

## Electric Furnace

### Features

- Galvanized insulated sheet metal cabinet enclosure
- Can be converted to a duct heater
- Magnetic de-energizing contactors for each element
- Line level auto limit primary safety set @ 165°F (74°C)
- Line level fuse link back-up safety
- Fan interlock control, fan signal proving switch
- Low air flow pressure switch
- Circuit breakers on all units
- Time delay sequencers for a gradual “stepped” power draw (softer start)
- Low voltage terminal strip (24 volt control)
- Specially designed tight cabinet for small duct, high velocity systems
- Single Supply (all units) or dual supply (15 and 20kW)

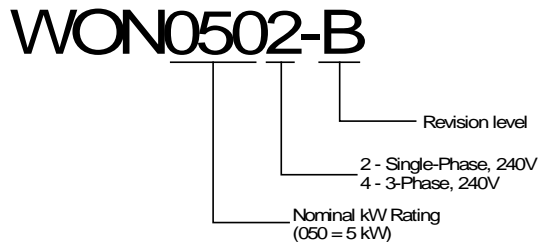
### General

The electric furnaces are designed to provide primary heating or auxiliary heating in a heat pump system. The model numbers, kW, and Unico System match-ups are shown in Table 1 below:

**Table 1. Electric Furnaces**

Model Number	Nominal kW Rating	Unico System Match-up	Min. Airflow, CFM (m³/s)
WON0202-B	2	All sizes	200 (0.10)
WON0502-B	5		250 (0.12)
WON0504-B			300 (0.14)
WON0752-B WON0754-B	7.5		500 (0.24)
WON1002-B WON1004-B	10	2430, 3642 and 4860	600 (0.28)
WON1502-B WON1504-B	15	3642 and 4860	800 (0.38)
WON2002-B	20		

### Specifications



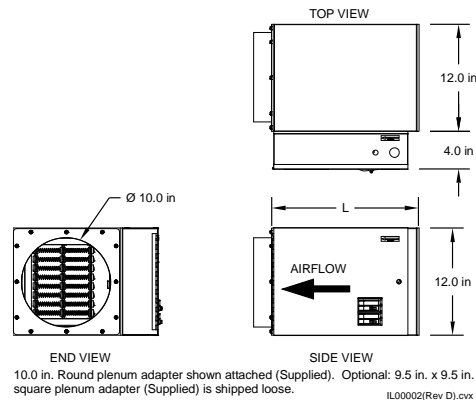
All Unico System furnaces include a 10-inch (254-mm) round plenum adapter and a 9½ × 9½-inch (241 × 241-mm) square plenum adapter.



CONFORMS TO UL STD 181  
CERTIFIED TO  
CAN/ULC STD S110-M86

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Other plenum adapter sizes are available separately. See the electric furnace installation instructions *Bulletin 30-34* for a list of plenum adapter part numbers. See Figure 1 and Table 1 for the dimensions on all furnaces.



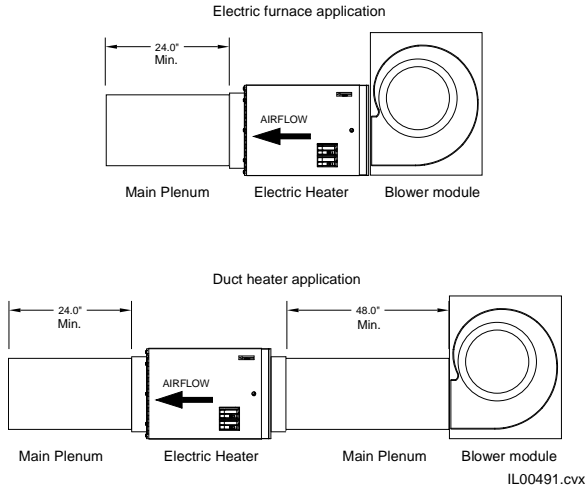
**Figure 1. Electric Furnace dimensions.**

**Table 1. Electric Furnace dimensions & specifications**

Model	L inch	Rated Capacity kW @ 240V	Amperage @ 240V
WON0202-B	13	2.0	8.30
WON0502-B	13	4.8	20.00
WON0752-B	16	7.2	31.25
WON1002-B	16	9.6	40.00
WON1502-B	21	14.4	60.00
WON2002-B	24	19.2	80.00
WON0504-B	21	4.8	11.54
WON0754-B	21	7.2	18.04
WON1004-B	21	9.6	23.09
WON1504-B	21	14.4	34.64

The electric duct furnace is approved for attic, closet, or alcove installation, with “0” clearance to combustible materials. It can

be mounted either directly to the blower module or in the main duct. See Figure 2.



**Figure 2. Minimum duct clearance for electric heater applications.**

Allow at least 25-inches (610-mm) in front of the control for servicing. For high humidity applications and other important information, see the electric furnace installation instructions *Bulletin 30-34*.

For limits and set points, see Table 2. For further specifications,

**Table 3. Furnace Specifications**

Model	Nom. Capacity, kW	Rated Output*, kW	Power Supply	No. of Supply Circuits	No. Steps	Control Power (VA)	Overall Dimensions, inch			
WON0202-B	2	2.0	1 ph – 60 Hz – 240V	1	1	20.5	12 H x 16 W x 13 L			
WON0502-B	5	4.8	1 ph – 60 Hz – 240V	1	1	20.5	12 H x 16 W x 13 L			
WON0752-B	7.5	7.5	1 ph – 60 Hz – 240V	1	2	31.0	12 H x 16 W x 16 L			
WON1002-B	10	9.6	1 ph – 60 Hz – 240V	1	2	31.0	12 H x 16 W x 16 L			
WON1502-B	15	14.4	1 ph – 60 Hz – 240V	1 or 2	3	42.5	12 H x 16 W x 21 L			
WON2002-B	20	19.2	1 ph – 60 Hz – 240V	1 or 2	3	42.5	12 H x 16 W x 24 L			
WON0504-B	5	4.8	3 ph – 60 Hz – 240V	1	1	20.5	12 H x 16 W x 21 L			
WON0754-B	7.5	7.5	3 ph – 60 Hz – 240V	1	1	20.5	12 H x 16 W x 21 L			
WON1004-B	10	10	3 ph – 60 Hz – 240V	1	1	20.5	12 H x 16 W x 21 L			
WON1504-B	15	15	3 ph – 60 Hz – 240V	1	2	31.0	12 H x 16 W x 21 L			
Model	Single Supply					Dual Supply (1 Circuit/ 2 Circuit)				
	Heater Amps	Max. Fan Amps	Min. Circuit Ampacity	Max. Overcurrent Protection †	Req'd Wire Size ††	Heater Amps	Max. Fan Amps	Min. Circuit Ampacity	Max. Overcurrent Protection	Req'd Wire Size
WON0202-B	8.3	6.5	18.5	20	12					
WON0502-B	20	6.5	33.1	35	10					
WON0752-B	31.25	6.5	47.2	50	8					
WON1002-B	40	6.5	58.1	60	6					
WON1502-B	60	6.5	83.1	90	3	40/20	---/6.5	50/33.1	50/35	6/8
WON2002-B	80	6.5	108.1	110	2	40/40	6.5/---	58.1/50	60/50	6/6
WON0504-B	11.54	6.5	22.6	25	10					
WON0754-B	18.04	6.5	30.7	35	8					
WON1004-B	23.09	6.5	37	40	8					
WON1504-B	34.6	6.5	51.4	60	6					

\*at rated voltage  
 † FUSE or "HACR TYPE" Circuit Breaker  
 †† Based on 75°C copper. For other wire types reference NEC

see Table 3. The 15 and 20 kW single phase furnaces contain two supply circuits. Supply wires can be run separately for each circuit, which is the default configuration. Using two supply circuits allows the use of smaller gauge wires. In some cases, it is necessary to use smaller gauge wire to comply with building codes that limit the maximum wire size that can be used for a single circuit. The required wire size for each electric furnace is shown in Table 3. The two circuits can also be joined together with a jumper bar. This is included with all dual circuit furnaces. The jumper bar allows the use of one pair of larger gauge wire, as opposed to two pairs of smaller gauge wire.

Note: Circuit breakers installed in this device are for short-circuit protection of internal wiring and to serve as a service disconnect. Circuit breakers installed within this device DO NOT provide over current protection of the supply wiring.

Specifications	
Maximum Outlet Temperature, °F (°C)	160 (70)
Maximum External Static Pressure, in. wc (Pa)	3 (745)
Auto Limit set point, °F (°C)	165 (74)
Fuse Link Setting, °F (°C)	250 (121)

**Table 2. Limits and set points**