

TEMPSTAR®

Heating and Cooling Products

2019

Residential Condensed Catalog





TCH6

High Efficiency up to 17.0 SEER Two-Stage Heat Pump with Observer®/Ion™ Communicating Control System



Recommended (Sold separately)

2 – 5 Tons Split System
208 / 230 Volt, Single-Phase, 60 Hz

Refrigeration Circuit

- Copeland Scroll™ UltraTech™ compressors on all models
- Crankcase heater factory installed
- Suction line accumulator factory installed
- Bi-flow filter drier supplied with every unit for field installation
- Integrated solid-state control with Time-Temperature Defrost
- High- and low-pressure switches
- Discharge gas thermostat
- Copper tube/aluminum fin coil

Performance

- Communicating, self-configuring operation when used with Observer/Ion Communicating Wall Control
- Outdoor temperature sensor factory installed
- Ball bearing PSC fan motors on all models
- High performance compressor sound shield standard
- Isolation compressor grommets

Easy-to-Install and Service

- Text based diagnostics with Observer/Ion Communicating Wall Control
- Only two control wires required from communicating indoor unit to condenser
- Easy access service valves on all models
- Innovative control box design
- External high- and low-refrigerant service ports
- Only two screws to access control panel
- Factory charged with R-410A refrigerant

Built to Last

- High-gloss, baked-on powder coat finish over galvanized steel
- Post-painted (black) coil fins
- Coated, weather-resistant cabinet screws
- Coated inlet grille with 3/8" (10mm) spacing for extra protection (hail guard)
- Corner posts for extra strength and style

Warranty*

- 10-year No Hassle Replacement™ limited warranty
- Five-year parts limited warranty (including compressor and coil)
 - With timely registration, an additional five-year parts limited warranty (including compressor and coil)

* For residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.



Unit Performance Data

Model Number	Size (tons)	Nominal Btu/hr	Min. Circuit Ampacity	Max. Fuse or Breaker	Operating Dimensions H x W x D (sq) in (mm)	Ship/Operating Weight lbs (kg)
TCH624GKA1	2	24,000	16.4	25	40-1/8 x 35 x 35 (1019 x 889 x 889)	292/249 (132/113)
TCH624GKA3	2	24,000	16.2	25	40-1/8 x 35 x 35 (1019 x 889 x 889)	292/249 (132/113)
TCH636GKA1	3	36,000	21.8	35	43-1/2 x 35 x 35 (1105 x 889 x 889)	313/270 (142/123)
TCH636GKA2	3	36,000	23.7	40	40-1/8 x 35 x 35 (1019 x 889 x 889)	313/270 (142/123)
TCH648GKA1	4	48,000	34.8	50	46-7/8 x 35 x 35 (1191 x 889 x 889)	345/302 (157/137)
TCH648GKA2	4	48,000	29.8	50	40-1/8 x 35 x 35 (1019 x 889 x 889)	345/302 (157/137)
TCH660GKA1	5	60,000	30.1	50	46-7/8 x 35 x 35 (1191 x 889 x 889)	369/323 (167/147)
TCH660GKA2	5	60,000	37.5	60	46-7/8 x 35 x 35 (1191 x 889 x 889)	369/323 (167/147)

TSH6

16.0 SEER Single-Stage Heat Pump with Observer®/Ion™ Communicating Control System

1-1/2 – 5 Tons Split System
208 / 230 Volt, Single-Phase, 60 Hz



Recommended (Sold separately)



Refrigeration Circuit

- Scroll compressors on all models
- Suction line accumulator factory installed
- Bi-flow filter drier supplied with every unit for field installation
- Integrated solid-state control with Time-Temperature Defrost
- External high- and low-refrigerant service ports
- Copper tube/aluminum fin coil

Performance

- Communicating, self-configuring operation when used with Observer/Ion Communicating Wall Control
- Outdoor temperature sensor factory installed
- Compressor sound blanket standard
- Isolation compressor grommets

Easy-to-Install and Service

- Text based diagnostics with Observer/Ion Communicating Wall Control
- Easy access service valves on all models
- Innovative control box design
- High- and low-pressure switches
- Only two screws to access control panel
- Factory charged with R-410A refrigerant

Built to Last

- High-gloss, baked-on powder coat finish over galvanized steel
- Post-painted (black) coil fins
- Coated, weather-resistant cabinet screws
- Coated inlet grille with 3/8" (10mm) spacing for extra protection (hail guard)
- Corner posts for extra strength and style

Warranty*

- Five-year No Hassle Replacement™ limited warranty (when installed with Observer Wall Control)
- Five-year parts limited warranty (including compressor and coil)
 - With timely registration, an additional five-year parts limited warranty (including compressor and coil)

* For residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.



Unit Performance Data

Model Number	Size (tons)	Nominal Btu/hr	Min. Circuit Ampacity	Max. Fuse or Breaker	Operating Dimensions H x W x D (sq) in (mm)	Ship/Operating Weight lbs (kg)
TSH618GKA	1-1/2	18,000	13.6	20	31-3/16 x 31-3/16 x 35-1/2 (793 x 793 x 902)	213/181 (97/82)
TSH624GKA	2	24,000	15.5	25	35 x 35 x 33-5/8 (889 x 889 x 854)	232/194 (105/88)
TSH630GKA	2-1/2	30,000	19.9	30	35 x 35 x 33-5/8 (889 x 889 x 854)	267/229 (121/104)
TSH636GKA	3	36,000	21.6	35	35 x 35 x 33-5/8 (889 x 889 x 854)	275/237 (125/108)
TSH642GKA	3-1/2	42,000	27.8	40	35 x 35 x 33-5/8 (889 x 889 x 854)	293/255 (133/116)
TSH648GKA	4	48,000	31.8	45	35 x 35 x 33-5/8 (889 x 889 x 854)	298/260 (135/118)
TSH660GKA	5	60,000	33.9	50	35 x 35 x 47-3/16 (889 x 889 x 1199)	363/317 (165/144)



Recommended (Sold separately)

TSH4

14.0 SEER Single-Stage Heat Pump with Observer®/Ion™ Communicating Control System

1-1/2 – 5 Tons Split System
208 / 230 Volt, Single-Phase, 60 Hz

Refrigeration Circuit

- Copeland Scroll™ UltraTech™ compressors on all models
- Suction line accumulator factory installed
- Bi-flow filter drier supplied with every unit for field installation
- Integrated solid-state control with Time-Temperature Defrost
- External high- and low-refrigerant service ports
- Copper tube/aluminum fin coil

Built to Last

- High-gloss, baked-on powder coat finish over galvanized steel
- Post-painted (black) coil fins
- Coated, weather-resistant cabinet screws
- Coated inlet grille with 3/8" (10mm) spacing for extra protection (hail guard)
- Corner posts for extra strength and style

Performance

- Communicating, self-configuring operation when used with Observer/Ion Communicating Wall Control
- Outdoor temperature sensor factory installed
- Compressor sound blanket standard
- Isolation compressor grommets

Warranty*

- Three-year No Hassle Replacement™ limited warranty
- Five-year parts limited warranty (including compressor and coil) – With timely registration, an additional five-year parts limited warranty (including compressor and coil)

* For residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.

Easy-to-Install and Service

- Text based diagnostics with Observer/Ion Communicating Wall Control
- Easy access service valves on all models
- Innovative control box design
- High- and low-pressure switches
- Only two screws to access control panel
- Factory charged with R-410A refrigerant



Unit Performance Data

Model Number	Size (tons)	Nominal Btu/hr	Min. Circuit Ampacity	Max. Fuse or Breaker	Operating Dimensions H x W x D (sq) in (mm)	Ship/Operating Weight lbs (kg)
TSH418GKA	1-1/2	18,000	11.8	20	28-11/16 x 31-3/16 x 31-3/16 (729 x 793 x 793)	219/184 (99/84)
TSH424GKA	2	24,000	17.6	25	28-11/16 x 31-3/16 x 31-3/16 (729 x 793 x 793)	195/164 (89/73)
TSH430GKA	2-1/2	30,000	18.3	30	28-11/16 x 31-3/16 x 31-3/16 (729 x 793 x 793)	216/182 (98/83)
TSH436GKA	3	36,000	20.0	30	28-11/16 x 31-3/16 x 31-3/16 (729 x 793 x 793)	228/194 (103/88)
TSH442GKA	3-1/2	42,000	24.0	40	28-11/16 x 31-3/16 x 31-3/16 (729 x 793 x 793)	252/221 (114/100)
TSH448GKA	4	48,000	25.2	40	28-11/16 x 31-3/16 x 31-3/16 (729 x 793 x 793)	252/221 (114/100)
TSH460GKA	5	60,000	32.0	50	28-11/16 x 31-3/16 x 31-3/16 (729 x 793 x 793)	267/236 (121/107)

N4H6

Efficient Up to 17.5 SEER Heat Pump Environmentally Balanced R-410A Refrigerant

2 – 5 Tons Split System
208 / 230 Volt, Single-Phase



Refrigeration Circuit

- Two-stage scroll compressors on all models
- Suction line accumulator factory installed
- Bi-flow filter drier included for field installation
- Integrated solid state control with Time-Temperature Defrost
- High- and low-pressure switches
- Copper tube/aluminum fin coil

Easy-to-Install and Service

- Easy access service valves on all models
- External high- and low-refrigerant service ports
- Only two screws to access control panel
- Factory charged with R-410A refrigerant
- Ion™ system control compatible with communicating relay module (see SYST0101CW Product Specification for details)

Built to Last

- Baked-on powder coat finish over galvanized steel
- Post-painted (black) coil fins
- Coated, weather-resistant cabinet screws
- Coated inlet grille with 3/8" (10mm) spacing for extra protection

Warranty*

- Five-year compressor limited warranty (including compressor and coil)
 - With timely registration, an additional five-year parts limited warranty (including compressor and coil)

* For residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.



Qualifying models only.

Unit Performance Data

Model Number	Size (tons)	Nominal Btu/hr	Min. Circuit Ampacity	Max. Fuse or Breaker	Operating Dimensions H x W x D (sq) in (mm)	Ship/Operating Weight lbs (kg)
N4H624GKA	2	24,000	16.2	25	38-7/8 x 35 x 35 (988 x 889 x 889)	277/233 (126/106)
N4H636GKA	3	36,000	23.7	40	38-7/8 x 35 x 35 (988 x 889 x 889)	289/245 (131/111)
N4H648GKA	4	48,000	29.5	50	38-7/8 x 35 x 35 (988 x 889 x 889)	315/271 (143/123)
N4H660GKA	5	60,000	37.5	60	45-11/16 x 35 x 35 (1161 x 889 x 889)	340/294 (154/133)



NXH6

High-Efficiency 16.0 SEER Heat Pump Environmentally Balanced R-410A Refrigerant

1-1/2 – 5 Tons Split System
208 / 230 Volt, Single-Phase, 60 Hz

Refrigeration Circuit

- Scroll compressors on all models
- Suction line accumulator factory installed
- Bi-flow filter drier included for field installation
- Integrated solid-state control with Time-Temperature Defrost
- High- and low-pressure switches
- Copper tube/aluminum fin coil

Easy-to-Install and Service

- Easy access service valves on all models
- External high- and low-refrigerant service ports
- Only two screws to access control panel
- Factory charged with R-410A refrigerant
- Ion™ system control compatible with communicating relay module (see SYST0101CW Product Specification for details)

Built to Last

- Baked-on powder coat finish over galvanized steel
- Post-painted (black) coil fins
- Coated, weather-resistant cabinet screws
- Coated inlet grille with 3/8" (10mm) spacing for extra protection (hail guard)

Warranty*

- Five-year parts limited warranty (including compressor and coil)
 - With timely registration, an additional five-year parts limited warranty (including compressor and coil)

* For residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.



Unit Performance Data

Model Number	Size (tons)	Nominal Btu/hr	Min. Circuit Ampacity	Max. Fuse or Breaker	Operating Dimensions H x W x D (sq) in (mm)	Ship/Operating Weight lbs (kg)
NXH618GKA	1-1/2	18,000	13.6	20	35-1/2 x 31-3/16 x 31-3/16 (901 x 793 x 793)	199/167 (90/76)
NXH624GKA	2	24,000	15.5	25	32-1/16 x 35 x 35 (815 x 889 x 889)	210/172 (95/78)
NXH630GKA	2-1/2	30,000	19.9	30	32-1/16 x 35 x 35 (815 x 889 x 889)	245/207 (111/94)
NXH636GKA	3	36,000	21.6	35	32-1/16 x 35 x 35 (815 x 889 x 889)	253/215 (115/98)
NXH642GKA	3-1/2	42,000	27.8	40	32-1/16 x 35 x 35 (815 x 889 x 889)	271/233 (123/106)
NXH648GKA	4	48,000	31.8	45	32-1/16 x 35 x 35 (815 x 889 x 889)	276/238 (125/108)
NXH660GKA	5	60,000	33.9	50	45-11/16 x 35 x 35 (1161 x 889 x 889)	334/288 (152/131)



N4H4

**Efficiency 14.0 SEER Heat Pump
Environmentally Sound R-410A Refrigerant**

**1-1/2 – 5 Tons Split System
208 / 230 Volt, Single-Phase, 60 Hz**

Refrigeration Circuit

- Scroll compressors on all models
- Suction line accumulator factory installed
- Integrated solid state control with Time-Temperature Defrost
- High- and low-pressure switches
- Copper tube/aluminum fin coil

Easy-to-Install and Service

- Easy access service valves on all models
- External high- and low-refrigerant service ports
- Only two screws to access control panel
- Factory charged with R-410A refrigerant
- Ion™ system control compatible with communicating relay module (see SYST0101CW Product Specification for details)

Built to Last

- Painted cabinet finish over galvanized steel
- Models available with coated inlet grille with 3/8" (10mm) spacing grille

Warranty*

- Five-year compressor limited warranty (including compressor and coil)
 - With timely registration, an additional five-year parts limited warranty (including compressor and coil)

* For residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.

Unit Performance Data

Model Number	Size (tons)	Nominal Btu/hr	Min. Circuit Ampacity	Max. Fuse or Breaker	Operating Dimensions H x W x D (sq) in (mm)	Ship/Operating Weight lbs (kg)
N4H418GKG	1-1/2	18,000	11.8	20	35-1/4 x 23-1/8 x 23-1/8 (899 x 587 x 587)	166/136 (75/61)
N4H424GKG	2	24,000	14.2	25	35-1/4 x 25-3/4 x 25-3/4 (895 x 654 x 654)	175/144 (79/65)
N4H430GKG	2-1/2	30,000	16.9	30	31-13/16 x 31-3/16 x 31-3/16 (808 x 792 x 792)	180/158 (82/72)
N4H436GKG	3	36,000	20.0	30	28-7/16 x 31-3/16 x 31-3/16 (722 x 792 x 792)	201/170 (91/77)
N4H442GKG	3-1/2	42,000	24.0	40	39-1/8 x 31-3/16 x 31-3/16 (994 x 792 x 792)	235/201 (107/91)
N4H448GKG	4	48,000	25.2	40	28-7/16 x 31-3/16 x 31-3/16 (722 x 792 x 792)	232/197 (105/89)
N4H460GKG	5	60,000	32.0	50	31-13/16 x 31-3/16 x 31-3/16 (808 x 792 x 792)	248/212 (113/96)



NH4H4

14.0 SEER Horizontal Discharge Heat Pump For Use with Ducted Indoor Units Environmentally Sound R-410A Refrigerant 1-1/2 – 5 Tons Split System, 208 / 230 Volt, Single-Phase

Refrigeration Circuit

- 14.0-16.0 SEER/11.0-13.0 EER/ 8.2-9.0 HSPF
- Scroll compressors on all models
- Factory-supplied filter-drier
- High- and low-pressure switches
- Line lengths up to 250 feet (76.2m)
- Accumulator

Easy-to-Install and Service

- Small footprint
- Easy access service valves on all models
- Factory charged with R-410A refrigerant
- Ion™ system control compatible with communicating relay module (see SYST0101CW Product Specification for details)

Built to Last

- Low-ambient operation (down to 0°F/-17.8°C)
- Ball bearing fan motor

Warranty*

- Five-year compressor limited warranty (including compressor and coil)
 - With timely registration, an additional five-year parts limited warranty (including compressor and coil)

* For residential applications only.

See warranty certificate for complete details and restrictions, including warranty coverage for other applications.

Unit Performance Data

Model Number	Size (tons)	Nominal Btu/hr	Min. Circuit Ampacity	Max. Fuse or Breaker	Operating Dimensions H x W x D (sq) in (mm)	Ship/Operating Weight lbs (kg)
208/230-1-60						
NH4H418AKA	1-1/2	18,000	11.8	20	25-1/8 x 36-15/16 x 14-9/16 (638 x 938 x 370)	170/150 (77/68)
NH4H424AKA	2	24,000	16.5	25	31-1/8 x 36-15/16 x 14-9/16 (790 x 938 x 370)	181/161 (82/73)
NH4H430AKA	2-1/2	30,000	17.2	30	37-1/8 x 44-1/2 x 17-1/16 (943 x 1130 x 433)	226/196 (89/103)
NH4H436AKA	3	36,000	19.0	30	37-1/8 x 44-1/2 x 17-1/16 (943 x 1130 x 433)	197/227 (103/89)
NH4H448AKA	4	48,000	28.8	50	43-1/8 x 44-1/2 x 17-1/16 (1095 x 1130 x 433)	276/246 (125/112)
NH4H460AKA	5	60,000	33.4	50	43-1/8 x 44-1/2 x 17-1/16 (1095 x 1130 x 433)	288/258 (131/117)