



Product Data

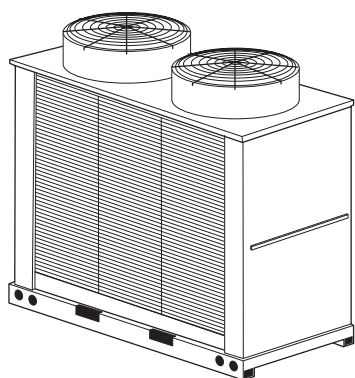
GEMINI™ SELECT 38APS025-050, 38APD025-100 Commercial Air-Cooled Condensing Units with PURON® Refrigerant (R-410A) 50/60 Hz

25 to 100 Nominal Tons (88 to 352 Nominal kW)

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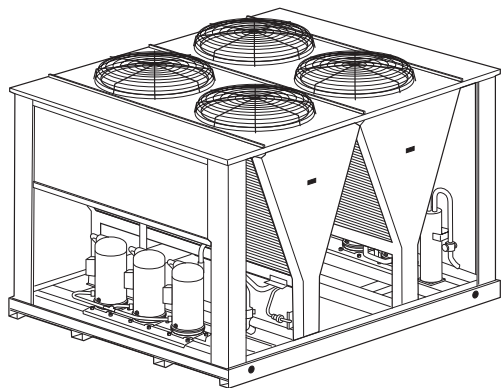
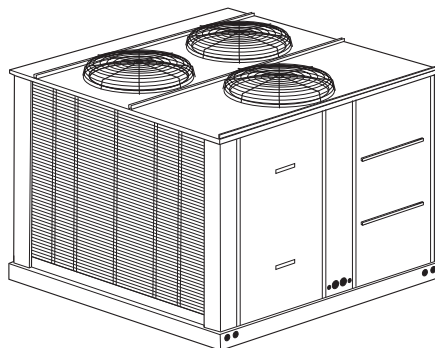


Gemini™ Select



**025 UNIT WITH
LOW SOUND OPTION**

040-060 UNIT



070 UNIT

**ASHRAE
90.1
COMPLIANT**


Puron®
the environmentally sound refrigerant

These dependable split systems match Carrier's 40RU or 39 Series indoor-air handlers with the versatile outdoor 38AP condensing units for a wide selection of commercial cooling solutions.

- Split condensing units compatible with ASHRAE 90.1
- Chlorine-free, non-ozone depleting Puron refrigerant (R-410A)
- Condenser coils feature the Novation® heat exchanger with microchannel coil technology
- 38APS single-circuit unit has up to 3 rotary scroll compressors
- 38APD unit has up to 6 rotary scroll compressors with 2 independent circuits
- Standard scroll compressor units operate as low as 33% (single circuit) or 15% (dual circuit) of nominal capacity
- Optional digital scroll compressors allow incremental unloading down to 10% (single circuit) or 5% (dual circuit) of nominal capacity for VAV applications
- Protection against high discharge and low suction refrigerant pressure, and low oil pressure

Features/Benefits

The 38AP condensing unit offers the utmost in system configuration and control adaptability. Its premium-quality standard components ensure durable, efficient, and reliable operation.

The 38AP units offer high unit EERs (Energy Efficiency Ratios) up to 11.6 and IPLVs (integrated part load values) up to 16.2. These units provide greater efficiency than similar units in the marketplace, which translates into year-round operating savings.

Features/Benefits (cont)



The latest safety standards for 38AP units are certified to UL (Underwriters Laboratories) and CSA (Canadian Standards Association) standards, ETL approved.

Versatility

The 38AP Series condensing units feature up to 6 compressors and 2 refrigerant circuits, and can be matched with a wide variety of air-handling units. Condensing unit circuits on sizes 025-050 can supply a single air handler or 2 separate air handlers. Standard units have scroll compressors and digital scrolls are available as an option. This option of digital control closely matches building loads and allows fine incremental adjustments to the variance in load.

Durable construction

All 38AP units have weatherized cabinets constructed of heavy-duty galvanized steel prepainted with corrosion-resistant baked enamel. Inside and outside surfaces are protected to ensure long life and good appearance. The

durable, galvanized steel, prepainted components exceed the requirements of the 500-hour salt spray test per ASTM (American Society for Testing and Materials) B117.

All 38AP units have Novation® heat exchangers with microchannel coil technology. The microchannel heat exchanger (MCHX) coils provide long-term reliability, high performance heat transfer, and significant savings in refrigerant charge. E-coated MCHX is offered as an option for harsh industrial or coastal conditions.

Reliability

The 38AP condensing units feature highly reliable, hermetic scroll compressors. Each 38AP unit is capable of unloading in staging sequence of scroll compressors. Compressors are mounted on rails with vibration isolators to provide quiet operation and reduced component stress.

The 38AP units have single or dual independent circuits; they provide inherent backup capability. Each circuit

is also protected by the following safety features:

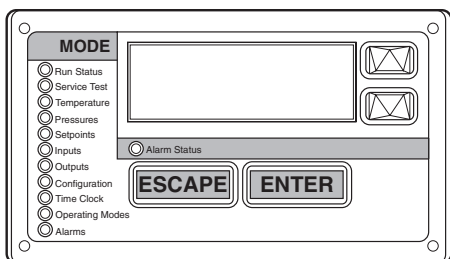
- Short-cycle protection
- Low superheat protection
- Loss of refrigerant charge protection
- Reverse rotation protection
- Suction and discharge pressure transducers
- Loss of phase protection
- High refrigerant pressure switch (discharge)
- Circuit breakers or fuses for short circuit protection of compressors and outdoor fans
- Suction line accumulator for each refrigerant circuit

Easier installation and service

The 38AP units are equipped with hinged control-box access doors, control interface terminal boards, liquid line shutoff valves, and suction line service valves.

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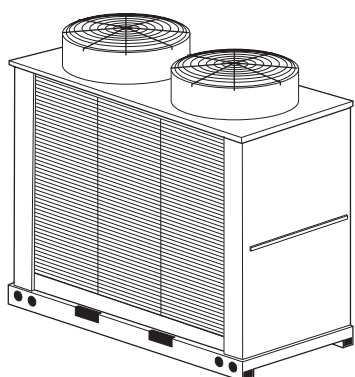
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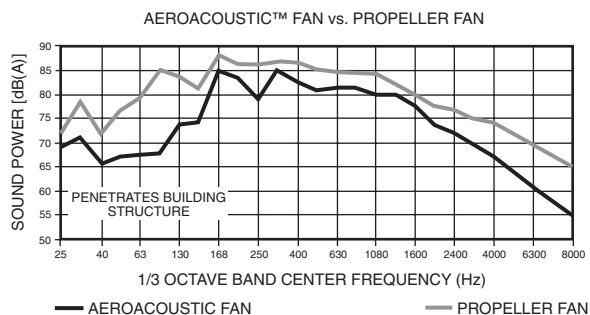
SCROLLING MARQUEE DISPLAY



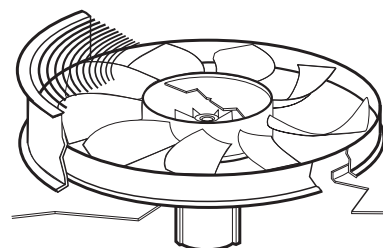
NAVIGATOR™ DISPLAY



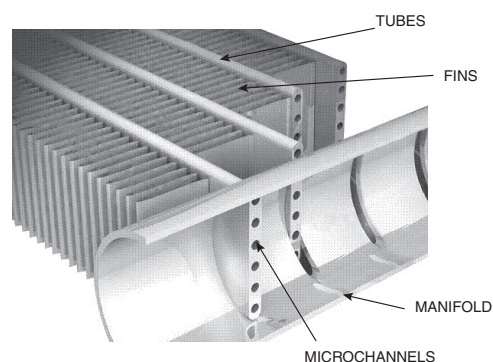
LOW SOUND OPTION



AEROACOUSTIC FAN VS PROPELLER FAN



LOW-NOISE AEROACOUSTIC FAN



**NOVATION® HEAT EXCHANGER TECHNOLOGY
WITH MICROCHANNEL CONDENSER COILS**

Model number nomenclature



38AP D 025 6 4 A 1 0 0 5 0

38AP – Split System Condensing Unit

Refrigeration Circuit Options*

D – Dual Refrigeration Circuit
S – Single Refrigeration Circuit

Nominal Capacity – Tons (kW)

025 – 25 (88) **050** – 50 (176) **090** – 90 (317)
027 – 27 (95) **060** – 60 (211) **100** – 100 (352)
030 – 30 (106) **070** – 70 (246)
040 – 40 (141) **080** – 80 (281)

Power Supply

1 – 575-3-60
2 – 380-3-60
5 – 280/230-3-60
6 – 460-3-60
9 – 380/415-3-50

Condenser Coil/Low Sound Options

4 – MCHX, No Sound Treatment
5 – E-coat, MCHX, No Sound Treatment
C – MCHX, Low Sound Fan(s)
D – E-coat MCHX, Low Sound Fan(s)
H – MCHX, Low Sound Fan(s), Compressor Blankets
J – E-coat MCHX, Low Sound Fan(s), Compressor Blankets

Revision Level

A – Current Revision Level

*38APS units available in sizes 025-050 only.

LEGEND

EMM — Energy Management Module
MCHX — Microchannel Heat Exchanger

Quality Assurance

Certified to ISO 9001:2000

Packaging/Security Options

0 – Std Packaging
8 – Std Packaging, Bottom Skid
J – Bottom Skid, Top Crate, Bag

Controls/Communications Options

2 – Scrolling Marquee
3 – EMM, Scrolling Marquee
5 – No Display

Electrical Options

0 – Single Point Power, Terminal Block
1 – Single Point Power, Non-Fused Disconnect

Ambient/Capacity Control/Interrupt Options

0 – Std Ambient, Std Compressor, Std Interrupt
2 – Std Ambient, Digital Compressor, Std Interrupt
3 – Std Ambient, Std Compressor, High Interrupt
5 – Std Ambient, Digital Compressor, High Interrupt
6 – Low Ambient, Std Compressor, Std Interrupt
8 – Low Ambient, Digital Compressor, Std Interrupt
9 – Low Ambient, Std Compressor, High Interrupt
C – Low Ambient, Digital Compressor, High Interrupt

Line Length Options

1 – Standard Line Length
2 – Long Line Length Check Valves

Capacity ratings

38AP UNIT CAPACITY RATINGS

UNIT SIZE	CAPACITY NOMINAL TONS (60 Hz)	CAPACITY NOMINAL kW (60 Hz)	CAPACITY NOMINAL TONS (50 Hz)	CAPACITY NOMINAL kW (50 Hz)	EER (60 Hz)	EER (50 Hz)	IPLV (60 Hz)	IPLV (50 Hz)
38APS025	24.0	84.3	19.9	69.9	11.0	11.6	14.4	15.5
38APD025	24.0	84.3	19.9	69.9	11.0	11.6	13.1	14.1
38APS027	26.6	93.4	22.1	77.6	10.9	11.5	14.7	15.7
38APD027	26.6	93.4	22.1	77.6	10.9	11.5	14.0	14.7
38APS030	31.1	109.2	25.8	90.6	10.8	11.4	14.3	15.2
38APD030	31.1	109.2	25.8	90.6	10.8	11.4	12.8	13.6
38APS040	39.8	139.8	33.0	115.9	11.6	12.1	16.2	17.4
38APD040	39.2	137.7	32.5	114.1	11.5	12.0	15.3	16.4
38APS050	48.1	168.9	39.9	140.1	11.1	11.7	15.0	15.9
38APD050	50.0	175.6	41.5	145.7	10.8	11.3	14.9	15.9
38APD060	58.3	204.7	48.4	170.0	11.1	11.7	14.5	15.5
38APD070	67.3	236.4	55.9	196.3	11.0	11.4	15.7	16.7
38APD080	78.0	273.9	64.7	227.2	11.1	11.5	15.6	16.6
38APD090	87.4	306.9	72.5	254.6	11.3	11.8	15.3	16.4
38APD100	96.0	337.2	79.7	279.9	11.1	11.6	15.0	16.0

LEGEND

EER — Energy Efficiency Ratio
IPLV — Integrated Part Load Value

NOTES:

- Unit performance is rated in accordance with ARI (Air Conditioning and Refrigeration Institute) Standard 365.
- Ratings are based on 45 F (7.2 C) saturated suction temperature and 95 F (35 C) outside-air temperature, and include suction line losses.

Physical data



38AP025-050 UNITS — ENGLISH

38AP UNIT SIZE	025		027		030		040		050	
NOMINAL CAPACITY, 50/60Hz (tons)	21/25		23/27		25/30		33/40		42/50	
CIRCUIT	Dual	Single	Dual	Single	Dual	Single	Dual	Single	Dual	Single
OPERATING WEIGHTS (lb)										
Standard	1095	1077	1258	1240	1264	1246	2094	1968	2120	1977
With Low Sound Option	1131	1113	1294	1276	1300	1282	2148	2022	2174	2031
APPROXIMATE REFRIGERANT CHARGE, TYPICAL (lb)*	28	24	30	26	30	26	52	40	52	40
NITROGEN SHIPPING CHARGE	15 psig									
COMPRESSOR hp (Qty)	11 (2)	11 (2)	13 (2)	13 (2)	15 (2)	15 (2)	10 (2)/ 8.5 (2)	13 (3)	11 (2)/ 13 (2)	13 (3)
CAPACITY STEPS										
Standard	2	2	2	2	2	2	4	3	4	3
Digital Option	22	22	22	22	22	22	44	33	44	33
CRANKCASE HEATER (W)	90 (60 Hz), 90 (50 Hz)									
CONDENSER FANS										
Standard	Propeller Type - Direct Drive									
Quantity	2	2	2	2	2	2	3	3	3	3
RPM	1140 (60 Hz), 950 (50 Hz)									
Diameter (in.)	30									
Total Watts (60 Hz)	3300	3300	3300	3300	3300	3300	4200	4200	4200	4200
Total Watts (50 Hz)	2750	2750	2750	2750	2750	2750	3500	3500	3500	3500
Low Noise	Plastic Type - Direct Drive									
Quantity	2	2	2	2	2	2	3	3	3	3
RPM	850 (60 Hz), 700 (50 Hz)									
Diameter (in.)	30									
Total Watts (60 Hz)	2750	2750	2750	2750	2750	2750	3500	3500	3500	3500
Total Watts (50 Hz)	2300	2300	2300	2300	2300	2300	2900	2900	2900	2900
MCHX COIL										
No. Coils per Circuit	1					2				
sq ft	27.1	27.1	33.9	33.9	33.9	33.9	67.8	67.8	67.8	67.8
TEMPERATURE RELIEF	Fusible Plug on Liquid Lines of Both Circuits - 210 F									
CONNECTIONS (in.) ODF										
Suction Line	1 ³ / ₈	1 ⁵ / ₈	1 ³ / ₈	1 ⁵ / ₈	1 ³ / ₈	1 ⁵ / ₈	1 ⁵ / ₈ + 1 ⁵ / ₈	2 ¹ / ₈	1 ⁵ / ₈ + 1 ⁵ / ₈	2 ¹ / ₈
Liquid Line	5 ⁵ / ₈	5 ⁵ / ₈	5 ⁵ / ₈	5 ⁵ / ₈	5 ⁵ / ₈	7 ⁵ / ₈	5 ⁵ / ₈ + 5 ⁵ / ₈	7 ⁵ / ₈	5 ⁵ / ₈ + 5 ⁵ / ₈	7 ⁵ / ₈
MAXIMUM HEIGHT FOR 3° F SUBCOOLING (ft)	75	75	75	75	75	75	75	75	75	75
TONS PER CIRCUIT	12/12	24	13.3/13.3	26.6	15.6/15.6	31.1	18.2/21	39.8	23.8/26.3	48.1
MINIMUM CAPACITY PER CIRCUIT (tons)	12	12	13	13	16	16	11/9	13	12/13	16

LEGEND

MCHX — Microchannel Heat Exchanger
ODF — Outside Diameter, Female

*Typical operating charge with 25 ft of interconnecting piping. Operating charge is approximate for maximum system capacity. Unit is factory supplied with nitrogen holding charge.

NOTE: Refer to Loading Sequences tables in Application Data section on page 83 or contact Application Engineering for detailed capacity step data.

Physical data (cont)



38AP060-100 UNITS — ENGLISH

38AP UNIT SIZE	060	070	080	090	100
NOMINAL CAPACITY, 50/60Hz (tons)	50/60	58/70	67/80	75/90	83/100
CIRCUIT	Dual	Dual	Dual	Dual	Dual
OPERATING WEIGHTS (lb)					
Standard	2227	2610	2844	3211	3353
With Low Sound Option	2299	2700	2952	3319	3461
APPROXIMATE REFRIGERANT CHARGE, TYPICAL (lb)*	60	70	78	96	100
NITROGEN SHIPPING CHARGE	15 psig				
COMPRESSOR hp (Qty)	13 (2)/15 (2)	15 (2)/11 (3)	15 (2)/15 (3)	13 (3)/15 (3)	15 (3)/15 (3)
CAPACITY STEPS					
Standard	4	5	5	6	6
Digital Option	44	55	55	66	66
CRANKCASE HEATER (W)	90 (60 Hz), 90 (50 Hz)				
CONDENSER FANS					
Standard	Propeller Type - Direct Drive				
Quantity	4	4	5	6	6
RPM			1140 (60 Hz), 950 (50 Hz)		
Diameter (in.)			30		
Total Watts (60 Hz)	6200	6000	7500	9000	9000
Total Watts (50 Hz)	5150	5000	6250	7500	7500
Low Noise	Plastic Type - Direct Drive				
Quantity	4	4	5	6	6
RPM			850 (60 Hz), 700 (50 Hz)		
Diameter (in.)			30		
Total Watts (60 Hz)	5200	5000	6250	7500	7500
Total Watts (50 Hz)	4300	4150	5200	6250	6250
MCHX COIL					
No. Coils per Circuit	1	2	2 to 3	3 to 3	3 to 3
sq ft	67.8	99.6	124.5	149.4	149.4
TEMPERATURE RELIEF	Fusible Plug on Liquid Lines of Both Circuits - 210 F				
CONNECTIONS (in.) ODF					
Suction Line	$1\frac{5}{8} + 1\frac{5}{8}$	$2\frac{1}{8} + 1\frac{5}{8}$	$2\frac{1}{8} + 1\frac{5}{8}$	$2\frac{1}{8} + 2\frac{1}{8}$	$2\frac{1}{8} + 2\frac{5}{8}$
Liquid Line	$\frac{5}{8} + \frac{7}{8}$	$\frac{7}{8} + \frac{7}{8}$	$\frac{7}{8} + \frac{7}{8}$	$\frac{7}{8} + \frac{7}{8}$	$\frac{7}{8} + \frac{7}{8}$
MAXIMUM HEIGHT FOR 3° F SUBCOOLING (ft)	75	75	75	75	75
TONS PER CIRCUIT	26.8/31.5	31.8/35.5	31.3/46.7	40.3/47.1	48/48
MINIMUM CAPACITY PER CIRCUIT (tons)	13/16	16/12	16/16	13/16	16/16

LEGEND

MCHX — Microchannel Heat Exchanger
ODF — Outside Diameter, Female

*Typical operating charge with 25 ft of interconnecting piping. Operating charge is approximate for maximum system capacity. Unit is factory supplied with nitrogen holding charge.

NOTE: Refer to Loading Sequences tables in Application Data section on page 83 or contact Application Engineering for detailed capacity step data

38AP025-050 UNITS — SI

38AP UNIT SIZES	025		027		030		040		050	
NOMINAL CAPACITY 50/60 Hz (kW)	74/88		81/95		88/106		116/141		148/176	
CIRCUIT	Dual	Single	Dual	Single	Dual	Single	Dual	Single	Dual	Single
OPERATING WEIGHTS (kg)										
Standard	497	489	571	562	573	565	950	893	961	897
With Low Sound Option	513	505	587	579	590	582	974	917	986	921
APPROXIMATE REFRIGERANT CHARGE, TYPICAL (kg)*	12.7	10.9	13.6	11.8	13.6	11.8	23.6	18.1	23.6	18.1
NITROGEN SHIPPING CHARGE	1.03 bar									
COMPRESSOR kW (Qty)	8.2 (2)	8.2 (2)	9.7 (2)	9.7 (2)	11.2 (2)	11.2 (2)	7.5 (2)/ 6.3 (2)	9.7 (3)	8.2 (2)/ 9.7 (2)	9.7 (3)
CAPACITY STEPS										
Standard	2	2	2	2	2	2	4	3	4	3
Digital Option	22	22	22	22	22	22	44	33	44	33
CRANKCASE HEATER (W)	90 (60 Hz), 90 (50 Hz)									
CONDENSER FANS										
Standard										
Quantity	2	2	2	2	2	2	3	3	3	3
r/s	Propeller Type - Direct Drive									
Diameter (mm)	19 (60 Hz), 16 (50 Hz)									
Total Watts (60 Hz)	3300	3300	3300	3300	3300	3300	4200	4200	4200	4200
Total Watts (50 Hz)	2750	2750	2750	2750	2750	2750	3500	3500	3500	3500
Low Noise										
Quantity	2	2	2	2	2	2	3	3	3	3
r/s	Plastic Type - Direct Drive									
Diameter (mm)	14 (60 Hz), 12 (50 Hz)									
Total Watts (60 Hz)	2750	2750	2750	2750	2750	2750	3500	3500	3500	3500
Total Watts (50 Hz)	2300	2300	2300	2300	2300	2300	2900	2900	2900	2900
MCHX COIL										
No. Coils per Circuit	1									
sq m	2.5	2.5	3.2	3.2	3.2	3.2	6.3	6.3	6.3	6.3
TEMPERATURE RELIEF	Fusible Plug on liquid lines of both circuits - 99 C									
CONNECTIONS (in.) ODF										
Suction Line	1 ³ / ₈	1 ⁵ / ₈	1 ³ / ₈	1 ⁵ / ₈	1 ³ / ₈	1 ⁵ / ₈	1 ⁵ / ₈ + 1 ⁵ / ₈	2 ¹ / ₈	1 ⁵ / ₈ + 1 ⁵ / ₈	2 ¹ / ₈
Liquid Line	5 ⁵ / ₈	5 ⁵ / ₈	5 ⁵ / ₈	5 ⁵ / ₈	5 ⁵ / ₈	7 ⁵ / ₈	5 ⁵ / ₈ + 5 ⁵ / ₈	7 ⁵ / ₈	5 ⁵ / ₈ + 5 ⁵ / ₈	7 ⁵ / ₈
MAXIMUM HEIGHT FOR 3° F SUBCOOLING (m)	23	23	23	23	23	23	23	23	23	23
kW PER CIRCUIT	42/42	84	47/47	94	55	109	64/74	140	84/92	169
MINIMUM CAPACITY PER CIRCUIT (kW)	42	42	46	46	56	56	39/32	46	42/46	56

LEGEND

MCHX — Microchannel Heat Exchanger
 ODF — Outside Diameter, Female

*Typical operating charge with 7.62 m of interconnecting piping. Operating charge is approximate for maximum system capacity. Unit is factory supplied with nitrogen holding charge.

NOTE: Refer to Loading Sequences tables in Application Data section on page 83 or contact Application Engineering for detailed capacity step data.

Physical data (cont)



38AP060-100 UNITS — SI

38AP UNIT SIZES	060	070	080	090	100
NOMINAL CAPACITY 50/60 Hz (kW)	176/211	204/246	236/281	264/317	292/352
CIRCUIT	Dual	Dual	Dual	Dual	Dual
OPERATING WEIGHTS (kg)					
Standard	1010	1184	1290	1456	1521
With Low Sound Option	1043	1225	1339	1505	1570
APPROXIMATE REFRIGERANT CHARGE, TYPICAL (kg)*	27.2	31.8	35.4	43.5	45.4
NITROGEN SHIPPING CHARGE	1.03 bar				
COMPRESSOR kW (Qty)	9.7 (2)/11.2 (2)	11.2 (2)/8.2 (3)	11.2 (2)/11.2 (3)	9.7 (3)/11.2 (3)	11.2 (3)/11.2 (3)
CAPACITY STEPS					
Standard	4	5	5	6	6
Digital Option	44	55	55	66	66
CRANKCASE HEATER (W)	90 (60 Hz), 90 (50 Hz)				
CONDENSER FANS					
Standard	Propeller Type - Direct Drive				
Quantity	4	4	5	6	6
r/s			19 (60 Hz), 16 (50 Hz)		
Diameter (mm)			762		
Total Watts (60 Hz)	6200	6000	7500	9000	9000
Total Watts (50 Hz)	5150	5000	6250	7500	7500
Low Noise	Plastic Type - Direct Drive				
Quantity	4	4	5	6	6
r/s			14 (60 Hz), 12 (50 Hz)		
Diameter (mm)			762		
Total Watts (60 Hz)	5200	5000	6250	7500	7500
Total Watts (50 Hz)	4300	4150	5200	6250	6250
MCHX COIL					
No. Coils per Circuit	1	2	2 - 3	3 - 3	3 - 3
sq m	6.3	9.3	11.6	13.9	13.9
TEMPERATURE RELIEF	Fusible Plug on Liquid Lines of Both Circuits - 99 C				
CONNECTIONS (in.) ODF					
Suction Line	$1\frac{5}{8} + 1\frac{5}{8}$	$2\frac{1}{8} + 1\frac{5}{8}$	$2\frac{1}{8} + 1\frac{5}{8}$	$2\frac{1}{8} + 2\frac{1}{8}$	$2\frac{1}{8} + 2\frac{5}{8}$
Liquid Line	$\frac{5}{8} + \frac{7}{8}$	$\frac{7}{8} + \frac{7}{8}$	$\frac{7}{8} + \frac{7}{8}$	$\frac{7}{8} + \frac{7}{8}$	$\frac{7}{8} + \frac{7}{8}$
MAXIMUM HEIGHT FOR 3° F SUBCOOLING (m)	23	23	23	23	23
kW PER CIRCUIT	94/111	112/125	110/164	142/166	169/169
MINIMUM CAPACITY PER CIRCUIT (kW)	46/56	56/42	56/56	46/56	56/56

LEGEND

MCHX — Microchannel Heat Exchanger
ODF — Outside Diameter, Female

*Typical operating charge with 7.62 m of interconnecting piping. Operating charge is approximate for maximum system capacity. Unit is factory supplied with nitrogen holding charge.

NOTE: Refer to Loading Sequences tables in Application Data section on page 83 or contact Application Engineering for detailed capacity step data.

Options and accessories



ITEM	FACTORY-INSTALLED OPTION	FIELD-INSTALLED ACCESSORY
Condenser Coil/Low Sound Options		
E-Coated MCHX	X	
Low Sound Fan(s)	X	
Compressor Blankets	X	
Line Length Options		
Long Line Length Check Valve	X	X
Ambient/Capacity Control/Interrupt Options		
Digital Compressor*	X	
High Short Circuit Current Rating Interrupt	X	
Motormaster V Low Ambient Control	X	
Electrical Options		
Non-Fused Disconnect	X	
Controls/Communications Options		
Navigator™ Display		X
Touch Pilot™ Display		X
ComfortLink™ Controls with Scrolling Marquee Display Module	X	
EMM	X	X
BACnet™ Translator Control		X
LON Translator Control		X
Packaging Options		
Bottom Skid	X	
Top Crate, Bag	X	

LEGEND

E-Coated — Epoxy Coating Applied to Entire Coil Assembly
EMM — Energy Management Module
LON — Local Operating Network
MCHX — Microchannel Heat Exchanger

*Digital compressors provide incremental unloading from full capacity down to a minimum value.

NOTES:

1. Std Interrupt - SCCR (short circuit current rating) (5K)
2. High Interrupt - SCCR 460-v and 380/415-v (65K), 208/230-v (65K), 575-v (25K)

Factory-installed options

Novation® heat exchanger technology microchannel coil (aluminum fin/aluminum tube) condenser is available for optimum durability. Novation heat exchangers with microchannel coil technology are offered with MCHX condenser coil coated or uncoated to match coil protection to site conditions. The Carrier Electronic Catalog (E-Cat) can be used to determine whether or not corrosion protection is recommended for particular applications in coastal/marine environments. Following the input of the requested data, the E-Cat program output will advise the appropriate coil to be used. Other factors described in "Selection Guide: Environmental Corrosion Protection, Novation Heat Exchanger with Microchannel Coil Technology" catalog number 04-581042-01 must also be considered to determine if corrosion protection is required.

Low sound fans can be paired with the MCHX option to provide a specially designed system of fan propellers and stacks that reduce sound without reducing unit performance. The factory-installed fan option is compatible with the Motormaster® V option.

Compressor blankets can be combined with the MCHX option to provide additional sound reduction when used with low sound fans. Blankets are available only on units with the low sound fan.

Long line length check valves are required for liquid line installation on all linear line length applications of more than 100 ft (30.5 m). For any 025-030 size dual-circuit unit application where evaporator is located higher than the condensing unit, check valves are required

for linear line length above 55 ft (16.8 m). The check valve option prevents charge migration to compressor. Check valves are also available as field-installed accessories.

Digital compressor control allows incremental unloading for a closer match to building load. Refer to Loading Sequences tables in Application Data section on page 83.

High short circuit current rating interrupt provides a short circuit current rating protection for the unit up to 65,000 A on 460-v, 380/415-v, and 208/230-v units or 25,000 A on 575-v units.

Motormaster® V low-ambient control provides control of outdoor-fan motor operation to maintain head pressure at low outdoor ambient temperatures down to -20 F (-29 C) for 50 and 60 Hz units. Only one factory-installed low ambient temperature kit per unit is required. This option also requires field-installed wind baffles.

Non-fused disconnect includes factory-installed non-fused disconnect capability for power and control located at the unit.

ComfortLink™ controls with scrolling marquee display module is used for accessing condensing unit information, reading sensor values, and testing the condensing unit. The marquee display is a 4-key, 4-character, 16-segment LED (light-emitting diode) display. Eleven mode LEDs are located on the display as well as an Alarm Status LED. The display shows all of the ComfortLink control codes (with 60-character expandable clear language), plus set points, time of day, temperatures, pressures, and superheat. Additional information can be displayed all at once with the accessory Navigator™ display.

Packaging options include bottom skid with standard coil protection and bottom skid, top crate with bag. Standard coil protection is also included on all unit packaging.

Energy management module (EMM) provides energy management capabilities to minimize condensing unit energy consumption. The EMM is also available as a field-installed accessory.

Options and accessories (cont)



Field-installed accessories

Long line length check valves are required for liquid line installation on all linear line length applications of more than 100 ft (30.5 m). For any 025-030 size dual-circuit unit application where evaporator is located higher than the condensing unit, check valves are required for linear line length above 55 ft (16.8 m). The check valve option prevents charge migration to compressor. Check valves are also available as a factory-installed option.

Navigator™ display module provides a portable, handheld display module for convenient access to unit status, operation, configuration and troubleshooting diagnostics capability. The 4-line, 80-character LCD (liquid crystal display) display provides clear language information in English, French, Spanish or Portuguese. The weatherproof enclosure and industrial grade extension cord make the Navigator module ideally suited for outdoor applications.

Magnets located on the back of the module allow attachment of any sheet metal component for hands free operation.

Energy management module provides energy management capabilities to minimize condensing unit energy consumption. The EMM is also available as a factory-installed option.

BACnet™ translator control provides an interface between the unit and a BACnet Local Area Network (LAN, i.e., MS/TP EIA-485).

LON (local operating network) translator control provides an interface between the unit and a local operating network (i.e., LonWorks® FT-10A ANSI/EIA-709.1).

Touch Pilot™ display is a cost-effective, touch-screen, remote-mount device that can be used in lieu of the remote enhanced display.

Dimensions

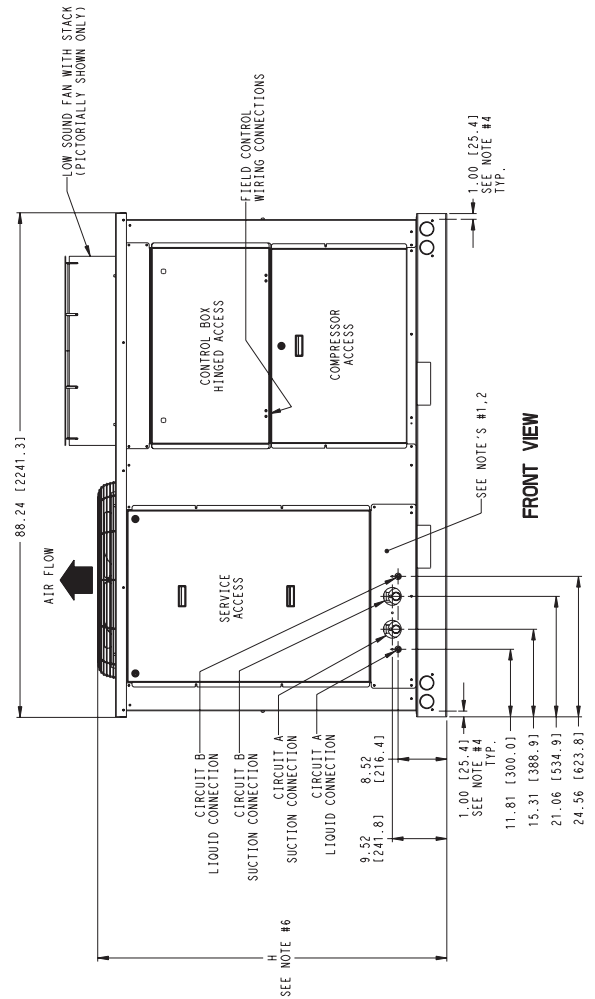
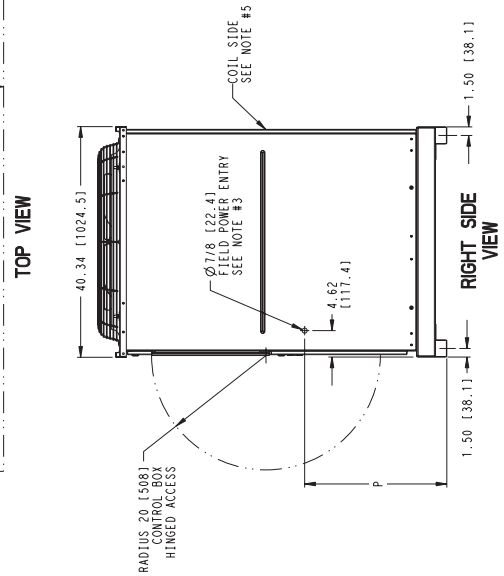
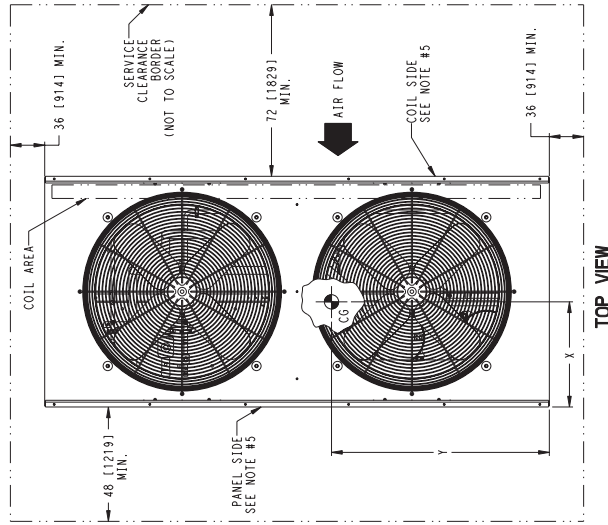


38AP UNITS, SIZES 025-030

UNIT	STANDARD WEIGHT, lb (kg)	CENTER OF GRAVITY, in. (mm)		HEIGHT, in. (mm)	POWER ENTRY, in. (mm)	SERVICE VALVE CONNECTIONS, in. (mm)	
		X	Y			Suction	Liquid
Standard	38APS025	1077 (489)	17.8 (452)	36.9 (937)	24.9 (632)	1 5/8 (41)	5/8 (16)
	38APD025	1095 (497)	17.8 (452)	37.0 (940)		1 3/8 (35)	5/8 (16)
	38APS027	1240 (563)	18.2 (462)	37.6 (955)		1 5/8 (41)	5/8 (16)
	38APD027	1258 (571)	18.2 (462)	37.6 (955)	36.9 (937)	1 3/8 (35)	5/8 (16)
	38APS030	1246 (565)	18.2 (462)	37.5 (953)		1 5/8 (41)	7/8 (22)
	38APD030	1264 (573)	18.2 (462)	37.6 (955)		1 3/8 (35)	5/8 (16)
Low Sound	38APS025	1113 (505)	17.8 (452)	36.9 (937)	24.9 (632)	1 5/8 (41)	5/8 (16)
	38APD025	1131 (513)	17.8 (452)	37.0 (940)		1 3/8 (35)	5/8 (16)
	38APS027	1276 (579)	18.2 (462)	37.6 (955)		1 5/8 (41)	5/8 (16)
	38APD027	1294 (587)	18.2 (462)	37.6 (955)	36.9 (937)	1 3/8 (35)	5/8 (16)
	38APS030	1282 (582)	18.2 (462)	37.5 (953)		1 5/8 (41)	7/8 (22)
	38APD030	1300 (590)	18.2 (462)	37.6 (955)		1 3/8 (35)	5/8 (16)

NOTES:

- Be sure to use a wet rag to remove all valve cores before brazing field piping.
- Do not cap or otherwise obstruct the liquid line temperature relief.
- A 7/8 in. (22.4 mm) diameter hole is provided for locating field power wiring. Actual hole size required depends on field wire sizing.
- A 0.437 in. (11.1 mm) diameter hole is used for mounting unit.
- Unit must have clearances as follows:
Top - Do not restrict.
Coil End - 72 in. (1829) from solid surface.
Panel Side - 48 in. (1219) per NEC (National Electrical Code).
- Unit height dimension for standard and low sound unit with stack fan option.
- Installation in a pit is not recommended.
- Unit can be handled using the fork truck lift pockets.
- Dimensions shown in inches (mm).



Dimensions (cont)

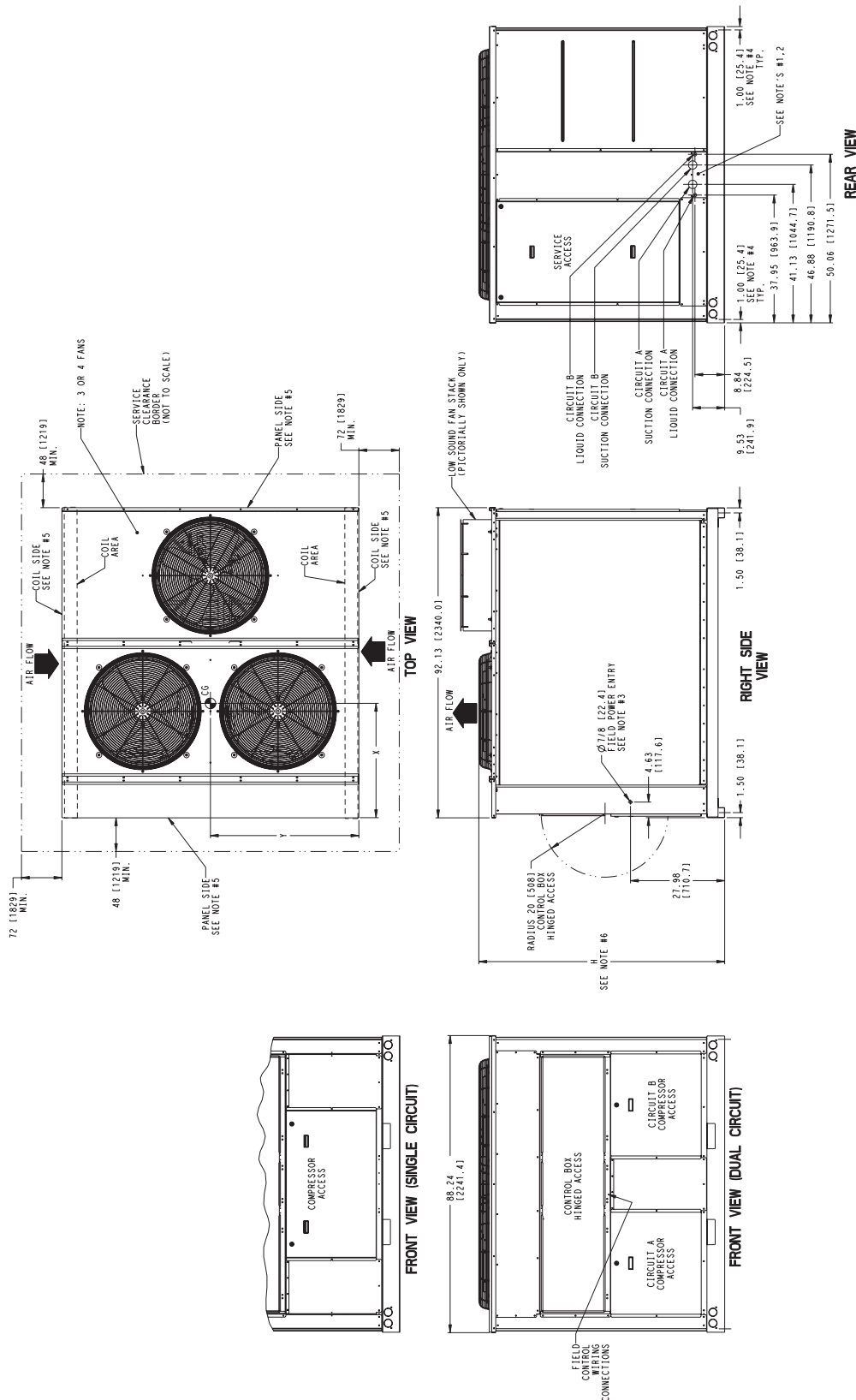


38AP UNITS, SIZES 040-060

NOTES:

1. Be sure to use a wet rag to remove all valve cores before brazing field piping.
2. Do not cap or otherwise obstruct the liquid line temperature relief.
3. A 7/8 in. (22.4 mm) diameter hole is provided for locating field power wiring.
4. Actual hole size required depends on field wire sizing.
5. A 0.437 in. (11.1 mm) diameter hole is used for mounting unit.
6. Unit must have clearances as follows:
Top - Do not restrict.
Panel Side - 48 in. (1219) from solid surface.
Coil End - 72 in. (1829) from solid surface.
7. Panel Side - 48 in. (1219) per NEC (National Electrical Code).
8. Unit height dimension for standard and low sound unit with stack fan option.
9. Installation in a pit is not recommended.
10. Unit can be handled using the fork truck lift pockets.
11. Dimensions shown in inches (mm).
12. Sizes 040 and 050 units have 3 condenser fans. Size 060 units have 4 condenser fans.

UNIT	STANDARD WEIGHT, lb (kg)	CENTER OF GRAVITY, in. (mm)		HEIGHT, in. (mm)	SERVICE VALVE CONNECTIONS, in. (mm)	
		X	Y		Suction	Liquid
Standard	38APS040	1968 (893)	35.0 (869)	44.0 (1118)	2 1/8 (54)	7/8 (22)
	38APD040	2094 (950)	33.7 (856)	44.1 (1120)	1 5/8 (41)	5/8 (16)
	38APS050	1977 (897)	34.9 (886)	44.0 (1118)	2 1/8 (54)	7/8 (22)
	38APD050	2120 (961)	33.4 (848)	44.1 (1120)	1 5/8 (41)	5/8 (16)
	38APD060	2227 (1010)	34.4 (874)	44.1 (1120)	1 5/8 (41)	5/8 (16)
	38APS040	2022 (917)	35.0 (869)	44.0 (1118)	2 1/8 (54)	7/8 (22)
Low Sound	38APD040	2148 (974)	33.7 (856)	44.1 (1120)	1 5/8 (41)	5/8 (16)
	38APS050	2031 (921)	34.9 (886)	44.0 (1118)	2 1/8 (54)	7/8 (22)
	38APD050	2174 (986)	33.4 (848)	44.1 (1120)	1 5/8 (41)	5/8 (16)
	38APD060	2299 (1043)	34.4 (874)	44.1 (1120)	1 5/8 (41)	5/8 (16)



UNIT		STANDARD WEIGHT, lb (kg)	CENTER OF GRAVITY, in. (mm)		HEIGHT, in. (mm)	SERVICE VALVE CONNECTIONS,		
						in. (mm)		
						Suction		Liquid
Standard	38APD070	2450 (1111)	50.9 (1293)	40.6 (1031)	73.0 (1854)	Circuit A	Circuit B	
						2 1/8 (54)	1 5/8 (41)	7/8 (22)
Low Sound	38APD070	2522 (1144)	50.9 (1293)	40.6 (1031)	78.5 (1994)	2 1/8 (54)	1 5/8 (41)	7/8 (22)

1. Be sure to use a wet rag to remove all valve cores before brazing field piping.
2. Do not cap or otherwise obstruct the liquid line temperature relief.
3. A $\frac{7}{16}$ in. (22.4 mm) diameter hole is provided for locating field power wiring. Actual hole size required depends on field wire sizing.
4. A 0.437 in. (11.1 mm) diameter hole is used for mounting unit.
5. Unit must have clearances as follows:
 - Top - Do not restrict.
 - Coil, Panel and Rear Side - 72 in. (1829) from solid surface.
 - Unit height dimension for standard and low sound unit with stack fan option. Installation in a pit is not recommended.
 - Unit can be handled using crane. Refer to service installation instructions. Dimensions shown in inches (mm).

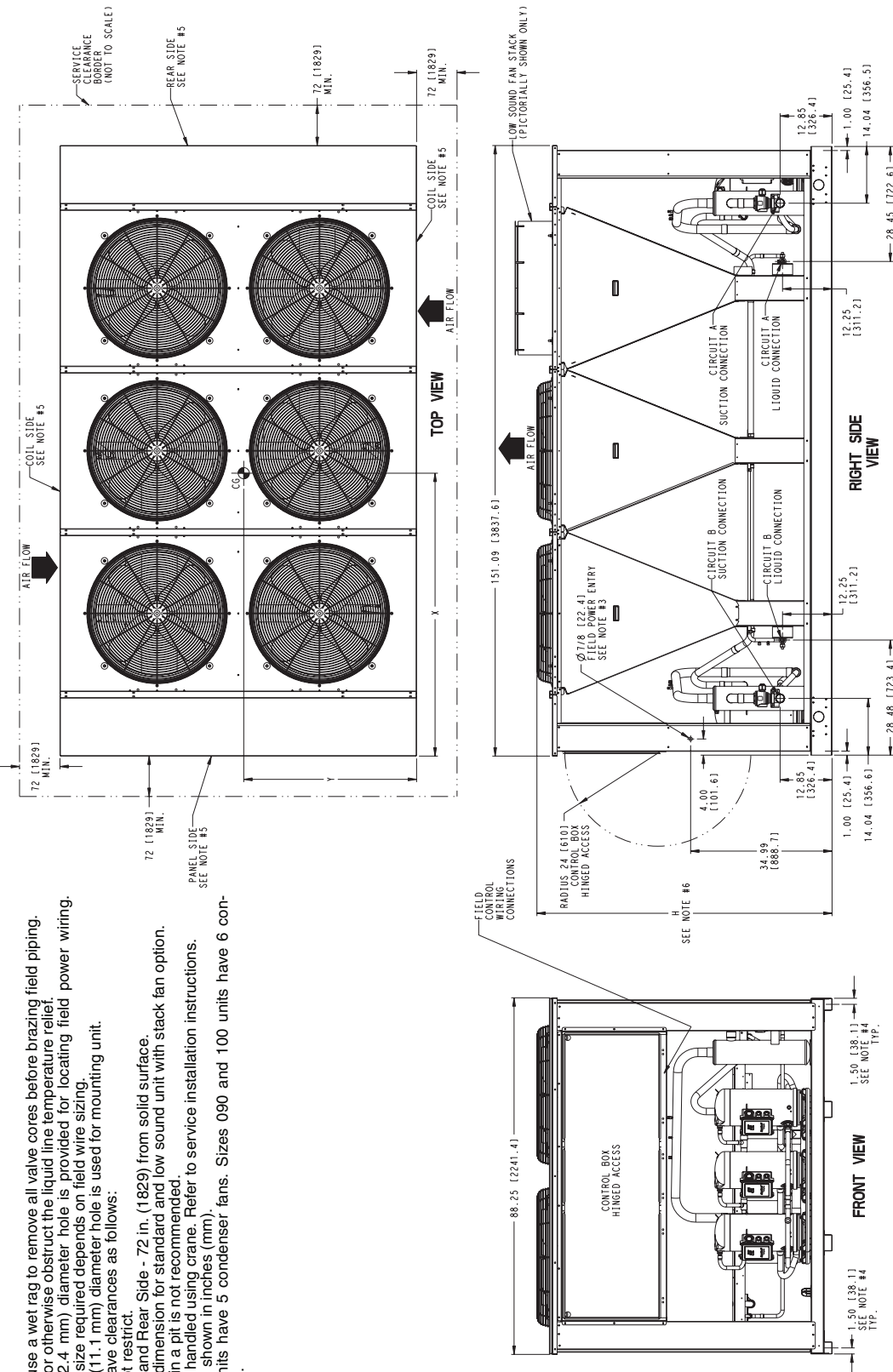


38AP UNITS, SIZES 080-100

UNIT	STANDARD WEIGHT, lb (kg)	CENTER OF GRAVITY, in. (mm)		HEIGHT, in. (mm)	SERVICE VALVE CONNECTIONS, in. (mm)		
		X	Y		Suction	Circuit A	Liquid
Standard	38APD080	2610 (1184)	67.6 (1716)	40.2 (1020)	2 1/8 (54)	1 5/8 (41)	7/8 (22)
	38APD090	2835 (1286)	72.4 (1839)	43.3 (1099)	2 1/8 (54)	1 5/8 (41)	7/8 (22)
	38APD100	2844 (1290)	72.6 (1844)	43.3 (1099)	2 1/8 (54)	1 5/8 (41)	7/8 (22)
	38APD080	2700 (1225)	67.6 (1716)	40.2 (1020)	2 1/8 (54)	1 5/8 (41)	7/8 (22)
Low Sound	38APD090	2943 (1335)	72.4 (1839)	43.3 (1099)	2 1/8 (54)	1 5/8 (41)	7/8 (22)
	38APD100	2952 (1339)	72.6 (1844)	43.3 (1099)	2 1/8 (54)	1 5/8 (41)	7/8 (22)

NOTES:

1. Be sure to use a wet rag to remove all valve cores before brazing field piping.
2. Do not cap or otherwise obstruct the liquid line temperature relief.
3. A 7/8 in. (22.4 mm) diameter hole is provided for locating field power wiring.
4. Actual hole size required depends on field wire sizing.
5. A 0.437 in. (11.1 mm) diameter hole is used for mounting unit.
6. Unit must have clearances as follows:
7. Top - Do not restrict.
8. Coil, Panel and Rear Side - 72 in. (1829) from solid surface.
9. Unit height dimension for standard and low sound unit with stack fan option.
10. Installation in a pit is not recommended.
11. Unit can be handled using crane. Refer to service installation instructions.
12. Dimensions shown in inches (mm).
13. Size 080 units have 5 condenser fans. Sizes 090 and 100 units have 6 condenser fans.



Selection procedure



To select a 38AP stand-alone condensing unit:

Use Carrier's Commercial Split Builder program to select a stand-alone outdoor unit from the Installation Configuration drop down menu and input the job requirements. From the list presented, select a 38AP condensing unit that is estimated to meet capacity requirements. The 38APS single-circuit unit is offered in sizes 025-050 and the 38APD dual-circuit unit is offered in sizes 025-100. After a 38AP unit is selected, the program will calculate the condensing unit performance.

To select 38AP systems:

For systems with one 40RU fan coil unit or 39 Series air handler — Use Carrier's Commercial Split Builder program to select a combined 38AP outdoor unit with matched 40RU indoor unit for sizes 025-030. The **AHUBuilder**® selection program is available to select 38AP outdoor units with a matching 39 Series air handler with direct-expansion (DX) coils. The 38APS single-circuit unit is offered in sizes 025-050 and 38APD dual-circuit unit is offered in sizes 025-100. Enter the software program and input the job requirements. From the list presented, select a 38AP condensing unit that is estimated to meet capacity requirements. After selecting a 38AP unit, check

its performance with one or several DX coils. From the DX coil list presented on the screen, match the 38AP with any coil or all coils. The program calculates the combined performance of the condensing unit and each DX coil and presents the resulting system capacities and operating temperatures. Matching thermostatic expansion valves and nozzles for the DX coils are automatically selected and displayed.

For systems with two air handlers — Use Carrier's **AHUBuilder**® selection program to select one size 025-100 38AP outdoor unit to match with two 39 Series air handlers with DX coils. For the first air handler, enter the **AHUBuilder** selection program and input the job requirements. To choose a condensing unit, select the Specify Your Own option. The program asks for condensing unit capacities at 30 F (–1.1 C) and 50 F (10 C) SST. See the Condensing Unit Circuit Ratings tables on pages 20-29, 34-43, 48-57, and 62-71, and enter the capacities from condenser circuit A or B (remember to use the correct air temperature entering condenser column when locating the circuit capacities). For the second air handler, repeat the procedure to select the second DX coil for the condenser circuit (A or B) not used in the first selection.

Performance data



38APD,APS025 CONDENSING UNIT RATINGS, 60 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	203.0	195.9	188.4	181.5	174.5	167.5	160.2	152.9	145.4	138.5	131.4
	kW	16.7	17.7	18.8	19.8	20.9	21.9	23.0	24.1	25.2	26.2	27.3
25	TC	225.7	218.1	210.1	202.8	195.3	187.8	180.1	172.1	164.2	156.9	149.2
	kW	17.0	18.1	19.2	20.2	21.3	22.4	23.5	24.7	25.8	26.8	27.9
30	TC	250.0	241.8	233.3	225.4	217.4	209.2	201.0	192.6	184.1	176.2	168.0
	kW	17.2	18.4	19.6	20.6	21.7	22.8	24.0	25.1	26.3	27.4	28.5
35	TC	275.6	266.8	257.7	249.2	240.6	231.9	223.0	214.0	204.7	196.3	187.5
	kW	17.5	18.6	19.9	20.9	22.0	23.2	24.3	25.5	26.8	27.8	29.0
40	TC	302.0	292.5	282.6	273.5	264.2	254.8	245.3	235.6	225.7	216.6	207.1
	kW	18.1	19.2	20.5	21.6	22.8	23.8	25.0	26.2	27.5	28.6	29.8
45	TC	328.2	318.0	307.3	297.5	287.5	277.4	267.1	256.6	245.9	236.1	225.9
	kW	18.1	19.2	20.5	21.6	22.8	23.8	25.0	26.2	27.5	28.6	29.8
50	TC	353.7	342.7	331.2	320.5	309.6	298.6	287.5	276.1	264.6	253.9	242.9
	kW	18.4	19.6	20.9	21.9	23.0	24.2	25.4	26.6	27.8	28.9	30.1

38APD,APS027 CONDENSING UNIT RATINGS, 60 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	232.0	225.0	217.7	210.9	204.0	197.0	190.0	182.8	175.5	168.7	161.7
	kW	18.2	19.4	20.9	22.0	23.2	24.4	25.7	27.1	28.5	29.6	30.9
25	TC	256.5	248.9	241.0	233.5	226.0	218.5	210.8	202.9	195.1	187.7	180.0
	kW	18.6	19.9	21.3	22.5	23.7	24.9	26.2	27.6	29.0	30.1	31.4
30	TC	282.5	274.2	265.6	257.5	249.3	241.0	232.6	224.2	215.5	207.4	199.1
	kW	19.2	20.4	21.8	23.0	24.1	25.4	26.7	28.0	29.5	30.6	31.8
35	TC	309.6	300.5	291.1	282.3	273.4	264.4	255.2	245.9	236.4	227.6	218.5
	kW	19.7	20.9	22.4	23.5	24.7	25.9	27.2	28.5	30.0	31.1	32.3
40	TC	336.9	327.1	316.8	307.3	297.6	287.8	277.9	267.8	257.5	248.0	238.1
	kW	20.9	22.1	23.5	24.6	25.8	27.0	28.3	29.6	31.0	32.1	33.3
45	TC	364.2	353.5	342.4	332.0	318.6	310.8	300.0	289.0	277.9	267.5	256.8
	kW	20.9	22.1	23.5	24.6	25.8	27.0	28.3	29.6	31.0	32.1	33.3
50	TC	391.3	379.6	367.6	356.2	344.7	333.1	321.4	309.5	297.4	286.1	274.4
	kW	21.5	22.8	24.2	25.2	26.4	27.6	28.9	30.2	31.6	32.6	33.9

38APD,APS030 CONDENSING UNIT RATINGS, 60 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	270.2	262.2	253.9	246.1	238.2	230.3	222.1	213.9	205.6	197.9	189.8
	kW	21.9	23.5	25.2	26.7	28.1	29.6	31.3	33.0	34.7	36.1	37.7
25	TC	298.8	290.1	281.1	272.6	264.1	255.4	246.6	237.8	228.7	220.3	211.5
	kW	22.5	24.1	25.8	27.2	28.7	30.3	31.9	33.6	35.4	36.8	38.4
30	TC	328.8	319.4	309.6	300.5	291.2	281.9	272.5	262.8	253.0	243.9	234.5
	kW	23.1	24.7	26.5	27.9	29.3	30.9	32.5	34.2	36.0	37.4	39.0
35	TC	359.8	349.6	339.0	329.2	319.2	309.1	298.8	288.4	277.8	268.0	257.8
	kW	23.7	25.3	27.1	28.5	30.0	31.5	33.2	34.9	36.7	38.1	39.6
40	TC	390.7	379.8	368.5	358.0	347.4	336.7	325.7	314.5	303.1	292.7	281.8
	kW	25.2	26.8	28.5	29.9	31.4	32.9	34.5	36.2	38.0	39.4	41.0
45	TC	421.2	409.6	397.6	386.5	373.5	363.7	352.1	340.2	328.1	317.0	305.4
	kW	25.2	26.8	28.5	29.9	31.4	32.9	34.5	36.2	38.0	39.4	41.0
50	TC	452.0	439.6	426.8	414.8	402.6	390.3	377.9	365.3	352.2	340.3	327.9
	kW	26.1	27.6	29.4	30.7	32.2	33.7	35.3	36.9	38.7	40.1	41.6

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

38APD040 CONDENSING UNIT RATINGS, 60 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	335.7	324.3	312.4	301.3	290.3	278.9	267.5	255.8	243.6	232.8	221.4
	kW	26.2	28.1	30.1	31.9	33.7	35.6	37.6	39.6	41.6	43.4	45.3
25	TC	372.4	360.1	347.2	335.4	323.4	311.1	298.6	286.2	273.1	261.4	249.0
	kW	26.6	28.6	30.7	32.5	34.4	36.3	38.3	40.4	42.5	44.3	46.2
30	TC	411.2	397.9	384.0	371.1	358.4	345.3	331.9	318.0	304.1	291.5	278.2
	kW	27.1	29.1	31.3	33.1	35.0	37.0	39.0	41.1	43.3	45.1	47.1
35	TC	451.9	437.5	422.8	408.8	394.9	380.7	366.4	351.6	336.8	323.0	308.7
	kW	27.6	29.7	31.9	33.7	35.6	37.7	39.7	41.9	44.1	45.9	47.9
40	TC	494.0	478.6	462.8	447.5	432.2	417.3	401.5	385.9	369.6	354.8	339.3
	kW	28.8	30.8	33.1	34.9	36.5	38.9	41.0	43.2	45.4	47.3	49.4
45	TC	538.1	521.2	503.7	486.9	470.9	453.8	437.0	420.1	401.4	385.6	368.7
	kW	28.8	30.8	33.1	34.9	36.5	38.9	41.0	43.2	45.4	47.3	49.4
50	TC	582.3	563.9	544.3	527.5	509.4	491.1	471.6	453.6	434.5	416.7	398.3
	kW	29.4	31.5	33.7	35.6	37.6	39.6	41.7	43.9	46.1	48.0	50.1

38APS040 CONDENSING UNIT RATINGS, 60 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	342.5	331.8	321.0	310.5	300.0	289.5	278.8	268.0	257.0	246.7	236.0
	kW	25.9	27.7	29.8	31.4	33.2	35.0	36.9	38.9	41.0	42.6	44.5
25	TC	378.2	366.5	354.6	343.3	331.9	320.3	308.7	296.8	284.8	273.6	261.9
	kW	26.6	28.4	30.5	32.2	33.9	35.7	37.6	39.6	41.7	43.4	45.2
30	TC	416.3	403.6	390.5	378.2	365.7	353.1	340.3	327.4	314.1	301.9	289.1
	kW	27.3	29.2	31.3	33.0	34.7	36.5	38.4	40.4	42.5	44.2	46.0
35	TC	456.7	442.8	428.5	414.9	401.3	387.5	373.5	359.3	344.8	331.4	317.5
	kW	28.2	30.1	32.1	33.8	35.5	37.4	39.3	41.3	43.4	45.0	46.9
40	TC	498.8	483.7	468.2	453.4	438.5	423.4	408.1	392.6	377.5	362.5	347.3
	kW	29.1	30.9	33.0	34.7	36.4	38.3	40.2	42.2	44.3	45.9	47.8
45	TC	543.2	526.6	510.2	493.3	477.0	460.5	443.7	427.7	410.6	394.2	377.7
	kW	30.1	31.9	34.0	35.7	37.4	39.2	41.1	43.1	45.2	46.9	48.7
50	TC	589.2	571.2	553.5	535.0	517.1	499.0	481.9	463.6	445.1	427.4	409.4
	kW	31.1	33.0	35.1	36.7	38.4	40.2	42.2	44.2	46.2	47.9	49.7

38APD050 CONDENSING UNIT RATINGS, 60 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	433.0	418.5	403.0	389.1	375.2	361.3	347.3	331.8	314.7	302.2	287.6
	kW	36.5	38.9	41.5	43.7	46.0	48.4	50.9	53.4	55.9	58.2	60.7
25	TC	478.5	463.0	446.8	431.7	417.0	401.9	385.8	370.6	353.2	339.0	323.5
	kW	37.3	39.8	42.4	44.7	47.0	49.5	52.0	54.6	57.2	59.5	62.0
30	TC	526.4	509.8	492.9	476.6	460.3	444.3	426.8	410.3	393.4	377.2	360.6
	kW	38.1	40.6	43.4	45.7	48.0	50.5	53.1	55.7	58.5	60.7	63.2
35	TC	578.9	560.6	541.3	524.3	506.7	488.5	469.7	450.8	432.5	414.8	396.5
	kW	39.1	41.6	44.4	46.7	49.1	51.6	54.1	56.8	59.5	61.8	64.4
40	TC	632.1	612.3	591.1	572.6	553.4	534.0	514.4	493.3	472.0	453.7	433.8
	kW	41.1	43.6	46.4	48.7	50.1	53.6	56.2	58.9	61.7	64.0	66.5
45	TC	686.6	665.0	642.1	622.2	600.2	580.1	556.8	534.9	513.9	492.5	471.0
	kW	41.1	43.6	46.4	48.7	50.1	53.6	56.2	58.9	61.7	64.0	66.5
50	TC	740.3	717.1	693.4	670.7	648.0	624.2	600.4	578.3	553.9	531.1	507.9
	kW	42.2	44.7	47.5	49.8	52.2	54.7	57.3	60.0	62.7	65.0	67.6

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APS050 CONDENSING UNIT RATINGS, 60 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	411.1	398.1	386.4	369.8	359.0	346.1	333.0	319.8	306.3	293.5	280.4
	kW	33.4	35.8	38.6	40.4	42.6	45.0	47.5	50.0	52.7	54.7	57.1
25	TC	451.7	438.1	424.4	409.0	398.0	387.2	367.2	355.8	341.6	325.9	311.1
	kW	35.3	37.5	40.0	42.0	44.0	46.3	48.2	50.8	53.5	55.3	57.5
30	TC	503.7	486.6	471.0	453.0	435.0	417.0	399.0	381.2	371.3	349.9	332.8
	kW	59.7	61.9	64.3	67.5	70.7	73.9	77.1	80.3	83.5	86.7	89.9
35	TC	551.1	534.3	516.6	500.6	484.4	469.0	451.0	433.9	415.9	400.3	383.6
	kW	36.4	38.7	41.3	43.4	45.6	47.9	50.3	52.8	55.3	57.4	59.8
40	TC	602.4	584.3	565.4	548.0	530.1	512.1	495.3	476.6	455.5	439.4	421.3
	kW	37.3	39.7	42.3	44.4	46.6	48.8	51.3	53.8	56.3	58.4	60.8
45	TC	656.0	636.0	614.8	596.9	577.5	556.4	536.3	515.7	496.6	476.6	456.7
	kW	38.9	41.2	43.2	45.4	47.2	49.8	52.2	54.6	57.2	59.3	61.5
50	TC	710.1	688.0	665.3	644.2	623.1	599.6	577.5	556.3	533.4	511.8	489.8
	kW	39.5	41.8	44.3	46.4	48.5	50.8	53.1	55.6	58.1	60.1	62.4

38APD060 CONDENSING UNIT RATINGS, 60 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	492.7	478.8	459.7	453.8	440.6	424.6	410.4	394.7	379.9	368.0	354.2
	kW	39.9	42.8	45.8	48.4	51.2	53.8	56.7	59.7	62.9	65.4	68.2
25	TC	551.7	535.5	517.9	505.1	485.4	472.8	456.4	438.7	421.5	406.7	390.6
	kW	41.2	44.0	47.1	49.7	52.2	54.8	57.7	60.9	64.0	66.4	69.2
30	TC	607.4	589.8	570.0	555.1	536.5	520.8	503.6	486.0	462.4	448.6	431.0
	kW	42.4	45.2	48.3	50.9	53.4	56.0	58.9	62.0	65.2	67.6	70.4
35	TC	653.4	636.1	609.0	605.5	591.5	573.3	546.6	532.6	511.7	498.2	481.0
	kW	43.6	46.5	49.5	52.1	54.7	57.6	60.3	63.2	66.4	68.9	71.7
40	TC	701.2	684.4	649.2	660.0	645.0	623.4	602.6	581.2	559.3	550.1	533.3
	kW	46.4	49.2	52.2	54.9	57.6	60.4	63.2	66.1	69.2	71.8	74.6
45	TC	760.6	742.3	705.5	712.8	700.1	679.5	648.7	631.8	606.0	596.1	577.8
	kW	46.4	49.2	52.2	54.9	57.6	60.4	63.2	66.1	69.2	71.8	74.6
50	TC	835.2	813.2	776.2	779.4	754.4	728.7	704.3	678.9	654.7	637.2	615.3
	kW	48.1	50.9	53.9	56.7	59.2	61.9	64.7	67.7	70.8	73.3	76.1

38APD070 CONDENSING UNIT RATINGS, 60 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	570.2	551.4	531.9	513.9	495.4	476.7	458.1	439.7	418.6	401.3	382.5
	kW	48.0	51.2	54.6	57.5	60.6	63.7	67.0	70.3	73.7	76.7	79.9
25	TC	632.3	612.0	591.1	571.6	551.6	531.5	511.1	490.6	469.6	450.0	429.8
	kW	49.2	52.5	56.0	59.0	62.1	65.3	68.7	72.1	75.6	78.6	81.9
30	TC	698.4	676.5	653.9	632.7	611.3	589.6	567.5	545.3	522.5	501.5	479.6
	kW	50.5	53.9	57.5	60.5	63.6	66.9	70.3	73.8	77.4	80.5	83.8
35	TC	767.9	744.3	719.9	697.0	673.9	650.4	626.8	602.7	578.0	555.3	531.7
	kW	51.9	55.3	59.0	62.0	65.2	68.5	72.0	75.5	79.2	82.2	85.6
40	TC	840.5	815.0	788.7	763.9	739.0	713.7	688.1	662.0	635.5	610.9	585.4
	kW	54.9	58.3	62.1	65.2	67.6	71.8	75.3	78.9	82.7	85.7	89.2
45	TC	915.5	887.9	859.4	832.7	807.0	778.5	750.8	722.6	693.9	667.4	639.9
	kW	54.9	58.3	62.1	65.2	67.6	71.8	75.3	78.9	82.7	85.7	89.2
50	TC	992.3	962.6	931.7	903.1	873.9	844.4	814.6	784.1	753.1	724.6	694.8
	kW	56.6	60.1	63.8	66.9	70.1	73.5	77.0	80.6	84.4	87.5	90.9

LEGEND

- kW** — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

**38APD080 CONDENSING UNIT RATINGS, 60 Hz ENGLISH**

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	678.1	657.5	636.1	616.1	596.0	575.4	554.5	533.2	512.3	492.1	471.4
	kW	54.3	58.1	62.3	65.7	69.2	72.9	76.8	80.8	85.1	88.5	92.3
25	TC	748.4	726.0	701.8	681.9	659.9	637.7	614.5	592.1	568.1	547.1	524.8
	kW	55.6	59.4	63.7	67.1	70.6	74.4	78.3	82.4	86.6	90.0	93.8
30	TC	824.8	800.2	775.3	750.3	726.6	702.5	677.3	652.6	626.9	603.1	578.5
	kW	57.1	60.9	65.1	68.5	72.1	75.9	79.8	83.8	88.1	91.5	95.3
35	TC	902.7	876.5	848.6	823.9	794.7	779.3	744.6	725.6	686.9	667.4	641.3
	kW	58.6	62.5	66.7	70.1	73.6	77.4	81.3	85.2	89.6	92.9	96.7
40	TC	985.7	957.2	924.6	903.7	877.6	836.6	820.3	778.4	761.5	729.3	700.8
	kW	62.0	65.8	69.8	73.4	77.1	80.7	84.5	88.6	92.7	96.2	100.0
45	TC	1056.5	1026.9	984.8	974.7	936.0	917.5	885.5	854.6	805.0	789.7	760.1
	kW	62.0	65.8	69.8	73.4	77.1	80.7	84.5	88.6	92.7	96.2	100.0
50	TC	1142.4	1109.6	1068.4	1046.7	1018.3	981.5	949.4	907.8	878.4	847.6	814.9
	kW	63.9	67.7	71.6	75.3	79.0	82.5	86.4	90.2	94.3	97.8	101.6

38APD090 CONDENSING UNIT RATINGS, 60 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	759.2	735.5	710.5	688.3	665.6	642.2	618.1	593.7	568.8	546.5	522.9
	kW	59.8	64.2	68.9	72.9	77.0	81.3	85.8	90.3	95.0	99.0	103.4
25	TC	837.0	811.5	784.5	760.3	736.2	711.2	685.3	658.4	631.7	607.8	582.3
	kW	60.9	65.3	70.1	74.1	78.2	82.6	87.1	91.7	96.5	100.5	104.9
30	TC	918.4	891.5	862.2	836.4	817.8	782.0	755.0	735.1	699.9	676.5	649.7
	kW	62.1	66.5	71.4	75.4	79.4	83.8	88.3	92.8	97.9	101.8	106.2
35	TC	1011.8	981.5	945.3	925.6	888.2	867.5	826.8	805.8	762.7	739.0	708.7
	kW	63.7	68.0	72.8	76.7	80.9	85.2	89.7	94.0	99.1	102.9	107.3
40	TC	1099.9	1067.2	1030.0	1005.9	974.9	930.2	908.9	863.6	842.0	805.8	773.1
	kW	66.9	71.2	75.8	79.8	83.9	88.2	92.5	97.0	101.7	105.6	109.9
45	TC	1173.6	1140.2	1092.4	1078.8	1048.3	1016.3	973.9	936.6	900.1	872.9	839.5
	kW	66.9	71.2	75.8	79.8	83.9	88.2	92.5	97.0	101.7	105.6	109.9
50	TC	1270.4	1232.1	1191.3	1153.5	1122.4	1086.0	1035.8	997.6	966.9	926.0	887.7
	kW	68.8	73.1	77.6	81.6	85.8	89.9	94.0	98.5	103.3	107.1	111.3

38APD100 CONDENSING UNIT RATINGS, 60 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	818.6	794.0	768.7	744.7	720.5	696.0	671.5	646.3	620.9	597.0	572.4
	kW	65.7	70.4	75.6	79.7	84.0	88.6	93.3	98.3	103.5	107.6	112.3
25	TC	906.6	879.8	852.3	826.1	799.7	773.0	746.1	719.1	691.1	665.2	638.4
	kW	67.6	72.3	77.5	81.7	86.0	90.6	95.4	100.4	105.6	109.7	114.4
30	TC	1001.0	971.8	941.7	913.3	884.5	855.6	826.2	796.3	766.2	737.9	708.6
	kW	69.6	74.3	79.5	83.7	88.1	92.7	97.5	102.5	107.7	111.8	116.5
35	TC	1101.5	1069.6	1036.7	1005.8	974.6	942.9	910.9	878.5	845.4	814.6	782.7
	kW	71.8	76.5	81.7	85.9	90.2	94.8	99.6	104.6	109.8	114.0	118.7
40	TC	1207.6	1172.8	1137.0	1103.4	1069.3	1034.9	1000.1	964.6	928.5	895.1	860.3
	kW	76.4	81.0	86.2	90.4	94.7	99.3	104.1	109.0	114.3	118.4	123.1
45	TC	1315.3	1277.8	1241.6	1204.9	1152.0	1130.4	1092.3	1053.6	1014.0	977.7	940.2
	kW	76.4	81.0	86.2	90.4	94.7	99.3	104.1	109.0	114.3	118.4	123.1
50	TC	1433.5	1392.2	1349.3	1309.4	1269.0	1228.0	1186.4	1144.2	1101.0	1061.4	1020.0
	kW	78.9	83.6	88.7	92.8	97.2	101.7	106.4	111.4	116.6	120.7	125.3

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD025 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz ENGLISH CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	101.5	97.9	94.2	90.8	87.3	83.7	80.1	76.4	72.7	69.3	65.7
	kW	8.3	8.9	9.4	9.9	10.4	11.0	11.5	12.1	12.6	13.1	13.6
25	TC	112.9	109.0	105.0	101.4	97.7	93.9	90.0	86.1	82.1	78.4	74.6
	kW	8.5	9.0	9.6	10.1	10.7	11.2	11.8	12.3	12.9	13.4	14.0
30	TC	125.0	120.9	116.6	112.7	108.7	104.6	100.5	96.3	92.0	88.1	84.0
	kW	8.6	9.2	9.8	10.3	10.8	11.4	12.0	12.6	13.2	13.7	14.3
35	TC	137.8	133.4	128.8	124.6	120.3	115.9	111.5	107.0	102.4	98.2	93.8
	kW	8.7	9.3	9.9	10.5	11.0	11.6	12.2	12.8	13.4	13.9	14.5
40	TC	151.0	146.2	141.3	136.7	132.1	127.4	122.7	117.8	112.8	108.3	103.6
	kW	8.9	9.5	10.1	10.6	11.2	11.8	12.3	13.0	13.6	14.1	14.7
45	TC	164.1	159.0	153.7	148.8	143.8	138.7	133.5	128.3	123.0	118.1	112.9
	kW	9.0	9.6	10.2	10.8	11.4	11.9	12.5	13.1	13.8	14.3	14.9
50	TC	176.9	171.3	165.6	160.2	154.8	149.3	143.7	138.1	132.3	127.0	121.4
	kW	9.2	9.8	10.4	11.0	11.5	12.1	12.7	13.3	13.9	14.5	15.0

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	101.5	97.9	94.2	90.8	87.3	83.7	80.1	76.4	72.7	69.3	65.7
	kW	8.3	8.9	9.4	9.9	10.4	11.0	11.5	12.1	12.6	13.1	13.6
25	TC	112.9	109.0	105.0	101.4	97.7	93.9	90.0	86.1	82.1	78.4	74.6
	kW	8.5	9.0	9.6	10.1	10.7	11.2	11.8	12.3	12.9	13.4	14.0
30	TC	125.0	120.9	116.6	112.7	108.7	104.6	100.5	96.3	92.0	88.1	84.0
	kW	8.6	9.2	9.8	10.3	10.8	11.4	12.0	12.6	13.2	13.7	14.3
35	TC	137.8	133.4	128.8	124.6	120.3	115.9	111.5	107.0	102.4	98.2	93.8
	kW	8.7	9.3	9.9	10.5	11.0	11.6	12.2	12.8	13.4	13.9	14.5
40	TC	151.0	146.2	141.3	136.7	132.1	127.4	122.7	117.8	112.8	108.3	103.6
	kW	8.9	9.5	10.1	10.6	11.2	11.8	12.3	13.0	13.6	14.1	14.7
45	TC	164.1	159.0	153.7	148.8	143.8	138.7	133.5	128.3	123.0	118.1	112.9
	kW	9.0	9.6	10.2	10.8	11.4	11.9	12.5	13.1	13.8	14.3	14.9
50	TC	176.9	171.3	165.6	160.2	154.8	149.3	143.7	138.1	132.3	127.0	121.4
	kW	9.2	9.8	10.4	11.0	11.5	12.1	12.7	13.3	13.9	14.5	15.0

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD027 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz ENGLISH
CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	116.1	112.6	109.0	105.6	102.1	98.7	95.1	91.5	87.9	84.5	81.0
	kW	9.1	9.7	10.5	11.0	11.6	12.2	12.9	13.6	14.3	14.9	15.5
25	TC	128.5	124.7	120.7	117.0	113.3	109.5	105.7	101.7	97.8	94.1	90.3
	kW	9.3	10.0	10.7	11.3	11.9	12.5	13.1	13.8	14.5	15.1	15.7
30	TC	141.7	137.5	133.2	129.2	125.1	121.0	116.8	112.6	108.2	104.3	100.1
	kW	9.6	10.2	10.9	11.5	12.1	12.7	13.4	14.0	14.8	15.3	16.0
35	TC	155.5	151.0	146.2	141.9	137.5	132.9	128.4	123.7	119.0	114.7	110.1
	kW	9.8	10.5	11.2	11.7	12.3	13.0	13.6	14.3	15.0	15.6	16.2
40	TC	169.5	164.6	159.5	154.7	149.9	145.1	140.1	135.1	130.0	125.3	120.3
	kW	10.1	10.7	11.5	12.0	12.6	13.2	13.9	14.5	15.3	15.8	16.4
45	TC	183.5	178.1	172.6	167.5	159.3	156.9	151.6	146.1	140.6	135.5	130.1
	kW	10.4	11.1	11.8	12.3	12.9	13.5	14.1	14.8	15.5	16.1	16.7
50	TC	197.3	191.5	185.6	180.0	174.3	168.5	162.7	156.8	150.8	145.2	139.4
	kW	10.8	11.4	12.1	12.6	13.2	13.8	14.4	15.1	15.8	16.3	16.9

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	115.9	112.4	108.7	105.3	101.9	98.4	94.8	91.2	87.6	84.2	80.7
	kW	9.1	9.7	10.4	11.0	11.6	12.2	12.8	13.5	14.2	14.8	15.4
25	TC	128.0	124.2	120.3	116.5	112.8	109.0	105.1	101.2	97.2	93.5	89.7
	kW	9.3	9.9	10.6	11.2	11.8	12.4	13.1	13.8	14.4	15.0	15.6
30	TC	140.9	136.7	132.4	128.3	124.2	120.0	115.8	111.6	107.2	103.2	99.0
	kW	9.6	10.2	10.9	11.5	12.1	12.7	13.3	14.0	14.7	15.3	15.9
35	TC	154.2	149.6	144.9	140.4	136.0	131.4	126.8	122.1	117.4	113.0	108.4
	kW	9.8	10.5	11.2	11.7	12.3	12.9	13.6	14.2	14.9	15.5	16.1
40	TC	167.5	162.5	157.3	152.6	147.7	142.8	137.8	132.7	127.5	122.8	117.8
	kW	10.1	10.7	11.4	12.0	12.6	13.2	13.8	14.5	15.2	15.8	16.4
45	TC	180.8	175.3	169.8	164.5	159.3	153.8	148.4	142.9	137.3	132.0	126.6
	kW	10.4	11.0	11.7	12.3	12.9	13.5	14.1	14.8	15.5	16.0	16.7
50	TC	193.9	188.0	182.0	176.2	170.4	164.6	158.7	152.7	146.6	140.9	135.0
	kW	10.8	11.4	12.1	12.6	13.2	13.8	14.4	15.1	15.8	16.3	16.9

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD030 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz ENGLISH CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	135.0	131.0	126.8	122.9	119.0	115.1	110.9	106.8	102.7	98.8	94.8
	kW	10.9	11.7	12.6	13.3	14.0	14.7	15.6	16.4	17.3	18.0	18.8
25	TC	149.3	144.9	140.4	136.2	131.9	127.6	123.2	118.8	114.2	110.0	105.7
	kW	11.2	12.0	12.8	13.5	14.3	15.1	15.9	16.7	17.6	18.3	19.1
30	TC	164.3	159.5	154.7	150.1	145.5	140.8	136.2	131.3	126.4	121.9	117.2
	kW	11.5	12.3	13.1	13.8	14.6	15.4	16.2	17.0	17.9	18.6	19.4
35	TC	179.7	174.6	169.3	164.5	159.5	154.5	149.4	144.2	138.9	134.0	128.9
	kW	11.8	12.6	13.5	14.2	14.9	15.7	16.5	17.3	18.2	18.9	19.7
40	TC	195.0	189.6	184.0	178.8	173.6	168.2	162.8	157.2	151.5	146.4	141.0
	kW	12.1	12.9	13.8	14.5	15.2	16.0	16.8	17.7	18.5	19.2	20.0
45	TC	210.1	204.4	198.4	192.9	186.7	181.7	175.9	170.0	164.0	158.6	152.8
	kW	12.5	13.3	14.2	14.9	15.6	16.4	17.2	18.0	18.9	19.6	20.3
50	TC	225.3	219.2	212.8	206.9	200.9	194.9	188.7	182.5	176.0	170.2	164.0
	kW	13.0	13.7	14.6	15.3	16.0	16.7	17.5	18.3	19.2	19.9	20.7

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	135.2	131.2	127.1	123.2	119.2	115.3	111.2	107.1	102.9	99.0	95.0
	kW	11.0	11.8	12.7	13.4	14.1	14.9	15.7	16.6	17.5	18.2	18.9
25	TC	149.5	145.1	140.6	136.4	132.1	127.8	123.4	119.0	114.4	110.2	105.9
	kW	11.3	12.1	13.0	13.7	14.4	15.2	16.0	16.9	17.8	18.5	19.3
30	TC	164.5	159.8	154.9	150.3	145.8	141.0	136.3	131.5	126.6	122.0	117.3
	kW	11.6	12.4	13.3	14.0	14.8	15.5	16.3	17.2	18.1	18.8	19.6
35	TC	180.1	175.0	169.7	164.7	159.7	154.7	149.5	144.3	138.9	134.0	128.9
	kW	12.0	12.8	13.6	14.4	15.1	15.9	16.7	17.5	18.4	19.1	19.9
40	TC	195.7	190.2	184.5	179.2	173.9	168.5	162.9	157.3	151.5	146.3	140.8
	kW	12.3	13.1	14.0	14.7	15.4	16.2	17.0	17.9	18.8	19.5	20.3
45	TC	211.1	205.3	199.2	193.5	186.8	182.1	176.2	170.2	164.0	158.5	152.6
	kW	12.7	13.5	14.4	15.1	15.8	16.6	17.4	18.2	19.1	19.8	20.6
50	TC	226.7	220.4	213.9	207.9	201.7	195.5	189.2	182.8	176.2	170.2	163.9
	kW	13.1	13.9	14.8	15.5	16.2	17.0	17.8	18.6	19.5	20.2	21.0

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD040 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz ENGLISH
CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	179.3	172.9	166.2	160.0	153.8	147.4	141.1	134.5	127.6	121.6	115.2
	kW	14.5	15.4	16.4	17.3	18.3	19.2	20.2	21.2	22.2	23.1	24.1
25	TC	199.2	192.3	185.1	178.5	171.9	164.9	157.9	151.1	143.8	137.2	130.3
	kW	14.7	15.7	16.8	17.7	18.7	19.7	20.7	21.7	22.8	23.7	24.7
30	TC	220.1	212.7	205.0	197.8	190.9	183.6	176.2	168.3	160.6	153.7	146.3
	kW	15.0	16.1	17.2	18.1	19.1	20.1	21.2	22.2	23.3	24.3	25.3
35	TC	242.1	234.2	226.1	218.3	210.7	202.8	194.9	186.7	178.6	170.9	163.0
	kW	15.3	16.4	17.5	18.5	19.5	20.5	21.6	22.7	23.8	24.8	25.9
40	TC	264.9	256.4	247.7	239.3	230.9	222.7	214.1	205.4	196.5	188.3	179.8
	kW	15.6	16.7	17.9	18.9	19.9	20.9	22.0	23.2	24.3	25.3	26.4
45	TC	288.6	279.4	269.8	260.7	252.0	242.7	233.3	224.1	214.1	205.4	196.1
	kW	16.0	17.1	18.2	19.2	20.1	21.3	22.4	23.6	24.7	25.7	26.8
50	TC	312.6	302.6	292.0	282.8	272.6	262.7	252.4	242.3	231.9	222.2	212.1
	kW	16.4	17.5	18.6	19.6	20.7	21.7	22.8	24.0	25.2	26.2	27.3

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	156.4	151.4	146.2	141.4	136.4	131.5	126.4	121.2	116.0	111.2	106.2
	kW	11.7	12.7	13.7	14.6	15.5	16.4	17.4	18.4	19.4	20.3	21.2
25	TC	173.2	167.8	162.1	156.9	151.6	146.2	140.7	135.1	129.4	124.2	118.7
	kW	11.9	12.9	13.9	14.8	15.7	16.6	17.6	18.6	19.7	20.6	21.5
30	TC	191.1	185.2	179.0	173.3	167.6	161.7	155.8	149.7	143.5	137.8	131.9
	kW	12.1	13.1	14.1	15.0	15.9	16.9	17.9	18.9	20.0	20.8	21.8
35	TC	209.7	203.3	196.7	190.5	184.3	177.9	171.5	164.9	158.2	152.1	145.7
	kW	12.3	13.3	14.4	15.2	16.2	17.1	18.1	19.2	20.2	21.1	22.1
40	TC	229.1	222.1	215.0	208.2	201.2	194.6	187.4	180.4	173.1	166.4	159.5
	kW	12.5	13.5	14.6	15.5	16.4	17.3	18.3	19.4	20.5	21.4	22.3
45	TC	249.5	241.8	233.9	226.2	218.9	211.0	203.6	196.0	187.3	180.2	172.6
	kW	12.8	13.8	14.8	15.7	16.4	17.6	18.6	19.6	20.7	21.6	22.6
50	TC	269.6	261.3	252.3	244.8	236.8	228.4	219.2	211.2	202.6	194.5	186.2
	kW	13.0	14.0	15.1	16.0	16.9	17.8	18.8	19.9	21.0	21.8	22.8

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD050 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz ENGLISH CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	204.3	196.8	188.6	181.6	174.6	167.9	160.7	152.5	143.0	137.1	129.7
	kW	17.2	18.4	19.5	20.6	21.7	22.9	24.1	25.2	26.3	27.4	28.6
25	TC	225.8	218.0	209.8	202.2	195.0	187.5	179.5	172.1	162.6	155.9	148.1
	kW	17.5	18.6	19.9	21.0	22.2	23.3	24.5	25.8	26.9	28.1	29.3
30	TC	248.7	240.5	232.3	224.1	216.1	208.3	199.7	191.7	183.2	175.3	167.1
	kW	17.7	18.9	20.2	21.4	22.5	23.7	25.0	26.3	27.5	28.7	29.9
35	TC	274.0	265.1	255.8	247.4	238.8	230.1	220.7	211.6	203.0	194.2	185.3
	kW	18.0	19.2	20.6	21.7	22.9	24.1	25.4	26.7	28.0	29.2	30.4
40	TC	300.0	290.4	280.0	271.2	261.9	252.5	242.9	232.5	222.4	213.4	203.8
	kW	18.3	19.5	20.9	22.0	23.2	24.5	25.8	27.1	28.4	29.6	30.9
45	TC	326.5	316.1	305.2	295.4	285.0	275.1	264.1	253.5	243.3	233.0	222.7
	kW	18.5	19.8	21.2	22.4	23.0	24.8	26.1	27.4	28.8	30.0	31.3
50	TC	353.2	342.0	330.4	319.6	309.1	297.2	285.8	274.9	263.2	252.3	241.1
	kW	18.9	20.1	21.5	22.7	23.9	25.1	26.4	27.8	29.2	30.3	31.6

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	228.8	221.7	214.4	207.5	200.6	193.5	186.6	179.3	171.8	165.1	158.0
	kW	19.2	20.5	21.9	23.1	24.3	25.5	26.9	28.2	29.7	30.8	32.1
25	TC	252.7	245.0	236.9	229.5	222.0	214.4	206.4	198.6	190.6	183.2	175.4
	kW	19.8	21.1	22.5	23.7	24.9	26.2	27.5	28.9	30.3	31.4	32.7
30	TC	277.7	269.3	260.6	252.5	244.2	236.0	227.1	218.5	210.3	201.9	193.5
	kW	20.4	21.7	23.2	24.3	25.5	26.8	28.1	29.5	30.9	32.0	33.3
35	TC	304.9	295.5	285.5	276.9	267.8	258.4	248.9	239.3	229.5	220.6	211.2
	kW	21.1	22.4	23.8	25.0	26.2	27.4	28.7	30.1	31.5	32.7	34.0
40	TC	332.1	321.9	311.1	301.4	291.5	281.4	271.6	260.8	249.6	240.2	230.0
	kW	21.8	23.1	24.5	25.6	26.8	28.1	29.4	30.8	32.2	33.3	34.6
45	TC	360.1	348.9	336.9	326.8	315.2	304.9	292.7	281.4	270.6	259.5	248.3
	kW	22.5	23.8	25.2	26.4	27.1	28.8	30.1	31.5	32.9	34.0	35.3
50	TC	387.1	375.1	363.0	351.1	338.9	327.0	314.6	303.4	290.6	278.8	266.8
	kW	23.3	24.6	26.0	27.1	28.3	29.5	30.8	32.2	33.6	34.7	36.0

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD060 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz ENGLISH
CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	230.8	224.0	216.3	211.1	202.8	197.5	189.2	183.8	175.0	169.1	162.2
	kW	17.7	19.0	20.4	21.5	22.7	23.9	25.2	26.6	27.9	29.1	30.3
25	TC	254.9	247.4	239.3	233.3	224.3	218.4	210.8	203.7	194.1	187.9	180.5
	kW	18.2	19.4	20.9	22.0	23.1	24.3	25.6	27.0	28.4	29.5	30.8
30	TC	279.8	271.7	263.2	254.9	248.6	240.2	232.4	224.3	214.1	207.6	199.5
	kW	18.7	19.9	21.4	22.5	23.6	24.8	26.1	27.5	28.9	30.0	31.2
35	TC	305.4	296.8	287.3	279.2	272.5	264.1	251.3	245.4	236.5	227.9	219.3
	kW	19.3	20.5	21.9	23.0	24.2	25.4	26.6	28.0	29.4	30.5	31.7
40	TC	327.4	318.9	305.8	303.9	296.6	286.7	277.2	267.4	257.4	251.0	242.5
	kW	19.9	21.1	22.4	23.6	24.7	25.9	27.2	28.5	29.8	30.9	32.1
45	TC	352.5	343.7	329.6	327.4	321.6	312.1	298.1	290.3	280.0	273.2	264.4
	kW	20.4	21.6	23.0	24.2	25.3	26.6	27.8	29.1	30.6	31.7	32.9
50	TC	392.7	381.1	366.6	362.7	343.5	337.3	321.5	313.8	298.4	288.5	276.9
	kW	21.2	22.4	23.8	25.0	26.0	27.3	28.5	29.8	31.2	32.3	33.5

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	261.8	254.9	243.4	242.8	237.7	227.2	221.3	211.0	204.9	198.9	191.9
	kW	22.2	23.8	25.4	26.9	28.5	29.9	31.6	33.1	35.0	36.3	37.9
25	TC	296.8	288.1	278.6	271.8	261.1	254.4	245.6	235.0	227.4	218.8	210.1
	kW	23.0	24.6	26.3	27.7	29.1	30.6	32.1	33.9	35.6	36.9	38.5
30	TC	327.6	318.0	306.8	300.2	287.9	280.5	271.3	261.7	248.3	241.1	231.4
	kW	23.7	25.3	27.0	28.5	29.8	31.3	32.9	34.6	36.3	37.6	39.2
35	TC	347.9	339.3	321.6	326.4	319.0	309.2	295.3	287.2	275.1	270.3	261.7
	kW	24.4	26.0	27.6	29.1	30.6	32.2	33.7	35.3	37.0	38.5	40.0
40	TC	373.7	365.4	343.5	356.2	348.4	336.7	325.4	313.8	302.0	299.1	290.8
	kW	25.2	26.7	28.3	29.9	31.4	32.8	34.4	36.0	37.6	39.1	40.6
45	TC	408.1	398.6	375.9	385.4	378.6	367.3	350.5	341.6	326.0	322.8	313.4
	kW	26.0	27.5	29.2	30.8	32.2	33.8	35.3	36.9	38.7	40.1	41.7
50	TC	442.4	432.0	409.6	416.7	410.9	391.3	382.8	365.1	356.2	348.7	338.3
	kW	26.9	28.5	30.1	31.7	33.2	34.6	36.2	37.8	39.6	41.0	42.6

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD070 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz ENGLISH CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	303.5	292.7	281.5	271.2	260.6	249.9	239.1	228.0	216.8	206.4	195.6
	kW	25.7	27.3	29.0	30.5	32.1	33.7	35.3	37.0	38.6	40.2	41.8
25	TC	336.8	325.2	313.3	302.1	290.8	279.4	267.8	256.0	243.9	232.8	221.3
	kW	26.3	27.9	29.7	31.3	32.9	34.6	36.3	38.0	39.8	41.4	43.1
30	TC	371.9	359.5	346.7	334.8	322.7	310.4	298.0	285.3	272.5	260.6	248.2
	kW	26.9	28.6	30.5	32.1	33.7	35.5	37.2	39.0	40.9	42.5	44.2
35	TC	408.6	395.3	381.6	368.8	355.8	342.7	329.4	315.8	302.0	289.3	276.0
	kW	27.5	29.3	31.2	32.9	34.6	36.3	38.1	40.0	41.9	43.5	45.3
40	TC	446.6	432.4	417.7	403.9	390.0	375.9	361.7	347.1	332.3	318.6	304.4
	kW	28.2	30.0	32.0	33.6	35.4	37.2	39.0	40.9	42.9	44.5	46.4
45	TC	485.6	470.3	454.5	439.7	425.4	409.7	394.3	378.7	362.8	348.1	332.9
	kW	29.0	30.8	32.8	34.5	35.8	38.0	39.9	41.8	43.8	45.5	47.4
50	TC	525.2	508.8	491.9	476.1	460.0	443.8	427.4	410.6	393.6	377.8	361.5
	kW	29.8	31.6	33.7	35.3	37.1	38.9	40.8	42.8	44.8	46.5	48.3

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	266.6	258.7	250.4	242.8	234.7	226.8	219.0	211.7	201.9	194.9	186.9
	kW	22.3	23.9	25.6	27.0	28.5	30.0	31.7	33.4	35.1	36.5	38.1
25	TC	295.5	286.8	277.9	269.4	260.8	252.1	243.3	234.6	225.7	217.2	208.5
	kW	22.9	24.5	26.3	27.7	29.2	30.7	32.4	34.1	35.8	37.2	38.8
30	TC	326.5	317.0	307.2	297.9	288.7	279.2	269.5	260.0	250.0	240.9	231.3
	kW	23.6	25.2	27.0	28.4	29.9	31.5	33.1	34.8	36.6	38.0	39.6
35	TC	359.3	348.9	338.3	328.2	318.0	307.7	297.4	286.8	276.0	266.0	255.7
	kW	24.4	26.0	27.7	29.2	30.6	32.2	33.8	35.5	37.3	38.7	40.3
40	TC	393.9	382.6	371.0	360.0	348.9	337.8	326.4	314.9	303.2	292.3	281.0
	kW	25.1	26.7	28.5	29.9	31.4	32.9	34.6	36.3	38.1	39.5	41.1
45	TC	429.9	417.6	404.9	393.0	381.6	368.9	356.5	343.9	331.1	319.3	307.0
	kW	26.0	27.5	29.3	30.7	31.8	33.7	35.4	37.1	38.8	40.2	41.8
50	TC	467.1	453.7	439.8	427.0	413.9	400.6	387.2	373.5	359.6	346.7	333.4
	kW	26.8	28.4	30.2	31.6	33.0	34.6	36.2	37.9	39.6	41.0	42.6

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

**38APD080 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz ENGLISH****CIRCUIT A**

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	270.2	262.0	253.7	245.6	237.7	229.6	221.4	213.0	204.8	196.8	188.7
	kW	21.7	23.2	24.9	26.2	27.6	29.0	30.6	32.2	33.8	35.2	36.6
25	TC	297.9	289.1	279.5	271.8	263.1	254.3	245.2	236.5	226.9	218.7	209.9
	kW	22.3	23.8	25.5	26.8	28.2	29.7	31.2	32.8	34.5	35.8	37.3
30	TC	328.7	318.9	309.0	299.1	289.7	280.1	270.0	260.3	250.1	240.6	230.8
	kW	23.0	24.5	26.2	27.5	28.9	30.3	31.8	33.4	35.1	36.4	37.9
35	TC	360.0	349.6	338.4	328.6	316.7	311.0	296.8	289.5	273.7	266.1	255.6
	kW	23.7	25.2	26.9	28.2	29.6	31.0	32.5	34.1	35.8	37.1	38.5
40	TC	394.0	382.6	369.4	361.1	350.8	333.8	327.7	310.3	304.1	290.9	279.4
	kW	24.5	26.0	27.6	29.0	30.4	31.7	33.3	34.8	36.5	37.8	39.3
45	TC	422.4	410.6	394.4	390.7	371.0	367.6	354.7	342.2	321.5	315.8	303.9
	kW	25.3	26.8	28.3	29.7	31.2	32.6	34.1	35.6	37.2	38.6	40.1
50	TC	459.7	446.3	428.0	421.3	410.0	395.0	382.0	360.9	352.9	339.4	326.1
	kW	26.2	27.6	29.1	30.6	32.0	33.4	34.9	36.4	38.0	39.4	40.8

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	408.0	395.5	382.4	370.4	358.3	345.7	333.0	320.2	307.5	295.3	282.8
	kW	32.5	34.8	37.4	39.5	41.6	43.9	46.3	48.7	51.2	53.3	55.6
25	TC	450.5	436.9	422.3	410.1	396.7	383.4	369.4	355.6	341.2	328.4	314.9
	kW	33.3	35.6	38.2	40.3	42.4	44.7	47.1	49.6	52.1	54.2	56.6
30	TC	496.2	481.3	466.3	451.3	436.9	422.4	407.3	392.3	376.8	362.5	347.6
	kW	34.1	36.4	39.0	41.1	43.3	45.5	47.9	50.4	53.0	55.1	57.4
35	TC	542.6	526.9	510.2	495.3	478.0	468.3	447.8	436.1	413.2	401.3	385.6
	kW	34.9	37.2	39.8	41.9	44.1	46.4	48.8	51.1	53.8	55.9	58.2
40	TC	591.6	574.6	555.2	542.6	526.9	502.8	492.6	468.1	457.4	438.4	421.4
	kW	35.8	38.1	40.7	42.8	45.0	47.2	49.6	52.1	54.6	56.7	59.0
45	TC	634.1	616.3	590.4	584.1	565.0	549.9	530.8	512.4	483.5	474.0	456.2
	kW	36.7	39.0	41.5	43.6	45.9	48.1	50.5	52.9	55.5	57.6	59.9
50	TC	682.7	663.3	640.4	625.4	608.3	586.6	567.4	546.8	525.5	508.2	488.8
	kW	37.7	40.0	42.5	44.7	46.9	49.1	51.4	53.9	56.3	58.5	60.8

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD090 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz ENGLISH CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	353.8	342.6	330.5	320.2	309.7	298.8	287.3	275.6	263.5	253.3	242.1
	kW	26.9	29.0	31.1	33.0	35.0	37.0	39.1	41.2	43.3	45.2	47.3
25	TC	389.3	377.3	364.7	353.0	341.6	330.0	317.8	305.2	292.2	281.1	269.1
	kW	27.3	29.3	31.6	33.4	35.4	37.4	39.5	41.7	43.8	45.8	47.8
30	TC	426.2	413.5	400.1	387.3	378.6	362.0	349.4	340.0	323.4	312.4	299.8
	kW	27.8	29.8	32.1	33.9	35.8	37.9	40.0	42.0	44.4	46.2	48.2
35	TC	468.2	454.0	436.8	428.0	410.5	400.8	382.2	371.8	351.4	340.7	326.5
	kW	28.4	30.4	32.6	34.4	36.4	38.4	40.4	42.5	44.8	46.6	48.6
40	TC	509.3	493.9	476.6	464.5	449.8	429.5	418.9	397.4	387.3	370.2	354.7
	kW	29.1	31.1	33.3	35.1	37.0	38.9	40.9	43.1	45.2	47.0	49.0
45	TC	542.5	526.5	504.1	495.8	483.3	468.0	443.9	433.0	409.6	398.5	382.5
	kW	29.8	31.8	33.9	35.7	37.6	39.6	41.5	43.6	45.7	47.5	49.5
50	TC	589.4	570.8	554.4	530.1	516.7	501.0	468.9	460.1	443.2	421.9	403.2
	kW	30.7	32.7	34.8	36.4	38.4	40.3	42.0	44.2	46.4	48.1	50.0

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	405.4	392.9	379.9	368.1	355.9	343.4	330.8	318.1	305.4	293.2	280.8
	kW	32.9	35.2	37.7	39.8	42.0	44.3	46.7	49.1	51.7	53.8	56.1
25	TC	447.7	434.2	419.9	407.4	394.6	381.2	367.5	353.3	339.5	326.7	313.2
	kW	33.6	35.9	38.5	40.6	42.8	45.1	47.5	50.0	52.6	54.7	57.1
30	TC	492.2	478.0	462.0	449.2	439.1	420.0	405.6	395.1	376.4	364.2	349.9
	kW	34.4	36.7	39.3	41.5	43.6	46.0	48.4	50.8	53.5	55.6	57.9
35	TC	543.6	527.5	508.5	497.6	477.8	466.8	444.7	434.0	411.3	398.4	382.2
	kW	35.3	37.6	40.2	42.3	44.5	46.8	49.2	51.6	54.3	56.3	58.7
40	TC	590.6	573.3	553.5	541.4	525.0	500.7	490.0	466.2	454.6	435.6	418.4
	kW	36.2	38.5	41.1	43.2	45.4	47.7	50.0	52.6	55.1	57.2	59.5
45	TC	631.1	613.7	588.2	583.0	565.0	548.3	530.0	503.6	490.5	474.5	457.1
	kW	37.1	39.4	41.9	44.1	46.3	48.6	51.0	53.4	56.0	58.1	60.4
50	TC	681.0	661.3	637.0	623.4	605.7	584.9	566.9	537.6	523.7	504.1	484.5
	kW	38.1	40.4	42.8	45.1	47.3	49.6	52.0	54.3	56.9	59.0	61.3

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD100 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz ENGLISH

CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	414.8	402.4	389.6	377.4	365.2	352.8	340.4	327.6	314.8	302.7	290.2
	kW	33.0	35.4	38.0	40.0	42.2	44.5	46.8	49.3	51.9	54.0	56.3
25	TC	459.3	445.7	431.8	418.5	405.2	391.7	378.1	364.4	350.2	337.1	323.5
	kW	34.0	36.3	38.9	41.0	43.2	45.5	47.9	50.4	53.0	55.1	57.4
30	TC	506.8	492.1	476.8	462.4	447.9	433.3	418.4	403.3	388.0	373.7	358.9
	kW	35.0	37.3	39.9	42.0	44.2	46.5	48.9	51.4	54.0	56.1	58.5
35	TC	557.6	541.5	524.8	509.2	493.4	477.3	461.1	444.7	428.0	412.4	396.3
	kW	36.0	38.4	41.0	43.1	45.3	47.6	50.0	52.5	55.1	57.2	59.5
40	TC	611.0	593.4	575.3	558.2	541.0	523.6	506.0	488.0	469.7	452.8	435.2
	kW	37.2	39.5	42.1	44.2	46.4	48.7	51.1	53.6	56.2	58.3	60.6
45	TC	663.7	644.9	628.0	609.4	576.5	571.7	552.4	532.8	512.7	494.3	475.5
	kW	38.3	40.7	43.3	45.4	47.5	49.8	52.2	54.7	57.3	59.4	61.7
50	TC	724.9	704.0	682.2	662.0	641.5	620.8	599.7	578.3	556.4	536.3	515.4
	kW	39.6	42.0	44.5	46.6	48.8	51.0	53.4	55.9	58.5	60.5	62.9

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	403.8	391.6	379.1	367.3	355.3	343.2	331.1	318.6	306.1	294.3	282.2
	kW	32.7	35.0	37.6	39.7	41.8	44.1	46.5	49.0	51.6	53.6	55.9
25	TC	447.4	434.1	420.5	407.6	394.5	381.4	368.1	354.7	340.9	328.1	314.8
	kW	33.7	36.0	38.6	40.7	42.8	45.1	47.5	50.0	52.6	54.7	57.0
30	TC	494.2	479.8	464.9	450.8	436.6	422.3	407.8	393.0	378.2	364.2	349.7
	kW	34.7	37.0	39.6	41.7	43.9	46.2	48.5	51.0	53.6	55.7	58.1
35	TC	543.9	528.2	511.9	496.7	481.2	465.6	449.8	433.8	417.4	402.2	386.5
	kW	35.7	38.1	40.7	42.8	44.9	47.2	49.6	52.1	54.7	56.8	59.1
40	TC	596.6	579.4	561.7	545.1	528.3	511.3	494.1	476.6	458.8	442.3	425.1
	kW	36.8	39.2	41.8	43.9	46.0	48.3	50.7	53.2	55.8	57.9	60.2
45	TC	651.6	632.9	613.6	595.5	575.5	558.7	539.9	520.8	501.3	483.3	464.6
	kW	38.0	40.3	42.9	45.0	47.2	49.5	51.8	54.3	56.9	59.0	61.3
50	TC	708.6	688.2	667.1	647.3	627.4	607.3	586.7	565.9	544.6	525.0	504.6
	kW	39.3	41.6	44.2	46.2	48.4	50.7	53.0	55.5	58.1	60.1	62.5

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD,APS025 CONDENSING UNIT RATINGS, 60 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	72.8	68.1	65.7	64.1	61.6	59.1	56.5	54.8	52.1	49.5	46.7
	kW	16.6	18.6	19.7	20.4	21.6	22.8	24.0	24.8	26.1	27.4	28.7
0	TC	78.2	73.2	70.7	69.0	66.4	63.8	61.1	59.3	56.5	53.6	50.7
	kW	16.8	18.8	19.9	20.7	21.8	23.0	24.3	25.1	26.5	27.8	29.1
2	TC	83.8	78.6	75.9	74.1	71.3	68.6	65.7	63.8	60.9	57.9	54.8
	kW	17.0	19.0	20.1	20.9	22.1	23.3	24.6	25.4	26.8	28.1	29.5
4	TC	89.5	84.0	81.1	79.2	76.3	73.4	70.4	68.4	65.3	62.1	58.8
	kW	17.2	19.3	20.3	21.1	22.3	23.5	24.8	25.7	27.1	28.4	29.8
6	TC	95.4	89.4	86.3	84.3	81.3	78.2	75.0	72.9	69.6	66.3	62.8
	kW	17.5	19.5	20.6	21.3	22.5	23.8	25.1	26.0	27.3	28.7	30.1
8	TC	101.1	94.7	91.5	89.4	86.1	82.8	79.5	77.2	73.8	70.3	66.7
	kW	17.7	19.7	20.8	21.6	22.8	24.0	25.3	26.2	27.6	29.0	30.4
10	TC	106.7	99.8	96.4	94.2	90.7	87.3	83.7	81.3	77.7	74.0	70.2
	kW	18.0	20.0	21.1	21.8	23.0	24.3	25.6	26.4	27.8	29.2	30.6

38APD,APS027 CONDENSING UNIT RATINGS, 60 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	82.4	77.5	75.0	73.4	70.8	68.3	65.7	64.0	61.3	58.6	55.8
	kW	18.6	20.7	21.9	22.7	24.0	25.3	26.7	27.7	29.3	30.9	32.5
0	TC	88.2	83.0	80.3	78.5	75.9	73.2	70.4	68.5	65.7	62.8	59.8
	kW	19.0	21.1	22.3	23.1	24.3	25.7	27.1	28.1	29.6	31.2	32.9
2	TC	94.1	88.5	85.7	83.8	81.0	78.1	75.2	73.2	70.1	67.0	63.9
	kW	19.4	21.5	22.6	23.4	24.7	26.1	27.5	28.4	30.0	31.5	33.2
4	TC	100.1	94.1	91.1	89.1	86.1	83.0	79.9	77.8	74.6	71.3	67.9
	kW	19.8	21.9	23.0	23.8	25.1	26.4	27.8	28.8	30.3	31.9	33.5
6	TC	106.1	99.7	96.5	94.4	91.1	87.9	84.6	82.4	79.0	75.5	71.9
	kW	20.2	22.3	23.4	24.2	25.5	26.8	28.2	29.2	30.7	32.3	33.9
8	TC	112.1	105.2	101.8	99.6	96.1	92.7	89.2	86.8	83.2	79.5	75.8
	kW	20.7	22.7	23.9	24.7	25.9	27.3	28.6	29.6	31.1	32.6	34.3
10	TC	118.0	110.6	107.1	104.7	101.0	97.3	93.6	91.1	87.3	83.4	79.4
	kW	21.2	23.2	24.4	25.2	26.4	27.7	29.1	30.0	31.5	33.0	34.6

38APD,APS030 CONDENSING UNIT RATINGS, 60 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	95.8	90.3	87.5	85.6	82.8	79.9	76.9	74.9	71.9	68.8	65.6
	kW	22.5	25.1	26.5	27.5	29.1	30.8	32.6	33.8	35.7	37.7	39.8
0	TC	102.5	96.6	93.6	91.6	88.7	85.6	82.4	80.3	77.1	73.8	70.5
	kW	22.9	25.5	27.0	28.0	29.6	31.3	33.0	34.3	36.2	38.2	40.3
2	TC	109.2	102.9	99.8	97.7	94.6	91.3	88.0	85.8	82.4	79.0	75.4
	kW	23.4	26.0	27.5	28.5	30.1	31.8	33.5	34.7	36.7	38.7	40.7
4	TC	115.9	109.3	106.0	103.8	100.5	97.1	93.7	91.3	87.8	84.1	80.3
	kW	23.9	26.5	28.0	29.0	30.6	32.2	34.0	35.2	37.1	39.1	41.1
6	TC	122.5	115.6	112.2	109.9	106.4	102.9	99.3	96.8	93.1	89.2	85.1
	kW	24.4	27.0	28.5	29.5	31.1	32.7	34.5	35.7	37.6	39.6	41.7
8	TC	129.2	121.8	118.3	115.8	112.2	108.6	104.8	102.2	98.3	94.3	90.0
	kW	25.0	27.6	29.0	30.0	31.6	33.3	35.0	36.2	38.1	40.1	42.0
10	TC	135.7	128.1	124.4	121.8	118.0	114.1	110.2	107.5	103.4	99.2	—
	kW	25.6	28.2	29.6	30.6	32.2	33.8	35.6	36.8	38.6	40.6	—

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

38APD040 CONDENSING UNIT RATINGS, 60 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	119.7	112.2	108.3	105.6	101.7	97.6	93.5	90.7	86.4	82.0	77.6
	kW	26.0	29.6	31.5	32.8	34.8	36.9	39.1	40.6	42.9	45.3	47.7
0	TC	128.4	120.4	116.2	113.5	109.3	105.0	100.6	97.6	93.0	88.5	83.7
	kW	26.4	30.0	31.9	33.2	35.3	37.4	39.6	41.2	43.5	45.9	48.3
2	TC	137.4	128.9	124.5	121.5	117.1	112.5	107.9	104.8	99.9	94.9	90.1
	kW	26.8	30.4	32.3	33.6	35.7	37.9	40.1	41.7	44.0	46.5	49.0
4	TC	146.6	137.7	132.8	129.7	124.9	120.2	115.3	112.0	107.0	101.6	96.3
	kW	27.2	30.8	32.7	34.1	36.2	38.4	40.6	42.2	44.6	47.0	49.6
6	TC	156.2	146.4	141.3	138.0	133.1	128.0	122.8	119.2	113.7	108.0	102.3
	kW	27.7	31.3	33.2	34.5	36.6	38.8	41.1	42.7	45.1	47.5	50.1
8	TC	165.9	155.3	150.1	146.3	141.2	135.8	130.3	126.4	120.3	114.8	108.7
	kW	28.1	31.7	33.6	35.0	37.1	39.3	41.6	43.1	45.5	48.1	50.6
10	TC	175.4	164.3	158.8	155.0	149.4	143.2	137.2	133.2	127.6	120.8	114.9
	kW	28.6	32.2	34.1	35.5	37.6	39.7	42.0	43.6	46.0	48.5	51.1

38APS040 CONDENSING UNIT RATINGS, 60 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	100.4	94.1	91.0	88.9	85.7	82.5	79.2	77.0	73.7	70.4	66.9
	kW	20.9	23.4	24.7	25.7	27.2	28.8	30.4	31.6	33.4	35.3	37.3
0	TC	107.2	100.8	97.4	95.2	91.8	88.3	84.8	82.5	79.0	75.4	71.7
	kW	21.3	23.8	25.1	26.1	27.6	29.2	30.9	32.0	33.8	35.8	37.8
2	TC	114.6	107.7	104.1	101.8	98.0	94.4	90.6	88.1	84.4	80.6	76.7
	kW	21.7	24.2	25.6	26.5	28.0	29.6	31.3	32.5	34.3	36.2	38.2
4	TC	122.2	114.9	111.0	108.4	104.5	100.5	96.7	93.9	90.1	86.0	81.5
	kW	22.2	24.7	26.0	27.0	28.5	30.1	31.8	32.9	34.7	36.6	38.6
6	TC	130.2	122.2	118.1	115.3	111.1	107.2	102.9	99.9	95.9	91.5	86.7
	kW	22.7	25.2	26.5	27.5	29.0	30.6	32.2	33.4	35.2	37.1	39.1
8	TC	138.4	130.1	125.4	122.5	118.3	113.9	109.4	106.1	101.5	96.8	92.0
	kW	23.2	25.7	27.1	28.0	29.5	31.1	32.8	33.9	35.7	37.6	39.6
10	TC	146.9	137.6	132.9	129.8	125.4	120.7	115.9	112.3	107.5	102.8	97.4
	kW	23.8	26.3	27.6	28.6	30.1	31.6	33.3	34.4	36.2	38.1	40.1

38APD050 CONDENSING UNIT RATINGS, 60 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	153.6	144.0	139.1	135.8	130.9	125.7	120.3	116.9	111.7	106.3	98.1
	kW	36.7	41.2	43.5	45.2	47.7	50.4	53.1	55.0	58.0	61.0	63.8
0	TC	164.5	154.4	149.2	145.7	140.3	134.8	129.5	125.7	119.9	114.1	108.0
	kW	37.4	41.8	44.2	45.9	48.5	51.1	53.9	55.8	58.8	61.8	64.9
2	TC	175.9	165.1	159.5	155.7	150.2	144.2	138.3	134.3	128.6	122.4	116.0
	kW	38.1	42.6	44.9	46.6	49.2	51.9	54.7	56.6	59.6	62.6	65.7
4	TC	187.4	175.9	169.9	165.7	160.0	154.0	147.5	143.6	136.7	130.3	123.2
	kW	38.8	43.3	45.7	47.3	49.9	52.6	55.4	57.4	60.3	63.4	66.5
6	TC	199.2	186.8	180.6	176.4	170.1	163.6	156.6	152.1	145.2	138.7	131.1
	kW	39.6	44.0	46.4	48.1	50.7	53.4	56.2	58.1	61.1	64.2	67.3
8	TC	211.2	197.8	191.4	186.9	180.2	173.0	165.8	161.5	154.2	146.6	—
	kW	40.3	44.7	47.2	48.8	51.4	54.1	56.9	58.9	61.9	64.9	—
10	TC	223.3	208.9	202.0	197.4	189.9	182.4	175.3	169.8	162.3	154.6	—
	kW	41.1	45.5	48.0	49.6	52.2	54.9	57.7	59.6	62.6	65.7	—

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APS050 CONDENSING UNIT RATINGS, 60 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	146.1	136.9	131.9	126.9	121.9	116.9	111.5	109.8	108.1	102.7	97.7
	kW	34.2	38.1	40.3	42.5	44.7	46.9	49.0	50.9	54.1	56.9	60.0
0	TC	156.0	147.2	142.0	138.8	133.2	129.0	124.4	116.8	111.8	111.1	104.9
	kW	34.8	38.9	41.1	42.6	44.9	47.0	50.2	52.6	54.2	57.8	60.5
2	TC	167.4	157.5	152.2	149.1	143.9	138.6	132.8	129.3	123.7	116.2	113.4
	kW	35.6	39.7	41.8	43.4	45.8	48.3	50.8	52.6	55.4	58.0	61.4
4	TC	178.3	168.0	162.4	158.7	153.2	147.9	142.3	138.4	132.0	126.4	120.1
	kW	36.3	40.4	42.5	44.0	46.4	48.9	51.5	53.3	56.0	58.9	61.9
6	TC	189.8	178.5	173.1	169.1	163.4	156.9	150.8	146.7	140.3	134.3	127.6
	kW	37.0	41.0	43.2	44.8	47.1	49.6	52.1	53.9	56.7	59.6	62.5
8	TC	201.4	189.3	183.5	179.2	173.0	166.2	159.6	155.2	148.9	141.9	134.8
	kW	37.8	41.8	44.0	45.5	47.8	50.2	52.8	54.6	57.4	60.2	63.1
10	TC	213.0	200.0	193.8	189.2	182.1	175.2	168.1	163.4	156.6	148.6	141.6
	kW	38.6	42.5	44.7	46.2	48.5	50.9	53.5	55.2	58.0	60.7	63.7

38APD060 CONDENSING UNIT RATINGS, 60 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	173.4	166.3	162.4	157.2	153.1	147.7	142.4	138.4	133.1	125.6	121.5
	kW	41.0	45.9	48.5	50.2	52.9	55.9	59.0	61.3	64.6	68.2	71.7
0	TC	189.2	177.3	173.9	168.6	164.4	156.6	152.5	147.9	142.2	135.6	130.0
	kW	42.1	46.8	49.5	51.1	54.0	56.9	60.0	62.3	65.7	69.1	72.0
2	TC	200.0	189.7	185.9	179.8	175.6	167.1	162.9	157.9	152.2	145.8	139.4
	kW	44.0	47.7	50.4	52.1	55.0	57.8	60.9	63.0	66.3	69.6	73.3
4	TC	209.4	202.2	197.9	191.3	186.9	179.2	173.0	168.2	162.5	153.7	148.5
	kW	43.9	48.7	51.4	53.1	55.9	58.8	61.9	64.2	67.4	71.0	74.4
6	TC	223.5	210.8	209.1	203.7	198.5	190.4	183.4	178.6	172.3	165.0	158.0
	kW	44.9	49.7	52.4	54.1	57.0	59.9	63.0	65.0	68.2	71.5	75.2
8	TC	241.4	222.2	219.3	214.9	210.2	200.2	195.4	187.3	182.7	173.4	167.2
	kW	46.2	50.7	53.4	55.2	58.1	60.9	64.1	66.1	69.4	73.0	76.3
10	TC	255.1	235.1	230.8	225.4	222.6	211.3	207.4	197.9	193.2	181.6	—
	kW	47.3	51.9	54.6	56.3	59.3	62.0	65.3	67.3	70.5	74.0	—

38APD070 CONDENSING UNIT RATINGS, 60 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	203.5	190.9	184.4	180.1	173.5	166.8	159.9	155.3	148.4	141.2	134.0
	kW	48.6	54.5	57.6	59.8	63.2	66.7	70.3	72.8	76.7	80.6	84.8
0	TC	218.2	204.8	198.0	193.4	186.4	179.3	172.1	167.3	159.9	152.4	144.6
	kW	49.7	55.5	58.7	60.9	64.3	67.8	71.5	74.1	78.0	82.0	86.1
2	TC	233.5	219.3	212.0	207.1	199.8	192.2	184.7	179.6	171.8	163.7	155.6
	kW	50.7	56.6	59.7	61.9	65.4	69.0	72.7	75.3	79.2	83.3	87.5
4	TC	249.2	234.1	226.4	221.3	213.5	205.6	197.5	192.1	183.8	175.4	166.6
	kW	51.8	57.7	60.9	63.1	66.5	70.1	73.9	76.5	80.5	84.6	88.8
6	TC	265.3	249.3	241.2	235.7	227.5	219.1	210.6	204.9	196.1	187.1	177.7
	kW	52.9	58.8	62.0	64.2	67.7	71.3	75.1	77.7	81.7	85.9	90.2
8	TC	281.7	264.8	256.2	250.5	241.7	232.9	223.9	217.8	208.6	199.1	—
	kW	54.1	60.0	63.2	65.4	68.9	72.5	76.3	78.9	83.0	87.2	—
10	TC	298.5	280.5	271.4	265.4	256.1	246.8	237.3	230.9	221.1	210.9	—
	kW	55.3	61.2	64.4	66.7	70.1	73.8	77.6	80.2	84.2	88.4	—

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

38APD080 CONDENSING UNIT RATINGS, 60 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	239.6	226.0	218.7	215.7	206.7	199.1	191.6	188.2	179.3	170.6	162.4
	kW	55.2	61.8	65.3	67.8	71.6	75.7	79.9	82.8	87.5	92.2	97.1
0	TC	256.3	241.9	234.4	230.9	221.1	213.0	205.1	201.6	191.2	182.6	177.1
	kW	56.3	62.9	66.4	68.9	72.7	76.8	81.0	83.8	88.5	93.2	97.8
2	TC	274.1	258.3	250.2	246.3	235.6	227.2	218.8	215.1	207.4	194.7	189.2
	kW	57.5	64.0	67.5	70.0	73.8	77.9	82.1	84.9	89.5	94.3	98.8
4	TC	292.7	274.7	268.1	261.5	253.8	241.4	235.8	226.6	220.5	207.5	201.2
	kW	58.8	65.2	68.7	71.2	75.0	79.0	83.2	86.2	90.6	95.5	100.0
6	TC	310.3	291.2	284.7	276.2	268.9	255.4	249.9	239.2	233.5	219.3	213.0
	kW	60.1	66.4	70.1	72.4	76.3	80.1	84.4	87.3	91.8	96.6	101.1
8	TC	327.7	307.1	299.7	292.2	283.4	273.8	261.5	255.3	246.0	233.9	222.5
	kW	61.4	67.7	71.3	73.6	77.5	81.6	85.6	88.4	92.9	97.7	102.5
10	TC	344.3	323.3	316.3	308.4	298.9	282.8	276.0	268.9	258.4	241.9	235.7
	kW	62.5	69.0	72.9	75.2	79.0	82.5	86.8	89.9	94.3	98.8	103.5

38APD090 CONDENSING UNIT RATINGS, 60 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	267.6	251.8	243.8	240.4	230.4	221.9	213.4	209.4	199.4	189.0	179.6
	kW	60.1	67.6	71.8	74.6	79.1	83.8	88.7	92.0	97.3	102.5	107.8
0	TC	286.2	269.7	260.7	257.2	248.9	237.2	228.2	224.5	213.2	202.5	196.1
	kW	61.1	68.7	72.7	75.6	79.9	84.7	89.6	92.9	98.2	103.5	108.5
2	TC	305.8	287.1	281.0	272.1	262.5	256.3	243.7	239.1	228.9	218.3	208.1
	kW	62.3	69.7	73.8	76.6	81.0	85.6	90.6	93.8	99.1	104.4	109.7
4	TC	325.8	305.6	298.5	290.1	282.3	268.6	262.2	250.7	244.1	230.1	222.7
	kW	63.4	70.8	74.9	77.7	82.1	86.7	91.5	94.8	99.8	105.3	110.4
6	TC	345.8	323.2	315.7	307.7	298.6	283.9	277.1	264.7	258.0	243.1	235.6
	kW	64.8	72.0	76.1	78.8	83.3	87.7	92.6	95.8	100.8	106.3	111.5
8	TC	364.9	341.6	333.5	323.0	314.1	303.3	286.2	282.4	271.7	253.6	247.1
	kW	66.1	73.3	77.5	80.0	84.5	89.0	93.5	96.9	102.0	107.2	112.3
10	TC	381.4	357.7	349.3	341.1	330.1	314.7	302.0	294.0	283.3	272.3	252.2
	kW	67.1	74.5	78.8	81.5	85.8	90.1	94.7	97.8	102.9	108.3	113.6

38APD100 CONDENSING UNIT RATINGS, 60 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	295.5	275.5	267.9	260.8	253.2	241.5	235.4	226.8	220.3	207.8	201.6
	kW	63.5	75.5	79.9	82.7	86.8	92.4	97.3	101.2	106.5	112.7	118.1
0	TC	315.3	295.3	287.1	280.1	271.6	261.1	252.7	244.9	236.6	225.0	216.6
	kW	65.0	77.0	80.8	83.9	89.0	93.9	98.6	102.6	107.7	114.1	119.6
2	TC	336.4	316.4	307.6	298.4	291.2	279.8	270.9	262.4	253.9	240.8	232.6
	kW	66.6	78.6	82.9	85.7	90.5	95.4	100.2	104.2	109.3	115.8	121.0
4	TC	353.0	333.0	329.3	319.7	311.7	298.8	289.9	282.0	271.7	260.5	248.9
	kW	67.7	79.7	84.6	87.3	92.0	97.0	101.6	105.2	110.4	116.1	121.9
6	TC	378.6	358.6	351.2	340.7	332.5	320.9	309.4	300.7	289.9	277.8	265.8
	kW	69.6	81.6	86.1	89.0	93.7	98.4	103.4	106.8	112.0	117.9	123.6
8	TC	402.8	382.8	373.6	364.5	353.3	341.1	329.0	320.2	308.5	295.6	282.8
	kW	71.4	83.4	87.9	90.7	95.1	99.8	104.8	107.8	113.8	119.4	125.4
10	TC	424.0	404.0	394.4	386.0	375.3	361.9	349.2	339.0	326.7	313.3	300.1
	kW	71.7	83.7	89.6	92.4	97.3	101.9	106.9	110.2	115.5	120.8	127.2

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD025 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz SI CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	36.4	34.0	32.9	32.0	30.8	29.5	28.3	27.4	26.1	24.7	23.4
	kW	8.3	9.3	9.8	10.2	10.8	11.4	12.0	12.4	13.1	13.7	14.4
0	TC	39.1	36.6	35.4	34.5	33.2	31.9	30.5	29.6	28.2	26.8	25.4
	kW	8.4	9.4	10.0	10.3	10.9	11.5	12.2	12.6	13.2	13.9	14.6
2	TC	41.9	39.3	37.9	37.0	35.7	34.3	32.9	31.9	30.4	29.0	27.4
	kW	8.5	9.5	10.1	10.4	11.0	11.7	12.3	12.7	13.4	14.1	14.7
4	TC	44.8	42.0	40.6	39.6	38.2	36.7	35.2	34.2	32.6	31.1	29.4
	kW	8.6	9.6	10.2	10.6	11.2	11.8	12.4	12.9	13.5	14.2	14.9
6	TC	47.7	44.7	43.2	42.2	40.6	39.1	37.5	36.4	34.8	33.2	31.4
	kW	8.7	9.7	10.3	10.7	11.3	11.9	12.5	13.0	13.7	14.4	15.1
8	TC	50.6	47.4	45.7	44.7	43.1	41.4	39.8	38.6	36.9	35.1	33.3
	kW	8.9	9.9	10.4	10.8	11.4	12.0	12.7	13.1	13.8	14.5	15.2
10	TC	53.4	49.9	48.2	47.1	45.4	43.6	41.9	40.7	38.8	37.0	35.1
	kW	9.0	10.0	10.5	10.9	11.5	12.1	12.8	13.2	13.9	14.6	15.3

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	36.4	34.0	32.9	32.0	30.8	29.5	28.3	27.4	26.1	24.7	23.4
	kW	8.3	9.3	9.8	10.2	10.8	11.4	12.0	12.4	13.1	13.7	14.4
0	TC	39.1	36.6	35.4	34.5	33.2	31.9	30.5	29.6	28.2	26.8	25.4
	kW	8.4	9.4	10.0	10.3	10.9	11.5	12.2	12.6	13.2	13.9	14.6
2	TC	41.9	39.3	37.9	37.0	35.7	34.3	32.9	31.9	30.4	29.0	27.4
	kW	8.5	9.5	10.1	10.4	11.0	11.7	12.3	12.7	13.4	14.1	14.7
4	TC	44.8	42.0	40.6	39.6	38.2	36.7	35.2	34.2	32.6	31.1	29.4
	kW	8.6	9.6	10.2	10.6	11.2	11.8	12.4	12.9	13.5	14.2	14.9
6	TC	47.7	44.7	43.2	42.2	40.6	39.1	37.5	36.4	34.8	33.2	31.4
	kW	8.7	9.7	10.3	10.7	11.3	11.9	12.5	13.0	13.7	14.4	15.1
8	TC	50.6	47.4	45.7	44.7	43.1	41.4	39.8	38.6	36.9	35.1	33.3
	kW	8.9	9.9	10.4	10.8	11.4	12.0	12.7	13.1	13.8	14.5	15.2
10	TC	53.4	49.9	48.2	47.1	45.4	43.6	41.9	40.7	38.8	37.0	35.1
	kW	9.0	10.0	10.5	10.9	11.5	12.1	12.8	13.2	13.9	14.6	15.3

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD027 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz SI
CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	41.3	38.9	37.6	36.8	35.5	34.3	33.0	32.1	30.8	29.4	28.0
	kW	9.3	10.4	11.0	11.4	12.0	12.7	13.4	13.9	14.7	15.5	16.3
0	TC	44.2	41.6	40.3	39.4	38.1	36.7	35.4	34.4	33.0	31.6	30.1
	kW	9.5	10.6	11.1	11.6	12.2	12.9	13.6	14.1	14.8	15.6	16.5
2	TC	47.2	44.5	43.1	42.1	40.7	39.3	37.8	36.8	35.3	33.8	32.2
	kW	9.7	10.8	11.3	11.7	12.4	13.0	13.7	14.2	15.0	15.8	16.6
4	TC	50.3	47.3	45.8	44.9	43.4	41.8	40.3	39.2	37.6	36.0	34.3
	kW	9.9	10.9	11.5	11.9	12.6	13.2	13.9	14.4	15.2	16.0	16.8
6	TC	53.4	50.2	48.6	47.6	46.0	44.4	42.7	41.6	39.9	38.2	36.4
	kW	10.1	11.2	11.7	12.1	12.8	13.4	14.1	14.6	15.4	16.2	17.0
8	TC	56.5	53.0	51.4	50.2	48.5	46.8	45.1	43.9	42.1	40.3	38.4
	kW	10.4	11.4	12.0	12.3	13.0	13.6	14.3	14.8	15.6	16.3	17.1
10	TC	59.4	55.8	54.1	52.9	51.1	49.3	47.4	46.2	44.3	42.3	40.3
	kW	10.6	11.6	12.2	12.6	13.2	13.9	14.5	15.0	15.8	16.5	17.3

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	41.1	38.7	37.4	36.6	35.3	34.0	32.7	31.9	30.5	29.2	27.8
	kW	9.3	10.4	10.9	11.3	12.0	12.6	13.3	13.8	14.6	15.4	16.2
0	TC	44.0	41.3	40.0	39.1	37.8	36.4	35.0	34.1	32.7	31.2	29.7
	kW	9.5	10.5	11.1	11.5	12.2	12.8	13.5	14.0	14.8	15.6	16.4
2	TC	46.9	44.1	42.6	41.7	40.3	38.8	37.3	36.3	34.8	33.3	31.7
	kW	9.7	10.7	11.3	11.7	12.3	13.0	13.7	14.2	15.0	15.7	16.6
4	TC	49.8	46.8	45.2	44.2	42.7	41.2	39.6	38.6	37.0	35.3	33.6
	kW	9.9	10.9	11.5	11.9	12.5	13.2	13.9	14.4	15.1	15.9	16.7
6	TC	52.7	49.5	47.9	46.8	45.2	43.5	41.9	40.7	39.0	37.3	35.5
	kW	10.1	11.1	11.7	12.1	12.7	13.4	14.1	14.6	15.3	16.1	16.9
8	TC	55.7	52.1	50.5	49.3	47.6	45.9	44.1	42.9	41.1	39.2	37.3
	kW	10.3	11.4	11.9	12.3	13.0	13.6	14.3	14.8	15.5	16.3	17.1
10	TC	58.5	54.8	53.0	51.8	50.0	48.1	46.2	45.0	43.0	41.1	39.1
	kW	10.6	11.6	12.2	12.6	13.2	13.8	14.5	15.0	15.7	16.5	17.3

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD030 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz SI CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	47.9	45.1	43.7	42.8	41.4	39.9	38.4	37.4	35.9	34.4	32.8
	kW	11.2	12.5	13.2	13.7	14.5	15.3	16.2	16.8	17.8	18.8	19.8
0	TC	51.2	48.3	46.8	45.8	44.3	42.8	41.2	40.1	38.5	36.9	35.2
	kW	11.4	12.7	13.4	13.9	14.7	15.5	16.4	17.0	18.0	19.0	20.0
2	TC	54.5	51.4	49.9	48.8	47.3	45.6	44.0	42.9	41.2	39.5	37.7
	kW	11.6	12.9	13.6	14.2	14.9	15.8	16.7	17.3	18.2	19.2	20.2
4	TC	57.9	54.5	52.9	51.9	50.2	48.5	46.8	45.7	43.9	42.0	40.2
	kW	11.9	13.2	13.9	14.4	15.2	16.0	16.9	17.5	18.4	19.4	20.4
6	TC	61.2	57.7	56.0	54.9	53.1	51.4	49.6	48.4	46.5	44.6	42.6
	kW	12.1	13.4	14.1	14.6	15.4	16.2	17.1	17.7	18.7	19.7	20.7
8	TC	64.4	60.8	59.0	57.8	56.0	54.2	52.3	51.1	49.1	47.1	45.0
	kW	12.4	13.7	14.4	14.9	15.7	16.5	17.4	18.0	18.9	19.9	21.0
10	TC	67.7	63.9	62.0	60.8	58.9	57.0	55.0	53.7	51.7	49.6	—
	kW	12.7	14.0	14.7	15.2	16.0	16.8	17.6	18.2	19.2	20.1	—

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	48.0	45.2	43.8	42.8	41.4	40.0	38.5	37.5	36.0	34.4	32.8
	kW	11.3	12.6	13.3	13.9	14.7	15.5	16.4	17.0	18.0	19.0	20.0
0	TC	51.3	48.3	46.8	45.9	44.4	42.8	41.2	40.2	38.6	36.9	35.3
	kW	11.5	12.9	13.6	14.1	14.9	15.7	16.6	17.2	18.2	19.2	20.2
2	TC	54.7	51.5	50.0	48.9	47.3	45.7	44.0	42.9	41.2	39.5	37.7
	kW	11.8	13.1	13.8	14.3	15.1	16.0	16.9	17.5	18.4	19.4	20.5
4	TC	58.0	54.7	53.1	52.0	50.3	48.6	46.9	45.7	43.9	42.0	40.1
	kW	12.0	13.3	14.1	14.6	15.4	16.2	17.1	17.7	18.7	19.7	20.7
6	TC	61.4	57.9	56.2	55.0	53.3	51.5	49.7	48.4	46.6	44.6	42.5
	kW	12.3	13.6	14.3	14.8	15.6	16.5	17.4	18.0	18.9	19.9	21.0
8	TC	64.7	61.1	59.3	58.0	56.2	54.3	52.4	51.1	49.2	47.1	45.0
	kW	12.6	13.9	14.6	15.1	15.9	16.7	17.6	18.2	19.2	20.2	21.0
10	TC	68.1	64.2	62.3	61.1	59.1	57.2	55.1	53.8	51.7	49.6	—
	kW	12.9	14.2	14.9	15.4	16.2	17.0	17.9	18.5	19.5	20.4	—

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD040 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz SI
CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	64.2	60.0	57.8	56.3	54.1	51.9	49.6	48.0	45.5	43.1	40.8
	kW	14.4	16.2	17.2	17.9	19.0	20.1	21.2	22.0	23.1	24.3	25.4
0	TC	68.8	64.4	62.1	60.5	58.2	55.8	53.4	51.8	49.2	46.8	44.0
	kW	14.6	16.5	17.5	18.2	19.3	20.4	21.5	22.3	23.5	24.7	25.9
2	TC	73.7	69.0	66.5	64.9	62.5	60.0	57.4	55.7	52.9	50.2	47.6
	kW	14.8	16.7	17.7	18.4	19.5	20.7	21.8	22.6	23.8	25.1	26.3
4	TC	78.7	73.8	71.1	69.3	66.7	64.1	61.5	59.6	56.9	54.0	51.0
	kW	15.1	17.0	18.0	18.7	19.8	21.0	22.1	23.0	24.2	25.4	26.7
6	TC	83.8	78.4	75.7	73.9	71.2	68.4	65.5	63.6	60.4	57.4	54.3
	kW	15.3	17.3	18.3	19.0	20.1	21.3	22.4	23.3	24.5	25.8	27.1
8	TC	89.1	83.3	80.4	78.4	75.6	72.6	69.6	67.5	64.1	61.1	57.7
	kW	15.6	17.5	18.6	19.3	20.4	21.5	22.7	23.6	24.8	26.1	27.4
10	TC	94.2	88.2	85.1	83.1	80.0	76.6	73.4	71.2	68.1	64.4	61.2
	kW	15.9	17.8	18.8	19.6	20.7	21.8	23.0	23.8	25.1	26.4	27.7

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	55.6	52.2	50.5	49.4	47.6	45.8	43.9	42.7	40.8	38.8	36.9
	kW	11.7	13.3	14.2	14.9	15.8	16.9	18.0	18.7	19.8	21.0	22.2
0	TC	59.6	56.0	54.2	52.9	51.0	49.1	47.2	45.9	43.8	41.7	39.7
	kW	11.8	13.5	14.4	15.0	16.0	17.0	18.1	18.9	20.0	21.2	22.5
2	TC	63.7	59.9	57.9	56.6	54.6	52.6	50.5	49.1	46.9	44.7	42.5
	kW	12.0	13.7	14.6	15.2	16.2	17.2	18.3	19.1	20.2	21.4	22.7
4	TC	67.9	63.9	61.8	60.3	58.2	56.1	53.9	52.4	50.1	47.7	45.3
	kW	12.1	13.8	14.7	15.4	16.3	17.4	18.5	19.2	20.4	21.6	22.8
6	TC	72.4	67.9	65.6	64.1	61.9	59.6	57.3	55.7	53.3	50.6	48.0
	kW	12.3	14.0	14.9	15.5	16.5	17.6	18.7	19.4	20.6	21.8	23.0
8	TC	76.8	72.0	69.6	67.9	65.6	63.2	60.7	59.0	56.2	53.7	51.0
	kW	12.5	14.2	15.1	15.7	16.7	17.7	18.8	19.6	20.7	21.9	23.2
10	TC	81.2	76.1	73.6	71.9	69.4	66.5	63.8	62.0	59.5	56.4	53.7
	kW	12.7	14.4	15.3	15.9	16.9	17.9	19.0	19.7	20.9	22.1	23.4

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD050 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz SI CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	72.5	67.9	65.4	63.8	61.4	58.8	56.2	54.5	51.8	49.3	43.9
	kW	17.0	19.2	20.3	21.1	22.4	23.7	25.0	25.9	27.3	28.7	29.9
0	TC	77.7	72.9	70.3	68.6	66.0	63.3	60.7	58.9	55.9	53.1	50.1
	kW	17.2	19.4	20.6	21.4	22.7	24.0	25.4	26.3	27.7	29.1	30.5
2	TC	83.2	78.1	75.3	73.5	70.8	67.9	65.0	63.1	60.3	57.3	54.2
	kW	17.4	19.6	20.8	21.7	22.9	24.3	25.6	26.6	28.0	29.5	30.9
4	TC	88.9	83.3	80.4	78.5	75.7	72.7	69.5	67.7	64.3	61.1	57.8
	kW	17.6	19.9	21.0	21.9	23.2	24.5	25.9	26.9	28.3	29.8	31.3
6	TC	94.7	88.8	85.7	83.7	80.6	77.5	74.1	71.9	68.6	65.5	61.7
	kW	17.8	20.1	21.3	22.1	23.4	24.8	26.2	27.1	28.6	30.1	31.6
8	TC	100.5	94.1	91.0	88.8	85.6	82.3	78.7	76.6	73.1	69.5	66.0
	kW	18.1	20.3	21.5	22.4	23.7	25.0	26.4	27.4	28.9	30.4	33.0
10	TC	106.4	99.6	96.4	94.0	90.6	86.8	83.4	80.8	77.3	73.3	70.0
	kW	18.3	20.5	21.8	22.6	23.9	25.2	26.7	27.6	29.1	30.6	34.0

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	81.1	76.1	73.7	72.0	69.5	66.9	64.2	62.4	59.8	57.0	54.2
	kW	19.8	22.0	23.2	24.0	25.3	26.7	28.1	29.1	30.6	32.2	33.9
0	TC	86.8	81.5	78.9	77.1	74.4	71.5	68.8	66.9	64.0	61.0	57.9
	kW	20.2	22.4	23.6	24.5	25.8	27.1	28.6	29.6	31.1	32.7	34.3
2	TC	92.6	87.0	84.2	82.2	79.4	76.3	73.2	71.3	68.3	65.1	61.8
	kW	20.7	22.9	24.1	25.0	26.3	27.6	29.0	30.0	31.6	33.1	34.8
4	TC	98.6	92.6	89.5	87.3	84.4	81.3	78.0	75.9	72.3	69.1	65.3
	kW	21.2	23.4	24.6	25.4	26.7	28.1	29.5	30.5	32.0	33.6	35.2
6	TC	104.5	98.1	94.9	92.7	89.5	86.1	82.5	80.1	76.6	73.2	69.4
	kW	21.7	23.9	25.1	25.9	27.2	28.6	30.0	31.0	32.5	34.1	35.7
8	TC	110.7	103.7	100.4	98.1	94.6	90.7	87.1	84.9	81.1	77.2	—
	kW	22.3	24.5	25.7	26.5	27.8	29.1	30.5	31.5	33.0	34.6	—
10	TC	116.9	109.3	105.7	103.4	99.3	95.5	92.0	89.0	85.0	81.3	—
	kW	22.8	25.0	26.2	27.0	28.3	29.6	31.1	32.0	33.5	35.1	—

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD060 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz SI
CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	80.7	76.7	74.9	72.6	70.6	68.1	65.7	63.9	61.4	58.3	56.1
	kW	18.2	20.3	21.4	22.2	23.4	24.7	26.1	27.1	28.6	30.3	31.8
0	TC	87.2	81.8	80.2	77.8	75.8	72.1	70.3	68.6	65.2	63.2	60.0
	kW	18.6	20.6	21.8	22.6	23.9	25.1	26.5	27.6	29.0	30.7	32.0
2	TC	92.0	87.5	85.6	82.9	80.9	76.8	75.1	72.9	70.1	67.2	64.3
	kW	19.0	21.0	22.2	23.0	24.2	25.5	26.9	27.9	29.3	30.8	32.5
4	TC	98.9	93.3	91.1	88.1	86.0	83.0	79.3	77.9	74.8	71.0	68.4
	kW	19.4	21.5	22.6	23.4	24.7	26.0	27.3	28.3	29.8	31.4	32.9
6	TC	104.9	95.0	95.5	93.8	91.2	88.4	83.9	82.2	79.2	75.9	72.7
	kW	19.8	21.8	23.0	23.8	25.1	26.4	27.8	28.7	30.1	31.6	33.3
8	TC	110.9	99.4	98.9	98.8	96.5	92.0	89.8	86.1	83.9	79.8	76.9
	kW	20.3	22.2	23.4	24.3	25.6	26.8	28.2	29.2	30.6	32.2	33.7
10	TC	117.3	105.6	103.6	103.1	102.2	97.0	95.2	90.9	88.7	83.8	81.4
	kW	20.8	22.7	23.9	24.7	26.1	27.3	28.8	29.6	31.1	32.7	34.2

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	92.7	89.5	87.4	84.6	82.4	79.5	76.7	74.5	71.6	67.3	65.4
	kW	22.9	25.6	27.1	28.0	29.5	31.2	32.9	34.2	36.0	37.9	39.9
0	TC	102.0	95.6	93.7	90.8	88.6	84.6	82.2	79.3	76.9	72.4	70.0
	kW	23.5	26.1	27.6	28.5	30.2	31.8	33.5	34.7	36.7	38.4	40.0
2	TC	108.0	102.2	100.3	96.9	94.7	90.3	87.9	85.0	82.1	78.6	75.1
	kW	25.0	26.7	28.2	29.1	30.7	32.3	34.0	35.2	37.0	38.8	40.8
4	TC	110.5	108.9	106.8	103.2	100.9	96.2	93.6	90.4	87.7	82.8	80.1
	kW	24.5	27.2	28.8	29.7	31.3	32.9	34.6	35.8	37.6	39.6	41.4
6	TC	118.6	115.8	113.6	109.9	107.3	102.0	99.5	96.5	93.1	89.1	85.3
	kW	25.1	27.9	29.4	30.3	31.9	33.5	35.2	36.3	38.1	39.9	41.9
8	TC	130.5	122.8	120.3	116.1	113.7	108.2	105.7	101.2	98.8	93.6	90.3
	kW	25.9	28.5	30.0	30.9	32.5	34.1	35.8	37.0	38.8	40.8	42.6
10	TC	137.8	129.5	127.2	122.3	120.4	114.3	112.2	106.9	104.5	97.8	—
	kW	26.6	29.2	30.6	31.6	33.2	34.8	36.6	37.6	39.4	41.3	—

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD070 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz SI CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	95.0	89.5	86.7	84.8	81.9	79.0	76.0	74.0	71.1	67.9	64.9
	kW	22.9	25.6	27.1	28.1	29.7	31.4	33.1	34.3	36.3	38.2	40.5
0	TC	101.9	96.0	93.0	91.0	88.0	84.9	81.8	79.7	76.4	73.2	69.8
	kW	23.5	26.1	27.6	28.6	30.2	31.9	33.6	34.9	36.8	38.8	40.9
2	TC	109.1	102.9	99.7	97.5	94.3	91.0	87.7	85.4	82.0	78.4	74.9
	kW	24.0	26.7	28.1	29.1	30.7	32.5	34.2	35.4	37.3	39.3	41.4
4	TC	116.6	109.9	106.5	104.2	100.8	97.3	93.7	91.3	87.7	84.0	80.1
	kW	24.5	27.2	28.7	29.7	31.3	33.0	34.7	36.0	37.9	39.9	41.9
6	TC	124.3	117.2	113.6	111.2	107.5	103.8	100.0	97.5	93.6	89.5	85.4
	kW	25.1	27.8	29.2	30.2	31.8	33.5	35.3	36.5	38.4	40.4	42.5
8	TC	132.2	124.6	120.8	118.3	114.4	110.4	106.4	103.7	99.5	95.2	—
	kW	25.7	28.4	29.8	30.8	32.4	34.1	35.9	37.1	39.0	41.0	—
10	TC	140.2	132.2	128.2	125.5	121.3	117.1	112.8	109.9	105.5	100.9	—
	kW	26.4	29.0	30.5	31.5	33.0	34.7	36.5	37.7	39.6	41.5	—

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	108.5	101.4	97.7	95.3	91.5	87.7	83.9	81.3	77.3	73.2	69.1
	kW	25.7	28.9	30.5	31.7	33.5	35.3	37.2	38.5	40.4	42.4	44.4
0	TC	116.3	108.8	104.9	102.3	98.4	94.4	90.4	87.6	83.4	79.2	74.8
	kW	26.2	29.4	31.1	32.3	34.1	35.9	37.9	39.2	41.2	43.2	45.3
2	TC	124.3	116.4	112.3	109.6	105.5	101.3	97.0	94.1	89.7	85.2	80.6
	kW	26.7	29.9	31.6	32.8	34.7	36.6	38.5	39.9	41.9	44.0	46.1
4	TC	132.6	124.2	119.9	117.0	112.7	108.3	103.8	100.8	96.1	91.4	86.5
	kW	27.2	30.5	32.2	33.4	35.2	37.2	39.2	40.5	42.6	44.8	46.9
6	TC	141.0	132.1	127.6	124.6	120.0	115.3	110.6	107.4	102.6	97.6	92.4
	kW	27.8	31.0	32.8	34.0	35.8	37.8	39.8	41.2	43.3	45.5	47.7
8	TC	149.6	140.2	135.4	132.2	127.4	122.5	117.5	114.2	109.0	103.8	97.5
	kW	28.4	31.6	33.4	34.6	36.5	38.4	40.5	41.9	44.0	46.2	48.5
10	TC	158.3	148.3	143.3	139.9	134.8	129.7	124.5	120.9	115.5	110.0	—
	kW	29.0	32.2	34.0	35.2	37.1	39.1	41.1	42.5	44.7	46.9	—

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD080 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz SI
CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	95.6	90.1	87.2	86.1	82.4	79.4	76.4	75.2	71.5	68.0	64.8
	kW	22.3	24.8	26.2	27.1	28.6	30.2	31.9	33.0	34.8	36.7	38.7
0	TC	102.6	96.5	93.5	92.1	88.2	84.9	81.8	80.4	76.3	72.8	70.7
	kW	22.8	25.3	26.7	27.7	29.1	30.7	32.4	33.5	35.3	37.2	39.0
2	TC	109.5	103.1	99.8	98.3	93.9	90.6	87.3	85.8	82.8	77.6	75.5
	kW	23.3	25.8	27.2	28.2	29.6	31.2	32.9	34.0	35.8	37.6	39.4
4	TC	117.0	109.8	107.2	104.5	101.4	96.2	94.2	90.4	88.0	82.7	80.3
	kW	23.9	26.4	27.8	28.7	30.2	31.7	33.4	34.5	36.3	38.2	39.9
6	TC	124.3	116.6	114.0	109.7	107.6	102.0	100.0	95.5	93.4	87.5	85.1
	kW	24.5	27.0	28.4	29.2	30.8	32.3	34.0	35.0	36.8	38.7	40.5
8	TC	131.6	123.3	120.3	117.2	113.7	109.8	103.7	102.3	98.6	92.4	90.2
	kW	25.1	27.6	29.0	29.9	31.4	32.9	34.5	35.6	37.4	39.2	41.1
10	TC	138.6	130.3	127.4	124.2	120.4	113.7	111.0	108.1	103.9	97.6	94.7
	kW	25.7	28.2	29.7	30.6	32.1	33.4	35.1	36.3	38.0	39.8	41.6

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	144.0	136.0	131.6	129.6	124.3	119.7	115.2	113.1	107.7	102.5	97.5
	kW	32.9	37.0	39.1	40.6	43.0	45.5	48.1	49.8	52.7	55.5	58.5
0	TC	153.7	145.4	140.9	138.8	132.9	128.1	123.3	121.2	114.9	109.7	106.4
	kW	33.5	37.6	39.7	41.2	43.6	46.1	48.6	50.4	53.2	56.1	58.8
2	TC	164.7	155.2	150.4	148.0	141.7	136.7	131.5	129.3	124.6	117.1	113.7
	kW	34.2	38.2	40.3	41.8	44.2	46.7	49.2	51.0	53.7	56.7	59.4
4	TC	175.6	164.9	161.0	157.0	152.4	145.1	141.7	136.2	132.5	124.9	120.9
	kW	34.9	38.8	41.0	42.5	44.8	47.3	49.8	51.6	54.3	57.3	60.0
6	TC	186.0	174.6	170.7	166.5	161.3	153.4	149.9	143.7	140.2	131.9	127.9
	kW	35.6	39.4	41.7	43.2	45.5	47.9	50.5	52.2	54.9	57.9	60.7
8	TC	196.1	183.9	179.4	174.9	169.7	164.0	157.8	153.0	147.4	141.5	132.3
	kW	36.3	40.1	42.4	43.8	46.2	48.6	51.1	52.8	55.6	58.5	61.4
10	TC	205.6	193.0	188.9	184.2	178.6	169.1	165.0	160.8	154.5	144.3	141.0
	kW	36.8	40.8	43.2	44.6	47.0	49.1	51.7	53.6	56.3	59.1	61.9

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD090 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz SI CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	124.3	116.6	113.0	111.4	106.7	102.8	98.8	97.0	92.2	87.2	82.6
	kW	33.3	37.3	39.5	41.0	43.4	45.9	48.5	50.3	53.2	56.0	59.0
0	TC	133.1	124.7	120.6	119.0	115.2	109.7	105.5	103.7	98.5	93.3	90.2
	kW	33.8	37.9	40.1	41.6	43.9	46.5	49.1	50.9	53.8	56.6	59.4
2	TC	141.7	132.8	129.9	125.8	121.3	118.4	112.5	110.3	104.7	101.2	94.9
	kW	34.5	38.5	40.7	42.2	44.6	47.1	49.7	51.4	54.3	57.3	60.0
4	TC	151.3	141.3	137.9	133.4	130.3	124.1	120.9	115.4	112.3	105.7	102.2
	kW	35.2	39.2	41.4	42.9	45.3	47.7	50.3	52.1	54.8	57.8	60.6
6	TC	160.3	149.5	145.9	142.1	137.7	130.7	127.6	121.7	118.6	111.5	108.0
	kW	35.9	39.8	42.1	43.5	45.9	48.3	51.0	52.7	55.4	58.4	61.3
8	TC	169.2	158.0	154.0	147.9	144.7	139.6	131.4	129.7	124.7	116.1	113.1
	kW	36.6	40.5	42.8	44.3	46.6	49.1	51.5	53.4	56.1	59.0	61.8
10	TC	177.3	165.1	161.1	157.3	152.5	143.0	139.3	134.9	129.8	125.0	114.4
	kW	37.1	41.2	43.6	45.1	47.3	49.8	52.2	53.9	56.7	59.6	62.6

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	143.3	135.2	130.8	129.0	123.6	119.1	114.6	112.5	107.2	101.8	97.0
	kW	26.8	30.3	32.3	33.6	35.7	37.9	40.2	41.7	44.1	46.5	48.8
0	TC	153.0	145.0	140.1	138.2	133.8	127.5	122.7	120.7	114.8	109.2	105.9
	kW	27.3	30.7	32.6	34.0	36.0	38.2	40.5	42.0	44.5	46.8	49.1
2	TC	164.1	154.4	151.1	146.3	141.2	137.9	131.2	128.8	124.2	117.1	113.3
	kW	27.7	31.2	33.1	34.4	36.4	38.6	40.8	42.3	44.8	47.1	49.7
4	TC	174.4	164.3	160.6	156.7	152.0	144.5	141.3	135.3	131.7	124.4	120.5
	kW	28.3	31.6	33.6	34.8	36.9	39.0	41.2	42.7	45.0	47.5	49.9
6	TC	185.6	173.8	169.9	165.6	160.9	153.2	149.5	143.1	139.4	131.5	127.6
	kW	28.9	32.2	34.1	35.3	37.4	39.4	41.6	43.1	45.4	47.9	50.3
8	TC	195.7	183.6	179.5	175.1	169.4	163.7	154.8	152.7	147.0	137.5	133.9
	kW	29.5	32.8	34.7	35.7	37.9	39.9	42.0	43.5	45.8	48.2	50.6
10	TC	204.0	192.6	188.1	183.9	177.6	171.7	162.7	159.1	153.4	147.4	137.8
	kW	30.1	33.2	35.3	36.5	38.5	40.2	42.5	43.9	46.2	48.7	51.0

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD100 CONDENSING UNIT CIRCUIT RATINGS, 60 Hz SI
CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	149.5	139.5	135.6	132.0	128.2	122.3	119.2	114.8	111.5	105.3	102.0
	kW	31.9	37.9	40.1	41.5	43.6	46.4	48.8	50.8	53.4	56.6	59.2
0	TC	159.4	149.4	145.3	141.7	137.4	132.2	127.9	124.0	119.7	113.8	109.6
	kW	32.7	38.7	40.6	42.1	44.7	47.1	49.5	51.5	54.1	57.3	60.0
2	TC	170.1	160.1	155.6	151.0	147.3	141.5	137.0	132.8	128.4	121.8	117.7
	kW	33.4	39.4	41.6	43.0	45.4	47.9	50.3	52.3	54.8	58.1	60.7
4	TC	179.2	169.2	166.5	161.7	157.7	151.1	146.6	142.7	137.4	131.7	125.9
	kW	34.1	40.1	42.4	43.8	46.2	48.7	51.0	52.8	55.4	58.2	61.1
6	TC	191.4	181.4	177.6	172.3	168.1	162.2	156.4	152.0	146.6	140.4	134.3
	kW	35.0	41.0	43.2	44.7	47.0	49.4	51.9	53.6	56.2	59.1	62.0
8	TC	203.5	193.5	188.8	184.2	178.5	172.4	166.3	161.8	155.8	149.3	142.9
	kW	35.9	41.9	44.1	45.5	47.7	50.1	52.6	54.1	57.1	59.9	62.9
10	TC	213.0	203.0	199.3	195.1	189.6	182.8	176.4	171.3	165.0	158.2	151.5
	kW	36.0	42.0	45.0	46.4	48.8	51.1	53.7	55.3	57.9	60.6	63.8

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	146.0	136.0	132.3	128.8	125.0	119.2	116.2	111.9	108.8	102.5	99.5
	kW	31.6	37.6	39.8	41.2	43.2	46.0	48.5	50.4	53.0	56.2	58.8
0	TC	155.9	145.9	141.9	138.4	134.1	129.0	124.8	121.0	116.9	111.1	107.0
	kW	32.3	38.3	40.3	41.8	44.3	46.8	49.1	51.1	53.7	56.9	59.6
2	TC	166.3	156.3	152.0	147.4	143.9	138.2	133.8	129.6	125.5	119.0	114.9
	kW	33.1	39.1	41.3	42.7	45.1	47.5	49.9	51.9	54.4	57.7	60.3
4	TC	173.9	163.9	162.7	158.0	154.1	147.7	143.3	139.4	134.3	128.8	123.0
	kW	33.7	39.7	42.1	43.5	45.8	48.3	50.6	52.4	55.0	57.9	60.7
6	TC	187.2	177.2	173.6	168.4	164.4	158.7	153.0	148.7	143.3	137.4	131.5
	kW	34.6	40.6	42.9	44.3	46.7	49.0	51.5	53.2	55.8	58.7	61.6
8	TC	199.3	189.3	184.8	180.3	174.8	168.7	162.8	158.4	152.6	146.3	140.0
	kW	35.5	41.5	43.8	45.2	47.4	49.7	52.2	53.7	56.7	59.5	62.5
10	TC	211.0	201.0	195.0	190.9	185.6	179.1	172.8	167.8	161.7	155.1	148.6
	kW	35.7	41.7	44.6	46.0	48.5	50.8	53.3	54.9	57.6	60.2	63.4

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD,APS025 CONDENSING UNIT RATINGS, 50 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	173.5	162.7	157.2	151.6	145.8	139.9	133.9	127.9	121.7	115.4	109.0
	kW	13.2	14.7	15.6	16.4	17.3	18.2	19.1	20.1	21.0	22.0	22.9
25	TC	192.8	181.2	175.3	169.2	163.1	156.8	150.4	143.9	137.3	130.6	123.8
	kW	13.4	15.0	15.8	16.7	17.6	18.5	19.5	20.5	21.5	22.5	23.5
30	TC	213.5	201.0	194.6	188.1	181.5	174.8	168.0	161.0	153.9	146.7	139.4
	kW	13.6	15.2	16.1	17.0	17.9	18.8	19.8	20.8	21.9	22.9	24.0
35	TC	235.4	221.9	215.0	207.9	200.8	193.6	186.3	178.8	171.2	163.5	155.5
	kW	13.9	15.5	16.3	17.2	18.1	19.1	20.1	21.1	22.2	23.2	24.3
40	TC	258.1	243.4	235.8	228.1	220.5	212.8	204.9	196.9	188.7	180.3	171.7
	kW	14.1	15.7	16.5	17.4	18.3	19.3	20.3	21.4	22.4	23.5	24.7
45	TC	281.1	264.8	256.3	248.1	239.8	231.5	222.9	214.2	205.4	196.4	187.1
	kW	14.3	15.9	16.7	17.6	18.6	19.5	20.5	21.6	22.7	23.8	24.9
50	TC	303.3	285.0	275.7	266.9	258.0	248.9	239.6	230.2	220.7	210.9	201.0
	kW	14.6	16.1	17.0	17.9	18.8	19.8	20.8	21.8	22.9	24.0	25.2

38APD,APS027 CONDENSING UNIT RATINGS, 50 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	197.4	186.5	180.9	175.2	169.5	163.7	157.9	152.0	145.9	139.8	133.6
	kW	14.4	16.1	16.9	17.9	18.8	19.9	20.9	22.1	23.2	24.5	25.7
25	TC	218.3	206.4	200.3	194.1	187.9	181.6	175.2	168.7	162.1	155.4	148.6
	kW	14.8	16.4	17.3	18.2	19.2	20.2	21.3	22.4	23.6	24.8	26.1
30	TC	240.5	227.4	220.7	214.0	207.2	200.3	193.4	186.3	179.1	171.8	164.4
	kW	15.2	16.8	17.7	18.6	19.6	20.6	21.7	22.8	24.0	25.2	26.5
35	TC	263.7	249.3	241.9	234.5	227.1	219.7	212.1	204.4	196.6	188.6	180.4
	kW	15.6	17.2	18.1	19.0	20.0	21.0	22.1	23.2	24.3	25.6	26.8
40	TC	287.3	271.3	263.1	255.1	247.1	239.0	230.9	222.5	214.0	205.3	196.3
	kW	16.1	17.7	18.5	19.4	20.4	21.4	22.5	23.6	24.7	25.9	27.2
45	TC	310.8	293.0	284.0	275.4	266.7	257.9	249.0	239.9	230.7	221.4	211.8
	kW	16.6	18.1	19.0	19.9	20.8	21.8	22.9	24.0	25.1	26.3	27.6
50	TC	333.7	313.8	304.5	295.1	285.6	276.0	266.3	256.5	246.5	236.4	226.0
	kW	17.1	18.6	19.5	20.4	21.3	22.3	23.3	24.4	25.6	26.7	28.0

38APD,APS030 CONDENSING UNIT RATINGS, 50 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	229.7	217.2	210.9	204.5	198.0	191.5	184.8	178.0	171.2	164.2	157.2
	kW	17.3	19.3	20.3	21.5	22.7	24.0	25.3	26.7	28.1	29.6	31.2
25	TC	254.0	240.5	233.6	226.6	219.6	212.5	205.2	197.9	190.5	182.9	175.2
	kW	17.8	19.7	20.8	21.9	23.2	24.4	25.8	27.1	28.6	30.1	31.7
30	TC	279.7	264.9	257.4	249.9	242.3	234.6	226.8	218.8	210.7	202.5	194.1
	kW	18.2	20.2	21.3	22.4	23.6	24.9	26.2	27.6	29.1	30.6	32.2
35	TC	306.0	290.0	281.8	273.8	265.7	257.4	249.0	240.4	231.7	222.7	213.6
	kW	18.7	20.7	21.8	22.9	24.1	25.4	26.7	28.1	29.5	31.1	32.6
40	TC	332.5	315.0	306.3	297.8	289.1	280.3	271.4	262.2	252.8	243.2	233.3
	kW	19.3	21.2	22.3	23.4	24.6	25.9	27.2	28.6	30.0	31.6	33.1
45	TC	358.6	339.6	330.4	321.3	312.0	302.7	293.2	283.5	273.6	263.4	252.8
	kW	19.9	21.8	22.9	24.0	25.2	26.4	27.7	29.1	30.6	32.1	33.6
50	TC	384.2	363.9	354.3	344.6	334.7	324.7	314.6	304.3	293.7	282.8	271.6
	kW	20.5	22.4	23.5	24.6	25.8	27.0	28.3	29.7	31.1	32.6	34.1

LEGEND

- kW** — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

38APD040 CONDENSING UNIT RATINGS, 50 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	285.8	268.5	259.6	250.6	241.5	232.0	222.4	212.8	202.8	192.9	182.5
	kW	20.5	23.1	24.6	26.0	27.5	29.1	30.7	32.3	34.0	35.7	37.4
25	TC	316.7	298.2	288.5	278.8	269.0	259.0	248.7	238.4	227.5	216.8	205.6
	kW	20.9	23.6	25.0	26.5	28.0	29.6	31.3	33.0	34.7	36.5	38.3
30	TC	349.8	329.6	319.3	308.8	298.0	287.1	276.3	265.0	253.6	241.6	229.8
	kW	21.3	24.0	25.4	26.9	28.5	30.1	31.8	33.5	35.3	37.1	39.0
35	TC	384.9	362.7	351.6	340.1	328.4	316.6	304.6	292.7	280.3	267.2	254.1
	kW	21.7	24.4	25.9	27.4	28.9	30.6	32.3	34.1	35.9	37.7	39.7
40	TC	421.4	397.6	385.0	372.3	359.6	346.7	334.2	321.0	307.8	294.1	278.8
	kW	22.1	24.8	26.3	27.8	29.4	31.1	32.8	34.6	36.4	38.3	40.3
45	TC	459.0	433.0	418.8	405.0	391.1	377.6	363.5	349.3	334.8	319.0	304.6
	kW	22.6	25.3	26.7	28.3	29.9	31.5	33.3	35.1	36.9	38.8	40.8
50	TC	497.2	467.9	453.4	438.6	423.7	408.8	392.0	376.9	361.4	343.9	328.6
	kW	23.1	25.8	27.2	28.8	30.4	32.0	33.7	35.6	37.4	39.3	41.3

38APS040 CONDENSING UNIT RATINGS, 50 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	288.9	273.0	264.2	255.8	247.2	238.5	229.8	220.9	211.8	202.6	193.4
	kW	20.0	22.3	23.6	24.9	26.3	27.8	29.3	30.9	32.6	34.4	36.2
25	TC	319.2	301.8	292.3	283.0	273.6	264.0	254.4	244.6	234.6	224.8	214.6
	kW	20.5	22.8	24.1	25.4	26.8	28.3	29.8	31.4	33.1	34.9	36.7
30	TC	352.7	332.4	322.1	311.9	301.6	291.1	280.4	269.7	258.7	248.1	236.8
	kW	21.1	23.4	24.7	26.0	27.4	28.8	30.4	32.0	33.7	35.4	37.3
35	TC	386.2	364.9	353.5	342.3	330.9	319.4	307.7	296.3	284.4	272.5	260.3
	kW	21.7	24.0	25.3	26.6	28.0	29.4	31.0	32.6	34.3	36.0	37.9
40	TC	422.9	399.0	386.5	374.1	361.5	349.0	336.8	324.0	311.1	298.1	284.8
	kW	22.3	24.6	25.9	27.2	28.6	30.1	31.6	33.2	34.9	36.7	38.5
45	TC	461.3	434.3	420.8	407.2	393.6	380.5	366.7	352.8	339.0	324.6	308.7
	kW	23.1	25.4	26.6	27.9	29.3	30.8	32.3	33.9	35.6	37.3	39.2
50	TC	501.1	471.5	456.6	441.8	427.9	412.9	398.0	382.9	367.5	350.4	334.1
	kW	23.8	26.1	27.4	28.7	30.1	31.5	33.0	34.6	36.3	38.0	39.8

38APD050 CONDENSING UNIT RATINGS, 50 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	368.2	346.3	335.3	324.0	312.4	301.0	288.9	277.1	264.8	252.3	241.2
	kW	28.6	31.9	33.6	35.5	37.4	39.3	41.4	43.5	45.6	47.9	50.2
25	TC	407.5	383.6	371.7	359.5	347.2	334.2	321.7	308.6	295.7	282.1	268.0
	kW	29.2	32.6	34.3	36.2	38.1	40.1	42.2	44.3	46.6	48.8	51.1
30	TC	449.1	423.5	410.0	397.0	383.5	369.9	356.0	341.5	326.9	312.7	297.3
	kW	29.9	33.3	35.0	36.9	38.9	40.9	43.0	45.2	47.4	49.7	52.1
35	TC	493.0	464.9	450.4	435.9	421.1	406.6	391.4	376.3	360.8	344.1	328.5
	kW	30.7	34.0	35.8	37.7	39.6	41.7	43.8	46.0	48.3	50.6	53.0
40	TC	538.8	507.9	491.9	476.0	460.5	444.3	427.8	411.2	394.1	375.5	357.4
	kW	31.4	34.7	36.5	38.4	40.4	42.4	44.6	46.8	49.1	51.4	53.8
45	TC	585.2	551.8	533.8	516.8	499.2	482.3	464.1	445.7	426.9	407.3	388.0
	kW	32.2	35.5	37.3	39.2	41.2	43.2	45.3	47.6	49.8	52.2	54.6
50	TC	632.6	595.6	576.5	558.7	539.4	520.2	500.1	480.2	459.0	439.1	419.1
	kW	33.0	36.3	38.1	40.0	42.0	44.0	46.1	48.3	50.6	53.0	55.4

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APS050 CONDENSING UNIT RATINGS, 50 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	341.3	320.9	311.2	296.6	286.8	277.0	267.2	258.3	252.9	241.7	230.5
	kW	25.9	28.9	30.5	32.1	34.0	36.0	38.0	39.8	42.0	44.2	46.6
25	TC	384.3	361.9	350.6	338.6	330.5	319.7	305.9	292.1	278.3	265.1	257.3
	kW	26.9	29.8	31.4	33.1	35.1	37.0	39.0	41.0	43.0	44.8	47.2
30	TC	422.8	399.6	387.2	375.7	362.8	351.2	337.9	325.9	311.8	293.5	275.2
	kW	27.5	30.6	32.2	33.9	35.6	37.5	39.4	41.5	43.5	45.6	47.7
35	TC	464.2	438.9	426.4	413.4	400.1	385.9	372.0	359.0	344.8	330.3	315.4
	kW	28.2	31.3	32.9	34.6	36.4	38.2	40.2	42.2	44.3	46.5	48.7
40	TC	508.3	480.7	465.9	451.5	437.6	422.9	408.1	392.9	376.3	360.1	345.0
	kW	29.0	32.0	33.6	35.3	37.1	39.0	40.9	42.9	45.0	47.1	49.4
45	TC	552.8	522.6	506.4	490.6	474.5	459.1	442.6	426.2	407.7	389.9	373.3
	kW	29.8	32.8	34.4	36.0	37.8	39.6	41.6	43.6	45.6	47.8	50.0
50	TC	598.1	564.5	546.3	529.7	512.0	494.1	476.1	456.2	437.3	419.7	400.0
	kW	30.6	33.6	35.1	36.8	38.6	40.4	42.3	44.2	46.3	48.4	50.6

38APD060 CONDENSING UNIT RATINGS, 50 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	424.9	401.4	389.4	377.5	365.4	353.1	340.3	328.1	315.4	301.4	289.7
	kW	31.8	35.4	37.3	39.3	41.4	43.7	46.0	48.5	51.1	53.7	56.7
25	TC	469.4	443.5	430.5	417.3	404.0	390.5	377.2	363.6	349.2	335.5	320.4
	kW	32.7	36.3	38.2	40.2	42.3	44.6	46.9	49.4	52.0	54.7	57.5
30	TC	516.4	488.0	473.9	459.5	445.0	430.3	415.5	400.8	385.6	370.3	353.9
	kW	33.7	37.2	39.1	41.1	43.3	45.5	47.9	50.3	52.9	55.6	58.4
35	TC	565.7	534.3	519.2	503.5	487.8	471.9	455.7	439.3	422.9	405.9	389.2
	kW	34.7	38.2	40.1	42.1	44.3	46.5	48.9	51.3	53.9	56.6	59.4
40	TC	616.7	582.8	565.8	548.8	531.7	514.5	497.0	479.2	461.4	443.0	424.4
	kW	35.7	39.3	41.2	43.2	45.3	47.6	49.9	52.4	54.9	57.6	60.4
45	TC	669.3	632.4	613.5	595.1	576.5	557.9	538.9	519.9	500.5	480.3	460.6
	kW	36.9	40.4	42.3	44.3	46.4	48.7	51.0	53.5	56.0	58.7	61.5
50	TC	724.5	691.0	657.4	643.2	622.3	602.9	581.2	561.4	539.6	519.1	497.0
	kW	38.2	40.8	43.5	45.6	47.7	49.9	52.2	54.6	57.2	59.8	62.5

38APD070 CONDENSING UNIT RATINGS, 50 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	510.1	477.8	461.3	444.4	431.8	410.1	393.0	380.0	356.1	338.2	325.5
	kW	39.8	44.5	46.9	49.5	52.0	54.8	57.5	60.1	63.0	65.7	68.4
25	TC	565.5	531.3	518.1	496.1	482.5	463.7	439.6	426.1	400.9	387.7	360.2
	kW	40.8	45.5	48.0	50.7	53.2	56.0	58.9	61.8	64.7	67.5	70.6
30	TC	622.2	587.5	573.6	554.9	535.5	510.4	495.9	470.9	455.0	428.9	412.6
	kW	41.7	46.6	49.1	51.8	54.6	57.5	60.2	63.4	66.3	69.6	72.5
35	TC	687.3	646.4	631.0	610.5	589.2	568.6	548.1	520.3	503.7	477.7	458.8
	kW	42.8	47.7	50.3	53.0	55.7	58.6	61.7	64.9	67.8	71.2	74.2
40	TC	750.7	707.0	690.1	667.6	645.1	624.3	601.8	577.5	554.1	530.4	506.1
	kW	43.9	48.9	51.5	54.2	57.0	60.0	63.1	66.0	69.2	72.6	75.8
45	TC	818.3	766.9	750.5	726.2	702.0	678.1	655.5	631.1	605.0	579.0	553.9
	kW	45.1	50.0	52.7	55.5	58.3	61.2	64.4	67.6	70.7	74.0	77.5
50	TC	885.6	843.4	806.5	786.1	760.2	734.8	710.3	684.4	656.7	627.9	602.1
	kW	46.4	51.7	53.9	56.8	59.6	62.6	65.8	69.0	72.2	75.4	79.0

LEGEND

- kW** — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

38APD080 CONDENSING UNIT RATINGS, 50 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	573.7	541.2	524.9	508.5	491.8	475.7	458.7	441.4	423.6	405.7	387.6
	kW	43.3	48.2	50.8	53.6	56.6	59.6	62.9	66.2	69.7	73.3	77.1
25	TC	632.9	598.5	580.9	563.1	545.1	526.6	508.6	489.8	470.6	451.1	431.3
	kW	44.3	49.3	51.9	54.7	57.7	60.7	64.0	67.3	70.8	74.5	78.3
30	TC	696.9	659.3	640.0	620.5	600.7	580.7	560.3	540.3	519.4	498.1	476.4
	kW	45.5	50.4	53.1	55.9	58.8	61.9	65.1	68.5	72.0	75.7	79.5
35	TC	763.5	722.2	701.1	679.8	658.2	636.3	614.1	591.6	569.3	546.0	522.3
	kW	46.7	51.6	54.2	57.0	60.0	63.1	66.3	69.6	73.2	76.8	80.6
40	TC	831.8	786.5	763.2	739.9	716.3	692.5	668.3	643.7	618.7	593.2	568.2
	kW	48.0	52.8	55.5	58.3	61.2	64.3	67.5	70.8	74.3	78.0	81.7
45	TC	900.2	850.5	824.9	799.4	773.7	747.7	721.4	694.8	667.8	640.3	612.3
	kW	49.3	54.2	56.8	59.6	62.5	65.6	68.7	72.1	75.5	79.2	82.9
50	TC	967.5	914.3	886.3	858.4	830.3	802.1	773.4	744.5	715.1	685.5	654.6
	kW	50.8	55.6	58.2	61.0	63.9	66.9	70.0	73.3	76.8	80.4	84.1

38APD090 CONDENSING UNIT RATINGS, 50 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	639.9	605.8	587.7	569.6	551.0	532.2	513.0	493.7	472.1	451.8	430.1
	kW	47.1	52.9	56.0	59.3	62.7	66.3	70.0	73.8	77.6	81.5	85.5
25	TC	707.3	669.1	649.5	629.8	609.8	589.4	568.6	547.8	526.3	502.7	480.1
	kW	48.1	53.8	56.9	60.2	63.6	67.2	70.9	74.8	78.7	82.7	86.8
30	TC	778.8	736.1	715.0	693.6	671.9	649.8	627.1	604.1	580.8	556.8	531.6
	kW	49.2	54.8	57.9	61.2	64.6	68.2	71.9	75.7	79.7	83.8	88.0
35	TC	853.0	806.3	783.3	759.8	735.8	711.6	687.0	661.8	636.2	610.2	583.5
	kW	50.3	55.9	59.0	62.2	65.6	69.2	72.8	76.7	80.7	84.8	89.0
40	TC	932.6	877.1	852.3	826.1	800.1	773.5	746.7	719.1	691.2	662.9	633.7
	kW	51.7	57.1	60.2	63.4	66.7	70.2	73.9	77.7	81.7	85.8	90.0
45	TC	1009.0	947.6	919.7	891.3	862.4	833.2	804.2	774.4	744.2	713.2	681.8
	kW	53.1	58.4	61.4	64.6	67.9	71.4	75.0	78.8	82.7	86.7	90.9
50	TC	1083.4	1015.2	985.2	953.9	921.5	889.9	857.7	825.3	792.8	759.9	725.7
	kW	54.6	59.8	62.8	65.9	69.2	72.6	76.2	79.9	83.8	87.8	91.9

38APD100 CONDENSING UNIT RATINGS, 50 Hz ENGLISH

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	692.1	653.6	634.3	615.0	595.4	575.5	555.4	534.9	514.1	493.2	471.7
	kW	52.5	58.4	61.6	65.0	68.5	72.2	76.1	80.2	84.4	88.9	93.5
25	TC	762.0	724.0	703.1	682.0	660.6	638.9	616.8	594.5	571.9	548.8	525.5
	kW	54.0	59.9	63.1	66.4	70.0	73.7	77.6	81.7	86.0	90.4	95.1
30	TC	844.2	799.2	776.5	753.4	729.9	706.2	682.2	657.9	633.1	608.0	582.2
	kW	55.5	61.4	64.6	68.0	71.5	75.3	79.2	83.3	87.5	92.0	96.7
35	TC	927.9	878.8	853.9	828.6	803.1	777.2	751.0	724.4	697.4	669.9	641.7
	kW	57.2	63.1	66.3	69.7	73.2	76.9	80.8	84.9	89.2	93.6	98.3
40	TC	1015.6	961.9	934.7	907.2	879.4	851.4	822.7	793.7	764.3	734.1	703.4
	kW	58.9	64.8	68.0	71.4	74.9	78.7	82.6	86.6	90.9	95.3	99.9
45	TC	1106.2	1047.8	1018.1	988.2	957.9	927.3	896.2	864.8	832.7	799.9	765.9
	kW	60.7	66.7	69.9	73.2	76.8	80.5	84.4	88.4	92.6	97.0	101.6
50	TC	1199.4	1135.8	1103.5	1070.9	1037.9	1004.6	970.8	936.7	901.7	866.0	828.8
	kW	62.8	68.7	71.8	75.2	78.7	82.4	86.2	90.3	94.5	98.8	103.4

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD025 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz ENGLISH

CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	86.8	81.4	78.6	75.8	72.9	70.0	67.0	63.9	60.8	57.7	54.5
	kW	6.6	7.4	7.8	8.2	8.6	9.1	9.6	10.0	10.5	11.0	11.5
25	TC	96.4	90.6	87.7	84.6	81.5	78.4	75.2	72.0	68.7	65.3	61.9
	kW	6.7	7.5	7.9	8.3	8.8	9.3	9.8	10.2	10.7	11.2	11.7
30	TC	106.7	100.5	97.3	94.1	90.8	87.4	84.0	80.5	76.9	73.3	69.7
	kW	6.8	7.6	8.0	8.5	8.9	9.4	9.9	10.4	10.9	11.5	12.0
35	TC	117.7	110.9	107.5	104.0	100.4	96.8	93.2	89.4	85.6	81.7	77.8
	kW	6.9	7.7	8.2	8.6	9.1	9.5	10.0	10.6	11.1	11.6	12.2
40	TC	129.1	121.7	117.9	114.1	110.3	106.4	102.5	98.5	94.4	90.2	85.9
	kW	7.0	7.8	8.3	8.7	9.2	9.7	10.2	10.7	11.2	11.8	12.3
45	TC	140.6	132.4	128.2	124.0	119.9	115.7	111.5	107.1	102.7	98.2	93.6
	kW	7.2	7.9	8.4	8.8	9.3	9.8	10.3	10.8	11.3	11.9	12.5
50	TC	151.7	142.5	137.9	133.5	129.0	124.4	119.8	115.1	110.3	105.5	100.5
	kW	7.3	8.1	8.5	8.9	9.4	9.9	10.4	10.9	11.5	12.0	12.6

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	86.8	81.4	78.6	75.8	72.9	70.0	67.0	63.9	60.8	57.7	54.5
	kW	6.6	7.4	7.8	8.2	8.6	9.1	9.6	10.0	10.5	11.0	11.5
25	TC	96.4	90.6	87.7	84.6	81.5	78.4	75.2	72.0	68.7	65.3	61.9
	kW	6.7	7.5	7.9	8.3	8.8	9.3	9.8	10.2	10.7	11.2	11.7
30	TC	106.7	100.5	97.3	94.1	90.8	87.4	84.0	80.5	76.9	73.3	69.7
	kW	6.8	7.6	8.0	8.5	8.9	9.4	9.9	10.4	10.9	11.5	12.0
35	TC	117.7	110.9	107.5	104.0	100.4	96.8	93.2	89.4	85.6	81.7	77.8
	kW	6.9	7.7	8.2	8.6	9.1	9.5	10.0	10.6	11.1	11.6	12.2
40	TC	129.1	121.7	117.9	114.1	110.3	106.4	102.5	98.5	94.4	90.2	85.9
	kW	7.0	7.8	8.3	8.7	9.2	9.7	10.2	10.7	11.2	11.8	12.3
45	TC	140.6	132.4	128.2	124.0	119.9	115.7	111.5	107.1	102.7	98.2	93.6
	kW	7.2	7.9	8.4	8.8	9.3	9.8	10.3	10.8	11.3	11.9	12.5
50	TC	151.7	142.5	137.9	133.5	129.0	124.4	119.8	115.1	110.3	105.5	100.5
	kW	7.3	8.1	8.5	8.9	9.4	9.9	10.4	10.9	11.5	12.0	12.6

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

**38APD027 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz ENGLISH****CIRCUIT A**

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	98.8	93.4	90.6	87.8	84.9	82.0	79.1	76.1	73.1	70.0	66.9
	kW	7.2	8.0	8.5	8.9	9.4	9.9	10.5	11.0	11.6	12.3	12.9
25	TC	109.4	103.4	100.4	97.3	94.2	91.0	87.8	84.6	81.3	78.0	74.6
	kW	7.4	8.2	8.7	9.1	9.6	10.1	10.7	11.2	11.8	12.4	13.1
30	TC	120.6	114.0	110.7	107.4	104.0	100.6	97.1	93.6	90.0	86.4	82.6
	kW	7.6	8.4	8.8	9.3	9.8	10.3	10.8	11.4	12.0	12.6	13.2
35	TC	132.3	125.2	121.5	117.8	114.2	110.5	106.7	102.9	99.0	95.0	90.9
	kW	7.8	8.6	9.0	9.5	10.0	10.5	11.0	11.6	12.2	12.8	13.4
40	TC	144.4	136.5	132.5	128.5	124.5	120.5	116.4	112.3	108.0	103.7	99.2
	kW	8.0	8.8	9.2	9.7	10.2	10.7	11.2	11.8	12.4	13.0	13.6
45	TC	156.4	147.6	143.2	138.9	134.6	130.2	125.8	121.3	116.7	112.1	107.3
	kW	8.3	9.0	9.5	9.9	10.4	10.9	11.4	12.0	12.6	13.2	13.8
50	TC	168.1	158.3	153.7	149.0	144.3	139.6	134.8	129.9	125.0	119.9	114.8
	kW	8.5	9.3	9.7	10.2	10.6	11.1	11.7	12.2	12.8	13.4	14.0

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	98.6	93.1	90.3	87.5	84.6	81.7	78.8	75.9	72.8	69.8	66.7
	kW	7.2	8.0	8.5	8.9	9.4	9.9	10.5	11.0	11.6	12.2	12.8
25	TC	108.9	103.0	99.9	96.8	93.7	90.5	87.4	84.1	80.8	77.5	74.0
	kW	7.4	8.2	8.6	9.1	9.6	10.1	10.6	11.2	11.8	12.4	13.0
30	TC	119.9	113.4	110.0	106.6	103.2	99.8	96.3	92.7	89.1	85.5	81.7
	kW	7.6	8.4	8.8	9.3	9.8	10.3	10.8	11.4	12.0	12.6	13.2
35	TC	131.4	124.1	120.4	116.6	112.9	109.2	105.4	101.5	97.6	93.6	89.5
	kW	7.8	8.6	9.1	9.5	10.0	10.5	11.0	11.6	12.2	12.8	13.4
40	TC	142.9	134.8	130.7	126.6	122.6	118.5	114.4	110.3	106.0	101.6	97.1
	kW	8.0	8.8	9.3	9.7	10.2	10.7	11.2	11.8	12.4	13.0	13.6
45	TC	154.4	145.4	140.8	136.5	132.1	127.7	123.2	118.7	114.0	109.3	104.5
	kW	8.3	9.1	9.5	9.9	10.4	10.9	11.5	12.0	12.6	13.2	13.8
50	TC	165.6	155.5	150.8	146.0	141.2	136.4	131.5	126.5	121.5	116.4	111.2
	kW	8.5	9.3	9.7	10.2	10.7	11.2	11.7	12.2	12.8	13.4	14.0

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD030 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz ENGLISH CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	114.8	108.5	105.4	102.2	98.9	95.7	92.3	88.9	85.5	82.0	78.5
	kW	8.6	9.6	10.1	10.7	11.3	11.9	12.6	13.3	14.0	14.7	15.6
25	TC	126.9	120.2	116.7	113.3	109.7	106.2	102.6	98.9	95.2	91.4	87.5
	kW	8.8	9.8	10.3	10.9	11.5	12.1	12.8	13.5	14.2	15.0	15.8
30	TC	139.8	132.4	128.6	124.9	121.1	117.3	113.4	109.4	105.4	101.2	97.0
	kW	9.1	10.0	10.6	11.1	11.7	12.4	13.0	13.7	14.5	15.2	16.0
35	TC	152.9	144.9	140.8	136.9	132.8	128.7	124.5	120.2	115.9	111.4	106.8
	kW	9.3	10.3	10.8	11.4	12.0	12.6	13.3	14.0	14.7	15.4	16.2
40	TC	166.1	157.4	153.0	148.8	144.5	140.1	135.7	131.1	126.5	121.7	116.7
	kW	9.6	10.5	11.1	11.6	12.2	12.8	13.5	14.2	14.9	15.7	16.5
45	TC	179.0	169.5	164.9	160.4	155.8	151.2	146.5	141.7	136.8	131.8	126.5
	kW	9.9	10.8	11.3	11.9	12.5	13.1	13.8	14.4	15.2	15.9	16.7
50	TC	191.5	181.4	176.7	171.9	167.1	162.1	157.1	152.0	146.8	141.4	135.9
	kW	10.2	11.1	11.7	12.2	12.8	13.4	14.0	14.7	15.4	16.2	16.9

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	114.9	108.7	105.5	102.3	99.1	95.8	92.5	89.1	85.7	82.2	78.7
	kW	8.7	9.7	10.2	10.8	11.4	12.0	12.7	13.4	14.1	14.9	15.7
25	TC	127.1	120.3	116.9	113.4	109.9	106.3	102.7	99.0	95.3	91.5	87.6
	kW	8.9	9.9	10.5	11.0	11.6	12.3	13.0	13.6	14.4	15.1	15.9
30	TC	139.9	132.5	128.8	125.0	121.2	117.3	113.4	109.4	105.4	101.3	97.1
	kW	9.2	10.2	10.7	11.3	11.9	12.5	13.2	13.9	14.6	15.4	16.2
35	TC	153.1	145.1	141.0	137.0	132.9	128.7	124.5	120.2	115.8	111.3	106.8
	kW	9.4	10.4	11.0	11.5	12.1	12.8	13.4	14.1	14.9	15.6	16.4
40	TC	166.4	157.6	153.3	149.0	144.6	140.2	135.7	131.1	126.4	121.5	116.5
	kW	9.7	10.7	11.2	11.8	12.4	13.0	13.7	14.4	15.1	15.9	16.7
45	TC	179.6	170.1	165.5	160.9	156.2	151.5	146.7	141.8	136.8	131.6	126.3
	kW	10.0	11.0	11.5	12.1	12.7	13.3	14.0	14.7	15.4	16.1	16.9
50	TC	192.7	182.5	177.6	172.7	167.7	162.6	157.5	152.2	146.9	141.4	135.7
	kW	10.3	11.3	11.8	12.4	13.0	13.6	14.3	14.9	15.7	16.4	17.2

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD040 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz ENGLISH
CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	152.9	143.3	138.3	133.3	128.1	122.8	117.4	112.1	106.4	101.0	95.0
	kW	11.2	12.6	13.4	14.1	14.9	15.7	16.5	17.3	18.1	19.0	19.8
25	TC	169.8	159.3	153.9	148.5	143.0	137.5	131.8	126.0	119.9	114.0	107.7
	kW	11.5	12.9	13.6	14.4	15.2	16.0	16.9	17.7	18.6	19.5	20.3
30	TC	187.6	176.3	170.6	164.8	158.8	152.7	146.7	140.5	134.2	127.5	121.1
	kW	11.7	13.2	13.9	14.7	15.5	16.4	17.2	18.1	19.0	19.9	20.9
35	TC	206.6	194.2	188.1	181.8	175.3	168.8	162.1	155.6	148.8	141.5	134.3
	kW	12.0	13.4	14.2	15.0	15.8	16.7	17.6	18.5	19.4	20.3	21.3
40	TC	226.3	213.2	206.2	199.3	192.3	185.2	178.3	171.0	163.8	156.2	147.9
	kW	12.2	13.7	14.5	15.3	16.1	17.0	17.9	18.8	19.8	20.7	21.7
45	TC	246.6	232.3	224.5	217.0	209.4	202.1	194.4	186.7	178.7	169.7	162.0
	kW	12.5	14.0	14.7	15.5	16.4	17.3	18.2	19.1	20.1	21.1	22.1
50	TC	267.2	251.1	243.3	235.3	227.1	218.9	209.9	201.3	193.1	183.7	175.2
	kW	12.8	14.2	15.0	15.8	16.7	17.6	18.5	19.4	20.4	21.4	22.4

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	132.9	125.2	121.3	117.4	113.4	109.2	105.0	100.8	96.4	92.0	87.5
	kW	9.2	10.5	11.2	11.9	12.6	13.4	14.2	15.0	15.9	16.8	17.7
25	TC	146.9	138.9	134.6	130.3	126.0	121.5	117.0	112.4	107.6	102.8	98.0
	kW	9.4	10.7	11.3	12.0	12.8	13.6	14.4	15.2	16.1	17.0	17.9
30	TC	162.2	153.3	148.7	144.0	139.2	134.4	129.5	124.5	119.4	114.1	108.7
	kW	9.6	10.8	11.5	12.2	13.0	13.7	14.6	15.4	16.3	17.2	18.1
35	TC	178.3	168.4	163.5	158.3	153.1	147.8	142.5	137.1	131.6	125.7	119.8
	kW	9.7	11.0	11.7	12.4	13.1	13.9	14.7	15.6	16.5	17.4	18.4
40	TC	195.1	184.4	178.8	173.1	167.3	161.5	155.9	150.0	144.0	137.9	130.9
	kW	9.9	11.2	11.8	12.6	13.3	14.1	14.9	15.8	16.7	17.6	18.5
45	TC	212.4	200.7	194.3	188.0	181.7	175.5	169.2	162.7	156.1	149.3	142.7
	kW	10.1	11.3	12.0	12.7	13.5	14.3	15.1	16.0	16.8	17.8	18.7
50	TC	230.0	216.8	210.1	203.4	196.6	189.9	182.1	175.6	168.3	160.2	153.4
	kW	10.3	11.5	12.2	12.9	13.7	14.5	15.3	16.1	17.0	17.9	18.9

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD050 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz ENGLISH

CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	173.2	162.5	157.0	151.4	145.5	139.9	133.8	127.9	121.6	115.2	110.2
	kW	13.4	15.0	15.9	16.8	17.7	18.6	19.6	20.6	21.5	22.5	23.6
25	TC	192.1	180.4	174.6	168.6	162.5	156.1	149.9	143.5	136.9	130.2	123.0
	kW	13.6	15.2	16.1	17.0	18.0	18.9	19.9	21.0	22.0	23.1	24.1
30	TC	212.2	199.8	193.2	186.8	180.2	173.5	166.6	159.5	152.3	145.2	137.8
	kW	13.8	15.5	16.3	17.3	18.2	19.2	20.3	21.3	22.4	23.5	24.6
35	TC	233.4	219.9	212.9	205.8	198.6	191.5	184.1	176.7	169.1	160.9	153.4
	kW	14.0	15.7	16.6	17.5	18.5	19.5	20.6	21.6	22.7	23.8	25.0
40	TC	255.6	240.9	233.2	225.5	217.9	210.1	202.2	194.2	186.0	176.9	168.2
	kW	14.2	15.9	16.8	17.7	18.7	19.8	20.8	21.9	23.0	24.2	25.3
45	TC	278.5	262.3	253.8	245.5	237.0	228.9	220.3	211.6	202.0	192.8	183.9
	kW	14.4	16.1	17.0	18.0	19.0	20.0	21.1	22.2	23.3	24.4	25.6
50	TC	301.7	284.1	274.6	266.1	256.9	247.8	238.5	228.2	218.5	209.4	199.1
	kW	14.7	16.3	17.2	18.2	19.2	20.2	21.3	22.4	23.5	24.7	25.9

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	194.9	183.8	178.3	172.6	166.9	161.1	155.1	149.2	143.2	137.1	131.0
	kW	15.2	16.9	17.8	18.7	19.7	20.7	21.8	22.9	24.1	25.3	26.6
25	TC	215.3	203.2	197.1	190.9	184.7	178.1	171.8	165.1	158.8	151.9	145.0
	kW	15.7	17.3	18.2	19.2	20.1	21.2	22.3	23.4	24.6	25.8	27.0
30	TC	236.9	223.7	216.8	210.2	203.3	196.4	189.4	182.0	174.6	167.5	159.5
	kW	16.2	17.8	18.7	19.6	20.6	21.7	22.7	23.9	25.0	26.3	27.5
35	TC	259.6	245.0	237.5	230.1	222.4	215.1	207.4	199.6	191.6	183.2	175.0
	kW	16.7	18.3	19.2	20.1	21.1	22.2	23.2	24.4	25.5	26.7	28.0
40	TC	283.2	267.1	258.7	250.5	242.6	234.2	225.6	217.0	208.1	198.6	189.3
	kW	17.2	18.8	19.7	20.7	21.7	22.7	23.8	24.9	26.0	27.2	28.4
45	TC	306.7	289.5	280.1	271.3	262.2	253.4	243.8	234.0	224.9	214.4	204.1
	kW	17.8	19.4	20.3	21.2	22.2	23.2	24.3	25.4	26.5	27.7	28.9
50	TC	331.0	311.5	301.9	292.6	282.4	272.4	261.6	252.0	240.5	229.7	220.0
	kW	18.4	20.0	20.9	21.8	22.8	23.8	24.8	25.9	27.1	28.2	29.5

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator
3. Refer to Commercial Split Builder program for more detailed information.



38APD060 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz ENGLISH

CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	196.2	185.4	179.9	174.4	168.8	163.2	157.4	151.6	145.8	139.8	133.8
	kW	14.2	15.7	16.6	17.5	18.5	19.5	20.5	21.6	22.8	24.0	25.3
25	TC	216.5	204.7	198.8	192.7	186.6	180.4	174.2	167.9	161.5	155.0	148.4
	kW	14.5	16.1	17.0	17.9	18.8	19.8	20.9	22.0	23.2	24.4	25.7
30	TC	238.1	225.1	218.6	211.9	205.3	198.6	191.8	185.0	178.0	170.9	163.7
	kW	14.9	16.5	17.4	18.3	19.2	20.2	21.3	22.4	23.5	24.8	26.0
35	TC	260.7	245.9	239.2	232.0	224.8	217.5	210.1	202.6	195.1	187.3	179.5
	kW	15.3	16.9	17.8	18.7	19.6	20.6	21.7	22.8	23.9	25.2	26.4
40	TC	283.9	268.1	260.3	252.5	244.7	236.8	228.8	220.7	212.5	204.1	195.7
	kW	15.8	17.4	18.2	19.1	20.1	21.1	22.1	23.2	24.4	25.6	26.8
45	TC	307.8	290.8	281.9	273.4	265.0	256.4	247.7	239.0	230.1	221.0	212.0
	kW	16.3	17.9	18.7	19.6	20.5	21.5	22.6	23.7	24.8	26.0	27.3
50	TC	334.0	316.5	299.0	295.4	285.7	277.0	266.8	258.0	248.0	238.6	228.7
	kW	16.8	18.0	19.2	20.1	21.1	22.1	23.1	24.2	25.3	26.5	27.7

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	228.8	216.0	209.4	203.1	196.6	190.0	182.9	176.4	169.6	161.5	156.0
	kW	17.7	19.6	20.7	21.8	23.0	24.2	25.5	26.9	28.3	29.7	31.4
25	TC	252.9	238.8	231.7	224.6	217.4	210.1	203.0	195.7	187.7	180.5	172.0
	kW	18.2	20.2	21.2	22.3	23.5	24.8	26.1	27.4	28.8	30.3	31.8
30	TC	278.3	263.0	255.3	247.5	239.7	231.7	223.7	215.9	207.6	199.4	190.2
	kW	18.7	20.7	21.8	22.9	24.1	25.3	26.6	28.0	29.4	30.9	32.4
35	TC	305.0	288.4	280.0	271.5	263.0	254.4	245.6	236.7	227.8	218.6	209.7
	kW	19.3	21.3	22.3	23.5	24.6	25.9	27.2	28.5	30.0	31.4	33.0
40	TC	332.9	314.7	305.4	296.3	287.0	277.7	268.2	258.5	248.9	238.9	228.7
	kW	19.9	21.9	22.9	24.1	25.3	26.5	27.8	29.1	30.6	32.0	33.6
45	TC	361.5	341.6	331.6	321.6	311.6	301.5	291.2	280.9	270.4	259.3	248.6
	kW	20.6	22.5	23.6	24.7	25.9	27.1	28.4	29.8	31.2	32.6	34.2
50	TC	390.5	374.5	358.5	347.7	336.6	325.9	314.4	303.5	291.7	280.5	268.3
	kW	21.3	22.8	24.3	25.4	26.6	27.8	29.1	30.5	31.8	33.3	34.8

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD070 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz ENGLISH CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	258.1	241.8	233.5	224.9	218.4	207.5	198.8	192.2	180.1	171.0	164.5
	kW	19.9	22.3	23.5	24.8	26.0	27.4	28.8	30.1	31.5	32.9	34.3
25	TC	286.2	268.9	262.1	251.0	244.0	234.5	222.3	215.4	202.8	196.0	182.1
	kW	20.4	22.8	24.1	25.4	26.6	28.1	29.5	30.9	32.4	33.8	35.4
30	TC	314.8	297.3	290.1	280.6	270.8	258.1	250.7	238.0	229.9	216.8	208.5
	kW	20.9	23.3	24.6	26.0	27.3	28.8	30.2	31.8	33.2	34.9	36.3
35	TC	347.8	327.1	319.2	308.7	297.8	287.4	277.0	262.9	254.4	241.3	231.6
	kW	21.4	23.9	25.2	26.5	27.9	29.4	30.9	32.5	34.0	35.7	37.2
40	TC	379.9	357.8	349.1	337.4	326.0	315.4	304.1	291.6	279.8	267.7	255.5
	kW	22.0	24.5	25.8	27.1	28.6	30.1	31.6	33.1	34.7	36.4	38.0
45	TC	414.2	388.0	379.5	367.1	354.7	342.6	331.1	318.7	305.4	292.2	279.4
	kW	22.6	25.1	26.4	27.8	29.2	30.7	32.3	33.9	35.5	37.1	38.9
50	TC	448.3	426.8	407.7	397.3	384.1	371.2	358.7	345.5	331.5	316.7	303.8
	kW	23.2	25.9	27.0	28.5	29.9	31.4	33.0	34.6	36.2	37.8	39.6

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	252.0	236.0	227.8	219.5	213.4	202.6	194.2	187.8	176.0	167.2	161.0
	kW	19.9	22.2	23.4	24.7	26.0	27.3	28.7	30.0	31.4	32.8	34.2
25	TC	279.3	262.4	256.0	245.2	238.5	229.2	217.3	210.7	198.1	191.7	178.1
	kW	20.4	22.7	24.0	25.3	26.5	28.0	29.4	30.8	32.3	33.7	35.2
30	TC	307.5	290.2	283.5	274.3	264.7	252.3	245.2	232.8	225.0	212.1	204.2
	kW	20.8	23.3	24.5	25.9	27.2	28.7	30.1	31.6	33.0	34.7	36.2
35	TC	339.5	319.3	311.8	301.8	291.4	281.2	271.1	257.4	249.3	236.4	227.2
	kW	21.4	23.8	25.1	26.4	27.8	29.2	30.8	32.3	33.8	35.5	37.0
40	TC	370.7	349.3	341.0	330.1	319.2	308.9	297.8	285.9	274.3	262.7	250.6
	kW	22.0	24.4	25.7	27.0	28.4	29.9	31.5	32.9	34.5	36.2	37.8
45	TC	404.0	378.9	371.0	359.1	347.3	335.5	324.4	312.4	299.7	286.8	274.5
	kW	22.5	25.0	26.3	27.7	29.1	30.5	32.1	33.7	35.3	36.9	38.6
50	TC	437.4	416.7	398.7	388.8	376.1	363.6	351.6	338.8	325.2	311.2	298.3
	kW	23.2	25.8	26.9	28.3	29.7	31.2	32.8	34.4	36.0	37.6	39.4

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD080 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz ENGLISH

CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	229.6	216.6	210.1	203.6	197.0	190.6	183.9	177.1	170.2	163.1	156.0
	kW	17.3	19.2	20.2	21.3	22.5	23.7	24.9	26.2	27.6	29.0	30.5
25	TC	253.4	239.6	232.6	225.5	218.3	210.9	203.8	196.3	188.7	181.0	173.1
	kW	17.8	19.7	20.7	21.8	22.9	24.1	25.4	26.7	28.1	29.5	31.0
30	TC	279.3	264.1	256.3	248.5	240.6	232.6	224.4	216.4	208.0	199.6	190.9
	kW	18.3	20.2	21.2	22.3	23.4	24.6	25.9	27.2	28.6	30.0	31.5
35	TC	306.4	289.6	281.1	272.5	263.8	254.9	246.0	236.9	228.0	218.6	209.1
	kW	18.9	20.7	21.8	22.9	24.0	25.2	26.4	27.7	29.1	30.5	32.0
40	TC	334.4	316.0	306.5	297.1	287.5	277.8	268.1	258.1	247.9	237.6	227.5
	kW	19.5	21.3	22.4	23.4	24.6	25.7	27.0	28.3	29.6	31.0	32.5
45	TC	363.1	342.8	332.4	322.0	311.5	300.9	290.2	279.4	268.4	257.3	245.8
	kW	20.1	22.0	23.0	24.0	25.2	26.3	27.6	28.9	30.2	31.6	33.1
50	TC	391.9	370.2	358.8	347.5	336.0	324.4	312.7	300.8	288.8	276.7	264.0
	kW	20.7	22.6	23.6	24.7	25.8	27.0	28.2	29.5	30.8	32.2	33.6

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	344.2	324.6	314.8	304.9	294.8	285.1	274.8	264.3	253.4	242.6	231.6
	kW	25.9	29.0	30.6	32.3	34.1	36.0	37.9	40.0	42.1	44.3	46.6
25	TC	379.5	358.9	348.3	337.6	326.8	315.6	304.8	293.4	281.9	270.1	258.1
	kW	26.5	29.6	31.2	32.9	34.7	36.6	38.6	40.6	42.8	45.0	47.3
30	TC	417.6	395.1	383.6	372.0	360.2	348.1	335.9	323.9	311.4	298.5	285.6
	kW	27.2	30.2	31.8	33.5	35.4	37.2	39.2	41.3	43.4	45.7	48.0
35	TC	457.1	432.6	420.0	407.3	394.5	381.4	368.1	354.7	341.3	327.4	313.2
	kW	27.8	30.8	32.5	34.2	36.0	37.9	39.9	41.9	44.1	46.3	48.6
40	TC	497.4	470.5	456.6	442.8	428.8	414.6	400.3	385.6	370.7	355.6	340.7
	kW	28.5	31.5	33.1	34.9	36.7	38.5	40.5	42.6	44.7	46.9	49.2
45	TC	537.1	507.7	492.5	477.4	462.2	446.7	431.2	415.4	399.4	383.1	366.4
	kW	29.2	32.2	33.8	35.6	37.3	39.2	41.2	43.2	45.3	47.5	49.9
50	TC	575.7	544.0	527.5	511.0	494.3	477.7	460.7	443.7	426.3	408.9	390.7
	kW	30.0	33.0	34.6	36.3	38.1	39.9	41.8	43.9	46.0	48.2	50.5

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD090 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz ENGLISH

CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	297.1	281.3	273.0	264.7	256.0	247.1	238.0	228.9	218.5	208.5	197.6
	kW	21.1	23.8	25.3	26.9	28.5	30.2	31.9	33.7	35.5	37.2	38.8
25	TC	327.9	309.9	300.7	291.6	282.3	272.9	263.2	253.5	243.4	231.9	221.0
	kW	21.5	24.2	25.7	27.2	28.8	30.5	32.3	34.0	35.9	37.7	39.4
30	TC	360.5	340.1	330.3	320.5	310.4	300.2	289.6	278.8	267.9	256.6	244.5
	kW	22.0	24.6	26.0	27.6	29.2	30.8	32.6	34.4	36.2	38.1	39.9
35	TC	394.4	372.3	361.6	350.7	339.5	328.2	316.8	304.9	292.8	280.7	268.2
	kW	22.5	25.1	26.5	28.0	29.6	31.2	32.9	34.7	36.5	38.4	40.3
40	TC	431.7	404.9	393.2	380.9	368.6	356.2	343.7	330.6	317.5	304.3	290.7
	kW	23.1	25.6	27.0	28.4	30.0	31.6	33.3	35.1	36.9	38.8	40.7
45	TC	467.6	437.8	424.3	410.7	397.1	383.3	369.5	355.5	341.6	327.1	312.4
	kW	23.7	26.1	27.5	29.0	30.5	32.1	33.7	35.5	37.3	39.1	41.0
50	TC	502.3	469.0	454.7	439.5	423.8	408.8	393.4	378.2	363.1	347.7	331.9
	kW	24.4	26.7	28.1	29.5	31.0	32.6	34.2	35.9	37.7	39.5	41.4

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	342.8	324.5	314.7	304.9	295.0	285.0	275.0	264.8	253.7	243.3	232.5
	kW	26.0	29.0	30.7	32.4	34.2	36.1	38.0	40.1	42.2	44.4	46.6
25	TC	379.4	359.2	348.8	338.2	327.5	316.5	305.4	294.3	282.9	270.8	259.1
	kW	26.6	29.6	31.3	33.0	34.8	36.7	38.7	40.7	42.9	45.1	47.4
30	TC	418.4	396.0	384.7	373.1	361.5	349.6	337.5	325.3	312.9	300.2	287.1
	kW	27.2	30.2	31.9	33.6	35.4	37.3	39.3	41.4	43.5	45.7	48.0
35	TC	458.5	434.0	421.7	409.2	396.3	383.4	370.3	356.9	343.4	329.5	315.3
	kW	27.9	30.9	32.5	34.3	36.1	38.0	39.9	42.0	44.1	46.4	48.7
40	TC	500.9	472.2	459.1	445.2	431.4	417.3	403.0	388.5	373.7	358.6	343.0
	kW	28.6	31.5	33.2	34.9	36.7	38.6	40.6	42.6	44.8	47.0	49.3
45	TC	541.4	509.8	495.4	480.6	465.3	449.9	434.6	418.9	402.6	386.1	369.5
	kW	29.3	32.3	33.9	35.6	37.4	39.3	41.3	43.3	45.4	47.6	49.9
50	TC	581.1	546.1	530.5	514.4	497.8	481.2	464.2	447.2	429.7	412.3	393.8
	kW	30.2	33.0	34.7	36.4	38.1	40.0	41.9	44.0	46.1	48.3	50.5

LEGEND

- kW** — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD100 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz ENGLISH

CIRCUIT A

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	346.3	327.0	317.4	307.7	297.9	288.0	277.9	267.6	257.3	246.8	236.0
	kW	26.3	29.2	30.8	32.5	34.3	36.1	38.1	40.1	42.2	44.4	46.8
25	TC	381.0	362.2	351.8	341.2	330.5	319.6	308.6	297.4	286.1	274.6	262.9
	kW	27.0	30.0	31.6	33.2	35.0	36.9	38.8	40.9	43.0	45.2	47.5
30	TC	422.3	399.8	388.4	376.9	365.1	353.3	341.2	329.1	316.7	304.1	291.2
	kW	27.8	30.7	32.3	34.0	35.8	37.7	39.6	41.7	43.8	46.0	48.3
35	TC	464.2	439.6	427.1	414.5	401.7	388.7	375.6	362.3	348.8	335.0	320.9
	kW	28.6	31.6	33.2	34.9	36.6	38.5	40.4	42.5	44.6	46.8	49.2
40	TC	508.0	481.1	467.5	453.8	439.9	425.8	411.5	396.9	382.2	367.1	351.7
	kW	29.5	32.4	34.0	35.7	37.5	39.4	41.3	43.3	45.5	47.7	50.0
45	TC	553.4	524.1	509.3	494.3	479.1	463.8	448.2	432.5	416.4	400.0	383.0
	kW	30.4	33.4	35.0	36.7	38.4	40.3	42.2	44.2	46.3	48.5	50.8
50	TC	600.1	568.2	552.0	535.7	519.2	502.5	485.5	468.4	450.9	433.0	414.4
	kW	31.4	34.4	36.0	37.6	39.4	41.2	43.1	45.2	47.3	49.4	51.7

CIRCUIT B

SST (F)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		70	80	85	90	95	100	105	110	115	120	125
20	TC	345.8	326.6	316.9	307.3	297.5	287.6	277.5	267.2	256.9	246.4	235.7
	kW	26.2	29.2	30.8	32.4	34.2	36.1	38.0	40.1	42.2	44.4	46.7
25	TC	381.0	361.8	351.4	340.8	330.1	319.2	308.2	297.1	285.8	274.3	262.6
	kW	27.0	29.9	31.5	33.2	35.0	36.8	38.8	40.8	43.0	45.2	47.5
30	TC	421.9	399.4	388.0	376.5	364.8	352.9	341.0	328.8	316.4	303.9	291.0
	kW	27.7	30.7	32.3	34.0	35.7	37.6	39.6	41.6	43.8	46.0	48.3
35	TC	463.7	439.2	426.8	414.2	401.4	388.5	375.4	362.1	348.6	334.9	320.8
	kW	28.5	31.5	33.1	34.8	36.6	38.4	40.4	42.4	44.6	46.8	49.1
40	TC	507.6	480.8	467.2	453.5	439.6	425.6	411.3	396.8	382.1	367.0	351.7
	kW	29.4	32.4	34.0	35.7	37.4	39.3	41.3	43.3	45.4	47.6	49.9
45	TC	552.8	523.7	508.9	493.9	478.8	463.5	448.0	432.3	416.3	399.9	383.0
	kW	30.3	33.3	34.9	36.6	38.3	40.2	42.1	44.2	46.3	48.5	50.8
50	TC	599.3	567.6	551.5	535.2	518.8	502.1	485.3	468.2	450.8	433.0	414.4
	kW	31.3	34.3	35.9	37.6	39.3	41.2	43.1	45.1	47.2	49.4	51.7

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (1000 Btuh)

NOTES:

1. Ratings are based on 15 F superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD,APS025 CONDENSING UNIT RATINGS, 50 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	60.7	56.8	54.8	53.5	51.4	49.3	47.2	45.8	43.6	41.4	39.1
	kW	13.5	15.3	16.2	16.8	17.8	18.8	19.9	20.6	21.7	22.8	23.9
0	TC	65.2	61.1	59.0	57.6	55.4	53.2	51.0	49.5	47.2	44.9	42.4
	kW	13.7	15.4	16.3	17.0	18.0	19.0	20.1	20.8	21.9	23.1	24.3
2	TC	69.9	65.5	63.3	61.8	59.6	57.3	54.9	53.3	50.9	48.4	45.9
	kW	13.9	15.6	16.5	17.1	18.1	19.2	20.3	21.0	22.2	23.3	24.5
4	TC	74.7	70.1	67.7	66.1	63.7	61.3	58.8	57.1	54.6	52.0	49.3
	kW	14.0	15.7	16.7	17.3	18.3	19.4	20.5	21.2	22.4	23.5	24.8
6	TC	79.5	74.6	72.0	70.3	67.8	65.3	62.7	60.9	58.2	55.4	52.6
	kW	14.2	15.9	16.8	17.4	18.5	19.5	20.6	21.4	22.5	23.7	25.0
8	TC	84.3	79.0	76.2	74.5	71.8	69.1	66.3	64.5	61.6	58.7	55.7
	kW	14.4	16.1	17.0	17.6	18.6	19.7	20.8	21.5	22.7	23.9	25.1
10	TC	89.0	83.2	80.3	78.4	75.6	72.7	69.8	67.8	64.8	61.7	58.5
	kW	14.5	16.2	17.1	17.8	18.8	19.8	20.9	21.7	22.9	24.1	25.3

38APD,APS027 CONDENSING UNIT RATINGS, 50 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	68.4	64.4	62.4	61.0	58.9	56.8	54.6	53.2	51.0	48.7	46.4
	kW	15.1	16.8	17.7	18.4	19.5	20.6	21.7	22.5	23.8	25.1	26.5
0	TC	73.3	69.0	66.8	65.3	63.0	60.8	58.5	57.0	54.6	52.2	49.8
	kW	15.4	17.1	18.0	18.7	19.7	20.8	22.0	22.8	24.1	25.4	26.8
2	TC	78.2	73.6	71.2	69.6	67.3	64.9	62.5	60.8	58.3	55.8	53.1
	kW	15.7	17.4	18.3	19.0	20.0	21.1	22.3	23.1	24.3	25.6	27.0
4	TC	83.2	78.2	75.7	74.0	71.5	69.0	66.4	64.7	62.0	59.3	56.5
	kW	16.0	17.7	18.6	19.3	20.3	21.4	22.6	23.4	24.6	25.9	27.3
6	TC	88.2	82.8	80.0	78.3	75.7	73.0	70.2	68.4	65.6	62.7	59.8
	kW	16.3	18.0	18.9	19.6	20.6	21.7	22.9	23.7	24.9	26.2	27.6
8	TC	93.1	87.3	84.4	82.6	79.7	76.9	74.0	72.0	69.1	66.0	62.9
	kW	16.7	18.3	19.3	19.9	21.0	22.0	23.2	24.0	25.2	26.5	27.8
10	TC	97.9	91.6	88.7	86.7	83.7	80.7	77.6	75.5	72.4	69.1	65.9
	kW	17.0	18.7	19.6	20.3	21.3	22.4	23.5	24.3	25.5	26.8	28.1

38APD,APS030 CONDENSING UNIT RATINGS, 50 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	79.6	75.1	72.7	71.2	68.8	66.5	64.1	62.4	59.9	57.4	54.8
	kW	18.0	20.2	21.3	22.2	23.5	24.8	26.3	27.3	28.9	30.5	32.2
0	TC	85.1	80.3	77.8	76.2	73.7	71.2	68.7	66.9	64.3	61.6	58.8
	kW	18.4	20.5	21.7	22.5	23.8	25.2	26.6	27.6	29.2	30.8	32.6
2	TC	90.7	85.6	83.0	81.3	78.7	76.1	73.4	71.5	68.8	65.9	63.0
	kW	18.8	20.9	22.0	22.9	24.2	25.5	27.0	28.0	29.5	31.2	32.9
4	TC	96.3	90.8	88.1	86.3	83.6	80.9	78.1	76.1	73.2	70.2	67.1
	kW	19.2	21.3	22.4	23.2	24.5	25.9	27.3	28.3	29.9	31.5	33.2
6	TC	101.8	96.0	93.2	91.3	88.5	85.6	82.7	80.7	77.7	74.5	71.2
	kW	19.6	21.7	22.8	23.6	24.9	26.3	27.7	28.7	30.3	31.9	33.6
8	TC	107.3	101.2	98.3	96.3	93.3	90.3	87.2	85.1	82.0	78.7	75.3
	kW	20.0	22.1	23.2	24.1	25.3	26.7	28.1	29.1	30.6	32.3	33.9
10	TC	112.7	106.3	103.3	101.2	98.1	94.9	91.7	89.5	86.2	82.8	79.2
	kW	20.5	22.5	23.7	24.5	25.8	27.1	28.5	29.5	31.0	32.6	34.3

LEGEND

- kW** — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

38APD040 CONDENSING UNIT RATINGS, 50 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	99.5	93.3	90.0	87.9	84.6	81.2	77.8	75.5	72.0	68.3	64.6
	kW	21.1	24.0	25.6	26.7	28.3	30.1	31.9	33.1	35.1	37.0	39.0
0	TC	106.7	100.1	96.7	94.4	90.9	87.3	83.7	81.2	77.6	73.6	69.8
	kW	21.4	24.3	25.9	27.0	28.7	30.4	32.3	33.5	35.5	37.5	39.5
2	TC	114.2	107.1	103.5	101.2	97.3	93.6	89.8	87.1	83.3	79.1	74.9
	kW	21.7	24.6	26.2	27.3	29.0	30.8	32.6	33.9	35.9	37.9	40.0
4	TC	121.9	114.5	110.5	107.9	103.9	99.9	96.0	93.0	89.1	84.5	80.3
	kW	22.0	24.9	26.5	27.6	29.3	31.1	33.0	34.3	36.3	38.3	40.4
6	TC	129.8	121.9	117.6	114.8	110.5	106.4	102.1	99.2	94.5	90.1	85.2
	kW	22.3	25.3	26.8	27.9	29.7	31.5	33.3	34.6	36.6	38.7	40.8
8	TC	137.8	129.3	124.7	121.7	117.4	112.9	108.3	105.2	100.3	95.7	90.7
	kW	22.7	25.6	27.2	28.3	30.0	31.8	33.7	35.0	37.0	39.1	41.2
10	TC	146.0	136.6	132.0	128.6	124.2	119.4	114.4	110.8	105.9	101.1	95.5
	kW	23.0	26.0	27.5	28.6	30.4	32.2	34.0	35.3	37.3	39.4	41.6

38APS040 CONDENSING UNIT RATINGS, 50 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	100.4	94.1	91.0	88.9	85.7	82.5	79.2	77.0	73.7	70.4	66.9
	kW	20.9	23.4	24.7	25.7	27.2	28.8	30.4	31.6	33.4	35.3	37.3
0	TC	107.2	100.8	97.4	95.2	91.8	88.3	84.8	82.5	79.0	75.4	71.7
	kW	21.3	23.8	25.1	26.1	27.6	29.2	30.9	32.0	33.8	35.8	37.8
2	TC	114.6	107.7	104.1	101.8	98.0	94.4	90.6	88.1	84.4	80.6	76.7
	kW	21.7	24.2	25.6	26.5	28.0	29.6	31.3	32.5	34.3	36.2	38.2
4	TC	122.2	114.9	111.0	108.4	104.5	100.5	96.7	93.9	90.1	86.0	81.5
	kW	22.2	24.7	26.0	27.0	28.5	30.1	31.8	32.9	34.7	36.6	38.6
6	TC	130.2	122.2	118.1	115.3	111.1	107.2	102.9	99.9	95.9	91.5	86.7
	kW	22.7	25.2	26.5	27.5	29.0	30.6	32.2	33.4	35.2	37.1	39.1
8	TC	138.4	130.1	125.4	122.5	118.3	113.9	109.4	106.1	101.5	96.8	92.0
	kW	23.2	25.7	27.1	28.0	29.5	31.1	32.8	33.9	35.7	37.6	39.6
10	TC	146.9	137.6	132.9	129.8	125.4	120.7	115.9	112.3	107.5	102.8	97.4
	kW	23.8	26.3	27.6	28.6	30.1	31.6	33.3	34.4	36.2	38.1	40.1

38APD050 CONDENSING UNIT RATINGS, 50 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	127.8	119.9	115.8	113.0	108.9	104.7	100.3	97.4	93.0	88.6	84.0
	kW	29.6	33.2	35.2	36.5	38.6	40.8	43.1	44.6	47.1	49.5	52.1
0	TC	136.9	128.5	124.0	121.1	116.8	112.3	107.8	104.7	99.9	95.1	90.2
	kW	30.2	33.8	35.7	37.1	39.2	41.4	43.7	45.2	47.6	50.2	52.7
2	TC	146.2	137.3	132.6	129.5	124.9	120.2	115.3	112.0	106.8	101.9	96.7
	kW	30.7	34.3	36.2	37.6	39.7	41.9	44.2	45.8	48.2	50.8	53.4
4	TC	155.9	146.3	141.3	138.0	133.1	128.1	123.0	119.5	114.2	108.3	103.0
	kW	31.2	34.8	36.8	38.1	40.3	42.5	44.8	46.4	48.8	51.3	54.0
6	TC	165.6	155.5	150.1	146.6	141.4	136.0	130.6	126.9	121.1	115.1	109.5
	kW	31.8	35.4	37.3	38.7	40.8	43.0	45.4	47.0	49.4	51.9	54.6
8	TC	175.6	164.6	159.0	155.2	149.8	144.1	138.3	134.3	127.9	121.7	115.8
	kW	32.4	36.0	37.9	39.3	41.4	43.6	45.9	47.5	49.9	52.5	55.1
10	TC	185.6	173.8	167.8	163.8	158.2	152.1	145.7	141.6	135.2	128.5	122.0
	kW	33.0	36.6	38.5	39.8	42.0	44.2	46.5	48.1	50.5	53.0	55.7

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APS050 CONDENSING UNIT RATINGS, 50 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	120.3	113.1	109.5	106.8	103.0	99.4	95.5	92.3	86.0	80.8	79.1
	kW	27.2	30.5	32.3	33.5	35.4	37.5	39.6	40.9	43.0	45.2	47.8
0	TC	128.8	121.3	117.4	114.6	110.8	106.5	102.6	99.6	95.6	90.9	86.1
	kW	27.7	31.0	32.8	34.0	36.0	37.9	40.1	41.5	43.8	46.1	48.5
2	TC	137.7	129.6	125.6	122.8	118.6	114.1	109.9	106.7	102.4	97.4	92.7
	kW	28.3	31.5	33.3	34.5	36.5	38.5	40.6	42.0	44.3	46.6	49.0
4	TC	147.0	138.3	133.8	130.8	126.5	121.9	117.3	114.1	108.9	104.2	98.7
	kW	28.8	32.1	33.8	35.1	37.0	39.0	41.1	42.6	44.8	47.1	49.5
6	TC	156.4	147.2	142.3	139.1	134.4	129.5	124.6	121.1	115.7	110.3	105.2
	kW	29.4	32.6	34.4	35.6	37.5	39.5	41.6	43.0	45.2	47.6	50.0
8	TC	165.9	156.1	150.8	147.4	142.4	137.1	131.8	128.1	122.2	116.9	111.0
	kW	30.0	33.2	34.9	36.1	38.0	40.0	42.1	43.5	45.7	48.1	50.4
10	TC	175.4	164.8	159.1	155.4	150.1	144.4	138.8	134.8	128.4	122.8	116.5
	kW	30.5	33.7	35.5	36.7	38.6	40.5	42.6	44.0	46.2	48.5	50.9

38APD060 CONDENSING UNIT RATINGS, 50 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	144.9	135.7	134.0	131.2	127.0	122.5	118.0	114.9	110.1	105.4	100.8
	kW	33.3	37.0	39.2	40.7	43.0	45.4	48.0	49.8	52.5	55.5	58.5
0	TC	157.7	147.7	143.6	140.2	135.7	130.9	126.2	123.2	118.2	113.2	107.7
	kW	34.0	37.8	39.9	41.4	43.7	46.1	48.7	50.4	53.2	56.1	59.2
2	TC	167.7	157.3	152.9	149.5	144.9	139.7	134.4	131.0	125.9	120.7	115.5
	kW	34.7	38.5	40.6	42.1	44.4	46.8	49.4	51.1	53.9	56.8	59.8
4	TC	178.6	168.0	162.7	159.0	153.9	148.5	143.1	139.8	134.2	128.9	122.6
	kW	35.5	39.3	41.4	42.8	45.1	47.6	50.1	51.9	54.7	57.6	60.6
6	TC	189.6	177.6	172.0	169.0	163.3	157.2	151.5	148.0	142.2	136.7	130.5
	kW	36.3	40.1	42.2	43.6	45.9	48.3	50.9	52.7	55.4	58.3	61.3
8	TC	201.4	187.2	180.8	177.4	170.8	165.9	159.5	156.2	150.0	143.4	137.0
	kW	37.2	40.9	43.0	44.5	46.7	49.2	51.7	53.5	56.2	59.1	62.1
10	TC	210.8	195.7	190.5	186.4	180.8	174.1	168.0	164.7	158.5	151.6	144.6
	kW	38.1	41.8	43.9	45.3	47.6	50.0	52.5	54.3	57.1	59.9	62.9

38APD070 CONDENSING UNIT RATINGS, 50 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	177.4	166.2	161.9	156.5	151.9	144.7	139.6	134.0	129.0	121.0	116.0
	kW	41.4	46.6	49.3	51.3	54.2	57.3	60.4	62.6	65.8	69.1	72.3
0	TC	190.8	178.4	173.8	168.6	163.4	155.5	150.6	144.5	139.4	130.2	125.6
	kW	42.1	47.3	50.2	52.1	55.0	58.2	61.4	63.6	66.9	70.3	73.5
2	TC	203.9	190.8	186.1	181.3	175.0	168.4	161.4	156.2	149.9	141.4	135.5
	kW	42.9	48.2	51.0	53.0	55.9	59.1	62.2	64.4	67.9	71.5	74.7
4	TC	217.2	203.5	198.5	193.4	186.8	179.9	172.5	167.0	160.6	151.0	145.3
	kW	43.7	49.0	51.9	53.8	56.8	60.0	63.2	65.4	69.0	72.7	76.0
6	TC	230.9	216.6	211.2	205.8	198.8	191.6	184.2	178.0	171.2	163.2	155.4
	kW	44.5	49.8	52.8	54.7	57.8	61.0	64.3	66.5	70.0	73.4	77.1
8	TC	246.3	229.7	224.1	218.4	211.0	203.4	195.2	189.4	181.9	173.8	165.4
	kW	45.4	50.7	53.7	55.7	58.7	61.9	65.2	67.6	71.0	74.6	78.2
10	TC	260.3	241.8	236.4	230.7	223.7	215.2	206.8	200.2	193.0	184.1	175.5
	kW	46.3	51.5	54.6	56.5	59.7	62.9	66.2	68.3	72.1	75.6	79.4

LEGEND

- kW** — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

38APD080 CONDENSING UNIT RATINGS, 50 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	187.3	180.4	176.8	174.5	170.8	167.1	163.3	161.0	157.0	153.1	149.1
	kW	50.2	53.5	55.2	56.5	58.4	60.5	62.6	64.1	66.4	68.8	71.3
0	TC	200.4	193.0	189.2	186.8	182.8	178.8	174.8	172.4	168.0	163.9	159.6
	kW	51.0	54.3	56.1	57.3	59.3	61.3	63.5	65.0	67.3	69.7	72.2
2	TC	213.7	205.9	201.8	199.2	195.0	190.8	186.6	183.9	179.3	175.0	170.4
	kW	51.9	55.2	56.9	58.2	60.1	62.2	64.3	65.8	68.1	70.5	73.0
4	TC	227.2	218.8	214.5	211.8	207.3	202.8	198.3	195.6	190.6	185.9	181.1
	kW	52.8	56.1	57.8	59.1	61.0	63.1	65.2	66.7	69.0	71.4	73.9
6	TC	240.7	231.7	227.1	224.2	219.4	214.7	209.9	207.1	201.8	196.8	191.7
	kW	53.7	57.0	58.8	60.0	61.9	64.0	66.1	67.6	69.9	72.3	74.8
8	TC	254.2	244.7	239.8	236.7	231.6	226.6	221.5	218.5	212.9	207.6	202.2
	kW	54.7	58.0	59.7	61.0	62.9	64.9	67.0	68.5	70.8	73.2	75.6
10	TC	267.5	257.4	252.2	248.9	243.4	238.1	232.8	229.6	223.7	218.1	212.4
	kW	55.8	59.0	60.7	62.0	63.9	65.9	68.0	69.5	71.7	74.1	76.5

38APD090 CONDENSING UNIT RATINGS, 50 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	221.5	208.6	202.1	197.6	191.0	184.2	177.2	172.3	165.4	157.6	150.1
	kW	48.7	54.9	58.2	60.6	64.3	68.1	72.2	74.9	79.2	83.6	88.1
0	TC	237.2	223.1	216.2	211.4	204.4	197.1	189.7	184.5	177.1	169.3	160.8
	kW	49.5	55.6	59.0	61.3	65.0	68.8	72.9	75.6	79.9	84.4	88.9
2	TC	252.9	237.9	230.6	225.5	218.0	210.2	202.3	196.8	188.8	180.5	171.7
	kW	50.4	56.4	59.8	62.1	65.7	69.6	73.6	76.3	80.6	85.1	89.6
4	TC	269.9	252.9	245.0	239.6	231.5	223.3	214.8	209.0	200.4	191.6	182.3
	kW	51.3	57.3	60.6	62.9	66.5	70.3	74.3	77.1	81.3	85.8	90.3
6	TC	286.2	267.7	259.3	253.5	244.7	235.9	227.0	220.9	211.7	202.3	192.6
	kW	52.3	58.2	61.5	63.8	67.4	71.1	75.1	77.8	82.1	86.5	91.0
8	TC	302.2	282.6	273.4	267.3	257.9	248.4	238.8	232.4	222.6	212.7	202.4
	kW	53.3	59.2	62.4	64.7	68.2	72.0	75.9	78.6	82.8	87.2	91.7
10	TC	317.7	296.5	286.9	280.3	270.2	260.0	249.9	243.1	232.8	222.3	211.6
	kW	54.4	60.1	63.4	65.7	69.2	72.9	76.7	79.4	83.6	87.9	92.4

38APD100 CONDENSING UNIT RATINGS, 50 Hz SI

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	243.6	229.6	222.4	217.7	210.3	202.9	195.4	190.4	182.7	174.8	166.8
	kW	55.1	61.5	65.0	67.4	71.3	75.3	79.5	82.5	87.1	91.9	97.0
0	TC	261.0	246.0	238.4	233.3	225.5	217.7	209.7	204.3	196.1	187.7	179.1
	kW	56.3	62.7	66.2	68.6	72.4	76.5	80.7	83.7	88.3	93.1	98.1
2	TC	279.0	263.1	255.0	249.5	241.3	232.9	224.4	218.6	209.9	201.0	191.8
	kW	57.5	63.9	67.4	69.8	73.7	77.7	81.9	84.9	89.5	94.3	99.3
4	TC	297.0	280.7	272.1	266.3	257.5	248.6	239.5	233.4	224.1	214.6	204.8
	kW	60.0	65.2	68.7	71.1	74.9	79.0	83.2	86.1	90.7	95.5	100.4
6	TC	316.7	298.7	289.5	283.3	274.0	264.5	254.9	248.4	238.5	228.4	217.9
	kW	60.1	66.5	70.0	72.4	76.2	80.2	84.5	87.4	91.9	96.7	101.6
8	TC	336.1	317.0	307.2	300.7	290.8	280.7	270.5	263.6	253.1	242.4	231.1
	kW	61.5	67.9	71.4	73.8	77.6	81.6	85.8	88.7	93.2	98.0	102.9
10	TC	356.0	335.6	325.2	318.2	307.7	297.0	286.1	278.8	267.6	256.2	244.2
	kW	63.0	69.3	72.8	75.2	79.0	83.0	87.1	90.0	94.6	99.3	104.2

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD025 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz SI CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	30.3	28.4	27.4	26.7	25.7	24.7	23.6	22.9	21.8	20.7	19.5
	kW	6.8	7.6	8.1	8.4	8.9	9.4	9.9	10.3	10.8	11.4	12.0
0	TC	32.6	30.5	29.5	28.8	27.7	26.6	25.5	24.8	23.6	22.4	21.2
	kW	6.9	7.7	8.2	8.5	9.0	9.5	10.0	10.4	11.0	11.5	12.1
2	TC	34.9	32.8	31.7	30.9	29.8	28.6	27.5	26.7	25.4	24.2	22.9
	kW	6.9	7.8	8.3	8.6	9.1	9.6	10.1	10.5	11.1	11.7	12.3
4	TC	37.3	35.0	33.8	33.0	31.9	30.6	29.4	28.6	27.3	26.0	24.6
	kW	7.0	7.9	8.3	8.6	9.2	9.7	10.2	10.6	11.2	11.8	12.4
6	TC	39.8	37.3	36.0	35.2	33.9	32.6	31.3	30.4	29.1	27.7	26.3
	kW	7.1	7.9	8.4	8.7	9.2	9.8	10.3	10.7	11.3	11.9	12.5
8	TC	42.2	39.5	38.1	37.2	35.9	34.6	33.2	32.2	30.8	29.3	27.8
	kW	7.2	8.0	8.5	8.8	9.3	9.8	10.4	10.8	11.4	12.0	12.6
10	TC	44.5	41.6	40.2	39.2	37.8	36.4	34.9	33.9	32.4	30.8	29.3
	kW	7.3	8.1	8.6	8.9	9.4	9.9	10.5	10.9	11.4	12.0	12.7

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	30.3	28.4	27.4	26.7	25.7	24.7	23.6	22.9	21.8	20.7	19.5
	kW	6.8	7.6	8.1	8.4	8.9	9.4	9.9	10.3	10.8	11.4	12.0
0	TC	32.6	30.5	29.5	28.8	27.7	26.6	25.5	24.8	23.6	22.4	21.2
	kW	6.9	7.7	8.2	8.5	9.0	9.5	10.0	10.4	11.0	11.5	12.1
2	TC	34.9	32.8	31.7	30.9	29.8	28.6	27.5	26.7	25.4	24.2	22.9
	kW	6.9	7.8	8.3	8.6	9.1	9.6	10.1	10.5	11.1	11.7	12.3
4	TC	37.3	35.0	33.8	33.0	31.9	30.6	29.4	28.6	27.3	26.0	24.6
	kW	7.0	7.9	8.3	8.6	9.2	9.7	10.2	10.6	11.2	11.8	12.4
6	TC	39.8	37.3	36.0	35.2	33.9	32.6	31.3	30.4	29.1	27.7	26.3
	kW	7.1	7.9	8.4	8.7	9.2	9.8	10.3	10.7	11.3	11.9	12.5
8	TC	42.2	39.5	38.1	37.2	35.9	34.6	33.2	32.2	30.8	29.3	27.8
	kW	7.2	8.0	8.5	8.8	9.3	9.8	10.4	10.8	11.4	12.0	12.6
10	TC	44.5	41.6	40.2	39.2	37.8	36.4	34.9	33.9	32.4	30.8	29.3
	kW	7.3	8.1	8.6	8.9	9.4	9.9	10.5	10.9	11.4	12.0	12.7

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD027 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz SI
CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	34.3	32.3	31.3	30.6	29.5	28.5	27.4	26.7	25.6	24.5	23.3
	kW	7.5	8.4	8.9	9.2	9.7	10.3	10.9	11.3	11.9	12.6	13.3
0	TC	36.7	34.6	33.5	32.8	31.7	30.5	29.4	28.6	27.5	26.3	25.1
	kW	7.7	8.5	9.0	9.3	9.9	10.4	11.0	11.4	12.0	12.7	13.4
2	TC	39.3	37.0	35.8	35.0	33.8	32.7	31.4	30.6	29.4	28.1	26.8
	kW	7.8	8.7	9.2	9.5	10.0	10.6	11.1	11.5	12.2	12.8	13.5
4	TC	41.8	39.3	38.1	37.2	36.0	34.8	33.5	32.6	31.3	29.9	28.5
	kW	8.0	8.8	9.3	9.6	10.2	10.7	11.3	11.7	12.3	13.0	13.6
6	TC	44.4	41.7	40.3	39.5	38.2	36.8	35.5	34.6	33.2	31.7	30.3
	kW	8.1	9.0	9.5	9.8	10.3	10.8	11.4	11.8	12.4	13.1	13.8
8	TC	46.9	44.0	42.6	41.7	40.2	38.8	37.4	36.4	34.9	33.4	31.9
	kW	8.3	9.2	9.6	10.0	10.5	11.0	11.6	12.0	12.6	13.2	13.9
10	TC	49.3	46.2	44.8	43.8	42.3	40.8	39.3	38.2	36.7	35.1	33.5
	kW	8.5	9.3	9.8	10.1	10.6	11.2	11.7	12.1	12.7	13.4	14.1

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	34.1	32.1	31.1	30.4	29.3	28.3	27.2	26.5	25.4	24.2	23.1
	kW	7.5	8.4	8.9	9.2	9.7	10.3	10.9	11.3	11.9	12.5	13.2
0	TC	36.5	34.4	33.2	32.5	31.4	30.3	29.1	28.3	27.2	26.0	24.7
	kW	7.7	8.5	9.0	9.3	9.9	10.4	11.0	11.4	12.0	12.7	13.4
2	TC	39.0	36.6	35.4	34.6	33.4	32.3	31.0	30.2	28.9	27.7	26.3
	kW	7.8	8.7	9.2	9.5	10.0	10.6	11.1	11.5	12.2	12.8	13.5
4	TC	41.4	38.9	37.6	36.7	35.5	34.2	32.9	32.1	30.7	29.4	28.0
	kW	8.0	8.9	9.3	9.6	10.2	10.7	11.3	11.7	12.3	13.0	13.6
6	TC	43.8	41.1	39.7	38.8	37.5	36.1	34.8	33.9	32.4	31.0	29.5
	kW	8.2	9.0	9.5	9.8	10.3	10.9	11.4	11.8	12.5	13.1	13.8
8	TC	46.2	43.3	41.9	40.9	39.5	38.1	36.6	35.6	34.1	32.6	31.0
	kW	8.3	9.2	9.7	10.0	10.5	11.0	11.6	12.0	12.6	13.2	13.9
10	TC	48.6	45.4	43.9	42.9	41.4	39.9	38.3	37.3	35.7	34.1	32.4
	kW	8.5	9.4	9.8	10.2	10.7	11.2	11.8	12.2	12.8	13.4	14.1

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD030 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz SI CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	39.8	37.5	36.4	35.6	34.4	33.2	32.0	31.2	30.0	28.7	27.4
	kW	9.0	10.0	10.6	11.0	11.7	12.3	13.1	13.6	14.3	15.2	16.0
0	TC	42.5	40.1	38.9	38.1	36.9	35.6	34.3	33.5	32.1	30.8	29.4
	kW	9.1	10.2	10.8	11.2	11.8	12.5	13.2	13.7	14.5	15.3	16.2
2	TC	45.3	42.8	41.5	40.6	39.3	38.0	36.7	35.8	34.4	33.0	31.5
	kW	9.3	10.4	10.9	11.4	12.0	12.7	13.4	13.9	14.7	15.5	16.4
4	TC	48.1	45.4	44.0	43.1	41.8	40.4	39.0	38.1	36.6	35.1	33.6
	kW	9.5	10.6	11.1	11.5	12.2	12.9	13.6	14.1	14.8	15.7	16.5
6	TC	50.8	48.0	46.5	45.6	44.2	42.8	41.3	40.3	38.8	37.3	35.6
	kW	9.7	10.8	11.3	11.7	12.4	13.0	13.8	14.3	15.0	15.8	16.7
8	TC	53.6	50.5	49.1	48.1	46.6	45.1	43.6	42.6	41.0	39.4	37.7
	kW	9.9	11.0	11.5	11.9	12.6	13.2	14.0	14.4	15.2	16.0	16.9
10	TC	56.2	53.0	51.5	50.5	49.0	47.4	45.8	44.7	43.1	41.4	39.6
	kW	10.2	11.2	11.8	12.2	12.8	13.5	14.2	14.6	15.4	16.2	17.0

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	39.8	37.5	36.4	35.6	34.4	33.2	32.0	31.2	30.0	28.7	27.4
	kW	9.1	10.2	10.7	11.2	11.8	12.5	13.2	13.7	14.5	15.3	16.2
0	TC	42.6	40.2	38.9	38.1	36.9	35.6	34.3	33.5	32.2	30.8	29.4
	kW	9.3	10.3	10.9	11.3	12.0	12.7	13.4	13.9	14.7	15.5	16.4
2	TC	45.4	42.8	41.5	40.7	39.4	38.0	36.7	35.8	34.4	32.9	31.5
	kW	9.4	10.5	11.1	11.5	12.2	12.9	13.6	14.1	14.9	15.7	16.5
4	TC	48.2	45.5	44.1	43.2	41.8	40.5	39.0	38.1	36.6	35.1	33.5
	kW	9.6	10.7	11.3	11.7	12.4	13.0	13.8	14.3	15.0	15.9	16.7
6	TC	51.0	48.1	46.7	45.7	44.3	42.8	41.4	40.4	38.8	37.2	35.6
	kW	9.8	10.9	11.5	11.9	12.6	13.2	14.0	14.5	15.2	16.1	16.9
8	TC	53.8	50.7	49.2	48.2	46.7	45.2	43.6	42.6	41.0	39.3	37.6
	kW	10.1	11.1	11.7	12.1	12.8	13.4	14.2	14.7	15.4	16.2	17.1
10	TC	56.5	53.3	51.8	50.7	49.1	47.5	45.9	44.8	43.1	41.4	39.6
	kW	10.3	11.4	11.9	12.3	13.0	13.7	14.4	14.9	15.6	16.4	17.3

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD040 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz SI
CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	53.3	49.9	48.1	46.9	45.0	43.2	41.3	40.0	38.1	36.0	34.0
	kW	11.6	13.2	14.0	14.5	15.4	16.3	17.3	17.9	18.9	19.8	20.8
0	TC	57.2	53.5	51.7	50.4	48.5	46.5	44.5	43.1	41.1	38.9	36.8
	kW	11.8	13.4	14.2	14.8	15.6	16.6	17.5	18.1	19.1	20.1	21.2
2	TC	61.3	57.4	55.4	54.1	52.0	49.9	47.8	46.3	44.2	41.9	39.6
	kW	12.0	13.5	14.4	15.0	15.8	16.8	17.7	18.4	19.4	20.4	21.5
4	TC	65.5	61.4	59.2	57.7	55.6	53.3	51.2	49.6	47.4	44.9	42.6
	kW	12.2	13.7	14.6	15.1	16.1	17.0	18.0	18.6	19.7	20.7	21.8
6	TC	69.7	65.4	63.0	61.5	59.1	56.9	54.5	52.9	50.4	47.9	45.3
	kW	12.4	13.9	14.8	15.3	16.3	17.2	18.2	18.9	19.9	21.0	22.0
8	TC	74.0	69.4	66.9	65.3	62.9	60.4	57.9	56.2	53.5	51.0	48.2
	kW	12.6	14.1	15.0	15.6	16.5	17.4	18.4	19.1	20.1	21.2	22.3
10	TC	78.5	73.4	70.8	69.0	66.6	64.0	61.3	59.3	56.7	54.0	50.8
	kW	12.8	14.3	15.2	15.8	16.7	17.6	18.6	19.3	20.4	21.4	22.5

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	46.1	43.4	42.0	41.0	39.5	38.0	36.5	35.5	33.9	32.4	30.6
	kW	9.5	10.9	11.6	12.1	12.9	13.8	14.6	15.2	16.2	17.2	18.2
0	TC	49.4	46.5	45.0	44.0	42.4	40.8	39.2	38.1	36.5	34.7	33.0
	kW	9.6	11.0	11.7	12.2	13.0	13.9	14.8	15.4	16.3	17.3	18.4
2	TC	52.9	49.8	48.1	47.1	45.4	43.7	42.0	40.8	39.1	37.2	35.3
	kW	9.7	11.1	11.8	12.3	13.1	14.0	14.9	15.5	16.5	17.5	18.5
4	TC	56.4	53.1	51.3	50.2	48.4	46.6	44.8	43.5	41.7	39.6	37.7
	kW	9.8	11.2	12.0	12.5	13.3	14.1	15.0	15.6	16.6	17.6	18.6
6	TC	60.1	56.5	54.6	53.3	51.4	49.5	47.6	46.3	44.2	42.2	40.0
	kW	10.0	11.3	12.1	12.6	13.4	14.3	15.2	15.8	16.7	17.7	18.8
8	TC	63.8	59.9	57.9	56.4	54.5	52.4	50.4	49.0	46.8	44.7	42.5
	kW	10.1	11.5	12.2	12.7	13.5	14.4	15.3	15.9	16.9	17.9	18.9
10	TC	67.5	63.3	61.1	59.6	57.6	55.5	53.0	51.5	49.2	47.1	44.7
	kW	10.3	11.6	12.4	12.9	13.7	14.5	15.4	16.0	17.0	18.0	19.0

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD050 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz SI CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	60.4	56.5	54.5	53.1	51.1	49.1	46.9	45.4	43.3	41.1	38.8
	kW	13.7	15.5	16.5	17.1	18.2	19.2	20.3	21.1	22.2	23.4	24.6
0	TC	64.7	60.7	58.5	57.1	55.0	52.8	50.6	49.0	46.7	44.4	41.9
	kW	13.8	15.7	16.6	17.3	18.3	19.4	20.5	21.3	22.5	23.7	24.9
2	TC	69.3	65.0	62.7	61.2	58.9	56.6	54.3	52.7	50.1	47.8	45.2
	kW	14.0	15.8	16.8	17.5	18.5	19.6	20.8	21.5	22.7	23.9	25.2
4	TC	73.9	69.3	66.9	65.3	63.0	60.5	58.1	56.3	53.8	51.0	48.4
	kW	14.1	16.0	16.9	17.6	18.7	19.8	21.0	21.7	22.9	24.2	25.4
6	TC	78.7	73.8	71.3	69.6	67.1	64.5	61.8	60.0	57.2	54.4	51.7
	kW	14.3	16.1	17.1	17.8	18.9	20.0	21.1	21.9	23.1	24.4	25.7
8	TC	83.6	78.4	75.6	73.8	71.2	68.5	65.7	63.7	60.7	57.7	54.8
	kW	14.5	16.3	17.3	18.0	19.0	20.1	21.3	22.1	23.3	24.6	25.9
10	TC	88.5	82.9	79.9	78.1	75.3	72.4	69.5	67.4	64.3	61.3	58.0
	kW	14.6	16.4	17.4	18.1	19.2	20.3	21.5	22.3	23.5	24.8	26.1

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	67.4	63.4	61.3	59.9	57.8	55.7	53.5	52.0	49.7	47.5	45.1
	kW	16.0	17.8	18.7	19.4	20.5	21.6	22.8	23.6	24.8	26.1	27.5
0	TC	72.1	67.8	65.5	64.0	61.8	59.6	57.3	55.7	53.2	50.7	48.4
	kW	16.3	18.1	19.1	19.8	20.8	21.9	23.1	23.9	25.2	26.5	27.9
2	TC	77.0	72.3	69.9	68.3	66.0	63.5	61.1	59.4	56.7	54.1	51.5
	kW	16.7	18.5	19.5	20.1	21.2	22.3	23.5	24.3	25.5	26.8	28.2
4	TC	82.0	77.0	74.3	72.6	70.2	67.6	64.9	63.1	60.4	57.4	54.6
	kW	17.1	18.9	19.8	20.5	21.6	22.7	23.9	24.6	25.9	27.2	28.5
6	TC	86.9	81.7	78.8	77.0	74.4	71.5	68.8	66.8	63.9	60.7	57.9
	kW	17.5	19.3	20.2	20.9	22.0	23.1	24.2	25.0	26.3	27.5	28.9
8	TC	92.0	86.3	83.4	81.4	78.6	75.7	72.7	70.6	67.2	64.0	61.0
	kW	17.9	19.7	20.6	21.3	22.4	23.5	24.6	25.4	26.6	27.9	29.2
10	TC	97.1	91.0	87.9	85.7	82.9	79.7	76.2	74.2	70.9	67.2	64.1
	kW	18.3	20.1	21.1	21.7	22.8	23.9	25.0	25.8	27.0	28.3	29.6

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD060 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz SI
CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	66.6	62.7	61.8	60.5	58.6	56.5	54.5	53.1	50.9	48.7	46.6
	kW	14.8	16.5	17.4	18.1	19.1	20.2	21.3	22.1	23.4	24.7	26.1
0	TC	72.7	68.1	66.2	64.7	62.6	60.4	58.2	56.8	54.6	52.3	49.8
	kW	15.1	16.8	17.7	18.3	19.4	20.5	21.6	22.4	23.7	24.9	26.4
2	TC	77.3	72.1	70.4	68.9	66.7	64.4	62.0	60.4	58.1	55.7	53.3
	kW	15.4	17.1	18.0	18.6	19.7	20.8	21.9	22.7	24.0	25.3	26.6
4	TC	82.2	77.3	74.9	73.2	70.8	68.4	65.9	64.4	61.8	59.4	56.6
	kW	15.7	17.4	18.3	19.0	20.0	21.1	22.2	23.0	24.3	25.6	26.9
6	TC	87.2	81.3	78.8	77.7	75.1	72.3	69.5	68.1	65.4	62.9	60.1
	kW	16.0	17.7	18.6	19.3	20.3	21.4	22.5	23.3	24.6	25.9	27.2
8	TC	93.0	85.5	82.0	80.7	77.6	75.8	73.0	71.9	68.8	66.2	62.9
	kW	16.4	18.1	19.0	19.6	20.6	21.8	22.9	23.7	24.9	26.2	27.5
10	TC	95.8	88.5	86.1	84.5	82.1	79.2	76.4	75.3	72.9	69.8	66.3
	kW	16.8	18.4	19.3	20.0	21.0	22.1	23.2	24.0	25.3	26.5	27.9

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	78.3	73.0	72.2	70.7	68.4	65.9	63.5	61.8	59.3	56.7	54.2
	kW	18.5	20.6	21.8	22.6	23.9	25.2	26.6	27.6	29.1	30.8	32.4
0	TC	85.0	79.6	77.4	75.6	73.1	70.6	68.0	66.4	63.6	61.0	57.9
	kW	18.9	21.0	22.2	23.0	24.3	25.6	27.0	28.0	29.6	31.1	32.8
2	TC	90.5	85.2	82.5	80.7	78.1	75.3	72.5	70.6	67.8	65.0	62.2
	kW	19.4	21.5	22.6	23.4	24.7	26.0	27.5	28.4	30.0	31.6	33.2
4	TC	96.4	90.7	87.8	85.9	83.1	80.2	77.2	75.4	72.4	69.5	66.0
	kW	19.8	21.9	23.1	23.9	25.1	26.5	27.9	28.9	30.4	32.0	33.6
6	TC	102.3	96.3	93.2	91.3	88.3	84.9	82.0	79.9	76.8	73.8	70.4
	kW	20.3	22.4	23.5	24.3	25.6	26.9	28.4	29.3	30.8	32.4	34.1
8	TC	108.5	101.6	98.8	96.7	93.1	90.1	86.5	84.3	81.2	77.3	74.1
	kW	20.8	22.9	24.0	24.8	26.1	27.4	28.8	29.8	31.3	32.9	34.5
10	TC	115.0	107.2	104.4	101.9	98.7	94.9	91.7	89.4	85.6	81.8	78.2
	kW	21.3	23.4	24.5	25.3	26.6	27.9	29.3	30.3	31.8	33.3	35.0

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD070 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz SI CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	87.5	82.1	80.0	77.3	75.1	71.5	69.0	66.3	63.8	59.9	57.4
	kW	20.7	23.3	24.7	25.7	27.1	28.7	30.2	31.4	33.0	34.7	36.2
0	TC	94.2	88.1	85.9	83.7	80.8	76.9	74.5	71.5	69.0	64.4	62.2
	kW	21.1	23.7	25.1	26.1	27.6	29.2	30.8	31.9	33.5	35.2	36.9
2	TC	100.7	94.3	92.0	89.6	86.6	83.3	79.8	77.3	74.2	70.0	67.1
	kW	21.5	24.1	25.5	26.5	28.0	29.6	31.2	32.3	34.1	35.9	37.5
4	TC	107.3	100.5	98.1	95.6	92.4	89.0	85.3	82.7	79.5	74.7	72.0
	kW	21.9	24.5	26.0	27.0	28.5	30.1	31.7	32.8	34.6	36.5	38.1
6	TC	114.0	107.0	104.4	101.8	98.3	94.8	91.2	88.1	84.8	80.8	77.0
	kW	22.3	25.0	26.4	27.4	28.9	30.6	32.3	33.3	35.1	36.8	38.7
8	TC	121.6	113.5	110.8	108.0	104.4	100.7	96.6	93.8	90.1	86.1	82.0
	kW	22.7	25.4	26.9	27.9	29.4	31.0	32.7	33.9	35.6	37.4	39.3
10	TC	128.6	119.5	116.9	114.1	110.6	106.5	102.4	99.1	95.6	91.2	87.0
	kW	23.2	25.8	27.3	28.3	29.9	31.5	33.2	34.3	36.2	37.9	39.8

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	89.9	84.1	81.9	79.2	76.8	73.1	70.6	67.8	65.2	61.2	58.6
	kW	20.7	23.2	24.6	25.6	27.0	28.6	30.1	31.2	32.8	34.5	36.1
0	TC	96.5	90.3	87.9	85.0	82.6	78.6	76.1	73.0	70.5	65.8	63.4
	kW	21.0	23.6	25.0	26.0	27.5	29.0	30.6	31.7	33.4	35.1	36.7
2	TC	103.1	96.6	94.1	91.7	88.4	85.1	81.5	78.9	75.7	71.4	68.4
	kW	21.4	24.0	25.5	26.4	27.9	29.5	31.0	32.1	33.9	35.7	37.3
4	TC	109.9	103.0	100.4	97.8	94.4	90.9	87.1	84.4	81.1	76.3	73.4
	kW	21.8	24.5	25.9	26.9	28.4	29.9	31.5	32.6	34.4	36.2	37.9
6	TC	116.9	109.6	106.8	104.1	100.4	96.8	93.1	89.9	86.4	82.4	78.4
	kW	22.2	24.9	26.3	27.3	28.8	30.4	32.1	33.1	34.9	36.6	38.4
8	TC	124.7	116.3	113.4	110.4	106.6	102.7	98.6	95.7	91.8	87.7	83.4
	kW	22.7	25.3	26.8	27.8	29.3	30.9	32.5	33.7	35.4	37.2	39.0
10	TC	131.8	122.3	119.5	116.6	113.0	108.7	104.4	101.0	97.4	92.8	88.6
	kW	23.1	25.7	27.2	28.2	29.8	31.4	33.0	34.1	35.9	37.7	39.6

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD080 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz SI
CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
	kW	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3
0	TC	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2
	kW	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7
2	TC	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2
	kW	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
4	TC	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
	kW	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
6	TC	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2
	kW	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9
8	TC	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
	kW	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3
10	TC	98.6	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
	kW	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	118.9	112.0	108.4	106.1	102.4	98.7	94.9	92.6	88.6	84.7	80.7
	kW	26.9	30.2	32.0	33.2	35.2	37.2	39.3	40.8	43.1	45.5	48.0
0	TC	127.1	119.8	116.0	113.5	109.5	105.6	101.6	99.2	94.8	90.7	86.4
	kW	27.4	30.6	32.4	33.7	35.6	37.7	39.8	41.3	43.6	46.0	48.5
2	TC	135.5	127.7	123.6	121.0	116.8	112.6	108.4	105.7	101.2	96.8	92.3
	kW	27.8	31.1	32.9	34.1	36.1	38.1	40.3	41.8	44.1	46.5	49.0
4	TC	144.0	135.6	131.3	128.6	124.1	119.6	115.1	112.4	107.4	102.7	97.9
	kW	28.3	31.6	33.4	34.6	36.5	38.6	40.7	42.2	44.5	46.9	49.4
6	TC	152.4	143.5	138.9	136.0	131.2	126.5	121.7	118.8	113.6	108.6	103.4
	kW	28.8	32.1	33.9	35.1	37.0	39.1	41.2	42.7	45.0	47.4	49.9
8	TC	160.8	151.3	146.4	143.4	138.2	133.2	128.1	125.1	119.5	114.3	108.8
	kW	29.4	32.6	34.4	35.6	37.5	39.6	41.7	43.2	45.4	47.8	50.3
10	TC	168.9	158.8	153.7	150.4	144.9	139.6	134.2	131.0	125.1	119.6	113.9
	kW	30.0	33.2	34.9	36.2	38.1	40.1	42.2	43.7	45.9	48.3	50.7

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

Performance data (cont)



38APD090 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz SI CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	102.6	96.4	93.4	91.3	88.3	85.2	81.9	79.6	76.4	72.6	69.0
	kW	21.8	24.6	26.2	27.3	29.1	30.9	32.8	34.0	36.0	38.0	40.0
0	TC	109.8	103.1	99.8	97.6	94.4	91.0	87.5	85.1	81.6	78.0	73.8
	kW	22.1	24.9	26.5	27.6	29.3	31.1	33.0	34.3	36.3	38.3	40.3
2	TC	117.0	109.9	106.5	104.1	100.6	96.9	93.2	90.7	86.9	83.0	78.8
	kW	22.5	25.3	26.8	27.9	29.6	31.4	33.2	34.5	36.5	38.5	40.6
4	TC	124.9	116.7	113.0	110.5	106.7	102.9	98.9	96.2	92.1	88.1	83.5
	kW	22.9	25.6	27.2	28.2	29.9	31.7	33.5	34.8	36.8	38.8	40.9
6	TC	132.5	123.6	119.6	116.9	112.7	108.6	104.4	101.5	97.3	92.9	88.3
	kW	23.4	26.0	27.6	28.6	30.3	32.0	33.8	35.1	37.0	39.0	41.1
8	TC	140.1	130.6	126.1	123.2	118.7	114.2	109.7	106.7	102.1	97.5	92.7
	kW	23.8	26.5	28.0	29.0	30.6	32.3	34.1	35.4	37.3	39.3	41.4
10	TC	147.3	137.0	132.4	129.1	124.4	119.4	114.6	111.4	106.6	101.7	96.8
	kW	24.3	26.9	28.4	29.4	31.0	32.7	34.5	35.7	37.6	39.6	41.6

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	118.9	112.0	108.4	106.1	102.4	98.7	94.9	92.6	88.6	84.7	80.7
	kW	26.9	30.2	32.0	33.2	35.2	37.2	39.3	40.8	43.1	45.5	48.0
0	TC	127.1	119.8	116.0	113.5	109.5	105.6	101.6	99.2	94.8	90.7	86.4
	kW	27.4	30.6	32.4	33.7	35.6	37.7	39.8	41.3	43.6	46.0	48.5
2	TC	135.5	127.7	123.6	121.0	116.8	112.6	108.4	105.7	101.2	96.8	92.3
	kW	27.8	31.1	32.9	34.1	36.1	38.1	40.3	41.8	44.1	46.5	49.0
4	TC	144.0	135.6	131.3	128.6	124.1	119.6	115.1	112.4	107.4	102.7	97.9
	kW	28.3	31.6	33.4	34.6	36.5	38.6	40.7	42.2	44.5	46.9	49.4
6	TC	152.4	143.5	138.9	136.0	131.2	126.5	121.7	118.8	113.6	108.6	103.4
	kW	28.8	32.1	33.9	35.1	37.0	39.1	41.2	42.7	45.0	47.4	49.9
8	TC	160.8	151.3	146.4	143.4	138.2	133.2	128.1	125.1	119.5	114.3	108.8
	kW	29.4	32.6	34.4	35.6	37.5	39.6	41.7	43.2	45.4	47.8	50.3
10	TC	168.9	158.8	153.7	150.4	144.9	139.6	134.2	131.0	125.1	119.6	113.9
	kW	30.0	33.2	34.9	36.2	38.1	40.1	42.2	43.7	45.9	48.3	50.7

LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.



38APD100 CONDENSING UNIT CIRCUIT RATINGS, 50 Hz SI
CIRCUIT A

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	121.9	114.8	111.3	108.9	105.2	101.5	97.8	95.2	91.4	87.5	83.4
	kW	27.6	30.8	32.5	33.8	35.7	37.7	39.8	41.3	43.6	46.0	48.5
0	TC	130.5	123.1	119.3	116.7	112.8	108.9	104.9	102.2	98.1	93.9	89.6
	kW	28.2	31.4	33.1	34.3	36.2	38.3	40.4	41.9	44.2	46.6	49.1
2	TC	139.6	131.6	127.6	124.8	120.7	116.5	112.2	109.4	105.0	100.5	95.9
	kW	28.8	32.0	33.7	35.0	36.9	38.9	41.0	42.5	44.8	47.1	49.6
4	TC	148.0	140.4	136.1	133.2	128.8	124.3	119.8	116.7	112.1	107.3	102.4
	kW	30.0	32.6	34.4	35.6	37.5	39.5	41.6	43.1	45.4	47.8	50.2
6	TC	158.4	149.4	144.8	141.7	137.0	132.3	127.5	124.2	119.3	114.2	109.0
	kW	30.1	33.3	35.0	36.2	38.1	40.2	42.3	43.7	46.0	48.4	50.8
8	TC	168.2	158.6	153.7	150.4	145.4	140.4	135.3	131.8	126.5	121.2	115.5
	kW	30.8	34.0	35.7	36.9	38.8	40.8	42.9	44.4	46.6	49.0	51.5
10	TC	178.1	167.9	162.7	159.2	153.9	148.5	143.1	139.5	133.8	128.1	122.1
	kW	31.5	34.7	36.4	37.6	39.5	41.5	43.6	45.1	47.3	49.7	52.1

CIRCUIT B

SST (C)		CONDENSER ENTERING-AIR TEMPERATURE (F)										
		21	27	30	32	35	38	41	43	46	49	52
-2	TC	121.7	114.7	111.2	108.8	105.1	101.4	97.7	95.2	91.3	87.4	83.4
	kW	27.5	30.7	32.5	33.7	35.6	37.6	39.7	41.2	43.5	45.9	48.5
0	TC	130.4	123.0	119.2	116.6	112.7	108.8	104.8	102.1	98.0	93.8	89.5
	kW	28.1	31.3	33.1	34.3	36.2	38.2	40.3	41.8	44.1	46.5	49.0
2	TC	139.4	131.5	127.4	124.7	120.6	116.4	112.2	109.3	104.9	100.5	95.9
	kW	28.7	31.9	33.7	34.9	36.8	38.8	40.9	42.4	44.7	47.1	49.6
4	TC	149.0	140.3	136.0	133.1	128.7	124.3	119.7	116.7	112.0	107.3	102.4
	kW	30.0	32.5	34.3	35.5	37.4	39.5	41.6	43.0	45.3	47.7	50.2
6	TC	158.3	149.3	144.7	141.6	136.9	132.2	127.4	124.2	119.3	114.2	109.0
	kW	30.0	33.2	35.0	36.2	38.1	40.1	42.2	43.7	45.9	48.3	50.8
8	TC	168.0	158.4	153.6	150.3	145.3	140.3	135.2	131.8	126.5	121.2	115.6
	kW	30.7	33.9	35.6	36.8	38.7	40.8	42.9	44.3	46.6	49.0	51.4
10	TC	177.9	167.7	162.5	159.0	153.8	148.4	143.0	139.4	133.8	128.1	122.1
	kW	31.4	34.6	36.4	37.6	39.5	41.4	43.5	45.0	47.3	49.6	52.1

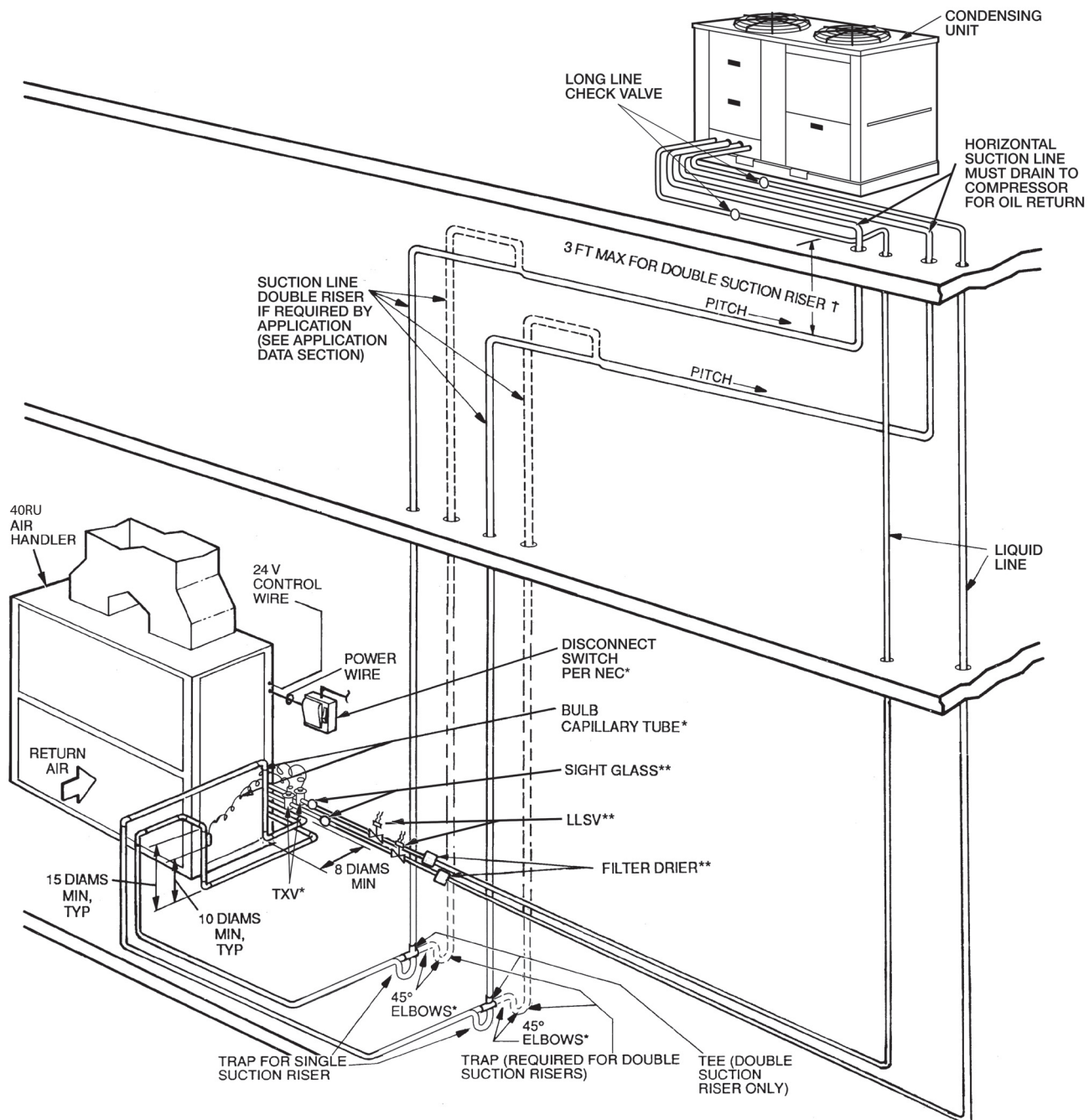
LEGEND

kW — Compressor Power
SST — Saturated Suction Temperature Entering Condensing Unit
TC — Gross Cooling Capacity (kW)

NOTES:

1. Ratings are based on 8.3 C superheat and use of R-410A refrigerant.
2. Ratings include suction line losses due to an accumulator.
3. Refer to Commercial Split Builder program for more detailed information.

ROOFTOP INSTALLATION - 38AP UNITS



LEGEND

- LLSV** — Liquid Line Solenoid Valve
- NEC** — National Electrical Code
- TXV** — Thermostatic Expansion Valve
- Piping
- Double Riser Piping (if required)

*Field supplied.

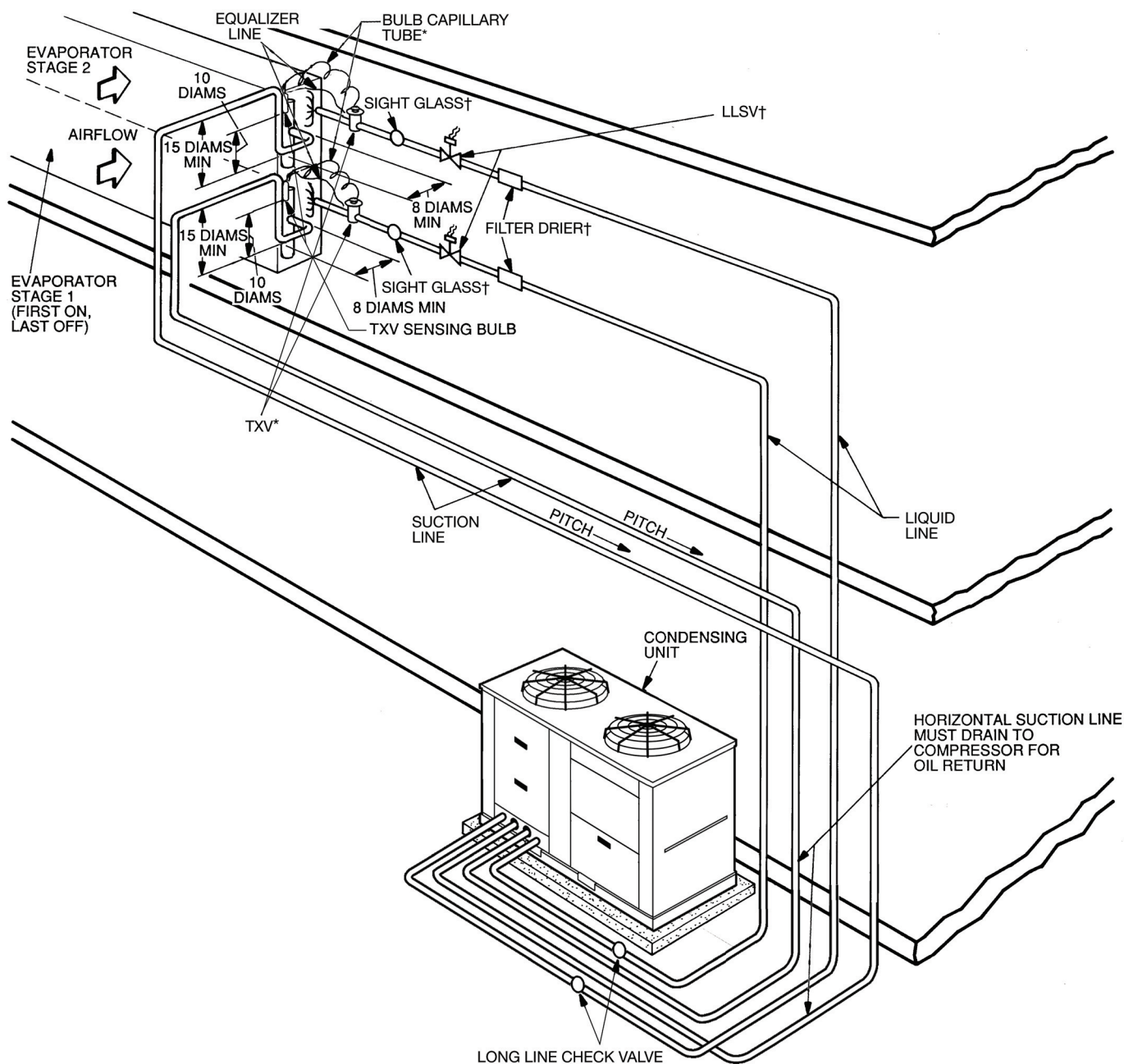
†If double suction riser is required for piping system, size pipe diameter of 3 ft (maximum) riser according to application data.

**Field supplied. See Refrigerant Specialties Part Numbers table on page 74.

NOTES:

1. All piping must follow standard refrigerant piping techniques. Refer to Carrier System Design Manual for details.
2. All wiring must comply with the applicable local and national codes.
3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
4. Engineer should determine where to mount the field-supplied disconnect switch on the unit in accordance with local code and NEC.
5. Liquid line solenoid valves (solenoid drop control) are not required but are recommended to prevent refrigerant migration to the compressor.
6. Factory-supplied accumulator not shown.
7. Dual-circuit piping shown. Single-circuit piping is similar but would only have one suction line and one liquid line.
8. A field-supplied, 5% bleed port TXV is required for every application.
9. Sight glass, LLSV, and filter drier are field supplied.
10. Long line length check valves are required for liquid line installation on all linear line length applications of more than 100 ft (30.5 m). For any 025-030 size dual-circuit unit application where evaporator is located higher than the condensing unit, check valves are required for linear line length above 55 ft (16.8 m).

GROUND LEVEL INSTALLATION — 38AP UNITS



LEGEND

LLSV — Liquid Line Solenoid Valve
NEC — National Electrical Code
TXV — Thermostatic Expansion Valve
 Piping

*Field supplied.

†Field supplied. See Refrigerant Specialties Part Numbers table on page 74.

NOTES:

1. All piping must follow standard refrigerant piping techniques. Refer to Carrier System Design Manual for details.
2. All wiring must comply with the applicable local and national codes.
3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
4. Engineer should determine where to mount the field-supplied disconnect switch on the unit in accordance with local code and NEC.
5. Liquid line solenoid valves (solenoid drop control) are not required but are recommended to prevent refrigerant migration to the compressor.
6. Factory-supplied accumulator not shown.
7. Dual-circuit piping shown. Single-circuit piping is similar but would only have one suction line and one liquid line.
8. A field-supplied, 5% bleed port TXV is required for every application.
9. Sight glass, LLSV, and filter drier are field supplied.
10. Long line length check valves are required for liquid line installation on all linear line length applications of more than 100 ft (30.5 m). For any 025-030 size dual-circuit unit application where evaporator is located higher than the condensing unit, check valves are required for linear line length above 55 ft (16.8 m).

Typical piping and wiring (cont)



REFRIGERANT SPECIALTIES PART NUMBERS

38APS UNIT SIZE	CIRCUIT A					
	Tons	LL Size (in.)	LLSV	LLSV Coil 24-v, 50/60 Hz	Sight Glass	Filter Drier
025	24.0	5/8 7/8	EF680028 EF680029	EF680032 EF680032	KM680005 KM680006	KH680002 KH680003
027	26.7	5/8 7/8	EF680028 EF680029	EF680032 EF680032	KM680005 KM680006	KH680002 KH680003
030	31.1	5/8 7/8 1 1/8	EF680028 EF680029 EF680030	EF680032 EF680032 EF680032	KM680005 KM680006 KM680007	KH680002 KH680003 KH680004
040	39.8	5/8 7/8 1 1/8	EF680028 EF680029 EF680030	EF680032 EF680032 EF680032	KM680005 KM680006 KM680007	KH680003* KH680003 KH680004
050	48.1	7/8 1 1/8	EF680029 EF680030	EF680032 EF680032	KM680006 KM680007	KH680003 KH680004

38APD UNIT SIZE	CIRCUIT A						CIRCUIT B					
	Tons	LL Size (in.)	LLSV	LLSV Coil 24-v, 50/60 Hz	Sight Glass	Filter Drier	Tons	LL Size (in.)	LLSV	LLSV Coil 24-v, 50/60 Hz	Sight Glass	Filter Drier
025	12.0	1/2 5/8	EF680031 EF680028	EF680032 EF680032	KM680004 KM680005	KH680001 KH680002	12.0	1/2 5/8	EF680031 EF680028	EF680032 EF680032	KM680004 KM680005	KH680001 KH680002
027	13.3	1/2 5/8	EF680031 EF680028	EF680032 EF680032	KM680004 KM680005	KH680001 KH680002	13.3	1/2 5/8	EF680031 EF680028	EF680032 EF680032	KM680004 KM680005	KH680001 KH680002
030	15.6	1/2 5/8 7/8	EF680031 EF680028 EF680029	EF680032 EF680032 EF680032	KM680004 KM680005 KM680006	KH680001 KH680002 KH680003	15.6	1/2 5/8 7/8	EF680031 EF680028 EF680029	EF680032 EF680032 EF680032	KM680004 KM680005 KM680006	KH680001 KH680002 KH680003
040	21.0	5/8 7/8	EF680028 EF680029	EF680032 EF680032	KM680005 KM680006	KH680002 KH680003	18.2	1/2 5/8 7/8	EF680028 EF680029 EF680029	EF680032 EF680032 EF680032	KM680004 KM680005 KM680006	KH680001 KH680002 KH680003
050	23.8	5/8 7/8	EF680028 EF680029	EF680032 EF680032	KM680005 KM680006	KH680002 KH680003	26.3	5/8 7/8	EF680028 EF680029	EF680032 EF680032	KM680005 KM680006	KH680002 KH680003
060	26.8	5/8 7/8	EF680028 EF680029	EF680032 EF680032	KM680005 KM680006	KH680002 KH680003	31.5	5/8 7/8 1 1/8	EF680028 EF680029 EF680030	EF680032 EF680032 EF680032	KM680005 KM680006 KM680007	KH680002 KH680003 KH680004
070	31.8	5/8 7/8 1 1/8	EF680028 EF680029 EF680030	EF680032 EF680032 EF680032	KM680005 KM680006 KM680007	KH680002 KH680003 KH680004	35.5	5/8 7/8 1 1/8	EF680028 EF680029 EF680030	EF680032 EF680032 EF680032	KM680005 KM680006 KM680007	KH680002 KH680003 KH680004
080	31.3	5/8 7/8 1 1/8	EF680028 EF680029 EF680030	EF680032 EF680032 EF680032	KM680005 KM680006 KM680007	KH680002 KH680003 KH680004	46.7	5/8 7/8 1 1/8	EF680028 EF680029 EF680030	EF680032 EF680032 EF680032	KM680005 KM680006 KM680007	KH680003* KH680003 KH680004
090	40.3	5/8 7/8 1 1/8	EF680028 EF680029 EF680030	EF680032 EF680032 EF680032	KM680005 KM680006 KM680007	KH680003* KH680003 KH680004	47.1	7/8 1 1/8	EF680029 EF680030	EF680032 EF680032	KM680006 KM680007	KH680003 KH680004
100	48.0	7/8 1 1/8	EF680029 EF680030	EF680032 EF680032	KM680006 KM680007	KH680003 KH680004	48.0	7/8 1 1/8	EF680029 EF680030	EF680032 EF680032	KM680006 KM680007	KH680003 KH680004

LEGEND

LL — Liquid Line
LLSV — Liquid Line Solenoid Valve

*Bushing required to fit 5/8 in. line.

NOTE:

- Filter driers have been sized based upon 1 to 2 psig pressure drop clean in accordance with ARI Standard 710.
- All pipe sizes are OD inches. Equivalent sizes in millimeters follow:

in.	mm
1/2	12.7
5/8	15.9
7/8	22.2
1 1/8	28.6

38APS STANDARD FAN ELECTRICAL DATA

38APS UNIT SIZE	V-Ph-Hz	SUPPLY VOLTAGE		COMPRESSOR			CONDENSER FAN		MCA	MOCP	REC FUSE	ICF
		Min	Max	Qty	RLA	LRA	Total Qty	FLA				
025	208/230-3-60	187	254	2	48.1	245	2	6.6	121.4	150	150	306.3
	380-3-60	342	418		23.7	145		3.9	61.1	80	70	176.5
	460-3-60	414	506		18.6	125		3.3	48.5	60	60	150.2
	575-3-60	518	632		14.7	100		2.6	38.3	50	45	119.9
	380/415-3-50	342	440		18.6	118		3.3	48.5	60	60	143.2
027	208/230-3-60	187	254	2	51.3	300	2	6.6	128.6	175	150	364.5
	380-3-60	342	418		26.9	139		3.9	68.3	90	80	173.7
	460-3-60	414	506		23.1	150		3.3	58.6	80	70	179.7
	575-3-60	518	632		19.9	109		2.6	50.0	60	60	134.1
	380/415-3-50	342	440		23.1	140		3.3	58.6	80	70	169.7
030	208/230-3-60	187	254	2	55.8	340	2	6.6	138.8	175	175	409.0
	380-3-60	342	418		34.0	196		3.9	84.3	110	100	237.8
	460-3-60	414	506		26.9	179		3.3	67.1	90	80	212.5
	575-3-60	518	632		23.7	132		2.6	58.5	80	70	160.9
	380/415-3-50	342	440		26.9	174		3.3	67.1	90	80	207.5
040	208/230-3-60	187	254	3	51.3	300	3	6.6	186.5	225	200	422.4
	380-3-60	342	418		26.9	139		3.9	99.1	125	110	204.5
	460-3-60	414	506		23.1	150		3.3	85.0	100	100	206.1
	575-3-60	518	632		19.9	109		2.6	72.5	90	80	156.6
	380/415-3-50	342	440		23.1	140		3.3	85.0	100	100	196.1
050	208/230-3-60	187	254	3	55.8	340	3	6.6	201.2	250	225	471.4
	380-3-60	342	418		34.0	196		3.9	122.2	150	150	275.7
	460-3-60	414	506		26.9	179		3.3	97.3	110	110	242.7
	575-3-60	518	632		23.7	132		2.6	84.8	100	100	187.2
	380/415-3-50	342	440		26.9	174		3.3	97.3	110	110	237.7

38APS LOW SOUND FAN ELECTRICAL DATA

38APS UNIT SIZE	V-Ph-Hz	SUPPLY VOLTAGE		COMPRESSOR			CONDENSER FAN		MCA	MOCP	REC FUSE	ICF
		Min	Max	Qty	RLA	LRA	Total Qty	FLA				
025	208/230-3-60	187	254	2	48.1	245	2	6.0	120.2	150	150	305.1
	380-3-60	342	418		23.7	145		3.9	61.1	80	70	176.5
	460-3-60	414	506		18.6	125		2.9	47.7	60	60	149.4
	575-3-60	518	632		14.7	100		2.4	37.9	50	45	119.5
	380/415-3-50	342	440		18.6	118		2.9	47.7	60	60	142.4
027	208/230-3-60	187	254	2	51.3	300	2	6.0	127.4	175	150	363.3
	380-3-60	342	418		26.9	139		3.9	68.3	90	80	173.7
	460-3-60	414	506		23.1	150		2.9	57.8	80	70	178.9
	575-3-60	518	632		19.9	109		2.4	49.6	60	60	133.7
	380/415-3-50	342	440		23.1	140		2.9	57.8	80	70	168.9
030	208/230-3-60	187	254	2	55.8	340	2	6.0	137.6	175	175	407.8
	380-3-60	342	418		34.0	196		3.9	84.3	110	100	237.8
	460-3-60	414	506		26.9	179		2.9	66.3	90	80	211.7
	575-3-60	518	632		23.7	132		2.4	58.1	80	70	160.5
	380/415-3-50	342	440		26.9	174		2.9	66.3	90	80	206.7
040	208/230-3-60	187	254	3	51.3	300	3	6.0	184.7	225	200	420.6
	380-3-60	342	418		26.9	139		3.9	99.1	125	110	204.5
	460-3-60	414	506		23.1	150		2.9	83.8	100	100	204.9
	575-3-60	518	632		19.9	109		2.4	71.9	90	80	156.0
	380/415-3-50	342	440		23.1	140		2.9	83.8	100	100	194.9
050	208/230-3-60	187	254	3	55.8	340	3	6.0	199.4	250	225	469.6
	380-3-60	342	418		34.0	196		3.9	122.2	150	150	275.7
	460-3-60	414	506		26.9	179		2.9	96.1	110	110	241.5
	575-3-60	518	632		23.7	132		2.4	84.2	100	100	186.6
	380/415-3-50	342	440		26.9	174		2.9	96.1	110	110	236.5

LEGEND

FLA	—	Full Load Amps
ICF	—	Maximum Instantaneous Current Flow
LRA	—	Locked Rotor Amps
MCA	—	Minimum Circuit Amps
MOCP	—	Maximum Overcurrent Protection
RLA	—	Rated Load Amps

NOTES:

- Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage 2%; amps 10%.
- All units or modules have single point primary power connection. Main power must be supplied from a field-supplied disconnect.
- For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381 and 760 amps, 6 conductors are required. Calculation of conductors required is based on 75 C copper wire.

- Wiring for main field supply must be rated 75 C. Use copper conductors only.
 - Incoming wire size range for terminal block with MCA up to 175 amps is 14 AWG (American Wire Gauge) to 2/0.
 - Incoming wire size range for terminal block with MCA from 175.1 amps to 420 amps is 2 AWG to 600 kcmil.
 - Incoming wire size range for non-fused disconnect with MCA up to 100 amps is 14 AWG to 1/0.
 - Incoming wire size range for non-fused disconnect with MCA from 100.1 amp to 200 amps is 6 AWG to 350 kcmil.
 - Incoming wire size range for non-fused disconnect with MCA from 200.1 amp to 450 amps is 3/0 to 500 kcmil.



Electrical data (cont)



38APD STANDARD FAN ELECTRICAL DATA

38APD UNIT SIZE	V-Ph-Hz	SUPPLY VOLTAGE		COMPRESSOR						CONDENSER FAN		MCA	MOCP	REC FUSE	ICF
				CIRCUIT A			CIRCUIT B			Total Qty	FLA				
		Min	Max	Qty	RLA	LRA	Qty	RLA	LRA						
025	208/230-3-60	187	254	1	48.1	245	1	48.1	245	2	6.6	121.4	150	150	306.3
	380-3-60	342	418		23.7	145		23.7	145		3.9	61.1	80	70	176.5
	460-3-60	414	506		18.6	125		18.6	125		3.3	48.5	60	60	150.2
	575-3-60	518	632		14.7	100		14.7	100		2.6	38.3	50	45	119.9
	380/415-3-50	342	440		18.6	118		18.6	118		3.3	48.5	60	60	143.2
027	208/230-3-60	187	254	1	51.3	300	1	51.3	300	2	6.6	128.6	175	150	364.5
	380-3-60	342	418		26.9	139		26.9	139		3.9	68.3	90	80	173.7
	460-3-60	414	506		23.1	150		23.1	150		3.3	58.6	80	70	179.7
	575-3-60	518	632		19.9	109		19.9	109		2.6	50.0	60	60	134.1
	380/415-3-50	342	440		23.1	140		23.1	140		3.3	58.6	80	70	169.7
030	208/230-3-60	187	254	1	55.8	340	1	55.8	340	2	6.6	138.8	175	175	409.0
	380-3-60	342	418		34.0	196		34.0	196		3.9	84.3	110	100	237.8
	460-3-60	414	506		26.9	179		26.9	179		3.3	67.1	90	80	212.5
	575-3-60	518	632		23.7	132		23.7	132		2.6	58.5	80	70	160.9
	380/415-3-50	342	440		26.9	174		26.9	174		3.3	67.1	90	80	207.5
040	208/230-3-60	187	254	2	35.8	239	2	33.4	225	3	6.6	167.2	200	175	361.4
	380-3-60	342	418		23.7	145		19.2	140		3.9	103.5	125	110	218.9
	460-3-60	414	506		17.9	125		16.7	114		3.3	83.6	100	90	186.2
	575-3-60	518	632		14.3	80		13.4	80		2.6	66.7	80	70	128.8
	380/415-3-50	342	440		17.9	118		16.7	111		3.3	83.6	100	90	179.2
050	208/230-3-60	187	254	2	51.3	300	2	51.3	300	3	6.6	231.4	250	250	467.3
	380-3-60	342	418		26.9	139		26.9	139		3.9	119.6	125	125	225.0
	460-3-60	414	506		23.1	150		23.1	150		3.3	99.1	110	110	220.2
	575-3-60	518	632		19.9	109		19.9	109		2.6	82.0	100	90	166.1
	380/415-3-50	342	440		23.1	140		23.1	140		3.3	99.1	110	110	210.2
060	208/230-3-60	187	254	2	51.3	300	2	55.8	340	4	6.6	254.6	300	300	524.8
	380-3-60	342	418		26.9	139		34.0	196		3.9	145.9	175	175	299.4
	460-3-60	414	506		23.1	150		26.9	179		3.3	119.9	125	125	265.3
	575-3-60	518	632		19.9	109		23.7	132		2.6	103.5	125	110	205.9
	380/415-3-50	342	440		23.1	140		26.9	174		3.3	119.9	125	125	260.3
070	208/230-3-60	187	254	2	55.8	340	3	46.1	245	4	6.6	296.3	300	300	566.5
	380-3-60	342	418		34.0	196		23.7	145		3.9	163.2	175	175	316.7
	460-3-60	414	506		26.9	179		18.6	125		3.3	129.5	150	150	274.9
	575-3-60	518	632		23.7	132		14.7	100		2.6	107.8	125	125	210.2
	380/415-3-50	342	440		26.9	174		18.6	118		3.3	129.5	150	150	269.9
080	208/230-3-60	187	254	2	55.8	340	3	55.8	340	5	6.6	326.0	350	350	596.2
	380-3-60	342	418		34.0	196		34.0	196		3.9	198.0	225	225	351.5
	460-3-60	414	506		26.9	179		26.9	179		3.3	157.7	175	175	303.1
	575-3-60	518	632		23.7	132		23.7	132		2.6	137.4	150	150	239.8
	380/415-3-50	342	440		26.9	174		26.9	174		3.3	157.7	175	175	298.1
090	208/230-3-60	187	254	3	51.3	300	3	55.8	340	6	6.6	374.9	400	400	645.1
	380-3-60	342	418		26.9	139		34.0	196		3.9	214.6	225	225	368.1
	460-3-60	414	506		23.1	150		26.9	179		3.3	176.5	200	200	321.9
	575-3-60	518	632		19.9	109		23.7	132		2.6	152.3	150	150	254.7
	380/415-3-50	342	440		23.1	140		26.9	174		3.3	176.5	200	200	311.9
100	208/230-3-60	187	254	3	55.8	340	3	55.8	340	6	6.6	388.4	400	400	658.6
	380-3-60	342	418		34.0	196		34.0	196		3.9	235.9	250	250	389.4
	460-3-60	414	506		26.9	179		26.9	179		3.3	187.9	200	200	333.3
	575-3-60	518	632		23.7	132		23.7	132		2.6	163.7	175	175	266.1
	380/415-3-50	342	440		26.9	174		26.9	174		3.3	187.9	200	200	328.3

LEGEND

FLA — Full Load Amps
ICF — Maximum Instantaneous Current Flow
LRA — Locked Rotor Amps
MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
RLA — Rated Load Amps

NOTES:

- Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage 2%; amps 10%.
- All units or modules have single point primary power connection. Main power must be supplied from a field-supplied disconnect.
- For MCA that is less than or equal to 380 amps, 3 conductors are required.
For MCA between 381 and 760 amps, 6 conductors are required.
Calculation of conductors required is based on 75 C copper wire.

- Wiring for main field supply must be rated 75 C. Use copper conductors only.
 - Incoming wire size range for terminal block with MCA up to 175 amps is 14 AWG (American Wire Gauge) to 2/0.
 - Incoming wire size range for terminal block with MCA from 175.1 amps to 420 amps is 2 AWG to 600 kcmil.
 - Incoming wire size range for non-fused disconnect with MCA up to 100 amps is 14 AWG to 1/0.
 - Incoming wire size range for non-fused disconnect with MCA from 100.1 amp to 200 amps is 6 AWG to 350 kcmil.
 - Incoming wire size range for non-fused disconnect with MCA from 200.1 amp to 450 amps is 3/0 to 500 kcmil.



38APD LOW SOUND FAN ELECTRICAL DATA

38APD UNIT SIZE	V-Ph-Hz	SUPPLY VOLTAGE		COMPRESSOR						CONDENSER FAN		MCA	MOCP	REC FUSE	ICF
				CIRCUIT A			CIRCUIT B			Total Qty	FLA				
		Min	Max	Qty	RLA	LRA	Qty	RLA	LRA						
025	208/230-3-60	187	254	1	48.1	245	1	48.1	245	2	6.0	120.2	150	150	305.1
	380-3-60	342	418		23.7	145		23.7	145		3.9	61.1	80	70	176.5
	460-3-60	414	506		18.6	125		18.6	125		2.9	47.7	60	60	149.4
	575-3-60	518	632		14.7	100		14.7	100		2.4	37.9	50	45	119.5
	380/415-3-50	342	440		18.6	118		18.6	118		2.9	47.7	60	60	142.4
027	208/230-3-60	187	254	1	51.3	300	1	51.3	300	2	6.0	127.4	175	150	363.3
	380-3-60	342	418		26.9	139		26.9	139		3.9	68.3	90	80	173.7
	460-3-60	414	506		23.1	150		23.1	150		2.9	57.8	80	70	178.9
	575-3-60	518	632		19.9	109		19.9	109		2.4	49.6	60	60	133.7
	380/415-3-50	342	440		23.1	140		23.1	140		2.9	57.8	80	70	168.9
030	208/230-3-60	187	254	1	55.8	340	1	55.8	340	2	6.0	137.6	175	175	407.8
	380-3-60	342	418		34.0	196		34.0	196		3.9	84.3	110	100	237.8
	460-3-60	414	506		26.9	179		26.9	179		2.9	66.3	90	80	211.7
	575-3-60	518	632		23.7	132		23.7	132		2.4	58.1	80	70	160.5
	380/415-3-50	342	440		26.9	174		26.9	174		2.9	66.3	90	80	206.7
040	208/230-3-60	187	254	2	35.8	239	2	33.4	225	3	6.0	165.4	200	175	359.6
	380-3-60	342	418		23.7	145		19.2	140		3.9	103.5	125	110	218.9
	460-3-60	414	506		17.9	125		16.7	114		2.9	82.4	100	90	185.0
	575-3-60	518	632		14.3	80		13.4	80		2.4	66.1	80	70	128.2
	380/415-3-50	342	440		17.9	118		16.7	111		2.9	82.4	100	90	178.0
050	208/230-3-60	187	254	2	48.1	245	2	51.3	300	3	6.0	229.6	250	250	465.5
	380-3-60	342	418		23.7	145		26.9	139		3.9	119.6	125	125	225.0
	460-3-60	414	506		18.6	125		23.1	150		2.9	97.9	110	110	219.0
	575-3-60	518	632		14.7	100		19.9	109		2.4	81.4	100	90	165.5
	380/415-3-50	342	440		18.6	118		23.1	140		2.9	97.9	110	110	212.0
060	208/230-3-60	187	254	2	51.3	300	2	55.8	340	4	6.0	252.2	300	300	522.4
	380-3-60	342	418		26.9	139		34.0	196		3.9	145.9	175	175	299.4
	460-3-60	414	506		23.1	150		26.9	179		2.9	118.3	125	125	263.7
	575-3-60	518	632		19.9	109		23.7	132		2.4	102.7	125	110	205.1
	380/415-3-50	342	440		23.1	140		26.9	174		2.9	118.3	125	125	253.7
070	208/230-3-60	187	254	2	55.8	340	3	46.1	245	4	6.0	293.9	300	300	564.1
	380-3-60	342	418		34.0	196		23.7	145		3.9	163.2	175	175	316.7
	460-3-60	414	506		26.9	179		18.6	125		2.9	127.9	150	150	273.3
	575-3-60	518	632		23.7	132		14.7	100		2.4	107.0	125	125	209.4
	380/415-3-50	342	440		26.9	174		18.6	118		2.9	127.9	150	150	268.3
080	208/230-3-60	187	254	2	55.8	340	3	55.8	340	5	6.0	323.0	350	350	587.2
	380-3-60	342	418		34.0	196		34.0	196		3.9	198.0	225	225	347.6
	460-3-60	414	506		26.9	179		26.9	179		2.9	155.7	175	175	298.2
	575-3-60	518	632		23.7	132		23.7	132		2.4	136.4	150	150	236.4
	380/415-3-50	342	440		26.9	174		26.9	174		2.9	155.7	175	175	293.2
090	208/230-3-60	187	254	3	51.3	300	3	55.8	340	6	6.0	371.3	400	400	641.5
	380-3-60	342	418		26.9	139		34.0	196		3.9	214.6	225	225	368.1
	460-3-60	414	506		23.1	150		26.9	179		2.9	174.1	200	200	319.5
	575-3-60	518	632		19.9	109		23.7	132		2.4	151.1	150	150	253.5
	380/415-3-50	342	440		23.1	140		26.9	174		2.9	174.1	200	200	309.5
100	208/230-3-60	187	254	3	55.8	340	3	55.8	340	6	6.0	384.8	400	400	655.0
	380-3-60	342	418		34.0	196		34.0	196		3.9	235.9	250	250	389.4
	460-3-60	414	506		26.9	179		26.9	179		2.9	185.5	200	200	330.9
	575-3-60	518	632		23.7	132		23.7	132		2.4	162.5	175	175	264.9
	380/415-3-50	342	440		26.9	174		26.9	174		2.9	185.5	200	200	325.9

LEGEND

FLA — Full Load Amps
ICF — Maximum Instantaneous Current Flow
LRA — Locked Rotor Amps
MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
RLA — Rated Load Amps

NOTES:

- Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage 2%; amps 10%.
- All units or modules have single point primary power connection. Main power must be supplied from a field-supplied disconnect.
- For MCA that is less than or equal to 380 amps, 3 conductors are required.
For MCA between 381 and 760 amps, 6 conductors are required.
Calculation of conductors required is based on 75 C copper wire.

- Wiring for main field supply must be rated 75 C. Use copper conductors only.
 - Incoming wire size range for terminal block with MCA up to 175 amps is 14 AWG (American Wire Gauge) to 2/0.
 - Incoming wire size range for terminal block with MCA from 175.1 amps to 420 amps is 2 AWG to 600 kcmil.
 - Incoming wire size range for non-fused disconnect with MCA up to 100 amps is 14 AWG to 1/0.
 - Incoming wire size range for non-fused disconnect with MCA from 100.1 amp to 200 amps is 6 AWG to 350 kcmil.
 - Incoming wire size range for non-fused disconnect with MCA from 200.1 amp to 450 amps is 3/0 to 500 kcmil.



Microprocessor

The *ComfortLink™* microprocessor controls overall unit operation. Its central executive routine controls a number of processes simultaneously. These include internal timers, reading inputs, analog to digital conversions, fan control, display control, diagnostic control, output relay control, demand limit, capacity control, head pressure control, and temperature reset. Some processes are updated almost continuously, others every 2 to 3 seconds, and some every 30 seconds. The microprocessor also has the capability of communicating with the Carrier Comfort Network® devices using the CCN protocol and other popular protocols including BACnet™, MODBUS, LonWorks®, etc.

The microprocessor routine is started by switching the Emergency ON-OFF switch to ON position.

Cooling control options

When mechanical cooling is required *ComfortLink™* controls have the capability to control the staging of the compressors in several different ways. The control checks on various other operation parameters in the units to make sure that safety limits are not exceeded and the compressors are reliably operated.

The 38AP unit *ComfortLink* controls offer two basic control approaches to mechanical cooling: constant volume (CV) with 2 stages of cooling and variable air volume (VAV) with multiple stages of cooling. In addition to these traditional methods of control, the 38AP Series *ComfortLink* controls offer the ability to run multiple stages of cooling in constant volume applications and accept an external input for desired percent of capacity.

CONTROL TYPE	COOLING CONTROL METHOD	UNIT SIZE	STAGING CONTROLLED BY
CV Thermostat 2-Stage	Thermostat	025 to 030	2-Stage Thermostat
CV Thermostat Multiple Stage	Thermostat	025 to 100	Supply Air Temperature
CV SPT Multiple Stage	Space Temperature, T-55/T-56	025 to 100	Supply Air Temperature
VAV	Supply Air Temperature	025 to 100	Supply Air Temperature
% Capacity	4-20 mA Input	025 to 100	Supply Air Temperature

LEGEND

CV — Constant Volume
SPT — Space Temperature Sensor
VAV — Variable Air Volume

Control type — The control type determines the selection of the type of cooling control as well as the technique for selecting a cooling mode. The control types are:

VAV — This configuration refers to standard VAV operation. If the control is occupied and fan status input closed, the controls vary capacity based on supply-air temperature

CV TSTAT-2 Stage — This configuration will force the control to monitor the thermostat inputs (Y1,Y2) to make a determination of mode and capacity.

CV TSTAT-Multiple Stage — This configuration will force the control to monitor the thermostat inputs (Y1,Y2) to make a determination of mode. Unlike traditional 2-stage thermostat control, the unit is allowed to use multiple stages of cooling control and perform VAV-style capacity control.

CV SPT-Multiple Stage — This configuration will force the control to monitor a space temperature sensor to make a determination of mode. The unit is allowed to use multiple stages of cooling control and perform VAV-style capacity control.

% Capacity Control — This configuration will force the control to monitor a 4 to 20 mA external input and vary compressor capacity from 0 to 100% depending on the 4 to 20 mA input.

Cooling control method

Three different cooling control methods are used to step through the available stages of capacity depending on the unit size, circuiting, compressor type and cooling control method. Refer to Loading Sequences tables in the Application Data section on page 83 for specific capacity control.

Multiple-Stage Supply Air Temperature (SAT) — The capacity of the compressors are controlled based on the supply-air temperature and supply air temperature set point. This control method uses an adaptive PID (proportional, integral, derivative) algorithm to calculate the estimated change in supply-air temperature before engaging or disengaging the next stage of cooling. The algorithm compensates for varying conditions, including changing flow rates across the evaporator coil, to provide better overall control of compressor staging.

Multiple Adaptive Demand — This control method will base the capacity compressors on the supply air discharge temperature and one of two supply air temperature set points. The control will be able to call out a LOW COOL or a HIGH COOL mode and maintain a low or high cool supply air set point. The unit will use either the input from a conventional thermostat to turn the Y1, Y2 signals into a high and low demand signal, or with a space temperature sensor use a differential from set point to determine the mode. Once the mode has been established the control uses the same algorithm as with VAV control.

Two-Stage Demand — The unit will operate 2 stages of compressor capacity control.

Demand limiting — The control supports demand limiting using one or two fixed capacity limits initiated by discrete input switches or a variable capacity limit function based on an analog input signal. On CCN systems this can be done through the network, or for non-CCN network jobs this can be done by adding the energy management module.

Diagnostics

The *ComfortLink* controls have fully integrated all controls and sensors into a common control system. The control monitors these inputs as well as many of the routines to provide advanced diagnostics. These include adaptive logic to allow the unit to continue to operate in a reduced output mode and automatic resets where applicable. The last 10 alarms and alerts are stored in memory and can be accessed through the display. The alarms can also be monitored through the Carrier Comfort Network® connection. The unit also supports the use of the hand held Navigator™ display which can be plugged in at the main control box.

Some of the diagnostics that are included are:

- Monitoring of all sensors
- Suction and discharge pressure transducers to provide compressor protection and coil freeze protection
- Monitoring of compressor status using compressor protection boards
- Compressor lockout at low ambient conditions
- Low refrigerant charge protection
- Compressor reverse rotation protection
- Low superheat protection

Control interface

The *ComfortLink* controller can interface with the Carrier Comfort Network devices through the 485 communications port. This will allow for the use of all system control programs. These include:

- Network Service Tool
- Touch Pilot™ device
- ComfortView™ software
- CCN Web software

The control can also provide interface with non-Carrier energy management systems with the addition of either the BACnet™/MODBUS Carrier translator or the Lon-Works Carrier translator. Several contact connection points have been provided in the main control box for interface to external controls and systems.

Constant volume applications — The units can be configured to operate in CV applications. The unit operate with either a standard (mechanical or electronic) 2-stage cool thermostat, or with an electronic room temperature sensor and a timeclock to establish unit start and stop times. With a standard thermostat (programmable is optional), cooling operation is set by space temperature. With a space sensor and field-supplied timeclock, the machine will operate at default values unless they are changed using appropriate input devices.

Features with thermostat control of unit include:

- Two-stage cooling or adaptive multiple stage cooling which can provide 2 to 6 stages of capacity when supply air sensors installed. Refer to Loading Sequences tables in the Application Data section on page 83 for specific capacity control.
- Control of unit using Y1, Y2 thermostat or T55, T56, or T58 space sensors.
- Control of a condenser fan based on outdoor-air and condensing pressures.
- Compressor time guard override (power up and minimum on and off timers) to assure air return in low load conditions.

Features with sensor control (three options available) of unit include:

- T55 sensor will monitor room temperature and provide unoccupied override capability (1 to 4 hours).
- T56 sensor will monitor room temperature, provide unoccupied override capability (1 to 4 hours), and provide a temperature offset of 5 F maximum.
- T58 is a CCN communicating sensor that will provide the set point and space temperature values.

Standard features include:

- Two-stage cooling or adaptive multiple stage cooling which can provide 2 to 6 stages of capacity when supply air sensors installed. Refer to Loading Sequences tables in the Application Data section on page 83 for specific capacity control.
- Adjustment of space temperature set points of $\pm 5^\circ \text{F}$ when using a T56 sensor.
- 365-day timeclock with backup (supports minute, hour, and day of week, date, month, and year access). The timeclock includes the following features:
 - Daylight savings time function
 - Occupancy control with 8 periods for unit operation
 - Holiday table containing up to 18 holiday schedules
- Ability to initiate timed override from T55 or T56 sensors (for a timed period of 1 to 4 hours).
- For units connected into a CCN network the timeclock can be integrated into the overall building energy management system and be updated remotely.

Variable air volume (VAV) applications — Units that are configured to operate in VAV applications are designed to control the leaving-air temperature in cooling to a configurable set point. Some of the features for VAV units in a stand-alone application include:

- The units are shipped as operable, stand-alone units with the addition of a field-supplied timeclock to establish unit start and stop times or they can use *ComfortLink*™ time of day scheduling routine.
- Provide cooling control.
- Supports an optional space temperature sensor for mode control and supply air temperature reset.
- If space sensor is equipped with an override feature, the sensor will allow operation during the unoccupied period for a fixed length of time.
- Control board diagnostics.
- Control of an outdoor-air fan based upon outdoor-air temperature and saturated condensing temperature.
- Support of remote occupied/unoccupied input to start.
- Support a field test for field check out.
- Cooling capacity control of 2 to 6 stages plus economizer. Refer to Loading Sequences tables in the Application Data section on page 83 for specific capacity control.
- Compressor time delays to prevent rapid cycling of compressors.
- Automatic lead-lag control of compressors to reduce the number of compressor cycles.
- With the addition of the energy management board, the *ComfortLink*™ controls will also support demand limiting and remote set point control.

When the unit is connected to a CCN (Carrier Comfort Network®) system, the following additional features can be used:

- Interface of the unit clock with the CCN network clock and allow for remote configuration of the schedules.
- CCN demand limit participation.

Controls (cont)



Sequence of operation

Cooling, constant volume (CV) units — On power up, the control module will activate the initialization software. The initialization software will determine the unit configuration and also initialize any controls loops and input/output devices. All alarms and configurations are saved in memory and maintained during power outages. All alarms will be maintained in memory and must be cleared through the display.

Constant volume conventional thermostat control — If the unit is equipped with a conventional thermostat with Y1, Y2, connections then the control will perform the following sequence.

If Y1 is closed and the fan status input is closed then the control will stage the first compressor be sequenced on. If Y2 closes the control will stage the second compressor on. For units configured for TSTAT Multi, the control will add and remove compressor stages to maintain the low and high demand leaving air set points. If Y1 is closed at least one compressor stage will be turned on.

Constant volume space temperature sensor control — If the space temperature operation has been selected using a T55, T56, or T58 sensor then the following logic will be used to control the operation of the unit. If the

internal timeclock is used, the control module determines the occupancy state based on the system time schedules. The set point for cooling is configurable through the display. If a T56 sensor is being used then the set point can be shifted by as much as 5 degrees. If the space temperature goes above the cooling set point then the unit will go into Cooling mode. The set point will depend on the space temperature. Once the fan status input is closed then the compressors will be sequenced on to maintain either the low or high load temperature set points.

Variable air volume control — On power up, the control module will activate the initialization software. The initialization software will determine the unit configuration and also initialize any controls loops and input/output devices. All alarms and configurations are saved in memory and maintained during power outages. All alarms will be maintained in memory and must be cleared through the display.

The unit will first determine the mode of operation. If the Cooling mode is required and the fan status input closed, then the controlling set point will be the leaving air temperature set point then the leaving-air temperature will sequence to compressors on and off using a PID control loop.

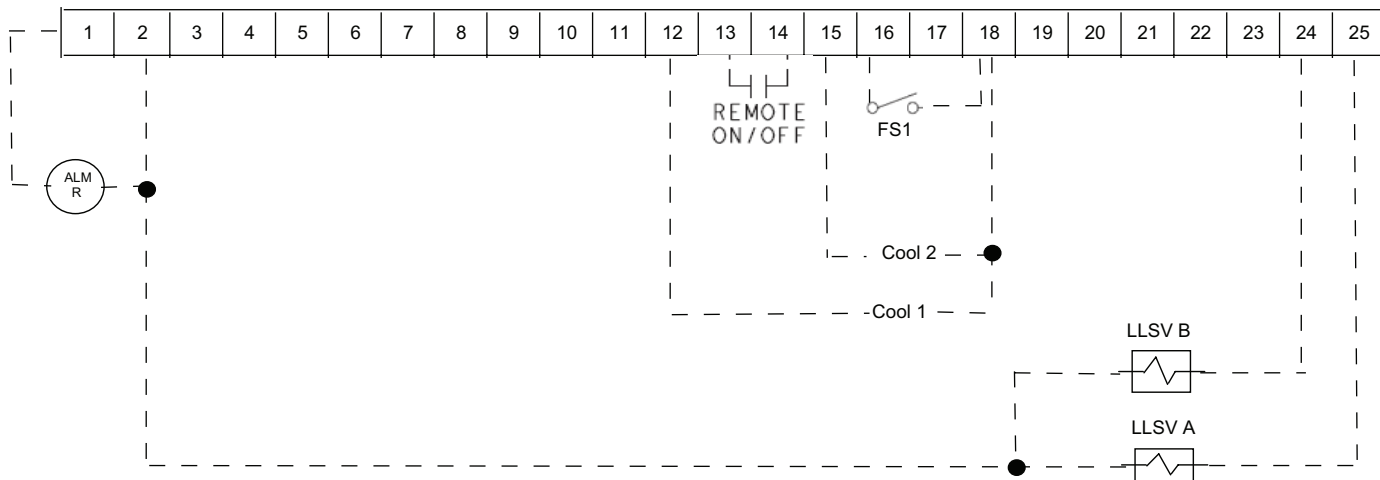
Typical control wiring schematics



LOW VOLTAGE CONTROL WIRING

2-STEP CV

LVT Terminal Strip



LEGEND

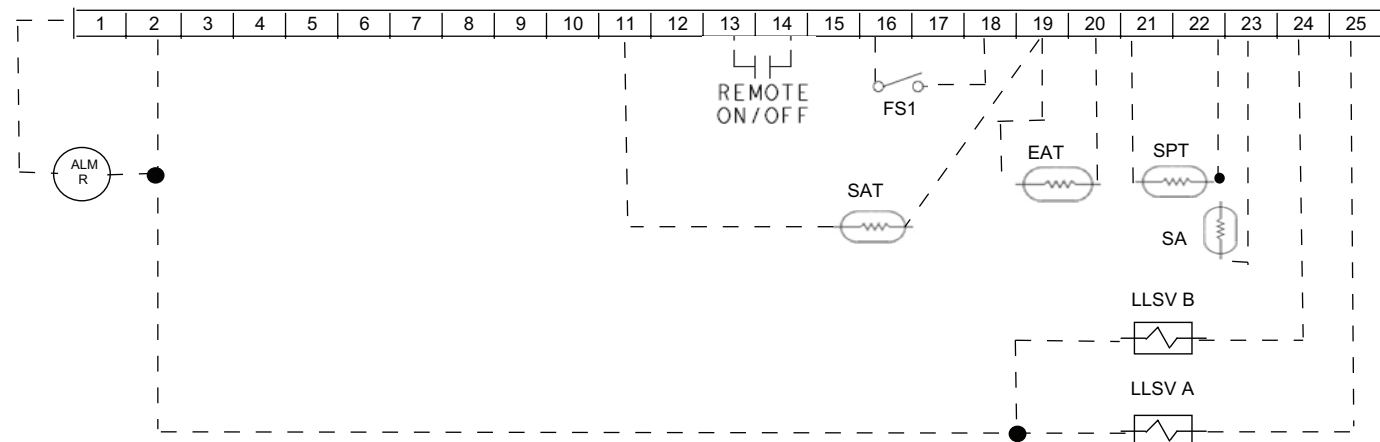
- ALM R** — Alarm Relay (24-v), 5-va Maximum
- Cool 1** — Thermostat Stage 1 (24-v)
- Cool 2** — Thermostat Stage 2 (24-v)
- FS1** — Fan Status Switch (24-v)
- LLSV** — Liquid Line Solenoid Valve
- LVT** — Low Voltage Terminal

See Note

NOTE: LLSV (24-v) should be 15-va maximum per valve as required.

VAV AND MULTIPLE STEP CV

LVT Terminal Strip



LEGEND

- ALM R** — Alarm Relay (24-v), 5-va Maximum
- EAT** — Evaporator Air Temperature Sensor
- FS1** — Fan Status Switch (24-v)
- LLSV** — Liquid Line Solenoid Valve
- LVT** — Low Voltage Terminal
- SA** — Set Point Adjustment T-56
- SAT** — Supply Air Temperature Sensor
- SPT** — Space Temperature Sensor (T-55, T-56)

See Note

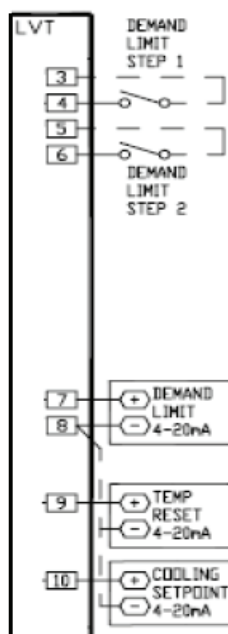
NOTE: LLSV (24-v) should be 15-va maximum per valve as required.

Typical control wiring schematics (cont)



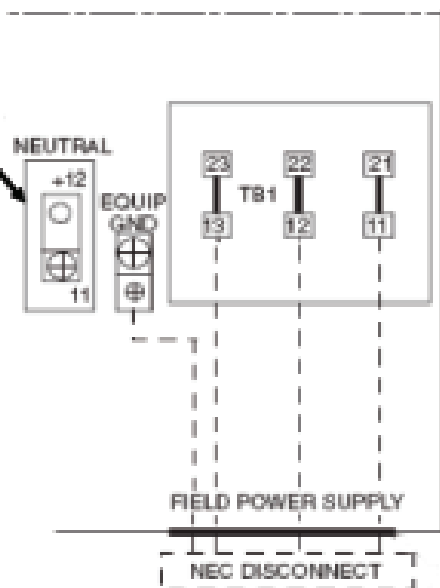
LVT EMM OPTION WIRING

LEGEND
EMM — Energy Management Module
LVT — Low Voltage Terminal



MAIN INCOMING POWER WIRING

380,400 Volt



LEGEND
GND — Ground
NEC — National Electrical Code
TB — Terminal Block
UL — Underwriters Laboratories

NOTES:

1. Factory wiring is in accordance with UL 1995 standards. Field modifications or additions must be in compliance with all applicable codes.
2. Wiring for main field supply must be rated 75 C minimum. Use copper for all units.

Application data



Installation

Locate the unit so that the condenser airflow is unrestricted both above and on the sides and ends of the unit. Refer to unit certified drawings for required clearances. Local codes for clearances take precedence over the manufacturer's recommendations when local codes call for greater clearances. If multiple units are installed at the same site, a separation of 10 ft (3 m) between the sides of the machines is required to maintain proper airflow and minimize the chances of condenser air recirculation. Wall height should not exceed to top of unit fan discharge.

IMPORTANT: Do NOT bury refrigerant piping underground. Failure to comply could result in equipment damage.

Operating limits

Maximum outdoor ambient:

50/60 Hz, full capacity. 122 F (50 C)

50/60 Hz, unloaded. 125 F (57.7 C)

Minimum load head pressure control (factory-installed option or field-installed accessory) -20 F (-6.6 C)

Range of acceptable saturation
suction temperature 20 to 55 F (-6.6 to 12.8 C)

Maximum discharge temperature 275 F (135 C)

Minimum suction superheat. 12 F (-11.1 C)

Maximum allowable liquid lift . . . 75 ft (22.8 m) 50/60 Hz

Required check valve 100 ft (30.5 m) 50/60 Hz

NOTES:

1. Select indoor equipment at no less than 300 cfm per ton (40 L/s per kW) (nominal condensing unit capacity).
2. The total combined draw of the 2 field-supplied liquid line solenoid valves and one air handler fan contactor must not exceed 90 va. If the specified va must be exceeded, use a remote relay to control the load.
3. Select equipment to match or to be slightly less than peak load. This provides better humidity control, less unit cycling, and less part-load operation.
4. Evaluate oil return when selecting vapor line sizes, especially for partial load conditions.
5. The indoor fan must operate when the outdoor unit is operating.
6. For VAV systems, the total building load is NOT the sum of the individual peak loads. Equipment selected for the sum of the individual peak loads will be oversized.
7. For VAV systems with supply-to-return air recycling, use the equipment room as a return-air plenum.

8. To minimize air recirculation, do not use concentric supply and return grilles.
9. All 38AP condensing units will come with one accumulator per circuit to protect compressors from liquid migration.
10. Ductwork should be sized according to unit size, not building load.

38AP UNIT AMBIENT LIMITATIONS

SINGLE CIRCUIT

38APS UNIT SIZE	MINIMUM LOW AMBIENT (Standard Unit)	MINIMUM LOW AMBIENT MOTORMASTER® CONTROL (Factory Installed Option)	MAXIMUM AMBIENT*
025-050	45 F (7.2 C)	-20 F (-28.9 C)	122 F (50 C)

*Operation above listed temperature depends on the saturated suction temperature the unit is operating at. Refer to ECAT for exact limitations.

DUAL CIRCUIT

38APD UNIT SIZE	MINIMUM LOW AMBIENT (Standard Unit)	MINIMUM LOW AMBIENT MOTORMASTER CONTROL (Factory-Installed Option)	MAXIMUM AMBIENT*
025-040	32 F (0 C)	-20 F (-28.9 C)	122 F (50 C)
050-060	25 F (-3.9 C)	-20 F (-28.9 C)	122 F (50 C)
070-100	32 F (0 C)	-20 F (-28.9 C)	122 F (50 C)

*Operation above listed temperature depends on the saturated suction temperature the unit is operating at. Refer to ECAT for exact limitations.

38AP LOADING SEQUENCES

LOADING SEQUENCES — SINGLE CIRCUIT

38APS UNIT SIZE	LOADING SEQUENCES			
	Standard Unit		Digital Factory-Installed Option	
	Range (%)	Number of Steps	Range (%)	Number of Steps
025-030	50, 100	2	17-100	22
040-050	33, 66, 100	3	11-100	33

LOADING SEQUENCES — DUAL CIRCUIT

38APD UNIT SIZE	LOADING SEQUENCES			
	Standard Unit		Digital Factory-Installed Option	
	Range (%)	Number of Steps	Range (%)	Number of Steps
025-030	50, 100	2	17-100	22
040-060	23, 50, 73, 100	4	8-100	44
070	24, 41, 65, 82, 100	5	8-100	55
080	20, 40, 60, 80, 100	5	7-100	55
090	15, 33, 49, 67, 82, 100	6	5-100	66
100	17, 33, 50, 67, 83, 100	6	6-100	66

Application data (cont)



REFRIGERANT PIPING REQUIREMENTS 38APS025-050 SINGLE-CIRCUIT UNITS

38APS UNIT SIZE	TOTAL LINEAR LENGTH OF INTERCONNECTING PIPE, ft (m)															
	0-25		25-50		50-75		75-100		100-125		125-150		150-175		175-200	
	(0-7.6)		(7.6-15.2)		(15.2-22.9)		(22.9-30.5)		(30.5-38.1)		(38.1-45.7)		(45.7-53.3)		(53.3-61.0)	
	L	S	L	S	L	S	L	S	L	S	L	S	L	S	L	S
025	5/8	13/8	5/8	15/8	7/8	15/8	7/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*
027	5/8	13/8	5/8	15/8	7/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*
030	5/8	13/8	7/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*	11/8	21/8*
040	5/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*	11/8	21/8*	11/8	25/8*	11/8	25/8*
050	7/8	15/8	7/8	21/8*	7/8	21/8*	11/8	21/8*	11/8	25/8*	11/8	25/8*	11/8	25/8*	11/8	25/8*

38APD025-100 DUAL-CIRCUIT UNITS

38APD UNIT SIZE		TOTAL LINEAR LENGTH OF INTERCONNECTING PIPE, ft (m)															
		0-25		25-50		50-75		75-100		100-125		125-150		150-175		175-200	
		(0-7.6)		(7.6-15.2)		(15.2-22.9)		(22.9-30.5)		(30.5-38.1)		(38.1-45.7)		(45.7-53.3)		(53.3-61.0)	
		L	S	L	S	L	S	L	S	L	S	L	S	L	S	L	S
025	Ckt A	1/2	11/8	1/2	11/8	5/8	13/8	5/8	13/8	5/8	13/8	5/8	13/8	5/8	15/8	5/8	15/8
	Ckt B	1/2	11/8	1/2	11/8	5/8	13/8	5/8	13/8	5/8	13/8	5/8	13/8	5/8	15/8	5/8	15/8
027	Ckt A	1/2	11/8	1/2	11/8	5/8	13/8	5/8	13/8	5/8	13/8	5/8	13/8	5/8	15/8	5/8	15/8
	Ckt B	1/2	11/8	1/2	11/8	5/8	13/8	5/8	13/8	5/8	13/8	5/8	13/8	5/8	15/8	5/8	15/8
030	Ckt A	1/2	11/8	5/8	13/8	5/8	13/8	5/8	13/8	5/8	15/8	5/8	15/8	7/8	15/8	7/8	15/8
	Ckt B	1/2	11/8	5/8	13/8	5/8	13/8	5/8	13/8	5/8	15/8	5/8	15/8	7/8	15/8	7/8	15/8
040	Ckt A	5/8	13/8	5/8	13/8	5/8	15/8	7/8	15/8	7/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*
	Ckt B	1/2	11/8	5/8	13/8	5/8	15/8	5/8	15/8	7/8	15/8	7/8	15/8	7/8	21/8*	7/8	21/8*
050	Ckt A	5/8	13/8	5/8	15/8	7/8	15/8	7/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*
	Ckt B	5/8	13/8	5/8	15/8	7/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*
060	Ckt A	5/8	13/8	5/8	15/8	7/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*
	Ckt B	5/8	15/8	7/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*	11/8	21/8*	11/8	21/8*
070	Ckt A	5/8	15/8	7/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*	11/8	21/8*	11/8	21/8*
	Ckt B	5/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*	11/8	21/8*	11/8	25/8*
080	Ckt A	5/8	15/8	7/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*	11/8	21/8*	11/8	21/8*
	Ckt B	5/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*	11/8	25/8*	11/8	25/8*	11/8	25/8*	11/8	25/8*
090	Ckt A	5/8	15/8	7/8	21/8*	7/8	21/8*	7/8	21/8*	7/8	21/8*	11/8	21/8*	11/8	25/8*	11/8	25/8*
	Ckt B	7/8	15/8	7/8	21/8*	7/8	21/8*	11/8	21/8*	11/8	25/8*	11/8	25/8*	11/8	25/8*	11/8	25/8*
100	Ckt A	7/8	15/8	7/8	21/8*	7/8	21/8*	11/8	21/8*	11/8	25/8*	11/8	25/8*	11/8	25/8*	11/8	25/8*
	Ckt B	7/8	15/8	7/8	21/8*	7/8	21/8*	11/8	21/8*	11/8	25/8*	11/8	25/8*	11/8	25/8*	11/8	25/8*

LEGEND

L — Liquid Line
S — Suction Line

*Double suction riser required on units if condensing unit is located higher than evaporator.

NOTE: All pipe sizes are OD inches. Equivalent sizes in millimeters follow:

in.	mm
1/2	12.7
5/8	15.9
7/8	22.2
11/8	28.6
13/8	34.9
15/8	41.3
21/8	54.0
25/8	66.7

REFRIGERANT PIPING REQUIREMENTS (cont) **38APS025-50 SINGLE-CIRCUIT UNITS DOUBLE SUCTION RISER**

38APS UNIT SIZE	TOTAL LINEAR LENGTH OF INTERCONNECTING PIPE, ft (m)																							
	0-25			25-50			50-75			75-100			100-125			125-150			150-175			175-200		
	(0-7.6)			(7.6-15.2)			(15.2-22.9)			(22.9-30.5)			(30.5-38.1)			(38.1-45.7)			(45.7-53.3)			(53.3-61.0)		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
025	—	—	—	—	—	—	—	—	—	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8
027	—	—	—	—	—	—	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8
030	—	—	—	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8
040	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 5/8	1 5/8	2 1/8	2 5/8
050	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8	2 5/8

38APD025-100 DUAL-CIRCUIT UNITS DOUBLE SUCTION RISER

38APDUNIT SIZE	TOTAL LINEAR LENGTH OF INTERCONNECTING PIPE, ft (m)																							
	0-25			25-50			50-75			75-100			100-125			125-150			150-175			175-200		
	(0-7.6)			(7.6-15.2)			(15.2-22.9)			(22.9-30.5)			(30.5-38.1)			(38.1-45.7)			(45.7-53.3)			(53.3-61.0)		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
025	Ckt A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Ckt B	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
027	Ckt A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Ckt B	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
030	Ckt A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Ckt B	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
040	Ckt A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8
	Ckt B	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8
050	Ckt A	—	—	—	—	—	—	—	—	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8
	Ckt B	—	—	—	—	—	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8
060	Ckt A	—	—	—	—	—	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8
	Ckt B	—	—	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8
070	Ckt A	—	—	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8
	Ckt B	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	2 5/8
080	Ckt A	—	—	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8
	Ckt B	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8
090	Ckt A	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8
	Ckt B	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8
100	Ckt A	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8
	Ckt B	—	—	—	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 3/8	1 5/8	2 1/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8	2 5/8	1 5/8	2 1/8

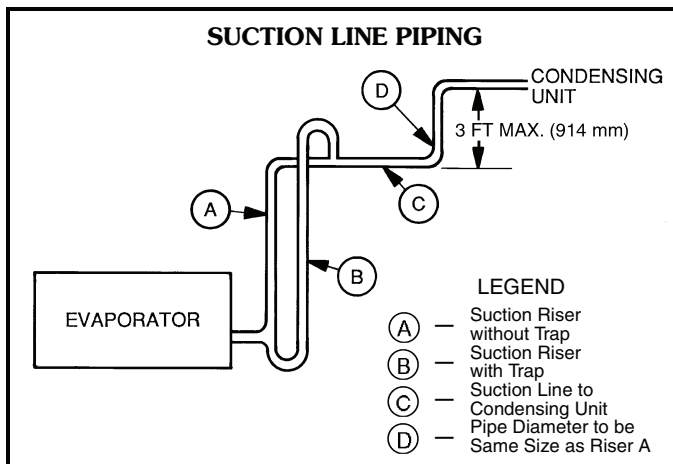
LEGEND

— Not Required
Pipe A — Suction Riser without Trap
Pipe B — Suction Riser with Trap
Pipe C — Suction Line Condensing Unit

- Pipe sizes are based on the total linear length, shown for each column, plus a 50% allowance for fittings.
- Suction and liquid line sizing is based on pressure drop equivalent to criteria may allow selection of smaller pipe sizes but at a penalty of decreased system capacity and efficiency.

- Refer to Carrier System Design Manual or to E20-II® design programs for further information on selecting pipe sizes for split systems.
- All pipe sizes are OD inches. Equivalent sizes in millimeters follow:

in.	mm
1/2	12.7
5/8	15.9
7/8	22.2
1 1/8	28.6
1 3/8	34.9
1 5/8	41.3
2 1/8	54.0
2 5/8	66.7



Guide specifications



Commercial Air-Cooled Condensing Units with Puron® Refrigerant (R-410A)

HVAC Guide Specifications

Size Range: **25 to 100 Nominal Tons at 60 Hz**

88 to 352 Nominal kW at 50 Hz

Carrier Model Number: **38APD, 38APS**

Part 1 — General

1.01 SYSTEM DESCRIPTION

Outdoor-mounted, air-cooled condensing unit with Puron® refrigerant (R-410A) suitable for on-the-ground or rooftop installation. The 38APS unit shall have one refrigeration circuit and shall consist of two or three rotary scroll compressors. The 38APD unit shall have two independent refrigeration circuits and shall consist of two, four, five or six rotary scroll compressors. Unit shall have air-cooled coils, propeller-type condenser fans, a control box, and shall discharge condenser air vertically upward as shown on certified drawings. Unit shall be used in refrigeration circuit with a central station air-handling unit or direct-expansion coils.

1.02 QUALITY ASSURANCE

- A. Unit performance shall be rated in accordance with ARI Standard 365, latest edition (U.S.A).
- B. Unit construction shall comply with latest edition of ASHRAE 15 Safety Code, UL 1995, and ASME applicable codes (U.S.A. codes).
- C. Unit shall be manufactured in a facility registered to ISO 9001:2000 Manufacturing Quality Standard.
- D. Base unit shall be constructed in accordance with UL standards and CSA.
- E. Unit cabinet shall be capable of withstanding 500-hour salt-spray exposure per ASTM B117 (scribed specimen).
- F. Design pressure shall be 650 psig (4482 kPa).
- G. Unit shall be functional checked at the factory.

1.03 DELIVERY, STORAGE, AND HANDLING

Unit shall be shipped as single package and shall be stored and handled per unit manufacturer's recommendations.

1.04 WARRANTY (FOR INCLUSION BY SPECIFYING ENGINEER)

Part 2 — Products

2.01 EQUIPMENT

A. General:

Factory assembled, single-piece, air-cooled condensing unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, compressors, nitrogen holding charge, and special features required prior to field start-up.

B. Unit Cabinet:

- 1. Cabinet shall be galvanized steel casing with a baked enamel powder or pre-painted finish.

- 2. Cabinet shall be capable of withstanding 500-hr salt spray test in accordance with ASTM (U.S.A.) B-117 standard.
- 3. Control box access panels shall be hinged for service access.
- 4. Lifting holes shall be provided to facilitate rigging.

C. Fans:

- 1. Condenser fans shall be direct-drive propeller type, discharging air vertically upward.
- 2. All condenser fan motors shall be totally enclosed 3-phase type with permanently lubricated ball bearings, class F insulation and internal, automatic-reset thermal overload protection or manual reset calibrated circuit breakers.
- 3. Shafts shall have inherent corrosion resistance.
- 4. Fan blades shall be statically and dynamically balanced.
- 5. Condenser-fan openings shall be equipped with PVC-coated steel wire safety guards.

D. Compressors:

- 1. Compressors shall be rotary scroll.
- 2. Operating oil charge and a crankcase heater control oil dilution.
- 3. Compressors shall be mounted on two rails having rubber in shear vibration isolators.
- 4. Staging of compressors shall provide unloading capability. Digital compressor unloading control shall be available as an option on one circuit.
- 5. Compressor motors shall be cooled by refrigerant gas passing through motor windings and shall have either internal line break thermal and current overload protection or external current overload modules with compressor temperature sensors.

E. Condenser Coils:

- 1. Coil shall be air-cooled microchannel heat exchanger (MCHX) and shall have a series of flat tubes containing a series of multiple, parallel flow microchannels layered between the refrigerant manifolds. Microchannel coils shall consist of a two-pass arrangement. Coil construction shall consist of aluminum alloys for the fins, tubes and manifolds in combination with a corrosion-resistant coating on the tubes.
- 2. Tubes shall be cleaned, dehydrated, and sealed.
- 3. Assembled condenser coils shall be leak tested and pressure tested at 650 psig (4482 kPa).

F. Refrigeration Components:

- 1. Refrigeration circuit components shall include liquid line temperature relief device, pressure transducers, liquid line shutoff valve, suction shutoff valve, suction line accumulators, nitrogen holding charge, and compressor oil.



2. Long line length check valves are required for liquid line installation on all linear line length applications of more than 100 ft (30.5 m) to prevent liquid migration during unit shutdown. For any 025-030 size dual circuit unit application where evaporator is located higher than the condensing unit, check valves are required for linear line length above 55 ft (16.8 m).
3. Units shall include one factory-installed suction line accumulator for each refrigerant circuit.

G. Controls and Safeties:

1. Unit ComfortLink™ controls shall include:
 - a. Optional scrolling marquee display.
 - b. Carrier Comfort Network® (CCN) system capability.
 - c. Unit control with standard pressure transducer, discharge pressure transducer and suction temperature thermistors.
 - d. Current alarm list and alarm history list on display.
 - e. Automatic compressor lead/lag control.
 - f. Service run test capability.
 - g. Compressor minimum run time (3 minutes) and minimum off time (3 minutes).
 - h. Service diagnostic mode.
 - i. Self-contained low voltage control circuit.
 - j. Cycle condenser fans to maintain proper head pressure control.
 - k. Capacity control with staging compressors.
 - l. Optional digital scrolls to stage compressors and cycle digital compressor for maintaining desired leaving air temperature set point.
 - m. Alarm relay output to indicate when unit is in alarm condition.
2. Minimum safety devices shall include:
 - a. Solid-state compressor lockout to provide optional reset capability at the space thermostat if any of the following safety devices trip and shut off compressor.
 - 1) Compressor lockout protection for internal or external overload.
 - 2) Low pressure protection.
 - 3) High pressure protection (high pressure switch or internal).
 - 4) Compressor reverse rotation protection.
 - 5) Loss of charge protection.
 - 6) Low suction superheat protection.

H. Operating Characteristics:

1. The capacity of the condensing unit shall meet or exceed ____ Btuh (____kW) at a suction temperature of ____ F (____C). The power consumption at full load shall not exceed ____Btuh (____kW).
2. The combination of the condensing unit and the evaporator or air handling unit shall have a

total net cooling capacity of ____ Btuh (____kW) or greater at conditions of ____ cfm (____L/s) entering-air temperature at the evaporator at ____F (____C) wet bulb and ____F (____C) dry bulb, and air entering the condensing unit at ____F (____C).

3. The system shall have an Energy Efficiency Ratio (EER) of ____Btuh/watt or greater at standard ARI conditions.

I. Electrical Requirements:

All unit power wiring shall enter unit cabinet at a single location.

J. Special Features:

1. Low Ambient Control:
 - a. Control shall regulate fan motor speed in response to the saturated condensing temperature of the unit. The control shall be capable of operating with outdoor temperatures at -20 F (-28.9 C).
 - b. Motormaster® low ambient control shall be available as a factory-installed option for all units.
2. Optional E-Coated MCHX Condenser Coil:

E-coated aluminum microchannel coils shall have a flexible epoxy polymer coating uniformly applied to all coil external surface areas without material bridging between fins or louvers. Coating process shall ensure complete coil encapsulation, including all exposed fin edges. E-coat thickness of 0.8 to 1.2 mil with top coat having a uniform dry film thickness from 1.0 to 2.0 mil on all external coil surface areas, including fin edges, shall be provided. E-coated coils shall have superior hardness characteristics of 2H per ASTM D3363-00 and cross-hatch adhesion of 4B-5B per ASTM D3359-02. E-coated products shall have superior impact resistance with no cracking, chipping or peeling per NSF/ANSI 51-2002 Method 10.2 (U.S.A. Standards).
3. Sound Reduction:
 - a. Low sound fan for sound reduction is available as a factory-installed option for all units.
 - b. Compressor sound blankets for additional sound reduction are available as a factory-installed option on all units having low sound fans.
4. Digital Compressor Option:

Modification shall include digital compressor to provide incremental steps for tighter temperature control. Digital compressor shall be available as factory-installed option for all units.
5. Non-Fused Disconnect:

A non-fused disconnect is available as a factory-installed option for all units having single point power connection units.

Guide specifications (cont)



6. Long Line Length Check Valves:

Long line length check valves are available as factory-installed options or field-installed accessories on all units.

7. High Short Circuit Current Rating (SCCR):

The optional high SCCR interrupt capability shall allow the unit to tolerate a 65 kA (208/230v, 380v and 460-v units) or 25 kA (575-v units) short circuit current for a brief period of time while protecting downstream components. The high SCCR option shall provide a higher level of protection than the standard unit (option for 60 Hz only). High interrupt shall be available as factory-installed option on all units.

8. Navigator™ Hand Held Display:

- a. Portable hand held display module with a minimum of 4 lines and 20 characters per line, of clear English, French, Spanish, or Portuguese language.
- b. Display menus shall provide clear language descriptions of all menu items, operating modes, configuration points and alarm diagnostics. Reference to factory codes shall not be accepted.
- c. RJ-14 connection plug shall allow display module to be connected to factory-installed receptacle.
- d. Industrial grade coiled extension cord shall allow the display module to be moved around the unit.
- e. Magnets shall hold the display module to any sheet metal panel to allow hands-free operation.

f. Display module shall have NEMA 4x housing suitable for use in outdoor environments.

g. Display shall have back light and contrast adjustment for easy viewing in bright sunlight or night conditions.

h. Navigator module shall have raised surface buttons with positive tactile response.

i. Navigator module shall be available as field-installed accessory for all units.

9. BACnet™ Translator Control:

BACnet control shall be available as a field-installed accessory for all units to provide interface between unit and a BACnet Local Area Network (LAN, i.e., MS/TP EIA-485).

10. LON Translator Control:

Unit shall be supplied with field-installed interface between the chiller and a Local Operating Network (LON, i.e., LonWorks FT-10A ANSI/EIA-709.1). LON shall be available as a field-installed accessory for all units.

11. Touch Pilot™ Display:

Touch Pilot remote mount touch screen display for network attachment to the unit shall be available as a field-installed accessory for all units.

12. Energy Management Module (EMM):

The EMM shall provide remote set point, demand limit control, and percent capacity input.



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