

# WFD195

## DOWNFLOW 95% AFUE GAS FURNACE, MULTI-SPEED BLOWER (93% AFUE 115K MODEL)

The Whirlpool® WFD195 95% AFUE (93% AFUE for 115K Model) Downflow, Multi-Speed, furnace features a patented aluminized-steel tubular heat exchanger and durable Silicon Nitride Hot Surface Ignition system.

# PRODUCT SPECIFICATIONS



# **95% AFUE** 93% AFUE 115K MODEL

HEATING INPUT: 46,000—115,000 BTU/H













<sup>\*</sup> To receive the 10-Year Parts Limited Warranty, or the Lifetime Heat Exchanger Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec. Full warranty details available at <a href="https://www.whirlpoolhvac.com">www.whirlpoolhvac.com</a>.

#### **Standard Features**

- Patented heavy duty dual-diameter tubular heat exchanger with lifetime limited warranty plus 10-year limited furnace replacement warranty
- Two-stage gas valve with revolutionary new convertible technology that allows installer to activate the two-stage valve with the flip of a dipswitch
- Silicon Nitride igniter with patented adaptive learning control for maximum igniter life
- Furnace control board with self-diagnostics, color-coded lowvoltage terminals, and provisions for electronic air cleaner and 24-volt humidifiers
- Control board stores the last five diagnostic codes in memory; simple push-button activation outputs the fault history to a flashing red LED
- Low constant fan allows homeowner to activate the low heat speed to efficiently circulate air throughout the home.
- Self-adjusting feature automatically adjusts to high or low stage based on outside temperature without an outdoor temperature sensor
- Dual-certified for sealed combustion direct vent (2-pipe) or non-direct vent (1-pipe) applications
- All models comply with California NOx emissions standards

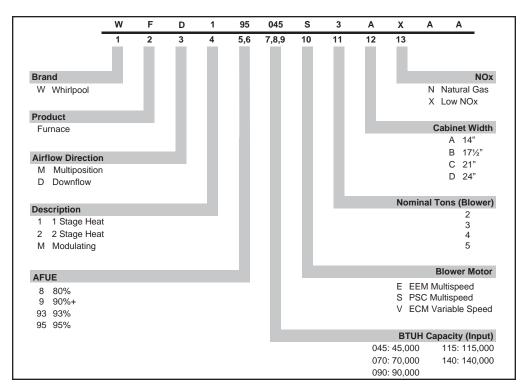
#### **Cabinet Features**

- Fully insulated, heavy-gauge steel cabinet with durable bakedenamel finish
- · Foil-faced insulation lines the heat exchanger
- Designed for multi-position installation: downflow, horizontal left or right
- Convenient left or right connection for gas & electric service
- Coil and furnace fit flush for most installations

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#### **Nomenclature**



#### Accessories

Accessory	Description	WFD195 045\$3BX	WFD195 070\$3BX	WFD195 070S4CX	WFD195 090S4CX	WFD195 090S5DX	WFD195 115\$5DX
LPM-05	LP Conversion Kit (Springs & Orifice) <sup>1</sup>	٧	٧	٧	٧	٧	٧
LPM-06	LP Conversion Kit (Springs & Orifice) <sup>2</sup>	٧	٧	٧	٧	٧	٧
LPLP01	LP Gas Low-Pressure Kit						٧
HANG11	High Altitude Natural Gas Kit	1	1	1	1	1	1
HANG12	High Altitude Natural Gas Kit	2	2	2	2	2	2
HALP10	High Altitude LP Gas Kit	3	3	3	3	3	3
HAPS27	High Altitude Pressure Switch Kit	3	3	3	3	3	3
EFR01	External Filter Rack	٧	٧	٧	٧	٧	٧
DCVK-20	Horizontal/Vertical Concentric Vent Kit (2")	٧	٧				
DCVK-30	Horizontal/Vertical Concentric Vent Kit (3")	٧	٧	٧	٧	٧	٧
0170K00000S	Flush-mount Vent Kit	٧	٧	٧	٧	٧	٧

White-Rodgers valves only

#### Notes

- All installations above 7,000' require a pressure switch change. For installation in Canada, furnaces are certified only to 4,500'.
- Downflow Floor base: When the GCH9 model is installed directly on a wood floor, a downflow floor base must be used. Those model numbers are: CFB17, CFB21 and CFB24.

White-Rodgers and Honeywell valves

V Indicates accessories available for this model

<sup>1</sup> Indicates 7,001' to 9,000' altitude

<sup>2</sup> Indicates 9,001' to 11,000' altitude

<sup>3</sup> Indicates 7,001' to 11,000' altitude

#### **S**PECIFICATIONS

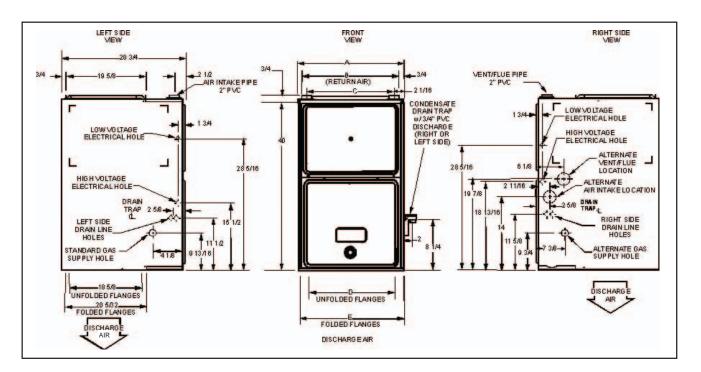
	WFD19 04583BX	WFD19 070S3BX	WFD19 070S4CX	WFD19 090S4CX	WFD19 090S5DX	WFD19 11585DX
Heating Capacity						
Natural Gas Input <sup>1</sup>	46,000	69,000	69,000	92,000	92,000	115,000
Natural Gas Output <sup>1</sup>	42,800	64,400	64,400	86,000	86,000	106,500
LP Gas Output <sup>1</sup>	38,502	57,753	57,753	77,004	77,004	96,255
AFUE <sup>2</sup>	93	93	93	93	93.0	93
Available AC @ 0.5" ESP	3	3	4	4	5	5
Temperature Rise Range (°F)	35 - 65	35 - 65	35 - 65	40 - 70	35-65	40 - 70
Circulator Blower						
Size (D x W)	10" x 8"	10" x 8"	10" x 10"	10" x 10"	11" x 10"	11" x 10"
Horsepower @ 1075 RPM	1/3	1/3	1/2	1/2	3/4	3/4
Speed	4	4	4	4	4	4
Vent Diameter <sup>3</sup>	2"	2"	2"	2"	2"	2"
No. of Burners	2	3	3	4	4	5
Filter Size (in2)						
Permanent <sup>4</sup>	288	282	260	376	376	470
Disposable	576	564	564	752	752	940
Electrical Data						
Min. Circuit Ampacity <sup>5</sup>	9.4	9.4	13.8	13.8	12.2	13.2
Max. Overcurrent Device (amps) <sup>6</sup>	15	15	15	15	15	15
Ship Weight (Ibs)	132	135	135	156	173	175

- 1- Natural Gas BTU/h. For altitudes above 2,000', reduce input rating 4% for each 1,000' above sea level.
- 2- DOE AFUE based upon Isolated Combustion System (ICS)
- 3— Installer must supply one or two PVC pipes: one for combustion air (optional) and one for the flue outlet (required). Vent pipe must be either 2" or 3" in diameter, depending upon furnace input, number of elbows, length of run and installation (1 or 2 pipes). The optional Combustion Air Pipe is dependent on installation/code requirements and must be 2" or 3" diameter PVC.
- 4— Minimum Circuit Ampacity = (1.25 x Circulator Blower Amps) + ID Blower amps. Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.
- 5- Maximum Overcurrent Protection Device refers to maximum recommended fuse or circuit breaker size. May use fuses or HACR-type circuit breakers of the same size as noted.

#### Notes:

- All furnaces are manufactured for use on 115 VAC, 60 Hz, single-phase electrical supply.
- Gas Service Connection 1/2" FPT
- Important: Size fuses and wires properly and make electrical connections in accordance with the National Electrical Code and/or all existing local codes.

#### DIMENSIONS



Model	A	В	C	D	E
WFD19045S3BX	17½"	16"	12%"	14½"	16"
WFD19070S3BX	17½"	16"	12%"	14½"	16"
WFD19070S4CX	21"	19½"	16%"	18"	19½"
WFD19090S4CX	21"	19½"	16%"	18"	19½"
WFD19090S5DX	24½"	23"	20%"	21½"	23"
WFD19115S5DX	24½"	23"	20%"	21½"	23"

#### Notes:

- Installer must supply one or two PVC pipes: one for combustion air (optional) and one for the flue outlet (required). Vent pipe must be either 2" or 3" in diameter, depending upon furnace input, number of elbows, length of run, and installation (1 or 2 pipes). The optional combustion air pipe is dependent on installation/code requirements and must be 2" or 3" diameter PVC.
- · Line voltage wiring can enter through the right or left side of furnace. Low-voltage wiring can enter through the right or left side of furnace.
- Conversion kits for high-altitude natural gas operation are available. Contact your Goodman distributor or dealer for details.
- Installer must supply the following gas line fittings, according to which entrance is used:
- Left: One 90<sup>o</sup> street elbow; one 2½" pipe nipple; one 90<sup>o</sup> elbow; straight pipe; one ground joint union **Right**: Straight pipe to reach gas valve
- Installations using a bottom return: Failure to unfold duct flanges will reduce airflow area by approximately 18%. This could result in performance
  and noise issues.

#### MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS

Position	Sides	Rear	Front	Bottom	Flue	Тор
Downflow	0"	0"	1"	NC	0"	1"
Horizontal	6"	0"	1"	С	0"	4"

C = Combustible: If placed on combustible floor, the floor MUST be wood ONLY.

NC = Non-Combustible: A combustible floor sub-base must be used for installation on combustible flooring

#### Notes:

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- For servicing or cleaning, a 24" front clearance is recommended.
- · Unit connections (electrical, flue and drain) may necessitate greater clearances than the minimum clearances listed below.
- In all cases, accessibility clearance must take precedence over clearances from the enclosure where accessibility clearances are greater.

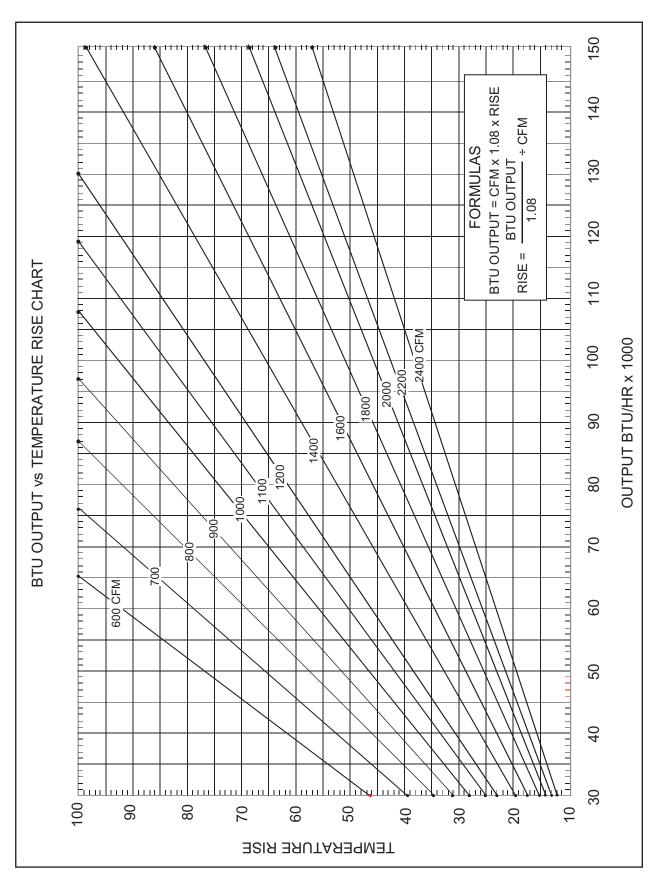
#### **BLOWER PERFORMANCE**

(CFM & Temperature Rise vs. External Static Pressure)															
		Tons	External Static Pressure, (Inches Water Column)												
Model Motor Speed			0.1 0.2		.2	0.3		0.4		0.5		0.6	0.7	0.8	
		ESP	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	CFM	CFM
	High	3	1,352	29	1,318	30	1,260	31	1,202	33	1,128	35	1,044	955	853
WFD19	Med	2.5	1,214	32	1,172	34	1,123	35	1,064	37	1,012	39	938	859	741
045S3BX	Med-Lo	2	997	40	994	40	960	41	923	43	884	45	817	741	611
	Low	1.5	757	52	753	52	734	54	704	56	674	59	620	524	438
	High	3	1,449	41	1,409	42	1,326	45	1,273	47	1,201	49	1,194	1,136	1,018
WFD19	Med	2.5	1,192	50	1,172	51	1,141	52	1,094	54	1,046	57	973	904	793
070S3BX	Med-Lo	2	981	61	962	62	943	63	917	65	888	67	830	764	665
	Low	1.5	750	79	730	81	714	83	692	86	657	90	620	570	502
	High	4	2,069	29	1,965	30	1,871	32	1,756	34	1,661	36	1,549	1,415	1,275
WFD19	Med	3.5	1,752	34	1,724	34	1,667	36	1,603	37	1,488	40	1,402	1,290	1,082
070S4CX	Med-Lo	3	1,437	41	1,437	41	1,417	42	1,369	43	1,320	45	1,256	1,140	984
	Low	2.5	1,184	50	1,177	50	1,161	51	1,132	52	1,095	54	1,047	928	837
	High	4	1,970	40	1,874	42	1,757	45	1,667	48	1,566	51	1,431	1,334	1,182
WFD19	Med	3.5	1,713	46	1,650	48	1,572	50	1,510	52	1,418	56	1,313	1,211	1,079
090S4CX	Med-Lo	3	1,439	55	1,412	56	1,370	58	1,327	60	1,260	63	1,166	1,078	956
	Low	2.5	1,183	67	1,155	69	1,122	71	1,108	72	1,062	75	1,011	931	816
	High	5	2,147	37	2,114	37	2,057	39	2,030	39	1,978	40	1,889	1,784	1,713
WFD19	Med	4	1,675	47	1,686	47	1,640	48	1,623	49	1,557	51	1,501	1,455	1,360
090S5CX	Med-Lo	3.5	1,489	53	1,470	54	1,436	55	1,409	56	1,361	58	1,318	1,243	1,130
	Low	3	1,307	61	1,265	63	1,234	64	1,203	66	1,168	68	1,096	1,053	991
	High	5	2,134	46	2,103	47	2,029	48	1,941	51	1,906	51	1,818	1,733	1,625
WFD19	Med	4	1,678	58	1,643	60	1,643	60	1,577	62	1,527	64	1,489	1,423	1,339
115S5DX	Med-Lo	3.5	1,453	68	1,440	68	1,426	69	1,363	72	1,349	73	1,314	1,253	1,205
	Low	3	1,259	78	1,239	79	1,220	80	1,181	83	1,159	85	1,118	1,082	1,015

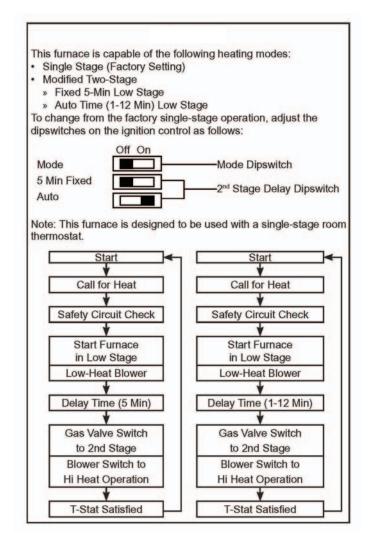
#### Notes:

- CFM in chart is without filter(s). Filters do not ship with this furnace, but must be provided by the installer. If the furnace requires two return filters, this chart assumes both filters are installed.
- All furnaces ship as high-speed cooling and medium-speed heating. Installer must adjust blower cooling & heating speed as needed.
- For most jobs, about 400 CFM per ton when cooling is desirable.
- . INSTALLATION IS TO BE ADJUSTED TO OBTAIN TEMPERATURE RISE WITHIN THE RANGE SPECIFIED ON THE RATING PLATE.
- The chart is for information only. For satisfactory operation, external static pressure should not exceed value shown on the rating plate. The shaded area indicates ranges in excess of the recommended maximum heating static pressure.
- The above chart is for U.S. furnaces installed at 0-2000 feet. At higher altitudes, a properly de-rated unit will have approximately the same temperature rise at a particular CFM, while ESP at the CFM will be lower.

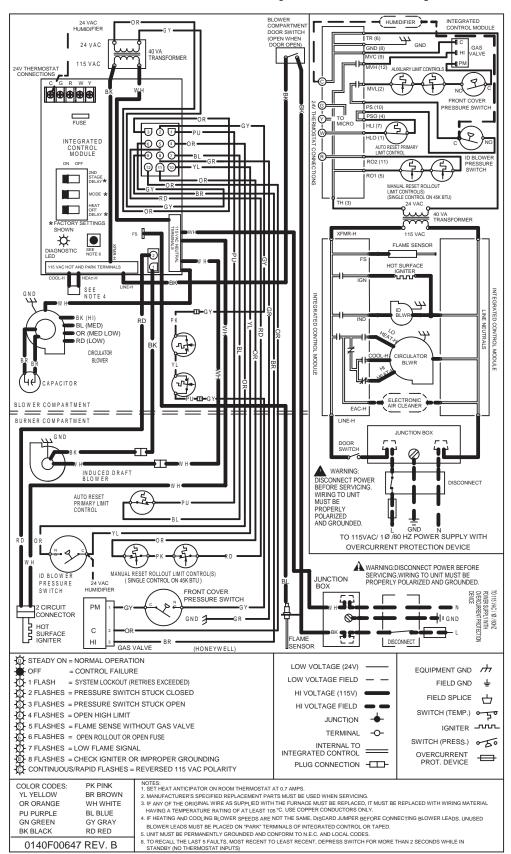
# Blower Performance (cont.)



## Convertible Configuration & Operation



## WFD195 / WFD193 Wiring Diagram (Honeywell Gas Valve)



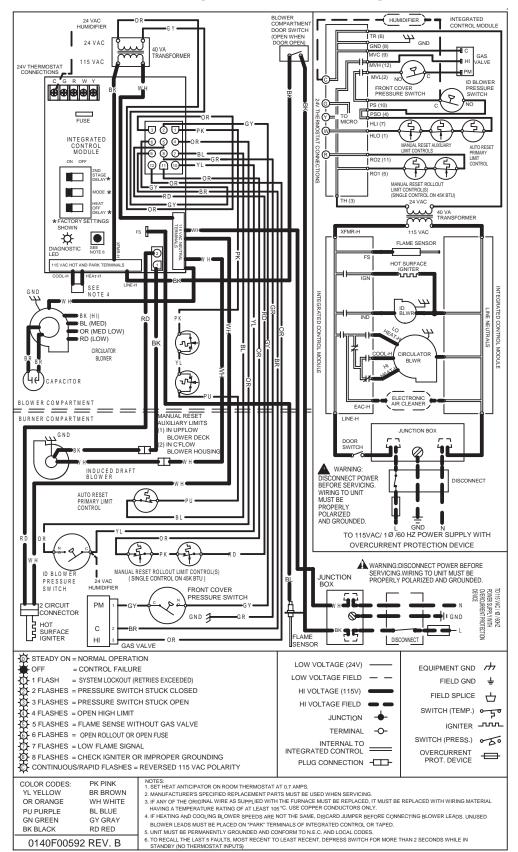
HIGH VOLTAGE!

Disconnect all power before servicing or installing this unit.

personal injury, or death. damage, Multiple power sources may be present. property cause so may 2 Failure

is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

# WFD193 Wiring Diagram (White-Rodgers Gas Valve)



Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

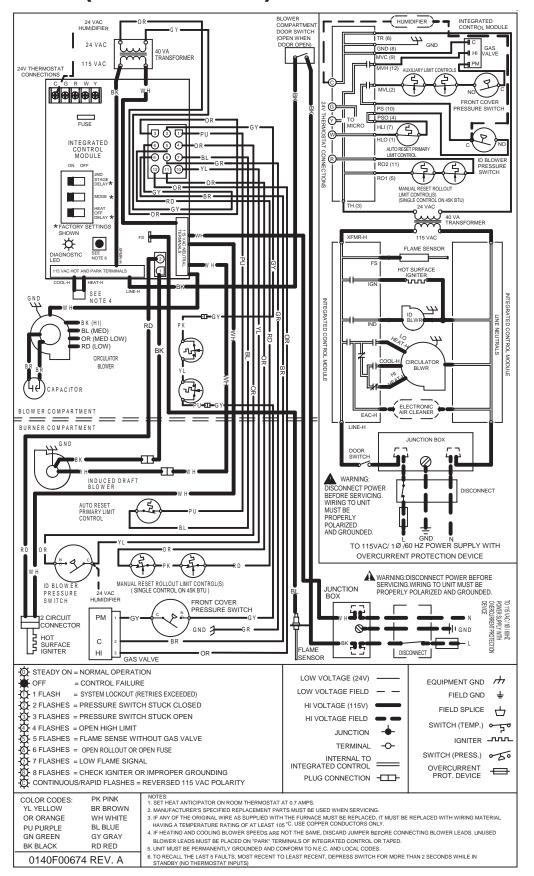
# **HIGH VOLTAGE!**

Disconnect all power before servicing or installing this unit

personal injury, or death cause property damage, Multiple power sources may be present. os op 2

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# WFD195 (White-Rodgers Gas Valve)



# **MARNING**

HIGH VOLTAGE!

Disconnect all power before servicing or installing this unit

Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death

Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

# Notes

# Product Specifications

