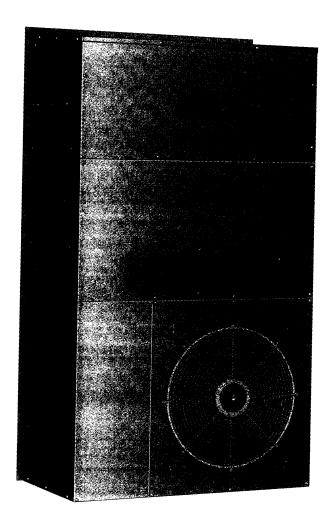


## W High Efficiency Series

### Wallmount Air Conditioners









RATED IN ACCORDANCE WITH ARI STANDARD 210 CERTIFICATION APPLIES ONLY WHEN USED WITH PROPER COMPONENTS AS LISTED WITH ARI.

#### PERFORMANCE:

Efficiency rating of up to 10.20 SEER

Cooling capacities from 22,400 to 61,000

Electric heat available from 5 to 22.5 kW

208–230 volt, single- or three-phase, and 460 volt, three-phase, models available

ARI performance certified, UL and C-UL safety certified

#### **FEATURES:**

18- and 20-gauge G90 galvanized steel construction, protected by a baked-on polyester exterior finish

Quiet, horizontal outdoor fan discharge, protected by a polyester-coated guard

All indoor coils are four rows deep to improve dehumidification; all refrigerant coils are constructed with long-life, rifled copper tubing, enhanced aluminum fin

Full-length side mounting brackets, top rain flashing, and sloped rain hood built into cabinet; bottom mounting bracket provided to assist installation

Built-in condensate drain trap

Permanently-lubricated PSC indoor and outdoor motors; multi-speed indoor blower motor for ducted or free blow applications

Built-in circuit breakers with lockable outside access door on all models (disconnect on 460 volt models)

Large, factory-installed filter area for improved filtration; 1" disposable (standard), 2" pleated (optional)

Barometric damper with washable aluminum outside air filter allows up to 40% fresh air, standard on all models

Optional, modulating economizer with washable aluminum filter and built-in relief allows up to 100% fresh air

Plug-in options and heater receptacle minimize field wiring of control options and electric heaters, standard on all models

		MODELS	SPECIFICAT	IONS W24 TI	HROUGH W	36			
MODEL W	24-1	30-1	36-1	24-3	30-3	36-3	30-4	36-4	
COOLING CAPACITY ①	22,400	30,000	35,000	22,400	30,000	35.000	30,000	35,000	
SEER ①	10.20	10.20	10.00	10.20	10.20	10.00	10.00	10.00	
VOLTS/PHASE/HERTZ		208-230 / 1 / 60			208-230 / 3 / 60		460 / 3 / 60		
COMPRESSOR DATA		•							
TYPE				RE	CIPROCATING				
RATED LOAD AMPS	9.8	13.7	15.2	6.7	9.0	9.6	4.3	4.6	
LOCK ROTOR AMPS	61	75	82	51	68	70	34	33	
CRANKCASE HEATER			<del></del>	OPTIONAL	INTERNAL 40 W	ATT PTC		1 33	
FAN DATA							· · · · · · · · · · · · · · · · · · ·		
MOTOR HP/RPM			1	/5 / 1075			1/4 1	1075	
FLA				1.5			.9		
FAN BLADE DIA/CFM					20" - 2600			<u></u>	
BLOWER DATA									
MOTOR HP/RPM	1/6 / 1075	1/4 / 1075	1/3 / 1075	1/6 / 1075	1/4 / 1075	1/3 / 1075	1/4 / 1075	3/4 / 1075	
FLA	1.4	1.8	2.6	1.4	1.8	2.6	.9	2.0	
RATED CFM/ESP 2	800 / .23	1000 / .34	1200 / .23	800 / .23	1000 / .34	1200 / .23	1000 / .35	1200 / .20	
VENTILATION PACKAGES			·• · · · · · · · · · · · · · · · · · ·			<u> </u>		12007120	
BAROMETRIC DAMPER		ADJUST	ABLE BARO	METRIC DAMP	ER STANDAR	D ON ALL	MODELS		
DAMPER FILTER					ALUMINUM 7" X				
MAX FRESH AIR CFM/% ③	277 / 34%	375 / 38%	430 / 36%	200 / 25%	375 / 38%	430 / 36%	375 / 38%	430 / 36%	
ECONOMIZER (OPTIONAL)		MODULAT	ING ECONO	MIZER SYSTE	M WITH BUIL	T IN RELIE		10070070	
FRESH AIR RANGE		-			) - 100%				
DAMPER FILTER				WASHABLE AL	UMINUM 7" X 29	)" X 1"			
RETURN AIR FILTER	16 X 25 X 1				6" X 16" X 1"				
WEIGHT SHIPPING/NET	343 / 307	356 / 320	364 / 328	341 / 305	354 / 318	362 / 326	354 / 318	362 / 326	

MODEL W	42-1	48-1	60-1	42-3	48-3	60-3	42-4	48-4	60-4
COOLING CAPACITY ①	41,000	47,000	60,000	41,000	47,000	60,000	41,000	47,000	60,000
SEER ①	10.00	10.20	10.20	10.00	10.20	10.20	10.00	10.00	10.00
VOLTS/PHASE/HERTZ		208-230 / 1 / 6	0	ļ	208-230 / 3	/ 60	10.00	460 / 3 / 6	
COMPRESSOR DATA							<del></del>		
TYPE	RECIPROCATING	SCI	ROLL	RECIPROCATING	SC	ROLL	RECIPROCATING	SC	ROLL
RATED LOAD AMPS	18.3	25.3	30.8	11.1	14.6	18.6	5.6	7.3	8.7
LOCK ROTOR AMPS	105	131	175	85	91	128	42	46	63
CRANKCASE HEATER	40 WATT PTC	NO	ONE	40 WATT PTC	NO	ONE	40 WATT PTC	N	ONE
FAN DATA									
MOTOR HP/RPM				1/4 / 1075				1/4 1075	
FLA		1.8							
FAN BLADE DIA/CFM	22" - 3800								
BLOWER DATA									
MOTOR HP/RPM	1/2 / 10	1/2 / 1075 3/4 / 1075				3/4 / 1075		3/4 / 1075	
FLA	3.	5	4.0	3	.5	4.0		2.0	
RATED CFM/ESP ②	1350/.5	1550/.5	1750/.5	1350/.5	1550/.5	1750/.5	1350/.6	1550/.6	1750/.5
VENTILATION PACKAGES							·		1
BAROMETRIC DAMPER		ADJUS	STABLE BAI	ROMETRIC D	AMPER S	TANDARD C	N ALL MOD	ELS	
DAMPER FILTER					E ALUMINUM				
MAX FRESH AIR CFM/% 3	535 / 40%	550 / .35%	590 / 33%	535 / 40%	550 / 35%	590 / 33%	535 / 40%	550 / 35%	590 / 35%
ECONOMIZER (OPTIONAL)		MODULA	TING ECON	NOMIZER SY	STEM WIT	H BUILT IN	RELIEF DA	MPER	7007
FRESH AIR RANGE	0 - 100%								
DAMPER FILTER				WASHAB	LE ALUMINUI	VI 7" X 29" X 1			
RETURN AIR FILTER					(2) 20" X 20"				
WEIGHT SHIPPING/NET	443 / 402	455 / 414	497 / 456	441 / 400	453 / 412	495 / 454	441 / 400	453 / 412	495 / 454

① Rated in accordance with DOE and ARI test standards. ② Includes factory installed filters and wet coils ③ CFM with standard return air filter grille in place. All specifications contained in this brochure are subject to change without notice.

Maximum size fuse or HACR-type circuit breaker for field wiring protection.

Minimum wire ampacity values are used for sizing field power conductors. Refer to the National Electrical Code (latest version). Article 310, for sizing conductors. NOTE: When more than three current-carrying conductors are in the same conduit, the conductor's ampacity must be derated. See Note 8 of Table 310 for ampacity adjustment factors

Based on 75° C. copper wire with no more than three current-carrying conductors in the same conduit. All wiring must conform to the National Electrical Code and all local codes

UNIT	A.R.I.	CERTIFIED I	RATING		TEMPERATURES IN (°F.) COOLING DATA IN M.B.T.U.H.								
		BTUH	SEER	CFM	80	85	90	95	100	105	110	115	
140.40=.	TOTAL	22,400	10.2	800	24.6	24.0	23.4	22.6	22.0	21.2	20.7	20.1	
W24CF1	SENSIBLE				17.0	16.7	16.5	16.3	16.0	15.6	15.1	14.8	
	WATTS				2225	2303	2382	2460	2538	2617	2695	2774	
	TOTAL	30,000	10.2	1000	33.5	32.5	31.4	30.4	29.4	28.3	27.3	26.3	
W30CF1	SENSIBLE				22.6	22.3	21.9	21.5	21.1	20.6	20.1	19.7	
	WATTS				2921	3019	3118	3216	3314	3413	3511	3610	
W36CF1	TOTAL	35,000	10.0	1200	38.0	37.0	36.0	35.0	34.1	33.1	32.2	31.2	
	SENSIBLE				26.3	26.0	25.7	25.3	25.0	24.5	24.1	23.8	
	WATTS				3454	3576	3699	3821	3943	4066	4180	4300	
	TOTAL	41,000	10.0	1350	45.5	44.0	42.7	41.4	40.1	38.0	37.5	36.2	
W42C61	SENSIBLE				30.8	30.3	29.9	29.4	29.8	28.3	27.8	27.2	
	WATTS				4123	4259	4395	4531	4667	4800	4935	5070	
	TOTAL	47,000	10.0	1650	51.2	49.8	48.4	47.0	45.8	44.6	43.4	42.2	
W48CS1	SENSIBLE				35.2	34.9	34.5	34.2	33.8	33.5	33.1	32.8	
	WATTS			<del></del>	4657	4929	5200	5472	5743	6015	6286	6558	
	TOTAL	60,000	10.2	1750	65.0	63.7	62.4	60.5	59.7	58.4	57.0	55.7	
W60CS1	SENSIBLE			<del> </del>	43.0	42.6	42.3	41.9	41.6	41.1	40.6	40.1	
	WATTS				5818	6073	6327	6581	6835	7089	7342	7590	

Cooling performance based on  $80^{\rm o}$  F / DB 67° WB indoor ambient with 0% fresh air. Rated in accordance with A.R.I. and D.O.E. Test Standards

	BTU*	*	SHIPPING					_	API	PROVE	D UNIT	AND H	EATER	СОМВ	INATIO	N				
MODEL	OUTPUT	AMPS	MPS WEIGHT	W-24-1	30-1	36-1	42-1	48-1	60-1	24-3	30-3	36-3	42-3	48-3	60-3	30-4	36-4	42-4	48-4	60-4
EDA05B1	17,062	20.8	15	Х	Х	Х	Х	Х	Х						<b>†</b>					-
EDA07B1	25,594	31.2	16	Х	Х	Х	Х	Х	Х								<u> </u>	<u> </u>		-
EDA10B1	34,125	41.6	16	Х	Х	Х	X	Х	Х											
EDA15B1	51,187	62.5	18		Х	Х	X	Х	Х											├─
EDH20B1	68,250	83.3	20				X	X	х	_					-			ļ		├─
EDH11B3	38,391	27.0	20							Х	Х	Х	Х	X	X					<del> </del>
EDH15B3	51,187	36.1	18								X	X	X	X	X					<del>                                     </del>
EDH22B3	76,781	54.1	23												X	-				<u> </u>
EDH09D4	30,712	10.8	18												_^_	Х	Х	Х	X	
EDH15D4	51,100	18.0	18													X				X
EDH18D4	61,425	21.6	23					-									X	X	X	X

<sup>\*</sup>BTU output and current based on 240 volts operation for 208-230 volts models and 480 volts for 460 volts models.

\*BTU Multiplier - For 230 volts operation multiply the listed output by .92, for 208 volts operation multiply by .75 for 460 volts operation multiply by .92.

\*Current Multiplier - For 230 volts operation multiply the listed amps by .96. for 208 operation multiply by .87 for 460 volts operation multiply by .96.

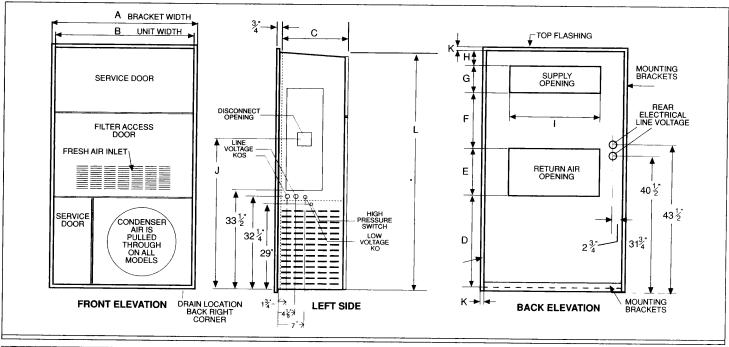
			IND	OOR BLOW	ER PERFC	RMANCE			
			CF	M AT VARIOUS	DUCT STATIC	S IN " WC			
UNIT MODEL	VOLTS	.1	.2	.3	.4	.5	.6	.7	.8
W24 HI/MED/LOW	208 230	775/674/586 900/755/673	742/642/588 850/730/645	696/518/567 780/683/632	659/567/528 704/623/603	601/480/405 650/572/486	476/405/330 553/461/411		
W30 HI/MED/LOW	208 230	983/640/- 1230/861/-	1003/654/570 1120/818/715	963/645/560 1080/800/732	910/640/565 975/795/724	845/521/554 920/728/672	743/576/511 807/681/616		
W36 HI/MED/LOW	208 230	1256/1195/1106 1340/1251/1159	1176/1119/1030 1280/1187/1095	1081/1038/940 1200/1075/985	997/979/895 1035/1028/946	937/883/820 957/949/875	814/765/720 838/814/775		
W42 HI/MED/LOW	208 230	1500/1177/– 1629/1373/–	1481/1169/– 1581/1345/–	1428/1152/890 1547/1309/1028	1400/1135/870 1481/1270/1020	1338/1110/845 1428/1233/990	1264/1065/805 1352/1169/940	1209/990/730 1264/1100/865	118/900/660 1177/1000/745
W48 HI/MED/LOW	208 230	1615/–/– 1837/–/–	1605/1250/936 1788/1470/1095	1595/1235/914 1723/1440/1086	1555/1180/904 1700/1366/1068	1511/1175/883 1626/1330/1050	1447/1130/850 1523/1295/985	1345/1077/808 1450/1210/936	1195/975/747 1265/1068/867
W60 HI/LOW	208 230	1990/1707 2105/1902	1942/1644 2065/1850	1877/1630 1985/1790	1820/1610 1907/1730	1740/1560 1825/1673	1650/1473 1740/1567	1567/1395 1620/1485	1415/1225 1505/1345
W36 HI/LOW	460	1249/1202	1180/1103	1073/1032	975/925	851/827	727/716	602/616	480/457
W42 HI/LOW	460	1748/1300	1700/1292	1650/1263	1605/1292	1548/1255	1490/1232	1395/1150	1300/1093
W48 HI/LOW	460	2023/1400	1966/1393	1910/1379	1826/1364	1762/1317	1654/1270	1540/1179	1441/1088
W60 HI/LOW	460	2050/1500	2023/1493	1953/1461	1884/1413	1788/1363	1692/1314	1596/1218	1500/1122

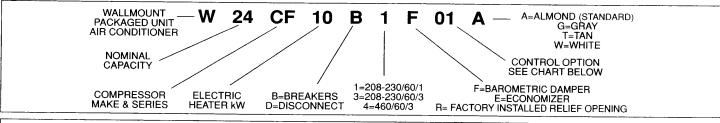
Includes factory-installed filter with dry coil. For wet coil performance, deduct approximately .1" from available static pressure.

		ELECTRI	C HEATE	R PRESS	URE LOS	SS				
CFM AT VARIOUS DUCT STATICS IN " WC										
HEATER MODEL	ED-5	ED-7.5	ED-10	ED-11	ED-15	ED-20	ED-22	ED-9	ED-18	
LOSS AT 600 CFM	.03	.04	.04	NA	NA	NA	NA	NA	NA	
LOSS AT 800 CFM	.03	.04	.04	.05	.05	NA	NA	NA	NA.	
LOSS AT 1000 CFM	.04	.06	.06	.07	.07	.08	NA	.06	NA.	
LOSS AT 1200 CFM	.05	.06	.06	.08	.08	.09	.12	.07	.12	
LOSS AT 1400 CFM	.05	.06	.06	.08	.08	.10	.13	.08	.13	
LOSS AT 1600 CFM	.06	.07	.07	.10	.10	.13	.20	.10	.20	
LOSS AT 1800 CFM	.07	.13	.13	.16	.16	.19	.31	.14	.31	

When heater is used, deduct the above pressure loss from the available unit static pressure.

			ι	JNIT D	IMENS	ONS (I	NCHES	S)				
UNIT MODEL	Α	В	С	D	Е	F	G	Н		J	К	L
W24	421/4	401/4	193/4	271/4	117/8	20 <sup>3</sup> / <sub>4</sub>	<b>7</b> <sup>7</sup> /8	21/4	197/8	44	1	701/2
W30, 36	421/4	401/4	193/4	28	13 <sup>7</sup> /8	18	77/8	21/4	277/8	44	1	701/2
W42, 48, 60	463/4	443/4	24	26	15 <sup>7</sup> /8	30	97/8	21/4	297/8	44	1	841/2





MODULE NUMBER	HIGH PRESSURE SWITCH	LOW PRESSURE SWITCH 1	COMPRESSOR TIME DELAY RELAY	LOW AMBIENT CONTROL 2	ALARM RELAY 3
01	X				
02		Х			
03			X		
04				X	
06					X
07	X	X			
08		X		X	
09	X	X		X	
10	X	X			Y
11	X	X		X	X

1 Low pressure switch includes an adjustable timed bypass relay and lock-out relay.

2 Low ambient control is fan cycling type for cooling operation down to 0°F.

3 Alarm relay provides a set of dry points to be connected to an alarm system. Includes a fire thermostat.

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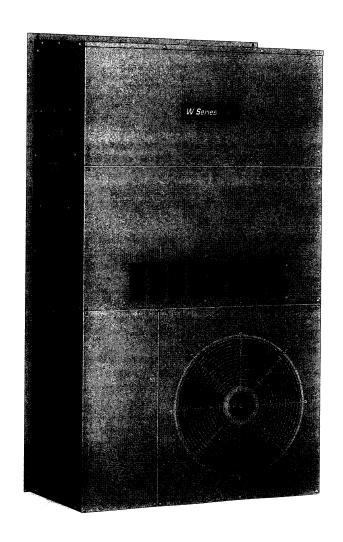
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## **INSTRUCTIONS FOR:**

## INSTALLATION OPERATION MAINTENANCE

# W SERIES WALLMOUNTED AIR CONDITIONING UNIT



**EME 99D** 

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### **CONGRATULATIONS**

You should look forward to the utmost in cooling comfort with the heating and cooling system installed in your home or business.

We constantly try to improve the quality of our products consistent with the price at which the product is sold. We believe of products represent the best possible value available.

This equipment has been built with care and undergoes several individual inspections. Finally, each unit is run and tested in our plant.

After taking all possible steps to insure the quality of our products, we make every effort to sell our products through qualified heating and cooling dealers or contractors.

Satisfactory air-conditioning depends greatly on the quality of the installation. Proper installation will give you years of comfort and dependable operation.

Your installation dealer or contractor should return the factory portions of the LIMITED WARRANTY CARD with the checklist properly executed, to confirm the date of installation. You should check to make certain that this has been accomplished. Failure to return the warranty card could result in the warranty period beginning at the date of the manufacture, instead of the date of the manufacture.

We have noted that many people do not understand the limited warranty. Please read your copy carefully - it is explicit and points out exactly what you are entitled to expect.

## YOU HAVE A MAJOR INVESTMENT IN A FINE PIECE OF EQUIPMENT. KEEP YOUR INVESTMENT SOUND.

Only the highest quality components are used in the construction of your unit. With proper maintenance your system should provide years of economical trouble-free service.

Your unit is supplied with high quality copper tube and enhanced aluminum finned coils for high heat transfer efficiency and long life. The unit cabinet is constructed of G-90 galvanized steel with all exterior surfaces finished with a baked on polyester coans. In these will provide excellent corrosion protection in most applications. However, if the unit is installed in an area with high air pollution such as near an industrial plant or on the sea coast, additional coating should be considered to extend the life of the