582K*04-06 Ultra Low NOx Legacy™ Line
Single Packaged Rooftop
Ultra Low NOx (14 ng/j) Emissions
Gas Heat/Electric Cooling

bryant®

Product Data

LEGACY™ LINE

with Axion™ Fan Technology

582K*04, 05, 06 Ultra Low NOx

Single-Package Ultra Low NOx Gas Heating/Electric Cooling Rooftop Units with Puron® Refrigerant (R-410A)

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Form PDS582K-D-4-6-05

Features/Benefits

The New Bryant Legacy™ Line rooftop units (RTU) with Axion™ Fan Technology and Ultra Low NOx Gas heating were designed by customers for customers and integrate new technology to provide value added benefits never seen in this type of equipment before.

New major design features include:

- Patented, industry's first efficient indoor fan system using Vane Axial fan with electronically commutated variable speed motor.
- Bryant exclusive Ultra Low NOx gas heat emissions burner box and heat exchanger design that provides 14 nanograms/joule (ng/j) operation.
- Reliable fixed speed scroll compressor on 3-5 ton sizes.
- Upgraded Unit Control Board with intuitive indoor fan adjustment.
- Reliable copper tube/aluminum fin condenser coil with 5/16 in. tubing to help reduce refrigerant charge versus prior designs.
- New outdoor fan system with rugged, lightweight high impact composite fan blade.

These 582K Ultra Low NOx Legacy Line units up to 5 tons are specifically designed to fit on Bryant roof curbs that were installed back to 1989, which makes replacement easy and eliminates the need for curb adapters or changing utility connections.

Single-stage units deliver efficiencies of up to 14.0 SEER on 3-phase products and 13.8 SEER2 on single-phase products. All models are capable of either vertical or horizontal airflow.

With "no-strip" screw collars, handled access panels, and more, the unit is easy to install, easy to maintain, and easy to use. Your new 3 to 5 ton Bryant Legacy Line rooftop unit (RTU) provides optimum comfort and control from a packaged rooftop.

Value-added features include:

- Optional Perfect Humidity™ dehumidification system for improved part load humidity performance.
- Puron® refrigerant (R-410A).
- Single point gas and electrical connections.
- RTU Open controller for BACnet™[1], LonWorks®[1], Modbus®[1] and Johnson Controls N2.
- Fixed refrigerant metering devices.
- Scroll compressors with internal line-break overload protection.
- Units come with an easy access toolless filter door. Filter track tilts out for filter removal and replacement. All filters are the same size in each unit.

Installation ease

All Legacy Line units are field-convertible to horizontal airflow, which makes it easy to adjust to unexpected jobsite complications. Lighter units make for easy replacement. Simple, fast plug-in connections to the standard integrated Unit Control Board (UCB). Clearly labeled connection points to reduce installation time. Also, a large control box provides room to work and room to mount Bryant accessory controls.

Easy to maintain

With the new Axion Fan Technology Vane Axial fan system and direct drive ECM motor, there is no longer a need to adjust belts or pulleys as in past designs. This frees up maintenance and installation time.

Easy access handles by Bryant provide quick and easy access to all normally serviced components. Our "no-strip" screw system has superior holding power and guides screws into position while preventing the screw from stripping the unit's metal.

Sloped, corrosion resistant composite drain pan sheds water; and won't rust.

Easy to use

The newly re-designed Unit Control Board by Bryant puts all connections and troubleshooting points in one convenient place. Most low voltage connections are made to the same board and make it easy to access it. Setting up the fan is simple by an intuitive switch and rotary dial arrangement. Bryant rooftops have high and low pressure switches, a filter drier, and 2 in. filters standard. The new integrated gas control board operates an intelligent multi-speed gas heat inducer motor to help reduce the Ultra Low NOx emissions.

NOTES:

1. Units cannot operate with Liquid Propane (LP) gas.
2. Units can operate from 0 to 2000 feet altitude only.

1. Third-party trademarks and logos are property of their respective owners.

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Features/Benefits (cont)

Axion™ Fan Technology

Direct drive Axion Fan Technology indoor fan system uses Vane Axial fan design and electronically commutated motors.

This new Vane Axial design over past belt drive systems has 75% fewer moving parts, uses up to 40% less energy and has no fan belts, blower bearings and shaft.

Streamlined control and integration

Bryant controllers make connecting Legacy™ Line rooftops into existing building automation systems (BAS) easy. The units are compatible with conventional thermostat controls and Bryant RTU Open multi-protocol controller.

Operating efficiency and flexibility

The 582K*04-06 Ultra Low NOx rooftops meet ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) 90.1-2016, IECC®[1] (International Energy Conservation Code) IECC-2018 minimum efficiency requirements.

1. Third-party trademarks and logos are the property of their respective owners.

Field convertible airflow

All Legacy Line 3 to 5 ton units are field-convertible to horizontal airflow, which makes it easy to adjust to unexpected job-site complications.

Comfort control

Bryant's patented Perfect Humidity™ dehumidification system is an all-inclusive factory-installed option on gas heating/electric cooling and electric cooling/electric heat models. This system provides reliable, flexible operation to meet indoor part load sensible and latent requirements.

LEGACY™ LINE

with Axion™ Fan Technology

High Efficiency Outdoor Fan
– Non-corrosive blade
– Balanced blade
– Efficient airflow collar

Vane Axial Indoor Fan
– Direct drive ECM
– Slow ramp up
– Phase loss protection
– No belts or pulleys

Compression
– Fully hermetic scroll
– Internally protected
– Single stage cooling capacity control

Heating
– Single stage gas heating operation
– Multi speed induced draft vent motor
– Integrated burner box and heat exchanger design

Efficient Coils
– Round tube/plate fin
– Copper/Aluminum
– Special coating available
– New 5/16 in. condenser tube
– Perfect Humidity™ available

Unit controls
– Base unit controller
Switch/dial fan setting
Large terminal connections
– RTU Open option
Multi-protocol controller

Cabinet Design
– Heavy gauge base rails
– Large handled access panels
– Tool-less filter access door
– Replacement "original" fit design

Model number nomenclature

582K*04-06 Ultra Low NOx Model Number Nomenclature

Position:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Example:	5	8	2	K	P	0	6	D	0	8	2	A	1	B	0	A	A

Unit Type
582 = Gas Heat RTU, Legacy™ Line

Model
K = Puron® (R-410A) Refrigerant

Voltage
E = 460-3-60[a]
J = 208/230-1-60[b]
P = 208/230-3-60

Cooling Tons
04 = 3 tons
05 = 4 tons
06 = 5 tons

Refrig. System/Gas Heat Options
3 = One Stage Cooling with Ultra Low NOx (14 ng/j) (1-phase only)[c]
D = One Stage Cooling with Ultra Low NOx (14 ng/j)
E = One Stage Cooling, Ultra Low NOx (14 ng/j), with Perfect Humidity® option
(Ultra Low NOx models include Stainless Steel HX)

Heat Level Input
Low Gas Heat: 060 = 60,000
Medium Gas Heat: 082 = 82,000

Coil Options (RTPF) (Outdoor – Indoor – Hail Guard)
A = Al/Cu – Al/Cu
B = Pre-coat Al/Cu – Al/Cu
C = E-coat Al/Cu – Al/Cu
D = E-coat Al/Cu – E-coat Al/Cu
E = Cu/Cu – Al/Cu
F = Cu/Cu – Cu/Cu
M = Al/Cu – Al/Cu – Louvered Hail Guard
N = Pre-coat Al/Cu – Al/Cu – Louvered Hail Guard
P = E-coat Al/Cu – Al/Cu – Louvered Hail Guard
Q = E-coat Al/Cu – E-coat Al/Cu – Louvered Hail Guard
R = Cu/Cu – Al/Cu – Louvered Hail Guard
S = Cu/Cu – Cu/Cu – Louvered Hail Guard

Vane Axial – Indoor Fan Options
1 = Direct Drive – Axion™ Fan – Standard Static
2 = Direct Drive – Axion Fan – Medium Static
3 = Direct Drive – Axion Fan – High Static

Outdoor Air Options
A = Electro-mechanical controls. Allows for use of all field-installed economizers and dampers.
B = Temperature Economizer, Barometric Relief, Standard Leak
E = Temperature Economizer, Barometric Relief, Standard Leak w/CO_2
H = Enthalpy Economizer, Barometric Relief, Standard Leak
L = Enthalpy Economizer, Barometric Relief, Standard Leak w/CO_2
Q = Motorized 2 Position Damper
U = Temperature Economizer, Barometric Relief, Ultra Low Leak
W = Enthalpy Economizer, Barometric Relief, Ultra Low Leak

Factory Installed Options
0A = None
Note: See the 582K 3 to 6 ton Price Pages for a complete list of factory-installed options.

Packaging and Control
A = Standard Packaging, electromechanical controls, no intake or exhaust option. Will allow for use of all field-installed economizers, manual or two-position damper.
B = LTL Packaging, electromechanical controls, no intake or exhaust option. Will allow for use of all field-installed economizers, manual or two-position damper.
G = Standard Packaging, electromechanical controls that require POL224 EconomizerONE.
H = LTL Packaging, electromechanical controls that require POL224 EconomizerONE.

NOTE(S):
[a] Non-fused disconnect not available for 460-v units.
[b] The following are not available as factory-installed options for models with this voltage code: Perfect Humidity, Coated Coils or Cu Fin Coils, Louvered Hail Guards, Economizer, and Powered 115 Volt Convenience Outlet.
[c] Units meet Department of Energy 2023 SEER2 requirements.

Capacity ratings

582KJ04-06 Ultra Low NOx 1-Phase AHRI Ratings[a,b,c,d]

UNIT	V-Ph-Hz	COOLING STAGES	NOMINAL CAPACITY (tons)	NET COOLING CAPACITY (MBtuh)	TOTAL POWER (kW)	SEER2	EER2
582KJ04	208/230-1-60	1	3	34.0	3.0	13.4	11.5
582KJ05	208/230-1-60	1	4	48.0	4.2	13.8	11.5
582KJ06	208/230-1-60	1	5	58.5	5.1	13.6	11.5

NOTE(S):
a. Rated in accordance with AHRI Standards 210/240 (04-06 size).
b. Rating are based on:
Cooling Standard: 80°F (27°C) db, 67°F (19°C) wb indoor air temperature and 95°F (35°C) db outdoor air temperature.
c. Units comply with ASHRAE 90.1-2016 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) and DOE-2023 (Department of Energy) Energy Standard for minimum SEER2 and EER2 requirements.
d. 582K*04-06 Ultra Low NOx units comply with US Energy Policy Act (2005). To evaluate code compliance requirements, refer to state and local codes.

582K(E/P)04-06 Ultra Low NOx 3-Phase AHRI Ratings[a,b,c,d]

UNIT	V-Ph-Hz	COOLING STAGES	NOMINAL CAPACITY (tons)	NET COOLING CAPACITY (MBtuh)	TOTAL POWER (kW)	SEER	EER
582K(E/P)04	208/230-3-60, 460-3-60	1	3	34.4	3.0	14.0	11.5
582K(E/P)05	208/230-3-60, 460-3-60	1	4	47.0	4.1	14.0	11.6
582K(E/P)06	208/230-3-60, 460-3-60	1	5	58.5	5.3	14.0	11.0

UNIT	NET COOLING CAPACITY 2 (MBtuh)	TOTAL POWER 2 (kW)	SEER2	EER2
582K(E/P)04	34.0	3.0	13.4	11.2
582K(E/P)05	47.0	4.2	13.4	11.2
582K(E/P)06	58.5	5.3	13.4	11.0

NOTE(S):
a. Rated in accordance with AHRI Standards 210/240 (04-06 size).
b. Rating are based on:
Cooling Standard: 80°F (27°C) db, 67°F (19°C) wb indoor air temperature and 95°F (35°C) db outdoor air temperature.
c. Units comply with ASHRAE 90.1-2016 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) requirements, as well as DOE-2018 (Department of Energy) Energy Standard for minimum SEER and EER requirements and DOE-2023 Energy Standard for minimum SEER2 and EER2 requirements. ASHRAE 90.1 requires M1 ratings on 3-phase models.
d. 582K*04-06 Ultra Low NOx units comply with US Energy Policy Act (2005). To evaluate code compliance requirements, refer to state and local codes.

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AHRI — Air-Conditioning, Heating and Refrigeration Institute
EER — Energy Efficiency Ratio
MBtuh — Btuh in Thousands
SEER — Seasonal Energy Efficiency Ratio

Capacity ratings (cont)

Sound Ratings Table

UNIT	COOLING STAGES	OUTDOOR SOUND (dB) AT 60 Hz[a,b]								
		A-Weighted[c]	63	125	250	500	1000	2000	4000	8000
582K*04	1	79	85.6	84.7	80.5	76.0	72.4	68.0	62.8	59.3
582K*05	1	79	85.6	84.7	80.5	76.0	72.4	68.0	62.8	59.3
582K*06	1	79	85.6	84.7	80.5	76.0	72.4	68.0	62.8	59.3

NOTE(S):
a. Outdoor sound data is measured in accordance with AHRI.
b. Measurements are expressed in terms of sound power. Do not compare these values to sound pressure values because sound pressure depends on specific environmental factors which normally do not match individual applications. Sound power values are independent of the environment and therefore more accurate.
c. A-weighted sound ratings filter out very high and very low frequencies, to better approximate the response of “average” human ear. A-weighted measurements for Bryant units are taken in accordance with AHRI.

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dB — Decibel

Minimum - Maximum Airflow Ratings (cfm) — Natural Gas

582K UNIT		HEAT LEVEL	COOLING		HEATING	
			Minimum Airflow (cfm)	Maximum Airflow (cfm)	Minimum Airflow (cfm)	Maximum Airflow (cfm)
1-Phase	***04**	LOW	900	1500	900	1500
		MED			1030	
	***05**	LOW	1200	2000	1200	2000
		MED				
	***06**	LOW	1500	2500	1500	2500
		MED				
3-Phase	***04**	LOW	900	1500	900	1500
		MED			1030	
	***05**	LOW	1200	2000	1200	2000
		MED				
	***06**	LOW	1500	2500	1500	2500
		MED				

Heat Rating Table — Ultra Low NOx Natural Gas

582K UNIT		GAS HEAT	SS HEAT EXCHANGER Input/Output Stage 1 (MBH)	TEMPERATURE RISE (°F)	THERMAL EFFICIENCY (%)	AFUE EFFICIENCY (%)
1-Phase	***04**	LOW	60/49	20-50	81	82
		MED	82/66	20-60	81	81
	***05**	LOW	60/49	20-50	81	82
		MED	82/66	20-60	81	81
	***06**	LOW	60/49	15-45	81	82
		MED	82/66	20-60	81	81
3-Phase	***04**	LOW	60/49	20-50	81	—
		MED	82/66	20-60	81	81
	***05**	LOW	60/49	20-50	81	—
		MED	82/66	20-60	81	81
	***06**	LOW	60/49	15-45	81	—
		MED	82/66	20-60	81	81

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AFUE — Annual Fuel Utilization Efficiency
MBH — Btuh in thousands

Physical data

582K Ultra Low NOx Units — 3 Ton Physical Data

582K UNIT	582K(E/P)04-D	582K(E/P)04-E	582KJ04-3
NOMINAL TONS	3	3	3
BASE UNIT OPERATING WT (lb)[a]	482	482	482
REFRIGERATION SYSTEM			
No. of Circuits / No. of Compressors / Type	1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / Scroll
Puron® (R-410A) Charge A/B (lb-oz)	4-6.0	—	4-9.2
Perfect Humidity™ Puron (R-410A) Charge A/B (lb-oz)	—	7-8.0	—
Metering Device	Acutrol	Acutrol	Acutrol
Perfect Humidity™ Metering Device	—	TXV-Acutrol	—
High-Pressure Trip / Reset (psig)	630 / 505	630 / 505	630 / 505
Low-Pressure Trip / Reset (psig)	54 / 117	27 / 44	54 / 117
EVAPORATOR COIL			
Material (Tube / Fin)	Cu / Al	Cu / Al	Cu / Al
Coil Type (in. RTPF)	3/8	3/8	3/8
Rows / FPI	2 / 15	2 / 15	2 / 15
Total Face Area (ft²)	5.5	5.5	5.5
Condensate Drain Connection Size (in.)	3/4	3/4	3/4
CONDENSER COIL			
Material (Tube / Fin)	Cu / Al	Cu / Al	Cu / Al
Coil Type (in. RTPF)	5/16 in. RTPF	5/16 in. RTPF	5/16 in. RTPF
Rows / FPI	1 / 18	1 / 18	1 / 18
Total Face Area (ft²)	11.7	11.7	14.6
PERFECT HUMIDITY COIL			
Material (Tube / Fin)	—	Cu / Al	—
Coil Type (in. RTPF)	—	3/8	—
Rows / FPI	—	1 / 17	—
Total Face Area (ft²)	—	4.1	—
EVAPORATOR FAN AND MOTOR			
Standard Static 1-Phase			
Motor Qty / Drive Type	—	—	1 / Direct
Maximum Continuous bhp	—	—	0.44
Range (rpm)	—	—	189-1890
Fan Qty / Type	—	—	1 / Vane Axial
Fan Diameter (in.)	—	—	16.6
Medium Static 1-Phase			
Motor Qty / Drive Type	—	—	1 / Direct
Maximum Continuous bhp	—	—	0.71
Range (rpm)	—	—	219-2190
Fan Qty / Type	—	—	1 / Vane Axial
Fan Diameter (in.)	—	—	16.6
High Static 1-Phase			
Motor Qty / Drive Type	—	—	1 / Direct
Maximum Continuous bhp	—	—	1.07
Range (rpm)	—	—	249-2490
Fan Qty / Type	—	—	1 / Vane Axial
Fan Diameter (in.)	—	—	16.6
Standard Static 3-Phase			
Motor Qty / Drive Type	1 / Direct	1 / Direct	—
Maximum Continuous bhp	0.44	0.44	—
Range (rpm)	189-1890	189-1890	—
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial	—
Fan Diameter (in.)	16.6	16.6	—
Medium Static 3-Phase			
Motor Qty / Drive Type	1 / Direct	1 / Direct	—
Maximum Continuous bhp	0.71	0.71	—
Range (rpm)	219-2190	219-2190	—
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial	—
Fan Diameter (in.)	16.6	16.6	—

Physical data (cont)

582K Ultra Low NOx Units — 3 Ton Physical Data (cont)

582K UNIT	582K(E/P)04-D	582K(E/P)04-E	582KJ04-3
High Static 3-Phase			
Motor Qty / Drive Type	1 / Direct	1 / Direct	—
Maximum Continuous bhp	1.07	1.07	—
Range (rpm)	249-2490	249-2490	—
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial	—
Fan Diameter (in.)	16.6	16.6	—
CONDENSER FAN AND MOTOR			
Qty / Motor Drive Type	1 / Direct	1 / Direct	1 / Direct
Motor HP / rpm	1/4 / 1100	1/4 / 1100	1/4 / 1100
Fan Diameter (in.)	23.0	23.0	23.0
FILTERS			
RA Filter Qty / Size (in.)	2 / 16 x 25 x 2	2 / 16 x 25 x 2	2 / 16 x 25 x 2
OA Inlet Screen Qty / Size (in.)	1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 24 x 1

NOTE(S):
a. Base unit operating weight does not include weight of options.

Physical data (cont)

582K Ultra Low NOx Units — 4 Ton Physical Data

582K UNIT	582K(E/P)05-D	582K(E/P)05-E	582KJ05-3
NOMINAL TONS	4	4	4
BASE UNIT OPERATING WT (lb)[a]	543	543	543
REFRIGERATION SYSTEM			
No. of Circuits / No. of Compressors / Type	1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / Scroll
Puron® (R-410A) Charge A/B (lb-oz)	9-14.0	—	8-9.6
Perfect Humidity™ Puron (R-410A) Charge A/B (lb-oz)	—	14-6.0	—
Metering Device	Acutrol	Acutrol	Acutrol
Perfect Humidity™ Metering Device	—	TXV-Acutrol	—
High-Pressure Trip / Reset (psig)	630 / 505	630 / 505	630 / 505
Low-Pressure Trip / Reset (psig)	54 / 117	27 / 44	54 / 117
EVAPORATOR COIL			
Material (Tube / Fin)	Cu / Al	Cu / Al	Cu / Al
Coil Type (in. RTPF)	3/8	3/8	3/8
Rows / FPI	3 / 15	3 / 15	3 / 15
Total Face Area (ft^2)	5.5	5.5	5.5
Condensate Drain Connection Size (in.)	3/4	3/4	3/4
CONDENSER COIL			
Material (Tube / Fin)	Cu / Al	Cu / Al	Cu / Al
Coil Type (in. RTPF)	5/16	5/16	5/16
Rows / FPI	2 / 18	2 / 18	2 / 18
Total Face Area (ft^2)	15.9	15.9	15.9
PERFECT HUMIDITY COIL			
Material (Tube / Fin)	—	Cu / Al	—
Coil Type (in. RTPF)	—	3/8	—
Rows / FPI	—	2 / 17	—
Total Face Area (ft^2)	—	4.1	—
EVAPORATOR FAN AND MOTOR			
Standard Static 1-Phase			
Motor Qty / Drive Type	—	—	1 / Direct
Maximum Continuous bhp	—	—	0.72
Range (rpm)	—	—	190-1900
Fan Qty / Type	—	—	1 / Vane Axial
Fan Diameter (in.)	—	—	16.6
Medium Static 1-Phase			
Motor Qty / Drive Type	—	—	1 / Direct
Maximum Continuous bhp	—	—	1.06
Range (rpm)	—	—	217-2170
Fan Qty / Type	—	—	1 / Vane Axial
Fan Diameter (in.)	—	—	16.6
High Static 1-Phase			
Motor Qty / Drive Type	—	—	1 / Direct
Maximum Continuous bhp	—	—	1.53
Range (rpm)	—	—	246-2460
Fan Qty / Type	—	—	1 / Vane Axial
Fan Diameter (in.)	—	—	16.6
Standard Static 3-Phase			
Motor Qty / Drive Type	1 / Direct	1 / Direct	—
Maximum Continuous bhp	0.72	0.72	—
Range (rpm)	190-1900	190-1900	—
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial	—
Fan Diameter (in.)	16.6	16.6	—
Medium Static 3-Phase			
Motor Qty / Drive Type	1 / Direct	1 / Direct	—
Maximum Continuous bhp	1.06	1.06	—
Range (rpm)	217-2170	217-2170	—
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial	—
Fan Diameter (in.)	16.6	16.6	—

Physical data (cont)

582K Ultra Low NOx Units — 4 Ton Physical Data (cont)

582K UNIT	582K(E/P)05-D	582K(E/P)05-E	582KJ05-3
High Static 3-Phase			
Motor Qty / Drive Type	1 / Direct	1 / Direct	—
Maximum Continuous bhp	1.96	1.96	—
Range (rpm)	266-2660	266-2660	—
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial	—
Fan Diameter (in.)	16.6	16.6	—
CONDENSER FAN AND MOTOR			
Qty / Motor Drive Type	1 / Direct	1 / Direct	1 / Direct
Motor HP / rpm	1/4 / 1100	1/4 / 1100	1/4 / 1100
Fan Diameter (in.)	23	23	23
FILTERS			
RA Filter Qty / Size (in.)	2 / 16 x 25 x 2	2 / 16 x 25 x 2	2 / 16 x 25 x 2
OA Inlet Screen Qty / Size (in.)	1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 24 x 1

NOTE(S):
a. Base unit operating weight does not include weight of options.

Physical data (cont)

582K Ultra Low NOx Units — 5 Ton Physical Data

582K UNIT	582K(E/P)06-D	582K(E/P)06-E	582KJ06-3
NOMINAL TONS	5	5	5
BASE UNIT OPERATING WT (lb)[a]	556	556	556
REFRIGERATION SYSTEM			
No. of Circuits / No. of Compressors / Type	1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / Scroll
Puron® (R-410A) Charge A/B (lb-oz)	8-9.0	—	8-9.6
Perfect Humidity™ Puron (R-410A) Charge A/B (lb-oz)	—	15-0.0	—
Metering Device	Acutrol	Acutrol	Acutrol
Perfect Humidity™ Metering Device	—	TXV-Acutrol	—
High-Pressure Trip / Reset (psig)	630 / 505	630 / 505	630 / 505
Low-Pressure Trip / Reset (psig)	54 / 117	27 / 44	54 / 117
EVAPORATOR COIL			
Material (Tube / Fin)	Cu / Al	Cu / Al	Cu / Al
Coil Type (in. RTPF)	3/8	3/8	3/8
Rows / FPI	4 / 15	4 / 15	4 / 15
Total Face Area (ft²)	5.5	5.5	5.5
Condensate Drain Connection Size (in.)	3/4	3/4	3/4
CONDENSER COIL			
Material (Tube / Fin)	Cu / Al	Cu / Al	Cu / Al
Coil Type (in. RTPF)	5/16	5/16	5/16
Rows / FPI	2 / 18	2 / 18	2 / 18
Total Face Area (ft²)	15.9	15.9	15.9
PERFECT HUMIDITY COIL			
Material (Tube / Fin)	—	Cu / Al	—
Coil Type (in. RTPF)	—	3/8	—
Rows / FPI	—	2 / 17	—
Total Face Area (ft²)	—	4.1	—
EVAPORATOR FAN AND MOTOR			
Standard Static 1-Phase			
Motor Qty / Drive Type	—	—	1 / Direct
Maximum Continuous bhp	—	—	1.06
Range (rpm)	—	—	215-2150
Fan Qty / Type	—	—	1 / Vane Axial
Fan Diameter (in.)	—	—	16.6
Medium Static 1-Phase			
Motor Qty / Drive Type	—	—	1 / Direct
Maximum Continuous bhp	—	—	1.44
Range (rpm)	—	—	239-2390
Fan Qty / Type	—	—	1 / Vane Axial
Fan Diameter (in.)	—	—	16.6
Standard Static 3-Phase			
Motor Qty / Drive Type	1 / Direct	1 / Direct	—
Maximum Continuous bhp	1.06	1.06	—
Range (rpm)	215-2150	215-2150	—
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial	—
Fan Diameter (in.)	16.6	16.6	—
Medium Static 3-Phase			
Motor Qty / Drive Type	1 / Direct	1 / Direct	—
Maximum Continuous bhp	1.44	1.44	—
Range (rpm)	239-2390	239-2390	—
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial	—
Fan Diameter (in.)	16.6	16.6	—
High Static 3-Phase			
Motor Qty / Drive Type	1 / Direct	1 / Direct	—
Maximum Continuous bhp	2.43	2.43	—
Range (rpm)	284-2836	284-2836	—
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial	—
Fan Diameter (in.)	16.6	16.6	—

Physical data (cont)

582K Ultra Low NOx Units — 5 Ton Physical Data (cont)

582K UNIT	582K(E/P)06-D	582K(E/P)06-E	582KJ06-3
CONDENSER FAN AND MOTOR			
Qty / Motor Drive Type	1 / Direct	1 / Direct	1 / Direct
Motor HP / rpm	1/4 / 1100	1/4 / 1100	1/4 / 1100
Fan Diameter (in.)	23.0	23.0	23.0
FILTERS			
RA Filter Qty / Size (in.)	2 / 16 x 25 x 2	2 / 16 x 25 x 2	2 / 16 x 25 x 2
OA Inlet Screen Qty / Size (in.)	1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 24 x 1

NOTE(S):
a. Base unit operating weight does not include weight of options.

Physical data (cont)

582K Ultra Low NOx Units, 3 to 5 Ton Gas Heat Data — 1 Phase Units

582K UNIT	582KJ04	582KJ05	582KJ06
GAS CONNECTION			
No. of Gas Valves	1	1	1
Natural Gas Supply Line Pressure (in. wg [psig])	5-13 [0.18-0.47]	5-13 [0.18-0.47]	5-13 [0.18-0.47]
HEAT ANTICIPATOR SETTING (AMPS)	0.14	0.14	0.14
NATURAL GAS HEAT			
LOW			
No. of Stages / No. of Burners (total)	1 / 1	1 / 1	1 / 1
Connection Size	1/2 in. NPT	1/2 in. NPT	1/2 in. NPT
Burner Thermal Switch Opens / Closes (°F)	350 / 301	350 / 301	350 / 301
Temperature Rise (°F)	20-50	20-50	15-45
MEDIUM			
No. of Stages / No. of Burners (total)	1 / 1	1 / 1	1 / 1
Connection Size	1/2 in. NPT	1/2 in. NPT	1/2 in. NPT
Burner Thermal Switch Opens / Closes (°F)	350 / 301	350 / 301	350 / 301
Temperature Rise (°F)	20 - 60	20 - 60	20 - 60

582K Ultra Low NOx Units, 3 to 5 Ton Gas Heat Data — 3 Phase Units

582K UNIT	582K(E/P)04	582K(E/P)05	582K(E/P)06
GAS CONNECTION			
No. of Gas Valves	1	1	1
Natural Gas Supply Line Pressure (in. wg [psig])	5-13 [0.18-0.47]	5-13 [0.18-0.47]	5-13 [0.18-0.47]
HEAT ANTICIPATOR SETTING (AMPS)	0.14	0.14	0.14
NATURAL GAS HEAT			
LOW			
No. of Stages / No. of Burners (total)	1 / 1	1 /1	1 /1
Connection Size	1/2 in. NPT	1/2 in. NPT	1/2 in. NPT
Burner Thermal Switch Opens / Closes (°F)	350 / 301	350 / 301	350 / 301
Temperature Rise (°F)	20-50	20-50	15-45
MEDIUM			
No. of Stages / No. of Burners (total)	1 / 1	1 / 1	1 / 1
Connection Size	1/2 in. NPT	1/2 in. NPT	1/2 in. NPT
Burner Thermal Switch Opens / Closes (°F)	350 / 301	350 / 301	350 / 301
Temperature Rise (°F)	20 - 60	20 - 60	20 - 60

Options and accessories

ITEM	FACTORY-INSTALLED OPTIONS	FIELD-INSTALLED ACCESSORIES
GAS HEAT — ULTRA LOW NOx WITH STAINLESS STEEL HEAT EXCHANGER		
Flue Discharge Deflector		X
CABINET		
Thru-the-Base Electrical or Gas-Line Connections	X	X
Hinged Access Panels	X	
MERV-8 Filters	X	
COIL OPTIONS		
Cu/Cu Indoor and/or Outdoor Coils[a]	X	
Pre-Coated Outdoor Coils[a]	X	
Premium, E-Coated Outdoor Coils[a]	X	
HUMIDITY CONTROL		
Perfect Humidity™ Dehumidification System[a]	X	
CONDENSER PROTECTION		
Condenser Coil Hail Guard (louvered design)[a]	X	X
CONTROLS		
Thermostats, Temperature Sensors, and Subbases		X
RTU Open Multi-Protocol Controller	X	
Smoke Detector (supply and/or return air)	X	
Horn Strobe Annunciator[b]		X
Time Guard II Compressor Delay Control Circuit		X
Phase Monitor	X	X
Condensate Overflow Switch	X	X
ECONOMIZERS AND OUTDOOR AIR DAMPERS		
EconomizerONE for Electromechanical Controls, complies with FDD (standard and ultra low leak damper models)[a,c]	X	X
Wi-Fi Stick for EconomizerONE (optional)		X
EconoMi$er 2 for DDC Controls (standard and ultra low leak air damper models)[a,d]	X	X
Motorized Two-Position Outdoor-Air Damper[a]	X	X
Manual Outdoor-Air Damper (25% and 50%)		X
Barometric Relief[e]	X	X
Power Exhaust — Prop Design		X

ITEM	FACTORY-INSTALLED OPTIONS	FIELD-INSTALLED ACCESSORIES
ECONOMIZER SENSORS AND IAQ DEVICES		
Single Dry Bulb Temperature Sensors[f]	X	X
Differential Dry Bulb Temperature Sensors[f]		X
Single Enthalpy Sensors[f]	X	X
Differential Enthalpy Sensors[f]		X
CO_2 Sensor (wall, duct, or unit mounted)[f]	X	X
INDOOR MOTOR AND DRIVE		
Multiple Motor and Drive Packages	X	
LOW AMBIENT CONTROL		
Winter Start Kit[g]		X
Low Ambient Controller to –20°F (–29°C)[g]		X
POWER OPTIONS		
Convenience Outlet (powered)[a]	X	
Convenience Outlet (unpowered)	X	X
Non-Fused Disconnect[h,i]	X	
ROOF CURBS		
Roof Curb 14 in. (356 mm)		X
Roof Curb 24 in. (610 mm)		X

NOTE(S):
a. Not available as a factory-installed option on single-phase (-3 voltage code) models. Use field-installed accessory where available.
b. Requires a field-supplied 24-v transformer for each application. See price pages for details.
c. FDD (Fault Detection and Diagnostic) capability per California Title 24 section 120.2.
d. Models with SystemVu and RTU Open DDC controls comply with California Title 24 Fault Detection and Diagnostic (FDD).
e. Included with economizer.
f. Sensors used to optimize economizer performance.
g. See application data for assistance.
h. Non-fused disconnect switch cannot be used when unit electrical rating exceeds: 208/230-1-60 and 208/230-3-60 = 80 amps (FLA). Bryant RTUBuilder automatically selects the amp limitations.
i. Non-fused disconnect is not available on 460-3-60 voltage models.

Options and accessories (cont)

Factory-installed options

Economizer (dry-bulb or enthalpy)

Economizers save money. They bring in fresh, outside air for ventilation; and provide cool, outside air to cool your building. This is the preferred method of low-ambient cooling. When coupled to CO_2 sensors, economizers can provide even more savings by coupling the ventilation air to only that amount required.

Economizers are available, installed and tested by the factory, with either enthalpy or dry-bulb temperature inputs. Additional sensors are available as accessories to optimize the economizers. Economizers include a powered exhaust system to help equalize building pressures.

Economizers include gravity controlled barometric relief that helps equalize building pressure and ambient air pressures. This can be a cost effective solution to prevent building pressurization. Economizers are available in Ultra Low Leak and standard low leak versions. Economizers can be factory-installed or easily field-installed.

Unit mounted CO_2 sensor

The CO_2 sensor works with the economizer to intake only the correct amount of outside air for ventilation. As occupants fill your building, the CO_2 sensor detects their presence through increasing CO_2 levels, and opens the economizer appropriately. When the occupants leave, the CO_2 levels decrease, and the sensor appropriately closes the economizer. This intelligent control of the ventilation air, called demand controlled ventilation (DCV), reduces the overall load on the rooftop, saving money. It is also available as a field-installed accessory.

Smoke detector (supply and/or return air)

Smoke detectors make your application safer and your job easier. Bryant smoke detectors immediately shut down the rooftop unit when smoke is detected. They are available, installed by the factory, for supply air, return air, or both.

Optional Perfect Humidity™ dehumidification system

Bryant's Perfect Humidity dehumidification system is an all-inclusive factory-installed option that can be ordered with any Legacy Line 582K*04-06 rooftop unit, with the exception of single-phase voltage (208/230-1-60) units.

This system expands the envelope of operation of Bryant's Legacy Line rooftop products to provide unprecedented flexibility to meet year round comfort conditions.

The Perfect Humidity dehumidification system has a unique dual operational mode setting. The Perfect Humidity system provides greater dehumidification of the occupied space by two modes of dehumidification operations in addition to its normal design cooling mode.

The Legacy Line 582K(E/P)04-06 rooftop coupled with the Perfect Humidity system is capable of operating in normal design cooling mode, sub-cooling mode, and hot gas reheat mode.

Normal design cooling mode is when the unit will operate under its normal sequence of operation by cycling compressors to maintain comfort conditions.

Sub-cooling mode will operate to satisfy part load type conditions when the space requires combined sensible and a higher proportion of latent load control.

Hot Gas Reheat mode will operate when outdoor temperatures diminish and the need for latent capacity is required for sole humidity control. Hot Gas Reheat mode will provide neutral air for maximum dehumidification operation.

NOTE: Perfect Humidity system includes Low Ambient controller.

Thru-the-base connections

Thru-the-base connections, available as a factory option, are necessary to ensure proper connection and seal when routing wire and piping through the rooftop's basepan and curb. These couplings eliminate roof penetration and should be considered for gas lines, main power lines, as well as control power.

Hinged access panels

Hinged access panels allow access to unit's major components with specifically designed hinged access panels. Panels are filter, control box access, indoor fan motor access.

MERV-8 return air filters

This factory option upgrades the return air filters from standard unit filters to high efficiency MERV-8 filters. The non-woven MERV-8 filter media is securely fastened inside the high strength, moisture-resistant filter frame on all four sides.

Cu/Cu (outdoor and indoor) coils

Copper fins and copper tubes are mechanically bonded to copper tubes and copper tube sheets. A polymer strip prevents coil assembly from contacting the sheet metal coil pan to minimize potential for galvanic corrosion between coil and pan.

E-coated (outdoor and indoor) coils

A flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins. Coating process shall ensure complete coil encapsulation of tubes, fins, and headers.

Pre-coated outdoor coils

A durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments. The coating minimizes galvanic action between dissimilar metals. Coating is applied to the aluminum fin stock prior to the fin stamping process to create an inert barrier between the aluminum fin and copper tube.

Condenser coil hail guard

Condenser coil hail guards have sleek, louvered panels protect the condenser coil from hail damage, foreign objects, and incidental contact.

Single enthalpy sensor

The enthalpy sensor prevents the wheel from rotating if the outside air conditions are acceptable for free cooling. Both exhaust and supply blowers will remain on.

Stainless steel heat exchanger (standard on all models)

The stainless steel heat exchanger provides the tubular heat exchanger be made out of a minimum 20 gauge type 409 stainless steel for applications where the mixed air to the heat exchanger is expected to drop below 45°F (7°C). Stainless steel may be specified on applications where the presence of airborne contaminants require its use (applications such as paper mills) or in area with very high outdoor humidity that may result in severe condensation in the heat exchanger during cooling operation.

Convenience outlet (powered or unpowered)

Convenience outlets reduce service and/or installation costs by including a convenience outlet in your specification. Bryant will install this service feature at our factory. It provides a convenient, 15 amp, 115-v GFCI receptacle with "Wet in Use" cover. The "powered" option allows the installer to power the outlet from the line side of the disconnect or load side as

Options and accessories (cont)

required by code. The "unpowered" option is to be powered from a separate 115/120-v power source.

The unpowered convenience outlet is available as a 15 amp factory-installed option or a 20 amp field-installed accessory.

Non-fused disconnect

This OSHA-compliant, factory-installed, safety switch allows a service technician to locally secure power to the rooftop. When selecting a factory-installed non-fused disconnect, note they are sized for the unit as ordered from the factory. The sizing of these do not accommodate field-installed items such as power exhaust devices, etc. If field installing electric heat with factory-installed non-fused disconnect switch, a single point kit may or may not be required.

NOTE: Non-fused disconnect is not available for 460-3-60 voltage units.

RTU Open, multi-protocol controller

Connect the rooftop to an existing BAS (building automation system) without needing complicated translators or adapter modules using the RTU Open controller. The RTU Open controller speaks the 4 most common building automation system languages (BACnet, Modbus, Johnson Controls N2, and LonWorks). Use this controller when you have an existing BAS. Besides the 4 protocols, it also communicates with a Bryant Open system (VVT®).

Condensate overflow switch

This sensor and related controller monitors the condensate level in the drain pan and shuts down compression operation when overflow conditions occur. It includes:

- Indicator light — solid red (more than 10 seconds on water contact — compressors disabled), blinking red (sensor disconnected).
- 10-second delay to break — eliminates nuisance trips from splashing or waves in pan (sensor needs 10 seconds of constant water contact before tripping).
- Disables the compressor(s) operation when condensate plug is detected, but still allows fans to run for economizer.

Power exhaust with barometric relief

Superior internal building pressure control. This field-installed accessory may eliminate the need for costly, external pressure control fans.

Field-installed accessories

Filter maintenance indicator

When the optional factory-installed filter maintenance indicator is used, a factory-installed differential pressure switch measures pressure drop across the outside air filter and activates a field-supplied dry contact indicator when the pressure differential exceeds the adjustable switch setpoint.

Condenser coil hail guard

Sleek, louvered panels protect the condenser coil from hail damage, foreign objects, and incidental contact. This can be purchased as a factory-installed option or as a field-installed accessory.

Differential enthalpy sensor

The differential enthalpy sensor is comprised of an outdoor and return air enthalpy sensors to provide differential enthalpy control. The sensor allows the unit to determine if outside air is suitable for free cooling.

Wall or duct mounted CO_2 sensor

The IAQ sensor shall be available in duct or wall mount. The sensor provides demand ventilation indoor air quality (IAQ) control.

Flue discharge deflector

The flue discharge deflector is a useful accessory when flue gas recirculation is a concern. By venting the flue discharge upwards, the deflector minimizes the chance for a neighboring unit to intake the flue exhaust.

Phase monitor protection

The phase monitor control will monitor the sequence of 3-phase electrical system to provide a phase reversal protection; and monitor the 3-phase voltage inputs to provide a phase loss protection for the 3-phase device. It will work on either a Delta or Wye power connection.

Winter start kit

The winter start kit by Bryant extends the low ambient limit of your rooftop to 25°F (–4°C). The kit bypasses the low pressure switch, preventing nuisance tripping of the low pressure switch. Other low ambient precautions may still be prudent.

Low ambient controller

The low ambient controller is a head pressure controller kit that is designed to maintain the unit's condenser head pressure during periods of low ambient cooling operation. This device should be used as an alternative to economizer free cooling when economizer usage is either not appropriate or desired. The low ambient controller will either cycle the outdoor fan motors or operate them at reduced speed to maintain the unit operation, depending on the model. This controller allows cooling operation down to –20°F (–29°C) ambient conditions.

Roof curb (14 in./356 mm or 24 in./610 mm)

Full perimeter roof curb with exhaust capability provides separate air streams for energy recovery from the exhaust air without supply air contamination.

Filter status indicator accessory

The filter status indicator monitors static pressure across supply and exhaust filters and provides indication when filters become clogged.

Power exhaust

Superior internal building pressure control. This field-installed accessory may eliminate the need for costly, external pressure control fans.

Manual OA damper

Manual outdoor air dampers are an economical way to bring in ventilation air. The dampers are available in 25% and 50% versions.

Motorized two-position damper

The Bryant two-position, motorized outdoor air damper admits up to 100% outside air. Using reliable, gear-driven technology, the 2-position damper opens to allow ventilation air and closes when the rooftop stops, stopping unwanted infiltration.

Options and accessories (cont)

Time Guard II control circuit

This accessory protects your compressor by preventing short-cycling in the event of some other failure, prevents the compressor from restarting for 30 seconds after stopping. Not required with RTU Open controller, or authorized commercial thermostats.

Wi-Fi Stick for EconomizerONE (optional)

The accessory Wi-Fi/WLAN stick can be connected to the EconomizerONE POL224 economizer controller via the USB host interface. The Wi-Fi stick enables a wireless connection to be made between a smartphone and the economizer controller via the Climatix™[1] mobile application for commissioning, troubleshooting, and maintenance operations. The Wi-Fi stick is required to utilize the mobile application.

Climatix™ mobile application

The Climatix™ mobile application offers a best-in-class user interface and a simple step-by-step commissioning workflow using a mobile device. The user interface walks users through the setup of the controller and allows users to view the operating mode and parameters. Users can adjust setpoints, initiate damper tests, and save the final configuration as a favorite to expedite setup in the future.

The application is available on Android™[1] and Apple iOS®[1] platforms. The Wi-Fi stick for the EconomizerONE is required to join the Siemens-WiFi-Stick network and setup the controller on a smartphone.

1. Third-party trademarks and logos are the property of their respective owners.

Options and Accessory Weights[a]

OPTION / ACCESSORY NAME	582K*04-06 ULTRA LOW NOx UNIT WEIGHT					
	04		05		06	
	lb	kg	lb	kg	lb	kg
Perfect Humidity™ System[b]	15	7	15	7	15	7
Power Exhaust — Vertical	51	23	51	23	51	23
Power Exhaust — Horizontal	39	18	39	18	39	18
EconomizerONE and EconoMi$er® 2	51	23	51	23	51	23
Two-Position Damper	39	18	39	18	39	18
Manual Damper	12	5	12	5	12	5
Hail Guard (louvered)	13	6	13	6	13	6
Cu/Cu Condenser Coil	37	17	74	34	74	34
Cu/Cu Condenser and Evaporator Coils	75	34	112	51	112	51
Roof Curb (14 in. curb)	95	43	95	43	95	43
Roof Curb (24 in. curb)	150	68	150	68	150	68
CO_2 Sensor	2	1	2	1	2	1
Flue Discharge Deflector	7	3	7	3	7	3
Optional Indoor Motor/Drive	10	5	10	5	10	5
Low Ambient Controller	9	4	9	4	9	4
Winter Start Kit	5	2	5	2	5	2
Return Air Smoke Detector	7	3	7	3	7	3
Supply Air Smoke Detector	7	3	7	3	7	3
Fan Filter Switch	2	1	2	1	2	1
Non-Fused Disconnect	15	7	15	7	15	7
Powered Convenience Outlet	36	16	36	16	36	16
Unpowered Convenience Outlet	4	2	4	2	4	2
Enthalpy Sensor	2	1	2	1	2	1
Differential Enthalpy Sensor	3	1	3	1	3	1

NOTE(S):
a. Where multiple variations are available, the heaviest combination is listed.
b. For Perfect Humidity™ system, add Low Ambient controller weight.

582K*04-06 Ultra Low NOx Base Unit Dimensions

NOTES:

1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
2. CENTER OF GRAVITY
3. DIRECTION OF AIR FLOW
4. ALL VIEW DRAWN USING 3RD ANGLE

UNIT	J	K
582K*04	33 3/8 [847]	18 5/8 [472]
582K*05	33 3/8 [847]	14 7/8 [377]
582K*06	33 3/8 [847]	14 7/8 [377]

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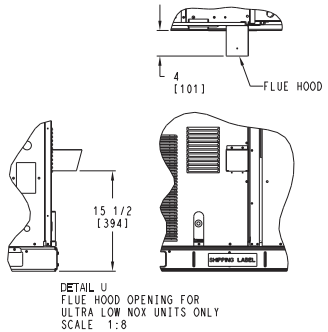
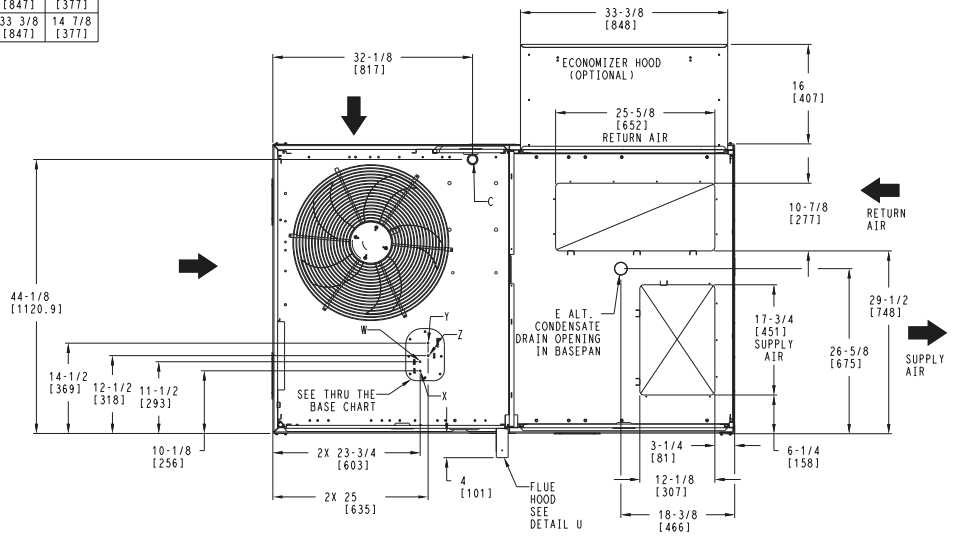
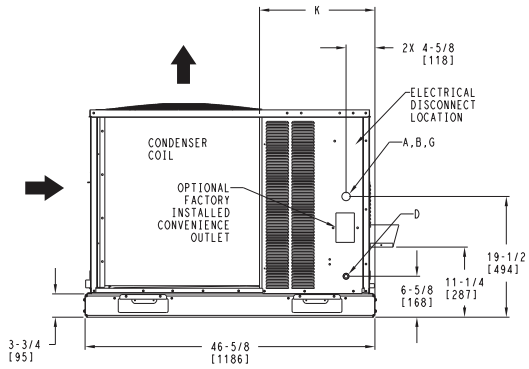
	CONNECTION SIZES
A	1 3/8" [35] DIA FIELD POWER SUPPLY HOLE
B	2" [50] DIA POWER SUPPLY KNOCKOUT
C	1 3/4" [51] DIA GAUGE ACCESS PLUG
D	7/8" [22] DIA FIELD CONTROL WIRING HOLE
E	3/4"-14 NPT CONDENSATE DRAIN
F	1/2"-14 NPT GAS CONNECTION
G	2 1/2 " [64] DIA POWER SUPPLY KNOCK-OUT

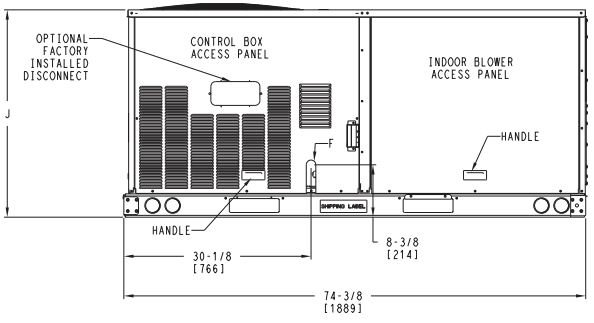
THRU-THE-BASE CHART
THESE HOLES REQUIRED FOR USE CRBTMPWR008A00, 009A00

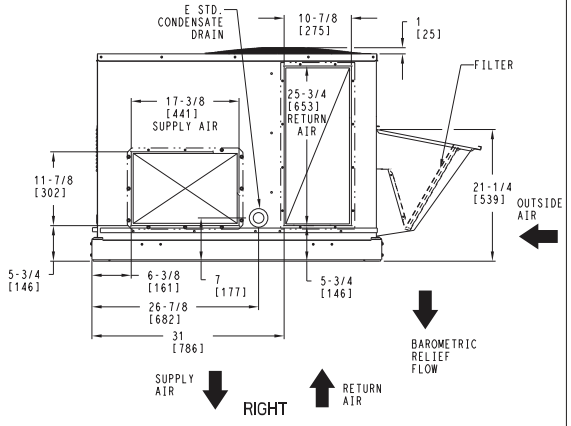
	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
W	1/2"	115V	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y	3/4"	POWER	1-1/8" [28.6]
Z*	(009A00) 1/2" FPT	GAS	1-1/8" [28.6]
	FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X, Y, & Z ARE PROVIDED		
*	(008A00) PROVIDES 3/4" FPT THRU CURB FLANGE & FITTING.		











ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES		
U.S. ECCN:NSR	1 OF 3	11/17/20	04/02/19	582K 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT	48TC003095

582K*04-06 Ultra Low NOx Base Unit Dimensions (cont)

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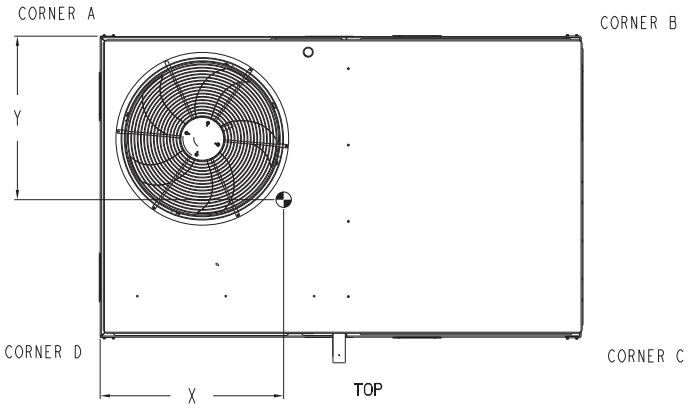
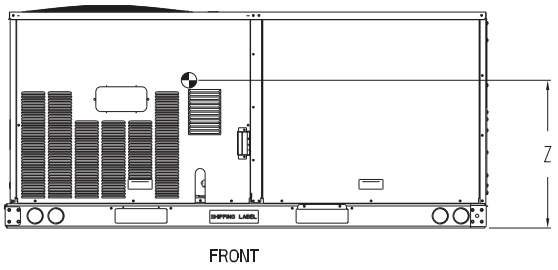
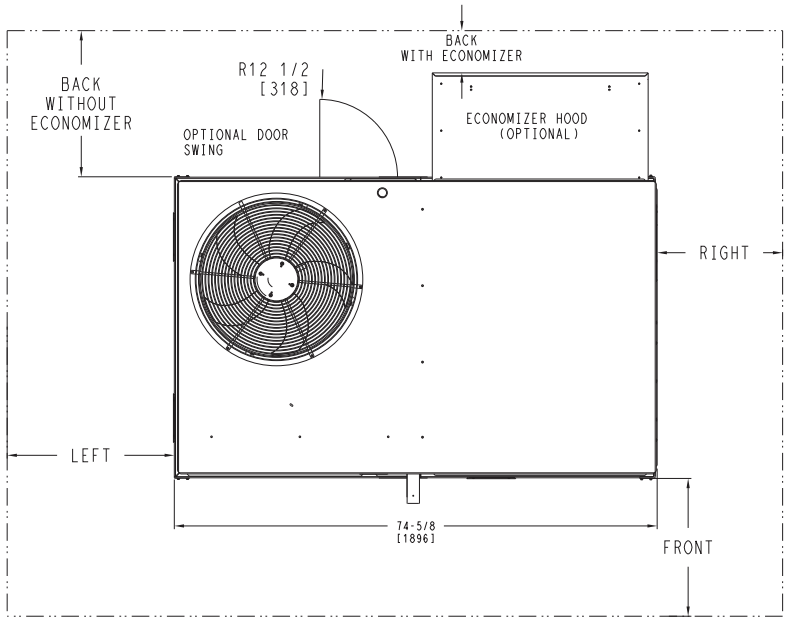
THIS TABLE IS FOR "ULTRA LOW NOX" UNITS ONLY

UNIT	STD. UNIT WEIGHT **		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
582K*04D	512	233	120	55	122	55	136	62	134	61	37 1/2 [953]	24 11/16 [627]	18 1/8 [460]
582K*05D	573	260	146	66	139	63	141	64	147	67	36 3/8 [924]	23 1/2 [597]	18 [457]
582K*06D	586	266	149	68	143	65	144	65	151	69	36 3/8 [924]	23 1/2 [597]	18 [457]

** STANDARD UNIT WEIGHT IS WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.







NOTES:

1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

	CLEARANCE		
	SERVICE WITH:	SERVICE WITH:	OPERATING
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/O HOOD	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/HOOD	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES		
U.S. ECCN:NSR	2 OF 3	11/17/20	04/02/19	582K 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT	48TC003095

582K*04-06 Ultra Low NOx Base Unit Dimensions (cont)

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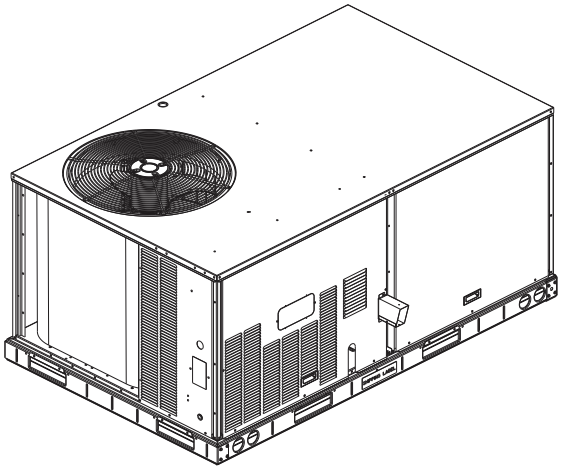
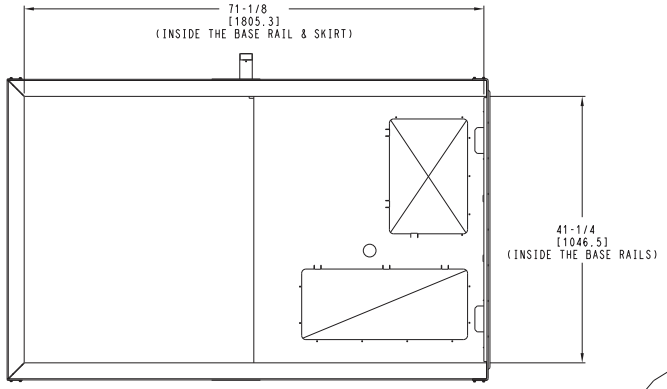
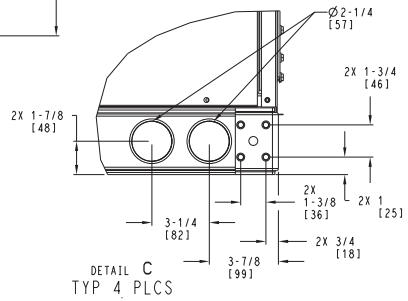


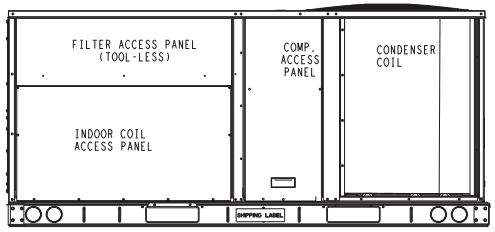


INSIDE BASERAIL DIMENSIONS

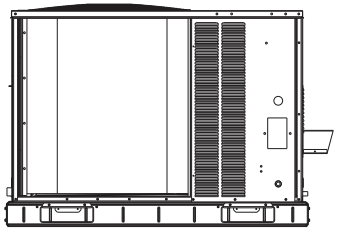
BOTTOM



DETAIL C
TYP 4 PLCS



BACK



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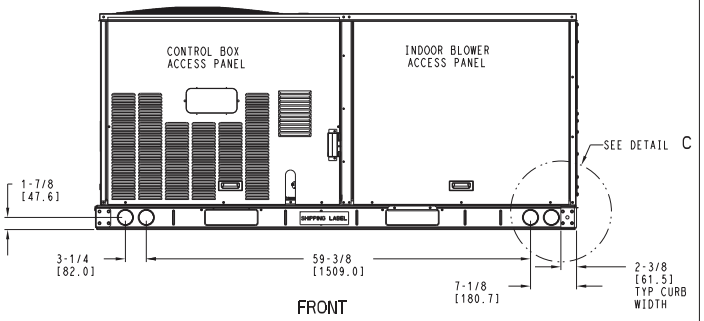


FRONT

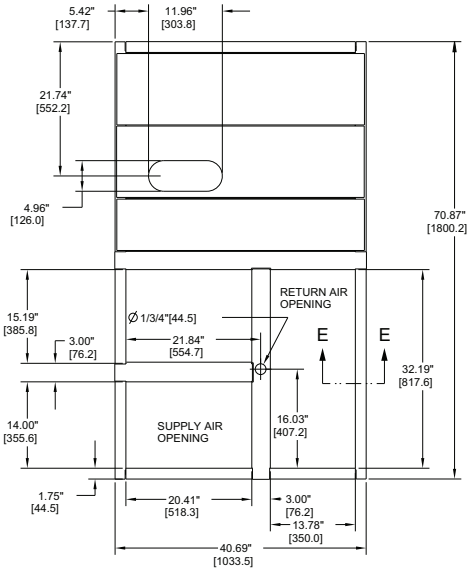
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES		
U.S. ECCN:NSR	3 OF 3	11/17/20	04/02/19	582K 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT	48TC003095

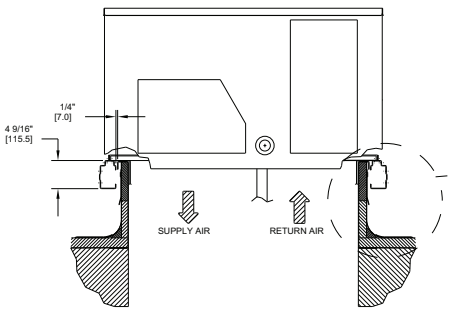
Roof Curb Dimensions — 582K*04-06 Ultra Low NOx

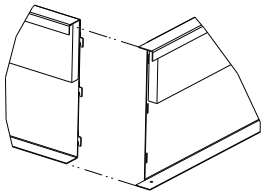
ROOF CURB ACCESSORY #	A
CRRFCURB001A01	14" [356]
CRRFCURB002A01	24" [610]

NOTES:
1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED.
2. INSULATED PANELS: 25.4 [1"] THK. POLYURETHANE FOAM, 44.5 [1-3/4] # DENSITY.
3. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
4. ROOFCURB: 18 GAGE STEEL.
5. ATTACH DUCTWORK TO CURB. (FLANGES OF DUCT REST ON CURB).
6. SERVICE CLEARANCE 4 FEET ON EACH SIDE.
7. ▨ DIRECTION OF AIR FLOW.
8. CONNECTOR PACKAGE CRBTMPWR001A01 IS FOR THRU-THE-CURB GAS TYPE PACKAGE CRBTMPWR003A01 IS FOR THRU-THE-BOTTOM TYPE GAS CONNECTIONS.

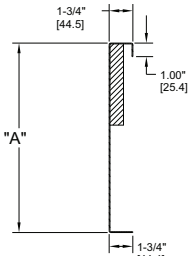
CONNECTOR PKG. ACC.	GAS CONNECTION TYPE	GAS FITTING	POWER WIRING FITTING	CONTROL WIRING FITTING	ACCESSORY CONVENIENCE OUTLET WIRING CONNECTOR
CRBTMPWR001A01	THRU THE CURB	3/4" [19] NPT	3/4" [19] NPT	1/2" [12.7] NPT	1/2" [12.7] NPT
CRBTMPWR003A01	THRU THE BOTTOM	1/2" [12.7] NPT			



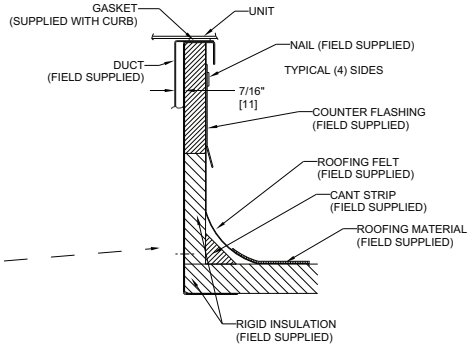


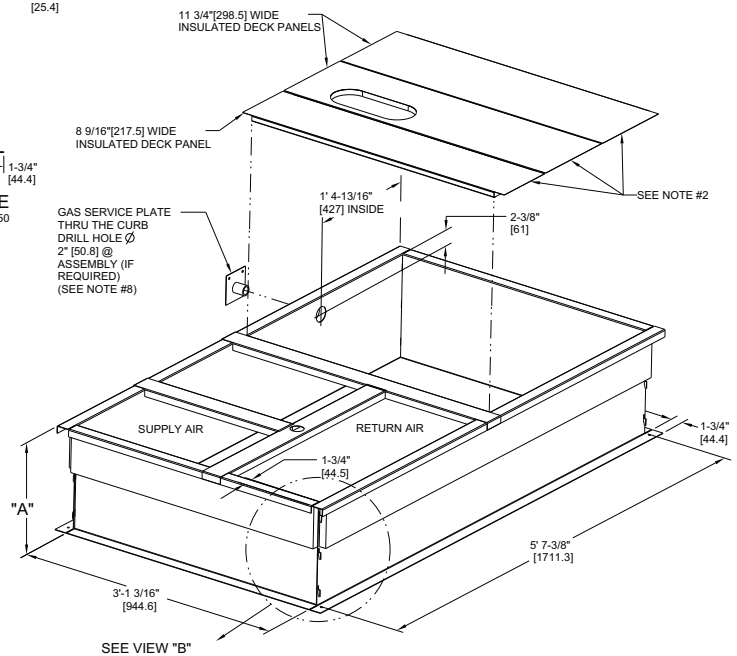


VIEW "B"
CORNER DETAIL



SECTION E-E
SCALE 0.250





CERTIFIED DRAWING

REV	REVISION RECORD	DATE	BY	CHK'D	APP'D	ECN NO.
A	OVERALL DIM. 5'-7 3/8" WAS 5'-7 7/8; 18GA MATERIAL WA 16 GA.; NAIL FIELD SUPPLIED WAS WITH CURB	04/22/13	MMC	-	-	1067898

DRAWING RELEASE LEVEL: PRODUCTION			
THIRD ANGLE PROJECTION	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: 1 DEC ± - 2 DEC ± - 3 DEC ± - ANG ± °		
MATERIAL - - -	AUTHORIZATION NUMBER 1041738	TITLE CURB ASY, ROOF	
	ENGINEERING - MANUFACTURING -		
ENGINEERING REQUIREMENTS T-005, Y-002	DRAFTER MMC 06/17/11 CHECKER -	SIZE D	DRAWING NUMBER 48TC400427 SHEET 5 OF 5 REV B
WEIGHT: -			
SURFACE FINISH -	MFG/PURCH PURCH	MODEL (INTERNAL USE ONLY)	NEXT DRAWING - SCALE N/A DISTRIBUTION MMC

Performance data

582KJ043 Ultra Low NOx Single Stage, 1-Phase Cooling Capacities without Perfect Humidity™ [a]

582KJ043				AMBIENT TEMPERATURE (°F)											
				85			95			105			115		
				EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85
900 cfm	EA (wb)	58	TC	33.6	33.6	36.8	31.8	31.8	34.8	29.5	29.5	33.5	27.4	27.4	31.3
			SHC	28.5	32.6	36.8	26.8	30.8	34.8	25.5	29.5	33.5	23.6	27.4	31.3
		62	TC	36.5	36.5	36.5	34.6	34.6	34.6	32.2	32.2	32.2	29.5	29.5	30.1
			SHC	25.4	29.4	33.5	24.4	28.6	32.7	23.1	27.4	31.6	21.5	25.8	30.1
		67	TC	40.2	40.2	40.2	38.4	38.4	38.4	36.4	36.4	36.4	33.8	33.8	33.8
			SHC	21.4	25.3	29.2	20.3	24.2	28.1	19.2	23.2	27.3	17.8	21.9	26.1
		72	TC	44.0	44.0	44.0	42.2	42.2	42.2	40.1	40.1	40.1	37.9	37.9	37.9
			SHC	17.7	21.2	24.6	16.5	20.2	23.8	15.3	19.1	22.9	14.0	17.9	21.8
		76	TC	—	46.9	46.9	—	45.2	45.2	—	43.2	43.2	—	41.0	41.0
			SHC	—	18.0	23.0	—	17.0	22.0	—	15.8	20.7	—	14.6	19.6
1050 cfm	EA (wb)	58	TC	35.7	35.7	38.9	33.7	33.7	38.2	31.7	31.7	35.9	29.5	29.5	33.5
			SHC	30.3	34.6	38.9	29.2	33.7	38.2	27.4	31.7	35.9	25.4	29.5	33.5
		62	TC	37.8	37.8	37.8	35.9	35.9	35.9	33.6	33.6	35.1	30.6	30.6	33.3
			SHC	27.2	31.8	36.5	26.2	31.0	35.8	25.2	30.1	35.1	23.5	28.4	33.3
		67	TC	41.6	41.6	41.6	39.7	39.7	39.7	37.6	37.6	37.6	35.2	35.2	35.2
			SHC	22.5	27.0	31.4	21.5	26.1	30.7	20.4	25.0	29.7	19.2	24.0	28.9
		72	TC	45.3	45.3	45.3	43.5	43.5	43.5	41.4	41.4	41.4	39.1	39.1	39.1
			SHC	18.1	22.2	26.4	16.9	21.3	25.6	15.8	20.2	24.7	14.5	19.1	23.6
		76	TC	—	48.1	48.1	—	46.5	46.5	—	44.5	44.5	—	42.1	42.1
			SHC	—	18.5	24.2	—	17.4	23.1	—	16.2	22.0	—	15.3	21.0
1200 cfm	EA (wb)	58	TC	37.0	37.0	41.8	35.4	35.4	40.1	33.5	33.5	38.0	31.2	31.2	35.5
			SHC	32.2	37.0	41.8	30.7	35.4	40.1	29.0	33.5	38.0	27.0	31.2	35.5
		62	TC	39.0	39.0	39.3	37.0	37.0	38.6	34.7	34.7	38.0	32.1	32.1	35.1
			SHC	28.9	34.1	39.3	27.9	33.2	38.6	27.0	32.5	38.0	24.8	29.9	35.1
		67	TC	42.6	42.6	42.6	40.8	40.8	40.8	38.6	38.6	38.6	36.1	36.1	36.1
			SHC	23.5	28.5	33.4	22.5	27.6	32.8	21.4	26.6	31.8	20.3	25.7	31.1
		72	TC	46.3	46.3	46.3	44.5	44.5	44.5	42.3	42.3	42.3	40.0	40.0	40.0
			SHC	18.4	23.1	27.8	17.3	22.2	27.1	16.2	21.2	26.2	15.0	20.1	25.2
		76	TC	—	49.2	49.2	—	47.4	47.4	—	45.3	45.3	—	42.9	42.9
			SHC	—	18.7	25.3	—	17.9	24.5	—	16.9	21.3	—	15.7	20.5
1350 cfm	EA (wb)	58	TC	38.4	38.4	43.4	36.8	36.8	41.7	35.0	35.0	39.7	32.7	32.7	37.2
			SHC	33.5	38.4	43.4	32.0	36.8	41.7	30.4	35.0	39.7	28.3	32.7	37.2
		62	TC	39.8	39.8	41.7	37.7	37.7	41.0	35.6	35.6	40.2	32.9	32.9	38.1
			SHC	30.3	36.0	41.7	29.4	35.2	41.0	28.4	34.3	40.2	26.6	32.3	38.1
		67	TC	43.5	43.5	43.5	41.6	41.6	41.6	39.4	39.4	39.4	36.9	36.9	36.9
			SHC	24.4	29.8	35.3	23.5	29.1	34.7	22.4	28.1	33.9	21.3	27.3	33.2
		72	TC	47.1	47.1	47.1	45.3	45.3	45.3	43.1	43.1	43.1	40.7	40.7	40.7
			SHC	18.7	23.9	29.1	17.7	23.0	28.4	16.5	22.0	27.5	15.3	20.9	26.6
		76	TC	—	49.9	49.9	—	48.2	48.2	—	46.0	46.0	—	43.6	43.6
			SHC	—	19.2	26.6	—	18.3	23.0	—	17.3	22.5	—	16.2	21.5
1500 cfm	EA (wb)	58	TC	39.7	39.7	44.8	38.0	38.0	43.0	36.3	36.3	41.1	34.1	34.1	38.7
			SHC	34.6	39.7	44.8	33.1	38.0	43.0	31.5	36.3	41.1	29.5	34.1	38.7
		62	TC	40.5	40.5	44.0	38.6	38.6	43.0	37.3	37.3	39.9	34.8	34.8	38.6
			SHC	31.7	37.9	44.0	30.7	36.9	43.0	28.6	34.3	39.9	27.2	32.9	38.6
		67	TC	44.2	44.2	44.2	42.2	42.2	42.2	40.1	40.1	40.1	37.6	37.6	37.6
			SHC	25.2	31.0	36.9	24.3	30.4	36.4	23.3	29.5	35.7	22.2	28.6	35.0
		72	TC	47.7	47.7	47.7	45.9	45.9	45.9	43.7	43.7	43.7	41.2	41.2	41.2
			SHC	19.0	24.5	30.1	18.0	23.8	29.6	16.8	22.8	28.8	15.6	21.7	27.8
		76	TC	—	50.4	50.4	—	48.8	48.8	—	46.6	46.6	—	44.1	44.1
			SHC	—	19.4	24.4	—	18.6	24.1	—	17.6	23.3	—	16.5	22.4

NOTE(S):
a. See minimum-maximum airflow ratings on page 6.

LEGEND

— — Do Not Operate
cfm — Cubic Feet Per Minute (Supply Air)
EA (db) — Entering Air Temperature (dry bulb)
EA (wb) — Entering Air Temperature (wet bulb)
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

Performance data (cont)

582K(E/P)04D Ultra Low NOx Single Stage, 3-Phase Cooling Capacities without Perfect Humidity™ [a]

582K(E/P)04D				AMBIENT TEMPERATURE (°F)											
				85			95			105			115		
				EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85
900 cfm	EA (wb)	58	TC	28.6	28.6	32.5	27.0	27.0	30.7	25.2	25.2	28.6	23.2	23.2	26.4
			SHC	24.7	28.6	32.5	23.3	27.0	30.7	21.7	25.2	28.6	20.0	23.2	26.4
		62	TC	31.1	31.1	31.1	28.9	28.9	29.8	26.3	26.3	28.6	23.6	23.6	27.2
			SHC	22.4	26.6	30.9	21.3	25.6	29.8	20.2	24.4	28.6	18.8	23.0	27.2
		67	TC	35.2	35.2	35.2	33.0	33.0	33.0	30.4	30.4	30.4	27.5	27.5	27.5
			SHC	18.7	23.0	27.2	17.8	22.0	26.3	16.7	20.9	25.2	15.5	19.8	24.0
		72	TC	38.9	38.9	38.9	37.2	37.2	37.2	34.8	34.8	34.8	31.9	31.9	31.9
			SHC	14.7	19.0	23.3	14.0	18.3	22.6	13.1	17.3	21.6	12.0	16.3	20.5
		76	TC	—	41.5	41.5	—	40.0	40.0	—	38.0	38.0	—	35.4	35.4
			SHC	—	15.6	20.5	—	15.1	20.0	—	14.3	19.1	—	13.3	17.8
1050 cfm	EA (wb)	58	TC	30.5	30.5	34.7	28.8	28.8	32.7	26.9	26.9	30.6	24.8	24.8	28.2
			SHC	26.4	30.5	34.7	24.8	28.8	32.7	23.2	26.9	30.6	21.4	24.8	28.2
		62	TC	32.4	32.4	33.9	30.0	30.0	32.7	27.4	27.4	31.3	24.8	24.8	29.3
			SHC	24.2	29.1	33.9	23.1	27.9	32.7	21.8	26.6	31.3	20.2	24.8	29.3
		67	TC	36.5	36.5	36.5	34.2	34.2	34.2	31.5	31.5	31.5	28.5	28.5	28.5
			SHC	19.8	24.6	29.4	19.0	23.8	28.7	17.9	22.7	27.6	16.7	21.5	26.4
		72	TC	40.0	40.0	40.0	38.3	38.3	38.3	35.9	35.9	35.9	33.0	33.0	33.0
			SHC	15.1	19.9	24.7	14.5	19.3	24.1	13.6	18.5	23.3	12.5	17.4	22.3
		76	TC	—	42.5	42.5	—	40.9	40.9	—	39.0	39.0	—	—	—
			SHC	—	16.3	22.0	—	15.7	21.4	—	14.9	20.2	—	—	—
1200 cfm	EA (wb)	58	TC	32.1	32.1	36.5	30.3	30.3	34.4	28.3	28.3	32.2	26.1	26.1	29.7
			SHC	27.8	32.1	36.5	26.2	30.3	34.4	24.4	28.3	32.2	22.5	26.1	29.7
		62	TC	33.3	33.3	36.6	30.9	30.9	35.3	28.4	28.4	33.5	26.1	26.1	30.9
			SHC	25.8	31.2	36.6	24.6	29.9	35.3	23.2	28.4	33.5	21.3	26.1	30.9
		67	TC	37.4	37.4	37.4	35.1	35.1	35.1	32.4	32.4	32.4	29.2	29.2	29.2
			SHC	20.7	25.9	31.2	20.0	25.4	30.8	18.9	24.4	29.8	17.7	23.1	28.6
		72	TC	40.7	40.7	40.7	39.0	39.0	39.0	36.7	36.7	36.7	33.8	33.8	33.8
			SHC	15.4	20.6	25.9	14.8	20.1	25.4	14.0	19.4	24.8	12.9	18.4	23.8
		76	TC	—	43.2	43.2	—	41.5	41.5	—	39.7	39.7	—	—	—
			SHC	—	16.7	23.0	—	16.0	22.1	—	15.3	21.2	—	—	—
1350 cfm	EA (wb)	58	TC	33.5	33.5	38.1	31.6	31.6	35.9	29.5	29.5	33.5	27.2	27.2	30.9
			SHC	28.9	33.5	38.1	27.3	31.6	35.9	25.4	29.5	33.5	23.4	27.2	30.9
		62	TC	34.1	34.1	38.9	31.7	31.7	37.5	29.5	29.5	34.9	27.2	27.2	32.2
			SHC	27.1	33.0	38.9	25.9	31.7	37.5	24.1	29.5	34.9	22.2	27.2	32.2
		67	TC	38.0	38.0	38.0	35.8	35.8	35.8	33.0	33.0	33.0	29.8	29.8	30.6
			SHC	21.4	27.1	32.8	20.8	26.8	32.7	19.8	25.9	31.9	18.6	24.6	30.6
		72	TC	41.2	41.2	41.2	39.5	39.5	39.5	37.3	37.3	37.3	34.3	34.3	34.3
			SHC	15.6	21.3	26.9	15.0	20.7	26.5	14.3	20.2	26.1	13.2	19.2	25.3
		76	TC	—	43.7	43.7	—	41.9	41.9	—	40.0	40.0	—	—	—
			SHC	—	17.0	23.6	—	16.3	22.7	—	15.6	21.9	—	—	—
1500 cfm	EA (wb)	58	TC	34.5	34.5	39.2	32.7	32.7	37.1	30.5	30.5	34.6	28.1	28.1	31.9
			SHC	29.8	34.5	39.2	28.2	32.7	37.1	26.3	30.5	34.6	24.2	28.1	31.9
		62	TC	35.1	35.1	39.1	32.7	32.7	38.7	30.5	30.5	36.1	28.1	28.1	33.3
			SHC	27.4	33.3	39.1	26.7	32.7	38.7	24.9	30.5	36.1	22.9	28.1	33.3
		67	TC	38.4	38.4	38.4	36.3	36.3	36.3	33.4	33.4	33.8	30.1	30.1	32.5
			SHC	22.1	28.2	34.3	21.6	28.0	34.4	20.6	27.2	33.8	19.4	26.0	32.5
		72	TC	41.6	41.6	41.6	39.8	39.8	39.8	37.7	37.7	37.7	34.7	34.7	34.7
			SHC	15.7	21.8	27.8	15.1	21.3	27.4	14.4	20.8	27.2	13.5	20.0	26.5
		76	TC	—	44.0	44.0	—	42.2	42.2	—	40.2	40.2	—	—	—
			SHC	—	17.2	24.1	—	16.5	23.3	—	15.8	22.5	—	—	—

NOTE(S):
a. See minimum-maximum airflow ratings on page 6.

LEGEND

— — Do Not Operate
cfm — Cubic Feet Per Minute (Supply Air)
EA (db) — Entering Air Temperature (dry bulb)
EA (wb) — Entering Air Temperature (wet bulb)
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

Performance data (cont)

582K(E/P)04E — Ultra Low NOx Unit with Perfect Humidity™ System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — SCFM/BF								
		900 / 0.01			1200 / 0.02			1500 / 0.04		
		Air Entering Evaporator — Ewb (°F)								
		72	67	62	72	67	62	72	67	62
75	TC	29.90	31.00	30.90	29.80	32.50	33.30	33.80	30.90	26.70
	SHC	14.70	19.40	25.50	24.30	19.80	14.90	13.60	17.70	21.20
	kW	2.51	2.49	2.42	2.82	2.74	2.68	3.09	3.01	2.88
85	TC	31.90	27.50	22.70	18.10	23.10	28.40	23.80	18.30	13.20
	SHC	10.70	14.20	17.40	13.00	10.00	6.90	2.60	5.50	8.40
	kW	3.36	3.23	3.06	3.62	3.41	3.24	3.79	3.58	3.39
95	TC	30.30	31.00	30.90	29.80	32.50	33.30	33.80	30.90	26.70
	SHC	14.80	19.40	25.50	24.30	19.80	14.90	13.60	17.70	21.20
	kW	2.53	2.49	2.41	2.82	2.74	2.68	3.09	3.01	2.88
105	TC	31.90	27.50	22.70	18.10	23.10	28.40	23.80	18.30	13.20
	SHC	10.70	14.20	17.40	13.00	10.00	6.90	2.60	5.50	8.40
	kW	3.36	3.23	3.06	3.62	3.41	3.24	3.79	3.58	3.39
115	TC	30.30	31.00	30.90	29.80	32.50	33.30	33.80	30.90	26.70
	SHC	14.80	19.40	25.50	24.30	19.80	14.90	13.60	17.70	21.20
	kW	2.53	2.49	2.41	2.82	2.74	2.68	3.09	3.01	2.88
125	TC	31.90	27.50	22.70	18.10	23.10	28.40	23.80	18.30	13.2
	SHC	10.70	14.20	17.40	0.00	10.00	6.90	2.60	5.50	8.40
	kW	3.36	3.23	3.06	3.62	3.41	3.24	3.79	3.58	3.39

582K(E/P)04E — Ultra Low NOx Unit with Perfect Humidity System in Hot Gas Reheat Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — Ewb (°F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		Air Entering Evaporator — cfm								
		900	1200	1500	900	1200	1500	900	1200	1500
80	TC	9.81	10.50	10.92	10.83	11.58	12.00	11.78	12.50	12.96
	SHC	1.41	3.09	4.87	0.60	1.98	3.47	-0.05	1.04	2.25
	kW	1.92	1.93	1.94	1.96	1.98	2.00	2.00	2.01	2.02
75	TC	11.71	12.51	13.04	12.67	13.38	13.86	13.44	13.91	14.32
	SHC	3.10	4.87	6.70	2.30	3.67	5.03	1.62	2.51	3.51
	kW	1.87	1.88	1.88	1.89	1.90	1.91	1.91	1.92	1.93
70	TC	13.37	14.10	14.41	13.94	14.53	14.90	14.42	14.95	15.10
	SHC	4.71	6.28	7.52	3.72	4.86	5.88	2.97	4.07	4.47
	kW	1.78	1.80	1.82	1.81	1.83	1.84	1.82	1.82	1.86
60	TC	13.95	14.80	14.62	14.47	15.22	15.53	14.66	14.63	15.46
	SHC	6.20	8.05	7.61	5.67	6.67	7.68	5.03	5.55	6.30
	kW	1.66	1.62	1.70	1.67	1.69	1.68	1.69	1.70	1.71
50	TC	14.26	14.87	15.78	14.65	15.78	16.21	15.01	16.16	16.58
	SHC	5.12	6.39	8.04	3.83	5.37	6.38	2.72	4.09	4.93
	kW	1.98	2.03	1.94	2.01	1.94	1.97	2.03	1.96	1.99
40	TC	14.16	15.50	15.88	15.28	16.24	16.28	15.62	16.60	17.01
	SHC	5.04	6.99	8.14	4.43	5.81	6.44	3.31	4.51	5.34
	kW	2.07	1.95	1.99	1.93	1.91	2.02	1.96	1.94	1.97

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Power Input
SCFM/BF — Standard Cubic Feet per Minute/Bypass Factor
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

Performance data (cont)

582KJ053 Ultra Low NOx Single Stage, 1-Phase Cooling Capacities without Perfect Humidity™ [a]

582KJ053				AMBIENT TEMPERATURE (°F)											
				85			95			105			115		
				EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85
1200 cfm	EA (wb)	58	TC	42.3	42.3	45.8	39.4	39.4	44.7	36.6	36.6	41.5	33.5	33.5	38.1
			SHC	35.5	40.6	45.8	34.1	39.4	44.7	31.6	36.6	41.5	28.9	33.5	38.1
		62	TC	45.6	45.6	45.6	42.1	42.1	42.7	38.3	38.3	40.8	34.2	34.2	38.7
			SHC	32.8	38.6	44.4	31.0	36.9	42.7	29.1	34.9	40.8	27.0	32.8	38.7
		67	TC	50.9	50.9	50.9	47.9	47.9	47.9	44.0	44.0	44.0	39.7	39.7	39.7
			SHC	27.3	32.9	38.5	25.8	31.5	37.2	24.0	29.8	35.5	22.0	27.8	33.6
		72	TC	55.6	55.6	55.6	53.2	53.2	53.2	50.2	50.2	50.2	45.9	45.9	45.9
			SHC	21.6	26.8	32.0	20.4	25.7	31.1	18.9	24.3	29.7	17.0	22.5	28.1
		76	TC	—	59.0	59.0	—	56.8	56.8	—	54.4	54.4	—	50.7	50.7
			SHC	—	22.2	28.8	—	20.9	27.5	—	19.5	26.1	—	17.9	24.5
1400 cfm	EA (wb)	58	TC	44.8	44.8	50.7	42.1	42.1	47.7	39.1	39.1	44.4	35.9	35.9	40.8
			SHC	38.9	44.8	50.7	36.5	42.1	47.7	33.8	39.1	44.4	31.0	35.9	40.8
		62	TC	47.5	47.5	49.2	43.8	43.8	47.2	39.9	39.9	45.0	36.0	36.0	41.6
			SHC	35.6	42.4	49.2	33.7	40.5	47.2	31.6	38.3	45.0	28.9	35.3	41.6
		67	TC	52.6	52.6	52.6	49.7	49.7	49.7	45.7	45.7	45.7	41.3	41.3	41.3
			SHC	28.8	35.2	41.7	27.5	34.2	40.8	25.7	32.4	39.2	23.7	30.5	37.2
		72	TC	57.1	57.1	57.1	54.6	54.6	54.6	51.6	51.6	51.6	47.6	47.6	47.6
			SHC	22.1	28.1	34.1	20.9	27.1	33.4	19.5	25.9	32.3	17.7	24.2	30.7
		76	TC	—	60.5	60.5	—	58.1	58.1	—	55.3	55.3	—	52.0	52.0
			SHC	—	22.6	30.3	—	21.3	29.0	—	20.3	26.0	—	18.9	24.6
1600 cfm	EA (wb)	58	TC	47.3	47.3	53.6	44.4	44.4	50.3	41.3	41.3	46.9	37.9	37.9	43.1
			SHC	41.1	47.3	53.6	38.5	44.4	50.3	35.8	41.3	46.9	32.8	37.9	43.1
		62	TC	48.9	48.9	53.1	45.2	45.2	51.1	41.8	41.8	47.6	38.0	38.0	44.9
			SHC	38.0	45.6	53.1	36.1	43.6	51.1	33.4	40.5	47.6	31.1	38.0	44.9
		67	TC	53.8	53.8	53.8	51.0	51.0	51.0	47.1	47.1	47.1	42.5	42.5	42.5
			SHC	30.1	37.3	44.5	29.0	36.5	43.9	27.3	34.9	42.5	25.4	33.0	40.6
		72	TC	58.2	58.2	58.2	55.7	55.7	55.7	52.7	52.7	52.7	48.7	48.7	48.7
			SHC	22.5	29.2	36.0	21.3	28.3	35.3	20.0	27.2	34.5	18.3	25.6	33.0
		76	TC	—	61.5	61.5	—	59.0	59.0	—	56.1	56.1	—	52.9	52.9
			SHC	—	23.0	28.4	—	21.9	28.2	—	20.8	27.5	—	19.5	26.5
1800 cfm	EA (wb)	58	TC	49.3	49.3	55.7	46.5	46.5	52.6	43.2	43.2	49.0	39.7	39.7	45.1
			SHC	42.8	49.3	55.7	40.3	46.5	52.6	37.4	43.2	49.0	34.3	39.7	45.1
		62	TC	50.1	50.1	56.4	46.8	46.8	53.9	43.4	43.4	49.2	39.8	39.8	46.9
			SHC	40.0	48.2	56.4	37.9	45.9	53.9	34.6	41.9	49.2	32.6	39.8	46.9
		67	TC	54.8	54.8	54.8	52.0	52.0	52.0	48.1	48.1	48.1	43.4	43.4	43.8
			SHC	31.3	39.2	47.1	30.3	38.6	46.8	28.9	37.3	45.7	26.9	35.4	43.8
		72	TC	59.1	59.1	59.1	56.5	56.5	56.5	53.6	53.6	53.6	49.6	49.6	49.6
			SHC	22.7	30.2	37.6	21.6	29.3	36.9	20.4	28.4	36.4	18.7	26.9	35.1
		76	TC	—	62.2	62.2	—	59.7	59.7	—	56.8	56.8	—	53.7	53.7
			SHC	—	23.4	30.4	—	22.3	29.5	—	21.1	28.6	—	20.0	27.8
2000 cfm	EA (wb)	58	TC	50.9	50.9	57.5	48.3	48.3	54.6	44.9	44.9	50.9	41.3	41.3	46.9
			SHC	44.2	50.9	57.5	41.9	48.3	54.6	38.9	44.9	50.9	35.7	41.3	46.9
		62	TC	52.0	52.0	56.4	48.3	48.3	56.8	45.0	45.0	53.0	41.3	41.3	48.8
			SHC	40.4	48.4	56.4	39.8	48.3	56.8	37.0	45.0	53.0	33.9	41.3	48.8
		67	TC	55.5	55.5	55.5	52.8	52.8	52.8	48.9	48.9	48.9	44.2	44.2	47.0
			SHC	32.4	40.9	49.5	31.5	40.5	49.4	30.3	39.5	48.8	28.4	37.7	47.0
		72	TC	59.8	59.8	59.8	57.2	57.2	57.2	54.3	54.3	54.3	50.3	50.3	50.3
			SHC	23.0	31.0	39.1	21.8	30.1	38.5	20.6	29.4	38.2	19.1	28.1	37.1
		76	TC	—	62.8	62.8	—	60.2	60.2	—	57.4	57.4	—	54.2	54.2
			SHC	—	23.6	31.5	—	22.6	30.6	—	21.4	29.6	—	20.3	29.0

NOTE(S):
a. See minimum-maximum airflow ratings on page 6.

LEGEND

— — Do Not Operate
cfm — Cubic Feet Per Minute (Supply Air)
EA (db) — Entering Air Temperature (dry bulb)
EA (wb) — Entering Air Temperature (wet bulb)
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

Performance data (cont)

582K(E/P)05D Ultra Low NOx Single Stage, 3-Phase Cooling Capacities without Perfect Humidity™ [a]

582K(E/P)05D				AMBIENT TEMPERATURE (°F)											
				85			95			105			115		
				EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85
1200 cfm	EA (wb)	58	TC	40.5	40.5	44.8	37.5	37.5	43.0	34.5	34.5	39.6	30.9	30.9	35.7
			SHC	34.0	39.4	44.8	32.1	37.5	43.0	29.4	34.5	39.6	26.2	30.9	35.7
		62	TC	43.9	43.9	43.9	40.4	40.4	41.0	36.4	36.4	38.7	31.9	31.9	36.2
			SHC	31.1	37.1	43.1	29.0	35.0	41.0	26.7	32.7	38.7	24.2	30.2	36.2
		67	TC	49.3	49.3	49.3	46.1	46.1	46.1	42.3	42.3	42.3	37.8	37.8	37.8
			SHC	25.7	31.5	37.4	23.9	29.8	35.6	21.8	27.7	33.6	19.4	25.4	31.4
		72	TC	54.7	54.7	54.7	51.5	51.5	51.5	48.0	48.0	48.0	44.0	44.0	44.0
			SHC	20.3	25.8	31.2	18.5	24.1	29.7	16.6	22.2	27.9	14.5	20.2	25.9
		76	TC	—	58.5	58.5	—	55.7	55.7	—	52.3	52.3	—	48.4	48.4
			SHC	—	21.2	27.8	—	19.4	26.0	—	17.5	24.1	—	15.8	22.4
1400 cfm	EA (wb)	58	TC	43.0	43.0	49.0	40.1	40.1	45.9	37.0	37.0	42.4	33.3	33.3	38.4
			SHC	37.0	43.0	49.0	34.4	40.1	45.9	31.5	37.0	42.4	28.2	33.3	38.4
		62	TC	45.3	45.3	47.5	41.8	41.8	45.3	37.9	37.9	43.0	33.5	33.5	39.7
			SHC	33.6	40.6	47.5	31.5	38.4	45.3	29.2	36.1	43.0	26.4	33.0	39.7
		67	TC	50.9	50.9	50.9	47.5	47.5	47.5	43.7	43.7	43.7	39.2	39.2	39.2
			SHC	27.2	34.0	40.7	25.4	32.2	39.0	23.3	30.2	37.1	21.1	28.0	34.9
		72	TC	56.0	56.0	56.0	52.9	52.9	52.9	49.2	49.2	49.2	45.2	45.2	45.2
			SHC	20.8	27.1	33.5	19.0	25.5	32.1	17.1	23.7	30.3	15.0	21.7	28.4
		76	TC	—	59.8	59.8	—	56.8	56.8	—	53.3	53.3	—	49.3	49.3
			SHC	—	21.5	29.2	—	20.0	27.7	—	18.3	24.3	—	16.5	22.7
1600 cfm	EA (wb)	58	TC	45.2	45.2	51.5	42.2	42.2	48.3	39.0	39.0	44.7	35.2	35.2	40.6
			SHC	38.8	45.2	51.5	36.2	42.2	48.3	33.2	39.0	44.7	29.9	35.2	40.6
		62	TC	46.4	46.4	51.4	42.8	42.8	49.0	39.2	39.2	46.0	35.3	35.3	42.4
			SHC	35.8	43.6	51.4	33.6	41.3	49.0	31.0	38.5	46.0	28.1	35.3	42.4
		67	TC	51.9	51.9	51.9	48.4	48.4	48.4	44.6	44.6	44.6	40.0	40.0	40.0
			SHC	28.5	36.1	43.6	26.6	34.3	42.0	24.7	32.5	40.2	22.4	30.2	38.0
		72	TC	56.8	56.8	56.8	53.7	53.7	53.7	50.0	50.0	50.0	45.8	45.8	45.8
			SHC	21.0	28.2	35.3	19.3	26.7	34.0	17.4	24.9	32.4	15.4	22.9	30.5
		76	TC	—	60.4	60.4	—	57.4	57.4	—	53.9	53.9	—	—	—
			SHC	—	22.0	27.8	—	20.5	27.1	—	18.8	25.8	—	—	—
1800 cfm	EA (wb)	58	TC	46.8	46.8	53.4	43.9	43.9	50.2	40.5	40.5	46.5	36.8	36.8	42.4
			SHC	40.2	46.8	53.4	37.6	43.9	50.2	34.6	40.5	46.5	31.2	36.8	42.4
		62	TC	47.3	47.3	54.6	45.5	45.5	48.6	41.0	41.0	47.7	36.8	36.8	44.3
			SHC	37.6	46.1	54.6	33.9	41.3	48.6	32.2	39.9	47.7	29.3	36.8	44.3
		67	TC	52.5	52.5	52.5	49.0	49.0	49.0	45.1	45.1	45.1	40.5	40.5	40.9
			SHC	29.5	37.8	46.2	27.7	36.2	44.7	25.8	34.4	43.0	23.5	32.2	40.9
		72	TC	57.3	57.3	57.3	54.1	54.1	54.1	50.4	50.4	50.4	46.2	46.2	46.2
			SHC	21.2	29.0	36.9	19.5	27.6	35.7	17.6	25.8	34.1	15.5	23.9	32.3
		76	TC	—	60.7	60.7	—	57.8	57.8	—	54.2	54.2	—	—	—
			SHC	—	22.2	29.5	—	20.7	28.2	—	19.0	26.9	—	—	—
2000 cfm	EA (wb)	58	TC	48.0	48.0	54.8	45.1	45.1	51.6	41.8	41.8	47.9	38.0	38.0	43.7
			SHC	41.3	48.0	54.8	38.6	45.1	51.6	35.6	41.8	47.9	32.2	38.0	43.7
		62	TC	48.5	48.5	56.1	46.6	46.6	49.4	41.8	41.8	50.0	38.0	38.0	45.7
			SHC	38.6	47.3	56.1	34.5	42.0	49.4	33.5	41.8	50.0	30.2	38.0	45.7
		67	TC	52.7	52.7	52.7	49.2	49.2	49.2	45.3	45.3	45.6	40.7	40.7	43.7
			SHC	30.3	39.4	48.5	28.6	37.9	47.2	26.7	36.1	45.6	24.5	34.1	43.7
		72	TC	57.5	57.5	57.5	54.3	54.3	54.3	50.6	50.6	50.6	46.3	46.3	46.3
			SHC	21.1	29.6	38.2	19.4	28.3	37.1	17.6	26.6	35.6	15.6	24.8	33.9
		76	TC	—	60.7	60.7	—	57.8	57.8	—	—	—	—	—	—
			SHC	—	22.3	30.4	—	20.8	29.1	—	—	—	—	—	—

NOTE(S):
a. See minimum-maximum airflow ratings on page 6.

LEGEND

— — Do Not Operate
cfm — Cubic Feet Per Minute (Supply Air)
EA (db) — Entering Air Temperature (dry bulb)
EA (wb) — Entering Air Temperature (wet bulb)
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

Performance data (cont)

582K(E/P)05E — Ultra Low NOx Unit with Perfect Humidity™ System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — SCFM/BF								
		1200 / 0.04			1600 / 0.07			2000 / 0.10		
		Air Entering Evaporator — Ewb (°F)								
		72	67	62	72	67	62	72	67	62
75	TC	49.7	44.9	40.6	52.9	47.8	43.5	54.8	49.8	0.0
	SHC	20.8	26.2	31.6	24.0	30.9	37.9	26.8	35.2	0.0
	kW	2.50	2.47	2.44	2.46	2.48	2.51	2.53	2.50	0.00
85	TC	46.5	42.0	37.9	49.1	44.7	40.6	51.2	46.5	42.6
	SHC	17.8	23.5	29.2	20.5	28.0	35.2	23.5	32.1	40.5
	kW	2.81	2.78	2.76	2.78	2.80	2.82	2.84	2.81	2.79
95	TC	43.1	38.9	35.1	45.8	41.5	37.6	47.5	43.1	39.4
	SHC	14.6	20.6	26.5	17.5	25.0	32.4	20.1	28.9	37.5
	kW	3.16	3.14	3.12	3.13	3.15	3.18	3.19	3.16	3.14
105	TC	39.3	35.3	32.0	41.8	37.7	34.2	43.4	39.1	35.9
	SHC	11.1	17.3	23.7	13.8	21.5	29.3	16.3	25.3	34.3
	kW	3.56	3.54	3.52	3.54	3.55	3.58	3.59	3.56	3.55
115	TC	35.3	31.8	28.6	37.4	33.7	30.5	39.1	35.3	32.2
	SHC	7.5	14.1	20.6	9.7	17.8	25.9	12.3	21.8	30.8
	kW	4.02	4.01	4.00	4.00	4.01	4.03	4.04	4.03	4.01
125	TC	31.2	27.9	24.9	33.2	29.8	26.8	34.5	31.0	28.3
	SHC	3.7	10.5	17.3	5.9	14.3	22.5	8.1	17.9	27.1
	kW	4.54	4.53	4.53	4.53	4.54	4.54	4.55	4.54	4.54

582K(E/P)05E — Ultra Low NOx Unit with Perfect Humidity System in Hot Gas Reheat Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — Ewb (°F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		Air Entering Evaporator — cfm								
		1200	1600	2000	1200	1600	2000	1200	1600	2000
80	TC	10.55	10.36	10.16	11.65	11.44	11.20	12.56	12.35	12.04
	SHC	–1.90	–1.24	–0.52	–3.80	–3.40	–2.95	–5.39	–5.19	–4.97
	kW	3.15	3.16	3.16	3.19	3.20	3.20	3.22	3.23	3.23
75	TC	12.91	12.76	12.57	13.89	13.76	13.47	14.64	14.56	14.25
	SHC	0.35	0.98	1.63	–1.54	–1.09	–0.76	–3.12	–2.80	–2.65
	kW	3.04	3.05	3.06	3.07	3.08	3.09	3.10	3.12	3.12
70	TC	15.12	14.94	14.82	15.98	15.88	15.60	16.69	16.50	16.13
	SHC	2.51	3.04	3.60	0.68	1.11	1.36	–0.78	–0.55	–0.50
	kW	2.92	2.93	2.95	2.96	2.97	2.98	2.98	2.99	3.00
60	TC	18.97	18.79	18.53	19.24	19.18	18.82	19.83	19.58	21.59
	SHC	6.49	6.91	7.10	4.77	5.17	5.26	3.72	3.89	4.75
	kW	3.17	3.23	3.15	3.21	3.26	3.18	3.23	3.12	3.10
50	TC	17.53	13.35	13.30	13.45	13.58	13.53	13.67	13.79	13.74
	SHC	9.21	8.03	7.71	7.82	7.54	7.16	7.44	7.10	6.68
	kW	3.01	3.07	3.11	3.04	3.10	3.15	3.07	3.14	3.18
40	TC	17.53	13.35	13.30	13.45	13.58	13.53	13.67	13.79	13.74
	SHC	9.21	8.03	7.71	7.82	7.54	7.16	7.44	7.10	6.68
	kW	3.39	3.32	3.24	3.14	3.23	3.15	3.18	3.27	3.08

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Power Input
SCFM/BF — Standard Cubic Feet per Minute/Bypass Factor
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

Performance data (cont)

582KJ063 Ultra Low NOx Single Stage, 1-Phase Cooling Capacities without Perfect Humidity™ [a]

582KJ063				AMBIENT TEMPERATURE (°F)											
				85			95			105			115		
				EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85
1500 cfm	EA (wb)	58	TC	53.2	53.2	60.0	50.3	50.3	56.7	47.1	47.1	53.1	43.6	43.6	49.2
			SHC	46.4	53.2	60.0	43.9	50.3	56.7	41.1	47.1	53.1	38.1	43.6	49.2
		62	TC	56.3	56.3	57.1	52.6	52.6	55.5	48.3	48.3	53.4	44.8	44.8	48.4
			SHC	42.0	49.6	57.1	40.4	48.0	55.5	38.4	45.9	53.4	35.0	41.7	48.4
		67	TC	62.4	62.4	62.4	59.1	59.1	59.1	54.9	54.9	54.9	50.1	50.1	50.1
			SHC	34.3	41.6	48.9	33.1	40.5	47.9	31.4	38.9	46.4	29.5	37.0	44.6
		72	TC	66.9	66.9	66.9	64.9	64.9	64.9	61.6	61.6	61.6	57.1	57.1	57.1
			SHC	26.2	32.8	39.3	25.3	32.4	39.4	24.0	31.2	38.5	22.3	29.6	37.0
		76	TC	—	70.8	70.8	—	68.6	68.6	—	65.7	65.7	—	61.9	61.9
			SHC	—	26.5	34.8	—	25.5	33.7	—	24.7	30.7	—	23.4	30.0
1750 cfm	EA (wb)	58	TC	56.4	56.4	63.6	53.5	53.5	60.3	50.1	50.1	56.5	46.5	46.5	52.4
			SHC	49.2	56.4	63.6	46.7	53.5	60.3	43.7	50.1	56.5	40.5	46.5	52.4
		62	TC	58.3	58.3	62.7	54.5	54.5	61.0	50.4	50.4	57.9	46.5	46.5	54.5
			SHC	45.4	54.1	62.7	43.7	52.3	61.0	41.2	49.5	57.9	38.6	46.5	54.5
		67	TC	64.0	64.0	64.0	61.0	61.0	61.0	56.7	56.7	56.7	51.7	51.7	51.7
			SHC	35.9	44.2	52.4	35.1	43.6	52.2	33.4	42.1	50.8	31.6	40.3	49.0
		72	TC	68.4	68.4	68.4	66.2	66.2	66.2	63.0	63.0	63.0	58.6	58.6	58.6
			SHC	26.5	34.1	41.7	25.7	33.7	41.6	24.6	32.9	41.2	23.0	31.4	39.9
		76	TC	—	72.4	72.4	—	69.8	69.8	—	66.9	66.9	—	63.1	63.1
			SHC	—	27.0	36.6	—	26.1	33.4	—	25.2	32.9	—	24.0	32.0
2000 cfm	EA (wb)	58	TC	59.1	59.1	66.6	56.1	56.1	63.2	52.7	52.7	59.4	48.8	48.8	55.1
			SHC	51.6	59.1	66.6	48.9	56.1	63.2	45.9	52.7	59.4	42.6	48.8	55.1
		62	TC	59.9	59.9	67.5	56.4	56.4	64.9	53.2	53.2	60.0	48.9	48.9	57.2
			SHC	48.3	57.9	67.5	46.2	55.6	64.9	42.9	51.5	60.0	40.6	48.9	57.2
		67	TC	65.1	65.1	65.1	62.3	62.3	62.3	58.0	58.0	58.0	53.0	53.0	53.4
			SHC	37.2	46.3	55.3	36.8	46.4	56.0	35.4	45.2	55.0	33.6	43.5	53.4
		72	TC	69.7	69.7	69.7	67.3	67.3	67.3	64.1	64.1	64.1	59.8	59.8	59.8
			SHC	26.8	35.2	43.7	26.0	34.9	43.7	24.9	34.2	43.5	23.5	33.1	42.6
		76	TC	—	73.7	73.7	—	70.9	70.9	—	67.9	67.9	—	63.9	63.9
			SHC	—	27.4	35.4	—	26.5	34.9	—	25.6	34.4	—	24.4	33.5
2250 cfm	EA (wb)	58	TC	61.2	61.2	69.0	58.3	58.3	65.8	54.8	54.8	61.8	50.9	50.9	57.3
			SHC	53.4	61.2	69.0	50.9	58.3	65.8	47.8	54.8	61.8	44.4	50.9	57.3
		62	TC	61.4	61.4	71.3	59.4	59.4	65.1	54.8	54.8	64.2	50.9	50.9	59.6
			SHC	50.7	61.0	71.3	46.9	56.0	65.1	45.5	54.8	64.2	42.2	50.9	59.6
		67	TC	66.0	66.0	66.0	63.3	63.3	63.3	59.1	59.1	59.1	53.9	53.9	57.5
			SHC	38.4	48.3	58.1	38.4	49.0	59.6	37.3	48.2	59.0	35.5	46.5	57.5
		72	TC	70.7	70.7	70.7	68.1	68.1	68.1	64.9	64.9	64.9	60.7	60.7	60.7
			SHC	27.0	36.2	45.5	26.2	35.8	45.5	25.2	35.4	45.6	23.9	34.4	45.0
		76	TC	—	74.5	74.5	—	71.8	71.8	—	68.7	68.7	—	64.6	64.6
			SHC	—	27.5	36.6	—	26.7	36.0	—	25.9	35.6	—	24.6	34.6
2500 cfm	EA (wb)	58	TC	62.8	62.8	70.8	60.1	60.1	67.8	56.6	56.6	63.8	52.6	52.6	59.4
			SHC	54.8	62.8	70.8	52.5	60.1	67.8	49.4	56.6	63.8	45.9	52.6	59.4
		62	TC	63.7	63.7	71.0	60.2	60.2	70.4	56.7	56.7	66.3	52.7	52.7	61.6
			SHC	50.9	61.0	71.0	49.9	60.2	70.4	47.0	56.7	66.3	43.7	52.7	61.6
		67	TC	66.6	66.6	66.6	64.1	64.1	64.1	59.9	59.9	62.8	54.7	54.7	61.4
			SHC	39.4	49.9	60.5	40.0	51.5	63.0	39.0	50.9	62.8	37.4	49.4	61.4
		72	TC	71.5	71.5	71.5	68.8	68.8	68.8	65.6	65.6	65.6	61.4	61.4	61.4
			SHC	27.0	37.0	47.0	26.2	36.7	47.2	25.3	36.4	47.4	24.2	35.7	47.2
		76	TC	—	75.2	75.2	—	72.4	72.4	—	69.3	69.3	—	65.3	65.3
			SHC	—	27.6	37.6	—	26.7	36.9	—	25.9	36.6	—	24.8	35.7

NOTE(S):
a. See minimum-maximum airflow ratings on page 6.

LEGEND

— — Do Not Operate
cfm — Cubic Feet Per Minute (Supply Air)
EA (db) — Entering Air Temperature (dry bulb)
EA (wb) — Entering Air Temperature (wet bulb)
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

Performance data (cont)

582K(E/P)06D Ultra Low NOx Single Stage, 3-Phase Cooling Capacities without Perfect Humidity™ [a]

582K(E/P)06D				AMBIENT TEMPERATURE (°F)											
				85			95			105			115		
				EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85
1500 cfm	EA (wb)	58	TC	52.2	52.2	58.7	49.3	49.3	55.4	46.0	46.0	51.7	42.5	42.5	47.7
			SHC	45.7	52.2	58.7	43.2	49.3	55.4	40.3	46.0	51.7	37.2	42.5	47.7
		62	TC	55.2	55.2	56.6	51.3	51.3	54.6	47.1	47.1	52.4	42.6	42.6	49.7
			SHC	41.9	49.2	56.6	40.0	47.3	54.6	37.9	45.2	52.4	35.5	42.6	49.7
		67	TC	61.0	61.0	61.0	57.5	57.5	57.5	53.2	53.2	53.2	48.4	48.4	48.4
			SHC	34.7	41.9	49.1	33.3	40.6	48.0	31.5	38.9	46.2	29.5	36.8	44.2
		72	TC	64.4	64.4	64.4	62.9	62.9	62.9	59.4	59.4	59.4	55.1	55.1	55.1
			SHC	26.4	33.4	40.5	25.8	33.1	40.3	24.5	31.8	39.1	22.8	30.2	37.6
		76	TC	—	66.0	66.0	—	65.1	65.1	—	63.0	63.0	—	59.5	59.5
			SHC	—	26.9	35.1	—	26.5	34.8	—	25.8	34.0	—	24.4	32.4
1750 cfm	EA (wb)	58	TC	54.8	54.8	61.7	51.6	51.6	58.1	48.2	48.2	54.3	44.5	44.5	50.1
			SHC	47.9	54.8	61.7	45.1	51.6	58.1	42.1	48.2	54.3	38.9	44.5	50.1
		62	TC	56.5	56.5	60.9	52.7	52.7	59.0	48.4	48.4	56.5	44.6	44.6	52.1
			SHC	44.3	52.6	60.9	42.4	50.7	59.0	40.2	48.4	56.5	37.0	44.6	52.1
		67	TC	62.0	62.0	62.0	58.7	58.7	58.7	54.4	54.4	54.4	49.4	49.4	49.4
			SHC	35.7	43.7	51.7	34.6	42.9	51.2	32.9	41.3	49.7	30.9	39.3	47.8
		72	TC	64.6	64.6	64.6	63.4	63.4	63.4	60.3	60.3	60.3	56.1	56.1	56.1
			SHC	26.2	33.8	41.5	25.8	33.8	41.8	24.6	32.9	41.1	23.1	31.4	39.8
		76	TC	—	65.9	65.9	—	64.8	64.8	—	63.3	63.3	—	59.9	59.9
			SHC	—	27.2	36.8	—	26.7	36.3	—	26.0	35.1	—	24.7	33.5
2000 cfm	EA (wb)	58	TC	56.6	56.6	63.8	53.5	53.5	60.3	49.9	49.9	56.3	46.1	46.1	52.0
			SHC	49.4	56.6	63.8	46.7	53.5	60.3	43.6	49.9	56.3	40.2	46.1	52.0
		62	TC	57.5	57.5	64.5	53.7	53.7	62.9	50.0	50.0	58.5	46.1	46.1	54.0
			SHC	46.2	55.3	64.5	44.5	53.7	62.9	41.4	50.0	58.5	38.2	46.1	54.0
		67	TC	62.1	62.1	62.1	59.3	59.3	59.3	55.0	55.0	55.0	50.0	50.0	51.0
			SHC	36.0	44.6	53.3	35.5	44.7	53.9	34.0	43.4	52.8	32.1	41.6	51.0
		72	TC	64.3	64.3	64.3	63.4	63.4	63.4	60.6	60.6	60.6	56.5	56.5	56.5
			SHC	25.7	34.0	42.2	25.4	34.1	42.7	24.5	33.6	42.6	23.1	32.3	41.6
		76	TC	—	65.6	65.6	—	64.1	64.1	—	63.1	63.1	—	59.9	59.9
			SHC	—	27.0	37.5	—	26.4	36.5	—	25.8	35.6	—	24.6	34.3
2250 cfm	EA (wb)	58	TC	57.7	57.7	65.2	54.7	54.7	61.8	51.2	51.2	57.8	47.2	47.2	53.3
			SHC	50.2	57.7	65.2	47.6	54.7	61.8	44.5	51.2	57.8	41.0	47.2	53.3
		62	TC	57.9	57.9	67.9	54.8	54.8	64.3	51.2	51.2	60.1	47.2	47.2	55.4
			SHC	47.9	57.9	67.9	45.3	54.8	64.3	42.3	51.2	60.1	39.0	47.2	55.4
		67	TC	61.7	61.7	61.7	59.5	59.5	59.5	55.2	55.2	55.5	50.2	50.2	53.9
			SHC	36.0	45.1	54.3	36.1	46.2	56.2	34.8	45.1	55.5	33.0	43.5	53.9
		72	TC	63.9	63.9	63.9	62.9	62.9	62.9	60.5	60.5	60.5	56.5	56.5	56.5
			SHC	25.1	33.8	42.5	24.9	34.0	43.2	24.2	33.9	43.6	22.8	32.9	43.0
		76	TC	—	65.0	65.0	—	63.5	63.5	—	62.6	62.6	—	59.5	59.5
			SHC	—	26.5	37.3	—	25.9	36.4	—	25.4	35.8	—	24.4	34.6
2500 cfm	EA (wb)	58	TC	58.2	58.2	65.9	55.4	55.4	62.7	51.9	51.9	58.8	47.9	47.9	54.3
			SHC	50.6	58.2	65.9	48.1	55.4	62.7	45.1	51.9	58.8	41.6	47.9	54.3
		62	TC	58.2	58.2	68.5	56.4	56.4	59.5	51.9	51.9	61.1	47.9	47.9	56.4
			SHC	48.0	58.2	68.5	42.8	51.1	59.5	42.8	51.9	61.1	39.4	47.9	56.4
		67	TC	61.1	61.1	61.1	59.2	59.2	59.2	55.1	55.1	57.7	50.1	50.1	56.3
			SHC	35.8	45.5	55.2	36.4	47.2	57.9	35.3	46.5	57.7	33.6	44.9	56.3
		72	TC	63.1	63.1	63.1	62.0	62.0	62.0	60.0	60.0	60.0	56.1	56.1	56.1
			SHC	24.3	33.4	42.5	24.0	33.6	43.2	23.5	33.9	44.3	22.3	33.1	43.9
		76	TC	—	64.1	64.1	—	62.7	62.7	—	61.8	61.8	—	58.8	58.8
			SHC	—	25.8	36.9	—	25.2	36.1	—	24.8	35.7	—	23.8	34.7

NOTE(S):
a. See minimum-maximum airflow ratings on page 6.

LEGEND

— — Do Not Operate
cfm — Cubic Feet Per Minute (Supply Air)
EA (db) — Entering Air Temperature (dry bulb)
EA (wb) — Entering Air Temperature (wet bulb)
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

Performance data (cont)

582K(E/P)06E — Ultra Low NOx Unit with Perfect Humidity™ System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — SCFM/BF								
		1500 / 0.01			2000 / 0.02			2500 / 0.03		
		Air Entering Evaporator — Ewb (°F)								
		72	67	62	72	67	62	72	67	62
75	TC	65.6	59.0	53.7	69.6	63.1	57.4	72.0	65.6	60.4
	SHC	25.3	33.5	42.2	29.9	40.9	51.6	34.3	47.6	60.0
	kW	3.11	3.06	3.03	3.05	3.09	3.16	3.16	3.11	3.07
85	TC	61.1	55.4	50.2	65.0	58.9	53.7	66.8	61.0	56.4
	SHC	21.1	30.0	38.8	25.6	36.9	48.0	29.3	43.3	56.0
	kW	3.47	3.43	3.39	3.42	3.46	3.51	3.52	3.48	3.44
95	TC	56.7	51.2	46.4	60.1	54.5	49.6	62.2	56.5	52.1
	SHC	16.9	26.1	35.2	21.0	32.7	44.2	25.0	39.1	52.1
	kW	3.89	3.85	3.80	3.83	3.88	3.93	3.95	3.90	3.86
105	TC	51.8	46.6	42.0	54.3	49.0	44.4	56.9	51.1	46.9
	SHC	12.3	21.7	31.1	15.5	27.5	39.3	20.0	34.0	46.9
	kW	4.36	4.31	4.26	4.29	4.33	4.38	4.42	4.36	4.32
115	TC	46.5	41.9	37.8	49.1	44.3	40.2	50.8	46.2	42.5
	SHC	7.3	17.3	27.2	10.7	23.2	35.4	14.4	29.4	42.5
	kW	4.88	4.83	4.78	4.81	4.86	4.91	4.93	4.88	4.84
125	TC	40.8	36.7	33.1	43.1	38.9	35.1	44.9	40.5	37.3
	SHC	2.0	12.5	22.8	5.2	18.2	30.5	8.9	24.2	37.3
	kW	5.44	5.39	5.35	5.37	5.42	5.47	5.49	5.44	5.40

582K(E/P)06E — Ultra Low NOx Unit with Perfect Humidity System in Hot Gas Reheat Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — Ewb (°F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		Air Entering Evaporator — cfm								
		1500	2000	2500	1500	2000	2500	1500	2000	2500
80	TC	13.19	12.95	12.70	14.56	14.30	14.00	15.70	15.44	15.05
	SHC	–2.38	–1.55	–0.65	–4.75	–4.25	–3.69	–6.74	–6.49	–6.21
	kW	3.15	3.16	3.16	3.19	3.20	3.20	3.22	3.23	3.23
75	TC	16.14	15.95	15.71	17.36	17.20	16.84	18.30	18.20	17.81
	SHC	0.44	1.23	2.03	–1.92	–1.36	–0.96	–3.90	–3.50	–3.31
	kW	3.04	3.05	3.06	3.07	3.08	3.09	3.10	3.12	3.12
70	TC	18.90	18.68	18.52	19.97	19.85	19.50	20.86	20.62	20.17
	SHC	3.13	3.80	4.51	0.85	1.39	1.70	–0.97	–0.69	–0.63
	kW	2.92	2.93	2.95	2.96	2.97	2.98	2.98	2.99	3.00
60	TC	23.71	23.48	23.16	24.05	23.98	23.52	24.79	24.47	26.99
	SHC	8.11	8.63	8.88	5.97	6.46	6.58	4.65	4.87	5.94
	kW	3.17	3.23	3.15	3.21	3.26	3.18	3.23	3.12	3.10
50	TC	21.91	16.69	16.62	16.81	16.98	16.92	17.08	17.24	17.17
	SHC	11.51	10.04	9.64	9.77	9.43	8.95	9.30	8.88	8.35
	kW	3.01	3.07	3.11	3.04	3.10	3.15	3.07	3.14	3.18
40	TC	21.91	16.69	16.62	16.81	16.98	16.92	17.08	17.24	17.17
	SHC	11.51	10.04	9.64	9.77	9.43	8.95	9.30	8.88	8.35
	kW	3.39	3.32	3.24	3.14	3.23	3.15	3.18	3.27	3.08

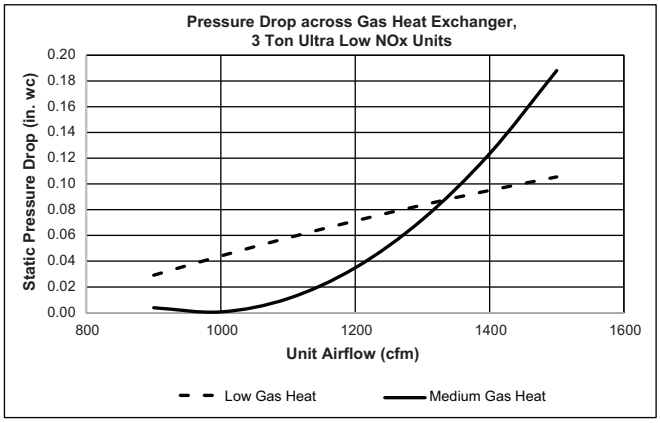
LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Power Input
SCFM/BF — Standard Cubic Feet per Minute/Bypass Factor
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

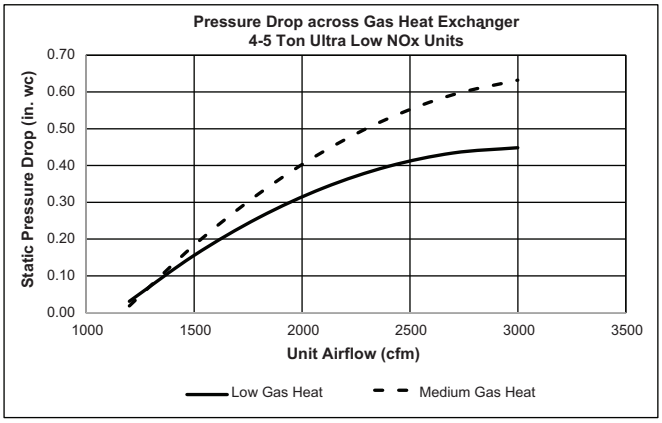
Performance data (cont)

Pressure Drops across Gas Heat Exchanger for 582K Ultra Low NOx Size 04-06 Units

Pressure Drop across Gas Heat Exchanger, 3 Ton Units



Pressure Drop across Gas Heat Exchanger, 4-5 Ton Units



Gas Heat Static Pressure Deductions (in. wg) — 3 Ton Units

CFM	900	1000	1100	1200	1300	1400	1500
LOW GAS HEAT DEDUCTION	0.63	0.58	0.53	0.47	0.40	0.33	0.26
MEDIUM GAS HEAT DEDUCTION	0.00	0.00	0.00	0.01	0.02	0.03	0.05

Gas Heat Static Pressure Deductions (in. wg) — 4 to 6 Ton Units

CFM	1200	1500	1800	2100	2400	2700	3000
LOW GAS HEAT DEDUCTION	0.02	0.18	0.32	0.44	0.53	0.59	0.63
MEDIUM GAS HEAT DEDUCTION	0.01	0.05	0.08	0.12	0.15	0.18	0.20

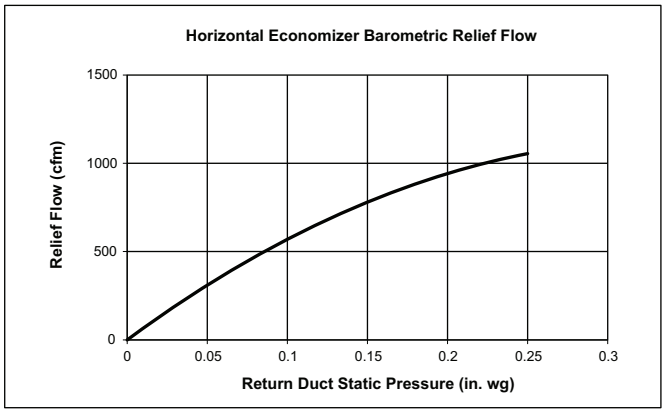
Gas Heat Stages

582K(E/P/J) UNIT SIZE	HEAT SIZE
1-Phase or 3-Phase	Low or Medium
04	1
05	1
06	1

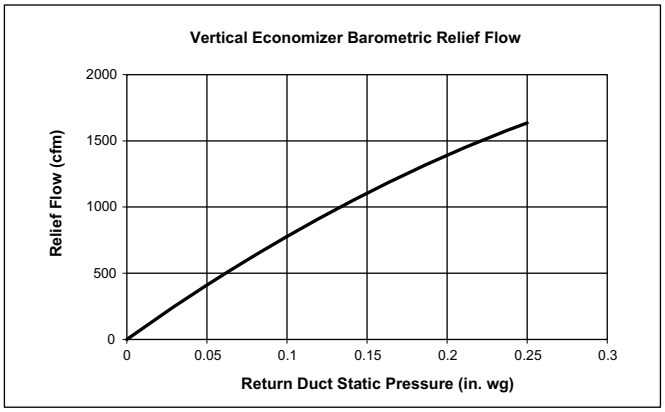
Performance data (cont)

Economizer Barometric Relief and Static Pressure

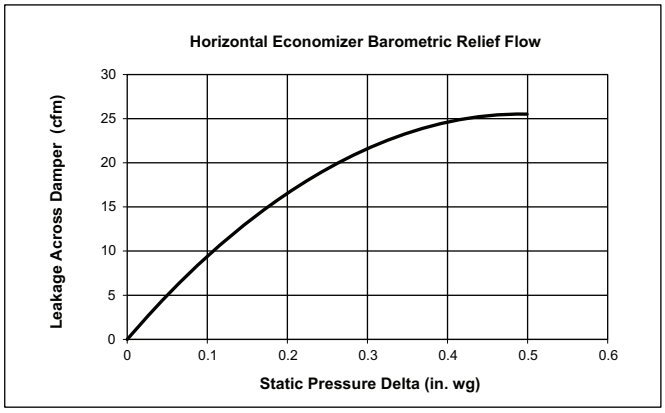
Horizontal Economizer Barometric Relief



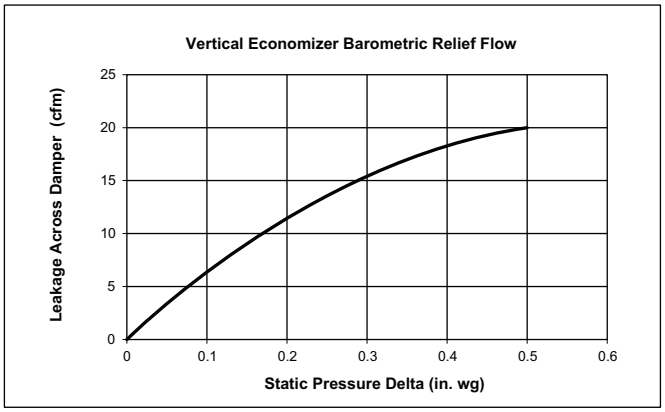
Vertical Economizer Barometric Relief



Horizontal Economizer Damper Leakage

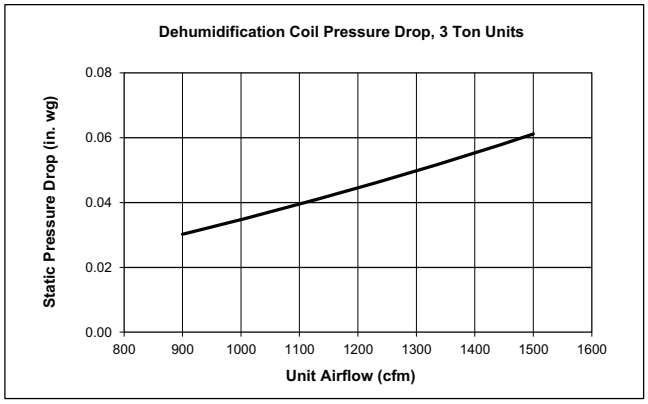


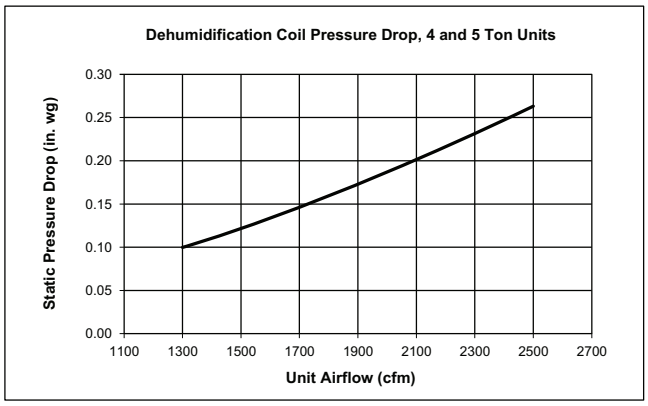
Vertical Economizer Damper Leakage



Performance data (cont)

Perfect Humidity™ Coil Pressure Drops





MERV-8 filters pressure drop

NOTE: For factory-installed MERV-8 filters, no additional pressure drop adjustments are necessary. The standard fan tables accommodate usage.

Fan data

GENERAL FAN PERFORMANCE NOTES

1. Interpolation is permissible. Do not extrapolate.
2. External static pressure is the static pressure difference between the return duct and the supply duct plus the static pressure caused by any FIOPs or accessories.
3. Tabular data accounts for pressure loss due to clean filters, unit casing, wet coils, and highest gas heat exchanger (when gas heat unit).
4. Factory options and accessories may effect static pressure losses. Gas heat unit fan tables assume highest gas heat models; for fan selections with low or medium heat models, the user must deduct low and medium heat static pressures. Selection software is available, through your salesperson, to help you select the best motor/drive combination for your application.
5. The fan performance tables offer motor/drive recommendations. In cases when two motor/drive combinations would work, Bryant recommends the lower horsepower option.
6. For information on the electrical properties of Bryant motors, please see the Electrical information section of this book.
7. For more information on the performance limits of Bryant motors, see the application data section of this book.
8. The EPACT (Energy Policy Act of 1992) regulates energy requirements for specific types of indoor fan motors. Motors regulated by EPACT include any general purpose, T-frame (three-digit, 143 and larger), single-speed, foot mounted, polyphase, squirrel cage induction motors of NEMA (National Electrical Manufacturers Association) design A and B, manufactured for use in the United States. Ranging from 1 to 200 Hp, these continuous-duty motors operate on 230 and 460 volt, 60 Hz power. If a motor does not fit into these specifications, the motor does not have to be replaced by an EPACT compliant energy-efficient motor. Variable-speed motors are exempt from EPACT compliance requirements.

Fan data (cont)

582KJ043 Single Phase Ultra Low NOx — 3 Ton Vertical Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
900	1112	0.10	1341	0.17	1530	0.25	1696	0.34	1845	0.44
975	1162	0.11	1385	0.19	1571	0.27	1733	0.36	1881	0.46
1050	1213	0.12	1431	0.20	1613	0.29	1772	0.39	1917	0.49
1125	1265	0.14	1477	0.22	1656	0.32	1813	0.41	1956	0.52
1200	1319	0.16	1525	0.25	1700	0.34	1855	0.44	1996	0.55
1275	1374	0.18	1573	0.27	1746	0.37	1898	0.48	2037	0.59
1350	1430	0.20	1623	0.30	1792	0.40	1942	0.51	2079	0.63
1425	1487	0.23	1674	0.33	1839	0.43	1987	0.55	2122	0.67
1500	1545	0.26	1725	0.36	1887	0.47	2032	0.58	2165	0.71

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
900	1983	0.54	2111	0.66	2231	0.77	2344	0.90	2452	1.03
975	2016	0.57	2143	0.69	2262	0.81	2375	0.93	2482	1.06
1050	2051	0.60	2177	0.72	2294	0.84	2406	0.97	—	—
1125	2088	0.63	2211	0.75	2328	0.88	2438	1.01	—	—
1200	2126	0.67	2248	0.79	2363	0.92	2472	1.05	—	—
1275	2165	0.71	2285	0.83	2399	0.96	—	—	—	—
1350	2205	0.75	2324	0.87	2437	1.01	—	—	—	—
1425	2247	0.79	2364	0.92	2475	1.06	—	—	—	—
1500	2289	0.84	2405	0.97	—	—	—	—	—	—

Standard Static 1112-1890 rpm, 0.44 Max bhp

Medium Static 1112-2190 rpm, 0.71 Max bhp

High Static 1112-2490 rpm, 1.07 Max bhp

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582KJ043 Single Phase Ultra Low NOx — Standard Static — 3 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1112	5.9	1341	7.1	1530	8.1	1696	9.0	1845	9.8
975	1162	6.1	1385	7.3	1571	8.3	1733	9.2	—	—
1050	1213	6.4	1431	7.6	1613	8.5	1772	9.4	—	—
1125	1265	6.7	1477	7.8	1656	8.8	1813	9.6	—	—
1200	1319	7.0	1525	8.1	1700	9.0	1855	9.8	—	—
1275	1374	7.3	1573	8.3	1746	9.2	—	—	—	—
1350	1430	7.6	1623	8.6	1792	9.5	—	—	—	—
1425	1487	7.9	1674	8.9	1839	9.7	—	—	—	—
1500	1545	8.2	1725	9.1	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	—	—	—	—	—	—	—	—	—	—
975	—	—	—	—	—	—	—	—	—	—
1050	—	—	—	—	—	—	—	—	—	—
1125	—	—	—	—	—	—	—	—	—	—
1200	—	—	—	—	—	—	—	—	—	—
1275	—	—	—	—	—	—	—	—	—	—
1350	—	—	—	—	—	—	—	—	—	—
1425	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—

Standard Static 1112-1890 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582KJ043 Single Phase Ultra Low NOx — Medium Static — 3 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1112	5.1	1341	6.1	1530	7.0	1696	7.7	1845	8.4
975	1162	5.3	1385	6.3	1571	7.2	1733	7.9	1881	8.6
1050	1213	5.5	1431	6.5	1613	7.4	1772	8.1	1917	8.8
1125	1265	5.8	1477	6.7	1656	7.6	1813	8.3	1956	8.9
1200	1319	6.0	1525	7.0	1700	7.8	1855	8.5	1996	9.1
1275	1374	6.3	1573	7.2	1746	8.0	1898	8.7	2037	9.3
1350	1430	6.5	1623	7.4	1792	8.2	1942	8.9	2079	9.5
1425	1487	6.8	1674	7.6	1839	8.4	1987	9.1	2122	9.7
1500	1545	7.1	1725	7.9	1887	8.6	2032	9.3	2165	9.9

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1983	9.1	2111	9.6	—	—	—	—	—	—
975	2016	9.2	2143	9.8	—	—	—	—	—	—
1050	2051	9.4	—	—	—	—	—	—	—	—
1125	2088	9.5	—	—	—	—	—	—	—	—
1200	2126	9.7	—	—	—	—	—	—	—	—
1275	2165	9.9	—	—	—	—	—	—	—	—
1350	—	—	—	—	—	—	—	—	—	—
1425	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—

Medium Static 1112-2190 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582KJ043 Single Phase Ultra Low NOx — High Static — 3 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1112	4.5	1341	5.4	1530	6.1	1696	6.8	1845	7.4
975	1162	4.7	1385	5.6	1571	6.3	1733	7.0	1881	7.6
1050	1213	4.9	1431	5.7	1613	6.5	1772	7.1	1917	7.7
1125	1265	5.1	1477	5.9	1656	6.7	1813	7.3	1956	7.9
1200	1319	5.3	1525	6.1	1700	6.8	1855	7.4	1996	8.0
1275	1374	5.5	1573	6.3	1746	7.0	1898	7.6	2037	8.2
1350	1430	5.7	1623	6.5	1792	7.2	1942	7.8	2079	8.3
1425	1487	6.0	1674	6.7	1839	7.4	1987	8.0	2122	8.5
1500	1545	6.2	1725	6.9	1887	7.6	2032	8.2	2165	8.7

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1983	8.0	2111	8.5	2231	9.0	2344	9.4	2452	9.8
975	2016	8.1	2143	8.6	2262	9.1	2375	9.5	2482	10.0
1050	2051	8.2	2177	8.7	2294	9.2	2406	9.7	—	—
1125	2088	8.4	2211	8.9	2328	9.3	2438	9.8	—	—
1200	2126	8.5	2248	9.0	2363	9.5	2472	9.9	—	—
1275	2165	8.7	2285	9.2	2399	9.6	—	—	—	—
1350	2205	8.9	2324	9.3	2437	9.8	—	—	—	—
1425	2247	9.0	2364	9.5	2475	9.9	—	—	—	—
1500	2289	9.2	2405	9.7	—	—	—	—	—	—

High Static 1112-2490 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582K(E/P)04D Three Phase Ultra Low NOx — 3 Ton Vertical Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
900	1112	0.10	1341	0.17	1530	0.25	1696	0.34	1845	0.44
975	1162	0.11	1385	0.19	1571	0.27	1733	0.36	1881	0.46
1050	1213	0.12	1431	0.20	1613	0.29	1772	0.39	1917	0.49
1125	1265	0.14	1477	0.22	1656	0.32	1813	0.41	1956	0.52
1200	1319	0.16	1525	0.25	1700	0.34	1855	0.44	1996	0.55
1275	1374	0.18	1573	0.27	1746	0.37	1898	0.48	2037	0.59
1350	1430	0.20	1623	0.30	1792	0.40	1942	0.51	2079	0.63
1425	1487	0.23	1674	0.33	1839	0.43	1987	0.55	2122	0.67
1500	1545	0.26	1725	0.36	1887	0.47	2032	0.58	2165	0.71

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
900	1983	0.54	2111	0.66	2231	0.77	2344	0.90	2452	1.03
975	2016	0.57	2143	0.69	2262	0.81	2375	0.93	2482	1.06
1050	2051	0.60	2177	0.72	2294	0.84	2406	0.97	—	—
1125	2088	0.63	2211	0.75	2328	0.88	2438	1.01	—	—
1200	2126	0.67	2248	0.79	2363	0.92	2472	1.05	—	—
1275	2165	0.71	2285	0.83	2399	0.96	—	—	—	—
1350	2205	0.75	2324	0.87	2437	1.01	—	—	—	—
1425	2247	0.79	2364	0.92	2475	1.06	—	—	—	—
1500	2289	0.84	2405	0.97	—	—	—	—	—	—

Standard Static 1112-1890 rpm, 0.44 Max bhp

Medium Static 1112-2190 rpm, 0.71 Max bhp

High Static 1112-2490 rpm, 1.07 Max bhp

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582K(E/P)04D Three Phase Ultra Low NOx — Standard Static — 3 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1112	5.9	1341	7.1	1530	8.1	1696	9.0	1845	9.8
975	1162	6.1	1385	7.3	1571	8.3	1733	9.2	—	—
1050	1213	6.4	1431	7.6	1613	8.5	1772	9.4	—	—
1125	1265	6.7	1477	7.8	1656	8.8	1813	9.6	—	—
1200	1319	7.0	1525	8.1	1700	9.0	1855	9.8	—	—
1275	1374	7.3	1573	8.3	1746	9.2	—	—	—	—
1350	1430	7.6	1623	8.6	1792	9.5	—	—	—	—
1425	1487	7.9	1674	8.9	1839	9.7	—	—	—	—
1500	1545	8.2	1725	9.1	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	—	—	—	—	—	—	—	—	—	—
975	—	—	—	—	—	—	—	—	—	—
1050	—	—	—	—	—	—	—	—	—	—
1125	—	—	—	—	—	—	—	—	—	—
1200	—	—	—	—	—	—	—	—	—	—
1275	—	—	—	—	—	—	—	—	—	—
1350	—	—	—	—	—	—	—	—	—	—
1425	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—

Standard Static 1112-1890 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582K(E/P)04D Three Phase Ultra Low NOx — Medium Static — 3 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1112	5.1	1341	6.1	1530	7.0	1696	7.7	1845	8.4
975	1162	5.3	1385	6.3	1571	7.2	1733	7.9	1881	8.6
1050	1213	5.5	1431	6.5	1613	7.4	1772	8.1	1917	8.8
1125	1265	5.8	1477	6.7	1656	7.6	1813	8.3	1956	8.9
1200	1319	6.0	1525	7.0	1700	7.8	1855	8.5	1996	9.1
1275	1374	6.3	1573	7.2	1746	8.0	1898	8.7	2037	9.3
1350	1430	6.5	1623	7.4	1792	8.2	1942	8.9	2079	9.5
1425	1487	6.8	1674	7.6	1839	8.4	1987	9.1	2122	9.7
1500	1545	7.1	1725	7.9	1887	8.6	2032	9.3	2165	9.9

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1983	9.1	2111	9.6	—	—	—	—	—	—
975	2016	9.2	2143	9.8	—	—	—	—	—	—
1050	2051	9.4	—	—	—	—	—	—	—	—
1125	2088	9.5	—	—	—	—	—	—	—	—
1200	2126	9.7	—	—	—	—	—	—	—	—
1275	2165	9.9	—	—	—	—	—	—	—	—
1350	—	—	—	—	—	—	—	—	—	—
1425	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—

Medium Static 1112-2190 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582K(E/P)04D Three Phase Ultra Low NOx — High Static — 3 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1112	4.5	1341	5.4	1530	6.1	1696	6.8	1845	7.4
975	1162	4.7	1385	5.6	1571	6.3	1733	7.0	1881	7.6
1050	1213	4.9	1431	5.7	1613	6.5	1772	7.1	1917	7.7
1125	1265	5.1	1477	5.9	1656	6.7	1813	7.3	1956	7.9
1200	1319	5.3	1525	6.1	1700	6.8	1855	7.4	1996	8.0
1275	1374	5.5	1573	6.3	1746	7.0	1898	7.6	2037	8.2
1350	1430	5.7	1623	6.5	1792	7.2	1942	7.8	2079	8.3
1425	1487	6.0	1674	6.7	1839	7.4	1987	8.0	2122	8.5
1500	1545	6.2	1725	6.9	1887	7.6	2032	8.2	2165	8.7

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1983	8.0	2111	8.5	2231	9.0	2344	9.4	2452	9.8
975	2016	8.1	2143	8.6	2262	9.1	2375	9.5	2482	10.0
1050	2051	8.2	2177	8.7	2294	9.2	2406	9.7	—	—
1125	2088	8.4	2211	8.9	2328	9.3	2438	9.8	—	—
1200	2126	8.5	2248	9.0	2363	9.5	2472	9.9	—	—
1275	2165	8.7	2285	9.2	2399	9.6	—	—	—	—
1350	2205	8.9	2324	9.3	2437	9.8	—	—	—	—
1425	2247	9.0	2364	9.5	2475	9.9	—	—	—	—
1500	2289	9.2	2405	9.7	—	—	—	—	—	—

High Static 1112-2490 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582KJ053 Single Phase Ultra Low NOx — 4 Ton Vertical Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1200	1262	0.21	1452	0.33	1614	0.45	1757	0.58	1888	0.72
1300	1333	0.25	1516	0.37	1674	0.50	1813	0.63	1942	0.78
1400	1405	0.29	1583	0.42	1735	0.55	1872	0.70	1997	0.84
1500	1478	0.34	1650	0.48	1798	0.62	1932	0.76	2054	0.92
1600	1552	0.40	1718	0.54	1863	0.68	1993	0.84	2114	1.00
1700	1627	0.46	1787	0.60	1928	0.76	2057	0.92	2174	1.09
1800	1704	0.52	1857	0.68	1995	0.84	2121	1.01	2236	1.18
1900	1781	0.60	1929	0.76	2063	0.93	2185	1.10	2299	1.28
2000	1859	0.68	2001	0.85	2132	1.02	2252	1.21	2363	1.39

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1200	2011	0.87	2126	1.02	2236	1.19	2341	1.37	2442	1.55
1300	2061	0.93	2174	1.09	2281	1.26	2384	1.44	—	—
1400	2114	1.00	2224	1.17	2329	1.34	2429	1.52	—	—
1500	2169	1.08	2277	1.25	2379	1.43	—	—	—	—
1600	2226	1.17	2331	1.34	2432	1.52	—	—	—	—
1700	2284	1.26	2388	1.44	—	—	—	—	—	—
1800	2344	1.36	2446	1.55	—	—	—	—	—	—
1900	2405	1.47	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—

Standard Static 1262-1900 rpm, 0.72 Max bhp

Medium Static 1262-2170 rpm, 1.06 Max bhp

High Static 1262-2460 rpm, 1.53 Max bhp

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582KJ053 Single Phase Ultra Low NOx — Standard Static — 4 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1262	6.6	1452	7.6	1614	8.5	1757	9.2	1888	9.9
1300	1333	7.0	1516	8.0	1674	8.8	1813	9.5	—	—
1400	1405	7.4	1583	8.3	1735	9.1	1872	9.9	—	—
1500	1478	7.8	1650	8.7	1798	9.5	—	—	—	—
1600	1552	8.2	1718	9.0	1863	9.8	—	—	—	—
1700	1627	8.6	1787	9.4	—	—	—	—	—	—
1800	1704	9.0	1857	9.8	—	—	—	—	—	—
1900	1781	9.4	—	—	—	—	—	—	—	—
2000	1859	9.8	—	—	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	—	—	—	—	—	—	—	—	—	—
1300	—	—	—	—	—	—	—	—	—	—
1400	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—
1600	—	—	—	—	—	—	—	—	—	—
1700	—	—	—	—	—	—	—	—	—	—
1800	—	—	—	—	—	—	—	—	—	—
1900	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—

Standard Static 1262-1900 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582KJ053 Single Phase Ultra Low NOx — Medium Static — 4 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1262	5.8	1452	6.7	1614	7.4	1757	8.1	1888	8.7
1300	1333	6.1	1516	7.0	1674	7.7	1813	8.4	1942	8.9
1400	1405	6.5	1583	7.3	1735	8.0	1872	8.6	1997	9.2
1500	1478	6.8	1650	7.6	1798	8.3	1932	8.9	2054	9.5
1600	1552	7.2	1718	7.9	1863	8.6	1993	9.2	2114	9.7
1700	1627	7.5	1787	8.2	1928	8.9	2057	9.5	—	—
1800	1704	7.9	1857	8.6	1995	9.2	2121	9.8	—	—
1900	1781	8.2	1929	8.9	2063	9.5	—	—	—	—
2000	1859	8.6	2001	9.2	2132	9.8	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	2011	9.3	2126	9.8	—	—	—	—	—	—
1300	2061	9.5	—	—	—	—	—	—	—	—
1400	2114	9.7	—	—	—	—	—	—	—	—
1500	2169	10.0	—	—	—	—	—	—	—	—
1600	—	—	—	—	—	—	—	—	—	—
1700	—	—	—	—	—	—	—	—	—	—
1800	—	—	—	—	—	—	—	—	—	—
1900	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—

Medium Static 1262-2170 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582KJ053 Single Phase Ultra Low NOx — High Static — 4 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1262	5.1	1452	5.9	1614	6.6	1757	7.1	1888	7.7
1300	1333	5.4	1516	6.2	1674	6.8	1813	7.4	1942	7.9
1400	1405	5.7	1583	6.4	1735	7.1	1872	7.6	1997	8.1
1500	1478	6.0	1650	6.7	1798	7.3	1932	7.9	2054	8.3
1600	1552	6.3	1718	7.0	1863	7.6	1993	8.1	2114	8.6
1700	1627	6.6	1787	7.3	1928	7.8	2057	8.4	2174	8.8
1800	1704	6.9	1857	7.5	1995	8.1	2121	8.6	2236	9.1
1900	1781	7.2	1929	7.8	2063	8.4	2185	8.9	2299	9.3
2000	1859	7.6	2001	8.1	2132	8.7	2252	9.2	2363	9.6

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	2011	8.2	2126	8.6	2236	9.1	2341	9.5	2442	9.9
1300	2061	8.4	2174	8.8	2281	9.3	2384	9.7	—	—
1400	2114	8.6	2224	9.0	2329	9.5	2429	9.9	—	—
1500	2169	8.8	2277	9.3	2379	9.7	—	—	—	—
1600	2226	9.0	2331	9.5	2432	9.9	—	—	—	—
1700	2284	9.3	2388	9.7	—	—	—	—	—	—
1800	2344	9.5	2446	9.9	—	—	—	—	—	—
1900	2405	9.8	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—

High Static 1262-2460 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582K(E/P)05D Three Phase Ultra Low NOx — 4 Ton Vertical Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1200	1262	0.21	1453	0.33	1614	0.45	1757	0.58	1888	0.72
1300	1333	0.25	1517	0.37	1674	0.50	1814	0.63	1942	0.78
1400	1405	0.29	1583	0.42	1736	0.56	1872	0.70	1998	0.85
1500	1478	0.34	1650	0.48	1799	0.62	1932	0.76	2055	0.92
1600	1553	0.40	1718	0.54	1863	0.68	1994	0.84	2114	1.00
1700	1628	0.46	1787	0.60	1929	0.76	2057	0.92	2174	1.09
1800	1704	0.52	1858	0.68	1995	0.84	2121	1.01	2236	1.18
1900	1781	0.60	1929	0.76	2063	0.93	2186	1.10	2299	1.28
2000	1859	0.68	2001	0.85	2132	1.02	2252	1.21	2363	1.39

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1200	2011	0.87	2126	1.02	2236	1.19	2341	1.37	2442	1.55
1300	2061	0.93	2174	1.09	2281	1.26	2383	1.44	2482	1.62
1400	2114	1.00	2224	1.17	2329	1.34	2429	1.52	2526	1.71
1500	2169	1.08	2277	1.25	2379	1.43	2478	1.61	2572	1.80
1600	2226	1.17	2332	1.34	2432	1.52	2528	1.71	2621	1.91
1700	2284	1.26	2388	1.44	2487	1.63	2581	1.82	—	—
1800	2344	1.36	2446	1.55	2543	1.74	2636	1.94	—	—
1900	2405	1.47	2505	1.66	2600	1.86	—	—	—	—
2000	2467	1.59	2566	1.79	2659	1.99	—	—	—	—

Standard Static 1262-1900 rpm, 0.72 Max bhp

Medium Static 1262-2170 rpm, 1.06 Max bhp

High Static 1262-2660 rpm, 1.92 Max bhp

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582K(E/P)05D Three Phase Ultra Low NOx — Standard Static — 4 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1262	6.6	1453	7.6	1614	8.5	1757	9.2	1888	9.9
1300	1333	7.0	1517	8.0	1674	8.8	1814	9.5	—	—
1400	1405	7.4	1583	8.3	1736	9.1	1872	9.9	—	—
1500	1478	7.8	1650	8.7	1799	9.5	—	—	—	—
1600	1553	8.2	1718	9.0	1863	9.8	—	—	—	—
1700	1628	8.6	1787	9.4	—	—	—	—	—	—
1800	1704	9.0	1858	9.8	—	—	—	—	—	—
1900	1781	9.4	—		—	—	—	—	—	—
2000	1859	9.8	—	—	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	—	—	—	—	—	—	—	—	—	—
1300	—	—	—	—	—	—	—	—	—	—
1400	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—
1600	—	—	—	—	—	—	—	—	—	—
1700	—	—	—	—	—	—	—	—	—	—
1800	—	—	—	—	—	—	—	—	—	—
1900	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—

Standard Static 1262-1900 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582K(E/P)05D Three Phase Ultra Low NOx — Medium Static — 4 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1262	5.8	1453	6.7	1614	7.4	1757	8.1	1888	8.7
1300	1333	6.1	1517	7.0	1674	7.7	1814	8.4	1942	8.9
1400	1405	6.5	1583	7.3	1736	8.0	1872	8.6	1998	9.2
1500	1478	6.8	1650	7.6	1799	8.3	1932	8.9	2055	9.5
1600	1553	7.2	1718	7.9	1863	8.6	1994	9.2	2114	9.7
1700	1628	7.5	1787	8.2	1929	8.9	2057	9.5	—	—
1800	1704	7.9	1858	8.6	1995	9.2	2121	9.8	—	—
1900	1781	8.2	1929	8.9	2063	9.5	—	—	—	—
2000	1859	8.6	2001	9.2	2132	9.8	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	2011	9.3	2126	9.8	—	—	—	—	—	—
1300	2061	9.5	—	—	—	—	—	—	—	—
1400	2114	9.7	—	—	—	—	—	—	—	—
1500	2169	10.0	—	—	—	—	—	—	—	—
1600	—	—	—	—	—	—	—	—	—	—
1700	—	—	—	—	—	—	—	—	—	—
1800	—	—	—	—	—	—	—	—	—	—
1900	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—

Medium Static 1262-2170 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582K(E/P)05D Three Phase Ultra Low NOx — High Static — 4 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1262	4.7	1453	5.5	1614	6.1	1757	6.6	1888	7.1
1300	1333	5.0	1517	5.7	1674	6.3	1814	6.8	1942	7.3
1400	1405	5.3	1583	6.0	1736	6.5	1872	7.0	1998	7.5
1500	1478	5.6	1650	6.2	1799	6.8	1932	7.3	2055	7.7
1600	1553	5.8	1718	6.5	1863	7.0	1994	7.5	2114	7.9
1700	1628	6.1	1787	6.7	1929	7.3	2057	7.7	2174	8.2
1800	1704	6.4	1858	7.0	1995	7.5	2121	8.0	2236	8.4
1900	1781	6.7	1929	7.3	2063	7.8	2186	8.2	2299	8.6
2000	1859	7.0	2001	7.5	2132	8.0	2252	8.5	2363	8.9

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	2011	7.6	2126	8.0	2236	8.4	2341	8.8	2442	9.2
1300	2061	7.7	2174	8.2	2281	8.6	2383	9.0	2482	9.3
1400	2114	7.9	2224	8.4	2329	8.8	2429	9.1	2526	9.5
1500	2169	8.2	2277	8.6	2379	8.9	2478	9.3	2572	9.7
1600	2226	8.4	2332	8.8	2432	9.1	2528	9.5	2621	9.9
1700	2284	8.6	2388	9.0	2487	9.3	2581	9.7	—	—
1800	2344	8.8	2446	9.2	2543	9.6	2636	9.9	—	—
1900	2405	9.0	2505	9.4	2600	9.8	—	—	—	—
2000	2467	9.3	2566	9.6	2659	10.0	—	—	—	—

High Static 1262-2660 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582KJ063 Single Phase Ultra Low NOx — 5 Ton Vertical Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1500	1478	0.34	1650	0.48	1799	0.62	1932	0.76	2055	0.92
1625	1571	0.41	1735	0.55	1879	0.70	2009	0.86	2129	1.02
1750	1666	0.49	1822	0.64	1962	0.80	2088	0.96	2205	1.13
1875	1761	0.58	1910	0.74	2046	0.91	2169	1.08	2283	1.26
2000	1859	0.68	2001	0.85	2132	1.02	2252	1.21	2363	1.39
2125	1957	0.79	2093	0.97	2218	1.15	2335	1.34	—	—
2250	2056	0.92	2185	1.10	2307	1.30	—	—	—	—
2375	2155	1.06	2279	1.25	—	—	—	—	—	—
2500	2256	1.21	2374	1.41	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1500	2169	1.08	2277	1.25	2379	1.43	—	—	—	—
1625	2240	1.19	2345	1.37	—	—	—	—	—	—
1750	2314	1.31	—	—	—	—	—	—	—	—
1875	2389	1.44	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2125	—	—	—	—	—	—	—	—	—	—
2250	—	—	—	—	—	—	—	—	—	—
2375	—	—	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

Standard Static 1478-2150 rpm, 1.06 Max bhp

Medium Static 1478-2390 rpm, 1.44 Max bhp

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582KJ063 Single Phase Ultra Low NOx — Standard Static — 5 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	1478	6.9	1650	7.7	1799	8.4	1932	9.0	2055	9.6
1625	1571	7.3	1735	8.1	1879	8.7	2009	9.3	2129	9.9
1750	1666	7.7	1822	8.5	1962	9.1	2088	9.7	—	—
1875	1761	8.2	1910	8.9	2046	9.5	—	—	—	—
2000	1859	8.6	2001	9.3	2132	9.9	—	—	—	—
2125	1957	9.1	2093	9.7	—	—	—	—	—	—
2250	2056	9.6	—	—	—	—	—	—	—	—
2375	—	—	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	—	—	—	—	—	—	—	—	—	—
1625	—	—	—	—	—	—	—	—	—	—
1750	—	—	—	—	—	—	—	—	—	—
1875	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2125	—	—	—	—	—	—	—	—	—	—
2250	—	—	—	—	—	—	—	—	—	—
2375	—	—	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

Standard Static 1478-2150 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582KJ063 Single Phase Ultra Low NOx — Medium Static — 5 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	1478	6.2	1650	6.9	1799	7.5	1932	8.1	2055	8.6
1625	1571	6.6	1735	7.3	1879	7.9	2009	8.4	2129	8.9
1750	1666	7.0	1822	7.6	1962	8.2	2088	8.7	2205	9.2
1875	1761	7.4	1910	8.0	2046	8.6	2169	9.1	2283	9.6
2000	1859	7.8	2001	8.4	2132	8.9	2252	9.4	2363	9.9
2125	1957	8.2	2093	8.8	2218	9.3	2335	9.8	—	—
2250	2056	8.6	2185	9.1	2307	9.7	—	—	—	—
2375	2155	9.0	2279	9.5	—	—	—	—	—	—
2500	2256	9.4	2374	9.9	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	2169	9.1	2277	9.5	2379	10.0	—	—	—	—
1625	2240	9.4	2345	9.8	—	—	—	—	—	—
1750	2314	9.7	—	—	—	—	—	—	—	—
1875	2389	10.0	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2125	—	—	—	—	—	—	—	—	—	—
2250	—	—	—	—	—	—	—	—	—	—
2375	—	—	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

Medium Static 1478-2390 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582K(E/P)06D Three Phase Ultra Low NOx — 5 Ton Vertical Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1500	1478	0.34	1650	0.48	1798	0.62	1932	0.76	2055	0.92
1625	1571	0.41	1735	0.55	1879	0.70	2009	0.86	2129	1.02
1750	1665	0.49	1822	0.64	1962	0.80	2088	0.96	2205	1.13
1875	1762	0.58	1911	0.74	2046	0.91	2169	1.08	2283	1.26
2000	1859	0.68	2001	0.85	2132	1.02	2252	1.21	2363	1.39
2125	1957	0.79	2093	0.97	2219	1.15	2335	1.34	2444	1.54
2250	2055	0.92	2185	1.10	2307	1.30	2420	1.50	2527	1.70
2375	2156	1.06	2279	1.25	2397	1.45	2507	1.66	2610	1.88
2500	2256	1.21	2374	1.41	2487	1.62	2594	1.84	2695	2.07

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1500	2169	1.08	2277	1.25	2379	1.43	2477	1.61	2572	1.80
1625	2240	1.19	2345	1.37	2445	1.55	2541	1.74	2633	1.93
1750	2314	1.31	2417	1.49	2514	1.68	2608	1.88	2698	2.08
1875	2389	1.44	2490	1.63	2586	1.83	2677	2.03	2766	2.24
2000	2467	1.59	2565	1.78	2659	1.99	2749	2.20	2836	2.41
2125	2546	1.74	2643	1.95	2734	2.16	2823	2.38	—	—
2250	2627	1.91	2721	2.13	2812	2.35	—	—	—	—
2375	2708	2.10	2801	2.32	—	—	—	—	—	—
2500	2791	2.30	—	—	—	—	—	—	—	—

Standard Static 1478-2150 rpm, 1.06 Max bhp

Medium Static 1478-2390 rpm, 1.44 Max bhp

High Static 1478-2836 rpm, 2.43 Max bhp

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582K(E/P)06D Three Phase Ultra Low NOx — Standard Static — 5 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	1478	6.9	1650	7.7	1798	8.4	1932	9.0	2055	9.6
1625	1571	7.3	1735	8.1	1879	8.7	2009	9.3	2129	9.9
1750	1665	7.7	1822	8.5	1962	9.1	2088	9.7		
1875	1762	8.2	1911	8.9	2046	9.5	—	—	—	—
2000	1859	8.6	2001	9.3	2132	9.9	—	—	—	—
2125	1957	9.1	2093	9.7	—	—	—	—	—	—
2250	2055	9.6	—	—	—	—	—	—	—	—
2375	—	—	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	—	—	—	—	—	—	—	—	—	—
1625	—	—	—	—	—	—	—	—	—	—
1750	—	—	—	—	—	—	—	—	—	—
1875	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2125	—	—	—	—	—	—	—	—	—	—
2250	—	—	—	—	—	—	—	—	—	—
2375	—	—	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

Standard Static 1478-2150 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582K(E/P)06D Three Phase Ultra Low NOx — Medium Static — 5 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	1478	6.2	1650	6.9	1798	7.5	1932	8.1	2055	8.6
1625	1571	6.6	1735	7.3	1879	7.9	2009	8.4	2129	8.9
1750	1665	7.0	1822	7.6	1962	8.2	2088	8.7	2205	9.2
1875	1762	7.4	1911	8.0	2046	8.6	2169	9.1	2283	9.6
2000	1859	7.8	2001	8.4	2132	8.9	2252	9.4	2363	9.9
2125	1957	8.2	2093	8.8	2219	9.3	2335	9.8	—	—
2250	2055	8.6	2185	9.1	2307	9.7	—	—	—	—
2375	2156	9.0	2279	9.5	—	—	—	—	—	—
2500	2256	9.4	2374	9.9	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	2169	9.1	2277	9.5	2379	10.0	—	—	—	—
1625	2240	9.4	2345	9.8	—	—	—	—	—	—
1750	2314	9.7	—	—	—	—	—	—	—	—
1875	2389	10.0	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2125	—	—	—	—	—	—	—	—	—	—
2250	—	—	—	—	—	—	—	—	—	—
2375	—	—	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

Medium Static 1478-2390 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582K(E/P)06D Three Phase Ultra Low NOx — High Static — 5 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	1478	5.2	1650	5.8	1798	6.3	1932	6.8	2055	7.2
1625	1571	5.5	1735	6.1	1879	6.6	2009	7.1	2129	7.5
1750	1665	5.9	1822	6.4	1962	6.9	2088	7.4	2205	7.8
1875	1762	6.2	1911	6.7	2046	7.2	2169	7.6	2283	8.1
2000	1859	6.6	2001	7.1	2132	7.5	2252	7.9	2363	8.3
2125	1957	6.9	2093	7.4	2219	7.8	2335	8.2	2444	8.6
2250	2055	7.2	2185	7.7	2307	8.1	2420	8.5	2527	8.9
2375	2156	7.6	2279	8.0	2397	8.5	2507	8.8	2610	9.2
2500	2256	8.0	2374	8.4	2487	8.8	2594	9.1	2695	9.5

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	2169	7.6	2277	8.0	2379	8.4	2477	8.7	2572	9.1
1625	2240	7.9	2345	8.3	2445	8.6	2541	9.0	2633	9.3
1750	2314	8.2	2417	8.5	2514	8.9	2608	9.2	2698	9.5
1875	2389	8.4	2490	8.8	2586	9.1	2677	9.4	2766	9.8
2000	2467	8.7	2565	9.0	2659	9.4	2749	9.7	2836	10.0
2125	2546	9.0	2643	9.3	2734	9.6	2823	10.0	—	—
2250	2627	9.3	2721	9.6	2812	9.9	—	—	—	—
2375	2708	9.5	2801	9.9	—	—	—	—	—	—
2500	2791	9.8	—	—	—	—	—	—	—	—

High Static 1478-2836 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582KJ043 Single Phase Ultra Low NOx — 3 Ton Horizontal Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
900	1079	0.09	1315	0.16	1510	0.24	1679	0.33	1830	0.43
975	1126	0.10	1355	0.17	1546	0.26	1713	0.35	1863	0.45
1050	1175	0.11	1396	0.19	1584	0.28	1749	0.37	1897	0.48
1125	1226	0.13	1438	0.21	1622	0.30	1785	0.40	1932	0.50
1200	1278	0.15	1482	0.23	1662	0.32	1822	0.42	1968	0.53
1275	1331	0.16	1528	0.25	1703	0.34	1861	0.45	2004	0.56
1350	1386	0.19	1575	0.27	1746	0.37	1900	0.48	2042	0.59
1425	1441	0.21	1623	0.30	1789	0.40	1941	0.51	2080	0.63
1500	1498	0.23	1672	0.33	1834	0.43	1982	0.54	2119	0.66

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
900	1968	0.53	2096	0.64	2215	0.76	2328	0.88	2434	1.00
975	2000	0.56	2127	0.67	2246	0.79	2358	0.91	2464	1.04
1050	2033	0.59	2159	0.70	2277	0.82	2389	0.95	—	—
1125	2067	0.61	2192	0.73	2309	0.86	2420	0.99	—	—
1200	2101	0.65	2225	0.77	2342	0.89	2452	1.03	—	—
1275	2136	0.68	2260	0.80	2376	0.93	2485	1.07	—	—
1350	2172	0.71	2295	0.84	2410	0.97	—	—	—	—
1425	2209	0.75	2330	0.88	2445	1.02	—	—	—	—
1500	2247	0.79	2367	0.92	2480	1.06	—	—	—	—

Standard Static 1079-1890 rpm, 0.44 Max bhp

Medium Static 1079-2190 rpm, 0.71 Max bhp

High Static 1079-2490 rpm, 1.07 Max bhp

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582KJ043 Single Phase Ultra Low NOx — Standard Static — 3 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1079	5.7	1315	7.0	1510	8.0	1679	8.9	1830	9.7
975	1126	6.0	1355	7.2	1546	8.2	1713	9.1	—	—
1050	1175	6.2	1396	7.4	1584	8.4	1749	9.3	—	—
1125	1226	6.5	1438	7.6	1622	8.6	1785	9.4	—	—
1200	1278	6.8	1482	7.8	1662	8.8	1822	9.6	—	—
1275	1331	7.0	1528	8.1	1703	9.0	—	—	—	—
1350	1386	7.3	1575	8.3	1746	9.2	—	—	—	—
1425	1441	7.6	1623	8.6	1789	9.5	—	—	—	—
1500	1498	7.9	1672	8.8	1834	9.7	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	—	—	—	—	—	—	—	—	—	—
975	—	—	—	—	—	—	—	—	—	—
1050	—	—	—	—	—	—	—	—	—	—
1125	—	—	—	—	—	—	—	—	—	—
1200	—	—	—	—	—	—	—	—	—	—
1275	—	—	—	—	—	—	—	—	—	—
1350	—	—	—	—	—	—	—	—	—	—
1425	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—

Standard Static 1079-1890 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582KJ043 Single Phase Ultra Low NOx — Medium Static — 3 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1079	4.9	1315	6.0	1510	6.9	1679	7.7	1830	8.4
975	1126	5.1	1355	6.2	1546	7.1	1713	7.8	1863	8.5
1050	1175	5.4	1396	6.4	1584	7.2	1749	8.0	1897	8.7
1125	1226	5.6	1438	6.6	1622	7.4	1785	8.2	1932	8.8
1200	1278	5.8	1482	6.8	1662	7.6	1822	8.3	1968	9.0
1275	1331	6.1	1528	7.0	1703	7.8	1861	8.5	2004	9.2
1350	1386	6.3	1575	7.2	1746	8.0	1900	8.7	2042	9.3
1425	1441	6.6	1623	7.4	1789	8.2	1941	8.9	2080	9.5
1500	1498	6.8	1672	7.6	1834	8.4	1982	9.1	2119	9.7

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1968	9.0	2096	9.6	—	—	—	—	—	—
975	2000	9.1	2127	9.7	—	—	—	—	—	—
1050	2033	9.3	2159	9.9	—	—	—	—	—	—
1125	2067	9.4	—	—	—	—	—	—	—	—
1200	2101	9.6	—	—	—	—	—	—	—	—
1275	2136	9.8	—	—	—	—	—	—	—	—
1350	2172	9.9	—	—	—	—	—	—	—	—
1425	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—

Medium Static 1079-2190 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582KJ043 Single Phase Ultra Low NOx — High Static — 3 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1079	4.3	1315	5.3	1510	6.1	1679	6.7	1830	7.3
975	1126	4.5	1355	5.4	1546	6.2	1713	6.9	1863	7.5
1050	1175	4.7	1396	5.6	1584	6.4	1749	7.0	1897	7.6
1125	1226	4.9	1438	5.8	1622	6.5	1785	7.2	1932	7.8
1200	1278	5.1	1482	6.0	1662	6.7	1822	7.3	1968	7.9
1275	1331	5.3	1528	6.1	1703	6.8	1861	7.5	2004	8.0
1350	1386	5.6	1575	6.3	1746	7.0	1900	7.6	2042	8.2
1425	1441	5.8	1623	6.5	1789	7.2	1941	7.8	2080	8.4
1500	1498	6.0	1672	6.7	1834	7.4	1982	8.0	2119	8.5

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1968	7.9	2096	8.4	2215	8.9	2328	9.3	2434	9.8
975	2000	8.0	2127	8.5	2246	9.0	2358	9.5	2464	9.9
1050	2033	8.2	2159	8.7	2277	9.1	2389	9.6	—	—
1125	2067	8.3	2192	8.8	2309	9.3	2420	9.7	—	—
1200	2101	8.4	2225	8.9	2342	9.4	2452	9.8	—	—
1275	2136	8.6	2260	9.1	2376	9.5	2485	10.0	—	—
1350	2172	8.7	2295	9.2	2410	9.7	—	—	—	—
1425	2209	8.9	2330	9.4	2445	9.8	—	—	—	—
1500	2247	9.0	2367	9.5	2480	10.0	—	—	—	—

High Static 1079-2490 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582K(E/P)04D Three Phase Ultra Low NOx — 3 Ton Horizontal Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
900	1079	0.09	1315	0.16	1510	0.24	1679	0.33	1830	0.43
975	1126	0.10	1355	0.17	1546	0.26	1713	0.35	1863	0.45
1050	1175	0.11	1396	0.19	1584	0.28	1749	0.37	1897	0.48
1125	1226	0.13	1438	0.21	1622	0.30	1785	0.40	1932	0.50
1200	1278	0.15	1482	0.23	1662	0.32	1822	0.42	1968	0.53
1275	1331	0.16	1528	0.25	1703	0.34	1861	0.45	2004	0.56
1350	1386	0.19	1575	0.27	1746	0.37	1900	0.48	2042	0.59
1425	1441	0.21	1623	0.30	1789	0.40	1941	0.51	2080	0.63
1500	1498	0.23	1672	0.33	1834	0.43	1982	0.54	2119	0.66

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
900	1968	0.53	2096	0.64	2215	0.76	2328	0.88	2434	1.00
975	2000	0.56	2127	0.67	2246	0.79	2358	0.91	2464	1.04
1050	2033	0.59	2159	0.70	2277	0.82	2389	0.95	—	—
1125	2067	0.61	2192	0.73	2309	0.86	2420	0.99	—	—
1200	2101	0.65	2225	0.77	2342	0.89	2452	1.03	—	—
1275	2136	0.68	2260	0.80	2376	0.93	2485	1.07	—	—
1350	2172	0.71	2295	0.84	2410	0.97	—	—	—	—
1425	2209	0.75	2330	0.88	2445	1.02	—	—	—	—
1500	2247	0.79	2367	0.92	2480	1.06	—	—	—	—

Standard Static 1079-1890 rpm, 0.44 Max bhp

Medium Static 1079-2190 rpm, 0.71 Max bhp

High Static 1079-2490 rpm, 1.07 Max bhp

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582K(E/P)04D Three Phase Ultra Low NOx — Standard Static — 3 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1079	5.7	1315	7.0	1510	8.0	1679	8.9	1830	9.7
975	1126	6.0	1355	7.2	1546	8.2	1713	9.1	—	—
1050	1175	6.2	1396	7.4	1584	8.4	1749	9.3	—	—
1125	1226	6.5	1438	7.6	1622	8.6	1785	9.4	—	—
1200	1278	6.8	1482	7.8	1662	8.8	1822	9.6	—	—
1275	1331	7.0	1528	8.1	1703	9.0	—	—	—	—
1350	1386	7.3	1575	8.3	1746	9.2	—	—	—	—
1425	1441	7.6	1623	8.6	1789	9.5	—	—	—	—
1500	1498	7.9	1672	8.8	1834	9.7	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	—	—	—	—	—	—	—	—	—	—
975	—	—	—	—	—	—	—	—	—	—
1050	—	—	—	—	—	—	—	—	—	—
1125	—	—	—	—	—	—	—	—	—	—
1200	—	—	—	—	—	—	—	—	—	—
1275	—	—	—	—	—	—	—	—	—	—
1350	—	—	—	—	—	—	—	—	—	—
1425	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—

Standard Static 1079-1890 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582K(E/P)04D Three Phase Ultra Low NOx — Medium Static — 3 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1079	4.9	1315	6.0	1510	6.9	1679	7.7	1830	8.4
975	1126	5.1	1355	6.2	1546	7.1	1713	7.8	1863	8.5
1050	1175	5.4	1396	6.4	1584	7.2	1749	8.0	1897	8.7
1125	1226	5.6	1438	6.6	1622	7.4	1785	8.2	1932	8.8
1200	1278	5.8	1482	6.8	1662	7.6	1822	8.3	1968	9.0
1275	1331	6.1	1528	7.0	1703	7.8	1861	8.5	2004	9.2
1350	1386	6.3	1575	7.2	1746	8.0	1900	8.7	2042	9.3
1425	1441	6.6	1623	7.4	1789	8.2	1941	8.9	2080	9.5
1500	1498	6.8	1672	7.6	1834	8.4	1982	9.1	2119	9.7

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1968	9.0	2096	9.6	—	—	—	—	—	—
975	2000	9.1	2127	9.7	—	—	—	—	—	—
1050	2033	9.3	2159	9.9	—	—	—	—	—	—
1125	2067	9.4	—	—	—	—	—	—	—	—
1200	2101	9.6	—	—	—	—	—	—	—	—
1275	2136	9.8	—	—	—	—	—	—	—	—
1350	2172	9.9	—	—	—	—	—	—	—	—
1425	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—

Medium Static 1079-2190 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582K(E/P)04D Three Phase Ultra Low NOx — High Static — 3 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1079	4.3	1315	5.3	1510	6.1	1679	6.7	1830	7.3
975	1126	4.5	1355	5.4	1546	6.2	1713	6.9	1863	7.5
1050	1175	4.7	1396	5.6	1584	6.4	1749	7.0	1897	7.6
1125	1226	4.9	1438	5.8	1622	6.5	1785	7.2	1932	7.8
1200	1278	5.1	1482	6.0	1662	6.7	1822	7.3	1968	7.9
1275	1331	5.3	1528	6.1	1703	6.8	1861	7.5	2004	8.0
1350	1386	5.6	1575	6.3	1746	7.0	1900	7.6	2042	8.2
1425	1441	5.8	1623	6.5	1789	7.2	1941	7.8	2080	8.4
1500	1498	6.0	1672	6.7	1834	7.4	1982	8.0	2119	8.5

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
900	1968	7.9	2096	8.4	2215	8.9	2328	9.3	2434	9.8
975	2000	8.0	2127	8.5	2246	9.0	2358	9.5	2464	9.9
1050	2033	8.2	2159	8.7	2277	9.1	2389	9.6	—	—
1125	2067	8.3	2192	8.8	2309	9.3	2420	9.7	—	—
1200	2101	8.4	2225	8.9	2342	9.4	2452	9.8	—	—
1275	2136	8.6	2260	9.1	2376	9.5	2485	10.0	—	—
1350	2172	8.7	2295	9.2	2410	9.7	—	—	—	—
1425	2209	8.9	2330	9.4	2445	9.8	—	—	—	—
1500	2247	9.0	2367	9.5	2480	10.0	—	—	—	—

High Static 1079-2490 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582KJ053 Single Phase Ultra Low NOx — 4 Ton Horizontal Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1200	1217	0.19	1411	0.30	1576	0.42	1722	0.55	1855	0.68
1300	1283	0.23	1470	0.34	1631	0.46	1774	0.60	1904	0.74
1400	1351	0.26	1531	0.38	1688	0.51	1827	0.65	1955	0.80
1500	1420	0.31	1593	0.43	1746	0.57	1883	0.71	2008	0.86
1600	1491	0.35	1657	0.48	1805	0.63	1939	0.78	2062	0.93
1700	1563	0.41	1722	0.54	1866	0.69	1997	0.85	2118	1.01
1800	1635	0.46	1789	0.61	1928	0.76	2056	0.92	2174	1.09
1900	1709	0.53	1856	0.68	1991	0.84	2116	1.01	2232	1.18
2000	1784	0.60	1925	0.76	2056	0.92	2178	1.10	2291	1.28

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1200	1979	0.83	2094	0.98	2204	1.15	2308	1.32	2409	1.50
1300	2025	0.89	2138	1.05	2246	1.21	2349	1.39	2447	1.57
1400	2074	0.95	2185	1.11	2291	1.28	2391	1.46	—	—
1500	2124	1.02	2234	1.19	2338	1.36	2436	1.54	—	—
1600	2176	1.10	2284	1.27	2386	1.45	—	—	—	—
1700	2230	1.18	2336	1.36	2436	1.54	—	—	—	—
1800	2285	1.27	2389	1.45	—	—	—	—	—	—
1900	2341	1.36	2444	1.55	—	—	—	—	—	—
2000	2398	1.46	—	—	—	—	—	—	—	—

Standard Static 1217-1990 rpm, 0.72 Max bhp

Medium Static 1217-2170 rpm, 1.06 Max bhp

High Static 1217-2460 rpm, 1.53 Max bhp

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582KJ053 Single Phase Ultra Low NOx — Standard Static — 4 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1217	6.4	1411	7.4	1576	8.3	1722	9.1	1855	9.8
1300	1283	6.8	1470	7.7	1631	8.6	1774	9.3	—	—
1400	1351	7.1	1531	8.1	1688	8.9	1827	9.6	—	—
1500	1420	7.5	1593	8.4	1746	9.2	1883	9.9	—	—
1600	1491	7.8	1657	8.7	1805	9.5	—	—	—	—
1700	1563	8.2	1722	9.1	1866	9.8	—	—	—	—
1800	1635	8.6	1789	9.4	—	—	—	—	—	—
1900	1709	9.0	1856	9.8	—	—	—	—	—	—
2000	1784	9.4	—	—	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	—	—	—	—	—	—	—	—	—	—
1300	—	—	—	—	—	—	—	—	—	—
1400	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—
1600	—	—	—	—	—	—	—	—	—	—
1700	—	—	—	—	—	—	—	—	—	—
1800	—	—	—	—	—	—	—	—	—	—
1900	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—

Standard Static 1217-1990 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582KJ053 Single Phase Ultra Low NOx — Medium Static — 4 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1217	5.6	1411	6.5	1576	7.3	1722	7.9	1855	8.5
1300	1283	5.9	1470	6.8	1631	7.5	1774	8.2	1904	8.8
1400	1351	6.2	1531	7.1	1688	7.8	1827	8.4	1955	9.0
1500	1420	6.5	1593	7.3	1746	8.0	1883	8.7	2008	9.3
1600	1491	6.9	1657	7.6	1805	8.3	1939	8.9	2062	9.5
1700	1563	7.2	1722	7.9	1866	8.6	1997	9.2	2118	9.8
1800	1635	7.5	1789	8.2	1928	8.9	2056	9.5	—	—
1900	1709	7.9	1856	8.6	1991	9.2	2116	9.8	—	—
2000	1784	8.2	1925	8.9	2056	9.5	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1979	9.1	2094	9.6	—	—	—	—	—	—
1300	2025	9.3	2138	9.9	—	—	—	—	—	—
1400	2074	9.6	—	—	—	—	—	—	—	—
1500	2124	9.8	—	—	—	—	—	—	—	—
1600	—	—	—	—	—	—	—	—	—	—
1700	—	—	—	—	—	—	—	—	—	—
1800	—	—	—	—	—	—	—	—	—	—
1900	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—

Medium Static 1217-2170 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582KJ053 Single Phase Ultra Low NOx — High Static — 4 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1217	4.9	1411	5.7	1576	6.4	1722	7.0	1855	7.5
1300	1283	5.2	1470	6.0	1631	6.6	1774	7.2	1904	7.7
1400	1351	5.5	1531	6.2	1688	6.9	1827	7.4	1955	7.9
1500	1420	5.8	1593	6.5	1746	7.1	1883	7.7	2008	8.2
1600	1491	6.1	1657	6.7	1805	7.3	1939	7.9	2062	8.4
1700	1563	6.4	1722	7.0	1866	7.6	1997	8.1	2118	8.6
1800	1635	6.6	1789	7.3	1928	7.8	2056	8.4	2174	8.8
1900	1709	6.9	1856	7.5	1991	8.1	2116	8.6	2232	9.1
2000	1784	7.3	1925	7.8	2056	8.4	2178	8.9	2291	9.3

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1979	8.0	2094	8.5	2204	9.0	2308	9.4	2409	9.8
1300	2025	8.2	2138	8.7	2246	9.1	2349	9.5	2447	9.9
1400	2074	8.4	2185	8.9	2291	9.3	2391	9.7	—	—
1500	2124	8.6	2234	9.1	2338	9.5	2436	9.9	—	—
1600	2176	8.8	2284	9.3	2386	9.7	—	—	—	—
1700	2230	9.1	2336	9.5	2436	9.9	—	—	—	—
1800	2285	9.3	2389	9.7	—	—	—	—	—	—
1900	2341	9.5	2444	9.9	—	—	—	—	—	—
2000	2398	9.7	—	—	—	—	—	—	—	—

High Static 1217-2460 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582K(E/P)05D Three Phase Ultra Low NOx — 4 Ton Horizontal Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1200	1216	0.19	1411	0.30	1576	0.42	1722	0.55	1855	0.68
1300	1282	0.23	1470	0.34	1631	0.46	1773	0.60	1904	0.74
1400	1351	0.26	1531	0.38	1688	0.51	1827	0.65	1955	0.80
1500	1420	0.31	1593	0.43	1746	0.57	1882	0.71	2008	0.86
1600	1491	0.35	1657	0.48	1806	0.63	1940	0.78	2062	0.93
1700	1563	0.41	1722	0.54	1866	0.69	1997	0.85	2118	1.01
1800	1636	0.47	1788	0.61	1928	0.76	2056	0.92	2175	1.09
1900	1710	0.53	1856	0.68	1991	0.84	2116	1.01	2233	1.18
2000	1784	0.60	1924	0.76	2055	0.92	2178	1.10	2292	1.28

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1200	1978	0.83	2094	0.98	2204	1.15	2308	1.32	2409	1.50
1300	2025	0.89	2138	1.05	2246	1.21	2349	1.39	2447	1.57
1400	2073	0.95	2185	1.11	2291	1.28	2392	1.46	2488	1.64
1500	2124	1.02	2233	1.19	2337	1.36	2437	1.54	2532	1.73
1600	2176	1.10	2284	1.27	2386	1.45	2483	1.63	2577	1.82
1700	2230	1.18	2336	1.36	2436	1.54	2532	1.73	2624	1.92
1800	2285	1.27	2389	1.45	2488	1.64	2582	1.83	—	—
1900	2341	1.36	2443	1.55	2541	1.74	2634	1.94	—	—
2000	2399	1.46	2499	1.66	2595	1.85	—	—	—	—

Standard Static 1216-1900 rpm, 0.72 Max bhp

Medium Static 1216-2170 rpm, 1.06 Max bhp

High Static 1216-2660 rpm, 1.96 Max bhp

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582K(E/P)05D Three Phase Ultra Low NOx — Standard Static — 4 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1216	6.4	1411	7.4	1576	8.3	1722	9.1	1855	9.8
1300	1282	6.7	1470	7.7	1631	8.6	1773	9.3	—	—
1400	1351	7.1	1531	8.1	1688	8.9	1827	9.6	—	—
1500	1420	7.5	1593	8.4	1746	9.2	1882	9.9	—	—
1600	1491	7.8	1657	8.7	1806	9.5	—	—	—	—
1700	1563	8.2	1722	9.1	1866	9.8	—	—	—	—
1800	1636	8.6	1788	9.4	—	—	—	—	—	—
1900	1710	9.0	1856	9.8	—	—	—	—	—	—
2000	1784	9.4	—	—	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	—	—	—	—	—	—	—	—	—	—
1300	—	—	—	—	—	—	—	—	—	—
1400	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—
1600	—	—	—	—	—	—	—	—	—	—
1700	—	—	—	—	—	—	—	—	—	—
1800	—	—	—	—	—	—	—	—	—	—
1900	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—

Standard Static 1216-1900 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582K(E/P)05D Three Phase Ultra Low NOx — Medium Static — 4 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1216	5.6	1411	6.5	1576	7.3	1722	7.9	1855	8.5
1300	1282	5.9	1470	6.8	1631	7.5	1773	8.2	1904	8.8
1400	1351	6.2	1531	7.1	1688	7.8	1827	8.4	1955	9.0
1500	1420	6.5	1593	7.3	1746	8.0	1882	8.7	2008	9.3
1600	1491	6.9	1657	7.6	1806	8.3	1940	8.9	2062	9.5
1700	1563	7.2	1722	7.9	1866	8.6	1997	9.2	2118	9.8
1800	1636	7.5	1788	8.2	1928	8.9	2056	9.5	—	—
1900	1710	7.9	1856	8.6	1991	9.2	2116	9.8	—	—
2000	1784	8.2	1924	8.9	2055	9.5	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1978	9.1	2094	9.6	—	—	—	—	—	—
1300	2025	9.3	2139	9.9	—	—	—	—	—	—
1400	2073	9.6	—	—	—	—	—	—	—	—
1500	2124	9.8	—	—	—	—	—	—	—	—
1600	—	—	—	—	—	—	—	—	—	—
1700	—	—	—	—	—	—	—	—	—	—
1800	—	—	—	—	—	—	—	—	—	—
1900	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—

Medium Static 1216-2170 rpm,

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582K(E/P)05D Three Phase Ultra Low NOx — High Static — 4 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1216	4.6	1411	5.3	1576	5.9	1722	6.5	1855	7.0
1300	1282	4.8	1470	5.5	1631	6.1	1773	6.7	1904	7.2
1400	1351	5.1	1531	5.8	1688	6.3	1827	6.9	1955	7.3
1500	1420	5.3	1593	6.0	1746	6.6	1882	7.1	2008	7.5
1600	1491	5.6	1657	6.2	1806	6.8	1940	7.3	2062	7.8
1700	1563	5.9	1722	6.5	1866	7.0	1997	7.5	2118	8.0
1800	1636	6.2	1788	6.7	1928	7.2	2056	7.7	2175	8.2
1900	1710	6.4	1856	7.0	1991	7.5	2116	8.0	2233	8.4
2000	1784	6.7	1924	7.2	2055	7.7	2178	8.2	2292	8.6

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1200	1978	7.4	2094	7.9	2204	8.3	2308	8.7	2409	9.1
1300	2025	7.6	2139	8.0	2246	8.4	2349	8.8	2447	9.2
1400	2073	7.8	2185	8.2	2291	8.6	2392	9.0	2488	9.4
1500	2124	8.0	2233	8.4	2337	8.8	2437	9.2	2532	9.5
1600	2176	8.2	2284	8.6	2386	9.0	2483	9.3	2577	9.7
1700	2230	8.4	2336	8.8	2436	9.2	2532	9.5	2624	9.9
1800	2285	8.6	2389	9.0	2488	9.4	2582	9.7	—	—
1900	2341	8.8	2443	9.2	2541	9.6	2634	9.9	—	—
2000	2399	9.0	2499	9.4	2595	9.8	—	—	—	—

High Static 1216-2660 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582KJ063 Single Phase Ultra Low NOx — 5 Ton Horizontal Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1500	1420	0.31	1593	0.43	1746	0.57	1883	0.71	2008	0.86
1625	1509	0.37	1673	0.50	1820	0.64	1954	0.79	2076	0.95
1750	1599	0.43	1755	0.57	1897	0.73	2026	0.88	2146	1.05
1875	1691	0.51	1839	0.66	1975	0.82	2101	0.98	2218	1.16
2000	1784	0.60	1925	0.76	2056	0.92	2178	1.10	2291	1.28
2125	1878	0.70	2011	0.86	2138	1.04	2255	1.22	2367	1.41
2250	1974	0.81	2100	0.98	2221	1.16	2335	1.35	—	—
2375	2070	0.94	2189	1.11	2305	1.30	—	—	—	—
2500	2166	1.08	2280	1.25	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1500	2124	1.02	2234	1.19	2338	1.36	—	—	—	—
1625	2190	1.12	2297	1.29	—	—	—	—	—	—
1750	2257	1.22	2362	1.40	—	—	—	—	—	—
1875	2327	1.34	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2125	—	—	—	—	—	—	—	—	—	—
2250	—	—	—	—	—	—	—	—	—	—
2375	—	—	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

Standard Static 1420-2150 rpm, 1.06 Max bhp

Medium Static 1420-2390 rpm, 1.44 Max bhp

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582KJ063 Single Phase Ultra Low NOx — Standard Static — 5 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	1420	6.6	1593	7.4	1746	8.1	1883	8.8	2008	9.3
1625	1509	7.0	1673	7.8	1820	8.5	1954	9.1	2076	9.7
1750	1599	7.4	1755	8.2	1897	8.8	2026	9.4	2146	10.0
1875	1691	7.9	1839	8.6	1975	9.2	2101	9.8	—	—
2000	1784	8.3	1925	9.0	2056	9.6	—	—	—	—
2125	1878	8.7	2011	9.4	2138	9.9	—	—	—	—
2250	1974	9.2	2100	9.8	—	—	—	—	—	—
2375	2070	9.6	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	2124	9.9	—	—	—	—	—	—	—	—
1625	—	—	—	—	—	—	—	—	—	—
1750	—	—	—	—	—	—	—	—	—	—
1875	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2125	—	—	—	—	—	—	—	—	—	—
2250	—	—	—	—	—	—	—	—	—	—
2375	—	—	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

Standard Static 1420-2150 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582KJ063 Single Phase Ultra Low NOx — Medium Static — 5 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	1420	5.9	1593	6.7	1746	7.3	1883	7.9	2008	8.4
1625	1509	6.3	1673	7.0	1820	7.6	1954	8.2	2076	8.7
1750	1599	6.7	1755	7.3	1897	7.9	2026	8.5	2146	9.0
1875	1691	7.1	1839	7.7	1975	8.3	2101	8.8	2218	9.3
2000	1784	7.5	1925	8.1	2056	8.6	2178	9.1	2291	9.6
2125	1878	7.9	2011	8.4	2138	8.9	2255	9.4	2367	9.9
2250	1974	8.3	2100	8.8	2221	9.3	2335	9.8	—	—
2375	2070	8.7	2189	9.2	2305	9.6	—	—	—	—
2500	2166	9.1	2280	9.5	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	2124	8.9	2234	9.3	2338	9.8	—	—	—	—
1625	2190	9.2	2297	9.6	—	—	—	—	—	—
1750	2257	9.4	2362	9.9	—	—	—	—	—	—
1875	2327	9.7	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2125	—	—	—	—	—	—	—	—	—	—
2250	—	—	—	—	—	—	—	—	—	—
2375	—	—	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

Medium Static 1420-2390 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582K(E/P)06D Three Phase Ultra Low NOx — 5 Ton Horizontal Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1500	1420	0.31	1593	0.43	1746	0.57	1883	0.71	2008	0.86
1625	1509	0.37	1673	0.50	1820	0.64	1954	0.79	2076	0.95
1750	1599	0.43	1755	0.57	1897	0.73	2026	0.88	2146	1.05
1875	1691	0.51	1839	0.66	1976	0.82	2102	0.99	2218	1.16
2000	1784	0.60	1924	0.76	2056	0.92	2178	1.10	2291	1.28
2125	1879	0.70	2011	0.86	2137	1.03	2256	1.22	2367	1.41
2250	1974	0.81	2099	0.98	2221	1.16	2335	1.35	2444	1.55
2375	2070	0.94	2189	1.11	2305	1.30	2416	1.49	2522	1.70
2500	2166	1.08	2280	1.25	2391	1.45	2499	1.65	2601	1.86

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1500	2124	1.02	2233	1.19	2337	1.36	2436	1.54	2532	1.73
1625	2190	1.12	2296	1.29	2398	1.47	2495	1.65	2589	1.85
1750	2257	1.22	2362	1.40	2462	1.59	2557	1.78	2648	1.97
1875	2327	1.34	2430	1.52	2528	1.72	2621	1.91	2710	2.11
2000	2398	1.46	2499	1.66	2595	1.85	2687	2.06	2775	2.27
2125	2471	1.60	2570	1.80	2665	2.01	2755	2.22	—	—
2250	2546	1.75	2643	1.96	2735	2.17	2824	2.39	—	—
2375	2622	1.91	2717	2.12	2807	2.34	—	—	—	—
2500	2699	2.08	2792	2.30	—	—	—	—	—	—

Standard Static 1420-2150 rpm, 1.06 Max bhp

Medium Static 1420-2390 rpm, 1.44 Max bhp

High Static 1420-2836 rpm, 2.43 Max bhp

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582K(E/P)06D Three Phase Ultra Low NOx — Standard Static — 5 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	1420	6.6	1593	7.4	1746	8.1	1883	8.8	2008	9.3
1625	1509	7.0	1673	7.8	1820	8.5	1954	9.1	2076	9.7
1750	1599	7.4	1755	8.2	1897	8.8	2026	9.4	2146	10.0
1875	1691	7.9	1839	8.6	1976	9.2	2102	9.8	—	—
2000	1784	8.3	1924	8.9	2056	9.6	—	—	—	—
2125	1878	8.7	2011	9.4	2137	9.9	—	—	—	—
2250	1974	9.2	2099	9.8	—	—	—	—	—	—
2375	2070	9.6	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	2124	9.9	—	—	—	—	—	—	—	—
1625	—	—	—	—	—	—	—	—	—	—
1750	—	—	—	—	—	—	—	—	—	—
1875	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2125	—	—	—	—	—	—	—	—	—	—
2250	—	—	—	—	—	—	—	—	—	—
2375	—	—	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

Standard Static 1420-2150 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Fan data (cont)

582K(E/P)06D Three Phase Ultra Low NOx — Medium Static — 5 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	1420	5.9	1593	6.7	1746	7.3	1883	7.9	2008	8.4
1625	1509	6.3	1673	7.0	1820	7.6	1954	8.2	2076	8.7
1750	1599	6.7	1755	7.3	1897	7.9	2026	8.5	2146	9.0
1875	1691	7.1	1839	7.7	1976	8.3	2102	8.8	2218	9.3
2000	1784	7.5	1924	8.1	2056	8.6	2178	9.1	2291	9.6
2125	1878	7.9	2011	8.4	2137	8.9	2256	9.4	2367	9.9
2250	1974	8.3	2099	8.8	2221	9.3	2335	9.8	—	—
2375	2070	8.7	2189	9.2	2305	9.6	—	—	—	—
2500	2166	9.1	2280	9.5	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	2124	8.9	2233	9.3	2337	9.8	—	—	—	—
1625	2190	9.2	2296	9.6	—	—	—	—	—	—
1750	2257	9.4	2362	9.9	—	—	—	—	—	—
1875	2327	9.7	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2125	—	—	—	—	—	—	—	—	—	—
2250	—	—	—	—	—	—	—	—	—	—
2375	—	—	—	—	—	—	—	—	—	—
2500	—	—	—	—	—	—	—	—	—	—

Medium Static 1420-2390 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

582K(E/P)06D Three Phase Ultra Low NOx — High Static — 5 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	1420	5.0	1593	5.6	1746	6.2	1883	6.6	2008	7.1
1625	1509	5.3	1673	5.9	1820	6.4	1954	6.9	2076	7.3
1750	1599	5.6	1755	6.2	1897	6.7	2026	7.1	2146	7.6
1875	1691	6.0	1839	6.5	1976	7.0	2102	7.4	2218	7.8
2000	1784	6.3	1924	6.8	2056	7.2	2178	7.7	2291	8.1
2125	1878	6.6	2011	7.1	2137	7.5	2256	8.0	2367	8.3
2250	1974	7.0	2099	7.4	2221	7.8	2335	8.2	2444	8.6
2375	2070	7.3	2189	7.7	2305	8.1	2416	8.5	2522	8.9
2500	2166	7.6	2280	8.0	2391	8.4	2499	8.8	2601	9.2

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1500	2124	7.5	2233	7.9	2337	8.2	2436	8.6	2532	8.9
1625	2190	7.7	2296	8.1	2398	8.5	2495	8.8	2589	9.1
1750	2257	8.0	2362	8.3	2462	8.7	2557	9.0	2648	9.3
1875	2327	8.2	2430	8.6	2528	8.9	2621	9.2	2710	9.6
2000	2398	8.5	2499	8.8	2595	9.2	2687	9.5	2775	9.8
2125	2471	8.7	2570	9.1	2665	9.4	2755	9.7	—	—
2250	2546	9.0	2643	9.3	2735	9.6	2824	10.0	—	—
2375	2622	9.2	2717	9.6	2807	9.9	—	—	—	—
2500	2699	9.5	2792	9.8	—	—	—	—	—	—

High Static 1420-2836 rpm

NOTE: Fan tables include highest gas heat. Utilize static pressure deduction tables for lower gas heat capacities.

Electrical data

Applicable for Electrical Data Tables on pages 60 to 61

LEGEND

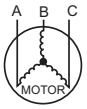
BRKR — Circuit Breaker
C.O. — Convenience Outlet
FLA — Full Load Amps
IFM — Indoor Fan Motor
LRA — Locked Rotor Amps
MCA — Minimum Circuit Amps
P.E. — Power Exhaust
PWRD C.O. — Powered Convenience Outlet
RLA — Rated Load Amps
UNPWR C.O. — Unpowered Convenience Outlet

NOTES:

1. In compliance with NEC requirements for multi-motor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker. Canadian units may be fuse or circuit breaker.
2. For 208/230 volt units, where one value is shown, it is the same for either 208 or 230 volts.
3. **Unbalanced 3-Phase Supply Voltage**: Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percentage of voltage imbalance.

$$\text{\% Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 230-3-60



AB = 224-v
BC = 231-v
AC = 226-v

$$\text{Average Voltage} = \frac{(224 + 231 + 226)}{3} = \frac{681}{3} = 227$$

Determine maximum deviation from average voltage.
(AB) 227-224 = 3-v
(BC) 231-227 = 4-v
(AC) 227-226 = 1-v
Maximum deviation is 4-v.
Determine percent of voltage imbalance.

$$\text{\% Voltage Imbalance} = 100x \frac{4}{227} = 1.76\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

Electrical data (cont)

582K*04-06 Cooling Electrical Data

582K* UNIT	V-Ph-Hz	UNIT VOLTAGE RANGE		COMPRESSOR		OFM (EA)		IFM			COMBUSTION FAN MOTOR	POWER EXHAUST	
		Min	Max	RLA	LRA	Watts	FLA	Type	Effcy at Full Load	FLA	FLA	Kit Qty	FLA (EA Kit)
043	208/230-1-60	187	253	16.0	92	275	1.5	STD	84%	3.4	0.48	1	1.9
								MED	84%	5.1			
								HIGH	85%	7.3			
04D/E	208/230-3-60	187	253	10.4	73	275	1.5	STD	84%	4.3	0.48	1	1.9
								MED	84%	5.1			
								HIGH	85%	7.3			
	460-3-60	414	506	5.8	38	275	0.8	STD	85%	1.2	0.25	1	1.0
								MED	85%	1.2			
								HIGH	84%	1.7			
053	208/230-1-60	187	253	25.0	120	275	1.5	STD	87%	5.0	0.48	1	1.9
								MED	86%	7.1			
								HIGH	84%	8.8			
05D/E	208/230-3-60	187	253	13.7	83	275	1.5	STD	87%	5.0	0.48	1	1.9
								MED	86%	7.1			
								HIGH	85%	5.5			
	460-3-60	414	506	6.2	41	275	0.8	STD	85%	1.2	0.25	1	1.0
								MED	86%	1.7			
								HIGH	88%	2.6			
063	208/230-1-60	187	253	25.6	150	275	1.5	STD	86%	7.2	0.48	1	1.9
								MED	84%	8.6			
06D/E	230-3-60	187	253	16.0	110	275	1.5	STD	86%	7.2	0.48	1	1.9
								MED	84%	9.2			
								HIGH	84%	6.5			
	460-3-60	414	506	7.8	52	275	0.8	STD	86%	1.7	0.25	1	1.0
								MED	86%	2.1			
								HIGH	88%	3.1			

Electrical data (cont)

582K*04-06 MCA MOCP Electrical Data

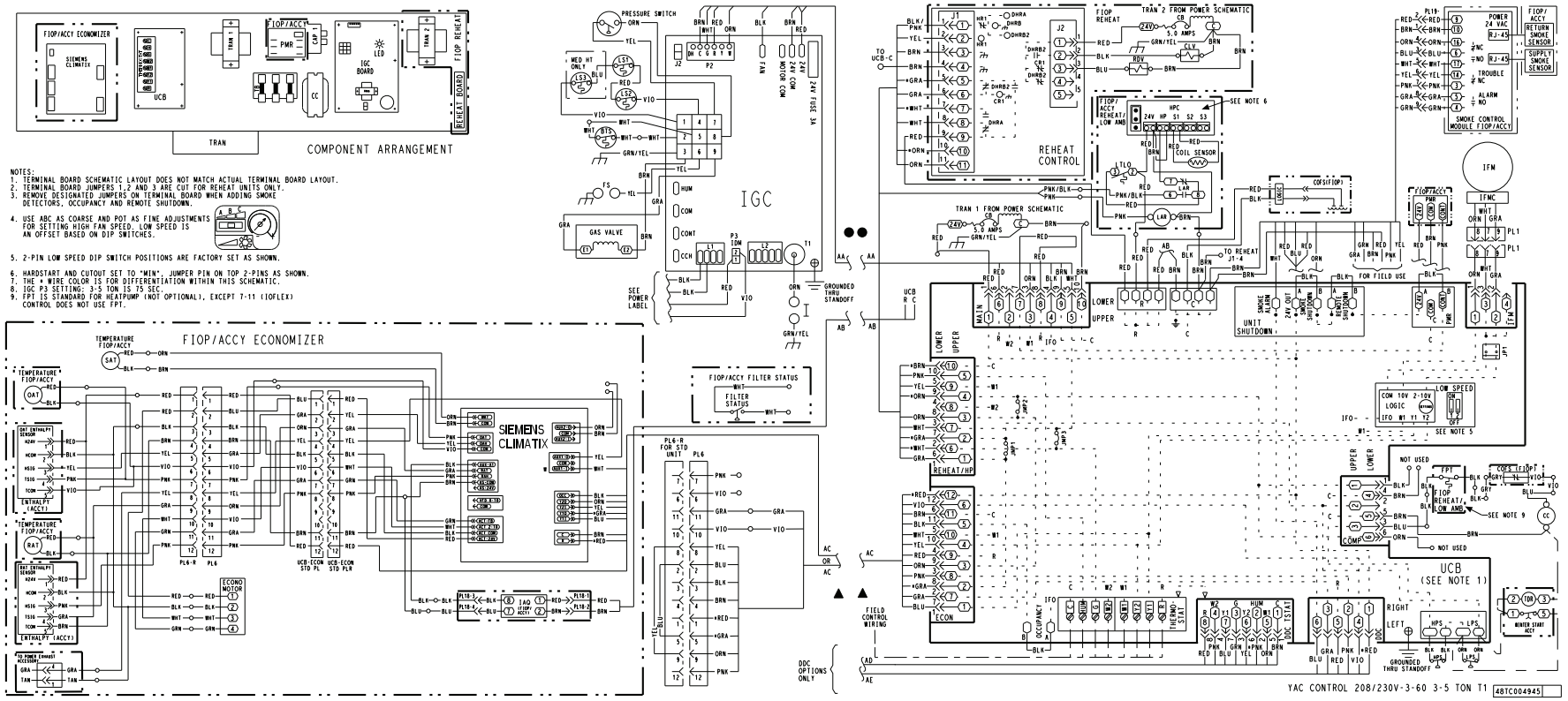
582K* UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	NO CONVENIENCE OUTLET OR UNPOWERED CONVENIENCE OUTLET							
			No Power Exhaust				With Power Exhaust (powered from unit)			
			MCA	Fuse or HACR Breaker	Disconnect Size		MCA	Fuse or HACR Breaker	Disconnect Size	
					FLA	LRA			FLA	LRA
043	208/230-1-60	STD	25	30	24	101	27	40	26	103
		MED	27	40	26	103	29	40	28	105
		HIGH	29	40	29	106	31	45	31	108
04D/E	208/230-3-60	STD	19	25	19	83	21	30	21	85
		MED	20	30	20	84	22	30	22	86
		HIGH	22	30	22	87	24	30	24	89
	460-3-60	STD	10	15	9	42	11	15	10	43
		MED	10	15	9	42	11	15	10	43
		HIGH	10	15	10	42	11	15	11	43
053	208/230-1-60	STD	38	60	36	131	40	60	38	133
		MED	40	60	39	134	42	60	41	136
		HIGH	42	60	41	136	44	60	43	138
05D/E	208/230-3-60	STD	24	30	23	94	26	30	25	96
		MED	26	30	26	97	28	40	28	99
		HIGH	25	30	24	95	26	30	26	97
	460-3-60	STD	10	15	9	45	11	15	11	46
		MED	11	15	10	45	12	15	11	46
		HIGH	12	15	11	47	13	15	12	48
063	208/230-1-60	STD	41	60	39	164	43	60	42	166
		MED	43	60	41	166	44	60	43	168
06D/E	208/230-3-60	STD	29	40	28	124	31	45	31	126
		MED	31	45	31	127	33	45	33	129
		HIGH	28	40	28	123	30	45	30	125
	460-3-60	STD	13	20	12	56	14	20	13	57
		MED	13	20	12	57	14	20	13	58
		HIGH	14	20	13	58	15	20	15	59

582K*04-06 MCA MOCP Electrical Data (cont)

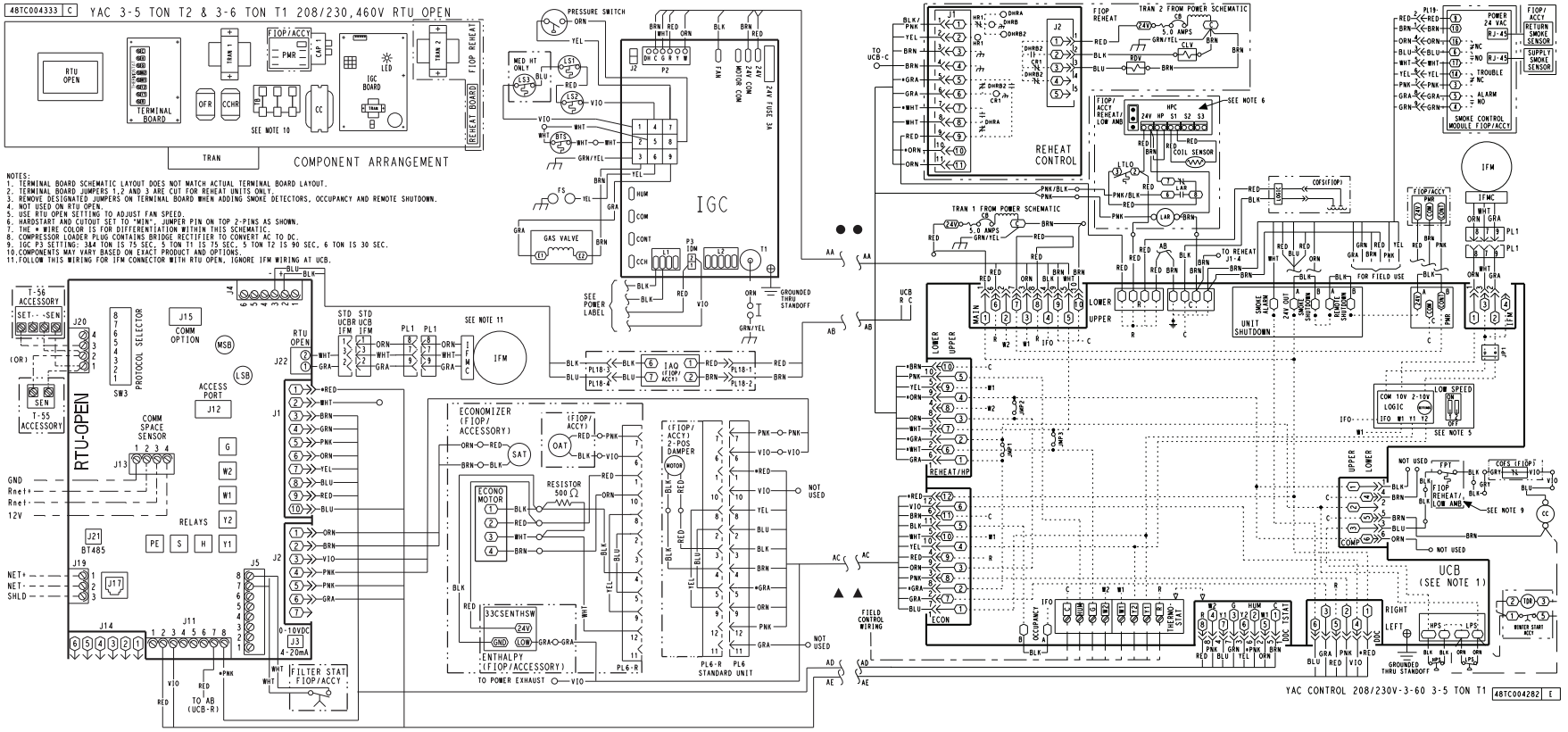
582K* UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	WITH POWERED CONVENIENCE OUTLET[a]							
			No Power Exhaust				With Power Exhaust (powered from unit)			
			MCA	Fuse or HACR Breaker	Disconnect Size		MCA	Fuse or HACR Breaker	Disconnect Size	
					FLA	LRA			FLA	LRA
04D/E	208/230-3-60	STD	24	30	24	88	26	30	26	90
		MED	25	30	25	89	27	30	27	91
		HIGH	27	30	28	92	29	35	30	94
	460-3-60	STD	12	15	12	44	13	15	13	45
		MED	12	15	12	44	13	15	13	45
		HIGH	12	15	12	44	13	15	13	45
05D/E	208/230-3-60	STD	29	40	29	99	31	40	31	101
		MED	31	40	31	102	33	45	33	104
		HIGH	29	40	29	100	31	40	32	102
	460-3-60	STD	12	15	12	47	13	15	13	48
		MED	13	15	13	47	14	20	14	48
		HIGH	14	15	14	49	15	20	15	50
06D/E	208/230-3-60	STD	34	45	34	129	36	50	36	131
		MED	36	50	36	132	38	50	38	134
		HIGH	33	45	33	128	35	50	35	130
	460-3-60	STD	15	20	14	58	16	20	16	59
		MED	15	20	15	59	16	20	16	60
		HIGH	16	20	16	60	17	20	17	61

NOTE(S):
a. Powered convenience outlet is not available for 208/230-1-60 (single-phase) units.

Typical Control Wiring Diagram — 582K*04-06 Ultra Low NOx 208/230-3-60 Unit with Electromechanical Control and POL224 Economizer

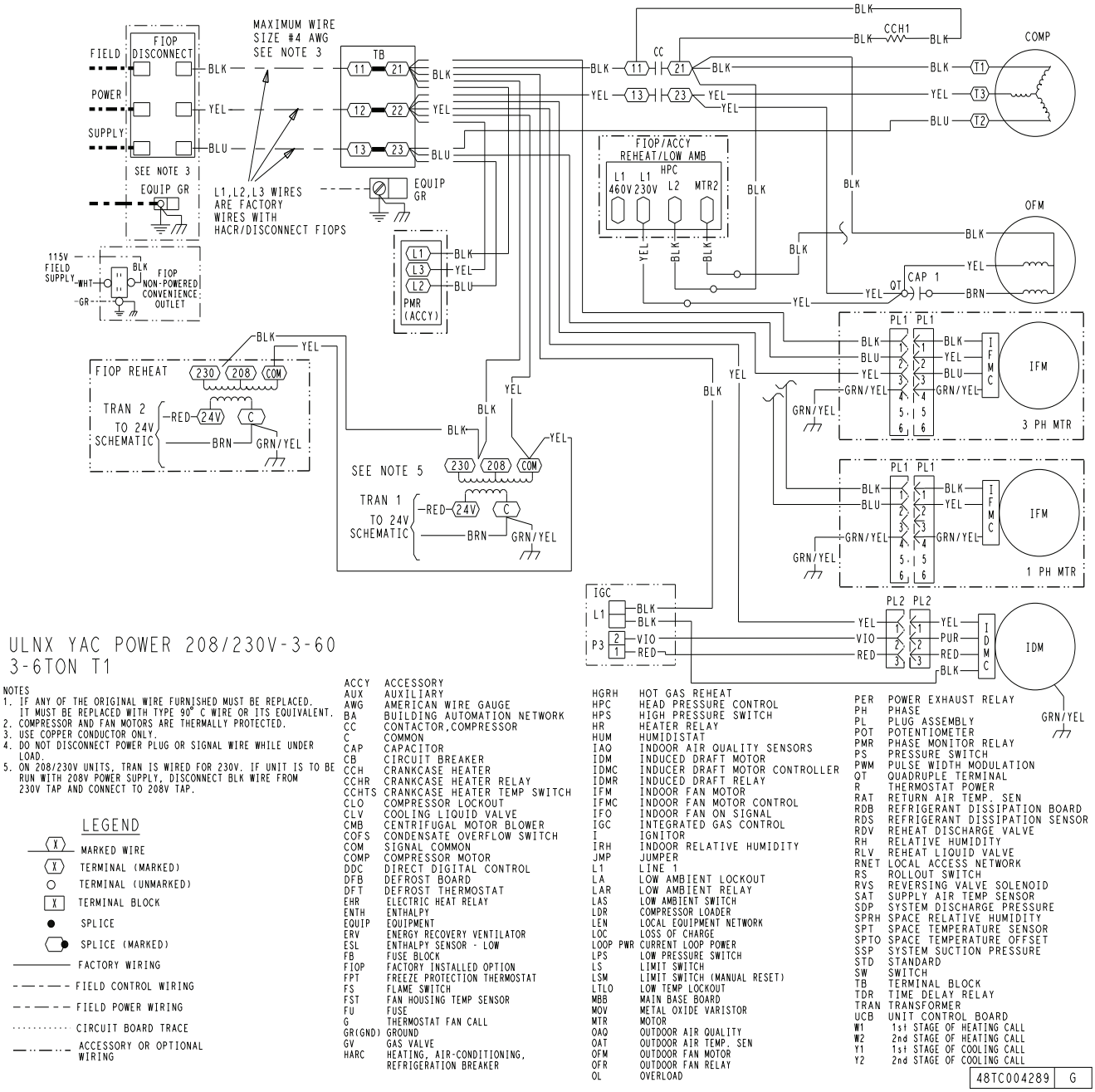


Typical Control Wiring Diagram — 582K*04-06 208/230-3-60 Unit with RTU Open Controller



Typical wiring diagrams (cont)

Typical 582K*04-06 Ultra Low NOx Power Wiring Diagram, 208/230-3-60 Unit Shown



NOTES
1. IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE 90° C WIRE OR ITS EQUIVALENT.
2. COMPRESSOR AND FAN MOTORS ARE THERMALLY PROTECTED.
3. USE COPPER CONDUCTOR ONLY.
4. DO NOT DISCONNECT POWER PLUG OR SIGNAL WIRE WHILE UNDER LOAD.
5. ON 208/230V UNITS, TRAN IS WIRED FOR 230V. IF UNIT IS TO BE RUN WITH 208V POWER SUPPLY, DISCONNECT BLK WIRE FROM 230V TAP AND CONNECT TO 208V TAP.

LEGEND

- MARKED WIRE
- TERMINAL (MARKED)
- TERMINAL (UNMARKED)
- TERMINAL BLOCK
- SPLICE
- SPLICE (MARKED)
- FACTORY WIRING
- FIELD CONTROL WIRING
- FIELD POWER WIRING
- CIRCUIT BOARD TRACE
- ACCESSORY OR OPTIONAL WIRING

ACCY	ACCESSORY
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BA	BUILDING AUTOMATION NETWORK
CC	CONTACTOR,COMPRESSOR
C	COMMON
CAP	CAPACITOR
CB	CIRCUIT BREAKER
CCH	CRANKCASE HEATER
CCHR	CRANKCASE HEATER RELAY
CCHTS	CRANKCASE HEATER TEMP SWITCH
CLO	COMPRESSOR LOCKOUT
CLV	COOLING LIQUID VALVE
CMB	CENTRIFUGAL MOTOR BLOWER
COFS	CONDENSATE OVERFLOW SWITCH
COM	SIGNAL COMMON
COMP	COMPRESSOR MOTOR
DDC	DIRECT DIGITAL CONTROL
DFB	DEFROST BOARD
DFT	DEFROST THERMOSTAT
EHR	ELECTRIC HEAT RELAY
ENTH	ENTHALPY
EQUIP	EQUIPMENT
ERV	ENERGY RECOVERY VENTILATOR
ESL	ENTHALPY SENSOR - LOW
FB	FUSE BLOCK
FIOP	FACTORY INSTALLED OPTION
FPT	FREEZE PROTECTION THERMOSTAT
FS	FLAME SWITCH
FST	FAN HOUSING TEMP SENSOR
FU	FUSE
G	THERMOSTAT FAN CALL
GR(GND)	GROUND
GV	GAS VALVE
HARC	HEATING, AIR-CONDITIONING, REFRIGERATION BREAKER
HGRH	HOT GAS REHEAT
HPC	HEAD PRESSURE CONTROL
HPS	HIGH PRESSURE SWITCH
HR	HEATER RELAY
HUM	HUMIDISTAT
IAQ	INDOOR AIR QUALITY SENSORS
IDM	INDUCED DRAFT MOTOR
IDMC	INDUCER DRAFT MOTOR CONTROLLER
IDMR	INDUCED DRAFT RELAY
IFM	INDOOR FAN MOTOR
IFMC	INDOOR FAN MOTOR CONTROL
IFO	INDOOR FAN ON SIGNAL
IGC	INTEGRATED GAS CONTROL
I	IGNITOR
IRH	INDOOR RELATIVE HUMIDITY
JMP	JUMPER
L1	LINE 1
LA	LOW AMBIENT LOCKOUT
LAR	LOW AMBIENT RELAY
LAS	LOW AMBIENT SWITCH
LDR	COMPRESSOR LOADER
LEN	LOCAL EQUIPMENT NETWORK
LOC	LOSS OF CHARGE
LOOP PWR	CURRENT LOOP POWER
LPS	LOW PRESSURE SWITCH
LS	LIMIT SWITCH
LSM	LIMIT SWITCH (MANUAL RESET)
LTLO	LOW TEMP LOCKOUT
MBB	MAIN BASE BOARD
MOV	METAL OXIDE VARISTOR
MTR	MOTOR
OAQ	OUTDOOR AIR QUALITY
OAT	OUTDOOR AIR TEMP. SEN
OFM	OUTDOOR FAN MOTOR
OFR	OUTDOOR FAN RELAY
OL	OVERLOAD
PER	POWER EXHAUST RELAY
PH	PHASE
PL	PLUG ASSEMBLY
POT	POTENTIOMETER
PMR	PHASE MONITOR RELAY
PS	PRESSURE SWITCH
PWM	PULSE WIDTH MODULATION
QT	QUADRUPLE TERMINAL
R	THERMOSTAT POWER
RAT	RETURN AIR TEMP. SEN
RDB	REFRIGERANT DISSIPATION BOARD
RDS	REFRIGERANT DISSIPATION SENSOR
RDV	REHEAT DISCHARGE VALVE
RH	RELATIVE HUMIDITY
RLV	REHEAT LIQUID VALVE
RNET	LOCAL ACCESS NETWORK
RS	ROLLOUT SWITCH
RVS	REVERSING VALVE SOLENOID
SAT	SUPPLY AIR TEMP SENSOR
SDP	SYSTEM DISCHARGE PRESSURE
SPRH	SPACE RELATIVE HUMIDITY
SPT	SPACE TEMPERATURE SENSOR
SPTO	SPACE TEMPERATURE OFFSET
SSP	SYSTEM SUCTION PRESSURE
STD	STANDARD
SW	SWITCH
TB	TERMINAL BLOCK
TDR	TIME DELAY RELAY
TRAN	TRANSFORMER
UCB	UNIT CONTROL BOARD
W1	1st STAGE OF HEATING CALL
W2	2nd STAGE OF HEATING CALL
Y1	1st STAGE OF COOLING CALL
Y2	2nd STAGE OF COOLING CALL

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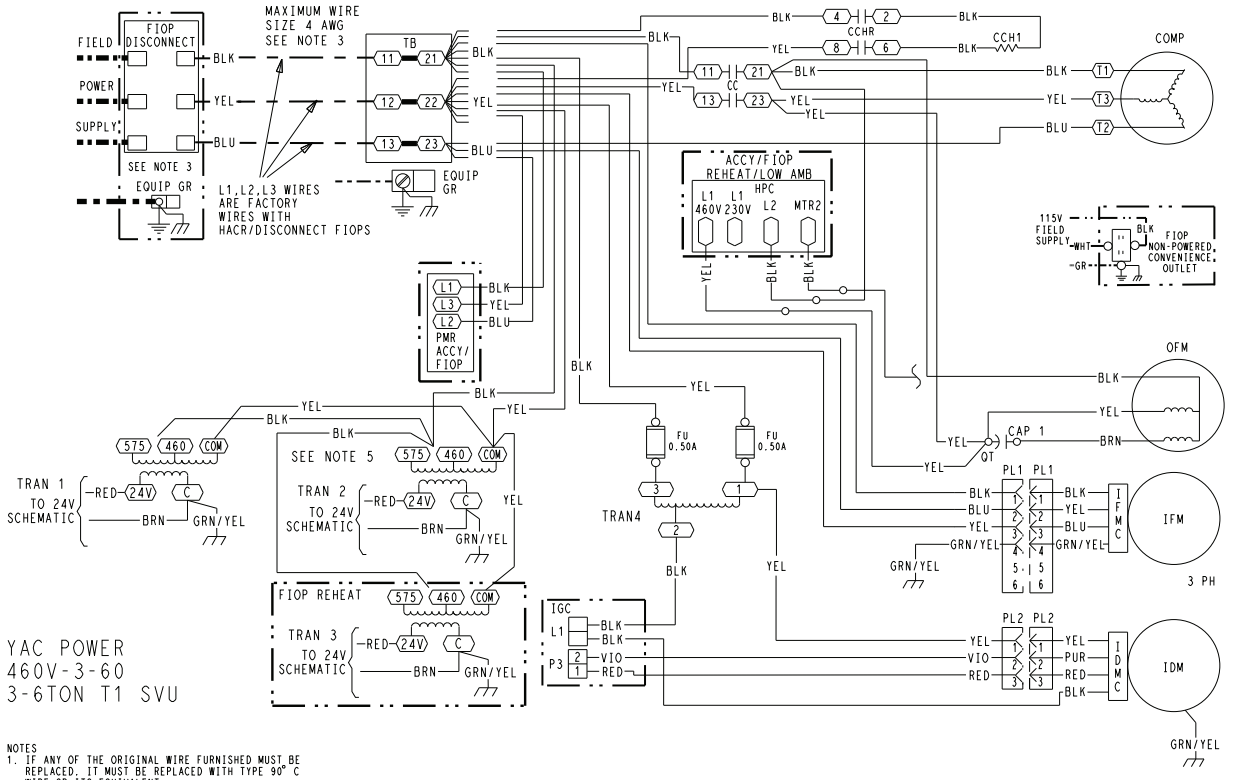
Typical wiring diagrams (cont)

Typical 582K*04-06 Ultra Low NOx Power Wiring Diagram, 460-3-60 Unit Shown



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2. COMPRESSOR AND FAN MOTORS ARE THERMALLY PROTECTED.
3. USE COPPER CONDUCTOR ONLY.
4. DO NOT DISCONNECT POWER PLUG OR SIGNAL WIRE WHILE UNDER LOAD.
5. TRANSFORMER IS DEDICATED BASED ON UNIT VOLTAGE. TAPS ONLY SHOWN TO SIMPLIFY SCHEMATIC.

LEGEND

- MARKED WIRE
- TERMINAL (MARKED)
- TERMINAL (UNMARKED)
- TERMINAL BLOCK
- SPLICE
- SPLICE (MARKED)
- FACTORY WIRING
- FIELD CONTROL WIRING
- FIELD POWER WIRING
- CIRCUIT BOARD TRACE
- ACCESSORY OR OPTIONAL WIRING

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DFB	DEFROST BOARD
DFT	DEFROST THERMOSTAT
EHR	ELECTRIC HEAT RELAY
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FB	FUSE BLOCK
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FS	FLAME SWITCH
FST	FAN HOUSING TEMP SENSOR
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G	THERMOSTAT FAN CALL
GR(GND)	GROUND
GV	GAS VALVE
HACR	HEATING, AIR-CONDITIONING, REFRIGERATION BREAKER
HGRH	HOT GAS REHEAT

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HUM	HUMIDISTAT
I	IGNITOR
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IDMC	INDUCER DRAFT MOTOR CONTROLLER
IDMR	INDUCED DRAFT RELAY
IFM	INDOOR FAN MOTOR
IFMC	INDOOR FAN MOTOR CONTROL
IFO	INDOOR FAN ON SIGNAL
IGC	INTEGRATED GAS CONTROL
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LEN	LOCAL EQUIPMENT NETWORK
LOC	LOSS OF CHARGE
LOOP PWR	CURRENT LOOP POWER
LPS	LOW PRESSURE SWITCH
LS	LIMIT SWITCH
LSM	LIMIT SWITCH (MANUAL RESET)
LTLO	LOW TEMP LOCKOUT
MBB	MAIN BASE BOARD
MOV	METAL OXIDE VARISTOR
MTR	MOTOR
OAQ	OUTDOOR AIR QUALITY
OAT	OUTDOOR AIR TEMP. SEN
OFM	OUTDOOR FAN MOTOR

OFR	OUTDOOR FAN RELAY
OL	OVERLOAD
PER	POWER EXHAUST RELAY
PH	PHASE
PL	PLUG ASSEMBLY
POT	POTENTIOMETER
PMR	PHASE MONITOR RELAY
PS	PRESSURE SWITCH
PWM	PULSE WIDTH MODULATION
QT	QUADRUPLE TERMINAL
R	THERMOSTAT POWER
RAT	RETURN AIR TEMP. SEN
RDV	REHEAT DISCHARGE VALVE
RH	RELATIVE HUMIDITY
RLV	REHEAT LIQUID VALVE
RNET	LOCAL ACCESS NETWORK
RS	ROLLOUT SWITCH
RVS	REVERSING VALVE SOLENOID
SAT	SUPPLY AIR TEMP SENSOR
SDP	SYSTEM DISCHARGE PRESSURE
SPRH	SPACE RELATIVE HUMIDITY
SPT	SPACE TEMPERATURE SENSOR
SPTO	SPACE TEMPERATURE OFFSET
SSP	SYSTEM SUCTION PRESSURE
STD	STANDARD
SW	SWITCH
TB	TERMINAL BLOCK
TDR	TIME DELAY RELAY
TRAN	TRANSFORMER
UCB	UNIT CONTROL BOARD
W1	1st STAGE OF HEATING CALL
W2	2nd STAGE OF HEATING CALL
Y1	1st STAGE OF COOLING CALL
Y2	2nd STAGE OF COOLING CALL

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Sequence of operation

General

The sequence below describes the sequence of operation for an electromechanical unit with and without a factory-installed EconomizerONE (POL224 controller). For information regarding a direct digital controller, see the start-up, operations, and troubleshooting manual for the applicable controller.

Electromechanical units without economizer

Cooling (single stage units)

When the thermostat calls for cooling, terminals G and Y1 are energized. The indoor fan will run at the user set fan speed and the compressor contactor (CC) is energized causing the compressor and outdoor fan to run.

When the thermostat removes the call for Y1, the compressor contactor will de-energize shutting down the compressor and the outdoor fan. When the thermostat removes the call for G, the indoor fan will turn off after the specific unit fan off delay.

Cooling (two stage units)

When the thermostat calls for cooling, terminals G and Y1 are energized. The indoor fan will run at the low fan speed and the compressor contactor (CC) is energized causing the compressor and outdoor fan to run. The low indoor fan speed is 66% of the user set fan speed and the compressor will run at partial capacity.

If additional cooling is needed, the thermostat will add the call for Y2. This will increase the indoor fan speed to the user set fan speed and energize the compressor loader for full compressor capacity. The outdoor fan is the same speed for Y1 and Y2.

When the thermostat removes the call for Y2 but leaves the Y1, the indoor fan will reduce speed to 66% of the user set fan speed, the compressor loader will turn off, and the outdoor fan will remain on. When the thermostat removes the call for Y1 the compressor contactor will de-energize shutting down the compressor and the outdoor fan. When the thermostat removes the call for G, the indoor fan will turn off after the specific unit fan off delay.

NOTE: Per ASHRAE 90.1-2016 and IECC-2018 standards, during the first stage of cooling operation the Unit Control Board (UCB) will adjust the fan motor speed to provide 66% of the total cfm established for the unit.

Gas heating

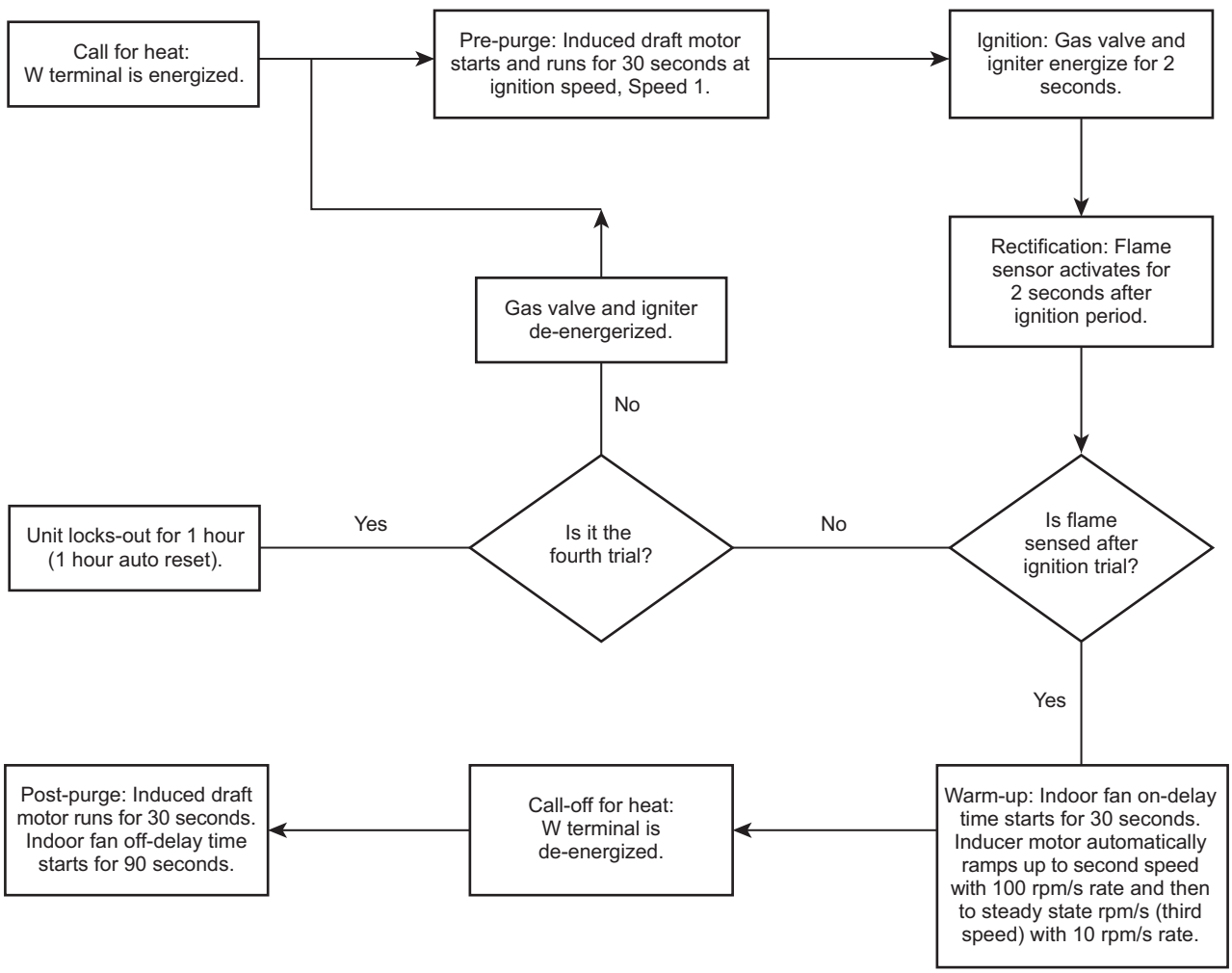
When the thermostat calls for heating, power is sent to W on the Integrated Gas Controller (IGC) board. An LED (light-emitting diode) on the IGC board turns on and remains on during normal operation. A check is made to ensure that the burner thermal switch and limit switch are closed. If the check was successful, the induced-draft motor is energized, and when its speed is satisfactory, as proven by the flue gas pressure switch, the ignition activation period begins. The burners will ignite within 2 seconds. If the burners do not light, there is a 30 second post purge period before another 2 second attempt. This sequence is repeated 4 times or until the burner lights. If, after the fourth trial the burners still have not lit, heating is locked out. The lock out period is for one hour after which the unit will auto reset.

When ignition occurs, the IGC board will continue to monitor the condition of the burner thermal switch, the limit switches, the flue gas pressure switch, as well as the flame sensor. 30 seconds after ignition occurs, assuming the unit is controlled through a room thermostat set for fan auto, the indoor-fan motor will energize (and the outdoor-air dampers will open to their minimum position). If, for some reason, the over-temperature limit opens prior to the start of the indoor fan blower, the unit will shorten the 30 second delay to 5 seconds less than the time from initiation of heat to when the limit tripped. Gas will not be interrupted to the burners and heating will continue. Once the fan-on delay has been modified, it will not change back to 30 seconds until power is reset to the control. When the thermostat is satisfied, W opens and the gas valve closes, interrupting the flow of gas to the main burners. If the unit is controlled through a room thermostat set for fan auto, the indoor-fan motor will continue to operate for an additional 90 seconds then stop. A LED indicator shows if the unit is operational with no fault when the light is solid. In case of unit failure the number of flashes on the LED indicates the type of failure mode in the gas heat sub-system.

The following figure is a flow chart detailing the operating sequence for the IGC.

Sequence of operation (cont)

IGC Operating Sequence



Sequence of operation (cont)

Electromechanical units with factory-installed EconomizerONE

When free cooling is not available, the compressors will be controlled by the zone thermostat. When free cooling is available, the outdoor-air damper is modulated by the EconomizerONE control to provide a 50°F (10°C) to 55°F (13°C) mixed-air temperature into the zone. As the mixed air temperature fluctuates above 55°F (13°C) or below 50°F (10°C) dampers will be modulated (open or close) to bring the mixed-air temperature back within control. If mechanical cooling is utilized with free cooling, the outdoor-air damper will maintain its current position at the time the compressor is started. If the increase in cooling capacity causes the mixed-air temperature to drop below 45°F (7°C), then the outdoor-air damper position will be decreased to the minimum position. If the mixed-air temperature continues to fall, the outdoor-air damper will close. Control returns to normal once the mixed-air temperature rises above 48°F (9°C). The power exhaust fans will be energized and de-energized, if installed, as the outdoor-air damper opens and closes.

If field-installed accessory CO_2 sensors are connected to the EconomizerONE control, a demand controlled ventilation strategy will begin to operate. As the CO_2 level in the zone increases above the CO_2 set-point (on the EconomizerONE controller), the minimum position of the damper will be increased proportionally until the Maximum Ventilation setting is reached. As the CO_2 level decreases because of the increase in fresh air, the outdoor-air damper will follow the higher demand condition from either the DCV mode or from the free cooling mode. For EconomizerONE operation, there must be a thermostat call for the fan (G). If the unit is occupied and the fan is on, the damper will operate at minimum position. Otherwise, the damper will be closed.

When the EconomizerONE control is in the occupied mode and a call for cooling exists (Y1 on the thermostat), the control will first check for indoor fan operation. If the fan is not on, then cooling will not be activated. If the fan is on, then the control will open the EconomizerONE damper to the minimum position.

On the initial power to the EconomizerONE control, it will take the damper up to 2-1/2 minutes before it begins to position itself. After the initial power-up, further changes in damper position can take up to 90 seconds to initiate. Damper movement from full closed to full open (or vice versa) will take between 1-1/2 and 2-1/2 minutes. If free cooling can be used as determined from the appropriate changeover command (dry bulb, outdoor enthalpy, differential dry bulb, or differential enthalpy), then the control will modulate the dampers open and closed to maintain the mixed-air temperature set-point at 50°F (10°C) to 55°F (13°C). If there is a further demand for cooling (cooling second stage — Y2 is energized), then the control will bring on compressor stage 1 to maintain the mixed-air temperature set-point. The EconomizerONE damper will be open at maximum position.

NOTE: On 2-speed units, the EconomizerONE controller will adjust the damper position as the Indoor Fan Speed changes, per its configured values.

Heating

The sequence of operation for heating is the same as an electromechanical unit without economizer. The only difference is how the economizer acts. The economizer will stay at the Economizer Minimum Position while the evaporator fan is operating. The outdoor-air damper is closed when the indoor fan is not operating. Refer to Service and Maintenance manual for further details.

Optional Perfect Humidity™ dehumidification system

Units with the factory equipped Perfect Humidity system option are capable of providing multiple modes of improved dehumidification as a variation of the normal cooling cycle. The Perfect Humidity system option includes additional valves in the liquid line and discharge line of each refrigerant circuit, a small reheat condenser coil downstream of the evaporator, and variable-speed control of some or all outdoor fans. Operation of the revised refrigerant circuit for each mode is described below.

The Perfect Humidity system provides three sub-modes of operation: Cool, Reheat1, and Reheat2.

Cool mode — Provides a normal ratio of Sensible and Latent Cooling effect from the evaporator coil.

Reheat1 — Provides increased Latent Cooling while slightly reducing the Sensible Cooling effect.

Reheat2 — Provides normal Latent Cooling but with null or minimum Sensible Cooling effect delivered to the space.

The Reheat1 and Reheat2 modes are available when the unit is not in a Heating mode and when the Low Ambient Lockout switch is closed.

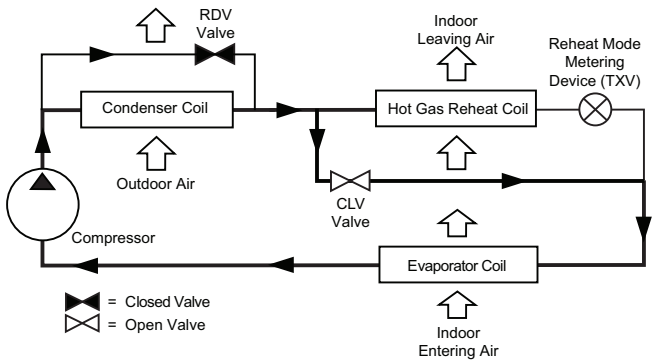
Refer to the following figures for single stage and 2 stage piping flow diagrams.

RTU Open controller (factory option)

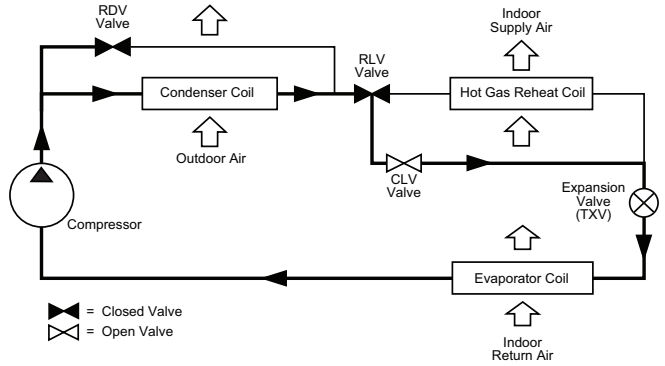
For details on operating 582K*04-06 units equipped with the factory-installed RTU Open controller option, refer to *Factory-Installed RTU Open Multi-Protocol Controller Controls, Start-Up, Operation and Troubleshooting* manual.

Sequence of operation (cont)

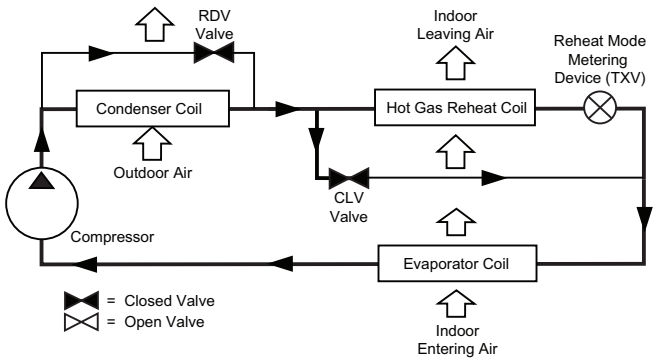
Normal Cooling Mode — Perfect Humidity™ System with Single Stage Cooling



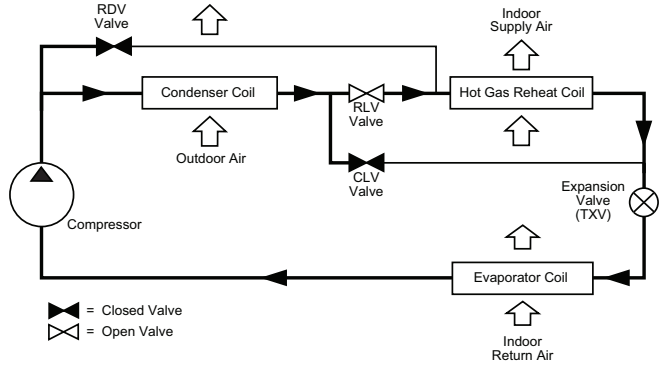
Normal Cooling Mode — Perfect Humidity System with 2 Stage Cooling



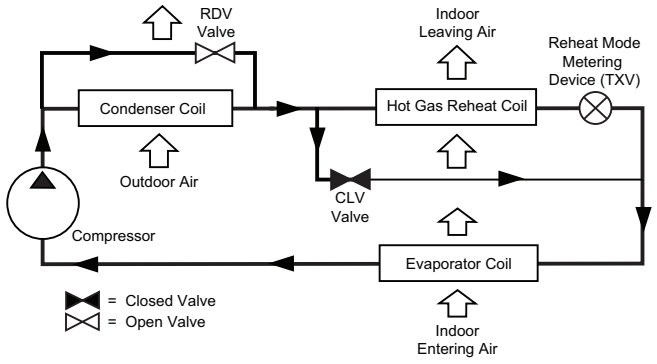
Subcooling Mode (REHEAT 1) — Perfect Humidity System with Single Stage Cooling



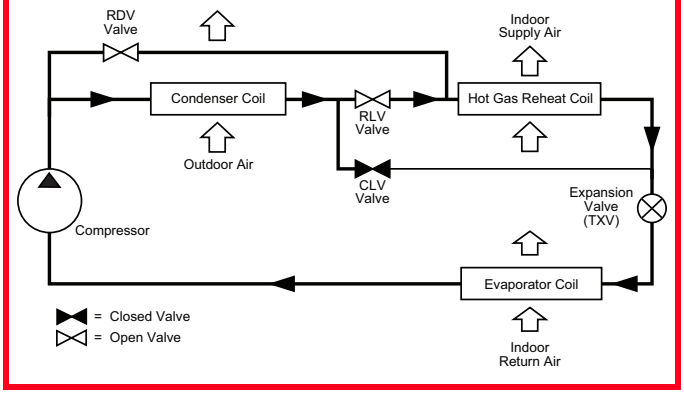
Subcooling Mode (REHEAT 1) — Perfect Humidity System with 2 Stage Cooling



Hot Gas Reheat Mode (REHEAT2) — Perfect Humidity System with Single Stage Cooling



Hot Gas ReHeat Mode (REHEAT2) — Perfect Humidity System with 2 Stage Cooling



Application data

Minimum operating ambient temperature (cooling)

In mechanical cooling mode, your Bryant rooftop unit can safely operate down to an outdoor ambient temperature of 40°F (4°C). It is possible to provide cooling at lower outdoor ambient temperatures by using less outside air, economizers, and/or accessory low ambient kits.

Maximum operating ambient temperature (cooling)

The maximum operating ambient temperature for cooling mode is 115°F (46°C). While cooling operation above 115°F (46°C) may be possible, it could cause either a reduction in performance, reliability, or a protective action by the unit's internal safety devices.

Multiple motor and drive packages

Some applications need larger horsepower motors, some need more airflow, and some need both. Regardless of the case, your Bryant expert has a factory-installed combination to meet your application. A wide selection of motors are available, factory-installed, to handle nearly any application.

Standard stainless steel heat exchanger

The stainless steel heat exchanger provides a tubular heat exchanger made out of a minimum 20 gauge type 409 stainless steel for applications where the mixed air to the heat exchanger is expected to drop below 45°F (7°C). Stainless steel may be specified on applications where the presence of airborne contaminants require its use (applications such as paper mills) or in area with very high outdoor humidity that may result in severe condensation in the heat exchanger during cooling operation.

Minimum mixed air temperature (heating)

Using the factory settings, the minimum temperatures for the mixed air (the combined temperature of the warm return air and the cold outdoor air) entering the dimpled, gas heat exchangers are shown in the following table.

Minimum Temperature for Mixed Air Temperature

STAINLESS STEEL
40°F (4°C) Continuous
35°F (2°C) Intermittent

Operating at lower mixed-air temperatures may be possible, if a field-supplied, outdoor air thermostat initiates both heat stages when the temperature is less than the minimum temperatures listed above. Please contact your local Bryant representative for assistance.

Minimum and maximum airflow (heating and cooling)

To maintain safe and reliable operation of your rooftop, operate within the heating airflow limits during heating mode and cooling airflow limits during cooling mode. Operating above the maximum may cause blow-off, undesired airflow noise, or airflow related problems with the rooftop unit. Operating below the minimum may cause problems with coil freeze-up and unsafe heating operation. Heating and cooling limitations differ when evaluating operating cfm, the minimum value is the HIGHER of the cooling and heating minimum cfm values published on page 6 and the maximum value is the LOWER of the cooling and heating minimum values published on page 6.

Heating-to-cooling changeover

Your unit will automatically change from heating to cooling mode when using a thermostat with an auto-changeover feature.

Airflow

All units are draw-though in cooling mode and blow-through in heating mode.

Outdoor air application strategies

Economizers reduce operating expenses and compressor run time by providing a free source of cooling and a means of ventilation to match application changing needs. In fact, they should be considered for most applications. Also, consider the various economizer control methods and their benefits, as well as sensors required to accomplish your application goals. Please contact your local Bryant representative for assistance.

Motor limits, break horsepower (bhp)

Due to internal design of Bryant units, the air path, and specially designed motors, the full horsepower (maximum continuous bhp) band, as listed in the Fan Performance tables, can be used with the utmost confidence. There is no need for extra safety factors, as Bryant motors are designed and rigorously tested to use the entire, listed bhp range without either nuisance tripping or premature motor failure.

Propane heating

Operation with propane gas is not allowed.

High altitude heating

Unit can operate from 0 to 2,000 feet in altitude as standard, operation above 2,000 feet is in not allowed.

Sizing a rooftop

Bigger is not necessarily better. While an air conditioner needs to have enough capacity to meet the design loads, it does not need excess capacity. In fact, excess capacity typically results in very poor part load performance and humidity control.

Using higher design temperatures than ASHRAE recommends for your location, adding "safety factors" to the calculated load, are all signs of oversizing air conditioners. Oversizing the air conditioner leads to poor humidity control, reduced efficiency, higher utility bills, larger indoor temperature swings, excessive noise, and increased wear and tear on the air conditioner.

Rather than oversizing an air conditioner, engineers should "right-size" or even slightly "under-size" air conditioners. Correctly sizing an air conditioner controls humidity better; promotes efficiency, reduces utility bills, extends equipment life, and maintains even, comfortable temperatures. Please contact your local Bryant representative for assistance.

Low ambient applications

The optional Bryant economizer can adequately cool your space by bringing in fresh, cool outside air. In fact, when so equipped, accessory low-ambient kit may not be necessary. In low ambient conditions, unless the outdoor air is excessively humid or contaminated, economizer-based "free cooling" is the preferred less costly and energy conscious method. In low ambient applications where outside air might not be desired (such as contaminated or excessively humid outdoor environments), your Bryant rooftop can operate to ambient temperatures down to –20°F (–29°C) using the recommended accessory low ambient controller.

Guide specifications

Note about this specification:
This specification is in the "Masterformat" as published by the Construction Specification Institute. Please feel free to copy this specification directly into your building spec.

Ultra Low NOx Gas Heat/Electric Cooling Packaged Rooftop

HVAC Guide Specifications

Size Range: **3 to 5 Nominal Tons**

Bryant Model Number: **582K*04-06**

Part 1 — (23 06 80) Schedules for Decentralized HVAC Equipment

1.01 (23 06 80.13) Decentralized Unitary HVAC Equipment Schedule:

A. (23 06 80.13.A.) Rooftop unit (RTU) schedule:

1. Schedule is per the project specification requirements.

Part 2 — (23 07 16) HVAC Equipment Insulation

2.01 (23 07 16.13) Decentralized, Rooftop Units:

A. (23 07 16.13.A.) Evaporator Fan Compartment:

1. Interior cabinet surfaces shall be insulated with a minimum 1/2 in. thick, minimum 1-1/2 lb density, flexible fiberglass insulation bonded with a phenolic binder, neoprene coated on the air side.
2. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.

B. (23 07 16.13.B.) Gas Heat Compartment:

1. Aluminum foil-faced fiberglass insulation shall be used.
2. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.

Part 3 — (23 09 13) Instrumentation and Control Devices for HVAC

3.01 (23 09 13.23) Sensors and Transmitters:

A. (23 09 13.23.A.) Thermostats:

1. Thermostat must:
   a. energize both "W" and "G" when calling for heat.
   b. have capability to energize 1 or 2 stages of cooling, and 2 different stages of heating.
   c. include capability for occupancy scheduling.

Part 4 — (23 09 23) Direct Digital Control System for HVAC

4.01 (23 09 23.13) Decentralized, Rooftop Units:

A. (23 09 23.13.A.) RTU Open Protocol, Direct Digital Controller:

1. Shall be ASHRAE 62 compliant.
2. Shall accept 18-30VAC, 50-60Hz, and consumer 15VA or less power.
3. Shall have an operating temperature range from –40°F (–40°C) to 130°F (54°C), 10% to 90% RH (non-condensing).
4. Shall include built-in protocol for BACnet™ [1] (MS/TP and PTP modes), Modbus®[1] (RTU and ASCII), Johnson N2 and LonWorks®[1]. LonWorks Echelon processor required for all Lon applications shall be contained in separate communication board.
5. Shall allow access of up to 62 network variables (SNVT). Shall be compatible with all open controllers.
6. Baud rate controller shall be selectable using a DIP switch.
7. Shall have an LED display independently showing the status of serial communication, running, errors, power, all digital outputs, and all analog inputs.
8. Shall accept the following inputs: space temperature, setpoint adjustment, outdoor air temperature, indoor air quality, outdoor air quality, compressor lock-out, fire shutdown, enthalpy switch, and fan status/filter status/humidity/ remote occupancy.
9. Shall provide the following outputs: economizer, fan, cooling stage 1, cooling stage 2, heat stage 1, heat stage 2, exhaust, and reversing valve/high fan speed.
10. Shall have built-in surge protection circuitry through solid-state polyswitches. Polyswitches shall be used on incoming power and network connections. Polyswitches will return to normal when the "trip" condition clears.
11. Shall have a battery back-up capable of a minimum of 10,000 hours of data and time clock retention during power outages.
12. Shall have built-in support for Bryant technician tool.
13. Shall include an RS-485 protocol communication port, an access port for connection of either a computer or a Bryant technician tool, an RS-485 port for network communication to intelligent space sensors and displays, and a port to connect an optional LonWorks communications card.
14. Software upgrades will be accomplished by either local or remote download. No software upgrades through chip replacements are allowed.

Part 5 — (23 09 33) Electric and Electronic Control System for HVAC

5.01 (23 09 33.13) Decentralized, Rooftop Units:

A. (23 09 33.13.A.) General:

1. Shall be complete with self-contained low-voltage control circuit protected by a resettable circuit breaker on the 24-v transformer side. Transformer shall have 75VA capability.
2. Shall utilize color-coded wiring.
3. Shall include a Unit Control Board to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, gas controller, economizer, thermostat, DDC control options, and low and high pressure switches. Controller shall also provide an intuitive means to adjust the

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indoor fan speed through a simple switch and pot adjustment design.

4. The heat exchanger shall be controlled by an integrated gas controller (IGC) microprocessor. See heat exchanger section of this specification.
5. Unit shall include a minimum of one 8-pin screw terminal connection board for connection of control wiring.

B. (23 09 33.13.B.) Safeties:

1. Compressor over-temperature, over-current. High internal pressure differential.
2. Low Pressure Switch:
   a. Low pressure switch shall use different color wire than the high pressure switch. The purpose is to assist the installer and service technician to correctly wire and or troubleshoot the rooftop unit.
3. High Pressure Switch:
   a. High pressure switch shall use different color wire than the low pressure switch. The purpose is to assist the installer and service technician to correctly wire and or troubleshoot the rooftop unit.
4. Automatic reset, motor thermal overload protector.
5. Heating section shall be provided with the following minimum protections:
   a. High temperature limit switches.
   b. Induced draft motor speed sensor.
   c. Flame rollout switch.
   d. Flame proving controls.

Part 6 — (23 09 93) Sequence of Operations for HVAC Controls

6.01 (23 09 93.13) Decentralized, Rooftop Units:

A. (23 09 93.13.A.) INSERT SEQUENCE OF OPERATION

Part 7 — (23 40 13) Panel Air Filters

7.01 (23 40 13.13) Decentralized, Rooftop Units:

A. (23 40 13.13.A.) Standard Filter Section:

1. Shall consist of factory-installed, low velocity, disposable 2 in. thick fiberglass filters of commercially available sizes.
2. Unit shall use only one filter size. Multiple sizes are not acceptable.
3. Filters shall be accessible through an access panel with “no-tool” removal as described in the unit cabinet section of this specification (23 81 19.13.G).

Part 8 — (23 81 19) Self-Contained Air Conditioners

8.01 (23 81 19.13) Small-Capacity Self-Contained Air Conditioners:

A. (23 81 19.13.A.) General:

1. Outdoor, rooftop mounted, electrically controlled, heating and cooling unit utilizing a fully hermetic scroll compressor(s) for cooling duty and gas combustion for heating duty.
2. Factory assembled, single-piece heating and cooling rooftop unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, and special features required prior to field start-up.
3. Unit shall use Puron® (R-410A) refrigerant.
4. Unit shall be installed in accordance with the manufacturer’s instructions.
5. Unit must be selected and installed in compliance with local, state, and federal codes.

B. (23 81 19.13.B.) Quality Assurance:

1. Unit meets ASHRAE 90.1 minimum efficiency requirements.
2. Unit shall be rated in accordance with AHRI Standards 210/240.
3. Unit shall be designed to conform to ASHRAE 15.
4. Unit shall be UL-tested and certified in accordance with ANSI Z21.47 Standards and UL-listed and certified under Canadian standards as a total package for safety requirements.
5. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
6. Unit casing shall be capable of withstanding 500 hour salt spray exposure per ASTM B117 (scribed specimen).
7. Unit shall be designed in accordance with ISO 9001, and shall be manufactured in a facility registered by ISO 9001:2015.
8. Roof curb shall be designed to conform to NRCA Standards.
9. Unit shall be subjected to a completely automated run test on the assembly line. The data for each unit will be stored at the factory, and must be available upon request.
10. Unit shall be designed in accordance with UL Standard 1995, including tested to withstand rain.
11. Unit shall be constructed to prevent intrusion of snow and tested to prevent snow intrusion into the control box up to 40 mph.
12. Unit shake tested to assurance level 1, ASTM D4169 to ensure shipping reliability.

C. (23 81 19.13.C.) Delivery, Storage, and Handling:

1. Unit shall be stored and handled per manufacturer’s recommendations.
2. Lifted by crane requires either shipping top panel or spreader bars.
3. Unit shall only be stored or positioned in the upright position.

D. (23 81 19.13.D.) Project Conditions:

1. As specified in the contract.

E. (23 81 19.13.E.) Operating Characteristics:

1. Unit shall be capable of starting and running at 115°F (46°C) ambient outdoor temperature, meeting maximum load criteria of AHRI Standard 210/240 at ±10% voltage.
2. Compressor with standard controls shall be capable of operation down to 40°F (4°C), ambient outdoor temperatures. Accessory winter start kit is necessary if

mechanically cooling at ambient temperatures down to 25°F (–4°C).

3. Unit shall discharge supply air vertically or horizontally as shown on contract drawings.
4. Unit shall be factory configured for vertical supply and return configurations.
5. Unit shall be field convertible from vertical to horizontal airflow on all models. No special kit required.
6. Unit shall be capable of mixed operation: vertical supply with horizontal return or horizontal supply with vertical return.

F. (23 81 19.13.F.) Electrical Requirements:

1. Main power supply voltage, phase, and frequency must match those required by the manufacturer.

G. (23 81 19.13.G.) Unit Cabinet:

1. Unit cabinet shall be constructed of galvanized steel, and shall be bonderized and coated with a pre-painted baked enamel finish on all externally exposed surfaces.
2. Unit cabinet exterior paint shall be:
   a. Film thickness (dry): 0.003 inches minimum
   b. Gloss (per ASTM D523, 60°F/16°C): 60
   c. Hardness: H-2H Pencil hardness.
3. Evaporator fan compartment interior cabinet insulation shall conform to AHRI Standards 210/240 minimum exterior sweat criteria. Interior surfaces shall be insulated with a minimum 1/2 in. thick, 1 lb density, flexible fiberglass insulation, neoprene coated on the air side. Aluminum foil-faced fiberglass insulation shall be used in the gas heat compartment.
4. Base of unit shall have a minimum of four locations for thru-the-base gas and electrical connections (factory-installed or field-installed), standard.
5. Base Rail:
   a. Unit shall have base rails on a minimum of 2 sides.
   b. Holes shall be provided in the base rails for rigging shackles to facilitate maneuvering and overhead rigging.
   c. Holes shall be provided in the base rail for moving the rooftop by fork truck.
   d. Base rail shall be a minimum of 16 gauge thickness.
6. Condensate Pan and Connections:
   a. Shall be a sloped condensate drain pan made of a corrosion resistant material.
   b. Shall comply with ASHRAE Standard 62.
   c. Shall use a 3/4 in. 14 NPT drain connection, possible either through the bottom or side of the drain pan. Connection shall be made per manufacturer's recommendations.
7. Top panel shall be a single piece top panel on all sizes.
8. Gas Connections:
   a. All gas piping connecting to unit gas valve shall enter the unit cabinet at a single location on side of unit (horizontal plane).
   b. Thru-the-base capability:
      1) Standard unit shall have a thru-the-base gas-line location using a raised, embossed portion of the unit basepan.
      2) Optional, factory approved, water-tight connection method must be used for thru-the-base gas connections.
      3) No basepan penetration, other than those authorized by the manufacturer, is permitted.
9. Electrical Connections:
   a. All unit power wiring shall enter unit cabinet at a single, factory prepared, knockout location.
   b. Thru-the-Base Capability.
      1) Standard unit shall have a thru-the-base electrical location(s) using a raised, embossed portion of the unit basepan.
      2) Optional, factory approved, water-tight connection method must be used for thru-the-base electrical connections.
      3) No basepan penetration, other than those authorized by the manufacturer, is permitted.
10. Component Access Panels (standard):
   a. Cabinet panels shall be easily removable for servicing.
   b. Unit shall have one factory-installed, tool-less, removable, filter access panel.
   c. Panels covering control box, indoor fan, indoor fan motor, gas components (where applicable), and compressors shall have molded composite handles.
   d. Handles shall be UV modified, composite. They shall be permanently attached, and recessed into the panel.
   e. Screws on the vertical portion of all removable access panel shall engage into heat resistant, molded composite collars.
   f. Collars shall be removable and easily replaceable using manufacturer recommended parts.

H. (23 81 19.13.H.) Gas Heat:

1. General:
   a. Heat exchanger shall be an induced draft design. Positive pressure heat exchanger designs shall not be allowed.
   b. Shall incorporate a direct-spark ignition system and redundant main gas valve.
   c. Gas supply pressure at the inlet to the rooftop unit gas valve must match that required by the manufacturer.

Guide specifications (cont)

2. The heat exchanger shall be controlled by an integrated gas controller (IGC) microprocessor:
   a. IGC board shall notify users of fault using an LED (light-emitting diode).
   b. The LED shall be visible without removing the control box access panel.
   c. IGC board shall contain algorithms that modify evaporator fan operation to prevent future cycling on high temperature limit switch.
   d. Unit shall be equipped with anti-cycle protection with one short cycle on unit flame rollout switch or 4 continuous short cycles on the high temperature limit switch. Fault indication shall be made using an LED.
3. Standard Stainless Steel Heat Exchanger Construction — Ultra Low NOx Burner Box:
   a. Burners shall be of the premixed type constructed of stainless steel.
   b. Use a redundant main gas valve.
   c. Burners shall be of the in-shot type constructed of aluminum-coated steel.
   d. All gas piping shall enter the unit cabinet at a single location on side of unit (horizontal plane).
   e. The stainless steel heat exchanger shall be of the tubular-section type, constructed of a minimum of 20-gauge type 409 stainless steel.
   f. Type 409 stainless steel shall be used in heat exchanger tubes and vestibule plate.
   g. Stainless steel natural gas burner box and heat exchanger assembly shall provide Ultra Low NOx gas emissions of 14 nanograms/joule (ng/j).
4. Induced Draft Combustion Motor and Blower:
   a. Shall be a multi speed direct-drive, single inlet, forward-curved centrifugal type.
   b. Shall be made from steel with a corrosion resistant finish.
   c. Shall have permanently lubricated sealed bearings.
   d. Shall have inherent thermal overload protection.
   e. Shall have an automatic reset feature.

I. (23 81 19.13.I.) Coils:

1. Standard Aluminum Fin-Copper Tube Coils:
   a. Standard evaporator and condenser coils shall have aluminum lanced plate fins mechanically bonded to seamless internally grooved copper tubes with all joints brazed.
   b. Evaporator coils shall be leak tested to 150 psig, pressure tested to 450 psig, and qualified to UL 1995 burst test at 1775 psig.
   c. Condenser coils shall be leak tested to 150 psig, pressure tested to 650 psig, and qualified to UL 1995 burst test at 1980 psig.
2. Optional Pre-Coated Aluminum-Fin Condenser Coils (3-Phase Models Only):
   a. Shall have a durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments.
   b. Coating shall be applied to the aluminum fin stock prior to the fin stamping process to create an inert barrier between the aluminum fin and copper tube.
   c. Epoxy-phenolic barrier shall minimize galvanic action between dissimilar metals.
   d. Corrosion durability of fin stock shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117-90.
   e. Corrosion durability of fin stock shall be confirmed through testing to have no visible corrosion after 48 hour immersion in a room temperature solution of 5% salt, 1% acetic acid.
   f. Fin stock coating shall pass 2000 hours of the following: one week exposure in the prohesion chamber followed by one week of accelerated ultraviolet light testing. Prohesion chamber: the solution shall contain 3.5% sodium chloride and 0.35% ammonium sulfate. The exposure cycle is one hour of salt fog application at ambient followed by one hour drying at 95°F (35°C).
3. Optional Copper-Fin Evaporator and Condenser Coils (3-Phase Models Only):
   a. Shall be constructed of copper fins mechanically bonded to copper tubes and copper tube sheets.
   b. Galvanized steel tube sheets shall not be acceptable.
   c. A polymer strip shall prevent coil assembly from contacting the sheet metal coil pan to minimize potential for galvanic corrosion between coil and pan.
4. Optional E-coated Aluminum-Fin Evaporator and Condenser Coils (3-Phase Models Only):
   a. Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins.
   b. Coating process shall ensure complete coil encapsulation of tubes, fins and headers.
   c. Color shall be high gloss black with gloss per ASTM D523-89.
   d. Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges.
   e. Superior hardness characteristics of 2H per ASTM D3363-92A and cross-hatch adhesion of 4B-5B per ASTM D3359-93.
   f. Impact resistance shall be up to 160 in. lb (ASTM D2794-93).
   g. Humidity and water immersion resistance shall be up to minimum 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92).
   h. Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117-90.

Guide specifications (cont)

J. (23 81 19.13.J.) Refrigerant Components:
   1. Refrigerant circuit shall include the following control, safety, and maintenance features:
      a. Fixed orifice metering system shall include a multiple feed distribution system that optimizes coil performance.
      b. Refrigerant filter drier — Solid core design.
      c. Service gauge connections on suction and discharge lines.
      d. Pressure gauge access through a specially designed access port in the top panel of the unit.
   2. There shall be gauge line access port in the skin of the rooftop, covered by a black, removable plug:
      a. The plug shall be easy to remove and replace.
      b. When the plug is removed, the gauge access port shall enable maintenance personnel to route their pressure gauge lines.
      c. This gauge access port shall facilitate correct and accurate condenser pressure readings by enabling the reading with the compressor access panel on.
      d. The plug shall be made of a leak proof, UV-resistant, composite material.
   3. Compressors:
      a. Unit shall use fully hermetic, scroll compressor for each independent refrigeration circuit.
      b. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
      c. Compressors shall be internally protected from high discharge temperature conditions.
      d. Compressors shall be protected from an over-temperature and over-amperage conditions by an internal, motor overload device.
      e. Compressor shall be factory mounted on rubber grommets.
      f. Compressor motors shall have internal line break thermal, current overload and high pressure differential protection.
      g. Crankcase heaters shall not be required for normal operating range, unless required by compressor manufacturer due to refrigerant charge limits.
      h. Compressor shall be of a single stage cooling capacity design.

K. (23 81 19.13.K.) Filter Section:
   1. Filters access is specified in the unit cabinet section of this specification.
   2. Filters shall be held in place by a pivoting filter tray, facilitating easy removal and installation.
   3. Shall consist of factory-installed, low velocity, throw-away 2 in. thick fiberglass filters.
   4. Filters shall be standard, commercially available sizes.
   5. Only one size filter per unit is allowed.

L. (23 81 19.13.L.) Evaporator Fan and Motor with Axion™ Fan Technology:
   1. Direct Drive Evaporator Fan Motor:
      a. Shall be a ECM motor design.
      b. Shall have permanently lubricated bearings.
      c. Shall have inherent automatic-reset thermal overload protection.
      d. Shall have slow ramp up to speed capabilities.
      e. Shall require no fan/motor belts for operation, adjustments and or initial fan speed set up.
      f. Fan DC voltage set up on Unit Control Board can eliminate the need of removal of blower access door, required on conventional belt drive systems.
      g. Shall be internally protected from electrical phase reversal and loss.
   2. Evaporator Fan:
      a. Shall be easily set with dedicated selection switch and adjustment pot on Unit Control Board.
      b. Size 04-06 units provide single speed indoor fan operation.
      c. Blower fan shall be a Vane Axial fan design with 75% less moving parts than a conventional belt drive system.
      d. Shall be constructed of an aluminum stator or high impact composite material on stator, rotor and air inlet casing.
      e. Shall be a patented/pending design with a corrosion resistant material and dynamically balanced.
      f. Shall have slow ramp up to speed capabilities to help reduce sound and comfort issues typically associated with single speed belt drive systems.
      g. Shall be a slide out design with two screw removal.
   3. Shall include an easily accessible Unit Control Board to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, gas controller, economizer, thermostat, DDC control options, and low and high pressure switches. Controller shall also provide an intuitive means to adjust the indoor fan speed through a simple switch and pot adjustment design.

M. (23 81 19.13.M.) Condenser Fans and Motors:
   1. Condenser Fan Motors:
      a. Shall be a totally enclosed motor.
      b. Shall use permanently lubricated bearings.
      c. Shall have inherent thermal overload protection with an automatic reset feature.
      d. Shall use a shaft-down design on all sizes.
   2. Condenser Fans:
      a. Shall be a direct-driven propeller type fan constructed of high impact composite material.
      b. Shall have high impact composite blades completely formed into one piece without blade

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fasteners or connectors and shall be dynamically balanced.

N. (23 81 19.13.N.) Special Features Options and Accessories:

1. Integrated EconomizerONE and EconoMi$er® 2 Low Leak Rate Models. (Can be factory-installed on 3-phase models only. Can be field-installed on all 3 and 1-phase models.)
   a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
   b. Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory-installed option.
   c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
   d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
   e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
   f. Standard leak rate shall be equipped with dampers not to exceed 2% leakage at 1 in. wg pressure differential.
   g. Economizer controller on EconomizerONE models shall be Siemens POL224 that provides:
      1) Combined minimum and DCV maximum damper position potentiometers with compressor staging relay.
      2) Functions with solid-state analog enthalpy or dry bulb changeover control sensing.
      3) LED indication for free cooling, sensor, and damper operation.
      4) One-line LCD interface screen for setup, configuration, and troubleshooting.
      5) Optional configuration via WLAN stick and Siemens Climatix™[1] smartphone app for easy setup.
      6) On-board Fault Detection and Diagnostics (FDD) that senses and alerts when the economizer is not operating properly, per California Title 24, ASHRAE 90.1 and IECC®[1].
      7) Sensor failure loss of communication identification.
      8) Capabilities for use with multiple-speed or single speed indoor fan systems.
      9) Utilize digital sensors: Dry bulb and Enthalpy.
   h. Economizer controller on EconoMi$er 2 models with RTU Open controls shall be a 4 to 20mA design controlled directly by the controller. RTU Open meets California Title 24, ASHRAE 90.1 and IECC Fault Detection and Diagnostic (FDD) requirements.
   i. Shall be capable of introducing up to 100% outdoor air.
   j. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air and contain seals that meet ASHRAE 90.1 requirements.
   k. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
   l. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory-installed economizers only. Outdoor air sensor setpoint shall be adjustable and shall range from 40°F to 100°F (4°C to 38°C). Additional sensor options shall be available as accessories.
   m. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 100%, with a range of 0% to 100%.
   n. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy.
   o. Dampers shall be completely closed when the unit is in the unoccupied mode.
   p. Economizer controller shall accept a 0 to 10 vdc CO_2 sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.
   q. Compressor lockout temperature on POL224 control is adjustable from –45°F to 80°F (–42°C to 27°C), set at a factory default of 32°F (0°C).
   r. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
   s. Shall contain LED indication for free cooling, sensor, and damper operation.
2. Integrated EconomizerONE and EconoMi$er 2 Ultra Low Leak Rate Models. (Can be factory-installed on 3-phase models only. Can be field-installed on all 3-phase and 1-phase models):
   a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
   b. Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory-installed option.
   c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.

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d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.

e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.

f. Ultra Low Leak design meets California Title 24 section 140.4 and ASHRAE 90.1 requirements for 4 cfm per sq ft on the outside air dampers and 10 cfm per sq ft on the return dampers.

g. Economizer controller on EconomizerONE models shall be the Siemens POL224 that provides:

   1) One-line LCD interface screen for setup, configuration, and troubleshooting.

   2) Optional configuration via WLAN stick and Siemens Climatix™ smartphone app for easy setup.

   3) On-board Fault Detection and Diagnostics (FDD) that senses and alerts when the economizer is not operating properly, per California Title 24, ASHRAE 90.1 and IECC.

   4) Sensor failure loss of communication identification.

   5) Capabilities for use with multiple-speed indoor fan systems.

   6) Utilize digital sensors: Dry bulb and Enthalpy.

h. Economizer controller on EconoMi$er 2 models with RTU Open controls shall be a 4 to 20 mA design controlled directly by the controller. RTU Open meets California Title 24, ASHRAE 90.1 and IECC Fault Detection and Diagnostic (FDD) requirements.

i. Shall be capable of introducing up to 100% outdoor air.

j. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air and contain seals that meet ASHRAE 90.1 requirements.

k. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.

l. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory-installed economizers only. Outdoor air sensor setpoint shall be adjustable and shall range from 40°F to 100°F (4°C to 38°C). Additional sensor options shall be available as accessories.

m. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 100%, with a range of 0% to 100%.

n. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy.

o. Dampers shall be completely closed when the unit is in the unoccupied mode.

p. Economizer controller shall accept a 0 to 10 vdc CO_2 sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.

q. Compressor lockout temperature on POL224 control is adjustable from –45°F to 80°F (–42°C to 27°C), set at a factory default of 32°F (0°C).

r. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.

s. Shall contain LED indication for free cooling, sensor, and damper operation.

3. Wi-Fi/WLAN Stick for EconomizerONE POL224 (field-installed):
   This item allows use of the Siemens Climatix™ mobile application.

4. Two-Position Damper (Factory-Installed on 3-Phase Models Only. Field-Installed on all 3-Phase and 1-Phase Models):

   a. Damper shall be a Two-Position Damper. Damper travel shall be from the full closed position to the field adjustable %-open setpoint.

   b. Damper shall include adjustable damper travel from 25% to 100% (full open).

   c. Damper shall include single or dual blade, gear driven dampers and actuator motor.

   d. Actuator shall be direct coupled to damper gear. No linkage arms or control rods shall be acceptable.

   e. Damper will admit up to 100% outdoor air for applicable rooftop units.

   f. Damper shall close upon indoor (evaporator) fan shutoff and/or loss of power.

   g. The damper actuator shall plug into the rooftop unit's wiring harness plug. No hard wiring shall be required.

   h. Outside air hood shall include aluminum water entrainment filter.

5. Manual Damper (Field-installed only):

   a. Manual damper package shall consist of damper, air inlet screen, and rain hood which can be preset to admit up to 25 or 50% outdoor air for year round ventilation.

6. Perfect Humidity™ Dehumidification System (3-Phase Models Only):

   a. The Perfect Humidity Dehumidification System shall be factory-installed and shall provide greater dehumidification of the occupied space by two modes of dehumidification operations in addition to its normal design cooling mode:

      1) Subcooling mode further sub cools the hot liquid refrigerant leaving the condenser coil

when both temperature and humidity in the space are not satisfied.

2) Hot gas reheat mode shall mix a portion of the hot gas from the discharge of the compressor with the hot liquid refrigerant leaving the condenser coil to create a two-phase heat transfer in the system, resulting in a neutral leaving air temperature when only humidity in the space is not satisfied.

3) Includes low ambient controller.

7. Low Ambient Control Package:
   a. Controller shall control coil head pressure by condenser fan speed modulation or condenser fan cycling and wind baffles.
   b. Shall consist of solid-state control and condenser coil temperature sensor to maintain condensing temperature between 90°F (32°C) and 110°F (43°C) at outdoor ambient temperatures down to –20°F (–29°C).
8. Condenser Coil Hail Guard Assembly (Factory-Installed on 3-Phase Models Only. Field-Installed on all 3-Phase and 1-Phase Models):
   a. Shall protect against damage from hail.
   b. Shall be either hood style or louvered.
9. Unit-Mounted, Non-Fused Disconnect Switch (available on units with MOCPs of 80 amps or less. Not available on 460-3-60 volt models.):
   a. Switch shall be factory-installed, internally mounted.
   b. National Electric Code (NEC) and UL approved non-fused switch shall provide unit power shutoff.
   c. Shall be accessible from outside the unit.
   d. Shall provide local shutdown and lockout capability.
   e. Sized only for the unit as ordered from the factory. Does not accommodate field-installed devices.
10. Convenience Outlet:
   a. Powered Convenience Outlet (3-Phase Models Only):
      1) Outlet shall be powered from main line power to the rooftop unit.
      2) Outlet shall be powered from line side or load side of disconnect by installing contractor, as required by code. If outlet is powered from load side of disconnect, unit electrical ratings shall be UL certified and rated for additional outlet amperage.
      3) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
      4) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
      5) Voltage required to operate convenience outlet shall be provided by a factory-installed step-down transformer.
      6) Outlet shall be accessible from outside the unit.
      7) Outlet shall include a field-installed “Wet in Use” cover.
   b. Factory-Installed Non-Powered Convenience Outlet:
      1) Outlet shall be powered from a separate 115/120-v power source.
      2) A transformer shall not be included.
      3) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
      4) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
      5) Outlet shall be accessible from outside the unit.
      6) Outlet shall include a field-installed “Wet in Use” cover.
   c. Field-Installed Non-Powered Convenience Outlet:
      1) Outlet shall be powered from a separate 115/120-v power source.
      2) A transformer shall not be included.
      3) Outlet shall be field-installed and internally mounted with easily accessible 115-v female receptacle.
      4) Outlet shall include 20 amp GFI receptacles. This kit provides a flexible installation method which allows code compliance for height requirements of the GFCI outlet from the finished roof surface as well as the capability to relocate the outlet to a more convenient location.
      5) Outlet shall be accessible from outside the unit.
      6) Outlet shall include a field-installed “Wet in Use” cover.
11. Flue Discharge Deflector:
   a. Flue discharge deflector shall direct unit exhaust vertically instead of horizontally.
   b. Deflector shall be defined as a “natural draft” device by the National Fuel and Gas (NFG) code.
12. Thru-the-Base Connectors:
   a. Kits shall provide connectors to permit gas and electrical connections to be brought to the unit through the unit basepan.
   b. Minimum of four connection locations per unit.
13. Propeller Power Exhaust:
   a. Power exhaust shall be used in conjunction with an integrated economizer.
   b. Independent modules for vertical or horizontal return configurations shall be available.
   c. Horizontal power exhaust shall be mounted in return ductwork.
   d. Power exhaust shall be controlled by economizer controller operation. Exhaust fans shall be energized when dampers open past the 0 to

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100% adjustable setpoint on the economizer control.

14. Roof Curbs (Vertical):
    a. Full perimeter roof curb with exhaust capability providing separate air streams for energy recovery from the exhaust air without supply air contamination.
    b. Formed galvanized steel with wood nailer strip and shall be capable of supporting entire unit weight.
    c. Permits installation and securing of ductwork to curb prior to mounting unit on the curb.
15. Outdoor Air Enthalpy Sensor shall be used to provide single enthalpy control. When used in conjunction with a return air enthalpy sensor, the unit will provide differential enthalpy control. The sensor allows the unit to determine if outside air is suitable for free cooling.
16. Return Air Enthalpy Sensor shall be used in conjunction with an outdoor air enthalpy sensor to provide differential enthalpy control.
17. Indoor Air Quality (CO_2) Sensor:
    a. Shall be able to provide demand ventilation indoor air quality (IAQ) control.
    b. The IAQ sensor shall be available in duct mount, wall mount, or wall mount with LED display. The setpoint shall have adjustment capability.
18. Smoke Detectors (factory-installed only):
    a. Shall be a Four-Wire Controller and Detector.
    b. Shall be environmental compensated with differential sensing for reliable, stable, and drift-free sensitivity.
    c. Shall use magnet-activated test/reset sensor switches.
    d. Shall have tool-less connection terminal access.
    e. Shall have a recessed momentary switch for testing and resetting the detector.
    f. Controller shall include:
        1) One set of normally open alarm initiation contacts for connection to an initiating device circuit on a fire alarm control panel.
        2) Two Form-C auxiliary alarm relays for interface with rooftop unit or other equipment.
        3) One Form-C supervision (trouble) relay to control the operation of the Trouble LED on a remote test/reset station.
        4) Capable of direct connection to two individual detector modules.
        5) Can be wired to up to 14 other duct smoke detectors for multiple fan shutdown applications.
19. Winter Start Kit:
    a. Shall contain a bypass device around the low pressure switch.
    b. Shall be required when mechanical cooling is required down to 25°F (–4°C).
    c. Shall not be required to operate on an economizer when below an outdoor ambient of 40°F (4°C).
20. Time Guard:
    a. Shall prevent compressor short-cycling by providing a 5-minute delay (±2 minutes) before restarting a compressor after shutdown for any reason.
    b. One device shall be required per compressor.
21. Hinged Access Panels:
    a. Shall provide easy access through integrated quarter turn latches.
    b. Shall be on major panels of: filter, control box, fan motor, and compressor.
22. Condensate Overflow Switch: This sensor and related controller monitors the condensate level in the drain pan and shuts down compression operation when overflow conditions occur. It includes:
    a. Indicator light — solid red (more than 10 seconds on water contact — compressors disabled), blinking red (sensor disconnected).
    b. 10 second delay to break — eliminates nuisance trips from splashing or waves in pan (sensor needs 10 seconds of constant water contact before tripping).
    c. Disables the compressor(s) operation when condensate plug is detected, but still allows fans to run for economizer.
23. MERV-8 Return Air Filters: Factory option to upgrade standard unit filters to MERV-8 filters.
24. Phase Monitor Control:
    a. Shall monitor the sequence of 3-phase electrical system to provide a phase reversal protection.
    b. Shall monitor the 3-phase voltage inputs to provide a phase loss protection for the 3-phase device.
    c. Will work on either a Delta or Wye power connection.
25. Horn/Strobe Annunciator: Provides an audible/visual signaling device for use with factory-installed option or field-installed accessory smoke detectors.
    a. Requires installation of a field-supplied 24-v transformer suitable for 4.2 VA (AC) or 3.0 VA (DC) per horn/strobe accessory.
    b. Requires field-supplied electrical box, North American 1-gang box, 2 in. x 4 in. (51 mm x 102 mm).
    c. Shall have a clear colored lens.

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.

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