

DUNHAM-BUSH®

Form No: MS0466A
(Supplementary to Form No: MS0456B)

Products That Perform...By People Who Care

Air Cooled Rotary Screw Flooded Chillers

R134a

AFVX Series

85 to 520 Tons

50Hz



PERFORMANCE DATA

LWT °F	MODEL AFVX	AMBIENT TEMPERATURE, °F											
		85.0			95.0			105.0			115.0		
		TR	KW	EER	TR	KW	EER	TR	KW	EER	TR	KW	EER
40.0	85-5SR	81.2	81.6	11.94	77.2	93.8	9.87	72.7	108.3	8.06	67.8	125.1	6.50
	105-5SR	97.2	99.4	11.73	92.4	114.4	9.70	87.1	131.9	7.92	81.3	152.0	6.42
	125-5SR	120.0	130.6	11.03	114.4	150.3	9.13	108.1	173.5	7.48	101.6	197.8	6.16
	155-5SR	146.1	152.6	11.49	139.3	175.5	9.52	131.6	202.7	7.79	123.6	231.2	6.41
	175-5SR	168.1	163.8	12.31	160.3	188.4	10.21	151.5	217.5	8.36	142.4	248.2	6.88
	115T-5SR	110.0	111.8	11.81	104.8	128.7	9.77	98.8	148.7	7.98	92.3	171.7	6.45
	130T-5SR	123.1	125.8	11.74	117.2	144.8	9.71	110.6	167.3	7.93	103.2	193.1	6.41
	145T-5SR	137.5	139.7	11.81	130.9	160.9	9.77	123.5	185.9	7.98	115.3	214.6	6.45
	160T-5SR	153.2	151.3	12.16	145.9	174.2	10.05	137.6	201.2	8.21	128.5	232.5	6.63
	180T-5SR	170.5	162.8	12.57	162.3	187.5	10.39	153.2	216.6	8.49	143.0	250.0	6.87
	190-5SR	186.6	180.6	12.40	177.6	208.0	10.24	167.5	240.3	8.37	156.5	276.8	6.78
	210-5SR	204.2	198.4	12.35	194.4	228.5	10.21	183.4	263.9	8.34	171.4	304.3	6.76
	235-5SR	227.1	229.6	11.87	216.3	264.5	9.82	204.4	305.5	8.03	191.7	350.1	6.57
	260-5SR	252.0	260.6	11.60	240.5	300.1	9.62	227.5	347.0	7.87	214.2	396.4	6.48
	290-5SR	278.1	282.5	11.81	265.4	325.4	9.79	251.0	376.2	8.01	236.1	429.7	6.59
	320-5SR	306.8	304.4	12.09	292.8	350.5	10.02	276.9	405.4	8.20	260.3	463.1	6.75
	340-5SR	328.8	315.6	12.50	313.8	363.4	10.36	296.8	420.2	8.48	279.1	480.1	6.98
	365-5SR	353.0	326.8	12.96	337.0	376.2	10.75	318.8	435.1	8.79	300.0	497.1	7.24
	390-5SR	385.1	361.5	12.79	367.2	416.3	10.58	347.0	481.3	8.65	325.6	552.9	7.07
	420-5SR	407.9	392.7	12.47	389.2	452.3	10.33	368.0	522.8	8.45	345.9	598.7	6.93
445-5SR	430.8	423.9	12.20	411.1	488.2	10.11	389.0	564.4	8.27	366.2	644.6	6.82	
470-5SR	456.2	459.0	11.93	434.9	528.7	9.87	410.9	611.0	8.07	385.6	700.6	6.60	
520-5SR	504.0	521.2	11.60	481.0	600.3	9.62	455.1	694.1	7.87	428.4	792.7	6.48	
42.0	85-5SR	84.4	81.5	12.43	80.3	93.8	10.28	75.8	108.3	8.39	70.7	124.7	6.80
	105-5SR	101.1	99.3	12.21	96.2	114.4	10.09	90.7	132.0	8.25	84.8	152.2	6.68
	125-5SR	124.7	130.5	11.46	119.1	150.1	9.52	112.6	173.5	7.79	106.0	198.3	6.42
	155-5SR	151.8	152.4	11.95	145.0	175.3	9.92	137.0	202.7	8.11	128.6	231.4	6.67
	175-5SR	174.7	163.6	12.82	166.8	188.2	10.64	157.7	217.6	8.70	148.4	248.4	7.17
	115T-5SR	114.3	111.5	12.30	108.9	128.5	10.17	102.8	148.7	8.30	96.1	172.0	6.71
	130T-5SR	127.9	125.5	12.23	121.9	144.7	10.11	115.0	167.3	8.25	107.5	193.4	6.67
	145T-5SR	142.8	139.4	12.30	136.1	160.7	10.16	128.5	185.9	8.30	120.1	214.7	6.71
	160T-5SR	159.2	150.9	12.66	151.7	174.0	10.46	143.2	201.3	8.54	133.8	232.1	6.92
	180T-5SR	177.1	162.4	13.09	168.8	187.3	10.81	159.4	216.6	8.83	149.0	249.6	7.16
	190-5SR	193.8	180.3	12.90	184.6	207.9	10.66	174.3	240.3	8.71	163.0	277.0	7.06
	210-5SR	212.2	198.0	12.86	202.1	228.3	10.62	190.8	264.0	8.67	178.5	304.5	7.04
	235-5SR	235.8	229.2	12.35	224.9	264.1	10.22	212.7	305.6	8.36	199.8	350.6	6.84
	260-5SR	261.6	260.1	12.07	250.0	299.7	10.01	236.8	347.0	8.19	223.2	396.8	6.75
	290-5SR	288.7	282.0	12.28	275.9	324.9	10.19	261.1	376.1	8.33	245.8	430.0	6.86
	320-5SR	318.5	303.8	12.58	304.3	350.0	10.43	288.0	405.2	8.53	270.8	463.3	7.01
	340-5SR	341.4	315.0	13.01	326.2	362.9	10.79	308.7	420.1	8.82	290.6	480.3	7.26
	365-5SR	366.5	326.1	13.48	350.2	375.7	11.19	331.6	434.9	9.15	312.3	497.3	7.54
	390-5SR	399.9	360.7	13.31	381.6	415.9	11.01	360.9	481.2	9.00	338.8	553.2	7.35
	420-5SR	423.5	391.8	12.97	404.4	451.6	10.75	382.8	522.7	8.79	360.1	599.2	7.21
445-5SR	447.1	423.0	12.68	427.3	487.4	10.52	404.7	564.3	8.61	381.4	645.3	7.09	
470-5SR	473.7	458.1	12.41	452.0	528.0	10.27	427.6	611.0	8.40	401.7	701.3	6.87	
520-5SR	523.1	520.2	12.07	500.0	599.3	10.01	473.5	693.9	8.19	446.4	793.6	6.75	
44.0	85-5SR	87.8	81.3	12.96	85.2	91.1	11.22	80.9	108.3	8.96	76.9	125.3	7.36
	105-5SR	108.5	99.0	13.14	105.3	109.9	11.50	100.0	132.0	9.09	95.0	152.3	7.49
	125-5SR	128.8	130.1	11.87	125.0	143.5	10.45	118.8	173.6	8.21	112.8	198.5	6.82
	155-5SR	159.9	152.0	12.62	155.2	167.5	11.12	147.4	202.7	8.73	140.1	231.8	7.25
	175-5SR	180.4	163.1	13.27	175.1	179.8	11.69	166.3	217.6	9.17	158.0	248.8	7.62
	115T-5SR	118.5	111.2	12.78	115.0	127.8	10.80	109.3	148.7	8.82	103.8	172.0	7.24
	130T-5SR	134.4	125.2	12.89	130.5	141.4	11.07	124.0	167.2	8.90	117.8	193.4	7.31
	145T-5SR	149.6	139.0	12.91	145.2	156.6	11.13	137.9	185.8	8.91	131.0	214.8	7.32
	160T-5SR	164.8	150.5	13.14	160.0	167.6	11.46	152.0	201.2	9.06	144.4	232.7	7.45
	180T-5SR	185.6	162.0	13.75	180.2	183.6	11.78	171.2	216.6	9.48	162.6	250.6	7.79
	190-5SR	197.3	179.7	13.18	191.6	205.1	11.21	182.0	240.3	9.09	172.9	277.6	7.47
	210-5SR	217.5	197.4	13.22	211.2	221.9	11.42	200.6	263.9	9.12	190.6	305.1	7.50
	235-5SR	244.3	228.5	12.83	237.2	250.8	11.35	225.3	305.5	8.85	214.1	351.3	7.31
	260-5SR	270.6	259.3	12.52	262.7	286.1	11.02	249.6	346.7	8.64	237.1	396.8	7.17
	290-5SR	298.7	281.1	12.75	290.0	310.1	11.22	275.5	375.9	8.79	261.7	430.1	7.30
	320-5SR	329.8	302.8	13.07	320.2	334.1	11.50	304.2	405.1	9.01	289.0	463.5	7.48
	340-5SR	350.5	314.0	13.40	340.3	346.3	11.79	323.3	419.9	9.24	307.1	480.5	7.67
	365-5SR	376.9	325.0	13.92	365.9	358.6	12.24	347.6	434.7	9.59	330.2	497.6	7.96
	390-5SR	404.7	359.4	13.51	392.9	403.6	11.68	373.3	480.9	9.31	354.6	553.4	7.69
	420-5SR	432.6	390.5	13.29	420.0	435.9	11.56	399.0	522.5	9.16	379.1	599.6	7.59
445-5SR	458.6	421.6	13.05	445.2	465.7	11.47	422.9	564.0	9.00	401.8	645.7	7.47	
470-5SR	484.4	456.7	12.73	470.3	505.8	11.16	446.8	610.7	8.78	424.4	701.9	7.26	
520-5SR	536.9	518.6	12.42	521.3	572.6	10.92	495.2	693.5	8.57	470.5	793.6	7.11	

- Notes:
- 1.) Ratings based on 10°F water range in evaporator and .0001 fouling factor.
 - 2.) Interpolation between ratings is permissible but extrapolation is NOT.
 - 3.) KWI is for compressor input.
 - 4.) Consult factory for 60 Hz operation.
 - 5.) Units are running on part load above Ambient Temperature 115°F due to the current limiter.

PERFORMANCE DATA

LWT °F	MODEL AFVX	AMBIENT TEMPERATURE, °F											
		85.0			95.0			105.0			115.0		
		TR	KW	EER	TR	KW	EER	TR	KW	EER	TR	KW	EER
46.0	85-5SR	90.4	81.1	13.38	87.8	93.6	11.25	83.4	108.3	9.23	79.2	124.8	7.61
	105-5SR	111.7	98.8	13.56	108.5	114.1	11.41	103.0	132.0	9.37	97.9	152.3	7.71
	125-5SR	132.6	129.8	12.26	128.8	149.7	10.32	122.3	173.5	8.46	116.2	198.5	7.02
	155-5SR	164.7	151.6	13.03	159.9	174.9	10.97	151.9	202.7	8.99	144.3	231.9	7.46
	175-5SR	185.8	162.8	13.69	180.4	187.7	11.53	171.3	217.5	9.45	162.8	248.9	7.85
	115T-5SR	122.0	110.9	13.21	118.5	128.1	11.10	112.5	148.6	9.09	106.9	172.1	7.46
	130T-5SR	138.4	124.8	13.32	134.4	144.2	11.19	127.7	167.2	9.17	121.3	193.4	7.53
	145T-5SR	154.0	138.6	13.34	149.6	160.2	11.21	142.1	185.7	9.18	135.0	214.7	7.55
	160T-5SR	169.7	150.1	13.57	164.8	173.4	11.40	156.6	201.1	9.34	148.7	232.1	7.69
	180T-5SR	191.2	161.4	14.21	185.6	186.6	11.93	176.3	216.4	9.78	167.5	250.1	8.04
	190-5SR	203.3	179.2	13.61	197.3	207.1	11.43	187.5	240.1	9.37	178.1	277.5	7.70
	210-5SR	224.1	196.8	13.66	217.5	227.5	11.48	206.7	263.7	9.40	196.3	304.5	7.74
	235-5SR	251.6	227.8	13.26	244.3	263.1	11.14	232.1	305.2	9.12	220.5	350.7	7.54
	260-5SR	278.7	258.5	12.94	270.6	298.5	10.88	257.1	346.5	8.90	244.2	397.0	7.38
	290-5SR	307.7	280.3	13.17	298.7	323.6	11.08	283.8	375.6	9.07	269.6	430.4	7.52
	320-5SR	339.7	301.9	13.50	329.8	348.7	11.35	313.3	404.7	9.29	297.6	463.7	7.70
	340-5SR	361.0	313.0	13.84	350.5	361.5	11.63	333.0	419.6	9.52	316.3	480.7	7.90
	365-5SR	388.2	324.0	14.38	376.9	374.3	12.08	358.0	434.4	9.89	340.1	497.7	8.20
	390-5SR	416.8	358.3	13.96	404.7	414.3	11.72	384.5	480.6	9.60	365.2	552.9	7.93
	420-5SR	445.6	389.3	13.73	432.6	450.0	11.54	411.0	522.1	9.45	390.4	599.2	7.82
445-5SR	472.3	420.3	13.49	458.6	485.7	11.33	435.6	563.6	9.28	413.8	645.4	7.69	
470-5SR	498.9	455.3	13.15	484.4	526.0	11.05	460.2	610.2	9.05	437.2	701.4	7.48	
520-5SR	553.0	516.9	12.84	536.9	597.0	10.79	510.1	692.9	8.83	484.6	793.9	7.32	
48.0	85-5SR	93.1	80.8	13.82	90.4	93.4	11.61	85.9	108.3	9.52	81.6	125.3	7.81
	105-5SR	115.1	98.6	14.01	111.7	113.9	11.77	106.1	131.9	9.65	100.8	152.3	7.94
	125-5SR	136.6	129.4	12.67	132.6	149.4	10.65	126.0	173.3	8.72	119.7	198.6	7.23
	155-5SR	169.6	151.1	13.46	164.7	174.5	11.32	156.4	202.4	9.27	148.6	231.8	7.69
	175-5SR	191.3	162.3	14.15	185.8	187.3	11.90	176.5	217.3	9.75	167.7	248.8	8.09
	115T-5SR	125.7	110.4	13.65	122.0	127.8	11.46	115.9	148.4	9.37	110.1	172.1	7.68
	130T-5SR	142.6	124.3	13.77	138.4	143.8	11.55	131.5	167.0	9.45	124.9	193.4	7.75
	145T-5SR	158.7	138.1	13.79	154.0	159.8	11.57	146.3	185.5	9.47	139.0	214.6	7.78
	160T-5SR	174.8	149.5	14.03	169.7	173.0	11.77	161.3	200.9	9.63	153.2	232.5	7.91
	180T-5SR	196.9	160.8	14.69	191.2	186.2	12.32	181.6	216.1	10.08	172.5	250.5	8.27
	190-5SR	209.4	178.6	14.07	203.3	206.7	11.80	193.1	239.8	9.66	183.4	277.4	7.94
	210-5SR	230.8	196.1	14.12	224.1	227.0	11.85	212.9	263.5	9.70	202.2	304.9	7.96
	235-5SR	259.2	227.0	13.70	251.6	262.5	11.50	239.1	304.9	9.41	227.1	351.1	7.76
	260-5SR	287.1	257.5	13.38	278.7	297.9	11.23	264.8	346.1	9.18	251.5	396.8	7.61
	290-5SR	316.9	279.3	13.62	307.7	322.9	11.43	292.3	375.1	9.35	277.7	430.1	7.75
	320-5SR	349.9	300.8	13.96	339.7	347.8	11.72	322.7	404.2	9.58	306.6	463.3	7.94
	340-5SR	371.9	311.9	14.31	361.0	360.7	12.01	343.0	419.0	9.82	325.8	480.3	8.14
	365-5SR	399.8	322.8	14.86	388.2	373.4	12.47	368.8	433.8	10.20	350.3	497.1	8.46
	390-5SR	429.3	357.1	14.43	416.8	413.5	12.10	396.0	480.0	9.90	376.2	552.5	8.17
	420-5SR	458.9	387.9	14.20	445.6	449.0	11.91	423.3	521.5	9.74	402.1	598.7	8.06
445-5SR	486.5	418.8	13.94	472.3	484.5	11.70	448.7	562.9	9.57	426.3	645.0	7.93	
470-5SR	513.9	453.7	13.59	498.9	524.8	11.41	474.0	609.5	9.33	450.3	701.7	7.70	
520-5SR	569.6	515.1	13.27	553.0	595.7	11.14	525.4	692.1	9.11	499.1	793.7	7.55	
50.0	85-5SR	95.9	80.5	14.29	93.1	93.2	11.99	88.4	108.2	9.81	84.0	125.3	8.05
	105-5SR	118.5	98.2	14.49	115.1	113.6	12.16	109.3	131.8	9.95	103.8	152.8	8.16
	125-5SR	140.7	128.9	13.10	136.6	148.9	11.01	129.8	173.1	9.00	123.3	198.5	7.45
	155-5SR	174.7	150.5	13.92	169.6	174.0	11.69	161.1	202.2	9.56	153.1	231.9	7.92
	175-5SR	197.1	161.6	14.63	191.3	186.8	12.29	181.8	217.0	10.05	172.7	248.9	8.32
	115T-5SR	129.4	110.0	14.12	125.7	127.4	11.84	119.4	148.2	9.67	113.4	172.0	7.91
	130T-5SR	146.9	123.8	14.24	142.6	143.4	11.93	135.5	166.7	9.75	128.7	193.8	7.97
	145T-5SR	163.4	137.5	14.26	158.7	159.3	11.95	150.7	185.2	9.76	143.2	215.4	7.98
	160T-5SR	180.1	148.9	14.51	174.8	172.5	12.16	166.1	200.6	9.94	157.8	232.9	8.13
	180T-5SR	202.8	160.2	15.20	196.9	185.6	12.73	187.1	215.8	10.40	177.7	250.8	8.50
	190-5SR	215.6	177.8	14.56	209.4	206.0	12.19	198.9	239.5	9.97	189.0	278.3	8.15
	210-5SR	237.7	195.3	14.61	230.8	226.3	12.24	219.2	263.1	10.00	208.3	305.2	8.19
	235-5SR	267.0	226.0	14.17	259.2	261.6	11.89	246.2	304.3	9.71	233.9	350.9	8.00
	260-5SR	295.7	256.5	13.83	287.1	297.1	11.60	272.7	345.6	9.47	259.1	396.6	7.84
	290-5SR	326.4	278.1	14.08	316.9	322.2	11.80	301.0	374.7	9.64	286.0	430.0	7.98
	320-5SR	360.4	299.6	14.44	349.9	346.9	12.10	332.4	403.7	9.88	315.8	463.0	8.18
	340-5SR	383.0	310.6	14.80	371.9	359.7	12.41	353.3	418.5	10.13	335.6	480.1	8.39
	365-5SR	411.8	321.5	15.37	399.8	372.4	12.88	379.8	433.2	10.52	360.8	496.8	8.72
	390-5SR	442.2	355.6	14.92	429.3	412.4	12.49	407.9	479.5	10.21	387.5	553.0	8.41
	420-5SR	472.7	386.3	14.68	458.9	447.7	12.30	436.0	520.7	10.05	414.2	598.7	8.30
445-5SR	501.1	417.1	14.42	486.5	483.1	12.09	462.2	562.0	9.87	439.1	644.4	8.18	
470-5SR	529.3	451.8	14.06	513.9	523.4	11.78	488.2	608.6	9.63	463.8	701.8	7.93	
520-5SR	586.7	513.0	13.72	569.6	594.1	11.51	541.2	691.1	9.40	514.1	793.2	7.78	

- Notes:
- 1.) Ratings based on 10°F water range in evaporator and .0001 fouling factor.
 - 2.) Interpolation between ratings is permissible but extrapolation is NOT.
 - 3.) KWI is for compressor input.
 - 4.) Consult factory for 60Hz operation.
 - 5.) Units are running on part load above Ambient Temperature 115°F due to the current limiter.

PHYSICAL SPECIFICATIONS

MODEL	AFVX	85-5SR	105-5SR	125-5SR	155-5SR	175-5SR	115T-5SR
Compressor							
Model (Qty)		MSC1215 (1)	MSC1218 (1)	MSC1222 (1)	MSC1227 (1)	MSC1230 (1)	MSC1210 (1) MSC1210 (1)
Rpm		2950	2950	2950	2950	2950	2950
Nominal Capacity	Tr	85.2	105.3	125.0	155.2	175.1	115.0
Min. % Unit Capacity Reduction		25.0%	25.0%	25.0%	25.0%	25.0%	12.5%
Evaporator							
Model (Qty)		C1R (1)	D1R (1)	D2R (1)	J1R (1)	K1R (1)	B1R (2)
Water Connector	Inch [mm]	5	6	6	6	6	6
Nom. Water Flow / P.D.	Gpm / Ft wg	204.7/ 7.8	253/ 7.1	300.3/ 8.0	372.9/ 14.0	420.7/ 15.0	276.3/ 6.0
Min/Max Water Flow	Gpm	78.5/ 396.1	103.9/ 523.2	117.8/ 587	117.3/ 586.9	129.9/ 641.3	124.5/ 625.5
Min/Max Water P.D.	Ft Wg	1.6/ 28.7	1.6/ 28.5	1.6/ 28.8	1.9/ 33.7	1.9/ 34.0	1.6/ 30.3
Condenser							
Coil Rows Deep / Total FA	Ft ²	3 / 121.9	3 / 162.6	4 / 162.6	4 / 171.1	4 / 171.1	3 / 162.6
No Of Fans		6	8	8	8	8	8
Fan Dia (Qty)	mm	800 (6)	800 (8)	800 (8)	900 (8)	900 (8)	800 (8)
Fan Motor (Qty)	Hp	1.5 (6)	1.5 (8)	1.5 (8)	3.0 (8)	3.0 (8)	1.5 (8)
Fan Motor FLA (Qty)	Amp	3.2 (6)	3.2 (8)	3.2 (8)	4.9 (8)	4.9 (8)	3.2 (8)
Min. Operating Ambient	°F	55	55	55	55	55	55
Electrical							
Nom. Voltage		400V/3/50Hz	400V/3/50Hz	400V/3/50Hz	400V/3/50Hz	400V/3/50Hz	400V/3/50Hz
Unit RLA	Amp	180	222	234	313	291	244
Unit Max. Inrush	Amp	462	520	358	471	503	466
General							
Unit Length	Inch [mm]	174 [4420]	216 [5486]	220 [5588]	220 [5588]	220 [5588]	231 [5867]
Unit Width	Inch [mm]	88 [2235]	88 [2235]	88 [2235]	88 [2235]	88 [2235]	88 [2235]
Unit Height	Inch [mm]	87 ½ [2223]	88 ½ [2248]	88 ½ [2248]	97 ½ [2477]	97 ½ [2477]	88 ½ [2248]
Shipping Weight	Lbs [kg]	9376 [4253]	10712 [4859]	11920 [5407]	13466 [6108]	14664 [6652]	13094 [5939]
Operating Weight	Lbs [kg]	9532 [4324]	10915 [4951]	12139 [5506]	13720 [6223]	14952 [6782]	13338 [6050]
Operating Charge R134a	Lbs [kg]	208 [94]	247 [112]	299 [136]	364 [165]	416 [189]	273 [124]

MODEL	AFVX	130T-5SR	145T-5SR	160T-5SR	180T-5SR	190-5SR	210-5SR
Compressor							
Model (Qty)		MSC1210 (1) MSC1212 (1)	MSC1212 (2)	MSC1212 (1) MSC1215 (1)	MSC1215 (2)	MSC1215 (1) MSC1218 (1)	MSC1218 (2)
Rpm		2950	2950	2950	2950	2950	2950
Nominal Capacity	Tr	130.5	145.2	160.0	180.2	191.6	211.2
Min. % Unit Capacity Reduction		12.5%	12.5%	12.5%	12.5%	12.5%	12.5%
Evaporator							
Model (Qty)		C1R (2)	C1R (2)	D1R (2)	D1R (2)	D2R (2)	J1R (2)
Water Connector	Inch [mm]	6	6	8	8	8	8
Nom. Water Flow / P.D.	Gpm / Ft wg	313.6/ 5.4	348.9/ 6.6	384.4/ 4.6	433.0/ 5.4	460.4/ 5.2	507.5/ 7.4
Min/Max Water Flow	Gpm	158.1/ 791.4	158.1/ 791.4	208.5/ 1046.4	208.5/ 1046.4	234.8/ 1173.0	236.3/ 1351.0
Min/Max Water P.D.	Ft Wg	1.7/ 31.8	1.7/ 31.8	1.6/ 30	1.6/ 30	1.7/ 30.6	2.0/ 40.9
Condenser							
Coil Rows Deep / Total FA	Ft ²	3 / 81.3, 4 / 81.3	4 / 171.1	3 / 85.6, 4 / 85.6	4 / 171.1	3 / 128.3, 4 / 85.6	3 / 256.7
No Of Fans		8	8	8	8	10	12
Fan Dia (Qty)	mm	800 (8)	800 (8)	900 (8)	900 (8)	900 (10)	900 (12)
Fan Motor (Qty)	Hp	1.5 (8)	1.5 (8)	3.0 (8)	3.0 (8)	3.0 (10)	3.0 (12)
Fan Motor FLA (Qty)	Amp	3.2 (8)	3.2 (8)	4.9 (8)	4.9 (8)	4.9 (10)	4.9 (12)
Min. Operating Ambient	°F	55	55	55	55	55	55
Electrical							
Nom. Voltage		400V/3/50Hz	400V/3/50Hz	400V/3/50Hz	400V/3/50Hz	400V/3/50Hz	400V/3/50Hz
Unit RLA	Amp	268	296	332	365	407	454
Unit Max. Inrush	Amp	575	510	548	645	707	753
General							
Unit Length	Inch [mm]	231 [5867]	234 [5944]	234 [5944]	234 [5944]	276 [7010]	318 [8077]
Unit Width	Inch [mm]	88 [2235]	88 [2235]	88 [2235]	88 [2235]	88 [2235]	88 [2235]
Unit Height	Inch [mm]	88 ½ [2248]	96 ½ [2451]	97 ½ [2477]	97 ½ [2477]	97 ½ [2477]	97 ½ [2477]
Shipping Weight	Lbs [kg]	13867 [6290]	14245 [6461]	16309 [7398]	16872 [7653]	18528 [8404]	20526 [9311]
Operating Weight	Lbs [kg]	14178 [6431]	14556 [6603]	16715 [7582]	17279 [7837]	18967 [8603]	21033 [9541]
Operating Charge R134a	Lbs [kg]	312 [142]	338 [153]	390 [177]	416 [189]	468 [212]	520 [236]

PHYSICAL SPECIFICATIONS

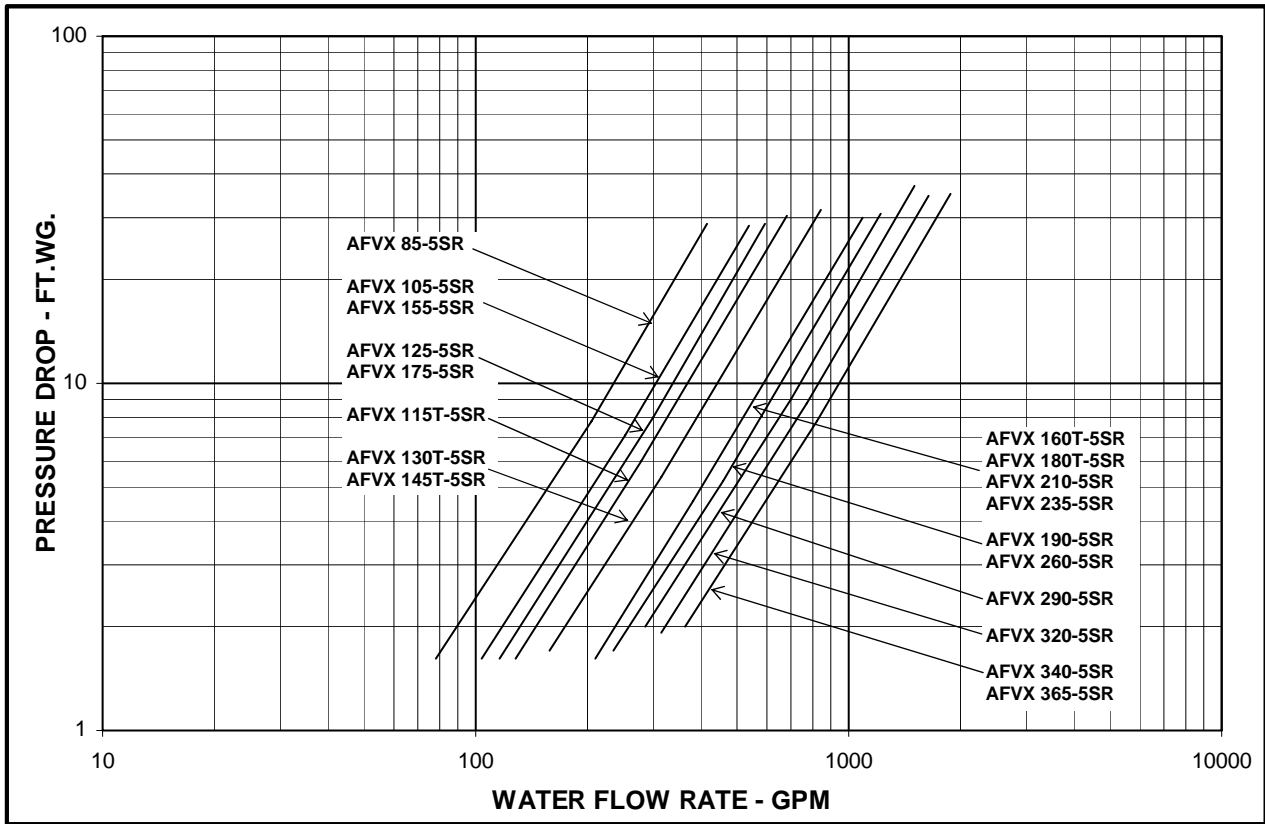
MODEL	AFVX	235-5SR	260-5SR	290-5SR	320-5SR	340-5SR	365-5SR
Compressor							
Model (Qty)		MSC1218 (1) MSC1222 (1)	MSC1222 (2)	MSC1222 (1) MSC1227 (1)	MSC1227 (2)	MSC1227 (1) MSC1230 (1)	MSC1230 (2)
Rpm		2950	2950	2950	2950	2950	2950
Nominal Capacity	Tr	237.2	262.7	290.0	320.2	340.3	365.9
Min. % Unit Capacity Reduction		12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
Evaporator							
Model (Qty)		J1R (2)	K1R (2)	K2R (2)	L1R (2)	L2R (2)	L2R (2)
Water Connector	Inch [mm]	8	8	8	10	10	10
Nom. Water Flow / P.D.	Gpm / Ft wg	569.9/ 9.0	631.2/ 9.4	696.8/ 9.0	769.4/ 8.8	817.6/ 7.8	879.2/ 9.0
Min/Max Water Flow	Gpm	236.3/ 1351.0	257/ 1282.2	284.1/ 1410.0	315.8/ 1574.2	364.5/ 1810.4	364.5/ 1810.4
Min/Max Water P.D.	Ft Wg	2.0/ 40.9	2.0/ 36.2	2.0/ 37.0	1.9/ 34.7	2.0/ 35.3	2.0/ 35.3
Condenser							
Coil Rows Deep / Total FA	Ft ²	3 / 299.4	3 / 171.1, 4 / 128.3	3 / 171.1, 4 / 171.1	4 / 342.2	4 / 342.2	3 / 213.9, 4 / 171.1
No Of Fans		14	14	16	16	16	18
Fan Dia (Qty)	mm	900 (14)	900 (14)	900 (16)	900 (16)	900 (16)	900 (18)
Fan Motor (Qty)	Hp	3.0 (14)	3.0 (14)	3.0 (16)	3.0 (16)	3.0 (16)	3.0 (18)
Fan Motor FLA (Qty)	Amp	4.9 (14)	4.9 (14)	4.9 (16)	4.9 (16)	4.9 (16)	4.9 (18)
Min. Operating Ambient	°F	55	55	55	55	55	55
Electrical							
Nom. Voltage		400V/3/ 50Hz	400V/3/ 50Hz	400V/3/ 50Hz	400V/3/ 50Hz	400V/3/ 50Hz	400V/3/ 50Hz
Unit RLA	Amp	460	485	560	626	604	592
Unit Max. Inrush	Amp	761	609	718	784	816	835
General							
Unit Length	Inch [mm]	364 [9246]	364 [9246]	406 [1031]	406 [1031]	406 [1031]	448 [1138]
Unit Width	Inch [mm]	88 [2235]	88 [2235]	88 [2235]	88 [2235]	88 [2235]	88 [2235]
Unit Height	Inch [mm]	97 ½ [2477]	97 ½ [2477]	97 ½ [2477]	97 ½ [2477]	97 ½ [2477]	97 ½ [2477]
Shipping Weight	Lbs [kg]	22657 [10277]	25018 [11348]	26892 [12198]	28468 [12913]	29284 [13283]	30732 [13940]
Operating Weight	Lbs [kg]	23302 [10570]	25808 [11706]	27722 [12574]	29488 [13375]	30377 [13779]	31825 [14436]
Operating Charge R134a	Lbs [kg]	572 [259]	624 [283]	702 [318]	780 [354]	832 [377]	884 [401]

MODEL	AFVX	390-5SR	420-5SR	445-5SR	470-5SR	520-5SR
Compressor						
Model (Qty)		MSC1218 (2) MSC1230 (1)	MSC1218 (1) MSC1222 (1) MSC1230 (1)	MSC1222 (2) MSC1230 (1)	MSC1218 (2) MSC1222 (2)	MSC1222 (4)
Rpm		2950	2950	2950	2950	2950
Nominal Capacity	Tr	392.9	420.0	445.2	470.3	521.3
Min. % Unit Capacity Reduction		8.33%	8.33%	8.33%	6.25%	6.25%
Evaporator						
Model (Qty)		L2R (1), M1R (1)	L3R (1), M1R (1)	L3R (1), M1R (1)	L3R (1), M1R (1)	M1R (2)
Water Connector	Inch [mm]	10	10	10	10	12
Nom. Water Flow / P.D.	Gpm / Ft wg	944.0/ 8.8	1009.1/ 9.2	1069.7/ 10.2	1130.0/ 11.2	1252.5/ 12.0
Min/Max Water Flow	Gpm	437.3/ 1810.5	437.9/ 1945.3	437.9/ 1945.3	437.9/ 1945.3	437.9/ 2174.8
Min/Max Water P.D.	Ft Wg	1.9/ 34.8	2.0/ 35.0	2.0/ 35.0	2.0/ 35.0	1.9/ 40.5
Condenser						
Coil Rows Deep / Total FA	Ft ²	3 / 320.8, 4 / 256.7	3 / 577.5	3 / 256.7, 4 / 320.8	3 / 320.8, 4 / 256.7	4 / 577.5
No Of Fans		18	18	18	18	18
Fan Dia (Qty)	mm	900 (18)	860 (18)	860 (18)	860 (18)	860 (18)
Fan Motor (Qty)	Hp	3.0 (18)	4.0 (18)	4.0 (18)	4.0 (18)	4.0 (18)
Fan Motor FLA (Qty)	Amp	4.9 (18)	7.1 (18)	7.1 (18)	7.1 (18)	7.1 (18)
Min. Operating Ambient	°F	55	55	55	55	55
Electrical						
Nom. Voltage		400V/3/50Hz	400V/3/50Hz	400V/3/50Hz	400V/3/50Hz	400V/3/50Hz
Unit RLA	Amp	740	788	796	935	960
Unit Max. Inrush	Amp	1035	1082	1007	1234	1085
General						
Unit Length	Inch [mm]	471 [11963]	471 [11963]	471 [11963]	471 [11963]	471 [11963]
Unit Width	Inch [mm]	88 [2235]	88 [2235]	88 [2235]	88 [2235]	88 [2235]
Unit Height	Inch [mm]	121 ½ [3087]	120 ½ [3061]	120 ½ [3061]	120 ½ [3061]	120 ½ [3061]
Shipping Weight	Lbs [kg]	33089 [15009]	33013 [14974]	34268 [15544]	36929 [16751]	39681 [17999]
Operating Weight	Lbs [kg]	33874 [15365]	33819 [15340]	35074 [15910]	37735 [17116]	40992 [18594]
Operating Charge R134a	Lbs [kg]	962 [436]	1001 [454]	1066 [484]	1144 [519]	1248 [566]

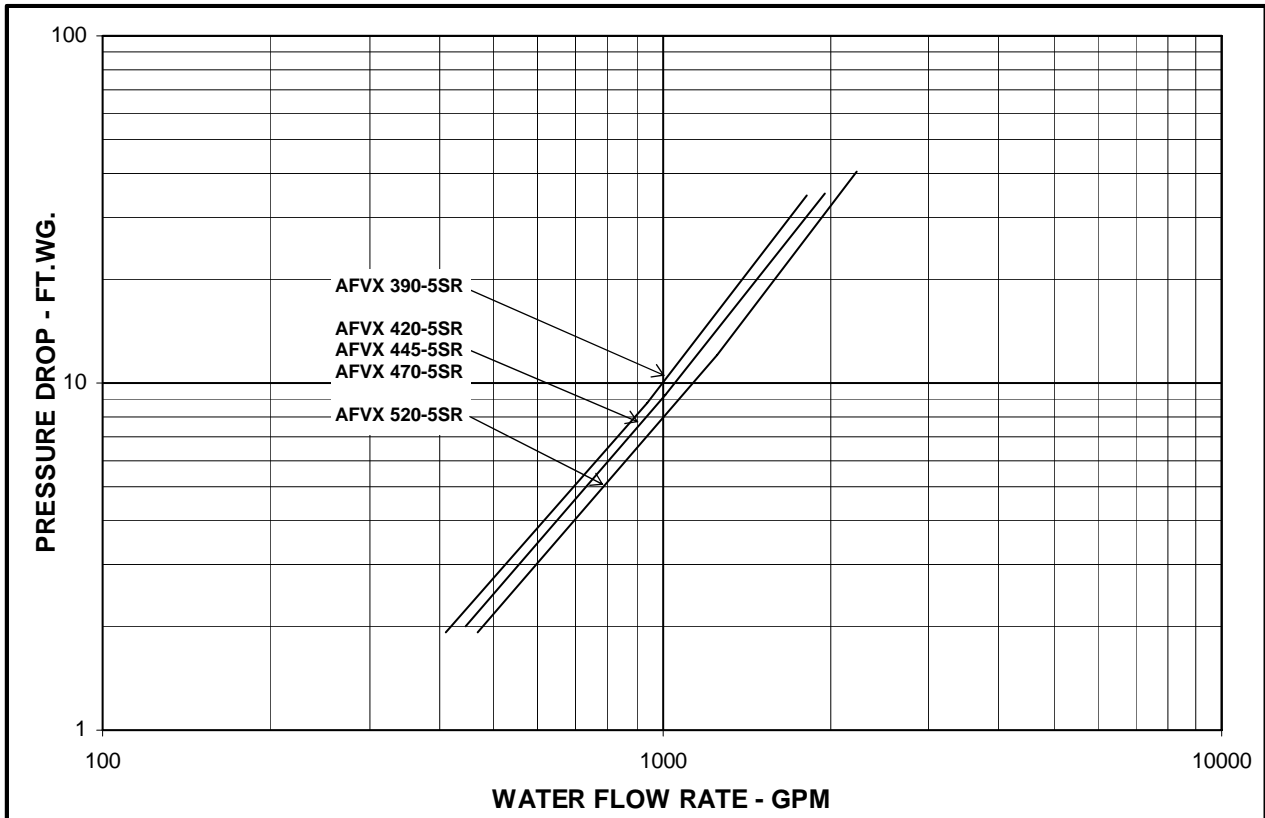
PRESSURE DROP

Evaporator Water Pressure

1.) 1 & 2 Compressor Units

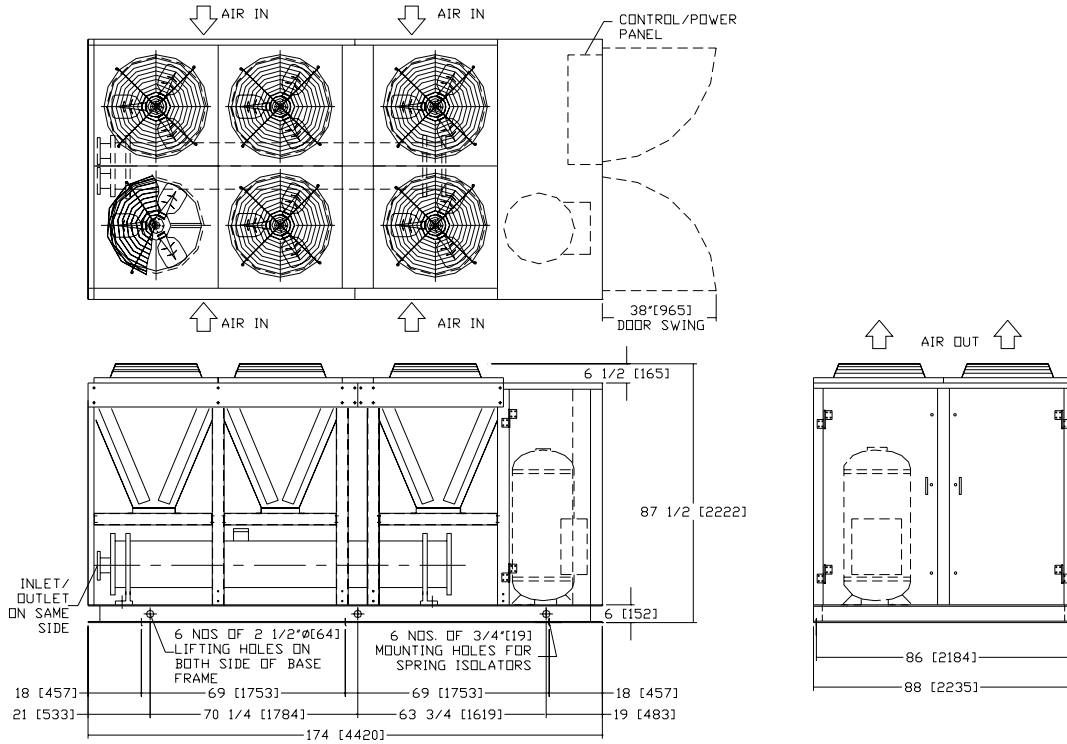


2.) 3 & 4 Compressor Units

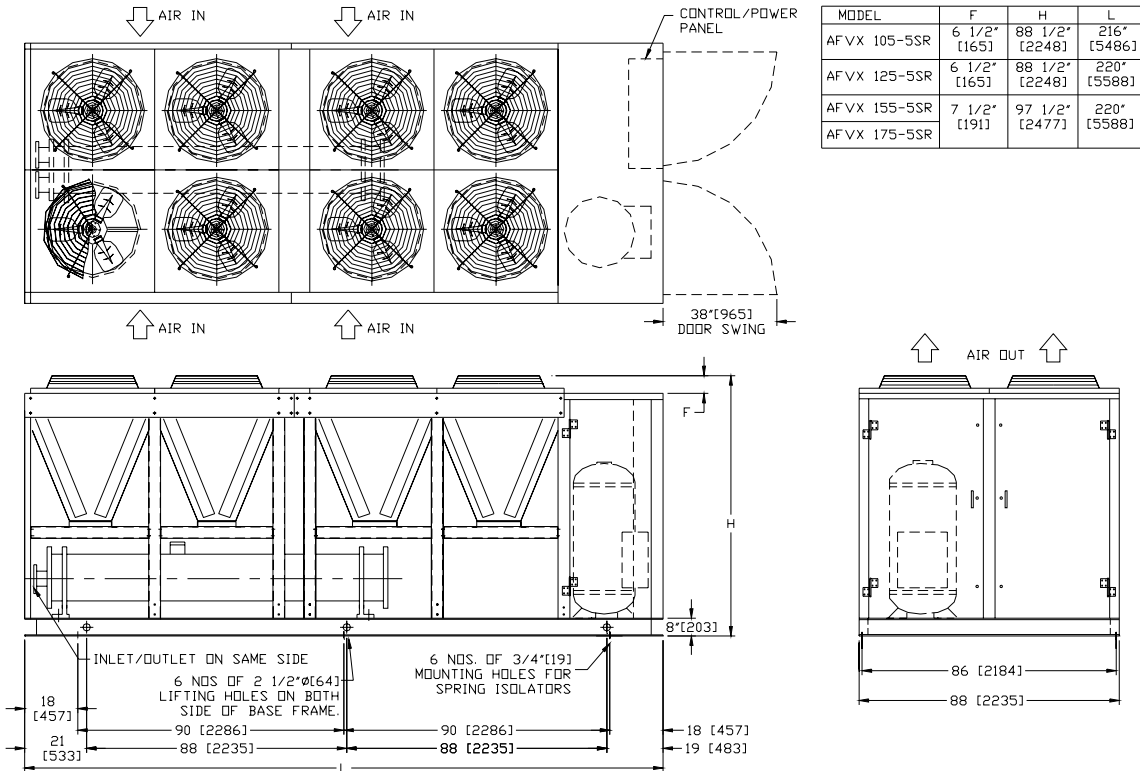


DIMENSIONAL DATA

AFVX 85-5SR



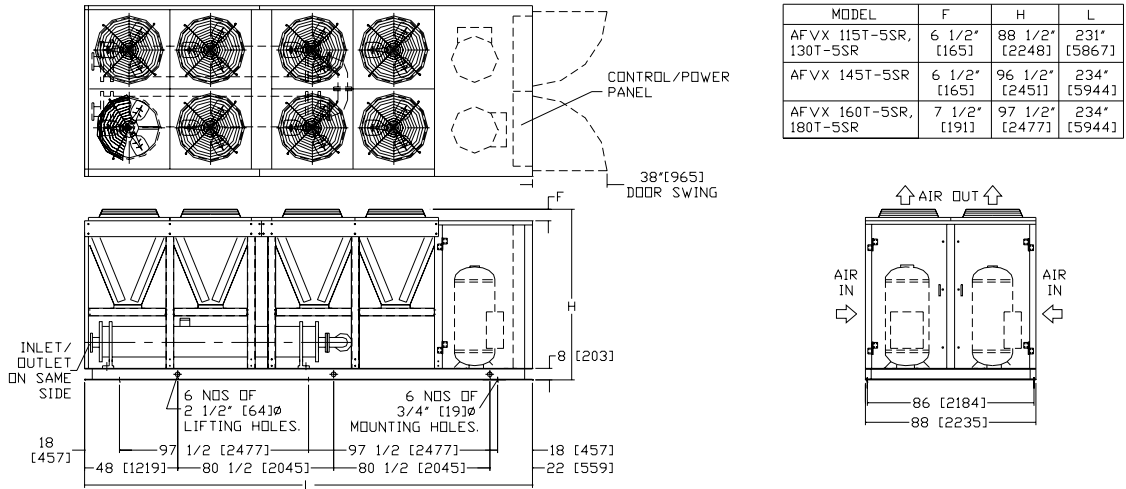
AFVX 105-5SR, 125-5SR, 155-5SR, 175-5SR



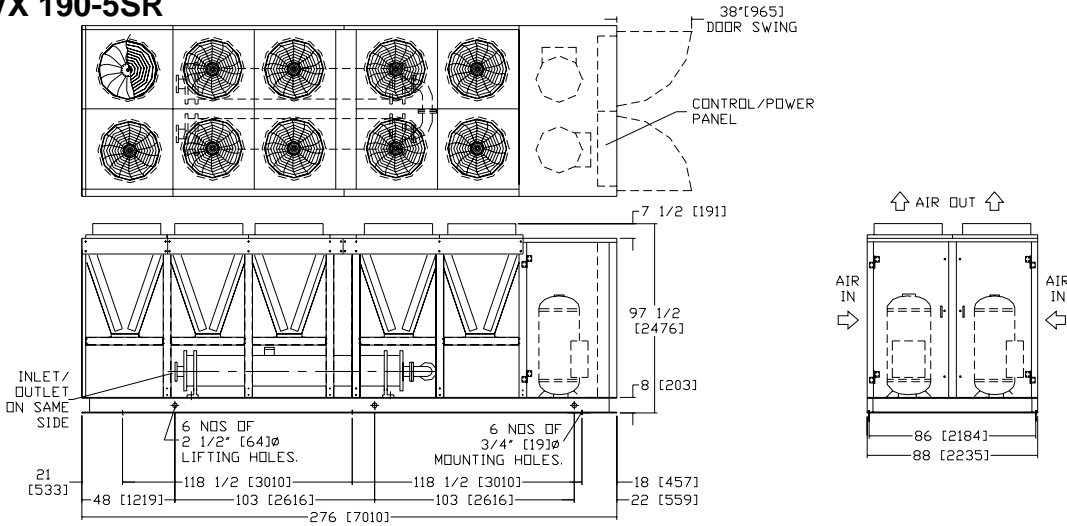
NOTE: ALL DIMENSIONS ARE IN INCHES[MM].

DIMENSIONAL DATA

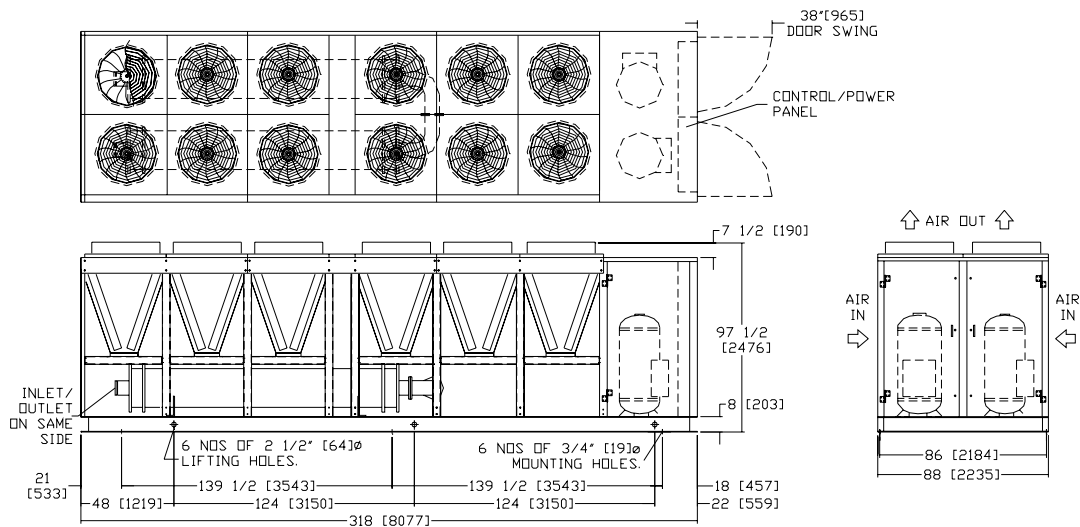
AFVX 115T-5SR, 130T-5SR, 145T-5SR, 160T-5SR, 180T-5SR



AFVX 190-5SR



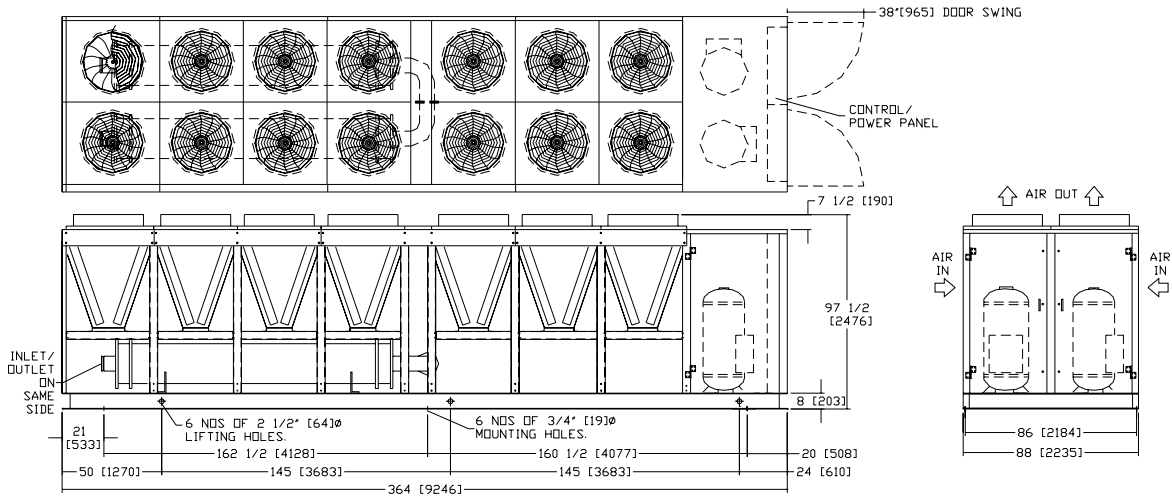
AFVX 210-5SR



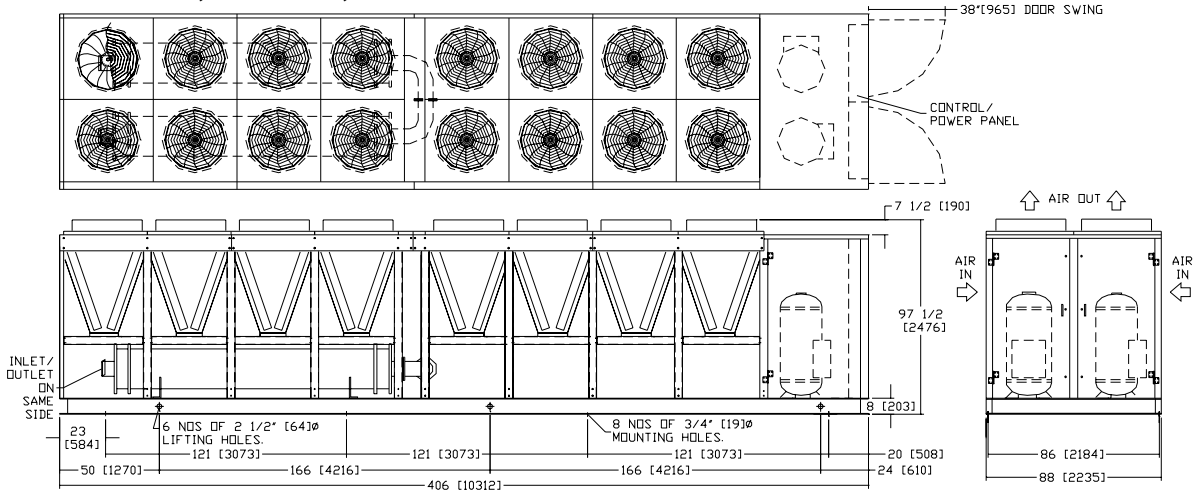
NOTE: ALL DIMENSIONS ARE IN INCHES [MM].

DIMENSIONAL DATA

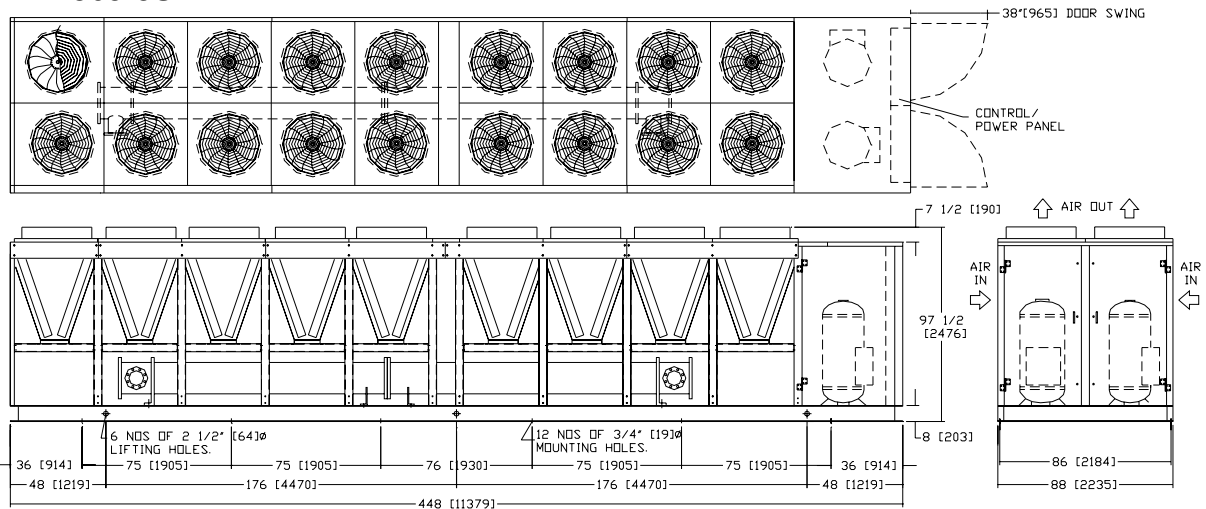
AFVX 235-5SR, 260-5SR



AFVX 290-5SR, 320-5SR, 340-5SR



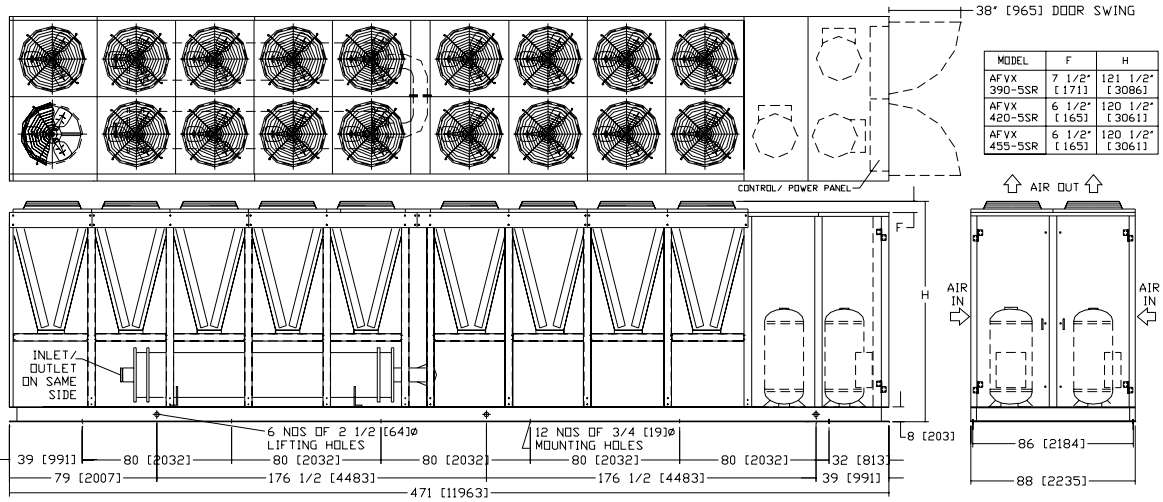
AFVX 365-5SR



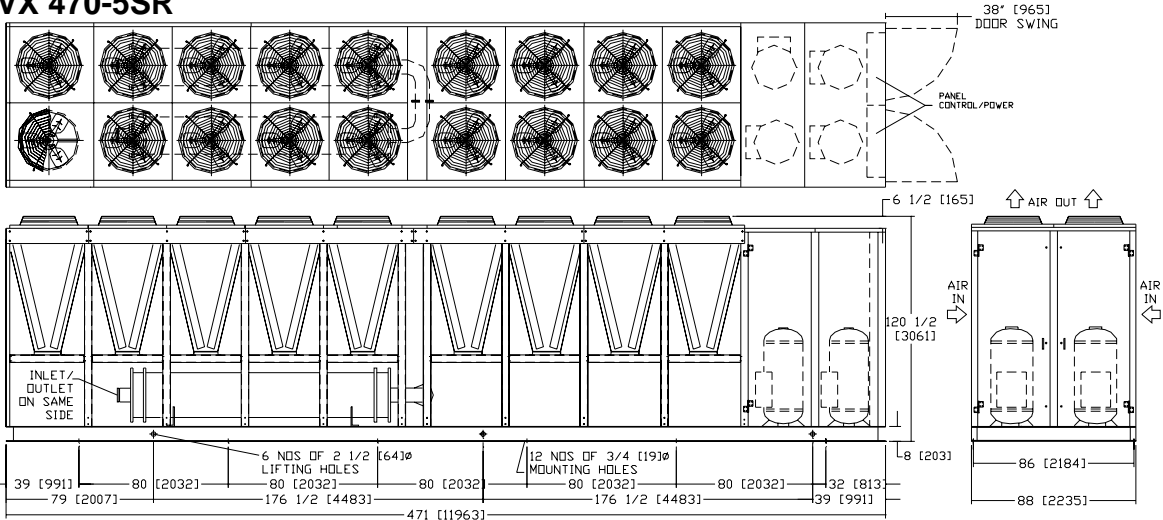
NOTE: ALL DIMENSIONS ARE IN INCHES[MM].

DIMENSIONAL DATA

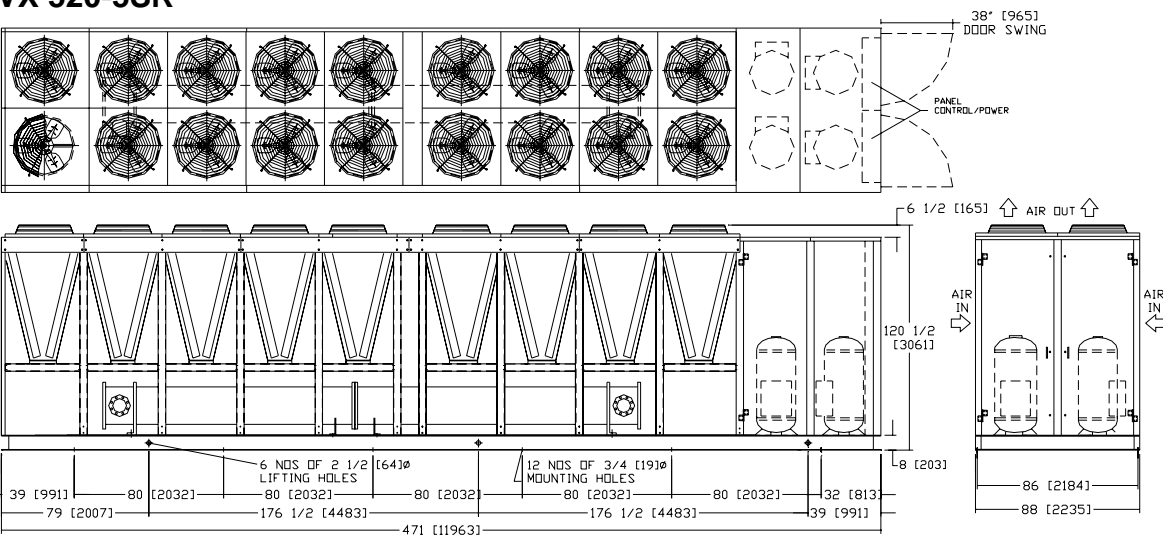
AFVX 390-5SR, 420-5SR, 455-5SR



AFVX 470-5SR



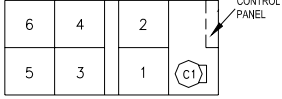
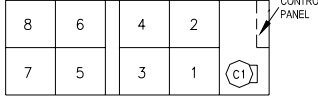

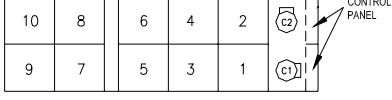
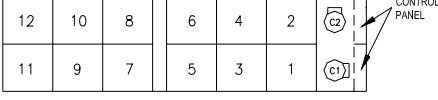
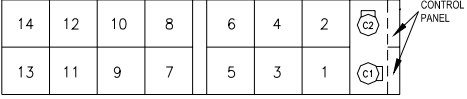
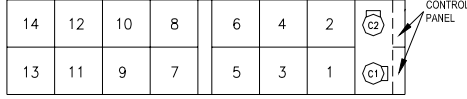

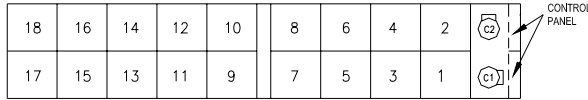

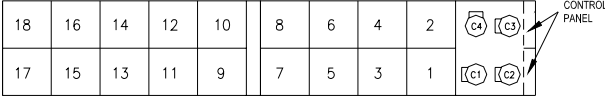
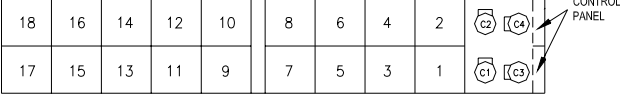
AFVX 520-5SR



NOTE: ALL DIMENSIONS ARE IN INCHES[MM].

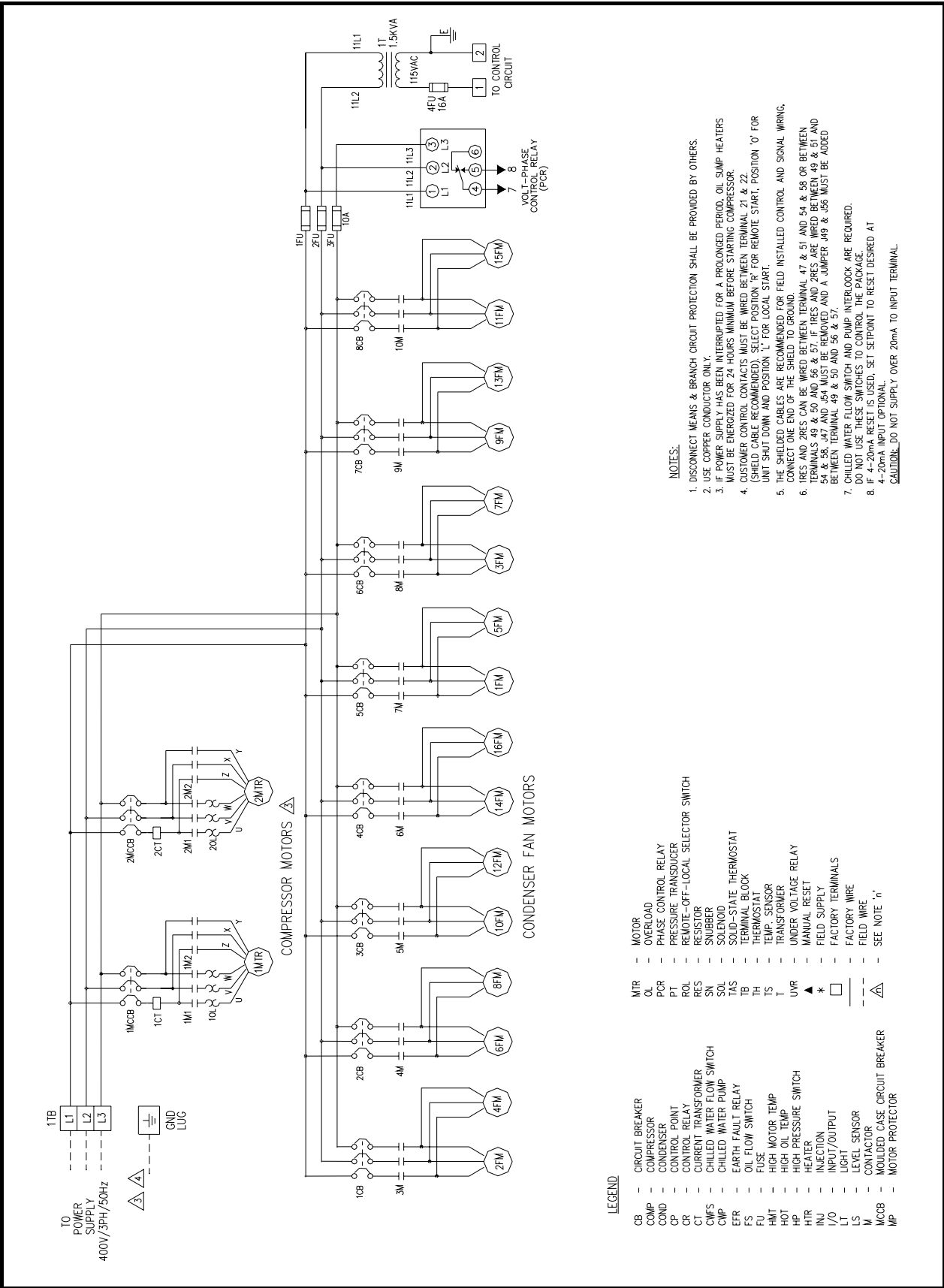
CONDENSER FAN

Fan Position Number & Cycling Sequence

AFVX 85-5SR 		AFVX 105-5SR, 125-5SR, 155-5SR, 175-5SR 		AFVX 115T-5SR, 130T-5SR, 145T-5SR, 160T-5SR, 180T-5SR 	
	SYSTEM		SYSTEM	SYSTEM 1	SYSTEM 2
BASE FANS	2, 4 & 6	BASE FANS	2, 4, 6 & 8	BASE FANS	6 & 8
STAGE 2	1 & 5	STAGE 2	1 & 5	STAGE 2	5
STAGE 3	3	STAGE 3	3 & 7	STAGE 3	7
AFVX 190-5SR 		AFVX 210-5SR 			
	SYSTEM 1	SYSTEM 2		SYSTEM 1	SYSTEM 2
BASE FANS	6, 8 & 10	BASE FANS	2 & 4	BASE FANS	8, 10 & 12
STAGE 2	5 & 9	STAGE 2	1	STAGE 2	7 & 11
STAGE 3	7	STAGE 3	3	STAGE 3	9
AFVX 235-5SR 		AFVX 260-5SR 			
	SYSTEM 1	SYSTEM 2		SYSTEM 1	SYSTEM 2
BASE FANS	8, 10, 12 & 14	BASE FANS	2, 4 & 6	BASE FANS	10, 12 & 14
STAGE 2	7 & 11	STAGE 2	1 & 5	STAGE 2	9 & 13
STAGE 3	9 & 13	STAGE 3	3	STAGE 3	11
AFVX 290-5SR, 320-5SR, 340-5SR 		AFVX 365-5SR 			
	SYSTEM 1	SYSTEM 2		SYSTEM 1	SYSTEM 2
BASE FANS	10, 12, 14 & 16	BASE FANS	2, 4, 6 & 8	BASE FANS	12, 14, 16 & 18
STAGE 2	9 & 13	STAGE 2	1 & 5	STAGE 2	11 & 15
STAGE 3	11 & 15	STAGE 3	3 & 7	STAGE 3	13 & 17
STAGE 4	-	STAGE 4	-	STAGE 4	-
AFVX 390-5SR, 420-5SR, 455-5SR 		AFVX 470-5 			
	SYSTEM 1	SYSTEM 2		SYSTEM 1	SYSTEM 2
BASE FANS	10, 12, 14, 16 & 18	BASE FANS	2, 4, 6 & 8	BASE FANS	12, 14, 16 & 18
STAGE 2	9 & 13	STAGE 2	1 & 5	STAGE 2	11 & 15
STAGE 3	11 & 15	STAGE 3	3, 7	STAGE 3	13 & 17
STAGE 4	17	STAGE 4	-	STAGE 4	-
AFVX 520-5 					
	SYSTEM 1	SYSTEM 2			
BASE FANS	10, 12, 14, 16 & 18	BASE FANS	2, 4, 6, 8 & 10		
STAGE 2	11 & 15	STAGE 2	1 & 3		
STAGE 3	13 & 17	STAGE 3	5 & 7		
STAGE 4	9 (Based on highest discharge pressure between 2 systems.)				

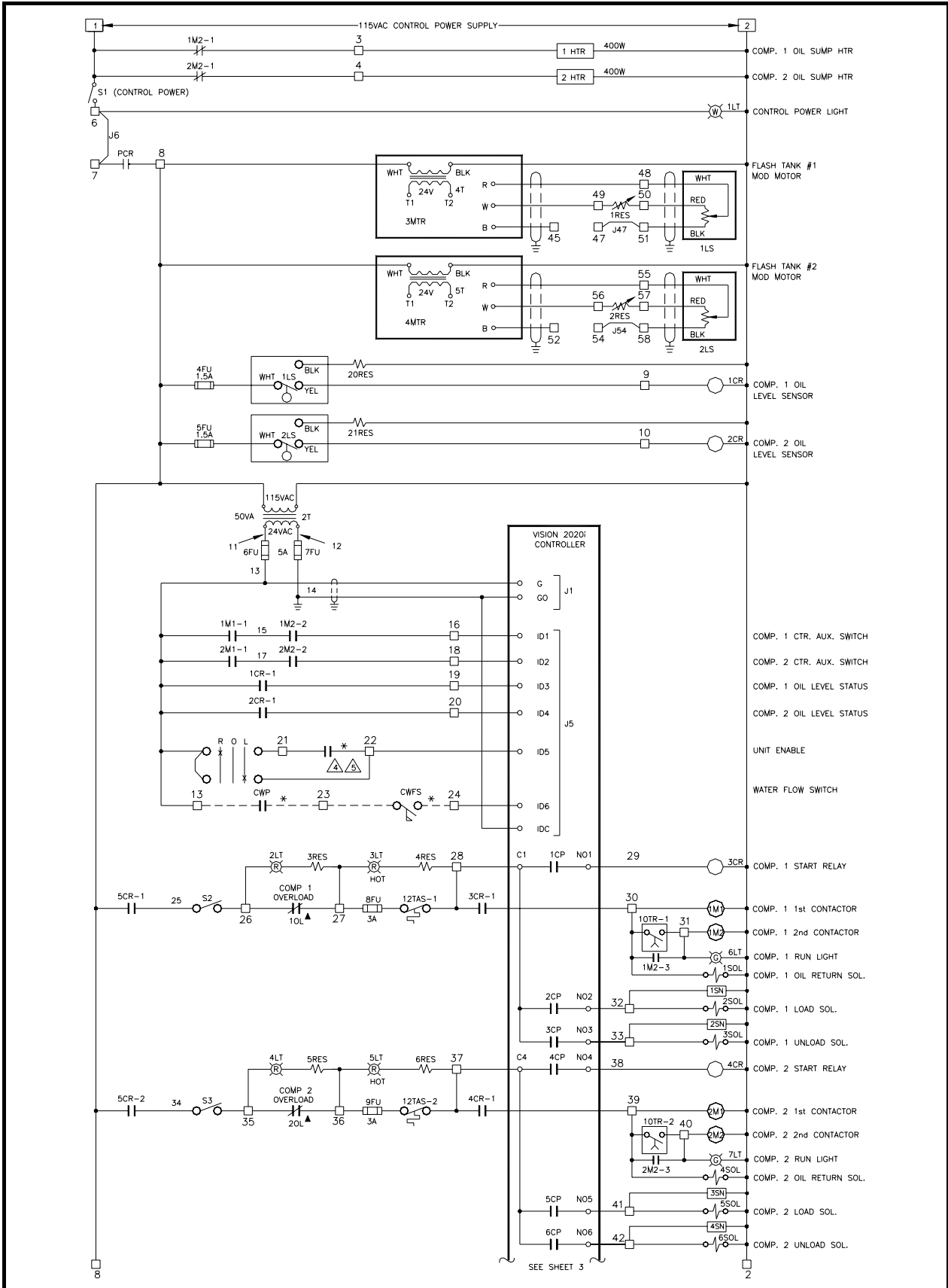
TYPICAL WIRING SCHEMATIC

AFVX - 2 COMPRESSORS



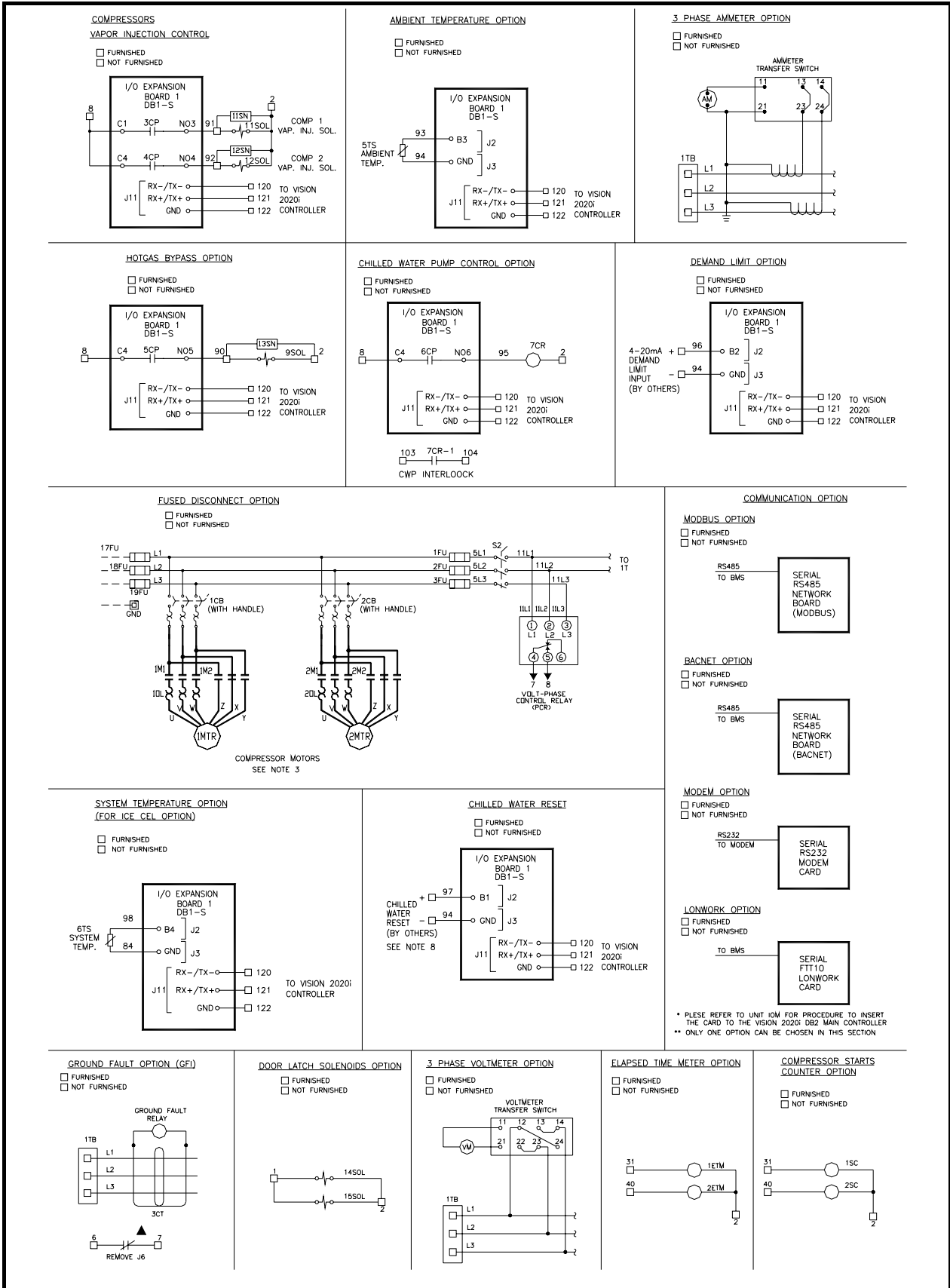
TYPICAL WIRING SCHEMATIC

AFVX - 2 COMPRESSORS



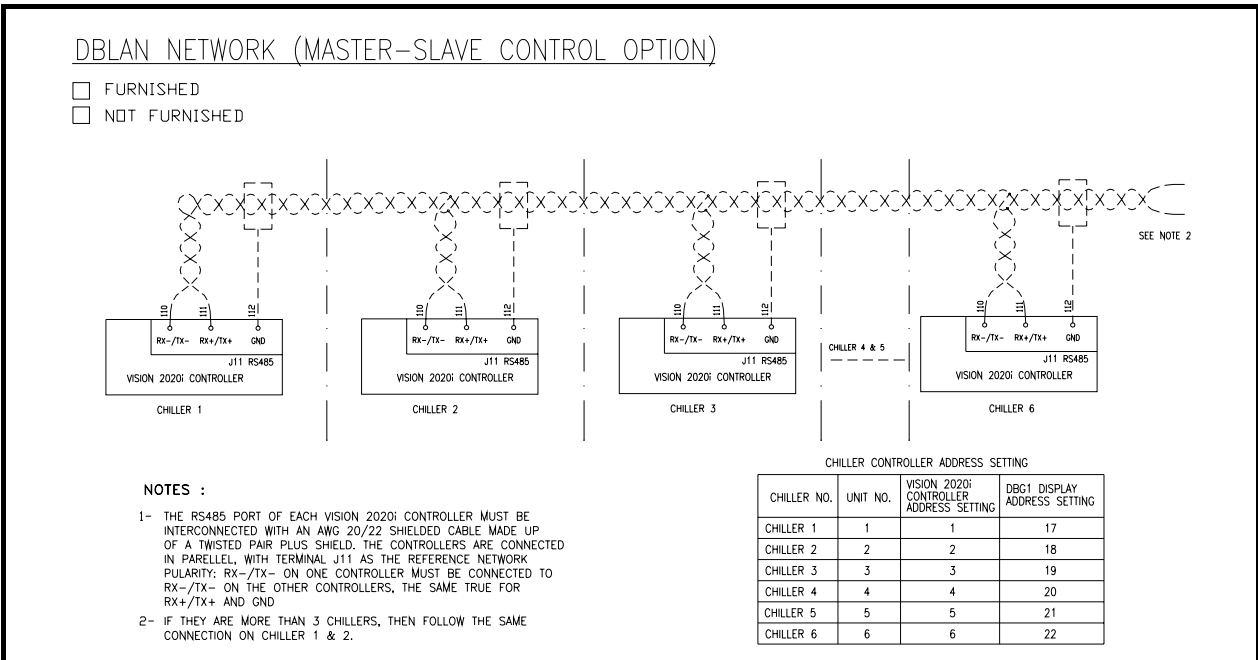
TYPICAL WIRING SCHEMATIC

AFVX - 2 COMPRESSORS



TYPICAL WIRING SCHEMATIC

AFVX - 2 COMPRESSORS



SOUND DATA

Sound Pressure Level dB(A) @ 10M- Free Field

BAND (HZ)	63	125	250	500	1K	2K	4K	8K	TOTAL	NC
AFVX 85-5SR	54	43	49	55	62	59	51	44	65	60
AFVX 105-5SR	55	43	49	56	63	60	51	44	66	65
AFVX 125-5SR	55	44	50	56	63	60	52	45	66	65
AFVX 155-5SR	54	44	50	56	63	60	52	45	66	65
AFVX 175-5SR	54	44	50	56	63	60	52	45	66	65
AFVX 115T-5SR	56	42	49	55	61	58	51	44	65	60
AFVX 130T-5SR	56	43	49	56	62	59	51	44	65	60
AFVX 145T-5SR	56	43	49	56	62	59	51	44	65	60
AFVX 160T-5SR	56	44	50	57	64	61	52	45	67	65
AFVX 180T-5SR	56	45	51	58	65	62	53	45	68	65
AFVX 190-5SR	57	46	51	58	65	62	53	46	68	65
AFVX 210-5SR	57	46	52	59	65	63	54	47	69	65
AFVX 235-5SR	57	46	52	59	65	63	54	47	68	65
AFVX 260-5SR	57	46	52	59	65	63	54	47	68	65
AFVX 290-5SR	57	46	52	59	65	63	54	47	68	65
AFVX 320-5SR	57	46	52	59	65	63	54	47	68	65
AFVX 340-5SR	57	46	52	59	65	63	54	47	68	65
AFVX 365-5SR	57	46	52	59	65	63	54	47	68	65
AFVX 390-5SR	58	47	53	60	67	64	55	48	70	65
AFVX 420-5SR	58	49	56	62	67	65	57	51	71	65
AFVX 445-5SR	58	49	56	62	67	65	57	51	71	65
AFVX 470-5SR	60	50	56	62	68	66	58	51	72	70
AFVX 520-5SR	60	50	56	62	68	66	58	51	72	70

Note: Published sound values as above are with ± 2 dB tolerance.

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

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