Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Dayton® Direct-Drive Blowers

Description

Dayton direct-drive blowers are specifically engineered for air-conditioning, heating and ventilating systems where the blower is mounted within a cabinet or plenum chamber. To minimize vibration, 4-point reinforced mounting brackets have been equipped with rubber isolators. Blowers can be mounted in four variable discharge positions. All motors are permanent split capacitor type (with appropriate capacitor attached) with automatic reset thermal protection.

Unpacking

1. Inspect unit for any damage that may have occurred during transit.
2. Shipping damage claim must be filed with carrier.
3. Insure that blower wheel spins freely before installation.

Motor Component Recognition

c UL us E47479

Dimensions

Model	Wheel Diameter x Width	A	B	C	D	E	F	G	H	I
1XJX7	$9^{7}/_{16}$ x $7^{3}/_{16}$	$12^{9}/_{16}$	$6^{1}/_{8}$	3/4	$12^{3}/_{4}$	$7^{13}/_{16}$	$7^{1}/_{8}$	$9^{3}/_{4}$	$9^{1}/_{8}$	$6^{19}/_{32}$
1XJX8	$9^{7}/_{16}$ x $9^{7}/_{16}$	15	$7^{7}/_{32}$	$1^{9}/_{16}$	$15^{9}/_{32}$	$10^{1}/_{4}$	$8^{9}/_{16}$	$12^{5}/_{16}$	$11^{13}/_{16}$	$6^{1}/_{2}$
1XJX9	$9^{7}/_{16}$ x $9^{7}/_{16}$	15	$7^{7}/_{32}$	$1^{9}/_{16}$	$15^{9}/_{32}$	$10^{1}/_{4}$	$8^{9}/_{16}$	$12^{5}/_{16}$	$11^{13}/_{16}$	$6^{1}/_{2}$
1XJY1	11 x $7^{13}/_{16}$	$16^{9}/_{16}$	$7^{7}/_{8}$	$1^{9}/_{32}$	$17^{5}/_{16}$	$11^{3}/_{8}$	$9^{5}/_{8}$	$11^{1}/_{2}$	$10^{1}/_{2}$	6
1XJY2	11 x $10^{9}/_{16}$	$16^{9}/_{16}$	$7^{7}/_{8}$	$1^{9}/_{32}$	$17^{5}/_{16}$	$11^{3}/_{8}$	$9^{5}/_{8}$	$14^{1}/_{16}$	$13^{1}/_{16}$	6
1XJY3	13 x $9^{1}/_{2}$	$19^{9}/_{32}$	$8^{7}/_{8}$	$1^{5}/_{8}$	$20^{5}/_{16}$	$13^{3}/_{8}$	$11^{9}/_{16}$	$13^{5}/_{16}$	$12^{3}/_{16}$	$8^{11}/_{16}$
1XJY4	13 x $9^{1}/_{2}$	$19^{9}/_{32}$	$9^{1}/_{16}$	$1^{5}/_{8}$	$20^{5}/_{16}$	$13^{3}/_{8}$	$11^{9}/_{16}$	$13^{5}/_{16}$	$12^{3}/_{16}$	$8^{5}/_{16}$

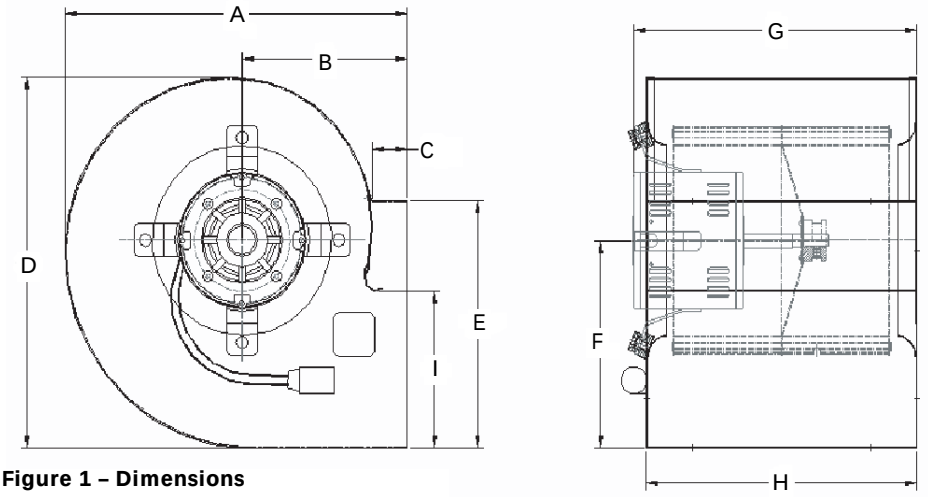


Figure 1 – Dimensions

General Safety Information

⚠ WARNING ***Disconnect power source before installing or servicing. Failure to disconnect power source can result in fire, shock or serious injury.***

1. Blower should be installed and serviced by a qualified technician only.
2. Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA) in the United States.
3. Motor must be securely and adequately grounded. This can be accomplished by wiring with a grounded, metal-clad raceway system by using a separate ground wire connected to the bare metal of the motor frame, or other suitable means.
4. Always disconnect power source before working on or near a motor or its connected load. Lock it in the open position and tag to prevent unexpected application of power.
5. In accordance with OSHA requirements, guarding is required if blower is mounted less than 7 feet above floor or where workers have access.
6. Be careful when touching the exterior of an operating motor; it may be hot enough to cause injury. With modern motors, this condition is normal as they are built to operate at higher temperatures.

ENGLISH

ESPAÑOL

FRANÇAIS

Dayton® Direct-Drive Blowers

ENGLISH

General Safety Information (Continued)

⚠ CAUTION ***Do not touch motor. It may be hot enough to cause injury.***

7. Protect power cable from coming into contact with sharp objects.
8. Do not kink power cable and never allow cable to come in contact with oil, grease, hot surfaces or chemicals.
9. Make certain that the power source conforms to the requirements of your equipment.

⚠ WARNING ***Do not use in a flammable or explosive atmosphere.***

Installation

1. Attach the housing supports (ordered separately) to the housing in the desired discharge position.

⚠ CAUTION ***For safety, a lockable disconnect switch should be located near blower so power can be positively disconnected while installing or servicing the fan.***

⚠ WARNING ***Blower frame and motor must be electrically grounded to a suitable electrical ground such as a grounded metallic raceway or ground wire system. Be sure the motor to housing ground wire is secure.***

2. Wiring connections:
   a. For Models 1XJX7 and 1XJX8 connect the two leads to the appropriate power source.
   b. For Models 1XJX9, 1XJY1, 1XJY2, 1XJY3 and 1XJY4, refer to Figure 2, page 3 for wiring.

NOTE: The purple lead in the wiring diagrams must always be used as one of the electrical connections. All leads not used must be "dead ended" (taped off).

3. Unit is ready for operation.

Operation

After the blower is installed and all duct work is re-attached, measure the current input to the motor and compare with the nameplate rating of the motor (See "Specifications and Performance") to determine if the motor is operating under safe load conditions.

⚠ CAUTION ***Make certain that the blower is operating within the static pressure limits shown in the "Specification and Performance" chart; if not, motor overload will result.***

Maintenance

⚠ WARNING ***Do not depend on any switch as the sole means of disconnecting power when installing or servicing the fan. If the power disconnect is out-of-sight, lock it in the open position and tag to prevent application of power. Failure to do so may result in fatal electrical shock.***

LUBRICATION

The motor bearings are permanently lubricated ball-bearings.

Specifications and Performance

Model	Wheel Dia.	Wheel Width	CFM Air Delivery @ RPM Shown .300" SP	.400" SP	.500" SP	.600" SP	.700" SP	.800" SP	.900" SP	No. of Speeds	Motor RPM	HP	Volts 60 Hz	Full Load Amps
1XJX7	9 7/16"	7 3/16"	1009	1005	1001	929	838	692	–	1	1070	1/6	115	3.7
1XJX8	9 7/16	9 7/16	1457	1340	1319	1301	1230	1117	715	1	986	1/4	115	4.9
1XJX9	9 7/16	9 7/16	1638	1610	1545	1457	1358	1225	1050	4	1085	1/3	115	6.9
	9 7/16	9 7/16	1516	1496	1437	1373	1320	1139	926	4	1040	1/3	115	6.9
	9 7/16	9 7/16	1368	1310	1280	1256	1185	1052	826	4	937	1/3	115	6.9
	9 7/16	9 7/16	1132	1101	1083	1046	1012	896	813	4	858	1/3	115	6.9

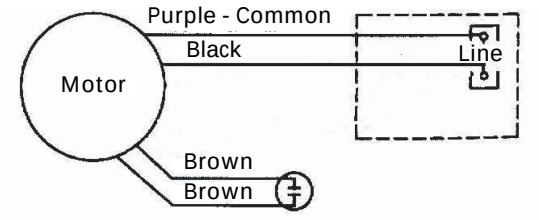
Models 1XJX7 thru 1XJX9, and 1XJY1 thru 1XJY4

Specifications and Performance (Continued)

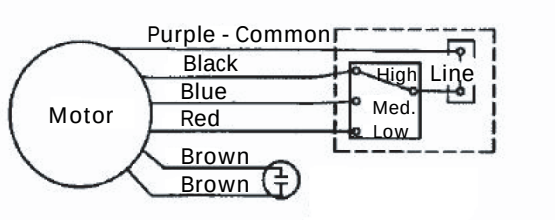
Model	Wheel Dia.	Wheel Width	CFM Air Delivery @ RPM Shown .800" SP	.900" SP	1.000" SP	1.100" SP	1.200" SP	1.250" SP	1.300" SP	No. of Speeds	Motor RPM	HP	Volts 60 Hz	Full Load Amps
1XJY1	11"	7 13/16"	1857	1751	1654	1521	1188	938	–	4	1060	1/2	115	9.0
	11	7 13/16	1706	1632	1546	1381	1033	863	–	4	1035	1/2	115	9.0
	11	7 13/16	1524	1458	1393	1208	925	841	–	4	989	1/2	115	9.0
	11	7 13/16	1327	1279	1162	1049	846	622	–	4	946	1/2	115	9.0
1XJY2	11	10 9/16	–	2016	1864	1704	1399	1217	1171	4	1100	3/4	115	9.0
	11	10 9/16	–	1925	1776	1589	1255	1184	1122	4	1080	3/4	115	9.0
	11	10 9/16	–	1745	1636	1430	1209	1128	1074	4	1050	3/4	115	9.0
	11	10 9/16	–	1587	1474	1345	1152	1110	880	4	1027	3/4	115	9.0

Model	Wheel Dia.	Wheel Width	CFM Air Delivery @ RPM Shown 1.200" SP	1.300" SP	1.400" SP	1.500" SP	1.600" SP	1.700" SP	1.800" SP	No. of Speeds	Motor RPM	HP	Volts 60 Hz	Full Load Amps
1XJY3	13"	9½"	2701	2522	2373	2231	2057	1851	1655	3	1097	1	115	15.3
	13	9½	2480	2373	2218	2084	1910	1696	1384	3	1070	1	115	15.3
	13	9½	2248	2143	2032	1890	1685	1498	–	3	1038	1	115	15.3
1XJY4	13	9½	2553	2465	2316	2149	1957	1671	1416	3	1086	1	230/208	7.2/6.9
	13	9½	2472	2401	2282	2116	1925	1680	1334	3	1062	1	230/208	7.2/6.9
	13	9½	2255	2204	2078	1959	1707	1333	–	3	1039	1	230/208	7.2/6.9

Single-Speed motor connection Diagram
for models 1XJX7 and 1XJX8



3-Speed motor connection diagram
for models 1XJY3 and 1XJY4



4-Speed motor connection diagram
for models 1XJX9, 1XJY1 and 1XJY2

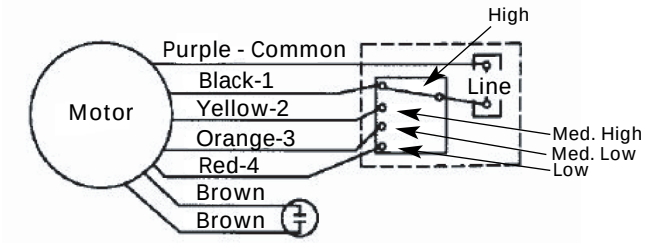


Figure 2 – Wiring Diagrams