

CH10 High Efficiency Series

10 SEER Remote Heat Pump Units



PERFORMANCE:

Efficiency rating of 10.0 SEER

Cooling and heating capacities from 1½ to 5 tons

Rated in accordance with D.O.E. test standards

FEATURES:

Quiet top air discharge

G-90 galvanized steel exterior cabinet with 1000-hour salt spray powder coated finish

Long-life copper tubes, aluminum fin refrigerant coils

State-of-the-art compressors

Powder coated fan guard & full metal louvered coil guard for hail protection

Large wrap-around coil surface

Control box located for easy access to electrical controls

Formed base with 2 ½" ground clearance

Factory installed liquid line filter dryer

CH10 High Efficiency Series

| MODEL SPECIFICATIONS | | | | | | |
|---|--|-------------------|-------------------|-------------------|-----------|------------|
| MODEL NUMBER | CH1018BD1 | CH1024BD1 | CH1030BD1 | CH1036BD1 | CH1036BD3 | CH1036BD-4 |
| PERFORMANCE DATA | | | | | | |
| RATED COOLING BTU/H | 17,600 | 22,600 | 28,200 | 34,600 | | |
| RATED HEATING BTU/H | 16,600 | 22,800 | 29,000 | 36,000 | | |
| SEER (COOLING) BTU/H-W | 10.0 | 10.0 | 10.0 | 10.0 | | |
| CFM | 600 | 800 | 1000 | 1250 | | |
| VOLTS/HZ/PHASE | 208-230/60/1 | 208-230/60/1 | 208-230/60/1 | 208-230/60/1 | 230/60/3 | 460/60/4 |
| VOLTAGE RANGE | 197-253 | 197-253 | 197-253 | 197-253 | 187-253 | 415-508 |
| OPERATING CURRENT AMPS ① | 9.2 | 12.0 | 15.4 | 18.3 | 13.2 | 6.2 |
| MIN. WIRE AMPACITY | 11.3 | 14.7 | 18.0 | 22.4 | 16.5 | 15.0 |
| MAX. HACR BREAKER ② | 15 | 25 | 30 | 35 | 25 | 15 |
| COMPRESSOR DATA | | | | | | |
| TYPE | RECIPROCATING | RECIPROCATING | RECIPROCATING | RECIPROCATING | | |
| RLA | 8.2 | 11.0 | 14.4 | 16.5 | 11.4 | 4.8 |
| LRA | 49 | 56 | 75 | 96 | 75 | 40 |
| CRANKCASE HEAT | YES | YES | YES | YES | | |
| FAN DATA | | | | | | |
| DIAMETER | 18 INCH / 3 BLADE | 18 INCH / 3 BLADE | 18 INCH / 3 BLADE | 18 INCH / 4 BLADE | | |
| MOTOR TYPE | PSC | PSC | PSC | PSC | | |
| HP (W) / FLA | 1/6 / 1.0 | 1/6 / 1.0 | 1/6 / 1.0 | 1/5 / 1.8 | 1/4 / 1.2 | |
| RPM | 1075 | 1075 | 1075 | 1075 | | |
| CFM | 1800 | 1800 | 1800 | 2400 | | |
| OUTDOOR COIL | | | | | | |
| TYPE | ENHANCED ALUMINUM PLATE FIN / RIFLED COPPER TUBE | | | | | |
| FACE AREA | 8.0 | 8.0 | 9.8 | 9.8 | | |
| F.P.I. / ROWS | 5/16 / 18-1 | 5/16 / 22-1 | 3/8 / 20-1 | 3/8 / 18-1 | | |
| REFRIGERANT LINE CONNECTIONS | | | | | | |
| LIQUID V MODELS / Q MODELS | 3/8 ID / #6 | 3/8 ID / #6 | 3/8 ID / #6 | 3/8 ID / #6 | | |
| VAPOR V MODELS / Q MODELS | 3/4 ID / #11 | 3/4 ID / #11 | 3/4 ID / #11 | 3/4 ID / #11 | | |
| REFRIGERANT CHARGE R-22 (OZ) Q MODELS ③ | 47 | 45 | 60 | 69 | | |
| REFRIGERANT CHARGE R-22 (OZ) V MODELS ③ | 68 | 66 | 81 | 90 | | |
| FACTORY PROVIDED LQ DRYER | SPRING LOADED DRYER ON ALL V MODELS | | | | | |
| WEIGHTS | | | | | | |
| NET WEIGHT — lbs. | 137 | 137 | 148 | 161 | | |
| SHIPPING WEIGHT — lbs. | 143 | 143 | 156 | 169 | | |

| COOLING PERFORMANCE DATA | | | | | | | | | | | | |
|---------------------------|--------------------------|----------------------------|--------|------|---|--------|--------|--------|--------|--------|--------|--------|
| BASIC OUTDOOR UNIT MODEL* | BASIC INDOOR COIL MODEL* | A.R.I. CERTIFIED RATINGS ⑤ | | | COOLING DATA AT EXTENDED OUTDOOR AMBIENTS °F.M.B.T.U.H. | | | | | | | |
| | | BTUH | SEER ④ | CFM | 80 | 85 | 90 | 95 | 100 | 105 | 110 | 115 |
| CH1018BD | E3009A59 | 17,600 | 10.00 | 600 | 18,680 | 18,320 | 17,960 | 17,600 | 16,680 | 15,760 | 14,840 | 13,920 |
| | E2419P59 | 16,600 | 10.00 | 600 | 17,620 | 17,280 | 16,940 | 16,600 | 15,740 | 14,870 | 14,000 | 13,130 |
| CH1024BD | E3009A59 | 22,600 | 10.00 | 800 | 24,480 | 23,850 | 23,230 | 22,600 | 21,420 | 20,230 | 19,040 | 17,850 |
| CH1030BD | E3009A63 | 28,200 | 10.00 | 1000 | 29,790 | 29,260 | 28,730 | 28,200 | 26,620 | 25,030 | 23,450 | 21,860 |
| CH1036CD | E3612A76 | 34,600 | 10.00 | 1250 | 37,250 | 36,370 | 35,480 | 34,600 | 31,700 | 28,800 | 25,900 | 23,000 |
| | E3612P76 | 34,600 | 10.00 | 1250 | 37,250 | 36,370 | 35,480 | 34,600 | 31,700 | 28,800 | 25,900 | 23,000 |
| CH1042CD | E4824A84 | 40,500 | 10.00 | 1350 | 42,430 | 41,790 | 41,140 | 40,500 | 38,930 | 37,350 | 35,780 | 34,200 |
| | E4824P84 | 40,500 | 10.00 | 1350 | 42,430 | 41,790 | 41,140 | 40,500 | 38,930 | 37,350 | 35,780 | 34,200 |
| CH1048CD | E6016A98 | 47,500 | 10.00 | 1700 | 50,170 | 49,280 | 48,390 | 47,500 | 46,050 | 44,600 | 43,150 | 41,700 |
| | E6040PE8 | 48,000 | 10.00 | 1700 | 50,670 | 49,780 | 48,890 | 48,000 | 46,550 | 45,100 | 43,650 | 42,200 |
| CH1060CD | E6037AE8 | 55,500 | 10.00 | 1850 | 59,200 | 57,970 | 56,730 | 56,500 | 54,040 | 52,570 | 51,100 | 49,640 |
| | E6040PE8 | 55,500 | 10.00 | 1750 | 59,200 | 57,970 | 56,730 | 56,500 | 54,040 | 52,570 | 51,100 | 49,640 |

FOOTNOTES:

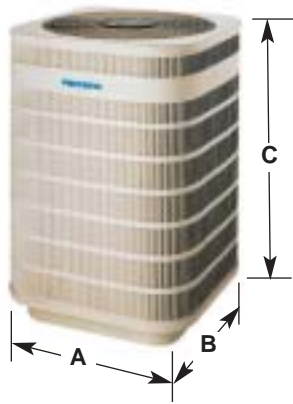
① Amps at 104°F OD temp. 80°F DB / 67°F WB indoor temp. ② Time delay type fuse for HACR Circuit Breaker. ③ Model refrigerant charge for condensing unit, matching evaporator coil and 25' of connecting line set. Q models charged for condensing unit only, matching precharged evaporator and line set contain the remainder of refrigerant. ④ Requires time delay relay to obtain SEER rating. ⑤ Rated in accordance with ARI 210-89 and D.O.E. Test Standards. *Basic model number only. See unit nomenclature on the next page for exact model number. For indoor coils nomenclature see indoor coil specification sheet. Due to constant improvement, all specifications are subject to change without notice.

MODEL SPECIFICATIONS

| MODEL NUMBER | CH1042CD1 | CH1048CD1 | CH1048CD3 | CH1048CD4 | CH1060CD1 | CH1060CD3 | CH1060CD4 |
|---|--|-------------------|-----------|-----------|-------------------|-----------|-----------|
| PERFORMANCE DATA | | | | | | | |
| RATED COOLING BTU/H | 40,500 | 47,500 | | | 55,500 | | |
| RATED HEATING BTU/H | 40,500 | 47,000 | | | 56,000 | | |
| SEER (COOLING) BTU/H-W | 10.0 | 10.0 | | | 10.0 | | |
| CFM | 1350 | 1700 | | | 1850 | | |
| VOLTS/HZ/PHASE | 208-230/60/1 | 208-230/60/1 | 230/60/3 | 460/60/4 | 208-230/60/1 | 230/60/3 | 460/60/4 |
| VOLTAGE RANGE | 197-253 | 197-253 | 187-253 | 415-508 | 197-253 | 187-253 | 415-508 |
| OPERATING CURRENT AMPS ① | 20.0 | 26.2 | 16.5 | 6.4 | 30.2 | 19.4 | 9.4 |
| MIN. WIRE AMPACITY | 24.0 | 31.0 | 20.0 | 11.0 | 38.0 | 24.0 | 12.0 |
| MAX. HACR BREAKER ② | 40 | 50 | 30 | 15 | 60 | 40 | 20 |
| COMPRESSOR DATA | | | | | | | |
| TYPE | SCROLL | SCROLL | | | SCROLL | | |
| RLA | 17.8 | 23.0 | 14.3 | 7.2 | 28.0 | 17.2 | 8.2 |
| LRA | 103 | 131 | 91 | 46 | 150 | 124 | 60 |
| CRANKCASE HEAT | NONE | NONE | | | NONE | | |
| FAN DATA | | | | | | | |
| DIAMETER | 18 INCH / 4 BLADE | 22 INCH / 3 BLADE | | | 22 INCH / 3 BLADE | | |
| MOTOR TYPE | PSC | PSC | | | PSC | | |
| HP (W) / FLA | 1/4 / 2.2 | 1/4 / 2.2 | 1/4 / 1.2 | | 1/4 / 2.2 | 1/4 / 1.2 | |
| RPM | 1075 | 1075 | | | 1075 | | |
| CFM | 3400 | 3400 | | | 3400 | | |
| OUTDOOR COIL | | | | | | | |
| TYPE | ENHANCED ALUMINUM PLATE FIN / RIFLED COPPER TUBE | | | | | | |
| FACE AREA | 14.7 | 18.3 | | | 22.0 | | |
| F.P.I. / ROWS | 3/8 / 18-1 | 3/8 / 20-1 | | | 3/8 / 18-1 | | |
| REFRIGERANT LINE CONNECTIONS | | | | | | | |
| LIQUID V MODELS / Q MODELS | 3/8 ID / #6 | 3/8 ID / #6 | | | 3/8 ID / #6 | | |
| VAPOR V MODELS / Q MODELS | 7/8 ID / #11 | 7/8 ID / #11 | | | 1-1/8 ID / #12 | | |
| REFRIGERANT CHARGE R-22 (OZ) Q MODELS ③ | 88 | 120 | | | 129 | | |
| REFRIGERANT CHARGE R-22 (OZ) V MODELS ③ | 109 | 141 | | | 150 | | |
| FACTORY PROVIDED LQ DRYER | SPRING LOADED DRYER ON ALL V MODELS | | | | | | |
| WEIGHTS | | | | | | | |
| NET WEIGHT — lbs. | 172 | 190 | | | 214 | | |
| SHIPPING WEIGHT — lbs. | 180 | 199 | | | 224 | | |

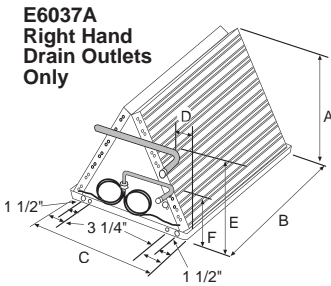
HEATING PERFORMANCE DATA

| BASIC OUTDOOR UNIT MODEL* | BASIC INDOOR COIL MODEL* | A.R.I. CERTIFIED RATINGS ⑤ | | | HEATING DATA AT EXTENDED OUTDOOR AMBIENTS °F.M.B.T.U.H. | | | | | | | |
|---------------------------|--------------------------|----------------------------|------|------|---|--------|--------|--------|--------|--------|--------|--------|
| | | BTUH | HSPF | CFM | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 |
| CH1018BD | E3009A59 | 18,000 | 7.20 | 600 | 3,490 | 5,700 | 7,920 | 10,140 | 12,350 | 15,250 | 18,840 | 22,420 |
| | E2419P59 | 17,000 | 7.20 | 600 | 3,960 | 5,900 | 7,840 | 9,780 | 11,720 | 14,320 | 17,580 | 20,830 |
| CH1024BD | E3009A59 | 23,400 | 7.20 | 800 | 8,120 | 9,260 | 10,400 | 11,540 | 12,680 | 17,240 | 25,210 | 33,180 |
| CH1030BD | E3009A63 | 29,800 | 7.20 | 1000 | 11,140 | 12,940 | 14,740 | 16,540 | 18,340 | 23,580 | 32,270 | 40,950 |
| CH1036CD | E3612A76 | 34,600 | 7.20 | 1250 | 12,810 | 15,040 | 17,280 | 19,510 | 21,740 | 28,330 | 39,290 | 50,240 |
| | E3612P76 | 34,600 | 7.20 | 1250 | 12,810 | 15,040 | 17,280 | 19,510 | 21,740 | 28,330 | 39,290 | 50,240 |
| CH1042CD | E4824A84 | 38,500 | 7.20 | 1350 | 19,940 | 21,810 | 23,690 | 25,560 | 27,440 | 33,430 | 43,530 | 53,640 |
| | E4824P84 | 38,500 | 7.20 | 1350 | 19,940 | 21,810 | 23,690 | 25,560 | 27,440 | 33,430 | 43,530 | 53,640 |
| CH1048CD | E6016A98 | 45,000 | 7.20 | 1700 | 23,760 | 25,950 | 28,130 | 30,320 | 32,510 | 39,190 | 50,350 | 61,510 |
| | E6040PE8 | 45,500 | 7.20 | 1700 | 24,260 | 26,450 | 28,630 | 30,820 | 33,010 | 39,690 | 50,750 | 61,810 |
| CH1060CD | E6037AE8 | 54,000 | 7.20 | 1850 | 30,440 | 32,900 | 35,360 | 37,810 | 40,270 | 47,540 | 59,630 | 71,710 |
| | E6040PE8 | 54,000 | 7.20 | 1750 | 30,440 | 32,900 | 35,360 | 37,810 | 40,270 | 47,540 | 59,630 | 71,710 |



| CONDENSER DIMENSIONS (INCHES) | | | | | | |
|-------------------------------|--------|--------|--------|----------|--------|----|
| MODEL | UNIT | | | SHIPPING | | |
| | A | B | C | A | B | C |
| CH1018B, CH1024B | 21-1/2 | 21-1/2 | 22-1/2 | 23-1/2 | 23-1/2 | 23 |
| CH1030B | 21-1/2 | 21-1/2 | 26-1/2 | 23-1/2 | 23-1/2 | 27 |
| CH1036B | 21-1/2 | 21-1/2 | 32-1/2 | 23-1/2 | 23-1/2 | 33 |
| CH1042C | 29-1/2 | 29-1/2 | 26-1/2 | 31-1/2 | 31-1/2 | 27 |
| CH1048C | 29-1/2 | 29-1/2 | 32-1/2 | 31-1/2 | 31-1/2 | 33 |
| CH1060C | 29-1/2 | 29-1/2 | 38-1/2 | 31-1/2 | 31-1/2 | 39 |

| TYPICAL COIL DIMENSIONS* (INCHES) | | | | | | | |
|-----------------------------------|--------|--------|--------|-------|--------|-------|----------------------------|
| INDOOR COIL MODEL NO. | A | B | C | D | E | F | DRAIN FITTING PRIM. / SEC. |
| E3009 | 12 | 19-1/2 | 16-1/2 | 1-1/2 | 8 | 3 | 3/4 F.P.T. / 1/2 F.P.T. |
| E3612 | 17-1/2 | 19-1/2 | 16-1/2 | 1-1/2 | 14-1/4 | 8-1/2 | 3/4 F.P.T. / 1/2 F.P.T. |
| E4824 | 18 | 19-1/2 | 20 | 1-1/2 | 14 | 7-1/2 | 3/4 F.P.T. / 1/2 F.P.T. |
| E6016 | 22 | 19-1/2 | 20 | 1-1/2 | 13-5/8 | 9-1/4 | 3/4 F.P.T. / 1/2 F.P.T. |
| E6037 | 21-1/2 | 23 | 21 | 1-1/2 | 14-1/4 | 8-1/4 | 3/4 F.P.T. / 1/2 F.P.T. |
| E6038 | 24 | 23 | 21 | 1-1/2 | 11-3/4 | 7 | 3/4 F.P.T. / 1/2 F.P.T. |



D = MANIFOLD TO PAN E = SUCTION HEIGHT F = LIQUID HEIGHT
 Indoor coil surfaces constructed of rifled tubing and enhanced aluminum plate fin.
 All indoor coils are equipped with TXV type refrigerant control device and high temperature, durable nylon drain pans.

Limited Coil Dimensions. For full details refer to Fedders Indoor Coils Spec Sheet #FECS.

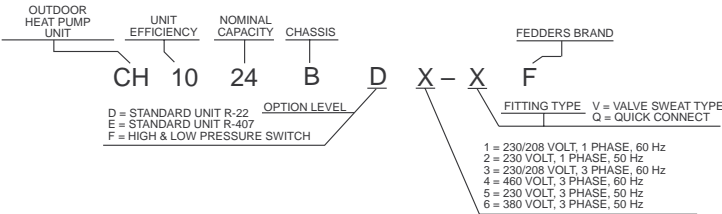


The "A" Series Air Handler is designed to be matched with the CH10 Series for performance and quiet operation.

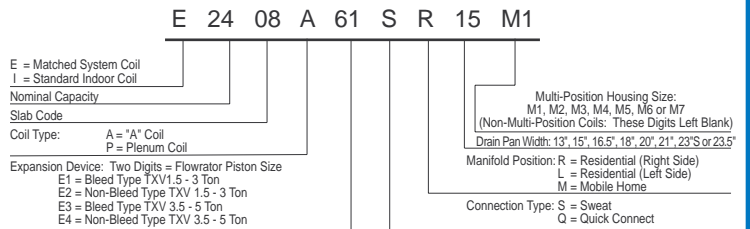
| OUTDOOR & INDOOR UNITS W/ MATCHING AIR HANDLER | | | | |
|--|----------------------|--------------|--------------------------------------|---|
| OUTDOOR UNIT | MATCHING INDOOR COIL | REQUIRED CFM | INDOOR COIL PRESSURE DROP* (IN W.C.) | MATCHING A SERIES AIR HANDLER-AVAILABLE ESP @ MIN FAN SPEED** |
| CH1018 | E3009A | 600 | .10 | A08 - .4 - LOW |
| CH1024 | E3009A | 800 | .17 | A08 - .3 - HIGH |
| CH1030 | E3009A | 1000 | .29 | A12 - .3 - MEDIUM |
| CH1036 | E3612A | 1250 | .22 | A12 - .3 - HIGH |
| CH1042 | E4824A | 1350 | .27 | A16 - .35 - MEDIUM |
| CH1048 | E6026A | 1700 | .30 | A16 - .3 - HIGH |
| CH1060 | E6037A | 1850 | .36 | A20 - .35 - HIGH |

* Dry coil static. For wet coil static, increase static 30%.
 ** Air handler available ESP includes .3 wet coil static & factory supplied air filter.

MODEL KEY: Residential & Light Commercial - Outdoor Unit



MODEL KEY: Indoor Coils



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 FERHS10

U.L. & C.U.L. certified

Rated in Accordance with ARI Standard 210/240.
 Certification Applies Only When Used with Proper Components as Listed with ARI.

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