

INSTALLATION INSTRUCTIONS

MODEL

BH60

INDOOR BLOWER COIL UNIT

GENERAL

Units are shipped completely assembled and internally wired, requiring only filter rack assembly, duct connections, thermostat wiring and external 220-240 volt AC power supply.

The BH60 blower coil unit is suitable for use with the following air conditioner and heat pump outdoor sections.

APPROVED COMBINATIONS			
Air Conditioning		Heat Pump	
Outdoor Section	Indoor Section	Outdoor Section	Indoor Section
48ECQ2	BH60	48HPQ2	BH60
60ECQ1	BH60	60HPQ3	BH60

UNPACKING

Upon receipt of equipment, carton should be checked for external signs of damage. If damage is found, request for inspection by carrier's agent should be made in writing immediately.

MOUNTING POSITION

The BH60 may be mounted in the horizontal position only. The BH60 is manufactured with four spot weld nuts to accept four pieces of 3/8 threaded rod on 16 inch centers allowing the unit to be hung from ceiling.

FILTER RACK - FILTER

This unit comes supplied with a filter rack in broken-down form for ease of shipment and must be field assembled (see assembly instructions for proper location).

The 15 x 30-5/8 x 1 filter supplied should be cleaned periodically throughout the year, as these are year-round heat-cool systems. Special attention should be given to new installation as airborne dust and debris from recent construction can easily plug a filter in a matter of days.

Dirty filters are the most prevalent and most easily corrected problem to be encountered in any forced air heating and/or cooling system.

LOCATION AND CLEARANCES

All access to the equipment is from one side and at least 30 inches should be provided from this side for service access.

The unit casing and duct work is suitable for 0 inch clearance.

CONDENSATE DRAIN

Determine where the drain line will run. This drain line contains cold water and must be insulated to avoid drops of water from dropping on ceiling, etc. A trap must be installed in the primary drain line below the bottom of the drain pan.

It is not recommended that any condensate drain lines be connected to a sewer main. Drain lines must be installed in accordance with local codes.



An auxiliary drain pan should always be used when equipment is installed over a finished living area, to provide protection from water damage in case of plugging of the primary drain line from the unit condensate collection pan.


INTERCONNECTING TUBING


It is recommended that the interconnecting tubing be the CT-12 series charged tubing sets. This is a precharged tubing set with an insulated suction line. Both suction and liquid line are equipped with the correct quick connect fittings for proper match up to the indoor and outdoor sections. The CT-12 series is available in standard tubing lengths of 15, 25, 35 and 45 feet.

BLOWER MOTOR OILERS

The blower motors should be oiled twice a year with approximately 8-10 drops of 20 weight motor oil. DO NOT over-oil and DO NOT use 3-in-1 oil or any other light oil.

WALL THERMOSTAT AND SUB-BASE COMBINATIONS			
Group	Thermostat	Subbase	Predominant Feature
A	8403-017 (T874R1129)	8404-009 (Q674L1181)	Heat or Cool - No Auto 
B	8403-018 (T874N1024)	8404-010 (Q674F1261)	Automatic Heat-Cool Changeover Position 

 No automatic changeover position—must manually place in heat or cool. Reversing valve remains energized at all times system switch is in heat position (except during defrost cycle). No pressure equalization noise when thermostat is satisfied on either heating or cooling.



 Allows thermostat to control both heating and cooling operation when set in "auto" position. Reversing valve de-energizes at end of each "on" heating cycle.


IMPORTANT NOTE:

Both thermostat and sub-base combinations shown above incorporate the following features: Man-auto fan switch, Off-Heat-Cool-Em. Ht. switch, and two (2) indicator lamps—one for Em. Ht. and one for compressor malfunction.

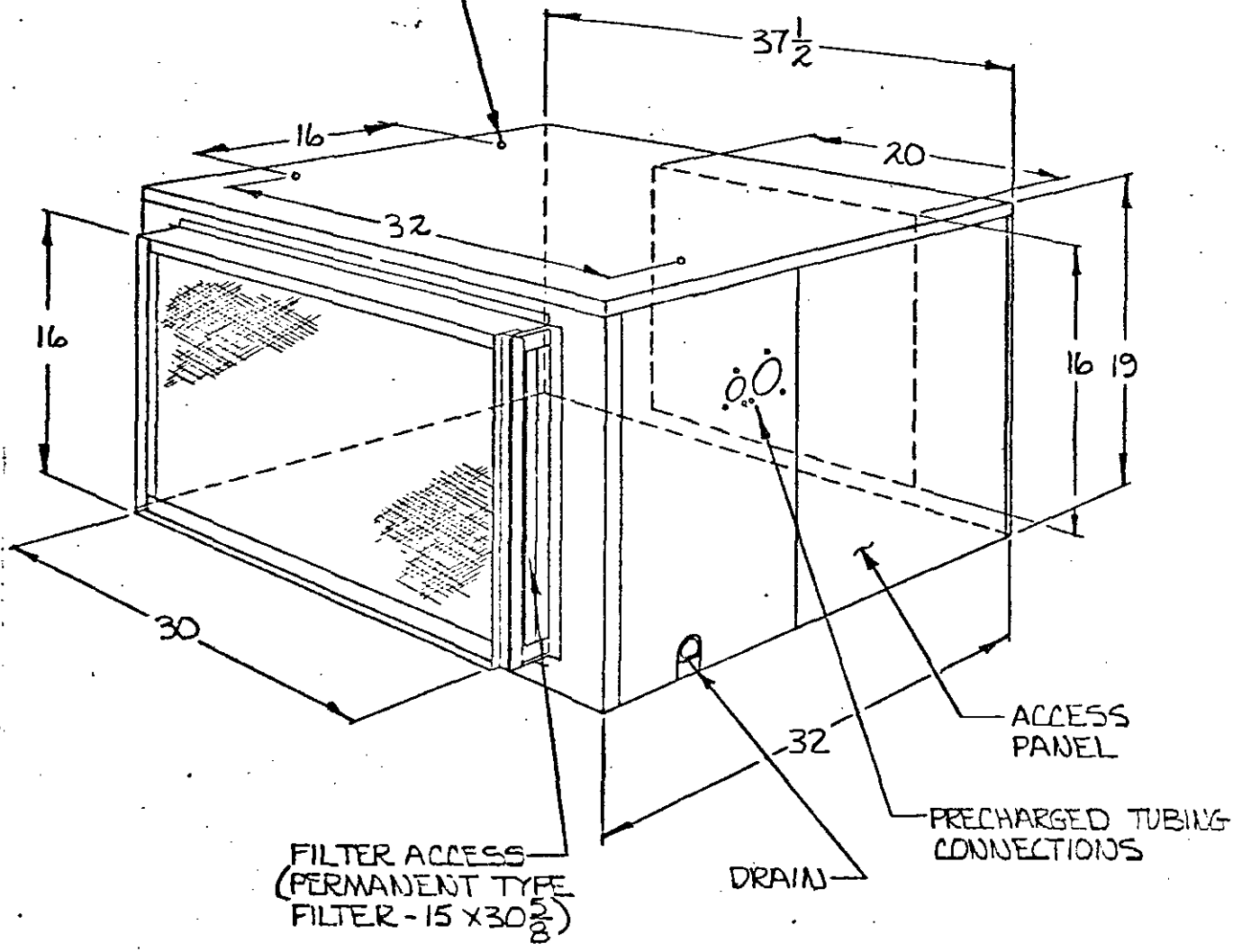
THERMOSTAT HEAT ANTICIPATION

Some of the wall thermostats require setting of the heat anticipator to assure proper cyclic operation and good temperature control within the structure being heated and cooled. Other anticipators are fixed and require no adjustment. The table below summarizes the anticipator types and their ranges, if adjustable.

Bard No.	Description	Stage	Type	Range	Stage	Type
8403-002	T87F3111	1	Adj.	.10-1.2A	1	Fixed
8403-019	T874C1000	1 2	Adj. Adj.	.10-1.2A .10-1.2A	1	Fixed
8403-017	T874R1129 	1 2	Adj. Fixed	.10-1.2A —	1	Fixed
8403-018	T874N1024 	1 2	Adj. Fixed	.10-1.2A —	1	Fixed

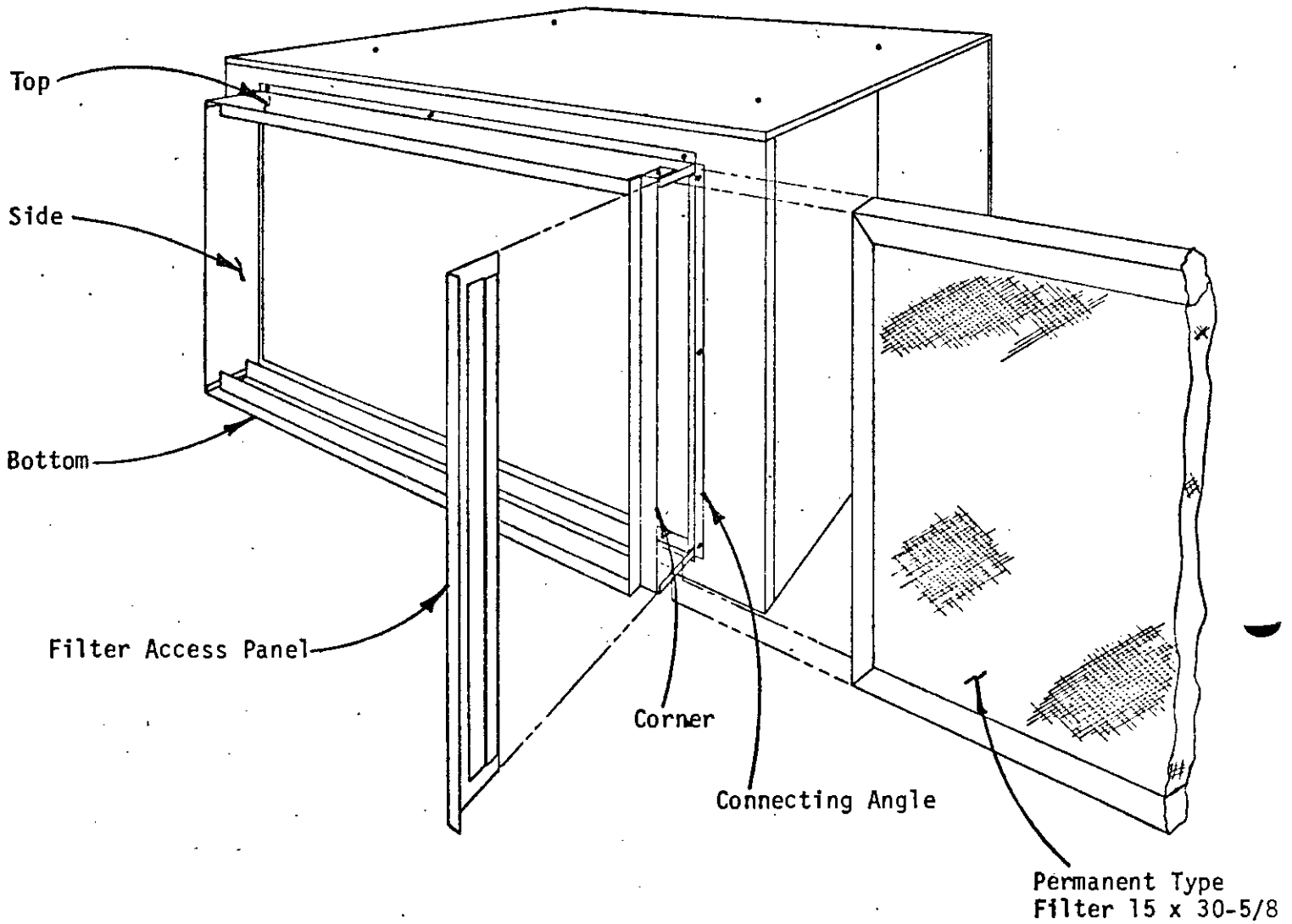
 Both of these thermostats have a W2 and a W3 connection terminal that are controlled by the 2nd stage mercury switch. W2 is connected to the fixed anticipator and W3 by-passes the anticipator, thus allowing outdoor thermostat operation without disrupting cycling rate, etc.

3/8 x 16 NC
 THREADED HOLES FOR
 CEILING SUSPENSION



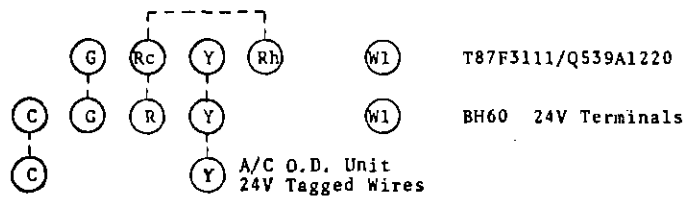
AIR DUCT	SIZE
RETURN	16 X 30
SUPPLY	16 X 20

FILTER RACK ASSEMBLY

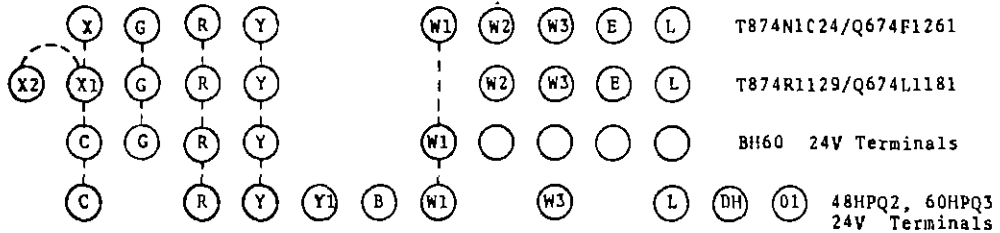


1. Attach top, bottom, and side to unit with screws supplied. (3 screws for each piece).
2. Attach side to the top and bottom (one screw attaches each end).
3. Attach corner to top and bottom (one screw attaches each end).
4. Attach connecting angle to unit with 3 screws.
5. Slide filter into filter rack.
6. Slide filter access panel through slots on top and bottom, sliding it tightly against connecting angle.

AIR CONDITIONING CONTROL CIRCUIT WIRING DIAGRAM



HEAT PUMP CONTROL CIRCUIT WIRING DIAGRAM



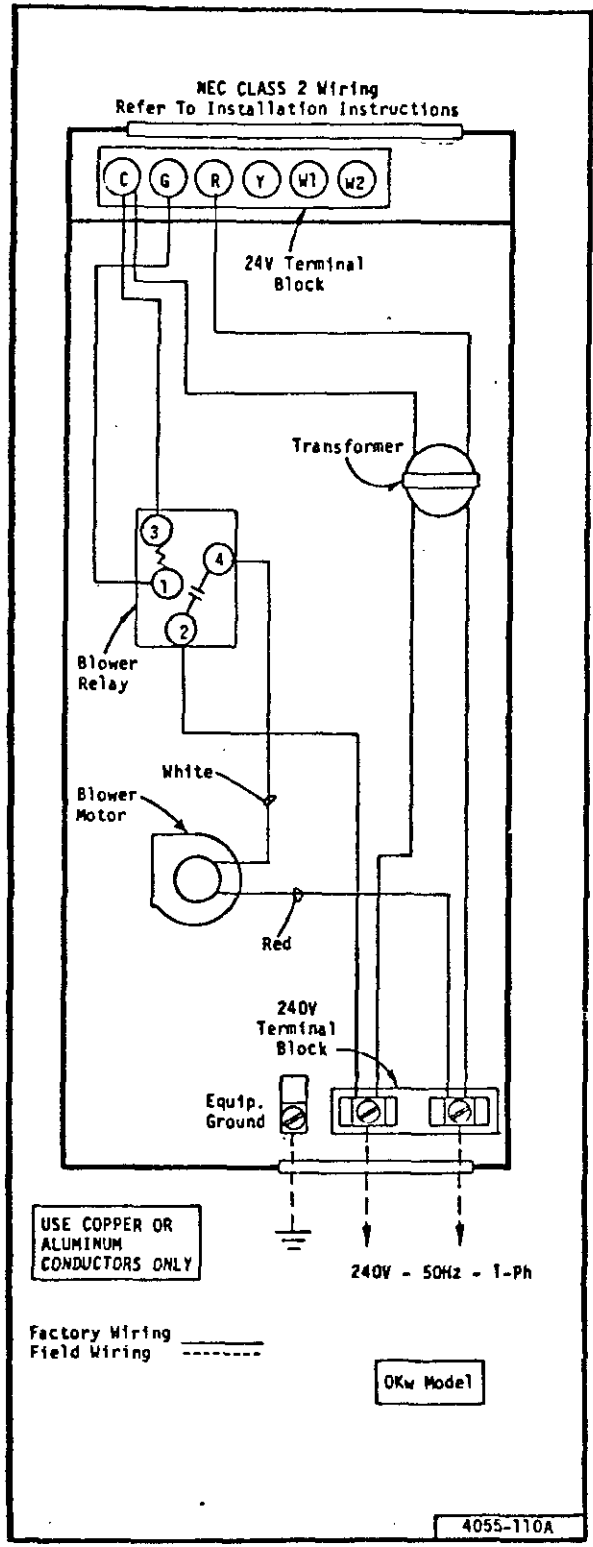
PARTS LIST

BH60

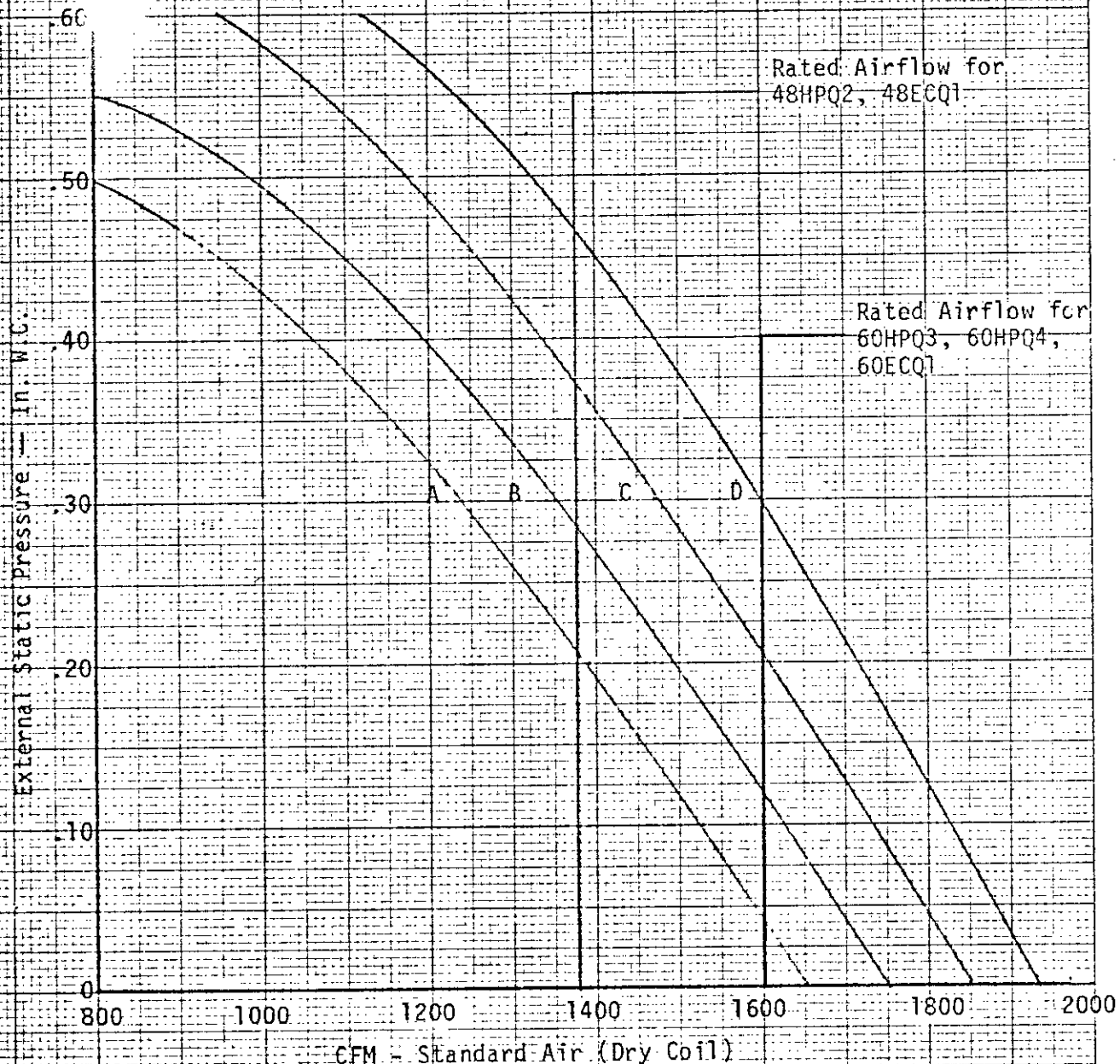
SPLIT SYSTEM BLOWER COIL

PART NO.	DESCRIPTION
*	Blower Housing 10-10
5152-006	Blower Wheel 10-10
5811-020	Capillary Tube (2)
5651-036	Check Valve
5060-002	Evaporator Coil
7003-013	Filter 15 x 30-5/8
8106-011	Motor - Blower 1/2
8201-008	Relay - Blower
5210-005	Strainer
8607-005	Terminal Board 24V
8407-007	Transformer
8607-001	Terminal Block 230V
5501-016	Motor Pulley 4 x 5/8
5501-012	Blower Pulley 6 x 5/8
5601-006	Belt 2410
1912-001	Shaft 15-3/4 x 3/4
5153-012	Bearings 3/4" bore
5153-018	Collar 3/4" bore
5153-002	Neoprene Collar 3/4"
5153-017	Bearing Bracket TA1849
5153-014	Bearing Cushion #1052

*Please order by model number.



BARD MANUFACTURING COMPANY
 MODEL BH60
 CFM vs. External Static Pressure
 (With 1 - 15 x 30-5/8 x 1 Filter)



	MOTOR H.P.	MOTOR PULLEY	TURNS - OPEN	BLOWER PULLEY	BELT
A	1/2	Dia.-4 in.	1/2	Dia.- 6 in.	Length-41 in.
B	1/2	Dia.-4 in.	1-1/2	Dia.- 5 in.	Length-41 in.
C	1/2	Dia.-4 in.	2-1/2	Dia.- 6 in.	Length-41 in.
D	1/2	Dia.-4 in.	3-1/2	Dia.- 6 in.	Length-41 in.

DIETZGEN CORPORATION
MADE IN U.S.A.

NO. 340R-20 DIETZGEN GRAPH PAPER
20 X 20 PER INCH

