

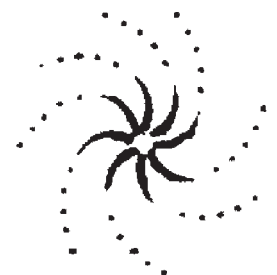
- DC OR AC MOTOR BLOWERS
- PY TACHOMETER MOUNTING KITS
- ENCODER MOUNTING KITS
- HEAVY DUTY DANCER HOUSINGS
- FILTERS - STANDARD AND SPECIAL
- SPECIAL BLOWERS AND ACCESSORIES

# Helwig Carbon Products, Inc.

8900 West Tower Ave., Milwaukee, WI 53224-2849



**DC/AC**  
**MOTOR ACCESSORIES**



# SIZE 10 & 11 COOLING BLOWERS & FILTERS



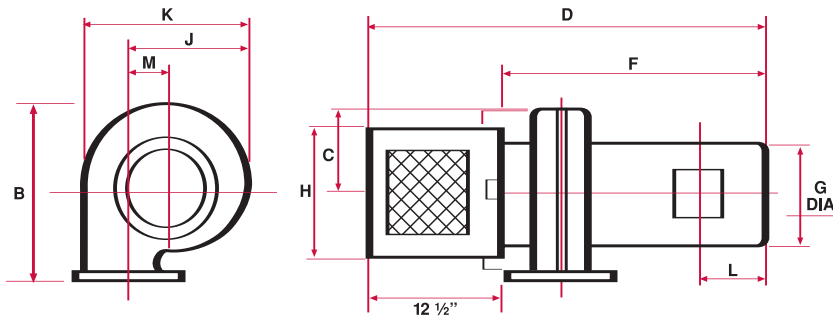
Size #10: Fabricated High Output Cooling Blower operates at slow speed for low noise applications.

Size #11: Heavy Duty High Output Cooling Blower for larger frame DC Motors.



Square filters available for sizes 6-8-9 blowers.

All dimensions in inches

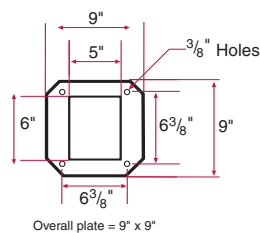


BLOWER SIZE	B	D	F	G	H	K	Net Wt. in Lbs.	Output CFM
10	19.5	29.3	17.0	7.2	15.0	17.6	98.0	2390
11	19.5	34.3	21.8	10.2	15.0	17.6	220.0	4250

Larger sizes available. Please call factory.

## MOUNTING FLANGE DIMENSIONS

### SIZE 10



### SIZE 11



## REPLACEMENT FILTERS

FOR ALL MAKES OF DC MOTORS INCLUDING:



US/EMERSON  
BALDOR/POWERTRON  
GENERAL ELECTRIC  
RELIANCE ELECTRIC

Sizes 3 through 11, completely assembled and ready to mount.  
Add our Pre-Filter Wraps for extended Filter life and even more cost savings.



# PY TACHOMETER MOUNTING KITS

Includes Main Housing, Finger Protection Cover, Anti-Backlash Coupling, Stub Shaft, all Mounting Hardware for Flange and Tachometer.



## RELIANCE TACHOMETER MOUNTING KITS

### MOTOR FRAMES \*

DC180ATZ-C180ATZ, 1811ATZ, DC2112ATZ  
C210ATZ-C250ATZ, 2113-2514ATZ  
C280ATZ-C360ATZ, 2811ATZ, 3212  
400 & 500 SERIES FRAMES

### TACH KIT

4.5-1R  
4.5-21  
4.5-26  
4.5-1X

DC Motor Frame	US/Emerson PY Tach Kit	General Electric PY Tach Kit	Baldor Powertron PY Tach Kit
180	8.5-375	8.5-375	-
180-1810	-	-	8.5-375
210	8.5-375	8.5-375	8.5-375
250	8.5-375	8.5-375	8.5-375
2512-2813	-	8.5-375	-
280	8.5-375	8.5-375	8.5-375
320	8.5-375	8.5-375	8.5-375
360	8.5-375	8.5-500	8.5-375
400	8.5-375	8.5-500	8.5-500
500	8.5-375	8.5-625	8.5-625
5010	8.5-375	8.5-625	-
5012	-	-	8.5-750
6000-6100	-	8.5-1.00	-
6200-6900	-	8.5-1.50	-

\* Many other frame sizes available.

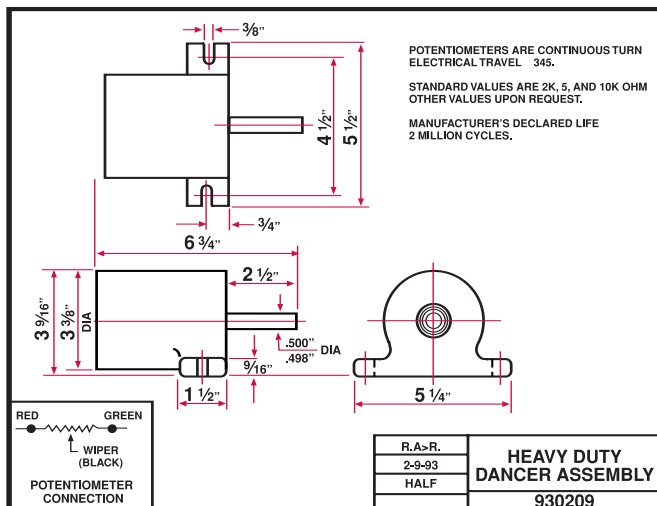
\*\* Encoder Mounting Kits available for all of the above.

# EAVY DUTY DANCER POTENTIOMETER



The Dancer Duty Potentiometer Series HDD is designed for use in harsh environments for a multitude of industrial applications.

A 360° Potentiometer with a rotational life of 2,000,000 cycles is mounted inside a heavy cast protective housing with external mounting feet and is directly connected to the dancer shaft which extends through the enclosure by use of a double set of bearings. This mounting configuration is designed to eliminate lost motion and excessive loading to the Potentiometer shaft.



The dancer shaft itself is 1/2" diameter by 2 1/2" long to carry dancer arms and timing or roller chain sprockets for rotational position. Wiring connections are made easy by a pre-wired strip within the enclosure.

Potentiometer values of 1K, 2K, 5K, and 10K are standard but special resistance values are available.



# REPLACEMENT FILTERS FOR RELIANCE



RELIANCE FILTER REPLACEMENTS – COMPLETE FILTER ASSEMBLY				
Frame	Reliance Part Number	Reliance Renewal Part Number	Helwig Part Number	Filter Assembly Dimensions (Diam. X Length)
C180ATZ	417077-57	418225-RR	CF-REL-3	6.81 x 6.12
C2113ATZ	417077-58	418225-SS	CF-REL-4	9.12 x 6.12
C2512ATZ	417077-58	418225-SS	CF-REL-4	9.12 x 6.12
C2115ATZ	417077-59	422018-1V	CF-REL-6	9.12 x 6.62
C2514ATZ	417077-59	422018-1V	CF-REL-6	9.12 x 6.62
C2515ATZ	417077-59	422018-1V	CF-REL-6	9.12 x 6.62
C2812ATZ	417077-59	422018-1V	CF-REL-6	9.12 x 6.62
C3210ATZ	417077-59	422018-1V	CF-REL-6	9.12 x 6.62
C3212ATZ	417077-59	422018-1V	CF-REL-6	9.12 x 6.62
C2813ATZ	417077-65	422018-1X	CF-REL-8	10.88 x 9.62
C2815ATZ	417077-65	422018-1X	CF-REL-8	10.88 x 9.62
C3214ATZ	417077-65	422018-1X	CF-REL-8	10.88 x 9.62
C3612ATZ	417077-65	422018-1X	CF-REL-8	10.88 x 9.62
C3613ATZ	417077-102	—	CF-REL-9	10.88 x 12.00
C400ATZ	417077-102	—	CF-REL-9	10.88 x 12.00

## PRE-FILTER WRAPS

- 5/8" thick polyester media provides high arrestance, extending life of your filter.
- Fibers are blended together to form a dense media that allows depth loading of particles yet low resistance to air flow.
- Pressure sensitive dry tackifier is applied to the air-leaving side to hold dirt particles on the fibers.
- Available from stock for filter sizes 3 through 11.
- Custom sizes manufactured to your specifications.
- Easily installed. Simply wrap the media around your filter and secure in place using the velcro tabs.
- Environmentally friendly. Media is made from 100% post consumer recycled polyester fibers.
- Low cost, efficient investment will save you hundreds of dollars in filter replacements.



## ENCODER / TACHOMETER MOUNTING KITS

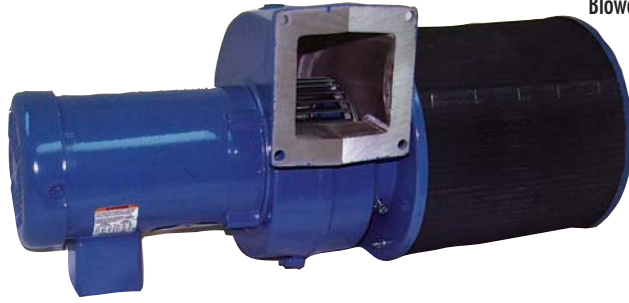


- Encoder Mounting Kits for Series 25, H25, H26, H42 and 625/525 Encoders (Specify make and frame of motor).
- Specialty Flange Adapter Plates to mount Encoders to PY Style Kits. (Specify make and series of Encoder).
- Tachometer Mounting Kits for PY, BC42 & BC46 Series Tachs.
- PY to BC42/46 Series Tachometer Mounting Flanges.
- BC 42/46 to PY Series Tachometer Mounting Flanges.
- Blue Max and Black Max Encoder and Tachometer mounting kits.

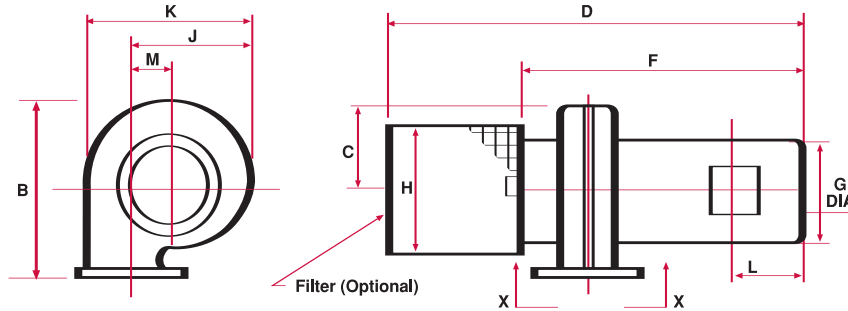


# HEAVY DUTY COOLING BLOWERS

Now you can increase the life of your DC or AC electrical motors by using our heavy duty Cooling Blowers. These economical units will save you down time and increase motor efficiency.



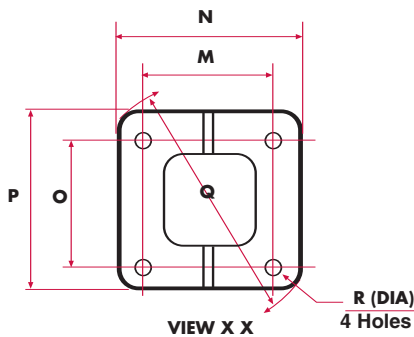
- Heavy Aluminum Housing
- AC Motors, Totally Enclosed Fan Cooled or Totally Enclosed Non Ventilated as standard
- Continuous Duty Rating
- Heavy duty steel impellers
- Wire Mesh Filters
- Sparkproof construction
- Adaptor Plates to adapt blowers to any motor, machine, or cabinet



All dimensions in inches

FRAME	BLOWER SIZE	B	C	D	F	G	H	M	J	K	L	Net Wt. in Lbs.	Output CFM
180AT	3	7.1	3.2	18.5	12.2	5.2	6.5	2.4	5.4	6.9	2.8	17.0	180
210AT	3	7.1	3.2	18.5	12.2	5.2	6.5	2.4	5.4	6.9	2.8	17.0	180
250AT*	3	7.1	3.2	18.5	12.2	5.2	6.5	2.4	5.4	6.9	2.8	17.0	180
280AT	4	9.3	4.3	22.6	14.5	6.4	8.1	2.7	7.0	9.0	3.5	25.0	380
320AT	6	11.4	5.3	26.5	16.0	7.2	10.2	4.2	8.8	10.7	3.7	38.0	810
360AT	6	11.4	5.3	26.5	16.0	7.2	10.2	4.2	8.8	10.7	3.7	38.0	810
400AT	6	11.4	5.3	26.5	16.0	7.2	10.2	4.2	8.8	10.7	3.7	38.0	810
500AT	8	14.3	7.6	28.1	17.3	8.0	10.3	5.7	12.0	15.2	4.0	43.0	1250
500AT	9	14.3	7.6	32.5	20.0	8.0	10.3	5.7	12.0	15.2	4.0	69.0	3210

\* Size 4 Blower recommended if motor is subjected to low speed at full torque.  
Above sizes for general reference. Call with motor specs for proper sizing.



BLOWER SIZE	M	N	O	P	Q	R
3	3.0	4.0	3.0	5.0	5.0	9/32
4	3.88	4.9	3.88	5.8	6.4	9/32
6	5.0	5.7	5.0	6.2	8.0	11/32
8/9	6.45	9.2	6.45	9.2	10.1	11/32

## ELECTRICAL BLOWER MOTOR DATA

BLOWER SIZE	HP	RPM	VOLTS	PHASE	HERTZ	S.F.	AMPS	PHASE	VOLTS	AMPS
3	1/8	3450	208/230/460	3	50/60	1.4	0.8/0.4	1	115/230	2.5/1.25
4	1/3	3450	208/230/460	3	50/60	1.35	1.6/1.4/0.7	1	115/230	4.2/2.1
6	1	3450	208/230/460	3	50/60	1.25	3.4/3.2/1.6	1	115/230	12.0/6.0
8	1	1750	208/230/460	3	50/60	1.25	3.4/3.2/1.6	1	115/230	12.8/6.4
9	4	3600	208/230/460	3	50/60	1.0	11.6/10.6/5.3	n/a	-	-
10	2	1800	208/230/460	3	50/60	1.15	6.5/6.2/3.1	n/a	-	-
11	7.5	3450	208/230/460	3	50/60	1.15	19.0/18.0/9.0	n/a	-	-

# OTHER AVAILABLE PRODUCTS & ACCESSORIES

## TACHOMETERS & ENCODERS

Available from our stock from manufacturers such as Hubner, General Electric, Encoder Products, Dynapar, Northstar, Avtron, Radio Energie, Baldor.

## CRANE DUTY BLOWERS

Available with DC Motors where AC Power is not available.

## ENCODER & TACHOMETER/ENCODER PACKAGES

The combination of both a DC Tach and an Encoder with one mounting arrangement.

## TACHOMETER & ENCODER MOUNTING KITS

for all makes of DC Motors including Marathon Blue & Black Max Vector duty motors.

## BLOWER WHEELS

Replacement blower wheels for all of our cooling blowers.

## COUPLINGS

Standard and special bore sizes including metric for Tachometers & Encoders.

## COOLING BLOWER FAILURE SWITCHES

to sense static pressure and assure Blower is on.

## MOUNTING PLATES & BLANK COVER PLATES

to mount Cooling Blower directly to frame of DC Motor.

## TRANSITION ADAPTER BASES

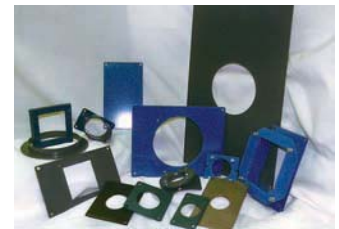
to adapt oversize Cooling Blowers on smaller frame DC Motors.

## BELLY BANDS

for mounting Cooling Blowers on round 180AT Frame GE Motors.  
Easy mounting, no machining.

## TACH/ENCODER STUBS

for threading into the back of AC & DC Motors.



## Helwig Carbon Products, Inc.

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