

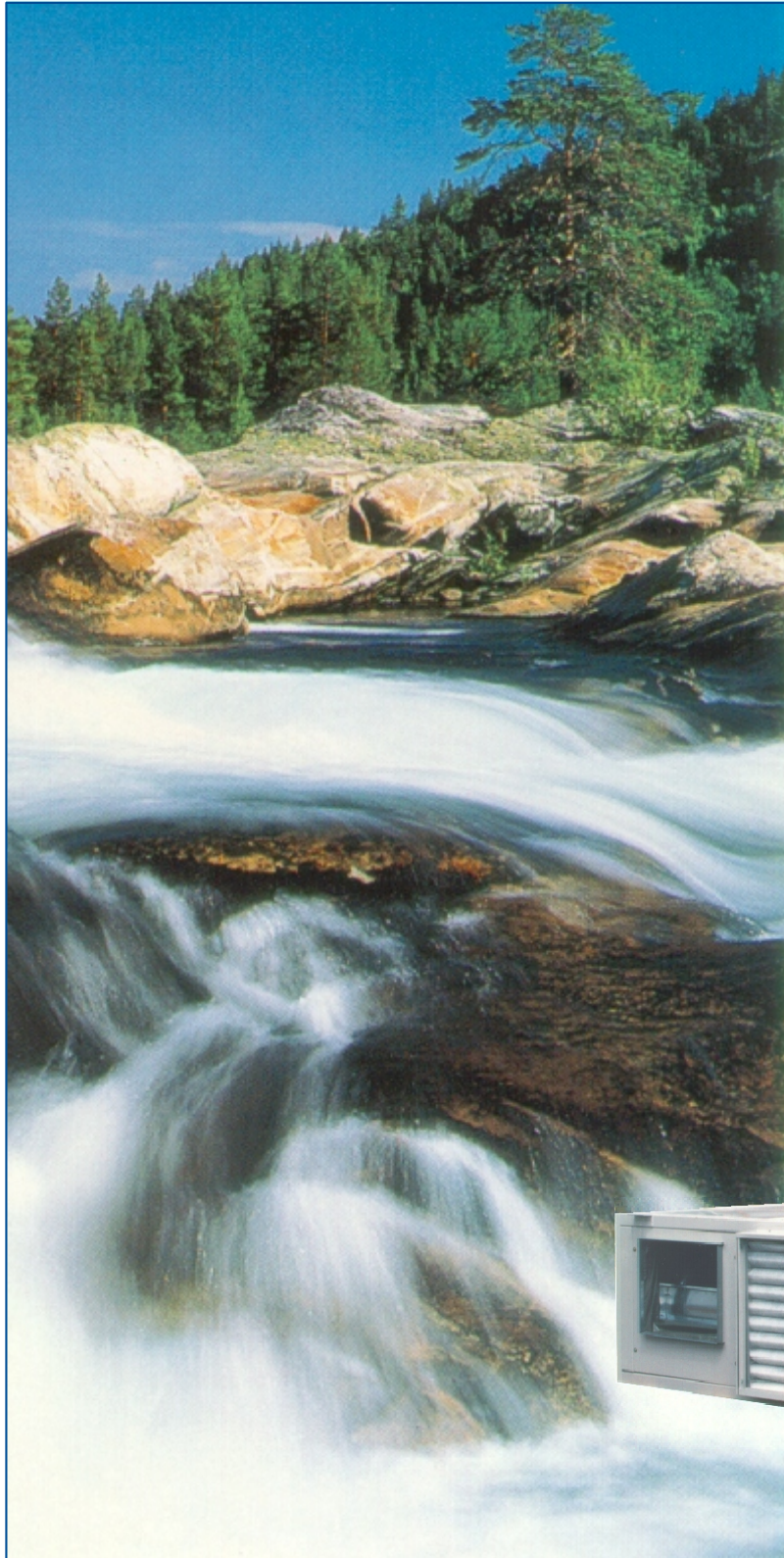
# DUNHAM-BUSH®

*Products That Perform...By People Who Care*

FORM NO: MS0207C

## HORIZONTAL WATER-COOLED SINGLE PACKAGED AIR CONDITIONER

**50 Hz**



### Features:

- Compact Design
- Reliable Performance
- Application Flexibility
- Wide Capacity Range

**WCP-CH SERIES  
WCPS-CH SERIES**

**Cooling Capacity:  
18 - 285 MBH**



# WATER-COOLED PACKAGE UNITS

## GENERAL DESCRIPTION

The compact, rugged and reliable WCP/ WCPS-CH, water-cooled, horizontal single packaged unit, is designed to meet the owners, consultants and contractors requirement of efficient, quiet and dependable performance. The wide range of cooling capacity satisfy most requirement for offices, industrial buildings, supermarkets, shops etc. These units are factory assembled, leak tested, evacuated, dehydrated, precharged with correct amount of refrigerant, tested run in factory and ready for installation.

## Reciprocating Compressor

(WCP-CH Series)

Hermetic reciprocating, refrigerant gas cooled high torque induction motor, quiet running with internal suspension system to eliminate vibration and internal inherent line break motor protection. Crankcase heater to prevent liquid migration during off cycle and eases start-up (for 3 phase unit only).

## Scroll Compressor(s)

(WCPS-CH Series)

### Reliability

- \* No contact scroll design that minimizes friction, increases volumetric efficiency and reduces vibration, thus longer service life.
- \* Suction gas cooled motor.

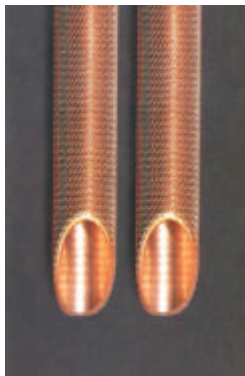
### Low Power Consumption:

- \* High EER.
- \* No crankcase heater required.



## Cleanable Shell and Tube Condenser

- \* Multiple 3/4" O.D. copper finned tubes with 25 to 30% more surface area ensure better heat transfer.
- \* Integral subcooling circuit to maximize efficiency.
- \* Provided with fusible plug for safety purpose.



- \* Leak and pressure tested to 450 psig.

## Fully Leak Tested Refrigerant Circuit

- \* Leak and pressure tested at 450 psig.
- \* Pressure ports are provided on the discharge, liquid and suction line.
- \* Evacuated, dehydrated and charged with refrigerant.

## Safety Components

High pressure and low pressure cut outs for model WCP 35CH and above, to guard against compressor damage due to high discharged head pressure and system leakage respectively.

## Efficient Evaporator Coil

- \* Model 68 and above independent thermal expansion valve with external equalizer for better refrigerant control and wider load condition.
- \* Leak and pressure tested to 450 psig
- \* Evacuated, dehydrated and charged with refrigerant.

## Drive Package and Blowers

(WCPS 68CH - 285CH)

- \* Belt driven drive package offers flexibility on various air flow rate and various static pressure applications.
- \* Single large diameter double inlet double width blowers reduce the noise level and eliminates the need for common transition and eliminates air unbalance.

## Casing

- \* Constructed of electro galvanized steel sheet and insulated with 1/2" thick x 1 1/2 lb per cu.ft linacoustic fiberglass.
- \* Aesthetically coated with powder paint to provide excellent finish, weatherability and corrosion resistance.
- \* Removable panels on the left and right hand side of the unit to provide access to critical parts and components.

## Filters

Side loading 1" thick filters - from both sides-thus eliminates unnecessary duct opening at site.

# WATER-COOLED PACKAGE UNITS

## Optional Accessories Features

- \* Factory wired starters
  - DOL for compressors and fan motors.
  - Auto-transformer for compressors.
- \* Suction stop valve(s), discharge stop valve(s) and liquid stop valve(s).
- \* External spring vibration isolators for blower fan and drive assembly.
- \* Thermostat.
- \* Hydrophilic aluminum fins, copper fins or tinned coated copper fins for better corrosion resistance.
- \* Hot gas by pass for low load conditions.
- \* Decorative discharge plenum.
- \* Hot water heating coils.
- \* Electric heaters.
- \* R407C refrigerant instead of R22.

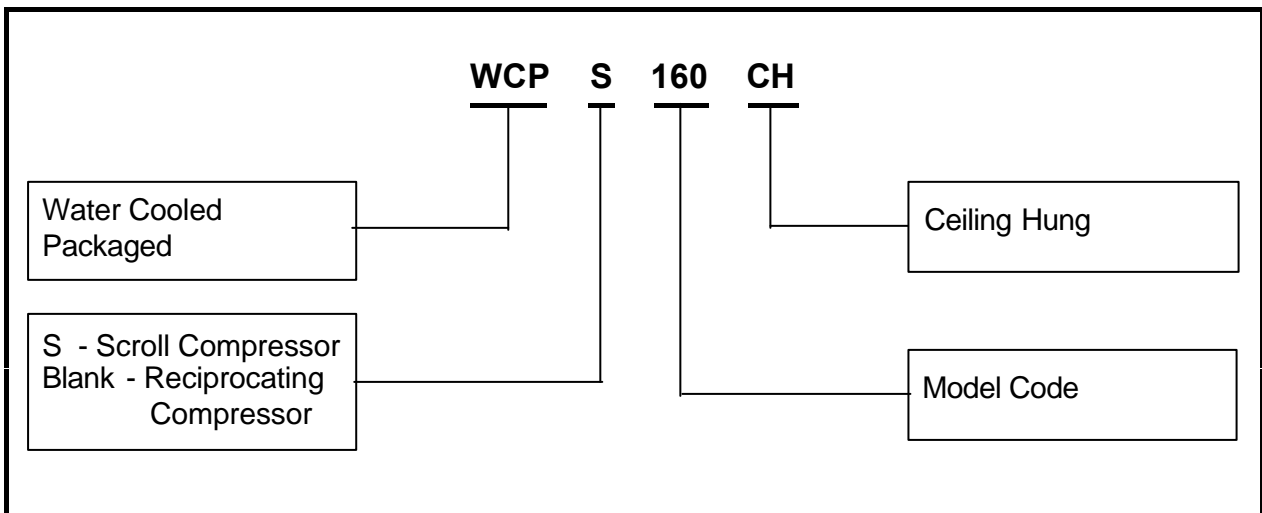
## CONDENSER WATER PRESSURE DROP- FT. W.G.

WCP 18CH		WCP 24CH		WCP 28CH		WCP 32CH		WCP 35CH		WCP 46CH		WCP 56CH		WCPS 68CH		WCPS 81CH			
GPM	FT	GPM	FT	GPM	FT	GPM	FT	GPM	FT	GPM	FT	GPM	FT	GPM	FT	GPM	FT	GPM	FT
3.0	1.4	3.5	1.7	5.0	1.2	6.0	0.6	6.0	0.6	7.0	0.9	10.0	1.2	10.0	1.0	10.0	0.9		
4.0	1.7	4.5	1.8	6.5	1.7	7.5	1.2	7.5	1.2	10.0	1.4	13.0	1.6	15.0	1.9	15.0	1.7		
5.0	2.0	5.5	2.0	8.0	1.8	9.0	1.7	9.0	1.7	13.0	1.8	16.0	2.8	20.0	3.6	20.0	3.4		
6.0	2.4	6.5	2.9	9.5	1.9	10.5	2.2	10.5	2.2	16.0	3.1	20.0	4.4	25.0	5.7	25.0	5.4		

WCPS 95CH		WCPS 125CH		WCPS 145CH		WCPS 160CH		WCPS 190CH		WCPS 220CH			WCPS 250CH		WCPS 285CH						
GPM	FT	GPM	FT	GPM	FT	GPM	FT	GPM	FT	GPM	FT	COND 1		COND 2	COND 1 & 2	GPM	FT	GPM	FT	COND 1	COND 2
												COND 1	COND 2								
15.0	1.5	20.0	1.7	25.0	1.3	25.0	1.0	30.0	1.2	20.0	1.7	3.4	20.0	1.7	25.0	1.0	2.6				
20.0	3.1	25.0	2.6	30.0	1.7	35.0	2.0	40.0	2.5	25.0	2.6	5.1	25.0	2.6	35.0	2.0	4.4				
25.0	5.1	30.0	3.5	35.0	2.4	40.0	3.2	50.0	4.5	30.0	3.5	6.8	30.0	3.5	40.0	3.2	6.0				
30.0	8.0	35.0	4.4	40.0	3.7	45.0	4.5	60.0	5.3	35.0	4.4	8.3	35.0	4.4	45.0	4.5	8.2				

CONVERSION FACTORS: FT. W.G. = PSI x 2.31 = BAR x 33.5 = KPA x 0.33  
 USGPM = L / MIN. x 0.26

# NOMENCLATURE



# SYSTEM COOLING CAPACITY

## PERFORMANCE DATA

MODEL	STD CAPACITY MBH	AIR ON EVAP.		LEAVING CONDENSER WATER TEMPERATURE - °F								
		CFM	WB TEMP. °F	80			95			110		
				TOTAL MBH <sup>1</sup>	SENS MBH <sup>2</sup>	KW <sup>3</sup>	TOTAL MBH <sup>1</sup>	SENS MBH <sup>2</sup>	KW <sup>3</sup>	TOTAL MBH <sup>1</sup>	SENS MBH <sup>2</sup>	KW <sup>3</sup>
WCP 18CH	18	650	72	20.26	10.77	1.24	19.09	10.14	1.33	17.23	9.17	1.39
			67	19.31	14.31	1.18	18.00	13.34	1.30	17.06	12.66	1.36
			62	17.63	17.63	1.18	16.29	16.29	1.27	15.57	15.57	1.33
			57	15.57	15.57	1.15	14.40	14.40	1.27	13.69	13.69	1.33
WCP 24CH	24	800	72	27.01	14.36	1.72	25.45	13.52	1.84	22.97	12.23	1.92
			67	25.75	19.09	1.64	24.00	17.79	1.80	22.74	16.88	1.88
			62	23.50	23.50	1.64	21.71	21.71	1.76	20.76	20.76	1.84
			57	20.76	20.76	1.60	19.20	19.20	1.76	18.25	18.25	1.84
WCP 28CH	28	1000	72	31.51	16.76	2.00	29.69	15.78	2.15	26.80	14.27	2.24
			67	30.04	22.27	1.91	28.00	20.76	2.10	26.53	19.69	2.20
			62	27.42	27.42	1.91	25.33	25.33	2.05	24.22	24.22	2.15
			57	24.22	24.22	1.86	22.40	22.40	2.05	21.29	21.29	2.15
WCP 32CH	32	1250	72	36.01	19.15	2.29	33.93	18.03	2.45	30.63	16.30	2.56
			67	34.34	25.45	2.18	32.00	23.72	2.40	30.32	22.50	2.51
			62	31.34	31.34	2.18	28.95	28.95	2.35	27.68	27.68	2.45
			57	27.68	27.68	2.13	25.60	25.60	2.35	24.33	24.30	2.45
WCP 35CH	35	1500	72	39.39	20.94	2.48	37.11	19.72	2.66	33.50	17.83	2.78
			67	37.56	27.83	2.36	35.00	25.94	2.60	33.17	24.61	2.72
			62	34.28	34.28	2.36	31.67	31.67	2.54	30.28	30.28	2.66
			57	30.28	30.28	2.30	28.00	28.00	2.54	26.61	26.61	2.66
WCP 46CH	46	1750	72	51.77	27.53	3.25	48.77	25.92	3.48	44.03	23.44	3.63
			67	49.36	36.58	3.09	46.00	34.10	3.40	43.59	32.35	3.55
			62	45.05	45.05	3.09	41.62	41.62	3.32	39.79	39.79	3.48
			57	39.79	39.76	3.01	36.80	36.80	3.32	34.97	34.97	3.48
WCP 56CH	56	1900	72	63.02	33.51	4.01	59.38	31.56	4.30	53.60	28.53	4.49
			67	60.09	44.53	3.82	56.00	41.51	4.20	53.07	39.38	4.39
			62	54.84	54.84	3.82	50.67	50.67	4.10	48.44	48.44	4.30
			57	48.44	48.44	3.72	44.80	44.80	4.10	42.58	42.58	4.30
WCPS 68CH	68	2100	72	76.56	40.71	3.25	72.14	38.33	3.49	65.12	34.67	3.64
			67	73.00	54.10	3.10	68.00	50.43	3.41	64.48	47.84	3.56
			62	66.63	66.63	3.10	61.56	61.56	3.33	58.86	58.86	3.49
			57	58.86	58.86	3.02	54.43	54.43	3.33	51.73	51.73	3.49
WCPS 81CH	81	2500	72	91.10	45.50	3.78	85.86	43.32	4.05	77.50	41.13	4.22
			67	86.88	59.10	3.60	81.00	58.40	4.68	76.74	54.64	4.14
			62	79.29	73.17	3.60	73.26	70.06	3.87	70.05	69.02	4.05
			57	70.05	70.05	3.50	64.78	64.78	3.87	61.57	61.57	4.05
WCPS 95CH	95	3400	72	106.96	56.88	4.63	100.77	53.55	4.96	90.96	48.43	5.18
			67	101.98	75.58	4.41	95.00	70.45	4.85	90.07	66.83	5.07
			62	93.08	93.08	4.41	85.99	85.99	4.74	82.22	82.22	4.96
			57	82.22	82.22	4.30	76.03	76.03	4.74	72.26	72.26	4.96
WCPS 125CH	122.0	4000	72	137.43	74.18	5.89	129.35	69.89	6.31	121.87	65.89	6.59
			67	131.04	98.31	5.61	122.00	91.54	6.17	115.48	86.75	6.45
			62	119.59	119.59	5.61	111.83	111.83	6.03	105.43	105.43	6.31
			57	105.64	105.64	5.47	97.88	97.88	6.03	92.65	92.65	6.31
WCPS 145CH	145	4200	72	163.20	76.90	7.10	153.70	72.40	7.60	145.00	68.30	8.00
			67	155.60	101.50	6.70	145.00	94.60	7.40	137.30	89.60	7.70
			62	142.00	123.70	6.70	132.90	115.80	7.30	125.40	110.20	7.60
			57	125.40	110.20	6.60	116.30	102.20	7.30	110.20	96.80	7.60
WCPS 160CH	160	4400	72	179.90	102.69	7.96	169.53	96.73	8.51	159.94	91.11	8.83
			67	171.63	139.09	7.72	160.00	129.60	8.35	151.66	122.87	8.75
			62	156.63	156.63	7.64	146.70	146.70	8.20	138.32	138.32	8.59
			57	138.32	138.32	7.41	127.95	127.95	8.12	122.65	122.65	8.51
WCPS 190CH	190	5400	72	213.67	102.99	9.15	201.37	107.16	9.72	189.95	101.13	10.13
			67	203.79	150.10	8.74	190.00	139.89	9.56	180.07	132.64	10.05
			62	186.00	182.60	8.66	174.14	170.96	9.40	164.26	164.26	9.80
			57	163.60	163.60	8.50	152.29	152.29	9.31	144.39	144.39	9.80
WCPS 220CH	220	6200	72	248.80	144.60	10.47	234.50	136.30	11.07	220.00	127.80	11.75
			67	233.40	192.90	10.39	220.00	181.80	10.99	206.60	170.70	11.67
			62	215.60	215.60	10.24	204.40	204.40	10.92	178.00	178.00	11.60
			57	195.60	195.60	10.09	173.40	173.40	10.84	170.00	170.00	11.52
WCPS 250CH	250	7400	72	281.16	148.47	11.66	264.89	139.85	12.49	249.90	131.91	13.03
			67	265.19	194.73	11.32	250.00	183.46	12.28	236.87	173.95	12.90
			62	244.61	230.20	11.18	228.34	228.34	12.07	216.19	216.19	12.62
			57	222.07	222.07	10.91	200.41	200.41	11.94	189.92	189.92	12.55
WCPS 285CH	285	8600	72	322.52	162.00	13.73	303.75	152.56	14.62	285.07	143.22	15.50
			67	302.37	207.81	13.66	285.00	195.91	14.48	267.77	184.02	15.44
			62	279.27	250.27	13.46	264.92	237.39	14.41	247.62	221.86	15.30
			57	253.42	253.42	13.32	238.97	238.97	14.27	221.67	221.67	15.23

- NOTES: 1.) RATINGS ARE GROSS CAPACITIES - FOR NET CAPACITIES, DEDUCT EVAPORATOR BLOWER MOTOR HEAT. ( MBH = 1000 x BTU / HR )  
2.) AT 80°F ( 26.6°C ) AIR ON EVAPORATOR.  
3.) COMPRESSOR MOTOR POWER INPUT AT RATED VOLTAGE ( KW )  
4.) FOR MODEL WCP 18-CH TO 56-CH, THE PERFORMANCE IS BASE ON NOMINAL CFM.

# BLOWER PERFORMANCE

**Available External Static Pressure - IWG - For Accessories And Duct System Static Resistance (Allowance Made For Wet Coil And Filters)**

**a.) Model WCP 18CH to 56CH ( Direct Drive )**

WCP 18CH		WCP 24CH		WCP 28CH		WCP 32CH		WCP 35CH		WCP 46CH		WCP 56CH	
KDD 9/7 T		KDD 9/7 T		KDD 9/7 T		KDD 10/8		KDD 10/8		KDD 10/10		KDD 10/10	
CFM	ESP	CFM	ESP	CFM	ESP	CFM	ESP	CFM	ESP	CFM	ESP	CFM	ESP
600	0.68	750	0.79	800	0.90	1100	0.57	1300	0.49	1550	0.42	1700	0.86
650	0.56	800	0.69	900	0.65	1200	0.55	1400	0.49	1650	0.40	1800	0.82
700	0.30	850	0.56	1000	0.48	1300	0.51	1500	0.45	1750	0.37	1900	0.72
750	0.12	900	0.48	1100	0.20	1400	0.45	1600	0.37	1850	0.35	2000	0.54

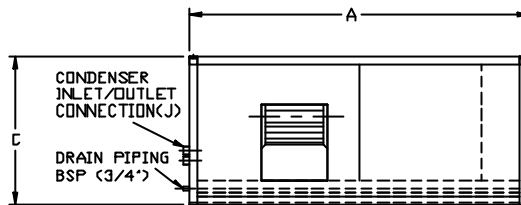
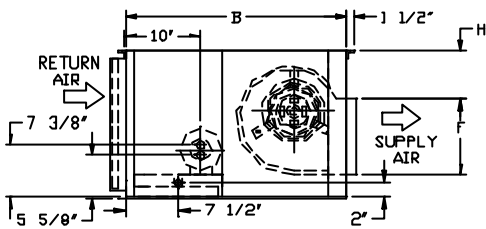
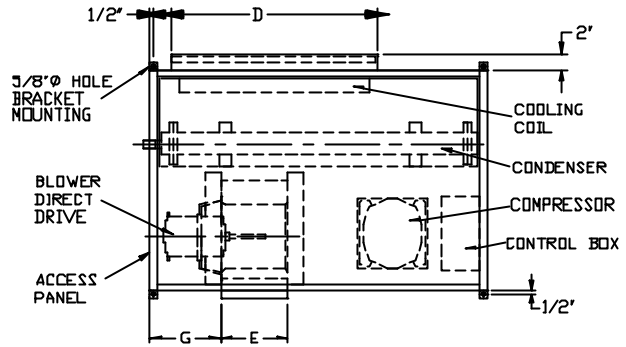
**b.) Model WCPS 68CH to WCPS 285CH (Belt Drive)**

RPM	CFM										FAN MODEL
	ESP	BHP	ESP	BHP	ESP	BHP	ESP	BHP	ESP	BHP	
<b>WCPS 68CH</b>											
900 1000 1100 1200	1700		1900		2100		2300		2500		ONE AT 10/10 SC
	0.45	0.44	0.39	0.50	0.29	0.56	0.19	0.63	0.06	0.70	
	0.67	0.53	0.62	0.60	0.55	0.67	0.47	0.76	0.35	0.84	
	0.90	0.63	0.87	0.71	0.81	0.80	0.75	0.90	0.65	0.99	
	1.14	0.74	1.12	0.84	1.08	0.94	1.03	1.05	0.95	1.15	
<b>WCPS 81CH</b>											
1100 1200 1300 1400	2000		2250		2500		2750		3000		ONE AT 10/10 SC
	0.77	0.76	0.69	0.87	0.56	0.99	0.38	1.12	0.16	1.24	
	1.04	0.89	0.97	1.02	0.86	1.15	0.70	1.29	0.51	1.45	
	1.31	1.03	1.26	1.18	1.18	1.34	1.04	1.50	0.87	1.67	
	1.59	1.19	1.56	1.35	1.49	1.53	1.38	1.71	1.23	1.90	
<b>WCPS 95CH</b>											
700 800 900 1000	2800		3100		3400		3700		4200		ONE AT 12/12 SC
	0.23	0.67	0.16	0.79	0.06	0.91	-	-	-	-	
	0.48	0.81	0.42	0.95	0.35	1.10	0.26	1.25	0.04	1.53	
	0.74	0.97	0.70	1.13	0.64	1.29	0.57	1.48	0.39	1.80	
	1.03	1.15	0.99	1.32	0.95	1.51	0.90	1.72	0.75	2.10	
<b>WCPS 125CH</b>											
800 900 1000 1100	3000		3400		3800		4200		4600		ONE AT 12/12 SC
	0.50	0.90	0.41	1.10	0.29	1.31	0.14	1.53	-	-	
	0.77	1.07	0.70	1.29	0.61	1.54	0.49	1.80	0.32	2.09	
	1.06	1.26	1.01	1.51	0.94	1.80	0.85	2.10	0.71	2.42	
	1.37	1.47	1.34	1.76	1.28	2.06	1.21	2.40	1.10	2.77	
<b>WCPS 145CH</b>											
850 900 950 1000	3300		3800		4200		4600		5000		ONE AT 12/12 SC
	0.56	1.14	0.43	1.42	0.27	1.67	0.08	1.93	-	-	
	0.70	1.24	0.59	1.54	0.44	1.80	0.27	2.09	0.06	2.38	
	0.85	1.34	0.75	1.66	0.62	1.95	0.47	2.26	0.27	2.57	
	1.00	1.45	0.92	1.80	0.80	2.10	0.66	2.42	0.48	2.76	
<b>WCPS 160CH</b>											
900 950 1000 1050	3400		3900		4400		4900		5400		ONE AT 12/12 SC
	0.68	1.29	0.55	1.60	0.36	1.94	0.12	2.30	-	-	
	0.84	1.41	0.72	1.74	0.55	2.10	0.33	2.49	0.02	2.90	
	0.99	1.51	0.89	1.87	0.73	2.26	0.54	2.68	0.25	3.12	
	1.15	1.63	1.06	2.00	0.92	2.42	0.74	2.87	0.48	3.35	
<b>WCPS 190CH</b>											
800 850 950 1050	3500		4200		4900		5600		6000		ONE AT 15/15 SC
	0.85	1.37	0.77	1.68	0.64	2.03	0.46	2.42	0.34	2.69	
	1.01	1.53	0.95	1.88	0.84	2.26	0.67	2.68	0.55	2.94	
	1.37	1.90	1.33	2.31	1.24	2.75	1.10	3.23	1.01	3.54	
	1.76	2.31	1.74	2.80	1.68	3.32	1.57	3.87	1.48	4.20	
<b>WCPS 220CH</b>											
800 850 900 950	4900		5300		5700		6100		6500		ONE AT 18/18 SC
	1.25	2.37	1.21	2.56	1.18	2.77	1.14	2.99	1.08	3.22	
	1.48	2.68	1.45	2.90	1.41	3.11	1.38	3.35	1.32	3.60	
	1.73	3.04	1.69	3.25	1.66	3.49	1.63	3.74	1.57	4.00	
	1.99	3.41	1.95	3.63	1.92	3.89	1.89	4.16	1.84	4.45	
<b>WCPS 250CH</b>											
600 700 800 900	5100		6000		6900		7800		8700		ONE AT 18/18 SC
	0.58	1.43	0.51	1.76	0.39	2.11	0.24	2.48	0.05	2.88	
	0.96	1.90	0.91	2.30	0.82	2.74	0.70	3.21	0.55	3.73	
	1.39	2.47	1.35	2.94	1.27	3.45	1.18	4.02	1.06	4.64	
	1.87	3.15	1.83	3.67	1.77	4.27	1.70	4.94	1.60	5.66	
<b>WCPS 285CH</b>											
700 750 800 900	5600		6500		7400		8300		9200		ONE AT 18/18 SC
	0.85	2.12	0.76	2.54	0.63	3.00	0.45	3.48	0.24	4.01	
	1.06	2.40	0.98	2.87	0.86	3.37	0.70	3.91	0.50	4.48	
	1.28	2.71	1.21	3.22	1.10	3.77	0.95	4.36	0.77	4.99	
	1.77	3.43	1.70	4.00	1.61	4.65	1.49	5.35	1.33	6.08	

# DIMENSIONAL DATA

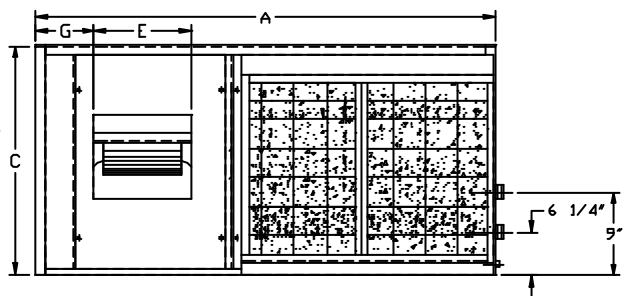
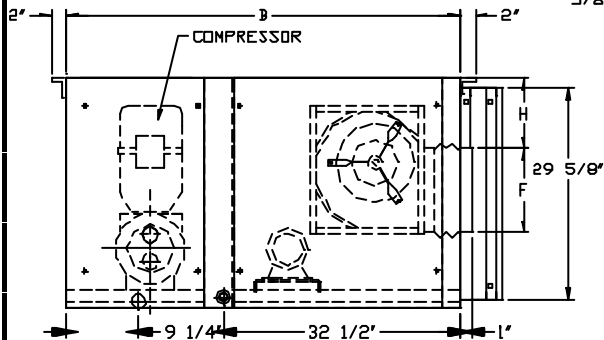
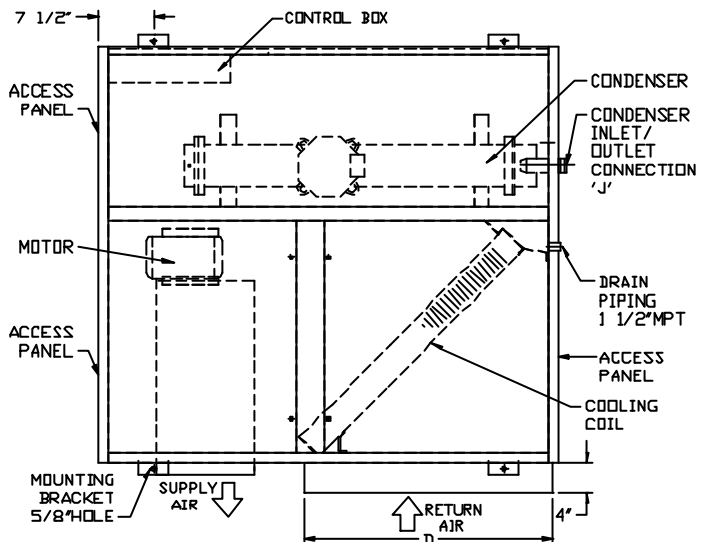
## MODEL WCP 18CH TO WCP 56CH

MODEL	A	B	C	D	E	F	G	H	J
WCP 18CH	46	30	20	25 1/2	9 1/4	10 1/2	9 1/2	6 1/4	3/4
WCP 24CH	46	30	20	25 1/2	9 1/4	10 1/2	9 1/2	6 1/4	3/4
WCP 28CH	46	30	20	25 1/2	9 1/4	10 1/2	9 1/2	6 1/4	1
WCP 32CH	46	30	20	32	10 1/2	11 1/2	8 1/2	6 1/4	1
WCP 35CH	46	30	20	32	10 1/2	11 1/2	8 1/2	6 1/4	1
WCP 46CH	46	30	20	36	13	11 1/2	8 1/2	6 1/4	1 1/4
WCP 56CH	46	30	20	36	13	11 1/2	8 1/2	6 1/4	1 1/4



## MODEL WCPS 68CH TO WCPS 145CH

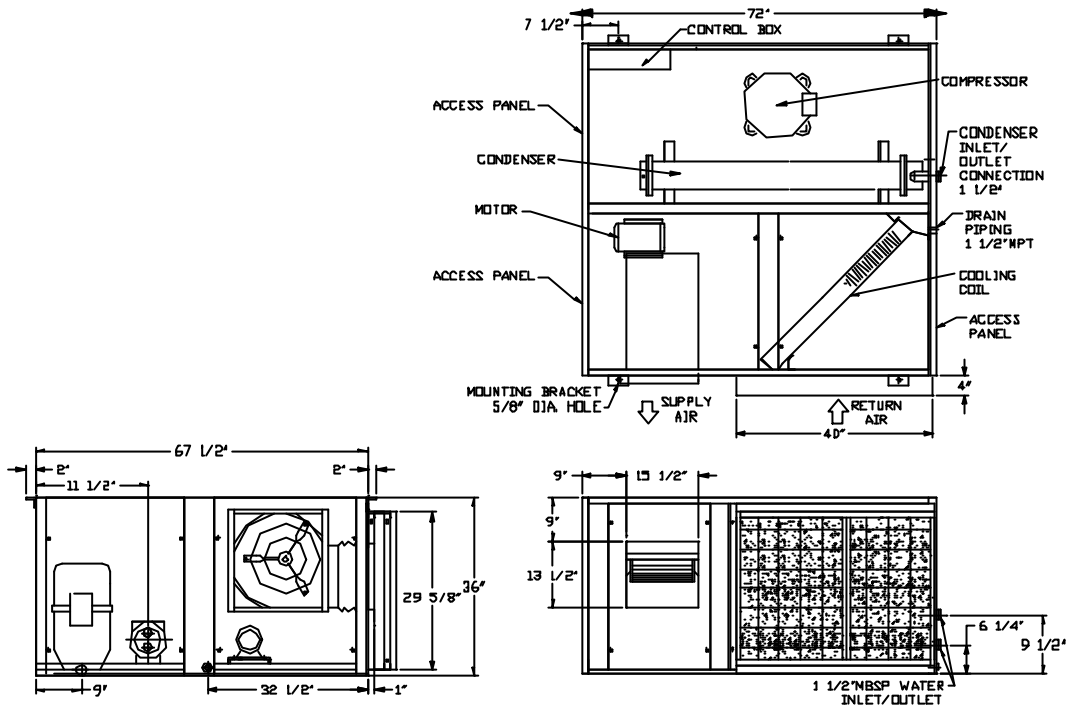
MODEL	A	B	C	D	E	F	G	H	J
WCP 68CH	63	54	31 1/2	34	13	11 1/2	8	9 1/2	1 1/4
WCPS 81CH	63	54	31 1/2	34	13	11 1/2	8	9 1/2	1 1/2
WCPS 95CH	68	54	34 1/2	36	15 1/2	13 1/2	8	9 1/2	1 1/2
WCPS 125CH	68	54	36	36	15 1/2	13 1/2	8	9 1/2	1 1/2
WCPS 145CH	72	54	36	40	15 1/2	13 1/2	9	10	1 1/2



NOTES: 1.) THE UNIT CONNECTION, LEFT/RIGHT HAND IS DETERMINED BY FACING INTO THE RETURN AIR STREAM.  
 2.) ALL DIMENSIONS ARE IN INCHES.

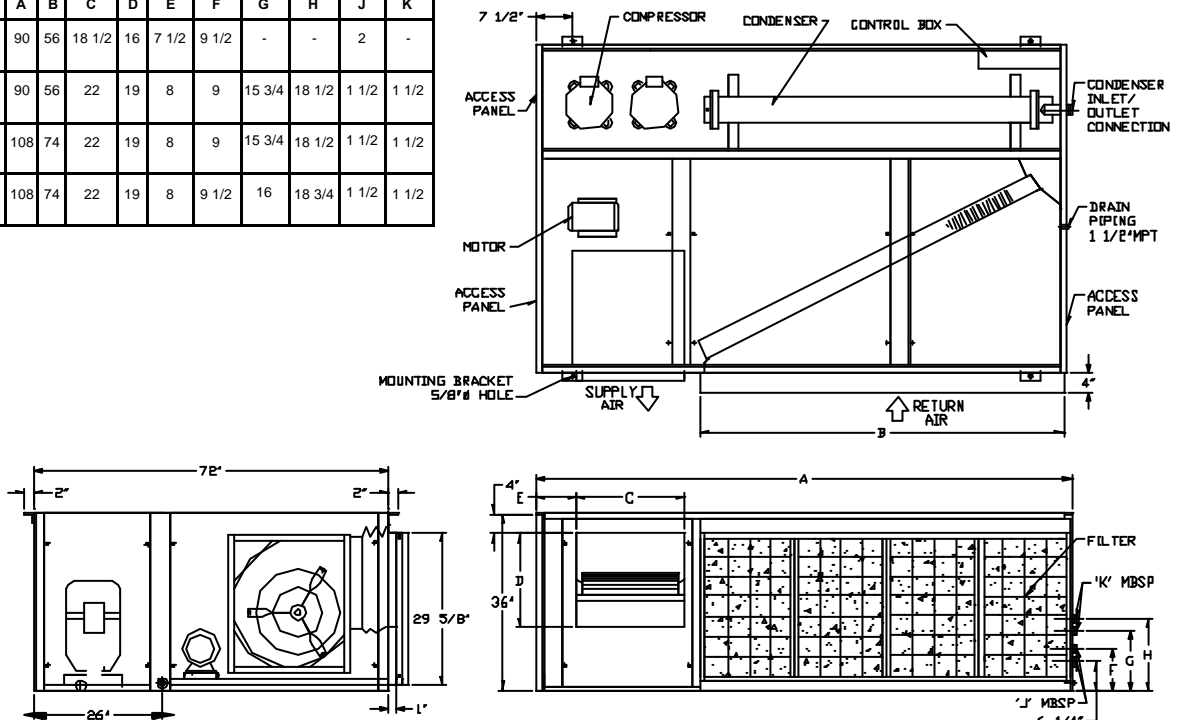
# DIMENSIONAL DATA

## MODEL WCPS 160CH



## MODEL WCPS 190CH TO WCPS 285CH

MODEL	A	B	C	D	E	F	G	H	J	K
WCPS 190CH	90	56	18 1/2	16	7 1/2	9 1/2	-	-	2	-
WCPS 220CH	90	56	22	19	8	9	15 3/4	18 1/2	1 1/2	1 1/2
WCPS 250CH	108	74	22	19	8	9	15 3/4	18 1/2	1 1/2	1 1/2
WCPS 285CH	108	74	22	19	8	9 1/2	16	18 3/4	1 1/2	1 1/2



NOTES: 1.) THE UNIT CONNECTION, LEFT/RIGHT HAND IS DETERMINED BY FACING INTO THE RETURN AIR STREAM. UNIT SHOWN IN DRAWING IS RIGHT HAND CONNECTION.  
 2.) ALL DIMENSIONS ARE IN INCHES.



# PHYSICAL DATA

MODEL	COMPRESSOR					COND.	BLOWER SECTION							EVAP. COIL		FILTERS		REF. CHRNG	APPROX. OPERATING WEIGHT (LBS)	
	QTY	NOMINAL POWER SUPPLY	MRA EA	LRA EA	NRA EA		MIN-MAX USGPM	BLOWER			MOTOR			CFM	ROWS DEEP	TOTAL	QTY			SIZE (INCH)
								TYPE OF DRV.	QTY	DIA x WIDTH (INCH)	MAX. HP	FLA EA	LRA EA							
WCP 18CH	1	230V -1-50Hz	1x13.2	1x53	1x6.5	4 9	DIRECT	1	9x7	0.25	1.4	-	450 850	3	1.90	1	1x20x25	1x4.80	220	
WCP 24CH	1	230V -1-50Hz	1x17.0	1x55	1x8.5	5 12	DIRECT	1	9x7	0.33	2.6	-	600 1100	3	2.20	1	1x20x25	1x5.17	300	
WCP 28CH	1	230V -1-50Hz	1x20.0	1x68	1x10.9	6 15	DIRECT	1	9x7	0.33	2.6	-	700 1200	3	2.60	1	1x20x25	1x5.50	280	
WCP 32CH	1	230V -1-50Hz	1x26.0	1x95	1x13.6	6 15	DIRECT	1	10x8	0.33	3.3	-	900 1300	3	3.00	2	1x20x16	1x5.72	320	
WCP 35CH	1	400V -3-50Hz	1x9.5	1x39	1x4.9	8 16	DIRECT	1	10x8	0.50	4.5	-	1000 1500	3	3.00	2	1x20x16	1x5.83	320	
WCP 46CH	1	400V -3-50Hz	1x13.0	1x45	1x5.7	10 20	DIRECT	1	10x10	0.50	4.5	-	1300 1800	3	4.00	1	1x20x20 1x20x16	1x6.27	440	
WCP 56CH	1	400V -3-50Hz	1x14.0	1x62	1x7.0	12 22	DIRECT	1	10x10	0.75	5.6	-	1500 1900	4	4.00	1	1x20x20 1x20x16	1x7.26	480	
WCPS 68CH	1	400V -3-50Hz	1x14.0	1x74	1x6.8	15 25	BELT	1	10x10	1.50	2.8	15.4	1700 2900	3	5.30	2	2x25x16	1x8.30	650	
WCPS 81CH	1	400V -3-50Hz	1x17.0	1x101	1x8.8	15 30	BELT	1	10x10	4.00	6.4	41.7	1900 3000	4	5.30	2	2x25x16	1x9.90	800	
WCPS 95CH	1	400V -3-50Hz	1x23.0	1x95	1x10.0	20 40	BELT	1	12x12	4.00	6.4	41.7	2800 4200	3	7.20	1	2x25x16 2x25x20	1x12.30	928	
WCPS 125CH	1	400V -3-50Hz	1x26.9	1x125	1x12.8	22 45	BELT	1	12x12	4.00	6.4	41.7	3000 4600	4	8.30	1	2x25x16 2x25x20	1x13.20	974	
WCPS 145CH	1	400V -3-50Hz	1x27.5	1x125	1x16.2	25 45	BELT	1	12x12	4.00	6.4	41.7	3300 5300	4	9.20	2	2x25x20	1x16.00	1150	
WCPS 160CH	1	400V -3-50Hz	1x34.0	1x167	1x16.3	30 50	BELT	1	12x12	5.50	8.3	56.4	3400 5500	4	9.20	2	2x25x20	1x23.80	1497	
WCPS 190CH	1	400V -3-50Hz	1x37.0	1x198	1x20.0	35 65	BELT	1	15x15	7.50	11.3	77.5	3500 6000	4	10.10	2	2x20x25 2x16x25	1x25.30	1740	
WCPS 220CH	2	400V -3-50Hz	1x23.0 1x26.9	1x95 1x125	1x10.0 1x12.8	45 80	BELT	1	18x18	7.50	11.3	77.5	4300 7200	4	12.10	2	2x20x25 2x16x25	2x13.20	1978	
WCPS 250CH	2	400V -3-50Hz	2x26.9	2x125	2x12.8	50 90	BELT	1	18x18	10.00	14.9	98.8	5100 9000	3	15.40	2	2x20x25 2x25x16	2x17.60	2241	
WCPS 285CH	2	400V -3-50Hz	1x26.9 1x34.0	1x125 1x167	1x12.8 1x16.3	60 100	BELT	1	18x18	10.00	14.9	98.8	5600 9200	4	15.40	2	2x20x25 2x25x16	1x17.60 1x23.80	2465	

- Notes: 1.) NRA = Nominal Running Ampere.  
 2.) LRA = Locked Rotor Ampere.  
 3.) FLA = Full Load Ampere.  
 4.) MRA = Maximum Running Ampere.

- 5.) Power supply for blower is 400V-3-50Hz except for WCP 18CH to WCP 56CH which is 230V-1ph-50Hz.  
 6.) Minimum-maximum voltage is 230V± 6%, 400V ± 6%.  
 7.) For other power supply requirements, please contact the Dunham-Bush sales office.

# CORRECTION FACTORS

To correct for variation in air flow, use this multiplier.

AIR FLOW VARIATION	TOTAL CAPACITY	SENSIBLE CAPACITY
0.8	0.960	0.900
0.9	0.980	0.950
1.0	1.000	1.000
1.1	1.015	1.045
1.2	1.025	1.090

To correct for altitude, use this multiplier.

ALTITUDE ABOVE SEA LEVEL - FT	COOLING CAPACITY
0	1.00
2000	0.98
3000	0.97
4000	0.96
5000	0.95
6000	0.93
7000	0.92

To correct sensible capacity for varying dry bulb.

DRY BULB	WET BULB			
	57	62	67	72
75	0.84	0.81	0.78	0.74
80	1.00	1.00	1.00	1.00
85	1.16	1.18	1.21	1.26

Note:  
 If the capacity after multiplying the sensible with the correction factor exceed the total capacity, then the sensible must be equal to the total.

MANUFACTURER RESERVES THE RIGHT TO CHANGE SPECIFICATION OR DESIGN AT ANY TIME WITHOUT PRIOR NOTICE.

# DUNHAM-BUSH®

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