | 3.16 | 818 | 4.07 | 878 | 5.07 | 937 | 6.17 | 992 | 7.31 | 1096 | 9.76 |
| | 25660 | 693 | 2.24 | 755 | 3.02 | 813 | 3.89 | 869 | 4.84 | 926 | 5.91 | 979 | 7.02 | 1032 | 8.24 | 1132 | 10.80 |
| | 28226 | 763 | 2.98 | 819 | 3.83 | 871 | 4.76 | 925 | 5.78 | 975 | 6.86 | 1028 | 8.05 | 1074 | 9.28 | 1170 | 12.00 |
| | 30792 | 832 | 3.87 | 883 | 4.79 | 933 | 5.79 | 981 | 6.86 | 1026 | 8.00 | 1075 | 9.22 | 1122 | 10.50 | | |
| | 33358 | 901 | 4.92 | 948 | 5.91 | 995 | 6.98 | 1039 | 8.09 | 1064 | 9.31 | 1127 | 10.50 | 1171 | 11.90 | | |
| 35924 | 971 | 6.14 | 1015 | 7.20 | 1058 | 8.35 | 1100 | 9.52 | 1141 | 10.80 | 1182 | 12.10 | | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

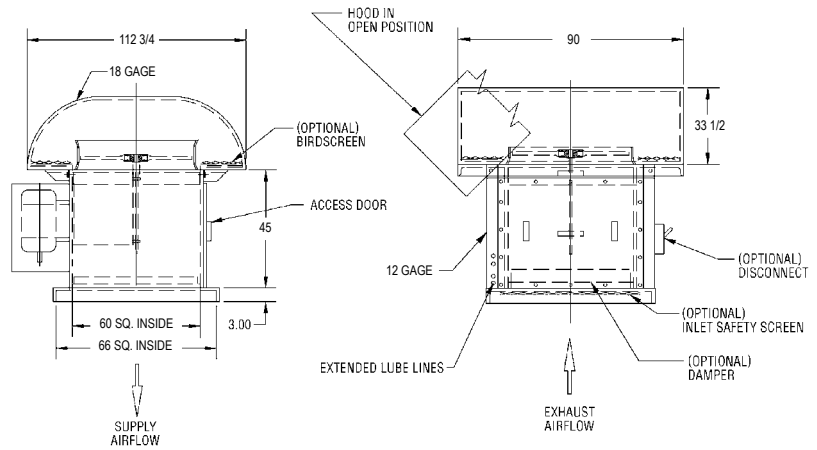
HRR - Belt Drive Fan Data

Hooded Roof Ventilators

054

| | |
|---|--------------------------------|
| Prop Diameter = 54 in. | Maximum Motor Frame Size = 286 |
| Fan Weight = 1200 lbs. | Tip Speed, FPM = 14.14 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 42.58 F (091) = 13.48 | |
| Inlet & Outlet Diameter (Area) = 54.56 in. (16.24 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-------|-------|------|---------|------|---------|------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 19488 | 253 | 0.58 | 299 | 1.10 | 349 | 1.81 | 401 | 2.70 | 455 | 3.81 | | | | | | |
| | 22736 | 295 | 0.92 | 335 | 1.52 | 376 | 2.25 | 419 | 3.14 | 464 | 4.19 | 511 | 5.44 | | | | |
| | 25984 | 337 | 1.38 | 372 | 2.04 | 407 | 2.80 | 445 | 3.73 | 482 | 4.77 | 521 | 5.96 | 561 | 7.31 | | |
| | 29232 | 379 | 1.96 | 410 | 2.69 | 442 | 3.51 | 474 | 4.46 | 507 | 5.54 | 540 | 6.72 | 575 | 8.04 | 647 | 11.10 |
| | 32480 | 421 | 2.69 | 449 | 3.49 | 477 | 4.38 | 505 | 5.33 | 535 | 6.47 | 566 | 7.68 | 595 | 8.97 | 657 | 11.90 |
| | 35728 | 464 | 3.58 | 489 | 4.45 | 514 | 5.41 | 540 | 6.43 | 566 | 7.44 | 593 | 8.81 | 621 | 10.20 | 676 | 13.10 |
| | 38976 | 506 | 4.65 | 529 | 5.59 | 552 | 6.62 | 576 | 7.70 | 599 | 8.84 | 624 | 10.10 | 648 | 11.50 | 699 | 14.50 |
| | 42224 | 548 | 5.91 | 569 | 6.91 | 591 | 8.02 | 612 | 9.17 | 634 | 10.40 | 655 | 11.60 | 679 | 13.10 | 725 | 16.10 |
| | 45472 | 590 | 7.39 | 609 | 8.46 | 630 | 9.64 | 650 | 10.80 | 670 | 12.10 | 690 | 13.40 | 710 | 14.80 | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-------|-------|------|---------|------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 19488 | 370 | 0.61 | 457 | 1.27 | 538 | 2.10 | 612 | 3.08 | 678 | 4.15 | 740 | 5.38 | 797 | 6.71 | 901 | 9.76 |
| | 22736 | 431 | 0.97 | 507 | 1.71 | 579 | 2.60 | 646 | 3.64 | 709 | 4.79 | 767 | 6.01 | 822 | 7.38 | 921 | 10.40 |
| | 25984 | 493 | 1.45 | 560 | 2.27 | 623 | 3.22 | 684 | 4.32 | 743 | 5.54 | 798 | 6.85 | 850 | 8.22 | 947 | 11.30 |
| | 29232 | 555 | 2.07 | 615 | 2.97 | 672 | 4.00 | 727 | 5.15 | 780 | 6.41 | 833 | 7.80 | 882 | 9.25 | 974 | 12.30 |
| | 32480 | 616 | 2.83 | 671 | 3.83 | 723 | 4.93 | 773 | 6.13 | 823 | 7.48 | 870 | 8.89 | 918 | 10.40 | 1006 | 13.70 |
| | 35728 | 678 | 3.77 | 728 | 4.86 | 775 | 6.02 | 822 | 7.32 | 867 | 8.69 | 912 | 10.20 | 955 | 11.80 | 1040 | 15.20 |
| | 38976 | 740 | 4.90 | 765 | 6.07 | 829 | 7.33 | 872 | 8.68 | 914 | 10.10 | 956 | 11.70 | 997 | 13.30 | | |
| | 42224 | 801 | 6.23 | 843 | 7.49 | 885 | 8.84 | 924 | 10.20 | 964 | 11.80 | 1002 | 13.40 | 1041 | 15.10 | | |
| | 45472 | 863 | 7.78 | 902 | 9.12 | 941 | 10.60 | 977 | 12.10 | 1015 | 13.70 | 1051 | 15.30 | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

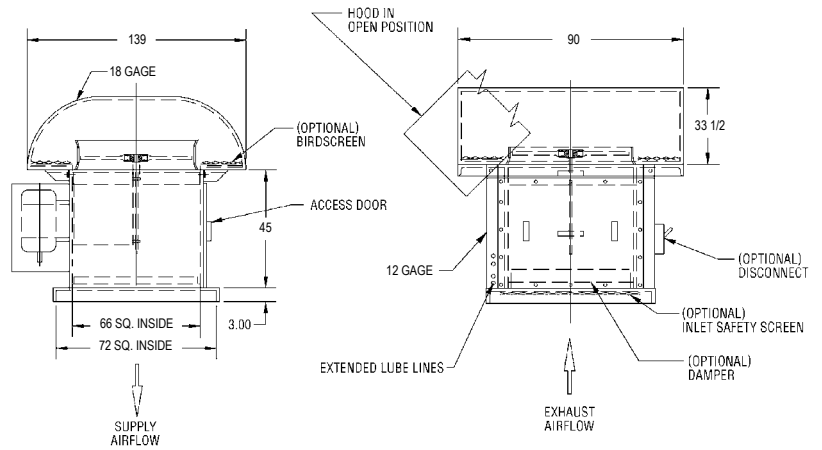
Belt Drive Fan Data - HRR

Hooded Roof Ventilators

060

| | |
|---|--------------------------------|
| Prop Diameter = 60 in. | Maximum Motor Frame Size = 286 |
| Fan Weight = 1620 lbs. | Tip Speed, FPM = 15.71 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 71.96 F (091) = 22.78 | |
| Inlet & Outlet Diameter (Area) = 60.63 in. (20.05 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 24060 | 226 | 0.72 | 269 | 1.36 | 314 | 2.24 | 361 | 3.33 | 410 | 4.70 | | | | | | |
| | 28070 | 266 | 1.14 | 302 | 1.87 | 339 | 2.78 | 377 | 3.87 | 417 | 5.17 | 460 | 6.71 | | | | |
| | 32080 | 303 | 1.70 | 335 | 2.52 | 366 | 3.46 | 400 | 4.61 | 434 | 5.89 | 469 | 7.36 | 505 | 9.03 | | |
| | 36090 | 341 | 2.42 | 369 | 3.33 | 397 | 4.34 | 427 | 5.51 | 457 | 6.85 | 486 | 8.29 | 518 | 9.93 | 582 | 13.70 |
| | 40100 | 379 | 3.32 | 404 | 4.31 | 430 | 5.41 | 454 | 6.58 | 482 | 7.98 | 509 | 9.49 | 536 | 11.10 | 591 | 14.70 |
| | 44110 | 417 | 4.42 | 440 | 5.50 | 463 | 6.67 | 486 | 7.94 | 509 | 9.32 | 534 | 10.90 | 559 | 12.50 | 608 | 16.20 |
| | 48120 | 455 | 5.74 | 476 | 6.90 | 497 | 8.17 | 518 | 9.51 | 539 | 10.90 | 561 | 12.50 | 583 | 14.20 | 629 | 17.90 |
| | 52130 | 493 | 7.30 | 512 | 8.53 | 532 | 9.91 | 551 | 11.30 | 571 | 12.80 | 589 | 14.30 | 611 | 16.10 | 652 | 19.90 |
| 56140 | 531 | 9.12 | 548 | 10.40 | 567 | 11.90 | 585 | 13.40 | 603 | 15.00 | 621 | 16.60 | 639 | 18.30 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 24080 | 333 | 0.76 | 411 | 1.56 | 484 | 2.60 | 551 | 3.80 | 611 | 5.13 | 666 | 6.64 | 717 | 8.29 | 811 | 12.10 |
| | 28070 | 388 | 1.20 | 457 | 2.11 | 521 | 3.21 | 582 | 4.50 | 636 | 5.91 | 690 | 7.42 | 739 | 9.11 | 829 | 12.80 |
| | 32080 | 444 | 1.79 | 504 | 2.80 | 561 | 3.97 | 616 | 5.33 | 669 | 6.84 | 718 | 8.45 | 765 | 10.10 | 852 | 13.90 |
| | 36090 | 499 | 2.55 | 553 | 3.67 | 605 | 4.94 | 655 | 6.36 | 702 | 7.92 | 750 | 9.64 | 794 | 11.40 | 877 | 15.20 |
| | 40100 | 555 | 3.50 | 604 | 4.73 | 650 | 6.08 | 695 | 7.57 | 741 | 9.23 | 783 | 11.00 | 826 | 12.90 | 905 | 16.90 |
| | 44110 | 610 | 4.66 | 655 | 5.99 | 697 | 7.43 | 740 | 9.04 | 780 | 10.70 | 821 | 12.60 | 859 | 14.50 | 936 | 18.70 |
| | 48120 | 666 | 6.05 | 707 | 7.49 | 746 | 9.05 | 785 | 10.70 | 823 | 12.50 | 860 | 14.40 | 897 | 16.40 | | |
| | 52130 | 721 | 7.69 | 759 | 9.23 | 796 | 10.90 | 831 | 12.60 | 868 | 14.50 | 902 | 16.50 | 937 | 18.60 | | |
| 56140 | 777 | 9.60 | 812 | 11.30 | 847 | 13.00 | 880 | 14.90 | 913 | 16.90 | 946 | 18.90 | | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

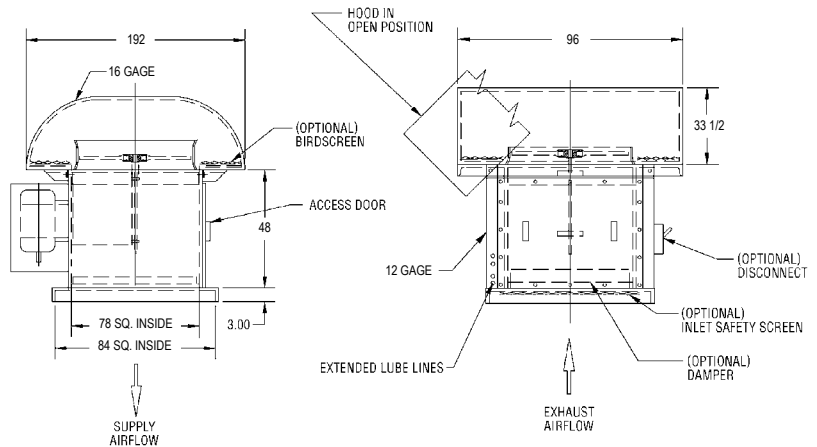
HRR - Belt Drive Fan Data

Hooded Roof Ventilators

072

| | |
|--|--------------------------------|
| Prop Diameter = 72 in. | Maximum Motor Frame Size = 326 |
| Fan Weight = 2450 lbs. | Tip Speed, FPM = 18.85 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 179.18 F (091) = 56.72 | |
| Inlet & Outlet Diameter (Area) = 72.75 in. (28.87 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 34644 | 190 | 1.03 | 225 | 1.96 | 262 | 3.22 | 301 | 4.80 | 342 | 6.77 | | | | | | |
| | 40418 | 221 | 1.64 | 251 | 2.69 | 282 | 4.00 | 314 | 5.57 | 348 | 7.44 | 383 | 9.67 | | | | |
| | 46192 | 253 | 2.45 | 279 | 3.62 | 305 | 4.98 | 334 | 6.64 | 362 | 8.49 | 391 | 10.60 | 421 | 13.00 | | |
| | 51966 | 284 | 3.49 | 308 | 4.79 | 331 | 6.25 | 355 | 7.94 | 381 | 9.86 | 405 | 11.90 | 431 | 14.30 | 485 | 19.70 |
| | 57740 | 316 | 4.78 | 337 | 6.21 | 358 | 7.79 | 379 | 9.34 | 402 | 11.50 | 424 | 13.70 | 446 | 15.90 | 493 | 21.20 |
| | 63514 | 348 | 6.37 | 367 | 7.91 | 386 | 9.61 | 405 | 11.40 | 425 | 13.40 | 445 | 15.70 | 466 | 18.10 | 507 | 23.30 |
| | 69288 | 379 | 8.27 | 397 | 9.93 | 414 | 11.80 | 432 | 13.70 | 449 | 15.70 | 468 | 18.00 | 486 | 20.50 | 524 | 25.80 |
| | 75062 | 411 | 10.50 | 426 | 12.30 | 443 | 14.30 | 459 | 16.30 | 476 | 18.40 | 491 | 20.60 | 509 | 23.20 | 543 | 28.70 |
| 80836 | 443 | 13.10 | 457 | 15.00 | 472 | 17.10 | 487 | 19.30 | 503 | 21.60 | 518 | 23.90 | 532 | 26.30 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 34644 | 277 | 1.09 | 343 | 2.25 | 404 | 3.74 | 459 | 5.47 | 509 | 7.39 | 555 | 9.56 | 597 | 11.90 | 676 | 17.40 |
| | 40418 | 324 | 1.73 | 380 | 3.03 | 434 | 4.63 | 485 | 6.48 | 532 | 8.51 | 575 | 10.70 | 616 | 13.10 | 691 | 18.50 |
| | 46192 | 370 | 2.58 | 420 | 4.03 | 467 | 5.72 | 513 | 7.68 | 557 | 9.85 | 599 | 12.20 | 638 | 14.60 | 710 | 20.00 |
| | 51966 | 416 | 3.67 | 461 | 5.28 | 504 | 7.11 | 546 | 9.16 | 585 | 11.40 | 625 | 13.90 | 661 | 16.40 | 731 | 22.00 |
| | 57740 | 462 | 5.04 | 503 | 6.81 | 542 | 8.76 | 579 | 10.90 | 617 | 13.30 | 653 | 15.80 | 668 | 18.50 | 754 | 24.30 |
| | 63514 | 509 | 6.71 | 546 | 8.63 | 581 | 10.70 | 616 | 13.00 | 650 | 15.40 | 684 | 18.10 | 716 | 20.90 | 780 | 27.00 |
| | 69288 | 555 | 8.71 | 589 | 10.80 | 622 | 13.00 | 654 | 15.40 | 686 | 18.00 | 717 | 20.70 | 748 | 23.70 | | |
| | 75062 | 601 | 11.10 | 632 | 13.30 | 664 | 15.70 | 693 | 18.20 | 723 | 20.90 | 751 | 23.70 | 781 | 26.80 | | |
| 80836 | 647 | 13.80 | 676 | 16.20 | 706 | 18.80 | 733 | 21.40 | 761 | 24.30 | 788 | 27.20 | | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

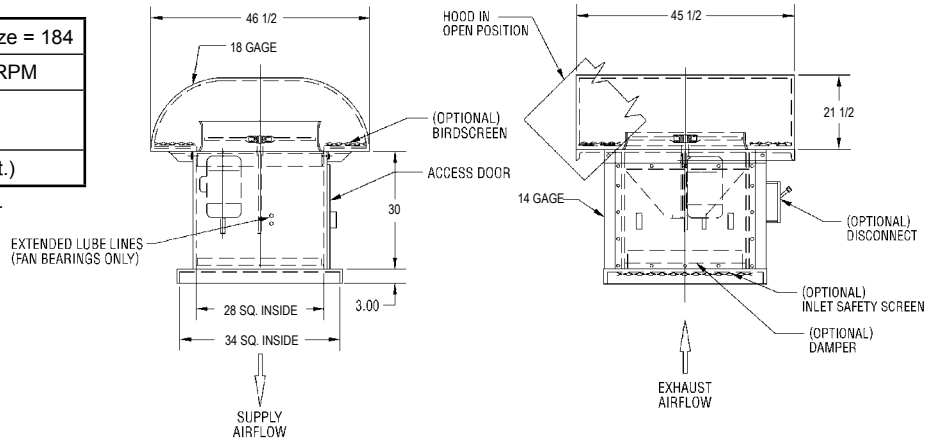
Belt Drive Fan Data - HRB

Hooded Roof Ventilators

024

| | |
|---|--------------------------------|
| Prop Diameter = 24 in. | Maximum Motor Frame Size = 184 |
| Fan Weight = 250 lbs. | Tip Speed, FPM = 6.28 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 0.7397 F (091) = 0.253 | |
| Inlet & Outlet Diameter (Area) = 24.25 in. (3.21 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 3852 | 569 | 0.12 | 674 | 0.22 | 786 | 0.36 | 902 | 0.53 | 1025 | 0.75 | | | | | | |
| | 4494 | 664 | 0.18 | 754 | 0.30 | 847 | 0.44 | 943 | 0.62 | 1043 | 0.83 | | | | | | |
| | 5136 | 759 | 0.27 | 837 | 0.40 | 916 | 0.55 | | | | | | | | | | |
| | 5778 | 854 | 0.39 | 924 | 0.53 | 994 | 0.70 | 1067 | 0.88 | 1142 | 1.10 | 1216 | 1.33 | 1295 | 1.59 | 1455 | 2.19 |
| | 6420 | 949 | 0.53 | 1012 | 0.69 | 1075 | 0.87 | 1137 | 1.05 | 1205 | 1.28 | 1273 | 1.52 | 1339 | 1.77 | 1478 | 2.36 |
| | 7062 | 1044 | 0.71 | 1100 | 0.88 | 1157 | 1.07 | 1216 | 1.27 | 1274 | 1.49 | 1335 | 1.74 | 1397 | 2.01 | 1522 | 2.59 |
| | 7704 | 1139 | 0.92 | 1190 | 1.11 | 1243 | 1.31 | 1296 | 1.52 | 1348 | 1.75 | 1404 | 2.00 | 1459 | 2.28 | 1572 | 2.87 |
| | 8346 | 1234 | 1.17 | 1280 | 1.37 | 1330 | 1.59 | 1378 | 1.81 | 1428 | 2.05 | 1474 | 2.30 | 1528 | 2.58 | 1631 | 3.19 |
| 8988 | 1329 | 1.46 | 1372 | 1.67 | 1418 | 1.91 | 1463 | 2.15 | 1508 | 2.40 | 1553 | 2.66 | 1597 | 2.93 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 3852 | 811 | 0.11 | 993 | 0.23 | 1147 | 0.37 | 1281 | 0.53 | 1408 | 0.70 | 1526 | 0.89 | 1642 | 1.10 | 1878 | 1.59 |
| | 4494 | 947 | 0.17 | 1108 | 0.31 | 1246 | 0.46 | 1371 | 0.64 | 1485 | 0.82 | 1597 | 1.02 | 1699 | 1.23 | 1898 | 1.70 |
| | 5136 | 1082 | 0.26 | 1227 | 0.41 | 1352 | 0.58 | 1467 | 0.77 | 1576 | 0.97 | 1675 | 1.18 | 1774 | 1.40 | 1955 | 1.88 |
| | 5778 | 1217 | 0.37 | 1348 | 0.54 | 1462 | 0.72 | 1571 | 0.92 | 1671 | 1.14 | 1767 | 1.36 | 1856 | 1.60 | 2031 | 2.10 |
| | 6420 | 1352 | 0.50 | 1472 | 0.69 | 1579 | 0.89 | 1678 | 1.10 | 1773 | 1.33 | 1862 | 1.57 | 1949 | 1.82 | 2108 | 2.35 |
| | 7062 | 1487 | 0.67 | 1598 | 0.87 | 1697 | 1.09 | 1788 | 1.31 | 1878 | 1.56 | 1964 | 1.82 | 2044 | 2.08 | 2199 | 2.64 |
| | 7704 | 1623 | 0.87 | 1725 | 1.09 | 1818 | 1.32 | 1904 | 1.56 | 1986 | 1.82 | 2068 | 2.09 | 2146 | 2.37 | 2293 | 2.96 |
| | 8346 | 1758 | 1.10 | 1853 | 1.34 | 1940 | 1.59 | 2023 | 1.85 | 2099 | 2.12 | 2175 | 2.40 | 2250 | 2.70 | | |
| 8988 | 1893 | 1.38 | 1982 | 1.64 | 2064 | 1.90 | 2142 | 2.18 | 2216 | 2.46 | 2285 | 2.75 | 2357 | 3.06 | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

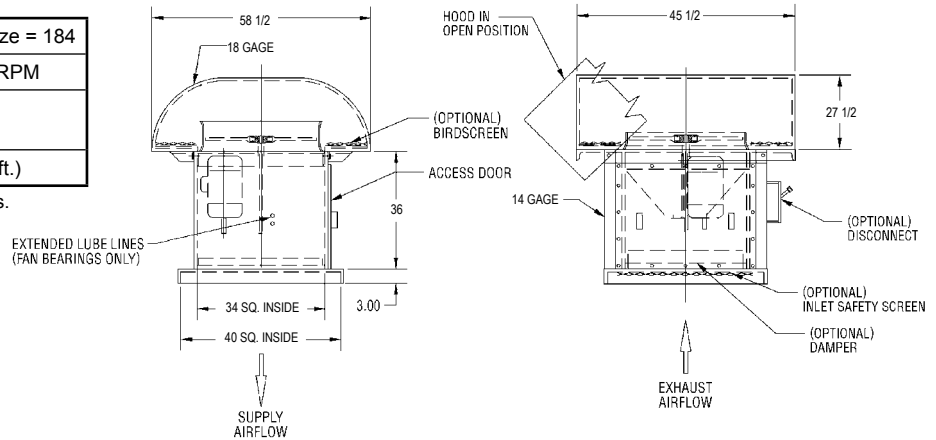
HRB - Belt Drive Fan Data

Hooded Roof Ventilators

027

| | |
|---|--------------------------------|
| Prop Diameter = 27 in. | Maximum Motor Frame Size = 184 |
| Fan Weight = 350 lbs. | Tip Speed, FPM = 7.07 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 1.333 F (091) = 0.456 | |
| Inlet & Outlet Diameter (Area) = 27.28 in. (4.06 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 4872 | 506 | 0.15 | 599 | 0.28 | 699 | 0.45 | 801 | 0.67 | 911 | 0.95 | 1021 | 1.36 | | | | |
| | 5684 | 590 | 0.23 | 670 | 0.38 | 753 | 0.56 | 838 | 0.78 | 927 | 1.05 | | | | | | |
| | 6496 | 674 | 0.34 | 744 | 0.51 | 814 | 0.70 | 890 | 0.93 | 965 | 1.19 | 1042 | 1.49 | 1122 | 1.83 | | |
| | 7308 | 759 | 0.49 | 821 | 0.67 | 883 | 0.88 | 948 | 1.12 | 1015 | 1.39 | 1081 | 1.68 | 1151 | 2.01 | 1293 | 2.78 |
| | 8120 | 843 | 0.67 | 899 | 0.87 | 955 | 1.10 | 1010 | 1.33 | 1071 | 1.62 | 1131 | 1.92 | 1190 | 2.24 | 1314 | 2.98 |
| | 8932 | 927 | 0.90 | 978 | 1.11 | 1028 | 1.35 | 1080 | 1.61 | 1132 | 1.89 | 1186 | 2.20 | 1242 | 2.54 | 1352 | 3.28 |
| | 9744 | 1012 | 1.16 | 1057 | 1.40 | 1105 | 1.65 | 1152 | 1.93 | 1198 | 2.21 | 1247 | 2.53 | 1296 | 2.88 | 1397 | 3.63 |
| | 10556 | 1096 | 1.48 | 1137 | 1.73 | 1182 | 2.01 | 1224 | 2.29 | 1266 | 2.59 | 1310 | 2.90 | 1357 | 3.27 | 1449 | 4.04 |
| 11368 | 1180 | 1.85 | 1219 | 2.11 | 1260 | 2.41 | 1299 | 2.71 | 1340 | 3.03 | 1380 | 3.36 | 1419 | 3.70 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 4872 | 721 | 0.14 | 862 | 0.29 | 1019 | 0.47 | 1138 | 0.67 | 1252 | 0.89 | 1356 | 1.13 | 1459 | 1.39 | 1669 | 2.01 |
| | 5684 | 841 | 0.22 | 984 | 0.39 | 1107 | 0.59 | 1219 | 0.80 | 1320 | 1.04 | 1419 | 1.29 | 1510 | 1.56 | 1687 | 2.16 |
| | 6496 | 961 | 0.32 | 1090 | 0.52 | 1201 | 0.73 | 1304 | 0.97 | 1400 | 1.22 | 1488 | 1.49 | 1577 | 1.77 | 1738 | 2.38 |
| | 7308 | 1081 | 0.46 | 1198 | 0.68 | 1299 | 0.91 | 1396 | 1.16 | 1485 | 1.44 | 1570 | 1.72 | 1650 | 2.02 | 1805 | 2.66 |
| | 8120 | 1201 | 0.63 | 1308 | 0.87 | 1403 | 1.12 | 1491 | 1.39 | 1575 | 1.69 | 1654 | 1.99 | 1732 | 2.31 | 1874 | 2.97 |
| | 8932 | 1321 | 0.84 | 1419 | 1.10 | 1508 | 1.38 | 1589 | 1.66 | 1669 | 1.97 | 1745 | 2.30 | 1816 | 2.63 | 1954 | 3.33 |
| | 9744 | 1441 | 1.10 | 1532 | 1.38 | 1615 | 1.67 | 1692 | 1.98 | 1765 | 2.30 | 1838 | 2.64 | 1907 | 3.00 | 2038 | 3.74 |
| | 10556 | 1562 | 1.39 | 1646 | 1.70 | 1724 | 2.01 | 1797 | 2.34 | 1865 | 2.67 | 1933 | 3.03 | 2000 | 3.41 | | |
| 11368 | 1682 | 1.74 | 1761 | 2.07 | 1834 | 2.40 | 1903 | 2.75 | 1969 | 3.11 | 2031 | 3.47 | 2094 | 3.87 | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

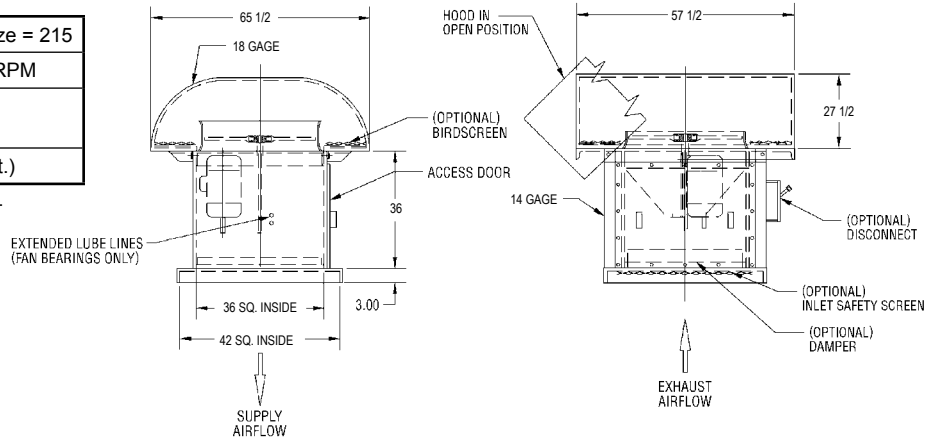
Belt Drive Fan Data - HRB

Hooded Roof Ventilators

030

| | |
|---|--------------------------------|
| Prop Diameter = 30 in. | Maximum Motor Frame Size = 215 |
| Fan Weight = 400 lbs. | Tip Speed, FPM = 7.85 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 2.06 F (091) = 0.73 | |
| Inlet & Outlet Diameter (Area) = 30.31 in. (5.01 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 6060 | 459 | 0.18 | 543 | 0.35 | 633 | 0.56 | 726 | 0.84 | 826 | 1.18 | 936 | 1.64 | 1016 | 2.15 | | |
| | 7070 | 535 | 0.29 | 608 | 0.47 | 683 | 0.70 | 760 | 0.97 | 840 | 1.30 | 926 | 1.69 | 1016 | 2.15 | | |
| | 8080 | 612 | 0.43 | 674 | 0.64 | 738 | 0.87 | 807 | 1.16 | 874 | 1.48 | 945 | 1.86 | 1017 | 2.27 | | |
| | 9090 | 688 | 0.61 | 738 | 0.84 | 801 | 1.10 | 859 | 1.39 | 920 | 1.73 | 980 | 2.09 | 1043 | 2.50 | 1172 | 3.45 |
| | 10100 | 764 | 0.84 | 815 | 1.09 | 866 | 1.36 | 916 | 1.66 | 971 | 2.01 | 1025 | 2.39 | 1079 | 2.78 | 1191 | 3.71 |
| | 11470 | 829 | 1.12 | 887 | 1.39 | 932 | 1.68 | 979 | 2.00 | 1026 | 2.35 | 1136 | 2.74 | 1125 | 3.15 | 1225 | 4.08 |
| | 12120 | 918 | 1.45 | 959 | 1.74 | 1002 | 2.06 | 1045 | 2.40 | 1086 | 2.75 | 1131 | 3.15 | 1175 | 3.58 | 1266 | 4.51 |
| | 13130 | 994 | 1.84 | 1031 | 2.16 | 1072 | 2.50 | 1110 | 2.85 | 1149 | 3.23 | 1188 | 3.61 | 1230 | 4.06 | 1313 | 5.02 |
| 14140 | 1070 | 2.30 | 1106 | 2.63 | 1142 | 3.00 | 1178 | 3.38 | 1215 | 3.77 | 1251 | 4.18 | 1286 | 4.60 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 6060 | 654 | 0.17 | 800 | 0.36 | 923 | 0.58 | 1031 | 0.83 | 1134 | 1.11 | 1229 | 1.41 | 1323 | 1.73 | 1512 | 2.50 |
| | 7070 | 762 | 0.27 | 892 | 0.49 | 1004 | 0.73 | 1105 | 1.00 | 1196 | 1.29 | 1286 | 1.61 | 1368 | 1.94 | 1529 | 2.68 |
| | 8080 | 872 | 0.40 | 989 | 0.65 | 1089 | 0.91 | 1182 | 1.20 | 1269 | 1.52 | 1349 | 1.85 | 1429 | 2.20 | 1575 | 2.96 |
| | 9090 | 980 | 0.57 | 1086 | 0.84 | 1178 | 1.13 | 1266 | 1.45 | 1346 | 1.79 | 1424 | 2.14 | 1495 | 2.51 | 1636 | 3.31 |
| | 10100 | 1089 | 0.79 | 1186 | 1.09 | 1272 | 1.40 | 1352 | 1.73 | 1428 | 2.10 | 1500 | 2.48 | 1570 | 2.86 | 1698 | 3.69 |
| | 11110 | 1198 | 1.05 | 1287 | 1.37 | 1368 | 1.72 | 1441 | 2.07 | 1513 | 2.45 | 1582 | 2.86 | 1646 | 3.27 | 1772 | 4.15 |
| | 12120 | 1307 | 1.37 | 1389 | 1.72 | 1464 | 2.08 | 1534 | 2.46 | 1600 | 2.86 | 1666 | 3.29 | 1728 | 3.73 | 1847 | 4.65 |
| | 13130 | 1416 | 1.74 | 1492 | 2.11 | 1563 | 2.50 | 1630 | 2.91 | 1691 | 3.33 | 1752 | 3.77 | 1812 | 4.24 | | |
| | 14140 | 1525 | 2.17 | 1597 | 2.57 | 1663 | 2.99 | 1725 | 3.42 | 1785 | 3.87 | 1841 | 4.32 | 1898 | 4.81 | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

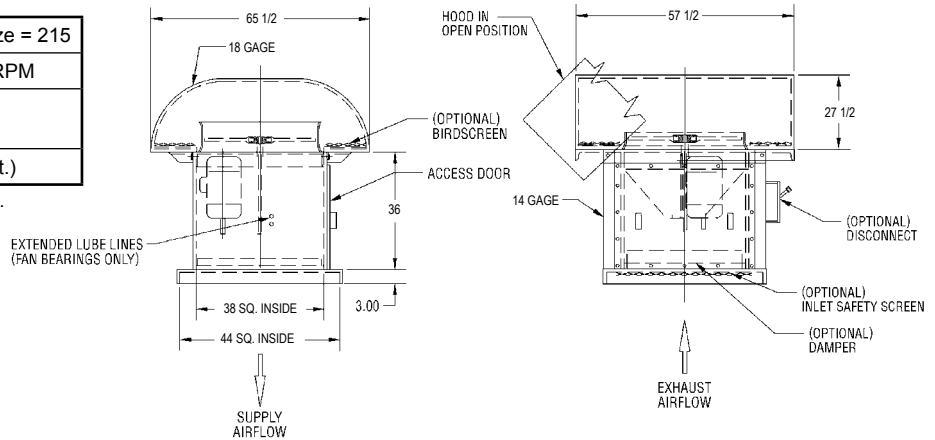
HRB - Belt Drive Fan Data

Hooded Roof Ventilators

032

| | |
|---|--------------------------------|
| Prop Diameter = 32 in. | Maximum Motor Frame Size = 215 |
| Fan Weight = 450 lbs. | Tip Speed, FPM = 8.38 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 3.117 F (091) = 1.066 | |
| Inlet & Outlet Diameter (Area) = 32.33 in. (5.70 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 6852 | 427 | 0.20 | 506 | 0.39 | 590 | 0.64 | 676 | 0.95 | 769 | 1.34 | | | | | | |
| | 7994 | 499 | 0.33 | 566 | 0.53 | 636 | 0.79 | 708 | 1.10 | 782 | 1.47 | 862 | 1.91 | 946 | 2.43 | | |
| | 9136 | 570 | 0.49 | 628 | 0.72 | 688 | 0.99 | 751 | 1.31 | 814 | 1.68 | 880 | 2.10 | 947 | 2.57 | | |
| | 10278 | 641 | 0.69 | 683 | 0.95 | 746 | 1.24 | 800 | 1.57 | 857 | 1.95 | 912 | 2.36 | 971 | 2.83 | 1091 | 3.90 |
| | 11420 | 712 | 0.95 | 759 | 1.23 | 806 | 1.54 | 853 | 1.88 | 904 | 2.27 | 955 | 2.70 | 1005 | 3.15 | 1109 | 4.19 |
| | 12562 | 763 | 1.26 | 826 | 1.57 | 868 | 1.90 | 912 | 2.26 | 956 | 2.66 | 1102 | 3.10 | 1048 | 3.57 | 1141 | 4.61 |
| | 13704 | 855 | 1.64 | 893 | 1.97 | 933 | 2.33 | 973 | 2.71 | 1011 | 3.11 | 1053 | 3.56 | 1095 | 4.05 | 1180 | 5.10 |
| | 14846 | 926 | 2.08 | 961 | 2.44 | 998 | 2.83 | 1034 | 3.23 | 1071 | 3.65 | 1106 | 4.09 | 1146 | 4.60 | 1223 | 5.68 |
| 15988 | 997 | 2.60 | 1030 | 2.98 | 1064 | 3.39 | 1068 | 3.82 | 1132 | 4.27 | 1165 | 4.73 | 1198 | 5.21 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 6852 | 609 | 0.19 | 745 | 0.40 | 860 | 0.66 | 961 | 0.94 | 1056 | 1.25 | 1145 | 1.59 | 1232 | 1.96 | 1408 | 2.82 |
| | 7994 | 710 | 0.31 | 831 | 0.55 | 935 | 0.83 | 1029 | 1.13 | 1114 | 1.46 | 1198 | 1.82 | 1274 | 2.19 | 1424 | 3.03 |
| | 9136 | 812 | 0.46 | 921 | 0.73 | 1014 | 1.03 | 1101 | 1.36 | 1182 | 1.72 | 1257 | 2.09 | 1331 | 2.49 | 1467 | 3.35 |
| | 10278 | 913 | 0.65 | 1012 | 0.95 | 1097 | 1.28 | 1179 | 1.64 | 1253 | 2.02 | 1326 | 2.42 | 1393 | 2.84 | 1523 | 3.74 |
| | 11420 | 1015 | 0.89 | 1105 | 1.23 | 1185 | 1.58 | 1259 | 1.96 | 1330 | 2.37 | 1397 | 2.80 | 1462 | 3.24 | 1581 | 4.17 |
| | 12562 | 1116 | 1.19 | 1199 | 1.55 | 1274 | 1.94 | 1342 | 2.34 | 1409 | 2.77 | 1473 | 3.23 | 1533 | 3.70 | 1650 | 4.69 |
| | 13704 | 1218 | 1.55 | 1294 | 1.94 | 1364 | 2.35 | 1429 | 2.78 | 1490 | 3.23 | 1552 | 3.72 | 1610 | 4.22 | 1720 | 5.26 |
| | 14846 | 1319 | 1.97 | 1390 | 2.39 | 1456 | 2.83 | 1518 | 3.29 | 1575 | 3.77 | 1632 | 4.27 | 1688 | 4.80 | | |
| 15988 | 1421 | 2.45 | 1487 | 2.91 | 1549 | 3.38 | 1607 | 3.87 | 1663 | 4.38 | 1715 | 4.89 | 1768 | 5.45 | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

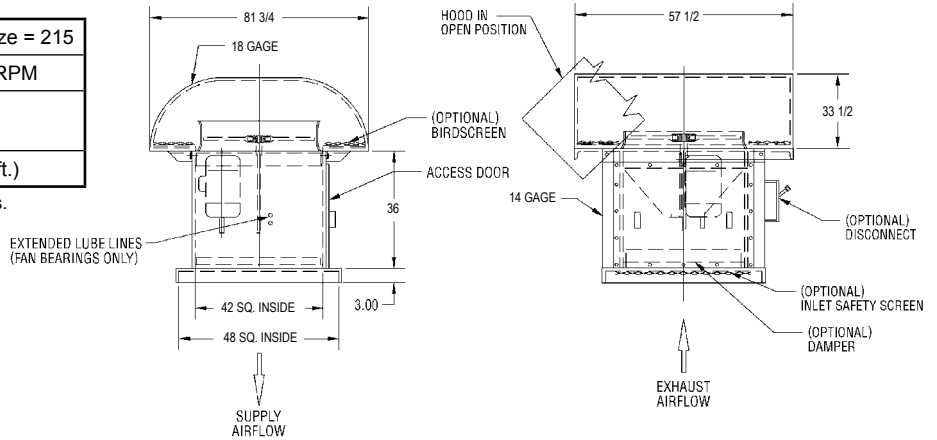
Belt Drive Fan Data - HRB

Hooded Roof Ventilators

036

| | |
|---|--------------------------------|
| Prop Diameter = 36 in. | Maximum Motor Frame Size = 215 |
| Fan Weight = 640 lbs. | Tip Speed, FPM = 9.42 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 5.611 F (091) = 1.775 | |
| Inlet & Outlet Diameter (Area) = 36.38 in. (7.72 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 8664 | 379 | 0.26 | 449 | 0.49 | 524 | 0.81 | 601 | 1.20 | 683 | 1.69 | | | | | | |
| | 10108 | 443 | 0.41 | 503 | 0.67 | 565 | 1.00 | 629 | 1.39 | 695 | 1.86 | 766 | 2.42 | 841 | 3.08 | | |
| | 11552 | 506 | 0.61 | 558 | 0.91 | 611 | 1.24 | 667 | 1.66 | 724 | 2.12 | 782 | 2.65 | 842 | 3.25 | | |
| | 12996 | 569 | 0.87 | 616 | 1.20 | 663 | 1.56 | 711 | 1.99 | 761 | 2.47 | 811 | 2.99 | 863 | 3.58 | 970 | 4.93 |
| | 14440 | 632 | 1.20 | 674 | 1.55 | 716 | 1.95 | 758 | 2.37 | 803 | 2.87 | 849 | 3.42 | 893 | 3.99 | 985 | 5.31 |
| | 15884 | 695 | 1.59 | 733 | 1.98 | 771 | 2.40 | 810 | 2.86 | 849 | 3.36 | 890 | 3.92 | 931 | 4.52 | 1014 | 5.83 |
| | 17328 | 759 | 2.07 | 793 | 2.48 | 829 | 2.94 | 864 | 3.43 | 898 | 3.93 | 936 | 4.50 | 972 | 5.12 | 1048 | 6.45 |
| | 18772 | 822 | 2.63 | 853 | 3.07 | 887 | 3.57 | 918 | 4.08 | 951 | 4.62 | 983 | 5.16 | 1018 | 5.81 | 1087 | 7.18 |
| 20216 | 885 | 3.29 | 914 | 3.76 | 945 | 4.29 | 975 | 4.83 | 1005 | 5.39 | 1035 | 5.98 | 1065 | 6.58 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 8664 | 555 | 0.27 | 686 | 0.56 | 807 | 0.94 | 918 | 1.37 | 1018 | 1.85 | 1110 | 2.39 | 1195 | 2.98 | 1352 | 4.34 |
| | 10108 | 647 | 0.43 | 761 | 0.76 | 868 | 1.16 | 970 | 1.62 | 1064 | 2.13 | 1150 | 2.67 | 1232 | 3.28 | 1382 | 4.62 |
| | 11552 | 740 | 0.65 | 840 | 1.01 | 934 | 1.43 | 1027 | 1.92 | 1115 | 2.46 | 1197 | 3.04 | 1276 | 3.65 | 1420 | 5.01 |
| | 12996 | 832 | 0.92 | 923 | 1.32 | 1008 | 1.78 | 1091 | 2.29 | 1171 | 2.85 | 1250 | 3.47 | 1323 | 4.11 | 1462 | 5.49 |
| | 14440 | 925 | 1.26 | 1007 | 1.70 | 1084 | 2.19 | 1159 | 2.73 | 1235 | 3.32 | 1305 | 3.95 | 1377 | 4.64 | 1509 | 6.08 |
| | 15884 | 1017 | 1.68 | 1092 | 2.16 | 1162 | 2.68 | 1233 | 3.25 | 1300 | 3.86 | 1369 | 4.53 | 1433 | 5.22 | 1560 | 6.75 |
| | 17328 | 1110 | 2.18 | 1178 | 2.70 | 1244 | 3.26 | 1309 | 3.86 | 1372 | 4.50 | 1434 | 5.19 | 1496 | 5.92 | | |
| | 18772 | 1202 | 2.77 | 1265 | 3.33 | 1327 | 3.93 | 1386 | 4.56 | 1446 | 5.24 | 1503 | 5.94 | 1561 | 6.70 | | |
| 20216 | 1295 | 3.46 | 1353 | 4.06 | 1412 | 4.70 | 1467 | 5.36 | 1522 | 6.07 | 1577 | 6.81 | | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

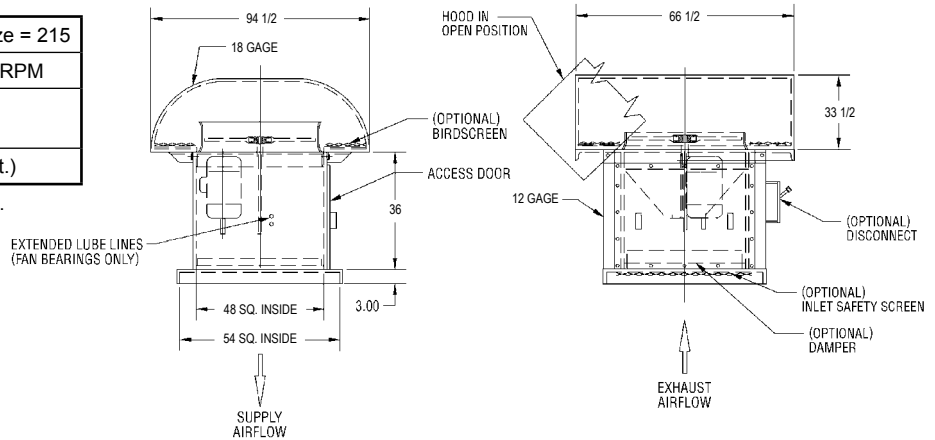
HRB - Belt Drive Fan Data

Hooded Roof Ventilators

042

| | |
|--|--------------------------------|
| Prop Diameter = 42 in. | Maximum Motor Frame Size = 215 |
| Fan Weight = 800 lbs. | Tip Speed, FPM = 11.00 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 12.119 F (091) = 3.836 | |
| Inlet & Outlet Diameter (Area) = 42.44 in. (9.82 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 11784 | 325 | 0.35 | 385 | 0.67 | 449 | 1.10 | 515 | 1.63 | 586 | 2.30 | | | | | | |
| | 13748 | 379 | 0.56 | 431 | 0.92 | 484 | 1.36 | 539 | 1.90 | 596 | 2.53 | 657 | 3.29 | | | | |
| | 15712 | 433 | 0.83 | 476 | 1.23 | 523 | 1.69 | 572 | 2.26 | 620 | 2.89 | 670 | 3.61 | | | | |
| | 17676 | 488 | 1.19 | 527 | 1.63 | 568 | 2.12 | 609 | 2.70 | 652 | 3.35 | 695 | 4.06 | 740 | 4.86 | 831 | 6.71 |
| | 19640 | 542 | 1.63 | 578 | 2.11 | 614 | 2.65 | 649 | 3.22 | 688 | 3.91 | 727 | 4.65 | 765 | 5.42 | 844 | 7.22 |
| | 21804 | 596 | 2.16 | 628 | 2.69 | 661 | 3.27 | 694 | 3.89 | 728 | 4.56 | 762 | 5.33 | 798 | 6.14 | 869 | 7.93 |
| | 23568 | 650 | 2.81 | 679 | 3.38 | 710 | 4.00 | 740 | 4.66 | 770 | 5.34 | 802 | 6.12 | 833 | 6.96 | 898 | 8.77 |
| | 25532 | 704 | 3.57 | 731 | 4.18 | 760 | 4.85 | 787 | 5.54 | 815 | 6.27 | 842 | 7.02 | 872 | 7.90 | 931 | 9.76 |
| | 27496 | 758 | 4.46 | 783 | 5.11 | 810 | 5.82 | 835 | 6.56 | 861 | 7.33 | 887 | 8.12 | 912 | 8.95 | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|-------|------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 11784 | 475 | 0.37 | 588 | 0.76 | 692 | 1.27 | 787 | 1.86 | 872 | 2.51 | 951 | 3.25 | 1024 | 4.06 | 1158 | 5.91 |
| | 13748 | 555 | 0.59 | 652 | 1.03 | 744 | 1.57 | 831 | 2.20 | 911 | 2.90 | 986 | 3.63 | 1056 | 4.46 | 1184 | 6.28 |
| | 15712 | 634 | 0.88 | 720 | 1.37 | 801 | 1.95 | 880 | 2.61 | 956 | 3.35 | 1028 | 4.14 | 1093 | 4.97 | 1217 | 6.82 |
| | 17676 | 713 | 1.25 | 790 | 1.80 | 864 | 2.42 | 935 | 3.12 | 1003 | 3.88 | 1071 | 4.72 | 1134 | 5.59 | 1253 | 7.47 |
| | 19640 | 792 | 1.71 | 862 | 2.31 | 929 | 2.98 | 993 | 3.71 | 1058 | 4.52 | 1119 | 5.38 | 1180 | 6.31 | 1293 | 8.28 |
| | 21604 | 871 | 2.28 | 935 | 2.93 | 996 | 3.64 | 1056 | 4.42 | 1114 | 5.25 | 1173 | 6.16 | 1228 | 7.10 | 1337 | 9.17 |
| | 23568 | 951 | 2.96 | 1009 | 3.67 | 1066 | 4.43 | 1121 | 5.25 | 1175 | 6.12 | 1229 | 7.06 | 1282 | 8.05 | | |
| | 25532 | 1030 | 3.76 | 1084 | 4.52 | 1137 | 5.34 | 1187 | 6.19 | 1239 | 7.12 | 1288 | 8.07 | 1338 | 9.11 | | |
| | 27456 | 1109 | 4.70 | 1159 | 5.51 | 1209 | 6.39 | 1256 | 7.28 | 1304 | 8.25 | 1351 | 9.26 | | | | |

- Notes:**
- Performance shown is for Installation Type A: free inlet, free outlet.
 - Performance ratings do not include the effects of appurtenances in the airstream.
 - Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

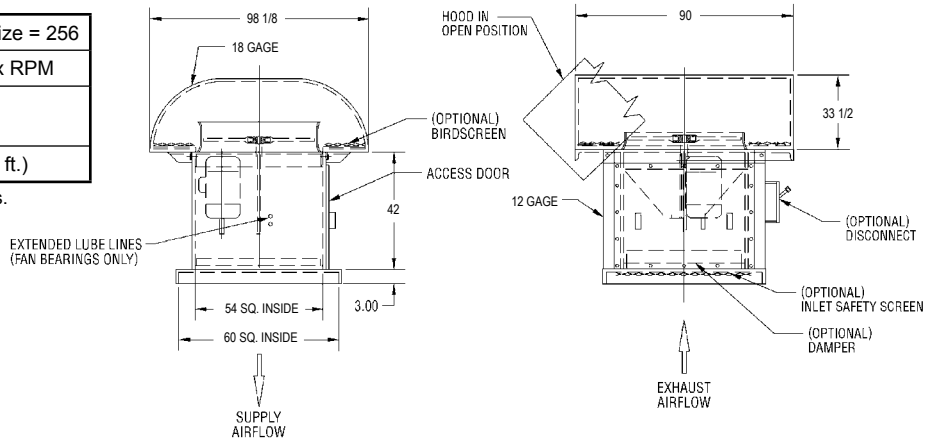
Belt Drive Fan Data - HRB

Hooded Roof Ventilators

048

| | |
|--|--------------------------------|
| Prop Diameter = 48 in. | Maximum Motor Frame Size = 256 |
| Fan Weight = 1050 lbs. | Tip Speed, FPM = 12.57 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 23.63 F (091) = 7.48 | |
| Inlet & Outlet Diameter (Area) = 48.50 in. (12.83 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-------|-------|------|---------|------|---------|------|---------|------|---------|------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 15396 | 264 | 0.46 | 337 | 0.87 | 393 | 1.43 | 451 | 2.13 | 512 | 3.01 | | | | | | |
| | 17962 | 332 | 0.73 | 377 | 1.20 | 423 | 1.78 | 472 | 2.48 | 522 | 3.31 | | | | | | |
| | 20528 | 379 | 1.09 | 418 | 1.61 | 458 | 2.21 | 500 | 2.95 | 543 | 3.77 | | | | | | |
| | 23094 | 427 | 1.55 | 462 | 2.13 | 497 | 2.78 | 533 | 3.53 | 571 | 4.38 | 608 | 5.31 | 647 | 6.35 | 727 | 8.77 |
| | 25660 | 474 | 2.13 | 506 | 2.76 | 537 | 3.46 | 568 | 4.21 | 602 | 5.11 | 636 | 6.07 | 669 | 7.09 | 739 | 9.43 |
| | 28226 | 522 | 2.83 | 550 | 3.52 | 578 | 4.27 | 607 | 5.08 | 637 | 5.96 | 667 | 6.96 | 698 | 8.02 | 761 | 10.40 |
| | 30792 | 569 | 3.67 | 595 | 4.41 | 621 | 5.23 | 648 | 6.08 | 674 | 6.98 | 702 | 8.00 | 729 | 9.09 | 786 | 11.50 |
| | 33358 | 616 | 4.67 | 640 | 5.46 | 665 | 6.34 | 689 | 7.24 | 713 | 8.20 | 737 | 9.17 | 763 | 10.30 | 815 | 12.80 |
| | 35924 | 664 | 5.83 | 685 | 6.68 | 709 | 7.61 | 731 | 8.57 | 754 | 9.58 | 776 | 10.60 | 798 | 11.70 | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-------|-------|------|---------|------|---------|------|---------|------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 15396 | 416 | 0.48 | 514 | 1.00 | 605 | 1.66 | 689 | 2.43 | 763 | 3.26 | 832 | 4.25 | 896 | 5.31 | 1014 | 7.71 |
| | 17982 | 485 | 0.77 | 571 | 1.35 | 651 | 2.06 | 727 | 2.86 | 798 | 3.78 | 863 | 4.75 | 924 | 5.83 | 1036 | 8.20 |
| | 20528 | 555 | 1.15 | 630 | 1.79 | 701 | 2.54 | 770 | 3.41 | 836 | 4.38 | 898 | 5.41 | 957 | 6.49 | 1065 | 8.91 |
| | 23094 | 624 | 1.63 | 692 | 2.35 | 756 | 3.16 | 818 | 4.07 | 878 | 5.07 | 937 | 6.17 | 992 | 7.31 | 1096 | 9.76 |
| | 25660 | 693 | 2.24 | 755 | 3.02 | 813 | 3.89 | 869 | 4.84 | 926 | 5.91 | 979 | 7.02 | 1032 | 8.24 | 1132 | 10.80 |
| | 28226 | 763 | 2.98 | 819 | 3.83 | 871 | 4.76 | 925 | 5.78 | 975 | 6.86 | 1028 | 8.05 | 1074 | 9.28 | 1170 | 12.00 |
| | 30792 | 832 | 3.87 | 883 | 4.79 | 933 | 5.79 | 981 | 6.86 | 1026 | 8.00 | 1075 | 9.22 | 1122 | 10.50 | | |
| | 33358 | 901 | 4.92 | 948 | 5.91 | 995 | 6.98 | 1039 | 8.09 | 1064 | 9.31 | 1127 | 10.50 | 1171 | 11.90 | | |
| | 35924 | 971 | 6.14 | 1015 | 7.20 | 1058 | 8.35 | 1100 | 9.52 | 1141 | 10.80 | 1182 | 12.10 | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

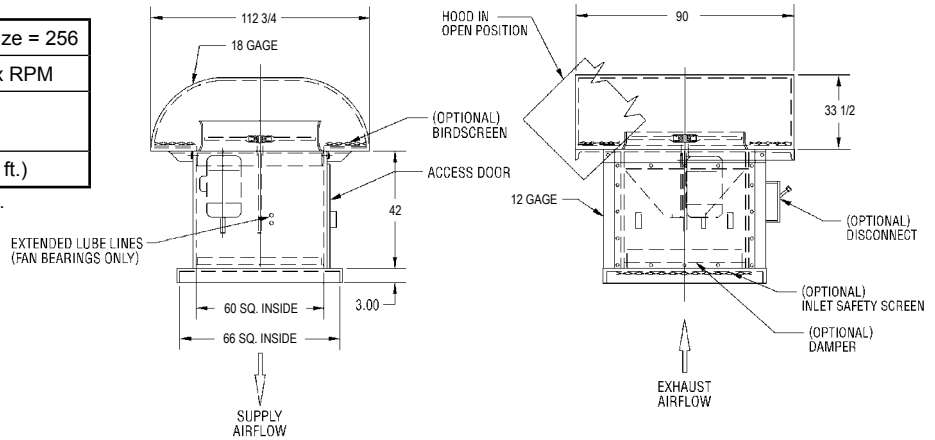
HRB - Belt Drive Fan Data

Hooded Roof Ventilators

054

| | |
|--|--------------------------------|
| Prop Diameter = 54 in. | Maximum Motor Frame Size = 256 |
| Fan Weight = 1150 lbs. | Tip Speed, FPM = 14.14 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 42.58 F (091) = 13.48 | |
| Inlet & Outlet Diameter (Area) = 54.56 in. (16.24 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 19488 | 253 | 0.58 | 299 | 1.10 | 349 | 1.81 | 401 | 2.70 | 455 | 3.81 | | | | | | |
| | 22736 | 295 | 0.92 | 335 | 1.52 | 376 | 2.25 | 419 | 3.14 | 464 | 4.19 | 511 | 5.44 | | | | |
| | 25984 | 337 | 1.38 | 372 | 2.04 | 407 | 2.80 | 445 | 3.73 | 482 | 4.77 | 521 | 5.96 | 561 | 7.31 | | |
| | 29232 | 379 | 1.96 | 410 | 2.69 | 442 | 3.51 | 474 | 4.46 | 507 | 5.54 | 540 | 6.72 | 575 | 8.04 | 647 | 11.10 |
| | 32480 | 421 | 2.69 | 449 | 3.49 | 477 | 4.38 | 505 | 5.33 | 535 | 6.47 | 566 | 7.68 | 595 | 8.97 | 657 | 11.90 |
| | 35728 | 464 | 3.58 | 489 | 4.45 | 514 | 5.41 | 540 | 6.43 | 566 | 7.44 | 593 | 8.81 | 621 | 10.20 | 676 | 13.10 |
| | 38976 | 506 | 4.65 | 529 | 5.59 | 552 | 6.62 | 576 | 7.70 | 599 | 8.84 | 624 | 10.10 | 648 | 11.50 | 699 | 14.50 |
| | 42224 | 548 | 5.91 | 569 | 6.91 | 591 | 8.02 | 612 | 9.17 | 634 | 10.40 | 655 | 11.60 | 679 | 13.10 | 725 | 16.10 |
| 45472 | 590 | 7.39 | 609 | 8.46 | 630 | 9.64 | 650 | 10.80 | 670 | 12.10 | 690 | 13.40 | 710 | 14.80 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 19488 | 370 | 0.61 | 457 | 1.27 | 538 | 2.10 | 612 | 3.08 | 678 | 4.15 | 740 | 5.38 | 797 | 6.71 | 901 | 9.76 |
| | 22736 | 431 | 0.97 | 507 | 1.71 | 579 | 2.60 | 646 | 3.64 | 709 | 4.79 | 767 | 6.01 | 822 | 7.38 | 921 | 10.40 |
| | 25984 | 493 | 1.45 | 560 | 2.27 | 623 | 3.22 | 684 | 4.32 | 743 | 5.54 | 798 | 6.85 | 850 | 8.22 | 947 | 11.30 |
| | 29232 | 555 | 2.07 | 615 | 2.97 | 672 | 4.00 | 727 | 5.15 | 780 | 6.41 | 833 | 7.80 | 882 | 9.25 | 974 | 12.30 |
| | 32480 | 616 | 2.83 | 671 | 3.83 | 723 | 4.93 | 773 | 6.13 | 823 | 7.48 | 870 | 8.89 | 918 | 10.40 | 1006 | 13.70 |
| | 35728 | 678 | 3.77 | 728 | 4.86 | 775 | 6.02 | 822 | 7.32 | 867 | 8.69 | 912 | 10.20 | 955 | 11.80 | 1040 | 15.20 |
| | 38976 | 740 | 4.90 | 765 | 6.07 | 829 | 7.33 | 872 | 8.68 | 914 | 10.10 | 956 | 11.70 | 997 | 13.30 | | |
| | 42224 | 801 | 6.23 | 843 | 7.49 | 885 | 8.84 | 924 | 10.20 | 964 | 11.80 | 1002 | 13.40 | 1041 | 15.10 | | |
| 45472 | 863 | 7.78 | 902 | 9.12 | 941 | 10.60 | 977 | 12.10 | 1015 | 13.70 | 1051 | 15.30 | | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

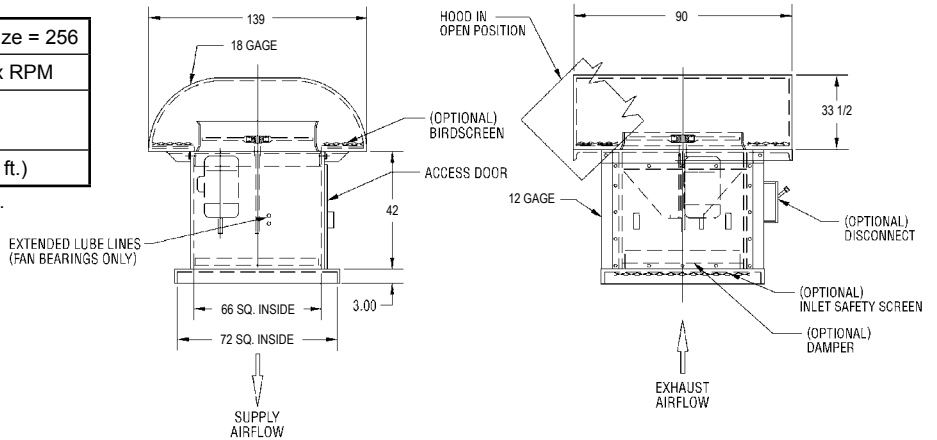
Belt Drive Fan Data - HRB

Hooded Roof Ventilators

060

| | |
|---|--------------------------------|
| Prop Diameter = 60 in. | Maximum Motor Frame Size = 256 |
| Fan Weight = 1550 lbs. | Tip Speed, FPM = 15.71 x RPM |
| Maximum BHP = F (RPM/1000) ³ F (097) = 71.96 F (091) = 22.78 | |
| Inlet & Outlet Diameter (Area) = 60.63 in. (20.05 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|------|---------|------|---------|------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 24060 | 226 | 0.72 | 269 | 1.36 | 314 | 2.24 | 361 | 3.33 | 410 | 4.70 | | | | | | |
| | 28070 | 266 | 1.14 | 302 | 1.87 | 339 | 2.78 | 377 | 3.87 | 417 | 5.17 | 460 | 6.71 | | | | |
| | 32080 | 303 | 1.70 | 335 | 2.52 | 366 | 3.46 | 400 | 4.61 | 434 | 5.89 | 469 | 7.36 | 505 | 9.03 | | |
| | 36090 | 341 | 2.42 | 369 | 3.33 | 397 | 4.34 | 427 | 5.51 | 457 | 6.85 | 486 | 8.29 | 518 | 9.93 | 582 | 13.70 |
| | 40100 | 379 | 3.32 | 404 | 4.31 | 430 | 5.41 | 454 | 6.58 | 482 | 7.98 | 509 | 9.49 | 536 | 11.10 | 591 | 14.70 |
| | 44110 | 417 | 4.42 | 440 | 5.50 | 463 | 6.67 | 486 | 7.94 | 509 | 9.32 | 534 | 10.90 | 559 | 12.50 | 608 | 16.20 |
| | 48120 | 455 | 5.74 | 476 | 6.90 | 497 | 8.17 | 518 | 9.51 | 539 | 10.90 | 561 | 12.50 | 583 | 14.20 | 629 | 17.90 |
| | 52130 | 493 | 7.30 | 512 | 8.53 | 532 | 9.91 | 551 | 11.30 | 571 | 12.80 | 589 | 14.30 | 611 | 16.10 | 652 | 19.90 |
| 56140 | 531 | 9.12 | 548 | 10.40 | 567 | 11.90 | 585 | 13.40 | 603 | 15.00 | 621 | 16.60 | 639 | 18.30 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|-------|-------|------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 24080 | 333 | 0.76 | 411 | 1.56 | 484 | 2.60 | 551 | 3.80 | 611 | 5.13 | 666 | 6.64 | 717 | 8.29 | 811 | 12.10 |
| | 28070 | 388 | 1.20 | 457 | 2.11 | 521 | 3.21 | 582 | 4.50 | 636 | 5.91 | 690 | 7.42 | 739 | 9.11 | 829 | 12.80 |
| | 32080 | 444 | 1.79 | 504 | 2.80 | 561 | 3.97 | 616 | 5.33 | 669 | 6.84 | 718 | 8.45 | 765 | 10.10 | 852 | 13.90 |
| | 36090 | 499 | 2.55 | 553 | 3.67 | 605 | 4.94 | 655 | 6.36 | 702 | 7.92 | 750 | 9.64 | 794 | 11.40 | 877 | 15.20 |
| | 40100 | 555 | 3.50 | 604 | 4.73 | 650 | 6.08 | 695 | 7.57 | 741 | 9.23 | 783 | 11.00 | 826 | 12.90 | 905 | 16.90 |
| | 44110 | 610 | 4.66 | 655 | 5.99 | 697 | 7.43 | 740 | 9.04 | 780 | 10.70 | 821 | 12.60 | 859 | 14.50 | 936 | 18.70 |
| | 48120 | 666 | 6.05 | 707 | 7.49 | 746 | 9.05 | 785 | 10.70 | 823 | 12.50 | 860 | 14.40 | 897 | 16.40 | | |
| | 52130 | 721 | 7.69 | 759 | 9.23 | 796 | 10.90 | 831 | 12.60 | 868 | 14.50 | 902 | 16.50 | 937 | 18.60 | | |
| | 56140 | 777 | 9.60 | 812 | 11.30 | 847 | 13.00 | 880 | 14.90 | 913 | 16.90 | 946 | 18.90 | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

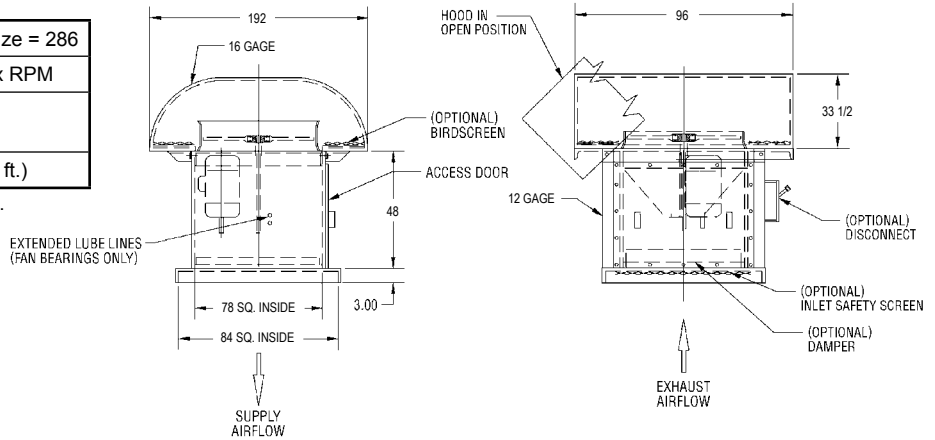
HRB - Belt Drive Fan Data

Hooded Roof Ventilators

072

| | |
|--|--------------------------------|
| Prop Diameter = 72 in. | Maximum Motor Frame Size = 286 |
| Fan Weight = 2300 lbs. | Tip Speed, FPM = 18.85 x RPM |
| Maximum BHP = F (RPM/1000) ³ | |
| F (097) = 179.18 F (091) = 56.72 | |
| Inlet & Outlet Diameter (Area) = 72.75 in. (28.87 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 097* | 34644 | 190 | 1.03 | 225 | 1.96 | 262 | 3.22 | 301 | 4.80 | 342 | 6.77 | | | | | | |
| | 40418 | 221 | 1.64 | 251 | 2.69 | 282 | 4.00 | 314 | 5.57 | 348 | 7.44 | 383 | 9.67 | | | | |
| | 46192 | 253 | 2.45 | 279 | 3.62 | 305 | 4.98 | 334 | 6.64 | 362 | 8.49 | 391 | 10.60 | 421 | 13.00 | | |
| | 51966 | 284 | 3.49 | 308 | 4.79 | 331 | 6.25 | 355 | 7.94 | 381 | 9.86 | 405 | 11.90 | 431 | 14.30 | 485 | 19.70 |
| | 57740 | 316 | 4.78 | 337 | 6.21 | 358 | 7.79 | 379 | 9.34 | 402 | 11.50 | 424 | 13.70 | 446 | 15.90 | 493 | 21.20 |
| | 63514 | 348 | 6.37 | 367 | 7.91 | 386 | 9.61 | 405 | 11.40 | 425 | 13.40 | 445 | 15.70 | 466 | 18.10 | 507 | 23.30 |
| | 69288 | 379 | 8.27 | 397 | 9.93 | 414 | 11.80 | 432 | 13.70 | 449 | 15.70 | 468 | 18.00 | 486 | 20.50 | 524 | 25.80 |
| | 75062 | 411 | 10.50 | 426 | 12.30 | 443 | 14.30 | 459 | 16.30 | 476 | 18.40 | 491 | 20.60 | 509 | 23.20 | 543 | 28.70 |
| 80836 | 443 | 13.10 | 457 | 15.00 | 472 | 17.10 | 487 | 19.30 | 503 | 21.60 | 518 | 23.90 | 532 | 26.30 | | | |

| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|-------|-------|-------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 34644 | 277 | 1.09 | 343 | 2.25 | 404 | 3.74 | 459 | 5.47 | 509 | 7.39 | 555 | 9.56 | 597 | 11.90 | 676 | 17.40 |
| | 40418 | 324 | 1.73 | 380 | 3.03 | 434 | 4.63 | 485 | 6.48 | 532 | 8.51 | 575 | 10.70 | 616 | 13.10 | 691 | 18.50 |
| | 46192 | 370 | 2.58 | 420 | 4.03 | 467 | 5.72 | 513 | 7.68 | 557 | 9.85 | 599 | 12.20 | 638 | 14.60 | 710 | 20.00 |
| | 51966 | 416 | 3.67 | 461 | 5.28 | 504 | 7.11 | 546 | 9.16 | 585 | 11.40 | 625 | 13.90 | 661 | 16.40 | 731 | 22.00 |
| | 57740 | 462 | 5.04 | 503 | 6.81 | 542 | 8.76 | 579 | 10.90 | 617 | 13.30 | 653 | 15.80 | 668 | 18.50 | 754 | 24.30 |
| | 63514 | 509 | 6.71 | 546 | 8.63 | 581 | 10.70 | 616 | 13.00 | 650 | 15.40 | 684 | 18.10 | 716 | 20.90 | 780 | 27.00 |
| | 69288 | 555 | 8.71 | 589 | 10.80 | 622 | 13.00 | 654 | 15.40 | 686 | 18.00 | 717 | 20.70 | 748 | 23.70 | | |
| | 75062 | 601 | 11.10 | 632 | 13.30 | 664 | 15.70 | 693 | 18.20 | 723 | 20.90 | 751 | 23.70 | 781 | 26.80 | | |
| 80836 | 647 | 13.80 | 676 | 16.20 | 706 | 18.80 | 733 | 21.40 | 761 | 24.30 | 788 | 27.20 | | | | | |

- Notes:**
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.
- * 091 and 097 wheels are suitable for exhaust or supply applications, however, 097 wheels are NOT reversible. For reversible flow, select a 091 wheel and add .39 VP loss for equal airflow in both directions.

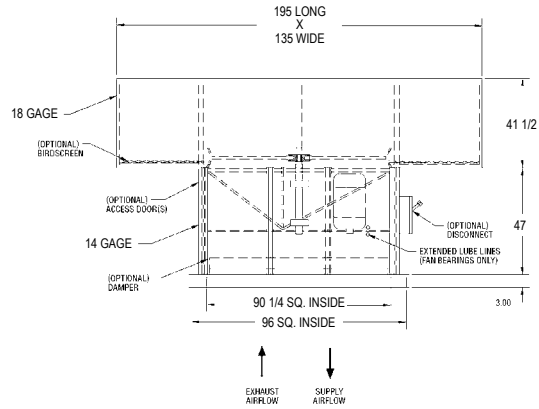
Belt Drive Fan Data - HTB

(Large T-Hood) Hooded Roof Ventilators

084

| | |
|--|--------------------------------|
| Prop Diameter = 84 in. | Maximum Motor Frame Size = 445 |
| Fan Weight = 3600 lbs. | Tip Speed, FPM = 21.99 x RPM |
| Maximum BHP = 122.52 (RPM/1000) ³ | |
| Inlet & Outlet Diameter (Area) = 84.88 in. (39.29 sq. ft.) | |

Approximate fan weights are less motor and accessories.

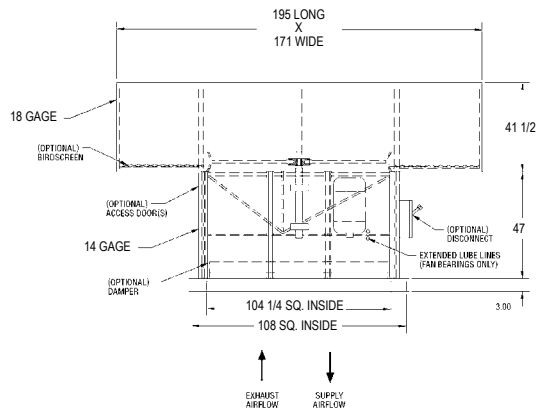


| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|--------|-------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 47148 | 238 | 1.48 | 294 | 3.06 | 346 | 5.09 | 393 | 7.45 | 436 | 10.10 | 476 | 13.00 | 512 | 16.20 | 579 | 23.60 |
| | 55006 | 277 | 2.35 | 326 | 4.13 | 372 | 6.30 | 415 | 8.82 | 456 | 11.60 | 493 | 14.50 | 528 | 17.80 | 592 | 25.10 |
| | 62864 | 317 | 3.51 | 360 | 5.48 | 400 | 7.78 | 440 | 10.40 | 478 | 13.40 | 513 | 16.60 | 547 | 19.90 | 608 | 27.30 |
| | 70722 | 357 | 5.00 | 395 | 7.19 | 432 | 9.67 | 468 | 12.50 | 502 | 15.50 | 536 | 18.90 | 567 | 22.40 | 626 | 29.90 |
| | 78580 | 396 | 6.85 | 431 | 9.26 | 464 | 11.90 | 497 | 14.80 | 529 | 18.10 | 559 | 21.50 | 590 | 25.20 | 647 | 33.10 |
| | 86438 | 436 | 9.12 | 466 | 11.70 | 498 | 14.60 | 528 | 17.70 | 557 | 21.00 | 586 | 24.70 | 614 | 28.40 | 668 | 36.70 |
| | 94296 | 475 | 11.80 | 505 | 14.70 | 533 | 17.70 | 561 | 21.00 | 588 | 24.50 | 614 | 28.20 | 641 | 32.22 | | |
| | 102154 | 515 | 15.10 | 542 | 18.10 | 569 | 21.40 | 594 | 24.80 | 620 | 28.50 | 644 | 32.30 | 669 | 36.50 | | |
| | 110012 | 555 | 18.80 | 580 | 22.10 | 605 | 25.60 | 628 | 29.20 | 652 | 33.00 | 676 | 37.10 | | | | |

096

| | |
|--|--------------------------------|
| Prop Diameter = 96 in. | Maximum Motor Frame Size = 445 |
| Fan Weight = 4000 lbs. | Tip Speed, FPM = 25.13 x RPM |
| Maximum BHP = 29.85 (RPM/500) ³ | |
| Inlet & Outlet Diameter (Area) = 97.00 in. (51.32 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|--------|-------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 61584 | 208 | 1.93 | 257 | 4.00 | 303 | 6.65 | 344 | 9.73 | 382 | 13.10 | 416 | 17.00 | 448 | 21.20 | 507 | 30.00 |
| | 71848 | 243 | 3.07 | 285 | 5.39 | 326 | 8.23 | 364 | 11.50 | 399 | 15.10 | 431 | 19.00 | 462 | 23.30 | 518 | 32.80 |
| | 82112 | 277 | 4.58 | 315 | 7.16 | 350 | 10.20 | 385 | 13.60 | 418 | 17.50 | 449 | 21.60 | 478 | 26.00 | 532 | 35.60 |
| | 92376 | 312 | 6.53 | 346 | 9.39 | 378 | 12.60 | 409 | 16.30 | 439 | 20.30 | 469 | 24.70 | 496 | 29.20 | 548 | 39.00 |
| | 102640 | 347 | 8.95 | 377 | 12.10 | 406 | 15.60 | 435 | 19.40 | 463 | 23.60 | 489 | 28.10 | 516 | 33.00 | 566 | 43.20 |
| | 112904 | 381 | 11.90 | 409 | 15.30 | 436 | 19.00 | 462 | 23.10 | 488 | 27.50 | 513 | 32.20 | 537 | 37.10 | 585 | 48.00 |
| | 123168 | 416 | 15.50 | 442 | 19.20 | 466 | 23.20 | 491 | 27.40 | 514 | 32.00 | 538 | 36.90 | 561 | 42.10 | | |
| | 133432 | 451 | 19.70 | 474 | 23.60 | 498 | 27.90 | 520 | 32.40 | 542 | 37.20 | 563 | 42.20 | 585 | 47.60 | | |
| | 143696 | 485 | 24.60 | 507 | 28.80 | 529 | 33.40 | 550 | 38.10 | 571 | 43.10 | 591 | 48.40 | | | | |

- Notes:
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.

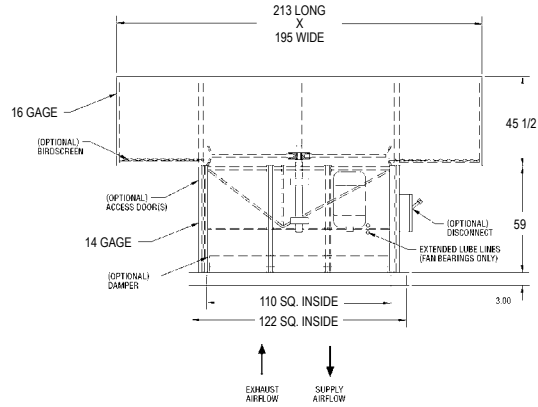
HTB - Belt Drive Fan Data

Hooded Roof Ventilators (Large T-Hood)

108

| | |
|--|--------------------------------|
| Prop Diameter = 108 in. | Maximum Motor Frame Size = 445 |
| Fan Weight = 4500 lbs. | Tip Speed, FPM = 28.27 x RPM |
| Maximum BHP = 53.79 (RPM/500) ³ | |
| Inlet & Outlet Diameter (Area) = 109.125 in. (64.95 sq. ft.) | |

Approximate fan weights are less motor and accessories.

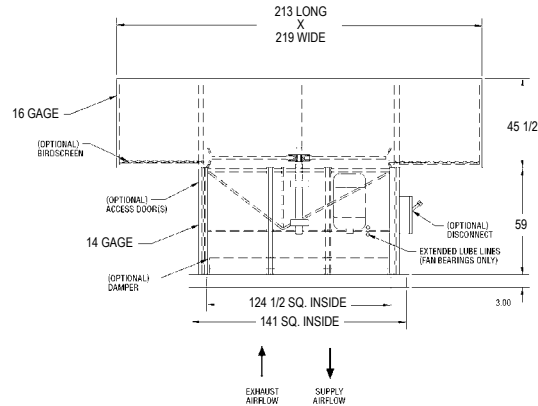


| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|--------|-------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 77940 | 185 | 2.45 | 229 | 5.06 | 269 | 8.42 | 306 | 12.30 | 339 | 16.60 | 370 | 21.50 | 398 | 26.90 | 451 | 39.00 |
| | 90930 | 216 | 3.89 | 254 | 6.82 | 289 | 10.40 | 323 | 14.60 | 354 | 19.20 | 383 | 24.00 | 411 | 29.50 | 461 | 41.50 |
| | 103920 | 247 | 5.80 | 280 | 9.06 | 311 | 12.90 | 342 | 17.30 | 372 | 22.20 | 399 | 27.40 | 425 | 32.90 | 473 | 45.10 |
| | 116910 | 277 | 8.26 | 307 | 11.90 | 336 | 16.00 | 364 | 20.60 | 390 | 25.70 | 417 | 31.20 | 441 | 37.00 | 487 | 49.40 |
| | 129900 | 308 | 11.30 | 335 | 15.30 | 361 | 19.70 | 386 | 24.50 | 411 | 29.90 | 435 | 35.60 | 459 | 41.70 | 503 | 54.70 |
| | 142890 | 339 | 15.10 | 364 | 19.40 | 387 | 24.10 | 411 | 29.30 | 433 | 34.70 | 456 | 40.80 | 477 | 47.00 | 520 | 60.70 |
| | 155880 | 370 | 19.60 | 393 | 24.30 | 415 | 29.30 | 436 | 34.70 | 457 | 40.50 | 478 | 46.70 | 499 | 53.30 | | |
| | 168870 | 401 | 24.90 | 421 | 29.90 | 442 | 35.30 | 462 | 41.00 | 482 | 47.10 | 501 | 53.40 | 520 | 60.30 | | |
| | 181860 | 431 | 31.10 | 451 | 36.50 | 470 | 42.30 | 489 | 48.20 | 507 | 54.60 | 526 | 61.30 | | | | |

120

| | |
|---|--------------------------------|
| Prop Diameter = 120 in. | Maximum Motor Frame Size = 445 |
| Fan Weight = 5400 lbs. | Tip Speed, FPM = 31.42 x RPM |
| Maximum BHP = 91.09 (RPM/500) ³ | |
| Inlet & Outlet Diameter (Area) = 121.25 in. (80.18 sq. ft.) | |

Approximate fan weights are less motor and accessories.



| PROP | CFM | 0" SP | | 1/8" SP | | 1/4" SP | | 3/8" SP | | 1/2" SP | | 5/8" SP | | 3/4" SP | | 1" SP | |
|------|--------|-------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 091 | 96216 | 122 | 1.75 | 162 | 4.77 | 210 | 9.92 | | | | | | | | | | |
| | 112252 | 142 | 2.78 | 176 | 6.08 | 212 | 10.70 | 259 | 18.80 | | | | | | | | |
| | 128288 | 163 | 4.16 | 192 | 7.78 | 223 | 12.40 | 257 | 18.40 | | | | | | | | |
| | 144324 | 183 | 5.92 | 209 | 9.87 | 236 | 14.70 | 264 | 20.70 | 296 | 28.20 | | | | | | |
| | 160360 | 203 | 8.12 | 227 | 12.40 | 251 | 17.50 | 276 | 23.50 | 301 | 30.50 | 331 | 39.40 | | | | |
| | 176396 | 223 | 10.80 | 245 | 15.40 | 267 | 20.80 | 289 | 27.00 | 311 | 33.90 | 336 | 42.00 | 363 | 51.80 | | |
| | 192432 | 244 | 14.00 | 263 | 19.00 | 284 | 24.70 | 304 | 31.00 | 324 | 38.20 | 345 | 46.10 | 367 | 55.00 | | |
| | 208468 | 264 | 17.80 | 282 | 23.10 | 301 | 29.20 | 319 | 35.80 | 338 | 43.10 | 357 | 51.00 | 376 | 59.80 | 419 | 80.20 |
| | 224504 | 284 | 22.30 | 301 | 27.90 | 318 | 34.30 | 336 | 41.30 | 353 | 48.60 | 370 | 56.80 | 388 | 65.50 | 425 | 85.50 |

- Notes:
- 1) Performance shown is for Installation Type A: free inlet, free outlet.
 - 2) Performance ratings do not include the effects of appurtenances in the airstream.
 - 3) Power rating (BHP) does not include drive losses.

Sample Specifications - HRD/HRR/HRB

Hooded Roof Ventilator

- 1.1 Fans shall be tested and rated in accordance with AMCA air and sound methods and standards.
- 1.2 Fans shall conform to AMCA 99 standards.
- 1.3 All motors and electrical components shall comply with NEMA, UL or other governing body.
- 1.4 Fan performance rating shall be based on methods as developed by AMCA standard 210.
- 1.5 Form, function and application of the fan shall be as defined by ASHRAE, AMCA and SMACNA in regard to air system design in compatibility with the fan.

Direct Drive - HRD

PRODUCT

- 2.1 The fan shall be of an axial flow propeller, panel fan mount, direct drive configuration.
- 2.2 The fan shall be direct drive with the propeller mounted directly to the motor shaft.
- 2.3 The fan housing shall be of heavy gage sheet steel and shall support a steel spun panel, which shall allow for smooth flow into the propeller.
- 2.3.1 The fan panel shall have an integrally spun, deep shroud for smooth air entry into the propeller.
- 2.4 The fan's motor support and mounting structure shall be fabricated of heavy steel plate.
- 2.5 The propeller shall consist of 6 blades affixed directly to a precision cast or machined hub assembly. The hub is designed to incorporate a taper lock bushing and is keyed directly to the motor shaft.
- 2.6 The incorporated panel fan assembly and curb cap shall be coated with an air dry enamel. The hood and side sheets shall be manufactured of galvanized sheet steel. Galvanized and aluminum parts are to remain uncoated.
- 2.7 The hood shall be supported and attached by means of heavy angle iron supports. Hoods shall be lockseam constructed for weatherproof service and designed to reduce sagging under heavy snow loading.
- 2.8 One side of the housing shall be removable for access to interior components.
- 2.9 The final complete fan assembly shall be vibration tested and mechanically balanced as per AMCA 204 Grade BV-3 / ANSI S2.19 G 6.3 and the results recorded on a label placed on the fan assembly.
- 2.10 The motor shall be of a typical NEMA-T frame type and typical with the motor industry. The electric motor shall be as indicated on the fan schedule and as available from the motor vendors.

ACCESSORIES

- 3.1 The fan shall have birdscreens manufactured of 3/4" non-flattened expanded galvanized metal around the exposed underside of the hood.
- 3.2 The fan shall be of a fixed, reversed air flow configuration with a double entry bell on the fan panel as indicated on the fan schedule where unit is required for supply air.
- 3.3 The fan shall be of a reversible air flow configuration for supply or exhaust with a double entry bell on the panel as indicated on the fan schedule. The fan's performance shall be equal in either direction.
- 3.4 Unit shall be of galvanized construction as shown on the fan schedule. All exterior surfaces shall be made of galvanized sheet steel or hot dipped galvanized. Hardware shall be zinc plated. The panel fan assembly on the interior of the unit shall be coated with an air dry enamel finish.

Belt Drive - HRR/HRB

PRODUCT

- 2.1 The fan shall be of an axial flow propeller, panel fan mount, belt drive configuration.
- 2.2 The fan shall be belt drive, Arrangement 9 or 10 (as indicated on the fan schedule). The drive shall have a minimum 1.5 service factor.
- 2.3 The fan shaft should be steel, ground for precision fit to bearings and keyed for driving the impeller and driven sheave.
- 2.4 Fan bearings should be cast iron housing, self-aligning, relubricatable bearings.
- 2.4.1 Fan bearings shall have a minimum L10 life as defined by AFBMA of 40,000 hours.
- 2.5 Fan housing shall be of heavy gage sheet steel and shall support a steel spun panel, which shall allow for smooth flow into the propeller.
- 2.6 The fan panel shall have an integrally spun, deep shroud for smooth air entry into the propeller.
- 2.7 The fan's motor support and mounting structure shall be fabricated of heavy steel plate.
- 2.8 The propeller shall consist of 6 blades affixed directly to a precision cast or machined hub assembly. The hub is designed to incorporate a taper lock bushing and is keyed directly to the fan shaft.
- 2.9 The incorporated panel fan assembly and curb cap shall be coated with an air dry enamel. The hood and side sheets should be manufactured of galvanized sheet steel. Galvanized and aluminum parts are to remain uncoated.
- 2.10 The hood shall be supported and attached by means of heavy angle iron supports. Hoods shall be lockseam constructed for weatherproof service and designed to reduce sagging under heavy snow loading.
- 2.11 One side of the unit housing shall be removable for access to interior components.
- 2.12 The final complete fan assembly shall be vibration tested and mechanically balanced as per AMCA 204 Grade BV-3 / ANSI S2.19 G 6.3 and the results recorded on a label placed on the fan assembly.
- 2.13 The motor shall be of a typical NEMA-T frame type and typical with motor industry. The electric motor shall be as indicated on the fan schedule and as available from the motor vendors.

ACCESSORIES

- 3.1 The fan shall have birdscreens manufactured of 3/4" non-flattened expanded galvanized metal around the exposed underside of the hood.
- 3.2 The fan shall be of a fixed, reversed air flow configuration with a double entry bell on the fan panel as indicated on the fan schedule where unit is required for supply air.
- 3.3 The fan shall be of a reversible air flow configuration for supply or exhaust with double entry bell on the fan panel as indicated on the fan schedule. The fan's performance shall be equal in either direction.
- 3.4 Unit shall be of galvanized construction as shown on the fan schedule. All exterior surfaces shall be made of galvanized sheet steel or hot dipped galvanized. Hardware shall be zinc plated. The panel fan assembly on the interior of the unit shall be coated with an air dry enamel finish.

HTB - Sample Specifications

Large T-Hood Roof Ventilator

- 1.1 Fans shall be tested and rated in accordance with AMCA air and sound methods and standards.
- 1.2 Fans shall conform to AMCA 99 standards.
- 1.3 All motors and electrical components shall comply with NEMA, UL or other governing body.
- 1.4 Fan performance rating shall be based on methods as developed by AMCA standard 210.
- 1.5 Form, function and application of the fan shall be as defined by ASHRAE, AMCA and SMACNA in regard to air system design in compatibility with the fan.

PRODUCT

- 2.1 The fan shall be of an axial flow propeller, panel fan mount, belt drive configuration.
- 2.2 The fan shall be belt drive arrangement 10 (as indicated on the fan schedule). The drive shall have a minimum 1.5 service factor.
- 2.3 The fan shaft should be steel, ground for precision fit to bearings and keyed for driving the impeller and driven sheave.
- 2.4 Fan bearings should be cast iron housing, self-aligning, relubricatable bearings.
 - 2.4.1 Fan bearings shall have a minimum L10 life as defined by AFBMA of 40,000 hours.
- 2.5 Fan housing shall be of heavy gage sheet steel, reinforced with square steel tubing framework and shall support a steel, integrally spun Venturi panel, which shall allow for smooth flow into the propeller.
- 2.6 The adjustable motor support and mounting structure shall be fabricated of heavy steel plate and square steel tubing.
- 2.7 The propeller shall consist of 6 blades affixed directly to a precision cast or machined hub assembly. The hub is designed to incorporate a taper lock bushing and is keyed directly to the fan shaft.
- 2.8 The incorporated panel fan assembly and curb cap shall be coated with an air dry enamel. The hood and side sheets should be manufactured of galvanized sheet steel. Galvanized and aluminum parts are to remain uncoated.
- 2.9 The hood shall be supported and attached by means of heavy angle iron supports. Hoods shall be lockseam constructed for weatherproof service and designed to reduce sagging under heavy snow loading.

- 2.10 One side of the unit housing shall be removable for access to interior components.
- 2.11 The final complete fan assembly shall be vibration tested and mechanically balanced as per AMCA 204 Grade BV-3 / ANSI S2.19 G 6.3 and the results recorded on a label placed on the fan assembly.
- 2.12 The motor shall be of a typical NEMA-T frame type and typical with motor industry. The electric motor shall be as indicated on the fan schedule and as available from the motor vendors.

ACCESSORIES

- 3.1 The fan shall have birdscreens manufactured of 3/4" non-flattened expanded galvanized metal around the exposed underside of the hood. These are removable in applications where supply filters are used.
- 3.2 The fan shall be of a fixed, reversed air flow configuration with a double entry bell on the fan panel as indicated on the fan schedule where unit is required for supply air.
- 3.3 The fan shall be of a reversible air flow configuration for supply or exhaust with double entry bell on the fan panel as indicated on the fan schedule. The fan's performance shall be equal in either direction.
- 3.4 Unit shall be of galvanized construction as shown on the fan schedule. All exterior surfaces shall be made of galvanized sheet steel or hot dipped galvanized. Hardware shall be zinc plated. The panel fan assembly on the interior of the unit shall be coated with an air dry enamel finish.

One Year Limited Warranty

Hooded Roof Ventilators - HRD/HRR/HRB/HTB

What Products Are Covered

PennBarry Commercial and Industrial Fans (each, a "PennBarry Product")

One Year Limited Warranty For PennBarry Products

PennBarry warrants to the original commercial purchaser that the PennBarry Products will be free from defects in material and workmanship for a period of one (1) year from the date of shipment.

Exclusive Remedy

PennBarry will, at its option, repair or replace (without removal or installation) the affected components of any defective PennBarry Product; repair or replace (without removal or installation) the entire defective PennBarry Product; or refund the invoiced price of the PennBarry Product. In all cases, a reasonable time period must be allowed for warranty repairs to be completed.

What You Must Do

In order to make a claim under these warranties:

1. You must be the original commercial purchaser of the PennBarry Product.
2. You must promptly notify us within the warranty period of any defect and provide us with any substantiation that we may reasonably request.
3. The PennBarry Product must have been installed and maintained in accordance with good industry practice and any specific PennBarry recommendations.

Exclusions

These warranties do not cover defects caused by:

1. Improper design or operation of the system into which the PennBarry Product is incorporated.
2. Improper installation.
3. Accident, abuse or misuse.
4. Unreasonable use (including any use for non-commercial purposes, failure to provide reasonable and necessary maintenance as specified by PennBarry, misapplication and operation in excess of stated performance characteristics).
5. Components not manufactured by PennBarry.

Limitations

1. In all cases, PennBarry reserves the right to fully satisfy its obligations under the Limited Warranties by refunding the invoiced price of the defective PennBarry Product (or, if the PennBarry Product has been discontinued, of the most nearly comparable current product).
2. PennBarry reserves the right to furnish a substitute or replacement component or product in the event a PennBarry Product or any component of the product is discontinued or otherwise unavailable.
3. PennBarry's only obligation with respect to components not manufactured by PennBarry shall be to pass through the warranty made by the manufacturer of the defective component.

General

The foregoing warranties are exclusive and in lieu of all other warranties except that of title, whether written, oral or implied, in fact or in law (including any warranty of merchantability or fitness for a particular purpose).

PennBarry hereby disclaims any liability for special, punitive, indirect, incidental or consequential damages, including without limitation lost profits or revenues, loss of use of equipment, cost of capital, cost of substitute products, facilities or services, downtime, shutdown or slowdown costs.

The remedies of the original commercial purchaser set forth herein are exclusive and the liability of PennBarry with respect to the PennBarry Products, whether in contract, tort, warranty, strict liability or other legal theory shall not exceed the invoiced price charged by PennBarry to its customer for the affected PennBarry Product at the time the claim is made.

Inquiries regarding these warranties should be sent to: PennBarry, 1401 North Plano Road, Richardson, TX 75081.

OTHER PENNBARRY PRODUCTS

CENTRIFUGAL PRODUCTS



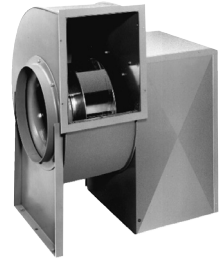
Domex
Centrifugal
Roof Exhausters



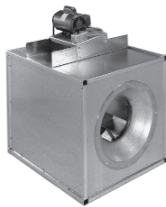
Fumex Fatrap
Kitchen Hood Centrifugal
Roof Exhausters



Zephyr
Ceiling and Inline Fans



Dynamo
Centrifugal Blowers



Centrex Inliner
Centrifugal Inline Fans



LC Dynafan
Low Contour Centrifugal
Roof Exhausters

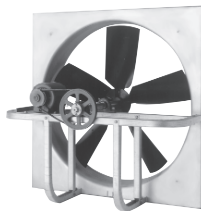


ESI
Efficient Silent
Inline Fan



Fume Exhaust
Curb Mounted
Centrifugal Fans

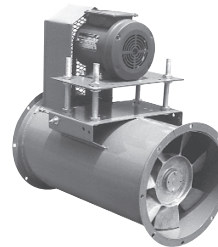
AXIAL / GRAVITY PRODUCTS



Breezeway
Propeller Wall Fans



HI-EX
Power Roof Ventilator



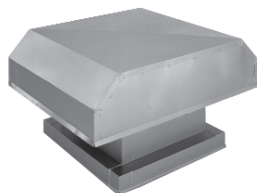
Tubeaxial
Inline Fans



Vaneaxial
Inline Fans



Powered Airette
Axial Roof Ventilators



Airette
Gravity Intake/Relief Hood



Domex Axial
Axial Roof Ventilators



Axcentrix
Bifurcator Fan

For more information contact your local PennBarry Sales
Manufacturer Representative or visit us at www.PennBarry.com

