

Air Maintenance/ Compressor Assembly

SERIES 7C7

For FireLock NXT™ Series 768 Dry Valves, Series 769 Deluge and Preaction Valves, Series 764 Alternate Valves.

Note: The Series 7C7 Air Maintenance/Compressor Assembly is designed for systems that do not require an accelerator to achieve the required system pressure performance. If an accelerator is required, a tank-mounted compressor with a regulated air maintenance device should be used.



SERIES 7C7

PRODUCT DESCRIPTION

The Series 7C7 Air Maintenance/Compressor assembly consists of a riser-mounted compressor, Series 757P Air Maintenance Device and flexible hoses for installation. It is designed to ensure the valve system can achieve operational air pressure within 30 minutes of discharge, in accordance with NFPA 13 requirements (7.2.6.2.2).

The Series 757P Air Maintenance Device is UL Listed and FM Approved.

The Series 7C7 Assembly is available with 1/6, 1/3 and 1/2 horsepower compressors depending upon the system requirements.

COMPRESSOR CAPACITIES

The engineer/system designer is responsible for sizing the compressor so that the entire system is charged to the required air pressure within NFPA guidelines (30 minutes). DO NOT oversize the compressor to provide more airflow. An oversized compressor will slow down or possibly prevent valve operation.

Hp	Nominal AC Voltage/Hz (+/- 10%)	Pressure psi/Bar	Time Minutes	Capacity WITH AutoVent gallons/m ³	Capacity WITHOUT AutoVent gallons/m ³	Amp Draw
1/6	110/60	18 1.2	30	175 0.7	275 1.1	2.1 Amps
1/3	110/60	18 1.2	30	375 1.4	525 2.0	4.4 Amps
1/3	220/50	18 1.2	30	160 0.6	235 0.9	
1/3	220/50	18 1.2	60	450 1.7	660 2.5	
1/3	220/60	18 1.2	30	370 1.4	400 1.5	
1/2	110/50	18 1.2	30	660 2.5	670 2.5	6.6 Amps
1/2	110/60	18 1.2	30	780 3.0	830 3.1	
3/4	220/50	18 1.2	30	600 2.3	675 2.5	3.8 Amps
3/4	220/60	18 1.2	30	700 2.7	775 2.9	
3/4	220/50	18 1.2	60	1200 4.5	1350 5.0	
3/4	220/60	18 1.2	60	1375 5.2	1525 5.8	

NOTE: Refer to the charts on the following pages for minimum required fill capacities to 13 psi/0.9 Bar. Low air alarms will clear at 13 psi/0.9 Bar. In addition, these charts contain higher capacities to 18 psi/1.2 Bar that are not shown in the table above.

JOB/OWNER

System No. _____
Location _____

CONTRACTOR

Submitted By _____
Date _____

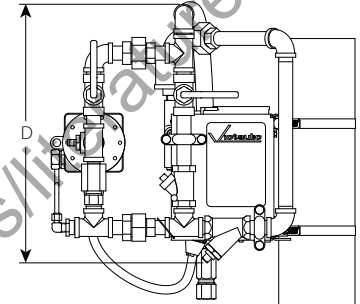
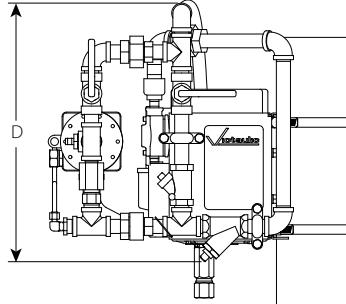
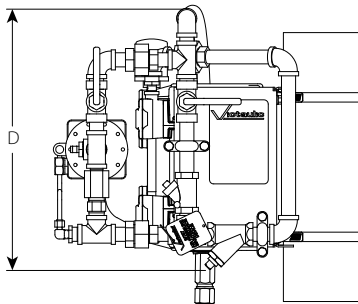
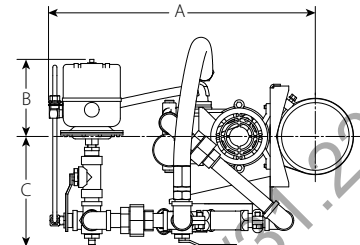
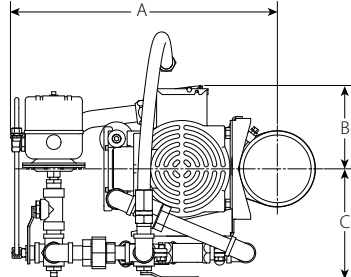
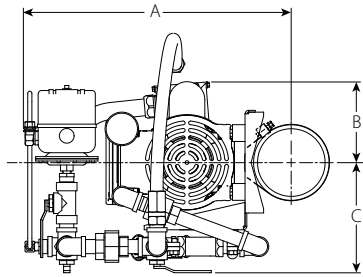
ENGINEER

Spec Sect _____ Para _____
Approved _____
Date _____

Air Maintenance/ Compressor Assembly

SERIES 7C7

ASSEMBLY DIMENSIONS



Series 7C7 - 1/2HP Compressor

Series 7C7 - 1/3HP Compressor

Series 7C7 - 1/6HP Compressor

Series 7C7 - 1/2HP Compressor				
Pipe Size	A	B	C	D
1 1/2"	14.5	4.8	6.55	15.54
2"	14.77	4.8	6.55	15.54
2 1/2" & 76.1	15.03	4.8	6.55	15.54
3"	15.36	4.8	6.55	15.54
4"	15.94	4.8	6.55	15.54
6" & 165.5	16.98	4.8	6.55	15.54
8"	18.01	4.8	6.55	15.54

Series 7C7 - 1/3HP Compressor				
Pipe Size	A	B	C	D
1 1/2"	14.53	5.00	6.55	15.38
2"	14.78	5.00	6.55	15.38
2 1/2" & 76.1	15.04	5.00	6.55	15.38
3"	15.36	5.00	6.55	15.38
4"	15.88	5.00	6.55	15.38
6" & 165.5	16.98	5.00	6.55	15.38
8"	18.02	5.00	6.55	15.38

Series 7C7 - 1/6HP Compressor				
Pipe Size	A	B	C	D
1 1/2"	14.53	4.60	6.55	15.38
2"	14.78	4.60	6.55	15.38
2 1/2" & 76.1	15.04	4.60	6.55	15.38
3"	15.36	4.60	6.55	15.38
4"	15.88	4.60	6.55	15.38
6" & 165.5	16.98	4.60	6.55	15.38
8"	18.02	4.60	6.55	15.38

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<https://www.victaulic.com/assets/uploads/31.22.pdf>

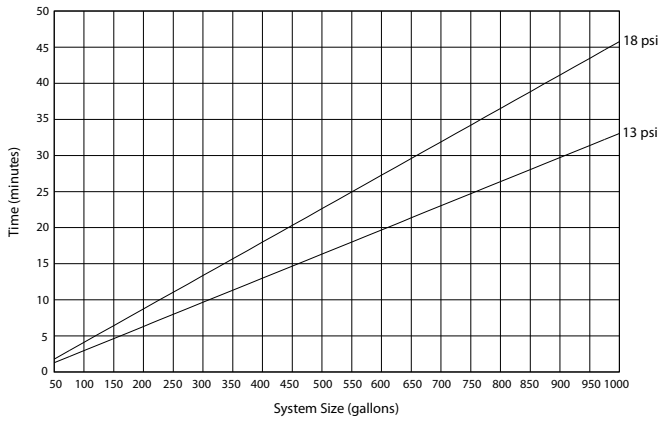
Air Maintenance/ Compressor Assembly

SERIES 7C7

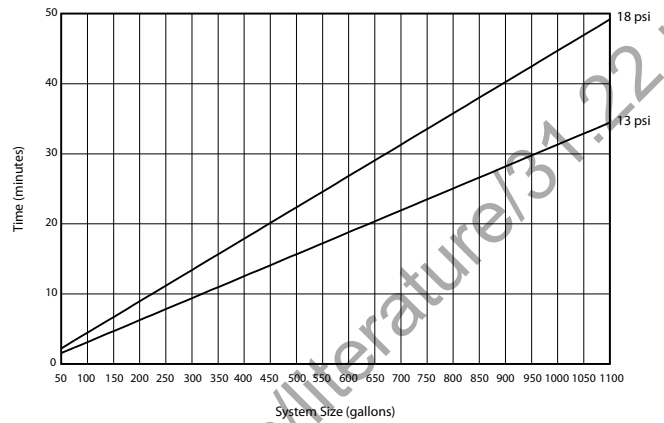
ASSEMBLY PERFORMANCE (1/2 HP Compressor)

- For use with FireLock NXT Series 768 Dry, Series 764 Alternate wet/dry and 769 Deluge and Preaction systems.

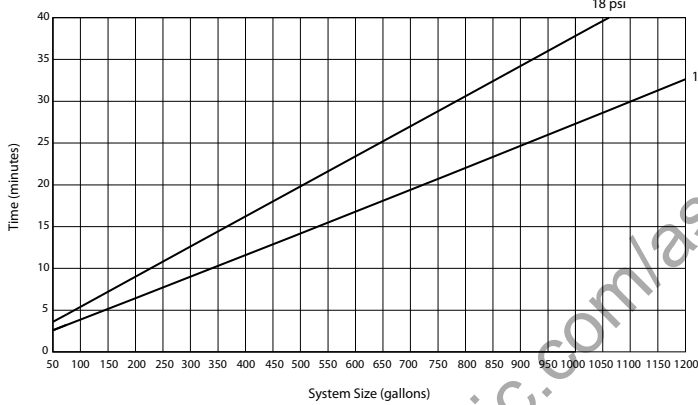
Estimated Time to Reach Various Pressures -
Series 7C7 with 1/2-hp (110 VAC, 50 Hz) Compressor and Auto Vent



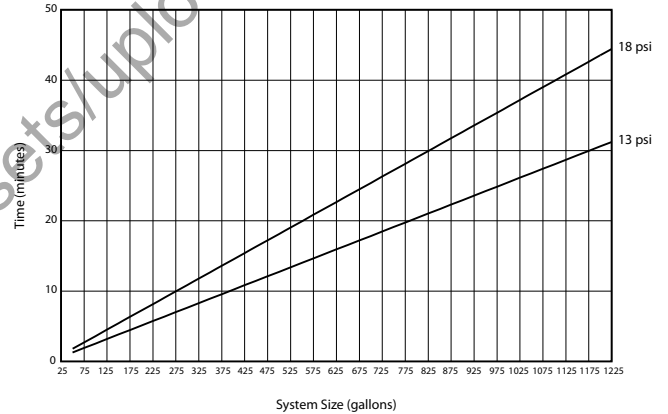
Estimated Time to Reach Various Pressures -
Series 7C7 with 1/2-hp (110 VAC, 50 Hz) Compressor and No Auto Vent



Estimated Time to Reach Various Pressures -
Series 7C7 with 1/2-hp (110 VAC, 60-Hz) Compressor and Auto Vent



Estimated Time to Reach Various Pressures -
Series 7C7 with 1/2-hp (110 VAC, 60 Hz) Compressor and No Auto Vent



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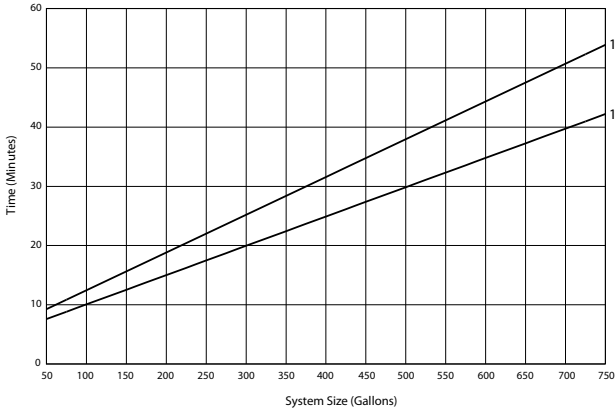
Air Maintenance/ Compressor Assembly

SERIES 7C7

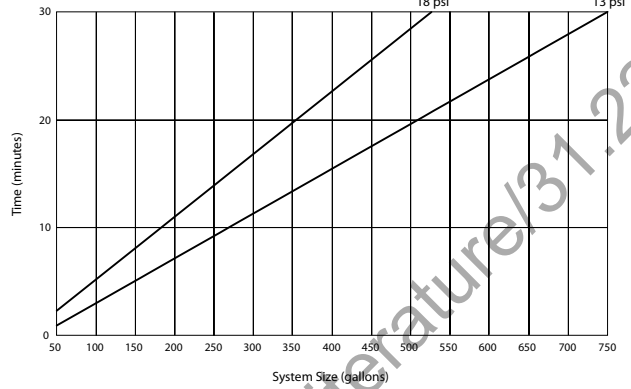
ASSEMBLY PERFORMANCE (1/3 HP Compressor)

- For use with FireLock NXT Series 768 Dry, Series 764 Alternate wet/dry and 769 Deluge and Preaction systems.

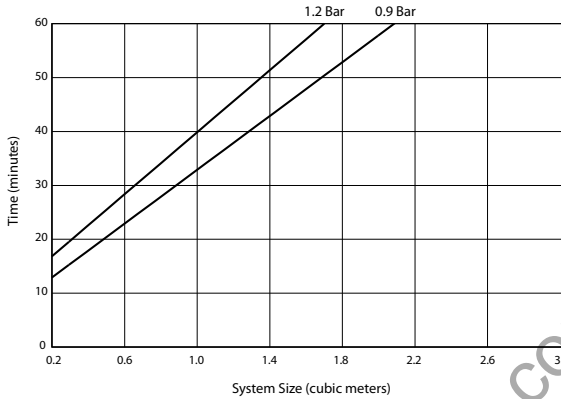
Estimated Time to Reach Various Pressures -
Series 7C7 with 1/3-hp (110 VAC) Compressor and Auto Vent



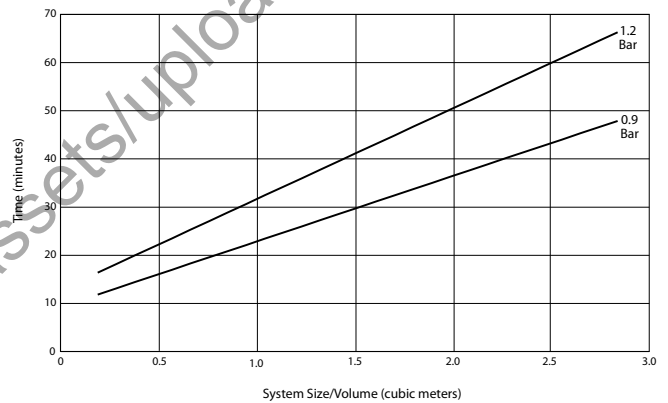
Estimated Time to Reach Various Pressures -
Series 7C7 with 1/3-hp (110 VAC) Compressor and No Auto Vent



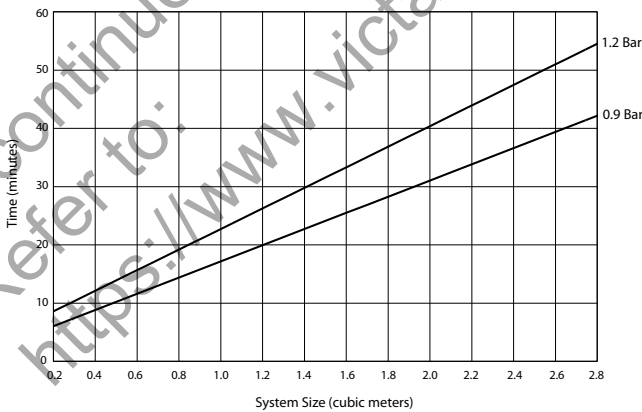
Estimated Time to Reach Various Pressures - 220-volt Option
Series 7C7 with 1/3-hp (220-240 VAC, 50-Hz) Compressor and Auto Vent



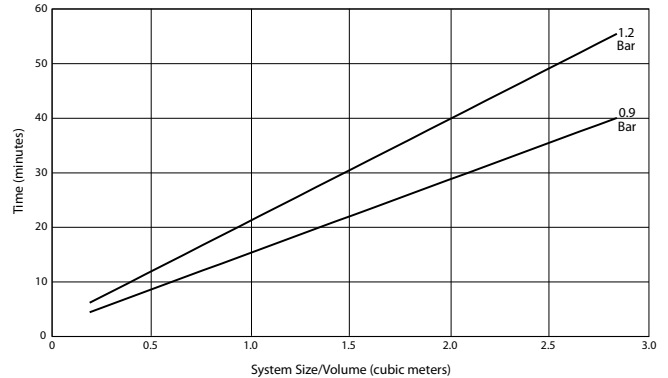
Estimated Time to Reach Various Pressures - 220-volt Option
Series 7C7 with 1/3-hp (220 - 240 VAC, 50 Hz) Compressor and No Auto Vent



Estimated Time to Reach Various Pressures - 220-volt Option
Series 7C7 with 1/3-hp (220-240 VAC, 60-Hz) Compressor and Auto Vent



Estimated Time to Reach Various Pressures - 220-volt Option
Series 7C7 with 1/3-hp (220 - 240 VAC, 60 Hz) Compressor and No Auto Vent



NOTE: Refer to the following page for charts reflecting the 220-volt 1/3-hp option.

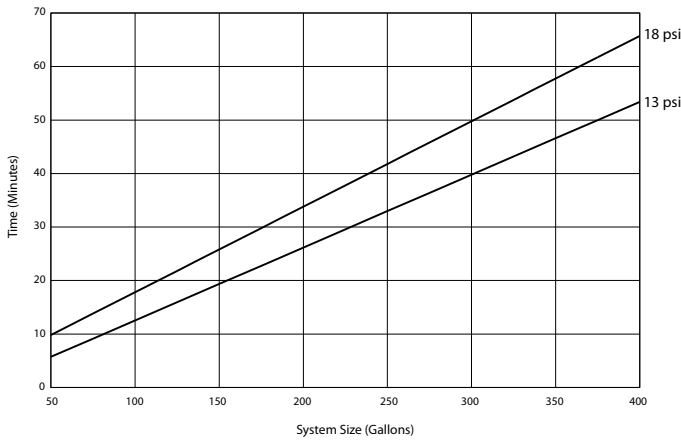
Air Maintenance/ Compressor Assembly

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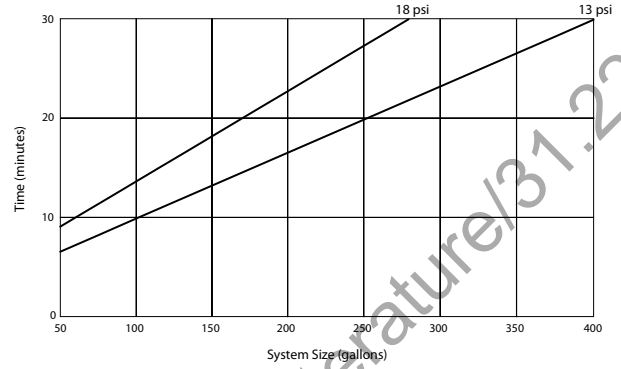
ASSEMBLY PERFORMANCE (1/6 HP Compressor)

- For use with FireLock NXT Series 768 Dry, Series 764 Alternate wet/dry and 769 Deluge and Preaction systems.

Estimated Time to Reach Various Pressures -
Series 7C7 with 1/6-hp (110 VAC) Compressor and Auto Vent



Estimated Time to Reach Various Pressures -
Series 7C7 with 1/6-hp (110 VAC) Compressor and No AutoVent

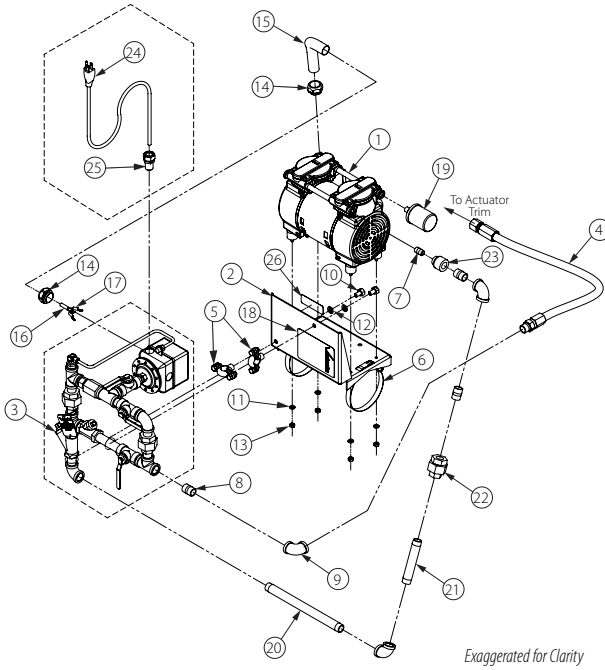


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Air Maintenance/ Compressor Assembly

SERIES 7C7

EXPLODED VIEW DRAWING - SERIES 7C7 AIR MAINTENANCE COMPRESSOR ASSEMBLY WITH 1/2-HP COMPRESSOR



Bill of Materials

Item	Qty.	Description
1	1	Compressor
2	1	Mounting Bracket
3	1	Series 757P Air Maintenance Trim Assembly with Pressure Switch
4	1	Stainless Steel Braided Flex Hose (1/2-inch NPT Male x Female)
5	2	Split Hanger for 1/2-inch Pipe
6	2	Hose Clamp
7	1	Close Nipple (1/4-inch NPT)
8	3	Close Nipple (1/2-inch NPT)
9	3	90° Female Elbow (1/2-inch NPT)
10	2	Hex-Head Bolt (3/8 - 16 x 3/8-inch Long)
11	4	Lock Washer (3/16 inch)
12	2	Lock Washer (3/8 inch)
13	4	Hex Nut (1/4 - 20 UNC)
14	2	Straight Conduit Connector (1/2-inch)
15	1	Liquid-Tight Conduit (1/2 inch x 9 1/2 inches Long)
16	1	14 AWG, 3-Strand Cable (25 inches Long)
17	3	#8 U-Style Wire Connector
18	1	Identification Tag
19	1	Compressor Air Intake Filter
20	1	Nipple (1/2-inch NPT x 10 inches Long)
21	1	Nipple (1/2-inch NPT x 4 1/2 inches Long)
22	1	Union (1/2-inch NPT)
23	1	Reducing Bell (1/2-inch NPT x 1/4-inch NPT)
24	1	14 AWG Grounded Cord with Plug (5 1/2 feet Long)*
25	1	Strain Relief Connector*
26	1	Identification Label*

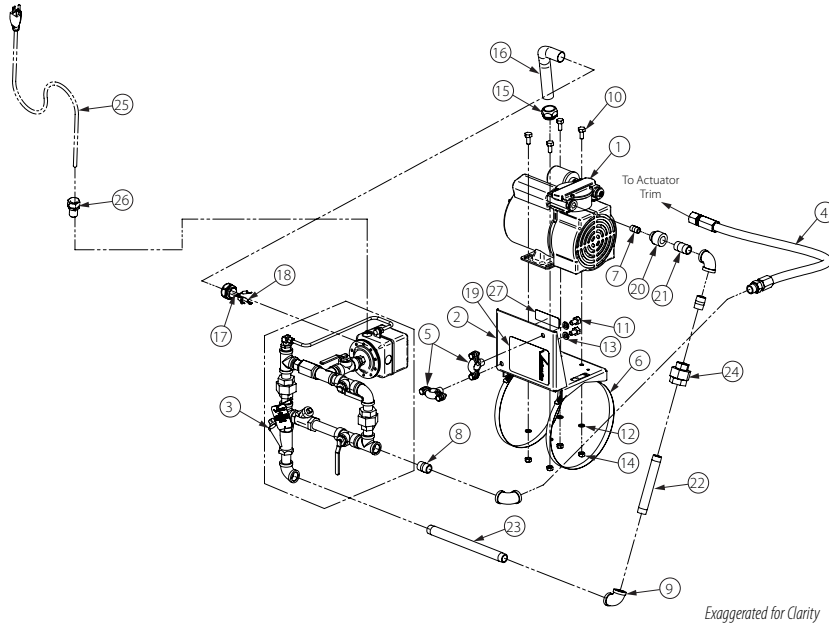
* NOTE: Items 24 - 26 apply only to the CSA version

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<https://www.victaulic.com/assets/uploads/literature/31.22.pdf>

Air Maintenance/ Compressor Assembly

SERIES 7C7

EXPLODED VIEW DRAWING - SERIES 7C7 AIR MAINTENANCE COMPRESSOR ASSEMBLY WITH 1/3-HP COMPRESSOR

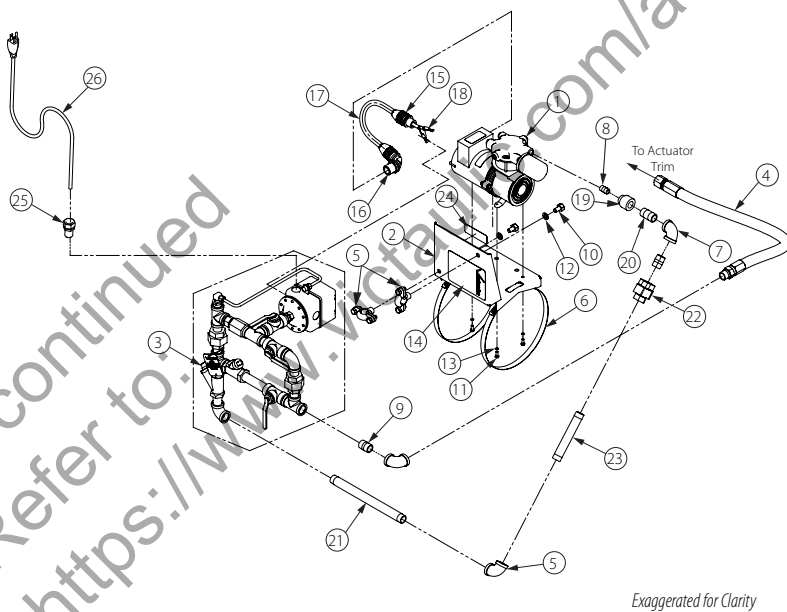


Bill of Materials

Item	Qty.	Description
1	1	Compressor
2	1	Mounting Bracket
3	1	Series 757P Air Maintenance Trim Assembly with Pressure Switch
4	1	Stainless Steel Braided Flex Hose (1/2-inch NPT Male x Female)
5	2	Split Hanger for 1/2-inch Pipe
6	2	Hose Clamp
7	1	Close Nipple (1/4-inch NPT)
8	2	Close Nipple (1/2-inch NPT)
9	3	90° Female Elbow (1/2-inch NPT)
10	4	Hex-Head Bolt (3/8 - 16 x 3/4-inch Long)
11	2	Hex-Head Bolt (3/8 - 16 x 5/8-inch Long)
12	4	Lock Washer (3/8 inch)
13	2	Lock Washer (3/8 inch)
14	4	Hex Nut (3/8 - 18)
15	2	Straight Conduit Connector (1/2 inch)
16	1	Liquid-Tight Conduit (1/2 inch x 9 1/2 inches Long)
17	2	14 AWG, 3-Strand Cable (25 inches Long)
18	3	#8 U-Style Wire Connector
19	1	Identification Tag
20	1	Reducing Bell (1/2-inch NPT x 1/4-inch NPT)
21	1	Nipple (1/2-inch NPT x 1 1/2 inches Long)
22	1	Nipple (1/2-inch NPT x 5 1/2 inches Long)
23	1	Nipple (1/2-inch NPT x 9 1/2 inches Long)
24	1	Union (1/2-inch NPT)
25	1	14 AWG Grounded Cord with Plug (5 1/2 feet Long)*
26	1	Strain Relief Connector*
27	1	Identification Label*

* NOTE: Items 25 - 27 apply only to the CSA version

EXPLODED VIEW DRAWING - SERIES 7C7 AIR MAINTENANCE COMPRESSOR ASSEMBLY WITH 1/6-HP COMPRESSOR



Bill of Materials

Item	Qty.	Description
1	1	Compressor
2	1	Mounting Bracket
3	1	Series 757P Air Maintenance Trim Assembly with Pressure Switch
4	1	Stainless Steel Braided Flex Hose (1/2-inch NPT Male x Female)
5	2	Split Hanger for 1/2-inch Pipe
6	2	Hose Clamp
7	3	90° Female Elbow (1/2-inch NPT)
8	1	Close Nipple (1/4-inch NPT)
9	2	Close Nipple (1/2-inch NPT)
10	2	Hex-Head Bolt (3/8 - 16 x 5/8-inch Long)
11	3	Hex-Head Bolt (#10 - 32 x 1/2-inch Long)
12	2	Lock Washer (3/8 inch)
13	3	Lock Washer (#10)
14	1	Identification Tag
15	1	Straight Connector, Flexible Cord
16	1	Connector, Flexible Cord
17	1	Liquid-Tight Conduit (1/2 inch x 11 1/2 inches Long)
18	3	#8 U-Style Wire Connector
19	1	Reducing Bell (1/2-inch NPT x 1/4-inch NPT)
20	1	Nipple (1/2-inch NPT x 1 1/2 inches Long)
21	1	Nipple (1/2-inch NPT x 9 inches Long)
22	1	Union (1/2-inch NPT)
23	1	Nipple (1/2-inch NPT x 5 inches Long)
24	1	Identification Label*
25	1	Strain Relief Connector*
26	1	14 AWG Grounded Cord with Plug (5 1/2 feet Long)*


* NOTE: Items 24 - 26 apply only to the CSA version

Air Maintenance/ Compressor Assembly

SERIES 7C7

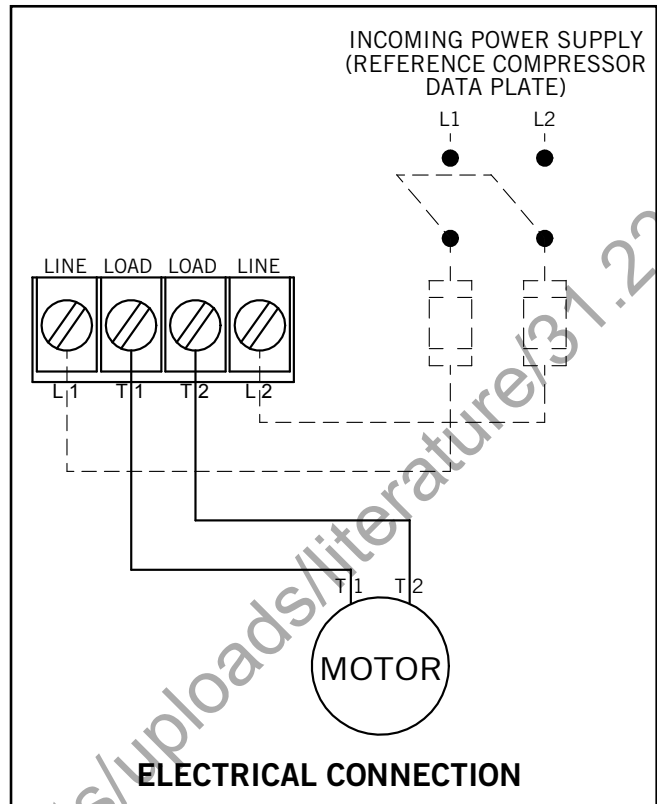
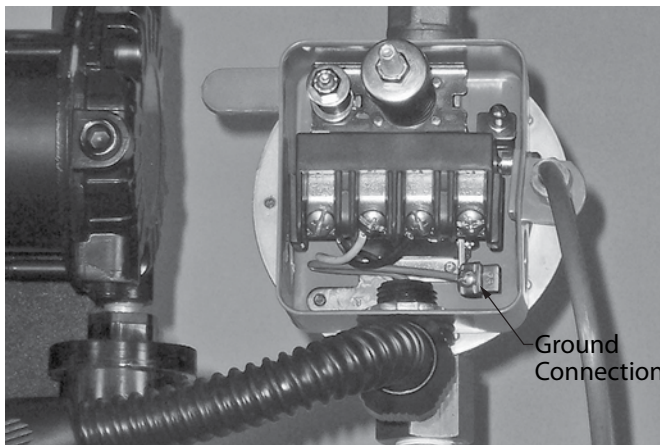
ELECTRICAL INFORMATION

⚠ DANGER



- Only qualified electricians should connect incoming power to the Series 7C7 Air Maintenance/Compressor Assembly.
- To reduce the risk of electric shock, check the electrical source for proper grounding.

Failure to follow these instructions could result in death or serious personal injury.



NOTE: NEMA 1 Enclosure - intended only for indoor use
Only qualified electricians should make the connection to the incoming power supply. All wiring shall be completed in accordance with requirements of the local authority having jurisdiction and any applicable electrical codes.

WARRANTY

Refer to the Warranty section of the current Price List or contact Victaulic for details.


NOTE

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

WARNING



⚠ WARNING



- This product must be installed by an experienced, trained installer, in accordance with the instructions provided with each valve. These instructions contain important information.

Failure to follow these instructions may result in serious personal injury, property damage, or valve leakage.

If you need additional copies of this product literature or the valve installation instructions, or if you have any questions about the safe installation and use of this device, contact Victaulic Company, P.O. Box 31, Easton, PA 18044-0031 USA, Telephone: 001-610-559-3300.

For complete contact information, visit www.victaulic.com

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