



**CLIMATEWORX**  
MISSION CRITICAL CLIMATE CONTROL

MISSION CRITICAL Air Conditioning Systems

## Series P, Vertical Floor-Mount Units

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*Technical Data– 60 Hz*

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# Air-cooled System

Model no. PAU_/_/PAD_/_/PAR_/_	028	034	042	051	057	065	076	087
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## Cooling Capacity - Rated at standard air volume, 95°F (35°C) ambient temperature

### 85F°(29°C) DB, 32%rh (shaded values at reduced airflow)

Net Total	BTUH	77879	110346	162185	190721	213317	247401	293509	368071
Net Sensible	BTUH	77458	110346	162185	190721	213157	247401	293509	363034
THR	BTUH	99209	148578	216659	259015	285357	335556	398878	505595

### 80F°(27°C) DB, 36%rh

Net Total	BTUH	75794	103798	151845	178871	201221	232869	273832	350802
Net Sensible	BTUH	75794	103525	151845	178871	197405	232869	273832	350802
THR	BTUH	98640	142970	205258	246248	271991	319719	378358	486483

### 75F° (24°C) DB, 45%rh

Net Total	BTUH	72846	98078	146611	170769	195620	225018	259379	335996
Net Sensible	BTUH	72846	98078	145385	168293	194519	219907	259379	314737
THR	BTUH	94926	136716	199487	237506	266021	311206	362541	470185

## Fan Section - EC fan

Standard Air Volume	CFM	4200	5600	7200	8700	9400	11200	14700	14700
External Static Pressure	in	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Quantity of Fans		1	1	2	2	2	2	3	3
Fan Size	mm	500	560	500	500	560	560	500	500
Net Total Fan Motor Power	kW	1.08	2.58	3.16	4.32	3.32	4.96	6.75	7.50

## Compressor - Refrigerant R407C

Quantity of Compressors		1	1	2	2	2	2	2	2
Compressor Model		ZR72KCE	ZR108KCE	ZR81KCE	ZR94KCE	ZR108KCE	ZR125KCE	ZR144KCE	ZR190KCE
Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll

## Evaporator Coil - A/V-Frame- Copper tube / aluminium fin - Stainless steel drain pan

Face Area	ft²	13.13	13.13	18.96	18.96	22.50	22.50	29.58	29.58
Rows Deep		4	4	4	4	4	4	4	6
Fins per inch		13	13	13	13	13	13	13	13
Face Velocity	FPM	320	427	380	459	480	498	497	497
Refrigerant Charge	Lbs	5.4	5.5	10.3	10.3	10.6	10.6	14.7	16.0

(estimated indoor unit charge, unit shipped with dry nitrogen holding charge)

Model no. PAU_ /PAD_ /PAR_	028	034	042	051	057	065	076	087
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**Reheat Section (options)**

*Electric Reheat*<sup>1</sup> - Single Stage, finned tubular type heater, SCR Controlled

Capacity	kW	6	6	9	9	12	12	24	24
Quantity of Heaters		3	3	3	3	3	3	3	3

*Hot Gas Reheat* - one stage per compressor

Heating Capacity	BTUH	37970	54686	79795	95002	106408	124483	145016	188074
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*Hot Water Reheat* - 180 °F (82.2° C ) E.W.T., 77°F (25° C ) L.A.T. - 2-way modulating control valve, optional 3-way

Heating Capacity	BTUH	106551	123964	183313	211584	273986	285496	360171	409194
Water Flow Rate	GPM	4.4	5.0	6.1	7.0	8.4	8.8	10.0	11.5
Pressure Drop	ft-H <sub>2</sub> O	4.1	4.7	5.7	6.6	7.9	8.2	6.1	7.0

**Humidifier Section (optional)**

*Electrode Boiler Type*<sup>1</sup>

Capacity	lb/hr	10	10	20	20	20	20	20	20
Humidifier Power	kW	3.4	3.4	6.8	6.8	6.8	6.8	6.8	6.8

**Filter Section** - Pleated disposable type, 30%efficiency to ASHRAE 52-76

*PAU\_ Upflow Models (Maximum 2" filter depth)*

Quantity of Filters ( )		(2) 14x20x2	(4) 20x25x2	(4) 20x30x2	(6) 20x25x2
Nominal Size	LxWxD-in	(2) 20x25x2			

*PAD\_ Downflow Models*

Quantity of Filters ( )		(3) 20x25x4	(4) 20x25x4	(4) 20x25x4	(6) 20x25x4
Nominal Size	LxWxD-in				

*PAD\_ Downflow Models Optional Top Mounted Filter Box (Adds 8" to Machine Height)*

Quantity of Filters ( )		(4) 16x25x4	(6) 16x20x4	(6) 16x25x4	(4) 16x20x4
Nominal Size	LxWxD-in				(4) 16x25x4

*PAR\_ Rear Return Models with Filter Box*

Quantity of Filters ( )		(2) 24x12x4			
Nominal Size	LxWxD-in	(2) 24x18x4	(6) 20x24x4	(6) 24x24x4	(10) 24x18x4
		(2) 20x24x4			

### Piping Connection Size

Liquid Line	- ODM -in	5/8	5/8	5/8	5/8	5/8	5/8	7/8	7/8
Hot Gas Line	- ODM -in	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-3/8	1-3/8
Hot Water	- ODM -in	7/8	7/8	7/8	7/8	7/8	7/8	1-1/8	1-1/8
Humidifier Water	- ODM -in	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Condensate Drain	- ODM -in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

### Physical Details - For units with standard options only; consult factory for special options and configuration

Dimensions	in	68-3/4(W)x35-1/4(D)x78(H)		78-3/4(W) x35-1/4(D) x78(H)		91(W) x35-1/4(D) x78(H)		108(W) x35-1/4(D) x78(H)	
Approx. Weight	lbs	1286	1346	1746	1831	1861	1962	2155	2279

### Electrical Performance - Cooling Only

208V/3Phase/60Hz	FLA	27.1	39.5	61.7	74.5	78.9	93.1	110	133
	MCA	31.7	47	67.3	81.7	86.4	102.4	120.6	146.5
	Fuse Size	50	70	80	110	110	130	160	200
460V/3Phase/60Hz	FLA	12.7	19.7	29.1	36.7	39.3	42.7	48.2	67.4
	MCA	14.9	23.6	31.9	40.4	43.2	47	52.9	74.5
	Fuse Size	20	35	40	50	50	60	70	100
575V/3Phase/60Hz	FLA	10.4	15.6	22.7	27.7	31.2	31.8	37.6	54
	MCA	12.3	18.6	24.8	30.4	34.2	34.9	41.1	59.6
	Fuse Size	15	30	30	40	45	45	50	80

### Electrical Performance - Cooling + Humidifier

208V/3Phase/60Hz	FLA	44.3	55.8	80.64	93.44	97.8	112	128.91	151.91
	MCA	52.2	67.41	90.96	105.36	110.05	126.02	144.21	170.08
	Fuse Size	60	90	100	120	130	150	180	210
460V/3Phase/60Hz	FLA	20.06	27.06	37.68	45.28	47.88	51.28	47.95	75.95
	MCA	24.16	32.78	42.55	51.1	53.9	57.72	53.64	85.14
	Fuse Size	30	45	50	60	60	70	60	110
575V/3Phase/60Hz	FLA	16.37	21.49	29.56	34.56	38	38.6	44.42	60.82
	MCA	19.7	26	33.34	38.96	42.73	43.4	49.67	68.12
	Fuse Size	25	35	35	45	50	50	60	80

### Electrical Performance - Cooling + Electric Reheat

208V/3Phase/60Hz	FLA	44.6	56.1	86.72	99.52	112.21	126.41	176.63	199.63
	MCA	52.5	67.79	98.57	112.97	128.06	144.04	203.86	229.73
	Fuse Size	60	90	110	130	140	170	220	260
460V/3Phase/60Hz	FLA	20.2	27.2	40.44	48.04	54.4	57.8	69.53	97.53
	MCA	24.33	32.96	45.98	54.53	62.04	65.87	80.61	112.11
	Fuse Size	30	45	50	60	70	70	90	130
575V/3Phase/60Hz	FLA	16.48	21.6	31.76	36.76	43.21	43.81	61.68	78.08
	MCA	19.84	26.14	36.09	41.72	49.25	49.92	71.25	89.7
	Fuse Size	25	35	40	50	50	50	80	100

**Electrical Performance - Cooling + Electric Reheat + Humidifier**

208V/3Phase/60Hz	FLA	44.6	56.1	86.72	99.52	112.21	126.41	176.63	199.63
	MCA	52.5	67.79	98.57	112.97	128.06	144.04	203.86	229.73
	Fuse Size	60	90	110	130	140	170	220	260
460V/3Phase/60Hz	FLA	20.2	27.2	40.44	48.04	54.4	57.8	69.53	97.53
	MCA	24.33	32.96	45.98	54.53	62.04	65.87	80.61	112.11
	Fuse Size	30	45	50	60	70	70	90	130
575V/3Phase/60Hz	FLA	16.48	21.6	31.76	36.76	43.21	43.81	61.68	78.08
	MCA	19.84	26.14	36.09	41.72	49.25	49.92	71.25	89.7
	Fuse Size	25	35	40	50	50	50	80	100

**Matching Air-Cooled Condenser – Selected at 95° F Ambient**

Model		KS12-128-1	KS12-154-1	KS13-288-2	KS13-288-2	KS13-288-2	KM13-356-2	KM13-396-2	KM14-492-2
Width x Depth x Height	in	68 x 44 x 38	68 x 44 x 38	88 x 44 x 38	88 x 44 x 38	88 x 44 x 38	135x43x48	135x43x48	175x43x48
Weight	lbs	274	289	401	401	401	650	695	840

<sup>1</sup> Standard options

# Water-cooled System

Model no. PWU_/_/PWD_/_/PWR_/_	028	034	042	051	057	065	076	087
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## Cooling Capacity - Rated at standard air volume

### 85F°(29°C) DB, 32%rh (shaded values at reduced airflow)

Net Total	BTUH	75617	111813	172857	194414	221061	250985	298279	387940
Net Sensible	BTUH	74123	111813	172856	194414	211242	250985	298279	387940
THR	BTUH	95637	146761	221366	255817	282453	330057	381699	509293

### 80F°(27°C) DB, 36%rh

Net Total	BTUH	73671	108244	163997	184520	214941	238546	286049	372815
Net Sensible	BTUH	73001	108244	163997	184520	213695	238546	286049	372815
THR	BTUH	93513	143429	211827	245320	275866	316617	368654	492828

### 75F° (24°C) DB, 45%rh

Net Total	BTUH	70865	103340	156586	177704	206381	231104	274648	359684
Net Sensible	BTUH	68770	102194	155406	176834	186093	226037	262274	319827
THR	BTUH	90481	138149	204107	238088	266628	308600	356300	478517

## Fan Section - EC fan

Standard Air Volume	CFM	3000	5600	7500	8700	8700	10800	12400	14000
External Static Pressure	in	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Quantity of Fans		1	1	2	2	2	2	3	3
Fan Size	mm	500	560	500	500	560	560	500	500
Net Total Fan Motor Power	kW	0.57	2.60	2.90	4.52	2.68	4.48	4.56	8.07

## Compressor - Refrigerant R407C

Quantity of Compressors		1	1	2	2	2	2	2	2
Compressor Model		ZR72KCE	ZR108KCE	ZR81KCE	ZR94KCE	ZR108KCE	ZR125KCE	ZR144KCE	ZR190KCE
Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll

## Evaporator Coil - A/V-Frame- Copper tube / aluminium fin - Stainless steel drain pan

Face Area	ft²	13.13	13.13	18.96	18.96	22.50	22.50	29.58	29.58
Rows Deep		4	4	4	4	4	4	4	6
Fins per inch		13	13	13	13	13	13	13	13
Face Velocity	FPM	230	427	396	459	387	480	419	480
Refrigerant Charge	Lbs	16.1	17.5	24.2	24.2	35.8	42.0	48.0	50.0

Model no. PWU__/PWD_ _/PWR_	028	034	042	051	057	065	076	087
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### Reheat Section (options)

*Electric Reheat*<sup>1</sup> - Single Stage, finned tubular type heater, SCR Controlled

Capacity	kw	6	6	9	9	12	12	24	24
Quantity of Heaters		3	3	3	3	3	3	3	3

*Hot Gas Reheat* - one stage per compressor

Heating Capacity	BTUH	36192	55260	81643	95235	106651	123440	142520	191407
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*Hot Water Reheat* - 180 °F (82.2° C ) E.W.T., 77°F (25° C ) L.A.T. - 2-way modulating control valve, optional 3-way

Heating Capacity	BTUH	83639	150035	200121	231590	231600	286854	330591	360258
Water Flow Rate	GPM	3.6	6.2	6.7	7.8	7.1	8.9	9.0	9.8
Pressure Drop	ft-H <sub>2</sub> O	3.4	5.8	6.3	7.3	6.6	8.3	8.4	9.2

### Humidifier Section (optional)

*Electrode Boiler Type*<sup>1</sup>

Capacity	lb/hr	10	10	20	20	20	20	20	20
Humidifier Power	kw	3.4	3.4	6.8	6.8	6.8	6.8	6.8	6.8

*Filter Section* - Pleated disposable type, 30% efficiency to ASHRAE 52-76

PWU\_ \_Upflow Models (Maximum 2" filter depth)

Quantity of Filters ( )		(2) 14x20x2	(4) 20x25x2	(4) 20x30x2	(6) 20x25x2
Nominal Size	LxWxD-in	(2) 20x25x2			

PWD\_ \_Downflow Models with Top Mounted Filter Box (Adds 8" to Machine Height)

Quantity of Filters ( )		(4) 16x25x4	(6) 16x20x4	(6) 16x25x4	(4) 16x20x4
Nominal Size	LxWxD-in				(4) 16x25x4

PWR\_ \_Rear Return Models with Filter Box

Quantity of Filters ( )		(2) 24x12x4	(6) 20x24x4	(6) 24x24x4	(10) 24x18x4
Nominal Size	LxWxD-in	(2) 24x18x4			
		(2) 20x24x4			

### Condensing Water Requirement

86°F EWT

Flow Rate	GPM	21.2	32.6	45.3	56.8	62.7	73.3	84.8	107.7
Unit Pressure Drop	ft-H <sub>2</sub> O	13.7	21.9	15.0	20.9	20.6	26.5	15.0	21.3

*Water Regulating Valve* - 2-way, head pressure controlled

- 86°F EWT	in	1-1/4	1-1/4	1	1	1-1/4	1-1/4	1-1/2	1-1/2
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### Piping Connection Size

Liquid Line	- ODM -in	1/2	5/8	1/2	5/8	5/8	5/8	7/8	7/8
Hot Gas Line	- ODM -in	7/8	1-1/8	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8
Condensing Water	- ODM -in	1-3/8	1-3/8	1-3/8	1-3/8	1-5/8	1-5/8	2-1/8	2-1/8
Hot Water	- ODM -in	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8
Humidifier Water	- ODM -in	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Condensate Drain	- ODM -in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

*Physical Details* - For units with standard options only; consult factory for special options and configuration

Dimensions	in	68-3/4(W)x35-1/4(D)x78(H)	78-3/4(W) x35-1/4(D) x78(H)	91(W) x35-1/4(D) x78(H)	108(W) x35-1/4(D) x78(H)				
Approx. Weight	lbs	1386	1446	1946	2031	2060	2162	2355	2479



**Electrical Performance - Cooling Only**

208V/3Phase/60Hz	FLA	27.1	39.5	61.7	74.5	78.9	93.1	110	133
	MCA	31.7	47	67.3	81.7	86.4	102.4	120.6	146.5
	Fuse Size	50	70	80	110	110	130	160	200
460V/3Phase/60Hz	FLA	12.7	19.7	29.1	36.7	39.3	42.7	48.2	67.4
	MCA	14.9	23.6	31.9	40.4	43.2	47	52.9	74.5
	Fuse Size	20	35	40	50	50	60	70	100
575V/3Phase/60Hz	FLA	10.4	15.6	22.7	27.7	31.2	31.8	37.6	54
	MCA	12.3	18.6	24.8	30.4	34.2	34.9	41.1	59.6
	Fuse Size	15	30	30	40	45	45	50	80

**Electrical Performance - Cooling + Humidifier**

208V/3Phase/60Hz	FLA	44.3	55.8	80.64	93.44	97.8	112	128.91	151.91
	MCA	52.2	67.41	90.96	105.36	110.05	126.02	144.21	170.08
	Fuse Size	60	90	100	120	130	150	180	210
460V/3Phase/60Hz	FLA	20.06	27.06	37.68	45.28	47.88	51.28	47.95	75.95
	MCA	24.16	32.78	42.55	51.1	53.9	57.72	53.64	85.14
	Fuse Size	30	45	50	60	60	70	60	110
575V/3Phase/60Hz	FLA	16.37	21.49	29.56	34.56	38	38.6	44.42	60.82
	MCA	19.7	26	33.34	38.96	42.73	43.4	49.67	68.12
	Fuse Size	25	35	35	45	50	50	60	80

**Electrical Performance - Cooling + Electric Reheat**

208V/3Phase/60Hz	FLA	44.6	56.1	86.72	99.52	112.21	126.41	176.63	199.63
	MCA	52.5	67.79	98.57	112.97	128.06	144.04	203.86	229.73
	Fuse Size	60	90	110	130	140	170	220	260
460V/3Phase/60Hz	FLA	20.2	27.2	40.44	48.04	54.4	57.8	69.53	97.53
	MCA	24.33	32.96	45.98	54.53	62.04	65.87	80.61	112.11
	Fuse Size	30	45	50	60	70	70	90	130
575V/3Phase/60Hz	FLA	16.48	21.6	31.76	36.76	43.21	43.81	61.68	78.08
	MCA	19.84	26.14	36.09	41.72	49.25	49.92	71.25	89.7
	Fuse Size	25	35	40	50	50	50	80	100

**Electrical Performance - Cooling + Electric Reheat + Humidifier**

208V/3Phase/60Hz	FLA	44.6	56.1	86.72	99.52	112.21	126.41	176.63	199.63
	MCA	52.5	67.79	98.57	112.97	128.06	144.04	203.86	229.73
	Fuse Size	60	90	110	130	140	170	220	260
460V/3Phase/60Hz	FLA	20.2	27.2	40.44	48.04	54.4	57.8	69.53	97.53
	MCA	24.33	32.96	45.98	54.53	62.04	65.87	80.61	112.11
	Fuse Size	30	45	50	60	70	70	90	130
575V/3Phase/60Hz	FLA	16.48	21.6	31.76	36.76	43.21	43.81	61.68	78.08
	MCA	19.84	26.14	36.09	41.72	49.25	49.92	71.25	89.7
	Fuse Size	25	35	40	50	50	50	80	100

<sup>1</sup> Standard options

# Glycol-cooled System

Model no. PGU_/_PGR_/_PGD_ _	028	034	042	051	057	065	076	087	089
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## Cooling Capacity - Rated at standard air volume

85F°(29°C) DB, 32%rh

(shaded values at reduced airflow)

Net Total	BTUH	64934	105622	104879	135420	187719	228434	267045	311556	358699
Net Sensible	BTUH	63348	105622	104879	135420	187719	228434	267045	311556	358699
THR	BTUH	88860	145993	143703	187227	252651	322168	371807	434536	500864

80F°(27°C) DB, 36%rh

Net Total	BTUH	67094	103551	100968	127683	177598	214954	251506	292049	337487
Net Sensible	BTUH	67094	103551	100968	127683	177598	214954	251506	292049	337487
THR	BTUH	91251	145479	142208	178681	241860	307322	354579	412600	477703

75F° (24°C) DB, 45%rh

Net Total	BTUH	64184	98239	98011	121948	168716	205374	239539	279892	328278
Net Sensible	BTUH	62299	98152	98011	121948	168716	204612	239342	278945	319006
THR	BTUH	88027	139617	136968	172387	232399	296808	341333	398964	467634

## Fan Section - EC fan

Standard Air Volume	CFM	3000	5600	6000	6600	8700	10800	12400	13500	14700
External Static Pressure	in	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Quantity of Fans		1	1	2	2	2	2	3	3	3
Fan Size	mm	500	560	500	500	560	560	500	500	500
Net Total Fan Motor Power	kW	0.56	2.56	1.65	2.08	2.60	4.40	4.08	5.76	8.13

## Compressor - Refrigerant R407C

Quantity of Compressors		1	1	2	2	2	2	2	2	2
Compressor Model		ZR72KCE	ZR108KCE	ZR54K5E	ZR72KCE	ZR94KCE	ZR125KCE	ZR144KCE	ZR160KCE	ZR190KCE
Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll

## Evaporator Coil - A/V-Frame - Copper tube / aluminium fin - Stainless steel drain pan

Face Area	ft²	13.13	13.13	18.96	18.96	22.50	22.50	29.58	29.58	29.58
Rows Deep		4	4	3	3	4	4	4	6	6
Fins per inch		13	13	13	13	13	13	13	13	13
Face Velocity	FPM	230	427	316	348	387	480	419	456	497
Refrigerant Charge	Lbs	16.1	17.5	24.2	24.2	35.8	42.0	48.0	50.0	50.0

Model no. PGU_ _/PGD_ _/PGR_ _		028	034	042	051	057	065	076	087	089
<b>Reheat Section (options)</b>										
<i>Electric Reheat</i> <sup>1</sup> - Single Stage, finned tubular type heater, SCR Controlled										
Capacity	kw	6	6	9	9	12	12	24	24	24
Quantity of Heaters		3	3	3	3	3	3	3	3	3
<i>Hot Gas Reheat</i> - one stage per compressor										
Heating Capacity	BTUH	35211	55847	54787	68955	92959	118723	136533	159586	187054
<i>Hot Water Reheat</i> - 180 °F (82.2° C ) E.W.T., 77°F (25° C ) L.A.T. - 2-way modulating control valve, optional 3-way										
Heating Capacity	BTUH	55336	110895	128334	141135	186055	230768	265725	288241	314535
Water Flow Rate	GPM	3.1	5.7	5.1	5.6	6.7	8.5	8.6	9.4	10.4
Pressure Drop	ft-H <sub>2</sub> O	0.5	1.6	1.3	1.6	2.3	3.7	3.8	4.5	5.5
<b>Humidifier Section (optional)</b>										
<i>Electrode Boiler Type</i> <sup>1</sup>										
Capacity	lb/hr	10	10	20	20	20	20	20	20	20
Humidifier Power	kw	3.4	3.4	6.8	6.8	6.8	6.8	6.8	6.8	6.8
<b>Filter Section</b> - Pleated disposable type, 30% efficiency to ASHRAE 52-76										
<i>PGU_ _ Upflow Models (Maximum 2" filter depth)</i>										
Quantity of Filters ( )		(2) 14x20x2		(4) 20x25x2		(4) 20x30x2			(6) 20x25x2	
Nominal Size	LxWxD-in	(2) 20x25x2								
<i>PGD_ _ Downflow Models with Top Mounted Filter Box (Adds 8" to Machine Height)</i>										
Quantity of Filters ( )		(4) 16x25x4		(6) 16x20x4		(6) 16x25x4			(4) 16x20x4	
Nominal Size	LxWxD-in								(4) 16x25x4	
<i>PGR_ _ Rear Return Models with Filter Box</i>										
Quantity of Filters ( )		(2) 24x12x4								
Nominal Size	LxWxD-in	(2) 24x18x4		(6) 20x24x4		(6) 24x24x4			(10) 24x18x4	
		(2) 20x24x4								
<b>Glycol Solution Requirement</b> - 40% propylene glycol										
<b>104°F EGT</b>										
Flow Rate	GPM	17.3	28.4	28.0	36.4	49.2	62.7	72.4	80.1	92.7
Unit Pressure Drop	ft-H <sub>2</sub> O	13.6	10.9	11.3	10.3	9.3	12.3	12.6	14.3	21.6
<b>Glycol Solution Regulating Valve</b> -2-way, head pressure controlled										
Size	in	1 1/2	1 1/2	1 ¼	1 ¼	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
<b>Piping Connection Size</b>										
Liquid Line	- ODM -in	1/2	5/8	1/2	5/8	5/8	5/8	7/8	7/8	7/8
Hot Gas Line	- ODM -in	7/8	1-1/8	7/8	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8
Glycol Solution	- ODM -in	1-3/8	1 5/8	1-3/8	1 5/8	2-1/8	2-1/8	2-1/8	2-1/8	2-1/8
Hot Water	- ODM -in	7/8	7/8	7/8	7/8	7/8	7/8	1-1/8	1-1/8	1-1/8
Humidifier Water	- ODM -in	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Condensate Drain	- ODM -in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>Physical Details</b> - For units with standard options only; consult factory for special options and configuration										
Dimensions	in	68-3/4(W)x35-1/4(D)x78(H)		78-3/4(W) x35-1/4(D) x78(H)		91(W) x35-1/4(D) x78(H)		108(W) x35-1/4(D) x78(H)		
Approx. Weight	lbs	1386		1446		1946		2031		2550
		2060		2162		2355		2479		

**Electrical Performance - Cooling Only**

208V/3Phase/60Hz	FLA	27.1	39.5	47.7	54.1	76.3	93.1	110	124.2	133
	MCA	31.7	47	51.6	58.8	83.5	102.4	120.6	135.6	146.5
	Fuse Size	50	70	60	70	110	130	160	180	200
460V/3Phase/60Hz	FLA	12.7	19.7	21.5	23.5	37.7	42.7	48.2	57.2	67.4
	MCA	14.9	23.6	23.3	27.6	41.4	47	52.9	63	74.5
	Fuse Size	20	35	30	35	50	60	70	80	100
575V/3Phase/60Hz	FLA	10.4	15.6	16.7	20.9	28.6	31.8	37.6	47.6	54
	MCA	12.3	18.6	18.1	22.8	31.3	34.9	41.1	52.4	59.6
	Fuse Size	15	30	20	30	40	45	50	79	80

**Electrical Performance - Cooling + Humidifier**

208V/3Phase/60Hz	FLA	44.3	55.8	66.64	73.04	95.2	112	128.91	143.11	151.91
	MCA	52.2	67.41	75.21	82.41	107.12	126.02	144.21	160.18	170.08
	Fuse Size	60	90	80	90	130	150	180	200	210
460V/3Phase/60Hz	FLA	20.06	27.06	30.08	33.88	46.28	51.28	47.95	65.75	75.95
	MCA	24.16	32.78	34	38.27	52.1	57.72	53.64	73.67	85.14
	Fuse Size	30	45	35	45	60	70	60	90	110
575V/3Phase/60Hz	FLA	16.37	21.49	23.56	27.76	35.4	38.6	44.42	54.42	60.82
	MCA	19.7	26	26.59	31.31	39.8	43.4	49.67	60.92	68.12
	Fuse Size	25	35	30	35	45	50	60	70	80

**Electrical Performance - Cooling + Electric Reheat**

208V/3Phase/60Hz	FLA	44.6	56.1	72.72	79.12	109.61	126.41	176.63	190.83	199.63
	MCA	52.5	67.79	82.82	90.02	125.14	144.04	203.86	219.83	229.73
	Fuse Size	60	90	90	100	140	170	220	250	260
460V/3Phase/60Hz	FLA	20.2	27.2	32.84	36.64	52.8	57.8	69.53	87.33	97.53
	MCA	24.33	32.96	37.43	41.71	60.24	65.87	80.61	100.64	112.11
	Fuse Size	30	45	40	45	70	70	90	110	130
575V/3Phase/60Hz	FLA	16.48	21.6	25.76	29.96	40.61	43.81	61.68	71.68	78.08
	MCA	19.84	26.14	29.34	34.07	46.32	49.92	71.25	82.5	89.7
	Fuse Size	25	35	30	35	50	50	80	90	100

**Electrical Performance - Cooling + Electric Reheat + Humidifier**

208V/3Phase/60Hz	FLA	44.6	56.1	72.72	79.12	109.61	126.41	176.63	190.83	199.63
	MCA	52.5	67.79	82.82	90.02	125.14	144.04	203.86	219.83	229.73
	Fuse Size	60	90	90	100	140	170	220	250	260
460V/3Phase/60Hz	FLA	20.2	27.2	32.84	36.64	52.8	57.8	69.53	87.33	97.53
	MCA	24.33	32.96	37.43	41.71	60.24	65.87	80.61	100.64	112.11
	Fuse Size	30	45	40	45	70	70	90	110	130
575V/3Phase/60Hz	FLA	16.48	21.6	25.76	29.96	40.61	43.81	61.68	71.68	78.08
	MCA	19.84	26.14	29.34	34.07	46.32	49.92	71.25	82.5	89.7
	Fuse Size	25	35	30	35	50	50	80	90	100

<sup>1</sup> Standard options

# Air Dual-cooling System

Model no. PDU_/_PDD_ _/_PDR_		028	034	042	051	057	065	076	087
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## Cooling Capacity - Rated at standard air volume, 95°F (35°C) ambient temperature

85F°(29°C) DB, 32%rh		(shaded values at reduced airflow)							
Net Total	BTUH	82025	109349	160990	186065	221790	245349	285966	343792
Net Sensible	BTUH	82025	109349	160990	186065	221790	245349	285966	343792
THR	BTUH	105238	144740	211335	254846	290432	331420	381552	470085
80F°(27°C) DB, 36%rh									
Net Total	BTUH	77080	104280	154703	175211	209740	233499	273222	329958
Net Sensible	BTUH	77080	104280	154256	175211	209740	233499	273222	329958
THR	BTUH	99982	141956	204787	243197	277181	319851	367943	454806
75F° (24°C) DB, 45%rh									
Net Total	BTUH	73607	99630	149812	170757	204620	225602	263944	312831
Net Sensible	BTUH	72125	98365	134756	165926	204620	220604	252532	277081
THR	BTUH	96317	136912	199794	238419	271553	312072	358355	441988

## Cooling Capacity - Chilled-water - Rated at standard air volume, 45°F entering water & 10°F water temperature rise

85F°(29°C) DB, 32%rh		(shaded values at reduced airflow)							
Net Net Total	BTUH	119696	144979	183042	224380	282558	298998	346119	366992
Net Sensible	BTUH	109041	132867	173798	214576	267379	284654	329529	350760
Flow Rate	GPM	28	34	43	54	65	71	82	87
Unit Pressure Drop	ft-H <sub>2</sub> O	21.3	31.0	19.9	30.9	27.2	32.1	12.1	13.4
80F°(27°C) DB, 36%rh									
Net Net Total	BTUH	105294	138947	160423	195987	248624	264117	303173	321381
Net Sensible	BTUH	95605	129257	151748	186663	234378	251058	287514	305960
Flow Rate	GPM	28	34	43	54	65	71	82	87
Unit Pressure Drop	ft-H <sub>2</sub> O	21.3	31.0	19.9	30.9	27.2	32.1	12.1	13.4
75F° (24°C) DB, 45%rh									
Net Net Total	BTUH	94722	123281	141869	172456	221514	232791	267994	278578
Net Sensible	BTUH	82051	107476	125927	153798	196177	207118	238287	247994
Flow Rate	GPM	28	34	43	54	65	71	82	87
Unit Pressure Drop	ft-H <sub>2</sub> O	21.3	31.0	19.9	30.9	27.2	32.1	12.1	13.4

Model no. PDU_/_PDD_ _/_PDR_		028	034	042	051	057	065	076	087
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## Fan Section -

Standard Air Volume	CFM	3600	5200	6200	8000	9400	10800	12000	13000
External Static Pressure	in	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Quantity of Fans		1	1	2	2	2	2	3	3
Fan Size	mm	500	560	500	500	560	560	500	500
Net Total Fan Motor Power	kW	0.98	2.27	2.32	4.50	3.66	5.44	4.80	5.76

## Compressor - Refrigerant R407C

Quantity of Compressors		1	1	2	2	2	2	2	2
Compressor Model		ZR72KCE	ZR108KCE	ZR81KCE	ZR94KCE	ZR108KCE	ZR125KCE	ZR144KCE	ZR190KCE
Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll

**Evaporator Coil** - A/V-Frame- Copper tube / aluminium fin - Stainless steel drain pan

Face Area	ft <sup>2</sup>	13.13	13.13	18.96	18.96	22.5	22.5	29.58	29.58
Rows Deep									
(DX/Chilled Water)	3/3	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4
Fins per inch		13	13	13	13	13	13	13	13
Face Velocity	FPM	274	396	327	422	418	480	406	439
Refrigerant Charge	Lbs	5.4	5.5	10.3	10.3	10.6	10.6	14.7	16.0

(estimated indoor unit charge, unit shipped with dry nitrogen holding charge)

**Reheat Section**

Electric Reheat <sup>1</sup> - Single Stage, finned tubular type heater, SCR Controlled

Capacity	kw	6	6	9	9	12	12	24	24
Quantity of Heaters		3	3	3	3	3	3	3	3

**Humidifier Section**

Electrode Boiler Type <sup>1</sup>

Capacity	lb/hr	10	10	20	20	20	20	20	20
Humidifier Power	kw	3.4	3.4	6.8	6.8	6.8	6.8	6.8	6.8

**Filter Section** - Pleated disposable type, 30%efficiency to ASHRAE 52-76

PDU\_ \_Upflow Models (Maximum 2" filter depth)

Quantity of Filters ( )		(2) 14x20x2	(4) 20x25x2	(4) 20x30x2	(6) 20x25x2
Nominal Size	LxWxD-in	(2) 20x25x2			

PDD\_ \_Downflow Models

Quantity of Filters ( )		(3) 20x25x4	(4) 20x25x4	(4) 20x25x4	(6) 20x25x4
Nominal Size	LxWxD-in				

PDD\_ \_Downflow Models with Optional Top Mounted Filter Box (Adds 8" to Machine Height)

Quantity of Filters ( )		(2) 16x25x4	(6) 16x20x4	(4) 16x25x4	(6) 16x20x4
Nominal Size	LxWxD-in	(2) 16x20x4		(2) 16x20x4	(2) 16x25x4

PDR\_ \_Rear Return Models with Filter Box

Quantity of Filters ( )		(2) 24x12x4	(6) 20x24x4	(6) 24x24x4	(10) 24x18x4
Nominal Size	LxWxD-in	(2) 24x18x4			
		(2) 20x24x4			

Model no. PDU_/_/PDD_/_/PDR_/_	028	034	042	051	057	065	076	087
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**Chilled-water Valve - 2-Way modulating**

Valve Size	in	1	1	1 1/4	1 1/4	1 1/2	1 1/2	2	2
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**Piping Connection Size**

Liquid Line	- ODM -in	1/2	5/8	1/2	5/8	5/8	5/8	7/8	7/8
Hot Gas Line	- ODM -in	7/8	1-1/8	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8
Humidifier Water	- ODM -in	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Condensate Drain	- ODM -in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

**Physical Details - For units with standard options only; consult factory for special options and configuration**

Dimensions	in	68-3/4(W) x 35-1/4(D) x 78(H)		88(W) x 35-1/4(D) x 78(H)		101-1/4(W) x 35-1/4(D) x 78(H)		118(W) x 35-1/4(D) x 78(H)	
Approx. Weight	lbs	1367	1433	1925	2019	2050	2162	2375	2511

**Matching Air-Cooled Condenser - Selected at 95° F Ambient**

Model		KS12-128-1	KS12-154-1	KS13-288-2	KS13-288-2	KS13-288-2	KM13-356-2	KM13-396-2	KM14-492-2
Width x Depth x Height in		68 x 44 x 38	68 x 44 x 38	88 x 44 x 38	88 x 44 x 38	88 x 44 x 38	135x43x48	135x43x48	175x43x48
Weight	lbs	274	289	401	401	401	650	695	840

**Electrical Performance - Cooling Only**

208V/3Phase/60Hz	FLA	27.1	39.5	61.7	74.5	78.9	93.1	110	133
	MCA	31.7	47	67.3	81.7	86.4	102.4	120.6	146.5
	Fuse Size	50	70	80	110	110	130	160	200
460V/3Phase/60Hz	FLA	12.7	19.7	29.1	36.7	39.3	42.7	48.2	67.4
	MCA	14.9	23.6	31.9	40.4	43.2	47	52.9	74.5
	Fuse Size	20	35	40	50	50	60	70	100
575V/3Phase/60Hz	FLA	10.4	15.6	22.7	27.7	31.2	31.8	37.6	54
	MCA	12.3	18.6	24.8	30.4	34.2	34.9	41.1	59.6
	Fuse Size	15	30	30	40	45	45	50	80

**Electrical Performance - Cooling + Humidifier**

208V/3Phase/60Hz	FLA	44.3	55.8	80.64	93.44	97.8	112	128.91	151.91
	MCA	52.2	67.41	90.96	105.36	110.05	126.02	144.21	170.08
	Fuse Size	60	90	100	120	130	150	180	210
460V/3Phase/60Hz	FLA	20.06	27.06	37.68	45.28	47.88	51.28	47.95	75.95
	MCA	24.16	32.78	42.55	51.1	53.9	57.72	53.64	85.14
	Fuse Size	30	45	50	60	60	70	60	110
575V/3Phase/60Hz	FLA	16.37	21.49	29.56	34.56	38	38.6	44.42	60.82
	MCA	19.7	26	33.34	38.96	42.73	43.4	49.67	68.12
	Fuse Size	25	35	35	45	50	50	60	80

<b>Electrical Performance - Cooling + Electric Reheat</b>									
208V/3Phase/60Hz	FLA	44.6	56.1	86.72	99.52	112.21	126.41	176.63	199.63
	MCA	52.5	67.79	98.57	112.97	128.06	144.04	203.86	229.73
	Fuse Size	60	90	110	130	140	170	220	260
460V/3Phase/60Hz	FLA	20.2	27.2	40.44	48.04	54.4	57.8	69.53	97.53
	MCA	24.33	32.96	45.98	54.53	62.04	65.87	80.61	112.11
	Fuse Size	30	45	50	60	70	70	90	130
575V/3Phase/60Hz	FLA	16.48	21.6	31.76	36.76	43.21	43.81	61.68	78.08
	MCA	19.84	26.14	36.09	41.72	49.25	49.92	71.25	89.7
	Fuse Size	25	35	40	50	50	50	80	100
<b>Electrical Performance - Cooling + Electric Reheat + Humidifier</b>									
208V/3Phase/60Hz	FLA	44.6	56.1	86.72	99.52	112.21	126.41	176.63	199.63
	MCA	52.5	67.79	98.57	112.97	128.06	144.04	203.86	229.73
	Fuse Size	60	90	110	130	140	170	220	260
460V/3Phase/60Hz	FLA	20.2	27.2	40.44	48.04	54.4	57.8	69.53	97.53
	MCA	24.33	32.96	45.98	54.53	62.04	65.87	80.61	112.11
	Fuse Size	30	45	50	60	70	70	90	130
575V/3Phase/60Hz	FLA	16.48	21.6	31.76	36.76	43.21	43.81	61.68	78.08
	MCA	19.84	26.14	36.09	41.72	49.25	49.92	71.25	89.7
	Fuse Size	25	35	40	50	50	50	80	100

<sup>1</sup> Standard options



# Water Dual-cooling System

Model no. PHU_/_/PHD_/_/PHR_		028	034	042	051	057	065	076	087
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## Cooling Capacity – Direct Expansion - Rated at standard air volume

85F°(29°C) DB, 32%rh		(shaded values at reduced airflow)							
Net Total	BTUH	75923	111779	170741	191957	219286	247470	295207	343940
Net Sensible	BTUH	72257	111779	170740	191957	209467	247470	295207	317599
THR	BTUH	95967	146761	221366	255817	282454	328989	381700	472189
80F°(27°C) DB, 36%rh									
Net Total	BTUH	73425	106811	161539	182063	213166	236885	282977	332106
Net Sensible	BTUH	72755	106811	161539	182063	211921	236885	282977	328771
THR	BTUH	93513	143429	211827	245320	275866	317627	368655	459247
75F° (24°C) DB, 45%rh									
Net Total	BTUH	70620	101907	154060	175247	204606	227504	271576	318287
Net Sensible	BTUH	68524	100761	152880	174377	184318	219349	259202	281607
THR	BTUH	90481	138149	204107	238088	266629	307541	356301	444115

## Cooling Capacity - Chilled-water - Rated at standard air volume, 45°F entering water & 10°F water temperature rise

85F°(29°C) DB, 32%rh		(shaded values at reduced airflow)							
Net Total	BTUH	85503	145205	211907	235137	257881	298524	345374	386115
Net Sensible	BTUH	84718	145205	202759	227139	242531	285282	345374	370004
Flow/Pressure Drop	GPM/ft-H <sub>2</sub> O	20/8.9	34/25.3	50/26.6	55/32.0	61/24.1	70/31.2	75/25.7	80/28.8
80F°(27°C) DB, 36%rh									
Net Total	BTUH	75258	130749	185831	205215	226324	260989	313423	336965
Net Sensible	BTUH	74377	116801	177136	197448	211984	248356	295447	321529
Flow/Pressure Drop	GPM/ft-H <sub>2</sub> O	20/8.9	34/25.3	50/26.6	55/32.0	61/24.1	70/31.2	75/25.7	80/28.8
75F° (24°C) DB, 45%rh									
Net Total	BTUH	65556	108520	164504	180249	201250	230377	277644	296377
Net Sensible	BTUH	61314	102460	147069	162427	176612	205151	245211	264579
Flow/Pressure Drop	GPM/ft-H <sub>2</sub> O	20/8.9	34/25.3	50/26.6	55/32.0	61/24.1	70/31.2	75/25.7	80/28.8

Model no. PHU_/_/PHR_/_/PHD_		028	034	042	051	057	065	076	087
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## Fan Section - EC fan

Standard Air Volume	CFM	3000	5600	7500	8700	8700	10800	12400	14200
External Static Pressure		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Quantity of Fans		1	1	2	2	2	2	3	3
Fan Size	mm	500	560	500	500	560	560	500	500
Net Total Fan Motor Power	kW	0.64	3.02	3.38	5.24	3.20	5.92	5.46	9.00

## Compressor - Refrigerant R407C

Quantity of Compressors		1	1	2	2	2	2	2	2
Compressor Model		ZR72KCE	ZR108KCE	ZR81KCE	ZR94KCE	ZR108KCE	ZR125KCE	ZR144KCE	ZR190KCE
Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll

**Evaporator Coil** - A/V-Frame- Copper tube / aluminium fin - Stainless steel drain pan

Face Area	ft <sup>2</sup>	13.13	13.13	18.96	18.96	22.5	22.5	29.58	29.58
Rows Deep (DX/Chilled Water)		4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4
Fins per inch		13	13	13	13	13	13	13	13
Face Velocity	FPM	229	427	395	458	387	480	419	480
Refrigerant Charge	Lbs	16.1	17.5	24.2	24.2	35.8	42.0	48.0	50.0

**Reheat Section**

Electric Reheat <sup>1</sup> - Single Stage, finned tubular type heater, SCR Controlled

Capacity	kw	6	6	6	12	12	12	12	12
Quantity of Heaters		3	3	3	3	3	3	3	3

**Humidifier Section**

Electrode Boiler Type <sup>1</sup>

Capacity	lb/hr	10	10	20	20	20	20	20	20
Humidifier Power	kw	3.4	3.4	6.8	6.8	6.8	6.8	6.8	6.8

**Filter Section** - Pleated disposable type, 30% efficiency to ASHRAE 52-76

PHU\_ \_Upflow Models (Maximum 2" filter depth)

Quantity of Filters ( )		(2) 14x20x2		(4) 20x25x2		(4) 20x30x2		(6) 20x25x2
Nominal Size	LxWxD-in	(2) 20x25x2						

PHD\_ \_Downflow Models with Top Mounted Filter Box (Adds 8" to Machine Height)

Quantity of Filters ( )		(2) 16x25x4		(6) 16x20x4		(4) 16x25x4		(6) 16x20x4
Nominal Size	LxWxD-in	(2) 16x20x4				(2) 16x20x4		(2) 16x25x4

PHR\_ \_Rear Return Models with Filter Box

Quantity of Filters ( )		(2) 24x12x4						
Nominal Size	LxWxD-in	(2) 24x18x4		(6) 20x24x4		(6) 24x24x4		(10) 24x18x4
		(2) 20x24x4						

Model no. PHU_ _/PHR_ _/PHD_ _		<b>028</b>	<b>034</b>	<b>042</b>	<b>051</b>	<b>057</b>	<b>065</b>	<b>076</b>	<b>087</b>
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**Condensing Water Requirement**

86°F EWT

Flow Rate	GPM	21.2	32.6	45.3	56.8	62.7	73.1	84.8	104.9
Unit Pressure Drop	ft-H <sub>2</sub> O	13.7	21.9	15.0	20.9	20.6	14.5	15.0	20.5

**Water Regulating Valve** - 2-way, head pressure controlled

- 85°F EWT	in	1	1-1/4	1	1	1-1/4	1-1/4	1-1/2	1-1/2
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**Chilled-water Valve** - 2-Way modulating

Valve Size	in	1	1	1-1/4"	1-1/4"	1 1/2	1 1/2	2	2
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### Piping Connection Size

Liquid Line	- ODM -in	1/2	5/8	1/2	5/8	5/8	5/8	7/8	7/8
Hot Gas Line	- ODM -in	7/8	1-1/8	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8
Glycol Solution	- ODM -in	1-1/8	1-3/8	1-5/8	1-5/8	2 1/8	2 1/8	2 1/8	2 1/8
Chilled Water	-ODM -in	1 1/8	1 1/8	1 3/8	1 3/8	1 5/8	1 5/8	2 1/8	2 1/8
Humidifier Water	- ODM -in	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Condensate Drain	- ODM -in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

### Physical Details - For units with standard options only; consult factory for special options and configuration

Dimensions	in	68-3/4(W) x 35-1/4(D) x 78(H)		88(W) x 35-1/4(D) x 78(H)		101-1/4(W) x 35-1/4(D) x 78(H)		118(W) x 35-1/4(D) x 78(H)	
Approx. Weight	lbs	1467	1533	2125	2219	2250	2362	2575	2711

### Electrical Performance - Cooling Only

208V/3Phase/60Hz	FLA	27.1	39.5	61.7	74.5	78.9	93.1	110	133
	MCA	31.7	47	67.3	81.7	86.4	102.4	120.6	146.5
	Fuse Size	50	70	80	110	110	130	160	200
460V/3Phase/60Hz	FLA	12.7	19.7	29.1	36.7	39.3	42.7	48.2	67.4
	MCA	14.9	23.6	31.9	40.4	43.2	47	52.9	74.5
	Fuse Size	20	35	40	50	50	60	70	100
575V/3Phase/60Hz	FLA	10.4	15.6	22.7	27.7	31.2	31.8	37.6	54
	MCA	12.3	18.6	24.8	30.4	34.2	34.9	41.1	59.6
	Fuse Size	15	30	30	40	45	45	50	80

### Electrical Performance - Cooling + Humidifier

208V/3Phase/60Hz	FLA	44.3	55.8	80.64	93.44	97.8	112	128.91	151.91
	MCA	52.2	67.41	90.96	105.36	110.05	126.02	144.21	170.08
	Fuse Size	60	90	100	120	130	150	180	210
460V/3Phase/60Hz	FLA	20.06	27.06	37.68	45.28	47.88	51.28	47.95	75.95
	MCA	24.16	32.78	42.55	51.1	53.9	57.72	53.64	85.14
	Fuse Size	30	45	50	60	60	70	60	110
575V/3Phase/60Hz	FLA	16.37	21.49	29.56	34.56	38	38.6	44.42	60.82
	MCA	19.7	26	33.34	38.96	42.73	43.4	49.67	68.12
	Fuse Size	25	35	35	45	50	50	60	80

### Electrical Performance - Cooling + Electric Reheat

208V/3Phase/60Hz	FLA	44.6	56.1	86.72	99.52	112.21	126.41	176.63	199.63
	MCA	52.5	67.79	98.57	112.97	128.06	144.04	203.86	229.73
	Fuse Size	60	90	110	130	140	170	220	260
460V/3Phase/60Hz	FLA	20.2	27.2	40.44	48.04	54.4	57.8	69.53	97.53
	MCA	24.33	32.96	45.98	54.53	62.04	65.87	80.61	112.11
	Fuse Size	30	45	50	60	70	70	90	130
575V/3Phase/60Hz	FLA	16.48	21.6	31.76	36.76	43.21	43.81	61.68	78.08
	MCA	19.84	26.14	36.09	41.72	49.25	49.92	71.25	89.7
	Fuse Size	25	35	40	50	50	50	80	100

**Electrical Performance - Cooling + Electric Reheat + Humidifier**

208V/3Phase/60Hz	FLA	44.6	56.1	86.72	99.52	112.21	126.41	176.63	199.63
	MCA	52.5	67.79	98.57	112.97	128.06	144.04	203.86	229.73
	Fuse Size	60	90	110	130	140	170	220	260
460V/3Phase/60Hz	FLA	20.2	27.2	40.44	48.04	54.4	57.8	69.53	97.53
	MCA	24.33	32.96	45.98	54.53	62.04	65.87	80.61	112.11
	Fuse Size	30	45	50	60	70	70	90	130
575V/3Phase/60Hz	FLA	16.48	21.6	31.76	36.76	43.21	43.81	61.68	78.08
	MCA	19.84	26.14	36.09	41.72	49.25	49.92	71.25	89.7
	Fuse Size	25	35	40	50	50	50	80	100

<sup>1</sup> Standard options

# Glycol Dual-cooling System

Model no. PEU_/_PER_/_PED_ _	028	034	042	051	057	065	076	087	089
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## Cooling Capacity – Direct Expansion - Rated at standard air volume

85F°(29°C) DB, 32%rh		(shaded values at reduced airflow)								
Net Total	BTUH	64320	103319	104333	134191	184852	232884	260696	285474	326575
Net Sensible	BTUH	62734	103319	104333	134191	184852	232884	260696	285474	326575
THR	BTUH	88860	141545	143704	187227	252652	325084	371809	411871	467707
80F°(27°C) DB, 36%rh										
Net Total	BTUH	66480	98808	100313	126454	174731	220416	245158	267798	313121
Net Sensible	BTUH	66480	98808	100313	126454	174731	220416	245158	267798	313121
THR	BTUH	91251	141275	142208	178682	241861	311367	354581	392125	452748
75F° (24°C) DB, 45%rh										
Net Total	BTUH	63569	92735	97205	120719	165849	214937	233191	257029	303817
Net Sensible	BTUH	61685	89321	97205	120719	165849	208863	232994	253179	284295
THR	BTUH	88027	134674	136969	172387	232400	305340	341335	380150	442414

## Cooling Capacity - Chilled-water - Rated at standard air volume, 45°F entering water & 10°F water temperature rise @85F/32%RH

85F°(29°C) DB, 32%rh		(shaded values at reduced airflow)								
Net Total	BTUH	81950	152296	174758	194527	255789	309013	351647	378877	390310
Net Sensible	BTUH	81323	152296	165477	185377	243151	294596	335191	362763	374617
Flow/Pressure Drop	GPM/ft-H <sub>2</sub> O	19.8/14.2	35.0/43.9	42.0/29.8	45.0/34.1	65.0/23.1	72.5/28.3	84.0/24.3	90.0/27.7	94.0/30.1
80F°(27°C) DB, 36%rh										
Net Total	BTUH	72100	136361	161012	170861	228588	274687	316142	332060	346797
Net Sensible	BTUH	71360	136010	152319	162239	217145	261004	300570	316661	331714
Flow/Pressure Drop	GPM/ft-H <sub>2</sub> O	19.8/14.2	35.0/43.9	42.0/29.8	45.0/34.1	65.0/23.1	72.5/28.3	84.0/24.3	90.0/27.7	94.0/30.1
75F° (24°C) DB, 45%rh										
Net Total	BTUH	64948	113997	143207	147165	200417	244167	280428	293585	306536
Net Sensible	BTUH	60854	107291	127474	130825	178920	217839	250361	262415	274902
Flow/Pressure Drop	GPM/ft-H <sub>2</sub> O	19.8/14.2	35.0/43.9	42.0/29.8	45.0/34.1	65.0/23.1	72.5/28.3	84.0/24.3	90.0/27.7	94.0/30.1

Model no. PEU_/_PER_/_PED_ _	028	034	042	051	057	065	076	087	089
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## Fan Section - EC fan

Standard Air Volume	CFM	3000	5600	6000	6600	8700	10000	12400	13500	13700
External Static Pressure	in	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Quantity of Fans		1	1	2	2	2	2	3	3	3
Fan Size	mm	500	560	500	500	560	560	500	500	500
Net Total Fan Motor Power	kW	0.74	3.12	1.88	2.44	3.44	4.38	5.94	6.90	7.14

## Compressor - Refrigerant R407C

Quantity of Compressors		1	1	2	2	2	2	2	2	2
Compressor Model		ZR72KCE	ZR108KCE	ZR54K5E	ZR72KCE	ZR94KCE	ZR125KCE	ZR144KCE	ZR160KCE	ZR190KCE
Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll

## Evaporator Coil - A/V-Frame- Copper tube / aluminium fin - Stainless steel drain pan

Face Area	ft <sup>2</sup>	13.13	13.13	18.96	18.96	22.50	22.50	29.58	29.58	29.58
Rows Deep (DX/Chill)	3/3	4/4	4/4	3/4	3/4	4/4	4/4	4/4	4/4	4/4
Fins per inch		13	13	13	13	13	13	13	13	13
Face Velocity	FPM	228	427	316	348	387	444	419	456	463
Refrigerant Charge	Lbs	16.1	17.5	24.2	24.2	35.8	42.0	48.0	50.0	50.0

**Reheat Section***Electric Reheat<sup>1</sup> - Single Stage, finned tubular type heater, SCR Controlled*

Capacity	kw	6	6	9	9	12	12	24	24	24
Quantity of Heaters		3	3	3	3	3	3	3	3	3

**Humidifier Section***Electrode Boiler Type<sup>1</sup>*

Capacity	lb/hr	10	10	20	20	20	20	20	20	20
Humidifier Power	kw	3.4	3.4	6.8	6.8	6.8	6.8	6.8	6.8	6.8

**Filter Section - Pleated disposable type, 30% efficiency to ASHRAE 52-76***PEU\_\_Upflow Models (Maximum 2" filter depth)*

Quantity of Filters ( )		(2) 14x20x2		(4) 20x25x2		(4) 20x30x2		(6) 20x25x2	
Nominal Size	LxWxD-in	(2) 20x25x2							

**PED\_\_Downflow Models with Top Mounted Filter Box (Adds 8" to Machine Height)**

Quantity of Filters ( )		(2) 16x25x4		(6) 16x20x4		(4) 16x25x4		(6) 16x20x4	
Nominal Size	LxWxD-in	(2) 16x20x4				(2) 16x20x4		(2) 16x25x4	

**PER\_\_Rear Return Models with Filter Box**

Quantity of Filters ( )		(2) 24x12x4							
Nominal Size	LxWxD-in	(2) 24x18x4		(6) 20x24x4		(6) 24x24x4		(10) 24x18x4	
		(2) 20x24x4							

<b>Model no. PEU__/PER__/PED__</b>		<b>028</b>	<b>034</b>	<b>042</b>	<b>051</b>	<b>057</b>	<b>065</b>	<b>076</b>	<b>087</b>	<b>089</b>
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**Glycol Solution Requirement - 40% propylene glycol****104°F EGT**

Flow Rate	GPM	17.3	27.6	28.0	36.4	49.2	62.7	72.4	80.2	89.6
Unit Pressure Drop	ft-H <sub>2</sub> O	13.6	10.5	11.3	10.3	9.3	12.3	12.6	14.4	16.8

**Glycol Solution Regulating Valve - 2-way, head pressure controlled**

Valve Size	in	1 ¼	1 ¼	1 ¼	1 ¼	1 ½	1 ½	1 ½	1 ½	1 ½
Quantity of Valves		1	1	2	2	2	2	2	2	2

**Chilled-water Valve - 2-Way modulating**

Valve Size	in.	1 ¼	1 ¼	1 ½	1 ½	2	2	2	2	2
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**Piping Connection Size**

Liquid Line	- ODM -in	5/8	5/8	1/2	5/8	5/8	5/8	7/8	7/8	7/8
Hot Gas Line	- ODM -in	7/8	1-1/8	7/8	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8
Glycol Solution	- ODM -in	1-3/8	1-3/8	1 5/8	1 5/8	2 1/8	2 1/8	2 1/8	2 1/8	2-1/8
Chilled Water	-ODM -in	1-3/8	1-3/8	1 5/8	1 5/8	2 1/8	2 1/8	2 1/8	2 1/8	2-1/8
Humidifier Water	- ODM -in	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Condensate Drain	- ODM -in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

**Physical Details - For units with standard options only; consult factory for special options and configuration**

Dimensions	in	68-3/4(W) x 35-1/4(D) x 78(H)		88(W) x 35-1/4(D) x 78(H)		101-1/4(W) x 35-1/4(D) x 78(H)		118(W) x 35-1/4(D) x 78(H)		
Approx. Weight	lbs	1467	1533	2125	2219	2250	2362	2575	2711	2800

**Electrical Performance - Cooling Only**

208V/3Phase/60Hz	FLA	27.1	39.5	47.7	54.1	76.3	93.1	110	124.2	133
	MCA	31.7	47	51.6	58.8	83.5	102.4	120.6	135.6	146.5
	Fuse Size	50	70	60	70	110	130	160	180	200
460V/3Phase/60Hz	FLA	12.7	19.7	21.5	23.5	37.7	42.7	48.2	57.2	67.4
	MCA	14.9	23.6	23.3	27.6	41.4	47	52.9	63	74.5
	Fuse Size	20	35	30	35	50	60	70	80	100
575V/3Phase/60Hz	FLA	10.4	15.6	16.7	20.9	28.6	31.8	37.6	47.6	54
	MCA	12.3	18.6	18.1	22.8	31.3	34.9	41.1	52.4	59.6
	Fuse Size	15	30	20	30	40	45	50	79	80

**Electrical Performance - Cooling + Humidifier**

208V/3Phase/60Hz	FLA	44.3	55.8	66.64	73.04	95.2	112	128.91	143.11	151.91
	MCA	52.2	67.41	75.21	82.41	107.12	126.02	144.21	160.18	170.08
	Fuse Size	60	90	80	90	130	150	180	200	210
460V/3Phase/60Hz	FLA	20.06	27.06	30.08	33.88	46.28	51.28	47.95	65.75	75.95
	MCA	24.16	32.78	34	38.27	52.1	57.72	53.64	73.67	85.14
	Fuse Size	30	45	35	45	60	70	60	90	110
575V/3Phase/60Hz	FLA	16.37	21.49	23.56	27.76	35.4	38.6	44.42	54.42	60.82
	MCA	19.7	26	26.59	31.31	39.8	43.4	49.67	60.92	68.12
	Fuse Size	25	35	30	35	45	50	60	70	80

**Electrical Performance - Cooling + Electric Reheat**

208V/3Phase/60Hz	FLA	44.6	56.1	72.72	79.12	109.61	126.41	176.63	190.83	199.63
	MCA	52.5	67.79	82.82	90.02	125.14	144.04	203.86	219.83	229.73
	Fuse Size	60	90	90	100	140	170	220	250	260
460V/3Phase/60Hz	FLA	20.2	27.2	32.84	36.64	52.8	57.8	69.53	87.33	97.53
	MCA	24.33	32.96	37.43	41.71	60.24	65.87	80.61	100.64	112.11
	Fuse Size	30	45	40	45	70	70	90	110	130
575V/3Phase/60Hz	FLA	16.48	21.6	25.76	29.96	40.61	43.81	61.68	71.68	78.08
	MCA	19.84	26.14	29.34	34.07	46.32	49.92	71.25	82.5	89.7
	Fuse Size	25	35	30	35	50	50	80	90	100

**Electrical Performance - Cooling + Electric Reheat + Humidifier**

208V/3Phase/60Hz	FLA	44.6	56.1	72.72	79.12	109.61	126.41	176.63	190.83	199.63
	MCA	52.5	67.79	82.82	90.02	125.14	144.04	203.86	219.83	229.73
	Fuse Size	60	90	90	100	140	170	220	250	260
460V/3Phase/60Hz	FLA	20.2	27.2	32.84	36.64	52.8	57.8	69.53	87.33	97.53
	MCA	24.33	32.96	37.43	41.71	60.24	65.87	80.61	100.64	112.11
	Fuse Size	30	45	40	45	70	70	90	110	130
575V/3Phase/60Hz	FLA	16.48	21.6	25.76	29.96	40.61	43.81	61.68	71.68	78.08
	MCA	19.84	26.14	29.34	34.07	46.32	49.92	71.25	82.5	89.7
	Fuse Size	25	35	30	35	50	50	80	90	100

<sup>1</sup> Standard options

# Glycol Free-cooling System

Model no. PFU_ _/PFR_ _/PFD_ _		028	034	042	051	057	065	076	087	089
<b>Cooling Capacity – Direct Expansion - Rated at standard air volume</b>										
<b>85F°(29°C) DB, 32%rh (shaded values at reduced airflow)</b>										
Net Total	BTUH	64320	103319	104333	134191	184852	225635	260696	287829	326575
Net Sensible	BTUH	62734	103319	104333	134191	184852	225635	260696	287829	326575
THR	BTUH	88860	141545	143704	187227	252652	322169	371809	411871	467707
<b>80F°(27°C) DB, 36%rh</b>										
Net Total	BTUH	66480	98808	100313	126454	174731	212155	245158	270153	313121
Net Sensible	BTUH	66480	98808	100313	126454	174731	212155	245158	270153	313121
THR	BTUH	91251	141275	142208	178682	241861	307323	354581	392124	452748
<b>75F° (24°C) DB, 45%rh</b>										
Net Total	BTUH	63569	92735	97205	120719	165849	202575	233191	259384	303817
Net Sensible	BTUH	61685	89321	97205	120719	165849	201814	232994	255534	284295
THR	BTUH	88027	134674	136969	172387	232400	296809	341335	380149	442414
<b>Cooling Capacity – 100% Free-cooling - Rated at standard air volume, 45°F entering glycol</b>										
<b>85F°(29°C) DB, 32%rh (shaded values at reduced airflow)</b>										
Net Total	BTUH	55335	93123	125185	133954	170432	196194	208713	221349	227749
Net Sensible	BTUH	55335	93123	125185	133954	170432	196194	208713	221349	227749
<b>80F°(27°C) DB, 36%rh</b>										
Net Total	BTUH	62760	87467	106892	116706	148333	167920	180843	191278	196330
Net Sensible	BTUH	62760	87467	106892	116706	148333	167920	180843	191278	196330
<b>75F° (24°C) DB, 45%rh</b>										
Net Total	BTUH	53622	73756	90942	99267	125995	141704	152703	160913	164602
Net Sensible	BTUH	53622	73756	90942	99267	125995	141704	152703	160913	164602

Model no. PFU_ _/PFR_ _/PFD_ _		028	034	042	051	057	065	076	087	089
<b>Fan Section - EC fan</b>										
Standard Air Volume	CFM	3000	5600	6000	6600	8700	10800	12400	13500	13700
External Static Pressure	in	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Quantity of Fans		1	1	2	2	2	2	3	3	3
Fan Size	mm	500	560	500	500	560	560	500	500	500
Net Total Fan Motor Power	kW	0.74	3.12	1.88	2.44	3.44	5.22	5.94	6.87	7.14

<b>Compressor - Refrigerant R407C</b>										
Quantity of Compressors		1	1	2	2	2	2	2	2	2
Compressor Model		ZR72KCE	ZR108KCE	ZR54K5E	ZR72KCE	ZR94KCE	ZR125KCE	ZR144KCE	ZR160KCE	ZR190KCE
Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll

<b>Evaporator Coil - A/V-Frame- Copper tube / aluminium fin - Stainless steel drain pan</b>										
Face Area	ft²	13.13	13.13	18.96	18.96	22.50	22.50	29.58	29.58	29.58
Rows Deep (DX/Free Cooling)		4/4	4/4	3/4	3/4	4/4	4/4	4/4	4/4	4/4
Fins per inch		13	13	13	13	13	13	13	13	13
Face Velocity	FPM	228	427	316	348	387	480	419	456	463
Refrigerant Charge	Lbs	16.1	17.5	24.2	24.2	35.8	42.0	48.0	50.0	50.0



**Reheat Section**

*Electric Reheat<sup>1</sup> - Single Stage, finned tubular type heater, SCR Controlled*

Capacity	kw	6	6	9	9	12	12	24	24	24
Quantity of Heaters		3	3	3	3	3	3	3	3	3

**Humidifier Section**

*Electrode Boiler Type<sup>1</sup>*

Capacity	lb/hr	10	10	20	20	20	20	20	20	20
Humidifier Power	kw	3.4	3.4	6.8	6.8	6.8	6.8	6.8	6.8	6.8

**Filter Section - Pleated disposable type, 30% efficiency to ASHRAE 52-76**

*PFU\_\_Upflow Models (Maximum 2" filter depth)*

Quantity of Filters ( )		(2) 14x20x2	(4) 20x25x2	(4) 20x30x2	(6) 20x25x2
Nominal Size	LxWxD-in	(2) 20x25x2			

*PFD\_\_Downflow Models with Top Mounted Filter Box (Adds 8" to Machine Height)*

Quantity of Filters ( )		(2) 16x25x4	(6) 16x20x4	(4) 16x25x4	(6) 16x20x4
Nominal Size	LxWxD-in	(2) 16x20x4		(2) 16x20x4	(2) 16x25x4

*PFR\_\_Rear Return Models with Filter Box*

Quantity of Filters ( )		(2) 24x12x4	(6) 20x24x4	(6) 24x24x4	(10) 24x18x4
Nominal Size	LxWxD-in	(2) 24x18x4 (2) 20x24x4			

<b>Model no. PFU__/PFR__/PFD__</b>	<b>028</b>	<b>034</b>	<b>042</b>	<b>051</b>	<b>057</b>	<b>065</b>	<b>076</b>	<b>087</b>	<b>089</b>
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**Glycol Solution Regulating Valve - 3-way modulating - 40C, (104F) entering glycol temperature**

Valve Size	in	1 1/2	1 1/2	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2	1 1/2
Quantity of Valves		1	1	2	2	2	2	2	2

**Glycol Solution Requirement - 40% Propylene glycol free cool at 7.2°C (45°F) entering temperature, 0°C (32°F) ambient temperature**

Flow Rate	GPM	17.3	27.6	28.0	36.4	49.2	62.7	72.4	80.2	89.6
Unit Pressure Drop	ft-H <sub>2</sub> O	17.1	14.1	14.3	15.9	12.4	17.2	21.4	25.3	30.2

**Piping Connection Size**

Liquid Line	- ODM -in	5/8	5/8	1/2	5/8	5/8	5/8	5/8	7/8	7/8
Hot Gas Line	- ODM -in	7/8	1 1/8	7/8	7/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8
Glycol Solution	- ODM -in	1 3/8	1 3/8	1 5/8	1 5/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8
Humidifier Water	- ODM -in	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Condensate Drain	- ODM -in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

**Physical Details - For units with standard options only; consult factory for special options and configuration**

Dimensions	in	68-3/4(W) x 35-1/4(D) x 78(H)	88(W) x 35-1/4(D) x 78(H)	101-1/4(W) x 35-1/4(D) x 78(H)	118(W) x 35-1/4(D) x 78(H)					
Approx. Weight	lbs	1467	1533	2125	2219	2250	2362	2575	2711	2800

**Electrical Performance - Cooling Only**

208V/3Phase/60Hz	FLA	27.1	39.5	47.7	54.1	76.3	93.1	110	124.2	133
	MCA	31.7	47	51.6	58.8	83.5	102.4	120.6	135.6	146.5
	Fuse Size	50	70	60	70	110	130	160	180	200
460V/3Phase/60Hz	FLA	12.7	19.7	21.5	23.5	37.7	42.7	48.2	57.2	67.4
	MCA	14.9	23.6	23.3	27.6	41.4	47	52.9	63	74.5
	Fuse Size	20	35	30	35	50	60	70	80	100
575V/3Phase/60Hz	FLA	10.4	15.6	16.7	20.9	28.6	31.8	37.6	47.6	54
	MCA	12.3	18.6	18.1	22.8	31.3	34.9	41.1	52.4	59.6
	Fuse Size	15	30	20	30	40	45	50	79	80

**Electrical Performance - Cooling + Humidifier**

208V/3Phase/60Hz	FLA	44.3	55.8	66.64	73.04	95.2	112	128.91	143.11	151.91
	MCA	52.2	67.41	75.21	82.41	107.12	126.02	144.21	160.18	170.08
	Fuse Size	60	90	80	90	130	150	180	200	210
460V/3Phase/60Hz	FLA	20.06	27.06	30.08	33.88	46.28	51.28	47.95	65.75	75.95
	MCA	24.16	32.78	34	38.27	52.1	57.72	53.64	73.67	85.14
	Fuse Size	30	45	35	45	60	70	60	90	110
575V/3Phase/60Hz	FLA	16.37	21.49	23.56	27.76	35.4	38.6	44.42	54.42	60.82
	MCA	19.7	26	26.59	31.31	39.8	43.4	49.67	60.92	68.12
	Fuse Size	25	35	30	35	45	50	60	70	80

**Electrical Performance - Cooling + Electric Reheat**

208V/3Phase/60Hz	FLA	44.6	56.1	72.72	79.12	109.61	126.41	176.63	190.83	199.63
	MCA	52.5	67.79	82.82	90.02	125.14	144.04	203.86	219.83	229.73
	Fuse Size	60	90	90	100	140	170	220	250	260
460V/3Phase/60Hz	FLA	20.2	27.2	32.84	36.64	52.8	57.8	69.53	87.33	97.53
	MCA	24.33	32.96	37.43	41.71	60.24	65.87	80.61	100.64	112.11
	Fuse Size	30	45	40	45	70	70	90	110	130
575V/3Phase/60Hz	FLA	16.48	21.6	25.76	29.96	40.61	43.81	61.68	71.68	78.08
	MCA	19.84	26.14	29.34	34.07	46.32	49.92	71.25	82.5	89.7
	Fuse Size	25	35	30	35	50	50	80	90	100

**Electrical Performance - Cooling + Electric Reheat + Humidifier**

208V/3Phase/60Hz	FLA	44.6	56.1	72.72	79.12	109.61	126.41	176.63	190.83	199.63
	MCA	52.5	67.79	82.82	90.02	125.14	144.04	203.86	219.83	229.73
	Fuse Size	60	90	90	100	140	170	220	250	260
460V/3Phase/60Hz	FLA	20.2	27.2	32.84	36.64	52.8	57.8	69.53	87.33	97.53
	MCA	24.33	32.96	37.43	41.71	60.24	65.87	80.61	100.64	112.11
	Fuse Size	30	45	40	45	70	70	90	110	130
575V/3Phase/60Hz	FLA	16.48	21.6	25.76	29.96	40.61	43.81	61.68	71.68	78.08
	MCA	19.84	26.14	29.34	34.07	46.32	49.92	71.25	82.5	89.7
	Fuse Size	25	35	30	35	50	50	80	90	100

<sup>1</sup> Standard options

## Chilled-Water System

Model no. PCU_/_PCD_/_PCR_		012	015	028	034	042	051	057	065	076	087	095	106	111	119	127	136	147	153	180
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**Cooling Capacity** - Rated at standard air volume, 45°F (7.2°C) entering water & 11°F (6.1°C) temperature rise

### 85F°(29°C) DB, 32%rh

Net Total	BTUH	72022	92358	149937	186038	234299	289804	307886	376644	397371	483409	499197	540415	570208	551509	595233	627563	800558	845557	1058241
Net Sensible	BTUH	72022	86569	147523	168972	229138	261516	298062	339401	387748	440020	474084	497552	512620	515159	539936	556279	725942	749844	961607
Flow Rate	GPM	15.8	20.0	32.4	39.6	50.6	62.0	66.0	80.0	86.0	102.0	106.0	115.0	122.0	119.0	128.0	136.0	160.0	170.0	228.0
Unit Pressure Drop	ft-H <sub>2</sub> O	7.4	13.7	26.2	43.0	15.7	34.5	27.9	60.7	18.4	31.9	33.7	31.7	30.7	46.1	42.1	40.4	69.7	66.3	29.4

### 80F°(27°C) DB, 36%rh

Net Total	BTUH	58996	77310	124905	157628	195076	247104	259905	321970	331594	414121	424728	460813	486849	468841	507203	534962	684896	725977	903472
Net Sensible	BTUH	58996	73960	124905	145255	195076	225346	255998	293028	331357	380241	408587	429139	442215	443192	464937	478908	626771	648461	828661
Flow Rate	GPM	13.2	17.0	27.4	34.0	42.4	53.4	56.0	69.0	72.0	90.0	91.0	99.0	105.0	102.0	110.0	116.0	140.0	150.0	198.0
Unit Pressure Drop	ft-H <sub>2</sub> O	5.3	10.1	18.9	32.0	11.3	26.2	20.5	46.3	13.2	25.3	25.4	23.9	23.1	34.7	31.7	29.9	54.4	52.4	22.7

### 75F° (24°C) DB, 45%rh

Net Total	BTUH	46695	64530	100956	133886	158546	210930	213272	276125	268355	349564	359068	392340	416009	397999	434693	461763	577964	618108	770596
Net Sensible	BTUH	46695	60449	100944	118539	157165	184161	206967	240453	266204	309451	331882	349880	361119	359901	379414	392448	508135	528154	674299
Flow Rate	GPM	10.3	14.1	22.4	29.1	35.1	46.1	46.5	59.7	58.9	75.9	78.0	85.0	90.0	88.0	96.0	102.0	126.0	134.4	170.0
Unit Pressure Drop	ft-H <sub>2</sub> O	3.3	7.1	12.8	23.7	7.9	20.0	14.5	35.5	9.1	18.5	19.1	18.0	17.2	26.5	24.6	23.5	44.7	42.6	17.1

### Fan Section - EC fan

Standard Air Volume	CFM	3000	3000	5600	5600	8700	8700	11200	11200	14700	14700	16600	16600	16600	18000	18000	18000	24000	24000	32000
External Static Pressure	in	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Quantity of Fans		1	1	1	1	2	2	2	2	3	3	3	3	3	4	4	4	4	4	4
Fan Size	mm	400	400	500	560	500	500	560	560	500	500	560	560	560	500	500	500	560	560	560
Net Total Fan Motor Power	kW	1.19	1.33	2.67	2.57	4.06	4.52	4.40	4.94	6.12	6.81	6.84	7.41	8.07	9.72	10.32	10.92	11.88	12.16	19.20

### Chilled-water Coil - A/V-Frame - Copper tube / aluminium fin - Stainless steel drain pan

Face Area	ft <sup>2</sup>	6.25	6.25	13.13	13.13	18.96	18.96	22.5	22.5	29.58	29.58	37.08	37.08	37.08	44.17	44.17	44.17	52.5	52.5	66.67
Rows Deep		4	6	4	6	4	6	4	6	4	6	4	5	6	4	5	6	5	6	6
Fins per inch		13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	11
Face Velocity	FPM	480	480	387	387	387	459	498	498	497	497	448	448	448	408	408	408	457	457	480

Model no. PCU_/_PCD_/_PCR_		012	015	028	034	042	051	057	065	076	087	095	106	111	119	127	136	147	153	180
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### Reheat Section

**Electric Reheat** <sup>1</sup> - Three stages, finned tubular type heater, SCR Controlled

Capacity	kW	6	6	6	6	9	9	12	12	24	24	24	24	24	24	24	24	24	24	24
Quantity of Heaters		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

**Hot Water Reheat** - 180°F (82.2°C ) E.W.T., 77°F (25°C ) L.A.T. - 2-way modulating control valve, optional 3-way

Heating Capacity	BTUH	58251	58251	110895	110895	186119	186119	239687	239687	301419	301419	355526	355526	355526	384250	384250	384250	513368	513368	684314
Water Flow Rate	GPM	4.0	4.0	5.7	5.7	7.4	7.4	8.9	8.9	9.9	9.9	10.0	10.0	10.0	10.1	10.1	10.1	12.8	12.8	20.4
Pressure Drop	ft-H <sub>2</sub> O	0.81	0.81	1.64	1.64	2.76	2.76	3.99	3.99	5.02	5.02	4.98	4.98	4.98	5.10	5.10	5.10	8.23	8.23	8.17

### Humidifier Section

**Electrode Boiler Type** <sup>1</sup>

Capacity	lb/hr	10	10	10	10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Humidifier Power	kW	3.4	3.4	3.4	3.4	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8

**Filter Section - Pleated disposable type, 30% efficiency to ASHRAE 52-76**

**PCU\_ \_Upflow Models (Maximum 2" filter depth)**

Quantity of Filters ( )	(2) 18x25x2	(2) 14x20x2	(4) 20x25x2	(4) 20x30x2	(6) 20x25x2	(3) 20x30x2	(8) 20x25x2	(12) 18x25x2	(8) 20x25x2
Nominal Size	LxWxD-in (1) 20x30x2	(2) 20x25x2	(4) 20x25x2	(4) 20x30x2	(6) 20x25x2	(8) 24x18x2	(8) 20x25x2	(4) 20x30x2	(8) 20x25x2

**PCD\_ \_Downflow Models**

Quantity of Filters ( )	(2) 20x25x4	(3) 20x25x4	(4) 20x25x4	(4) 20x25x4	(6) 20x25x4	(8) 20x25x4	(8) 20x25x4	(8) 20x25x4	N/A
Nominal Size	LxWxD-in	(3) 20x25x4	(4) 20x25x4	(4) 20x25x4	(6) 20x25x4	(8) 20x25x4	(8) 20x25x4	(8) 20x25x4	N/A

**PCD\_ \_Downflow Models Optional Top Mounted Filter Box (Adds 8" to Machine Height)**

Quantity of Filters ( )	(2) 16x25x4	(2) 16x25x4	(6) 16x20x4	(2) 16x25x4	(6) 16x20x4	(10) 16x20x4	(12) 16x20x4	(8) 16x25x4	N/A
Nominal Size	LxWxD-in	(2) 16x20x4	(6) 16x20x4	(4) 16x20x4	(2) 16x25x4	(2) 16x25x4	(12) 16x20x4	(6) 16x20x4	N/A

**PCR\_ \_Rear Return Models with Filter Box**

Quantity of Filters ( )	(2) 12x24x4	(2) 24x12x4	(6) 20x24x4	(6) 24x24x4	(10) 24x18x4	(2) 12x24x4	(10) 24x24x4	(14) 20x24x4	(12) 20x24x4
Nominal Size	LxWxD-in	(2) 24x24x4	(2) 24x18x4	(6) 20x24x4	(6) 24x24x4	(8) 24x24x4	(10) 24x24x4	(14) 20x24x4	(12) 20x24x4

**Chilled-water Valve - 2-Way modulating**

Valve Size	in	1	1	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2	1 1/2	2	2	2	2	2	2	2	2	2	2	3
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**Piping Connection Size**

Chilled-water	- ODM -in	1 1/8	1 1/8	1 3/8	1 3/8	1 5/8	1 5/8	1 5/8	1 5/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8	3 1/8
Hot Water	- ODM -in	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	1 1/8
Humidifier Water	- ODM -in	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Condensate Drain	- ODM -in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

**Physical Details - For units with standard options only; consult factory for special options and configuration**

Dimensions	in	37(W) x 35-1/4(D) x 78(H)		50(W) x 35-1/4(D) x 78(H)		60-1/4(W) x 35-1/4(D) x 78(H)		72-1/4(W) x 35-1/4(D) x 78(H)		89-1/4(W) x 35-1/4(D) x 78(H)			107(W) x 35-1/4(D) x 78(H)			124(W) x 35-1/4(D) x 78(H)			142(W) x 35-1/4(D) x 78(H)		120(W) x 48(D) x 107(H)
Weight	lbs	656	709	836	908	1109	1212	1232	1355	1541	1693	1847	1968	2090	2260	2404	2547	2683	2851	2875	

<b>Electrical Performance - Cooling Only</b>																				
208V/3Phase/60Hz	FLA	4.6	4.6	8.5	9.4	16.9	16.9	18.7	18.7	25.4	25.4	28.1	28.1	28.1	33.9	33.9	33.9	37.4	37.4	N/A
	MCA	5.8	5.8	10.6	11.7	19.1	19.1	21	21	27.5	27.5	30.4	30.4	30.4	36	36	36	39.7	39.7	N/A
	Fuse Size	15	15	15	20	25	25	30	30	35	35	35	35	35	40	40	40	45	45	N/A
460V/3Phase/60Hz	FLA	2.2	2.2	3.7	4.2	7.3	7.3	8.3	8.3	11	11	12.5	12.5	12.5	14.7	14.7	14.7	16.7	16.7	29.2
	MCA	2.7	2.7	4.6	5.2	8.3	8.3	9.4	9.4	11.9	11.9	13.55	13.55	13.55	15.6	15.6	15.6	17.7	17.7	31
	Fuse Size	15	15	15	15	15	15	15	15	15	15	15	15	15	20	20	20	20	20	35
575V/3Phase/60Hz	FLA	1.7	1.7	3.1	3.5	6.1	6.1	7	7	9.2	9.2	10.4	10.4	10.4	12.2	12.2	12.2	13.9	13.9	23.4
	MCA	2.2	2.2	3.8	4.4	6.9	6.9	7.8	7.8	10	10	11.3	11.3	11.3	13	13	13	14.8	14.8	24.8
	Fuse Size	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	30
<b>Electrical Performance - Cooling + Humidifier</b>																				
208V/3Phase/60Hz	FLA	20.97	20.97	24.82	25.7	35.84	35.84	37.6	37.6	44.31	44.31	46.95	46.95	46.95	52.78	52.78	52.78	56.3	56.3	N/A
	MCA	26.21	26.21	31.02	32.12	44.8	44.8	47	47	55.38	55.38	58.68	58.68	58.68	65.97	65.97	65.97	70.37	70.37	N/A
	Fuse Size	30	30	35	35	45	45	50	50	60	60	60	60	60	70	70	70	80	80	N/A
460V/3Phase/60Hz	FLA	9.56	9.56	11.06	11.56	15.88	15.88	16.88	16.88	19.55	19.55	21.05	21.05	21.05	23.22	23.22	23.22	25.22	25.22	37.74
	MCA	11.95	11.95	13.83	14.45	19.86	19.86	21.11	21.11	24.44	24.44	26.32	26.32	26.32	29.03	29.03	29.03	31.53	31.53	47.18
	Fuse Size	15	15	15	15	20	20	25	25	25	25	30	30	30	30	30	30	35	35	50
575V/3Phase/60Hz	FLA	7.65	7.65	8.97	9.39	12.96	12.96	13.8	13.8	16.02	16.02	17.28	17.28	17.28	19.08	19.08	19.08	20.76	20.76	30.2
	MCA	9.57	9.57	11.22	11.74	16.19	16.19	17.24	17.24	20.02	20.02	21.59	21.59	21.59	23.84	23.84	23.84	25.94	25.94	37.74
	Fuse Size	15	15	15	15	20	20	20	20	25	25	25	25	25	25	25	25	30	30	40
<b>Electrical Performance - Cooling + Electric Reheat</b>																				
208V/3Phase/60Hz	FLA	21.27	21.27	25.12	26	41.92	41.92	52.01	52.01	92.03	92.03	94.67	94.67	94.67	100.5	100.5	100.5	104.02	104.02	N/A
	MCA	26.59	26.59	31.41	32.51	52.4	52.4	65.01	65.01	115.03	115.03	118.33	118.33	118.33	125.62	125.62	125.62	130.02	130.02	N/A
	Fuse Size	30	30	35	35	60	60	70	70	120	120	120	120	120	130	130	130	140	140	N/A
460V/3Phase/60Hz	FLA	9.7	9.7	11.2	11.7	18.64	18.64	23.4	23.4	41.13	41.13	42.63	42.63	42.63	44.8	44.8	44.8	46.8	46.8	59.32
	MCA	12.13	12.13	14	14.63	23.29	23.29	29.25	29.25	51.42	51.42	53.29	53.29	53.29	56	56	56	58.5	58.5	74.15
	Fuse Size	15	15	15	15	25	25	30	30	60	60	60	60	60	60	60	60	60	60	80
575V/3Phase/60Hz	FLA	7.76	7.76	9.08	9.5	15.16	15.16	19.01	19.01	33.28	33.28	34.54	34.54	34.54	36.34	36.34	36.34	38.02	38.02	47.46
	MCA	9.71	9.71	11.36	11.88	18.95	18.95	23.76	23.76	41.6	41.6	43.17	43.17	43.17	45.42	45.42	45.42	47.52	47.52	59.32
	Fuse Size	15	15	15	15	20	20	35	35	45	45	45	45	45	50	50	50	50	50	60
<b>Electrical Performance - Cooling + Electric Reheat + Humidifier</b>																				
208V/3Phase/60Hz	FLA	37.62	37.62	41.47	42.35	60.82	60.82	70.91	70.91	110.92	110.92	113.56	113.56	113.56	119.39	119.39	119.39	122.91	122.91	N/A
	MCA	47.03	47.03	51.84	52.94	76.02	76.02	88.63	88.63	138.66	138.66	141.96	141.96	141.96	149.24	149.24	149.24	153.64	153.64	N/A
	Fuse Size	50	50	60	60	80	80	90	90	140	140	150	150	150	150	150	150	160	160	N/A
460V/3Phase/60Hz	FLA	17.09	17.09	18.59	19.09	27.18	27.18	31.95	31.95	49.68	49.68	51.18	51.18	51.18	53.35	53.35	53.35	55.35	55.35	67.87
	MCA	21.36	21.36	23.24	23.86	33.98	33.98	39.93	39.93	62.1	62.1	63.97	63.97	63.97	66.68	66.68	66.68	69.18	69.18	84.83
	Fuse Size	25	25	25	35	35	35	40	40	70	70	70	70	70	70	70	70	70	70	80
575V/3Phase/60Hz	FLA	13.68	13.68	15	15.42	21.99	21.99	25.84	25.84	40.11	40.11	41.37	41.37	41.37	43.17	43.17	43.17	44.85	44.85	54.29
	MCA	17.1	17.1	18.75	19.27	27.49	27.49	32.31	32.31	50.14	50.14	51.72	51.72	51.72	53.97	53.97	53.97	56.07	56.07	67.87
	Fuse Size	20	20	20	30	30	30	35	35	60	60	60	60	60	60	60	60	60	60	70

<sup>1</sup> Standard options

## **Appendix A: Dimensional Drawing List**

### **BMS**

#### **Drawing Title**

BMS Advanced M52 Modbus RTU  
 BMS Advanced M52  
 BMS Serial to Ethernet  
 BMS Serial to Ethernet (Lonworks)  
 BMS Serial to Serial

#### **Drawing No.**

M52ES1004  
 M52ES1005  
 M52ES25A  
 M52ES26B  
 M52ES27B

### **Dimensional Detail**

#### **Drawing Title**

Dimensional Detail Down Flow PS6  
 Dimensional Detail Up Flow PS6  
 Dimensional Detail Down Flow Chilled Water Cooling Only 12 to 15 kw  
 Dimensional Detail Down Flow Standard Cooling 12 to 15 kw  
 Dimensional Detail Down Flow Chilled Water Cooling Only 28 to 34 kw  
 Dimensional Detail Down Flow Standard Cooling 28 to 34 kw  
 Dimensional Detail Down Flow Chilled Water Cooling Only 42 to 51 kw  
 Dimensional Detail Down Flow Standard Cooling 42 to 51 kw  
 Dimensional Detail Down Flow Dual or Free Cooling 42 to 51 kw  
 Dimensional Detail Down Flow Chilled Water Cooling Only 57 to 65 kw  
 Dimensional Detail Down Flow Standard Cooling 57 to 65 kw  
 Dimensional Detail Down Flow Dual or Free Cooling 57 to 65 kw  
 Dimensional Detail Down Flow Chilled Water Cooling Only 76 to 87 kw  
 Dimensional Detail Down Flow Standard Cooling 76 to 87 kw  
 Dimensional Detail Down Flow Dual or Free Cooling 76 to 87 kw  
 Dimensional Detail Down Flow Chilled Water Cooling Only 95 to 111 kw  
 Dimensional Detail Down Flow Standard Cooling 95 to 111 kw  
 Dimensional Detail Down Flow Chilled Water Cooling Only 119 to 136 kw  
 Dimensional Detail Down Flow Standard Cooling 119 to 136 kw  
 Dimensional Detail Down Flow Chilled Water Cooling Only 147 to 153 kw  
 Dimensional Detail Down Flow Standard Cooling 147 to 153 kw  
 Dimensional Detail Down Flow Chilled Water Cooling Only 180 kw  
 Dimensional Detail Up Flow Standard Cooling 12 to 15 kw  
 Dimensional Detail Up Flow Standard Cooling 28 to 34 kw  
 Dimensional Detail Up Flow Dual or Free Cooling 28 to 34 kw  
 Dimensional Detail Up Flow Standard Cooling 42 to 51 kw  
 Dimensional Detail Up Flow Dual or Free Cooling 42 to 51 kw  
 Dimensional Detail Up Flow Standard Cooling 57 to 65 kw  
 Dimensional Detail Up Flow Dual or Free Cooling 57 to 65 kw  
 Dimensional Detail Up Flow Standard Cooling 76 to 87 kw  
 Dimensional Detail Up Flow Dual or Free Cooling 76 to 87 kw  
 Dimensional Detail Up Flow Standard Cooling 95 to 111 kw

#### **Drawing No.**

S6DDX600PS6  
 S6UDX600PS6  
 SPDDCP  
 SPDDCPA  
 SPDDDP  
 SPDDDPA  
 SPDDEP  
 SPDDEPA  
 SPDDPEB  
 SPDDFP  
 SPDDFPA  
 SPDDFPB  
 SPDDGP  
 SPDDGPA  
 SPDDGPB  
 SPDDHP  
 SPDDHPA  
 SPDDJP  
 SPDDJPA  
 SPDDKP  
 SPDDKPA  
 SPDDL  
 SPDDLP  
 SPDUCPA  
 SPDUDPA  
 SPDUEPA  
 SPDUEPB  
 SPDUFPA  
 SPDUFPB  
 SPDUGPA  
 SPDUGPB  
 SPDUHPA

Dimensional Detail Up Flow Standard Cooling 119 to 136 kw	SPDUJPA
Dimensional Detail Up Flow Standard Cooling 147 to 153 kw	SPDUKPA

**Plenum**

<b>Drawing Title</b>	<b>Drawing No.</b>
Return Air Plenum 12 to 15 kw	SPDPDPCP
Return Air Plenum 28 to 34 kw	SPDPDPDP
Return Air Plenum 42 to 51 kw	SPDPDPEP
Return Air Plenum 57 to 65 kw	SPDPDPFP
Return Air Plenum 76 to 87 kw	SPDPDPGP
Return Air Plenum 95 to 111 kw	SPDPDPHP
Return Air Plenum 119 to 136 kw	SPDPDPJP
Return Air Plenum 147 to 153 kw	SPDPDPKP
Return Air Plenum 180 kw	SPDPDPLP
Discharge Plenum PS6	SPDPS6-P
Discharge Plenum 12 to 15 kw	SPDPUPCA
Discharge Plenum 28 to 34 kw	SPDPUFDA
Discharge Plenum 42 to 51 kw	SPDPUPEA
Discharge Plenum 57 to 65 kw	SPDPUPFA
Discharge Plenum 76 to 87 kw	SPDPUPGA
Discharge Plenum 95 to 111 kw	SPDPUPHA
Discharge Plenum 119 to 136 kw	SPDPUJPA
Discharge Plenum 147 to 153 kw	SPDPUKPA

**Electric Co-Work**

<b>Drawing Title</b>	<b>Drawing No.</b>
Electric Co-Work	M52ES13E
Electric Co-Work Advanced M52	M52ES1003

**Electrical Schematic**

<b>Drawing Title</b>	<b>Drawing No.</b>
Electrical Schematic General Dual Air Cooled	ES9030
Electrical Schematic General Dual Water or Glycol Cooled	ES9040
Electrical Schematic General Chilled Water	ES9050
Electrical Schematic General Air Cooled	ES9060
Electrical Schematic General Water or Glycol Cooled	ES9065
Electrical Schematic General Free Cooling	ES9070

**Floor Stand**

**Drawing Title**

**Drawing No.**

Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 12 to 15 kw	SPDFC
Floor Stand Down Flow Chilled Water Cooling Only 25"-36" 12 to 15 kw	SPDFC36
Floor Stand Standard Cooling 12"-24" 12 to 15 kw	SPDFCPA
Floor Stand Standard Cooling 25"-36" 12 to 15 kw	SPDFCPA36
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 28 to 34 kw	SPDFDP
Floor Stand Down Flow Chilled Water Cooling Only 25"-36" 28 to 34 kw	SPDFDP36
Floor Stand Standard Cooling 12"-24" 28 to 34 kw	SPDFDPA
Floor Stand Standard Cooling 25"-36" 28 to 34 kw	SPDFDPA36
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 42 to 51 kw	SPDFE
Floor Stand Down Flow Chilled Water Cooling Only 25"-36" 42 to 51 kw	SPDFE36
Floor Stand Standard Cooling 12"-24" 42 to 51 kw	SPDFEPA
Floor Stand Standard Cooling 25"-36" 42 to 51 kw	SPDFEPA36
Floor Stand Dual or Free Cooling 12"-24" 42 to 51 kw	SPDFEPB
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 57 to 65 kw	SPDFF
Floor Stand Down Flow Chilled Water Cooling Only 25"-36" 57 to 65 kw	SPDFF36
Floor Stand Standard Cooling 12"-24" 57 to 65 kw	SPDFFPA
Floor Stand Standard Cooling 25"-36" 57 to 65 kw	SPDFFPA36
Floor Stand Dual or Free Cooling 12"-24" 57 to 65 kw	SPDFFPB
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 76 to 87 kw	SPDFG
Floor Stand Down Flow Chilled Water Cooling Only 25"-36" 76 to 87 kw	SPDFG36
Floor Stand Standard Cooling 12"-24" 76 to 87 kw	SPDFGPA
Floor Stand Standard Cooling 25"-36" 76 to 87 kw	SPDFGPA36
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 95 to 111 kw	SPDFH
Floor Stand Down Flow Chilled Water Cooling Only 25"-36" 95 to 111 kw	SPDFH36
Floor Stand Standard Cooling 12"-24" 95 to 111 kw	SPDFHPA
Floor Stand Standard Cooling 25"-36" 95 to 111 kw	SPDFHPA36
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 119 to 136 kw	SPDFJP
Floor Stand Down Flow Chilled Water Cooling Only 25"-36" 119 to 136 kw	SPDFJP36
Floor Stand Standard Cooling 12"-24" 119 to 136 kw	SPDFJPA
Floor Stand Standard Cooling 25"-36" 119 to 136 kw	SPDFJPA36
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 147 to 153 kw	SPDFK
Floor Stand Down Flow Chilled Water Cooling Only 25"-36" 147 to 153 kw	SPDFK36
Floor Stand Standard Cooling 12"-24" 147 to 153 kw	SPDFKPA
Floor Stand Standard Cooling 25"-36" 147 to 153 kw	SPDFKPA36
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 12 to 15 kw with OHSA Guard	SPDFOC
Floor Stand Standard Cooling 12"-24" 12 to 15 kw with OHSA Guard	SPDFOCA
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 28 to 34 kw with OHSA Guard	SPDFOD
Floor Stand Standard Cooling 12"-24" 28 to 34 kw with OHSA Guard	SPDFODA
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 42 to 51 kw with OHSA Guard	SPDFOE
Floor Stand Standard Cooling 12"-24" 42 to 51 kw with OHSA Guard	SPDFOEA
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 57 to 65 kw with OHSA Guard	SPDFOF
Floor Stand Standard Cooling 12"-24" 57 to 65 kw with OHSA Guard	SPDFOFA
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 76 to 87 kw with OHSA Guard	SPDFOG



Floor Stand Standard Cooling 12"-24" 76 to 87 kw with OHSA Guard	SPDFOGA
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 95 to 111 kw with OHSA Guard	SPDFOH
Floor Stand Standard Cooling 12"-24" 95 to 111 kw with OHSA Guard	SPDFOHA
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 119 to 136 kw with OHSA Guard	SPDFOJ
Floor Stand Standard Cooling 12"-24" 119 to 136 kw with OHSA Guard	SPDFOJA
Floor Stand Down Flow Chilled Water Cooling Only 12"-24" 147 to 153 kw with OHSA Guard	SPDFOK
Floor Stand Standard Cooling 12"-24" 147 to 153 kw with OHSA Guard	SPDFOKA
Floor Stand PS6 12" and 18"	SPS6DF
Floor Stand PS6 18" with OSHA Guard	SPS6DFO18

**Piping Schematics**

<b>Drawing Title</b>	<b>Drawing No.</b>
PS6 Piping Schematics Air Cooled	PS6DS100
PS6 Piping Schematics Air Cooled with Hot Gas bypass	PS6DS103
PS6 Piping Schematics Water Cooled	PS6DS200
PS6 Piping Schematics Water Cooled with Hot Gas bypass	PS6DS300
PS6 Piping Schematics Chilled Water	PS6DS401A
PS6 Piping Schematics Free Cooling	PS6DS501
PS6 Piping Schematics Dual Chilled Water	PS6DS502
PS6 Piping Schematics Water Dual Cooled	PS6DS503
PS6 Piping Schematics Glycol Dual Cooled	PS6DS504
PS6 Piping Schematics Air Dual Cooled	PS6DS505
Piping Schematics Chilled Water	S401B
Series 9 Piping Schematics Air Cooled	S9DS101
Series 9 Piping Schematics Chilled Water with Bypass Valve	S9DS406
Series 9 Piping Schematics Constant Flow Free Cooling	S9DS501
Series 9 Piping Schematics Variable Flow with Manual Bypass Free Cooling	S9DS505

**NOTE:** These drawings are available at: [www.climateworxinternational.com](http://www.climateworxinternational.com)