



WALL MOUNT, VARIABLE SPEED, ECM-BASED

AIR HANDLER WITH INTERNAL EEV,

COMMUNICATING FOR SIDE DISCHARGE

MATCHUP 1 TO 3 TONS

Contents

Nomenclature	2
Heat Kit Nomenclature.....	2
Product Specifications	3
Dimensions	4
Airflow Data	6
Wiring Diagram	7
Accessories	9



R32

Product Features

- Electronic Expansion Valve (EEV) for cooling and heat pump applications
 - Optimized for use with R-32 refrigerant AHRI certified; ETL listed
 - Factory installed R-32 sensor designed for the lifespan of the coil
 - Variable-speed ECM blower motor provides constant CFM over a wide range of static pressure conditions independent of duct system
 - Compatible with Goodman brand smart thermostat and other Daikin brand communicating thermostats
 - Aluminum tubing coils on all models
 - Cabinet air leakage less than 2.0% at 1.0 inch H₂O when tested in accordance with ASHRAE standard 193
 - Cabinet air leakage less than 1.4% at 0.5 inch H₂O when tested in accordance with ASHRAE standard 193
 - UL 60335 2-40 Compliant
- Fault recall of six most recent faults
 - Thermoplastic drain pan with bottom primary and secondary drain connections
 - Built-in filter rack (filter included)
 - Large chassis (2½- and 3-ton units) – front return only
 - Small chassis (1, 1½ and 2 ton units) – front or bottom return
 - Wall-hanging bracket provided
 - Field installed 3 kW electric heater kit option available for large chassis only



* Complete warranty details available from your local dealer or at www.goodmanmfg.com. To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec. The duration of warranty coverage in Texas and Florida differs in some cases.

	A	W	V	E	24	S	U	1	3	00	A	A	
	1	2	3	4	5,6	7	8	9	10	11,12	13	14	
Product													Minor Rev
A Corporate Air Handler													Major Revision
D Daikin Air Handler													
Application													Factory Installed Electric Heat KW
C Ceiling Mount													00 - No Electric Heat
W Wall Mount													Refrigerant
													3 - R32
Motor													Electrical
S MS-ECM													1 208/230 V, 1 Phase, 60 Hz
V VS-ECM Communicating													
Expansion Device													Cabinet
E Electronic Expansion Valve													N - Uncased
F Flowrator													P - Painted
T Thermal Expansion Valve													U - Unpainted
Nominal Capacity Range													Cabinet Width
12 - 1.0 Ton													AC* Series
30 - 2.5 Tons													AM* Series
18 - 1.5 Tons													AW* Series
36 - 3.0 Tons													M - 43.25"
24 - 2.0 Tons													B - 17.5"
													S - 20.2"
													L - 49.25"
													C - 21.0"
													L - 24.0"
													D - 24.5"

	H	K	T	W	N	0	3	L	1	
	1	2	3	4	5	6	7	8	9	
Unit Type										Electrical
HKTW - Electric heater										A - Single phase 208 V
Kit for Wall Mount Air handlers										B - Single phase 240 V
Service Disconnect										1 - Single phase 208/240 V
D - Service disconnect										3 - Three phase 208/240 V
N - No service disconnect										Cabinet Size
										X - All Cabinets
										S - Small Cabinet
										L - Large Cabinet
										Heating Capacity @ 240 V
										3 3.0 kW
										10 9.6 kW
										5 4.8 kW
										15 14.4 kW
										6 6.0 kW
										19 19.2 kW with 170°F limit
										20 19.2 kW with 160°F limit
										8 8.0 kW
										25 24.0 kW

Note: 20X3 = 18.0 kW with 160°F limit

	AWVE12 SU1300	AWVE18 SU1300	AWVE24 SU1300	AWVE30 LU1300	AWVE36 LU1300
NOMINAL RATINGS					
Cooling (BTU/h)	12000	18000	24000	30000	36000
Heating (BTU/h)	12000	18000	24000	30000	36000
BLOWER					
Diameter	10	10	10	10	10
Width	6	6	6	8	8
COIL CONNECTIONS					
Liquid	3/8"	3/8"	3/8"	3/8"	3/8"
Suction	5/8"	5/8"	5/8"	3/4"	3/4"
Coil Drain Connection FPT	3/4"	3/4"	3/4"	3/4"	3/4"
ELECTRICAL DATA					
Voltage	208/230	208/230	208/230	208/230	208/230
Minimum Circuit Ampacity	2.6/2.6	3.5/3.5	4.9/4.9	4.9/4.9	4.9/4.9
Max. Overcurrent Device (Amps)	15/15	15/15	15/15	15/15	15/15
Minimum VAC	197	197	197	197	197
Maximum VAC	253	253	253	253	253
BLOWER MOTOR					
Full Load Amps (FLA)	2.1	2.8	3.9	3.9	3.9
Horsepower (HP)	1/4	1/3	1/2	1/2	1/2
SHIP WEIGHT (LBS)	77	77	80	94	94

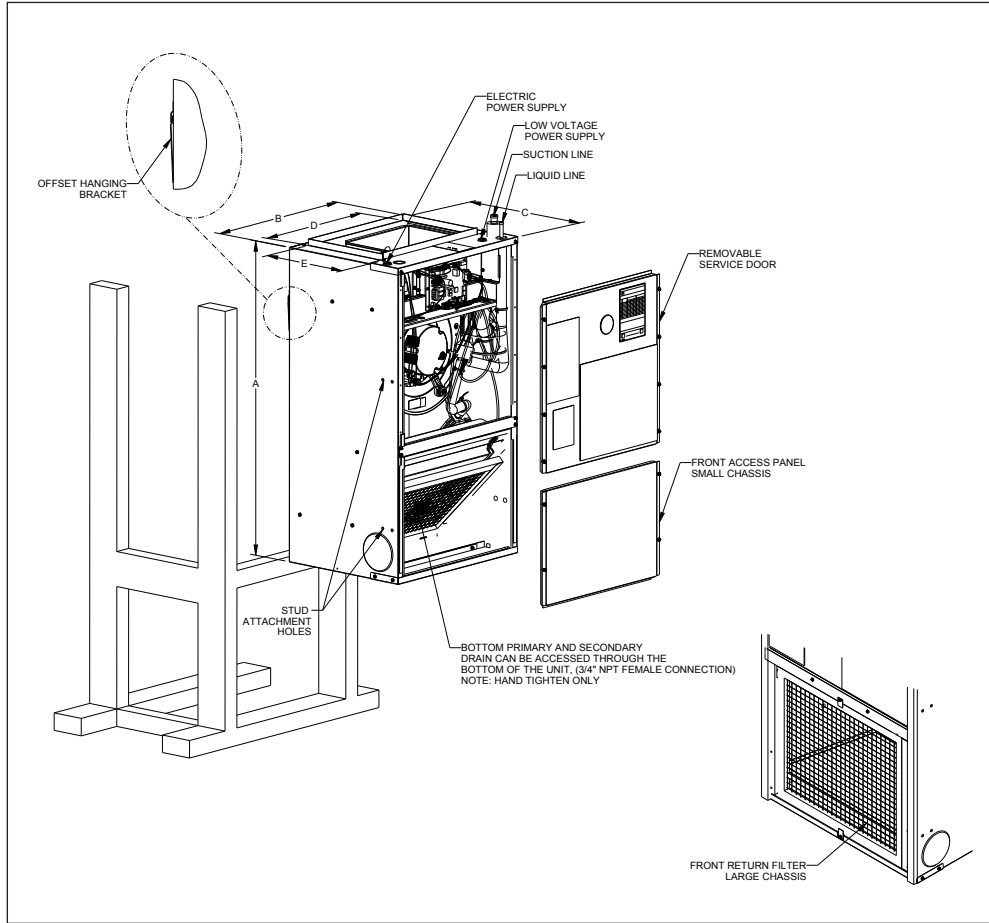
MODELS	CIRCUIT 1 (208V/240V)		
	HEATER AMPS	MCA ¹	MOP ²
AWVE30LU1300	0.0/0.0	4.9/4.9	15/15
HKTWN03L1	10.8/12.5	18.4/20.5	20/25
AWVE36LU1300	0.0/0.0	4.9/4.9	15/15
HKTWN03L1	10.8/12.5	18.4/20.5	20/25

¹ Minimum Circuit Ampacity (Heater Amps + Motor Amps) X 1.25

² Maximum Overcurrent Protection = 2.25 X Motor Amps + Heater Amps

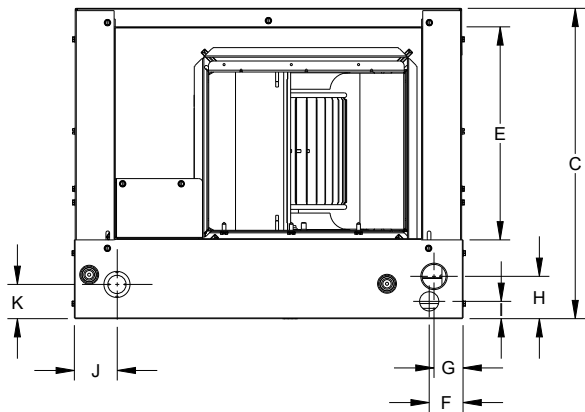
DIMENSIONS

Note - Once installed, top of unit must be level or slightly tilted back to ensure proper condensate drainage.

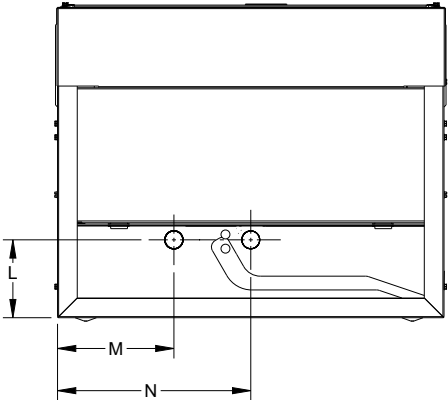
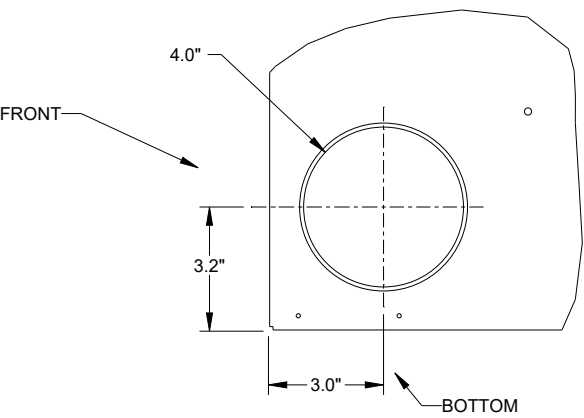
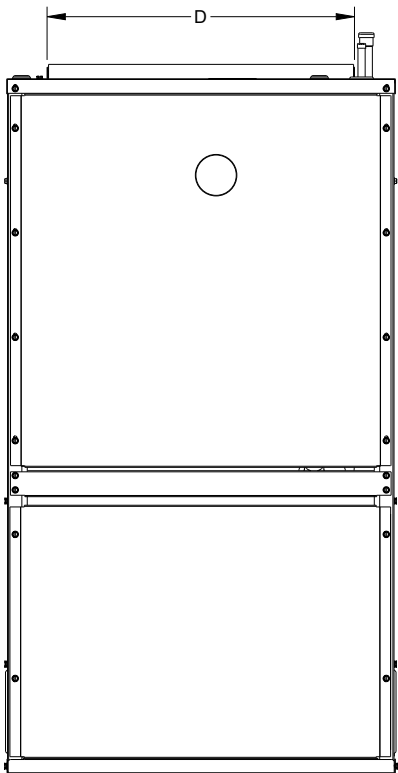


SMALL CHASSIS (AWVE12,18,24)	
A	36"
B	20 ³ / ₁₆ "
C	16 ¹ / ₈ "
D	16"
E	11"
Filter	14" X 18" x 1"

LARGE CHASSIS (AWVE30,36)	
A	36"
B	24"
C	21"
D	19 ⁷ / ₈ "
E	15 ⁷ / ₈ "
Filter	18" X 20" x 1"



TOP VIEW



BOTTOM VIEW

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
AWVE 12,18,24	36"	20 $\frac{1}{4}$ "	16 $\frac{5}{8}$ "	16"	11"	1 $\frac{3}{4}$ "	1 $\frac{1}{2}$ "	2 $\frac{1}{4}$ "	$\frac{7}{8}$ "	1 $\frac{1}{8}$ "	1 $\frac{3}{4}$ "	4"	6"	10"
AWVE 30,36	36"	24"	21"	19 $\frac{5}{8}$ "	16"	4 $\frac{1}{8}$ "	1 $\frac{1}{2}$ "	1 $\frac{3}{4}$ "	2"	1 $\frac{1}{4}$ "	2 $\frac{3}{8}$ "	4"	8"	12"

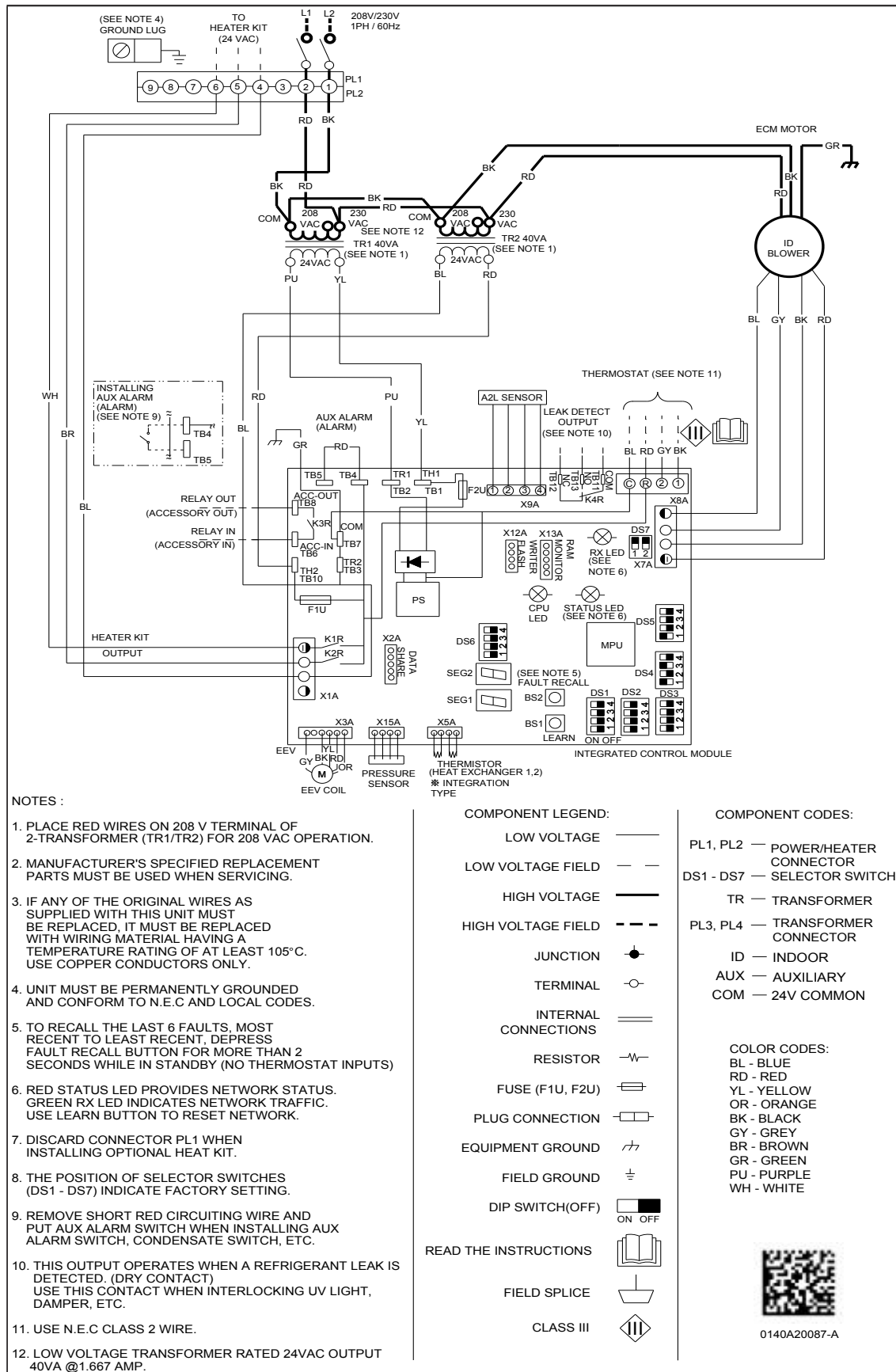
RATED INDOOR AIRFLOW RATE [SCFM]

ID UNIT	OD UNIT	STATIC PRESSURE (IN. WC)							
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
AWVE12 SU1300	DH6VSA121M / GZV6VSA121M	450	450	450	450	450	450	450	450
AWVE18 SU1300	DH6VSA181M / GZV6VSA181M	600	600	600	600	600	600	600	600
AWVE24 SU1300	DH6VSA241M / GZV6VSA241M	830	830	830	830	830	830	830	830
AWVE30 LU1300	DH6VSA301M */ GZV6VSA301M *	1000	1000	1000	1000	1000	1000	1000	1000
AWVE36 LU1300	DH6VSA361M */ GZV6VSA361M *	1150	1150	1150	1150	1150	1150	1150	1150

* The chart is for information only. For satisfactory operation, external static pressure must not exceed 0.3 wc. CFM values are based on 0% trim, refer to outdoor spec sheet for higher/lower trim values.

* Unit may provide different SCFM during electrical heater operation. See IO manual for the airflow rate.

AWVE30LU13**, AWVE36LU13** WIRING DIAGRAM



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.

WARNING

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

MODEL	ITEM #	DESCRIPTION
AWVE12,18,24	Wad-1	Wall access door
AWVE30,36	Wad-2	Wall access door

[illegible]

[illegible]

[illegible]