

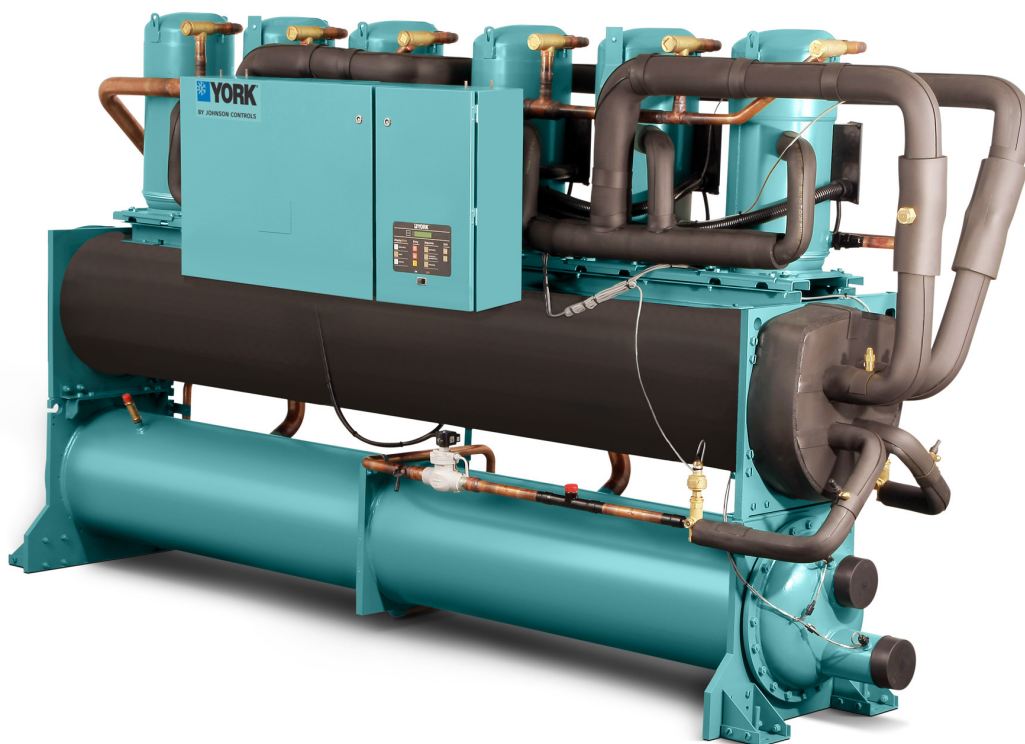
## Model YCWL Water-Cooled Scroll Liquid Chiller

Style A

50 THROUGH 200 TONS  
175kW THROUGH 700 kW  
60Hz

Model #: YCWL0157HE46XACSDTXXXXXLX90X24XE1XXXXXXXXXXXXXXXXXXXXSNXXXXXS  
Serial #: 11531B53537181

Year: 2015  
Size: 157 Tons



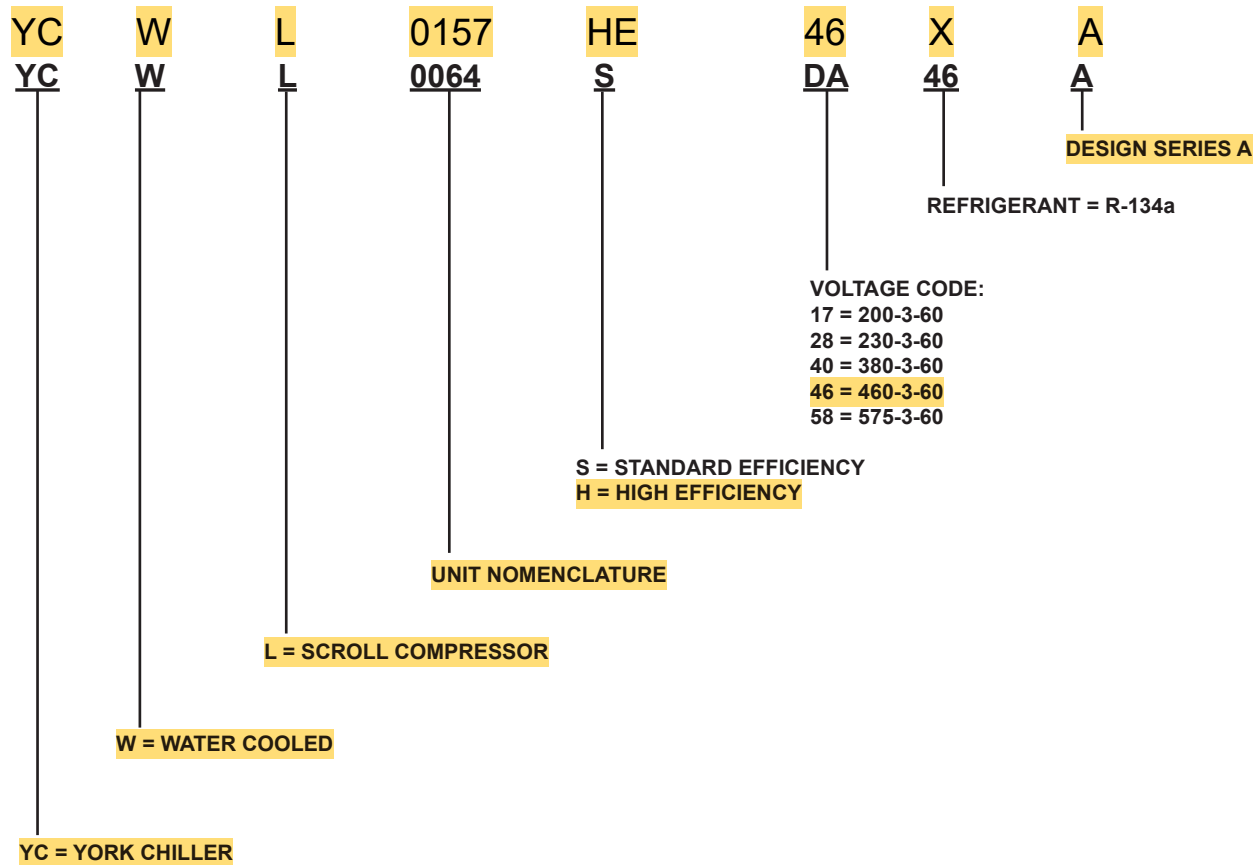
Shipping Weight: 6,863 lbs.  
Operating Weight: 7,807 lbs.

L: 12' W: 2' 11" H: 6' 6"



BY JOHNSON CONTROLS

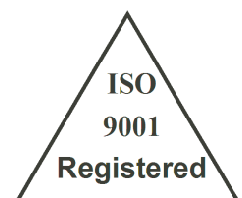
## Nomenclature



PERFORMANCE DATA PROVIDED IN THIS DOCUMENT WAS CREATED IN ACCORDANCE WITH JOHNSON CONTROLS SOFTWARE: **YORKWORKS VERSION 14.03 AND DXCHILL VERSION 6.13**

## Approvals

- ASME Boiler and Pressure Vessel Code –Section VIII Division 1.
- AHRI Standard 550/590 and 551/591
- c/U.L. – Underwriters Laboratory
- ASHRAE 15 – Safety Code for Mechanical Refrigeration
- ASHRAE Guideline 3 – Reducing Emission of Halogenated Refrigerants in Refrigeration and Air Conditioning Equipment and Systems
- N.E.C. – National Electrical Code
- OSHA – Occupational Safety and Health Act



Products are produced at a facility whose quality-management systems are ISO9001 certified.

JOHNSON CONTROLS

**HIGH EFFICIENCY (HE)**

| <b>YCWL</b> | <b>0064HE</b> | <b>0074HE</b> | <b>0084HE</b> | <b>0094HE</b> | <b>0096HE</b> | <b>0118HE</b> | <b>0127HE</b> | <b>0157HE</b> |
|-------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|-------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|

**GENERAL UNIT DATA**

|                                                        |         |         |         |         |         |         |         |         |
|--------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>NOMINAL UNIT CAPACITY (TONS)</b>                    | 63.2    | 73      | 82.4    | 92.6    | 95.8    | 117.2   | 132.1   | 148.5   |
| <b>NUMBER OF INDEPENDENT REFRIGERANT CIRCUITS</b>      | 2       | 2       | 2       | 2       | 2       | 2       | 2       | 2       |
| <b>REFRIGERANT CHARGE, R-410A, CKT 1/CKT. 2 (LBS.)</b> | 65/65   | 90/90   | 90/90   | 155/155 | 170/170 | 155/155 | 180/180 | 195/195 |
| <b>OIL CHARGE, CKT. 1/CKT. 2, (GAL.)</b>               | 2.2/2.2 | 2.5/2.2 | 2.5/2.5 | 3.1/2.5 | 3.3/3.3 | 3.3/3.1 | 3.7/3.7 | 4.7/4.7 |
| <b>SHIPPING WEIGHT (LBS.)</b>                          | 4373    | 4835    | 5097    | 5669    | 6013    | 5905    | 7087    | 6863    |
| <b>OPERATING WEIGHT (LBS.)</b>                         | 4688    | 5330    | 5592    | 6308    | 6741    | 6544    | 7975    | 7807    |

**COMPRESSORS, SCROLL**

|                                    |             |             |             |             |                       |             |                    |                 |
|------------------------------------|-------------|-------------|-------------|-------------|-----------------------|-------------|--------------------|-----------------|
| <b>QUANTITY PER CHILLER</b>        | 4           | 4           | 4           | 4           | 6                     | 4           | 5                  | 4               |
| <b>NOMINAL SIZE CKT. 1/ CKT. 2</b> | 15-15/15-15 | 20-20/15-15 | 20-20/20-20 | 25-25/20-20 | 15-15-15/<br>15-15-15 | 32-32/25-25 | 20-20-20/<br>32-32 | 35-35/<br>35-35 |

**CONDENSER**

|                                                 |          |          |          |          |           |          |           |           |
|-------------------------------------------------|----------|----------|----------|----------|-----------|----------|-----------|-----------|
| <b>WATER VOLUME (GAL.)</b>                      | 26.9     | 26.9     | 26.9     | 44.1     | 52.4      | 44.1     | 52.4      | 59.1      |
| <b>MAXIMUM WATER SIDE PRESSURE (PSIG)</b>       | 150      | 150      | 150      | 150      | 150       | 150      | 150       | 150       |
| <b>MAXIMUM REFRIGERANT SIDE PRESSURE (PSIG)</b> | 560      | 560      | 560      | 560      | 560       | 560      | 560       | 560       |
| <b>DIA. X LENGTH (INCHES X FEET)</b>            | 14" X 8' | 14" X 8' | 14" X 8' | 18" X 8' | 18" X 10' | 18" X 8' | 18" X 10' | 18" X 10' |
| <b>WATER NOZZLE CONNECTION SIZE, (INCHES)</b>   | 4        | 4        | 4        | 5        | 5         | 5        | 5         | 5         |

**EVAPORATOR**

|                                                 |          |          |          |          |           |          |           |           |
|-------------------------------------------------|----------|----------|----------|----------|-----------|----------|-----------|-----------|
| <b>WATER VOLUME (GALS.)</b>                     | 37.3     | 59.8     | 59.8     | 59.8     | 57.6      | 59.8     | 77        | 77        |
| <b>MAXIMUM WATER SIDE PRESSURE (PSIG)</b>       | 150      | 150      | 150      | 150      | 150       | 150      | 150       | 150       |
| <b>MAXIMUM REFRIGERANT SIDE PRESSURE (PSIG)</b> | 450      | 450      | 450      | 450      | 450       | 450      | 450       | 450       |
| <b>DIA. X LENGTH (INCHES X FEET)</b>            | 13" X 8' | 16" X 8' | 16" X 8' | 16" X 8' | 15" X 10' | 16" X 8' | 17" X 10' | 17" X 10' |
| <b>WATER NOZZLE CONNECTION SIZE, (INCHES)</b>   | 6        | 8        | 8        | 8        | 8         | 8        | 8         | 8         |

# Unit Dimensions - English - Four Compressor

| STANDARD EFFICIENCY (SE) |           |           |           |           |           |           |           |           |           |
|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| YCWL                     | 0056SE    | 0064SE    | 0074SE    | 0084SE    | 0094SE    | 0104SE    | 0118SE    | 0132SE    | 0157SE    |
| W                        | 34 5/8    | 34 5/8    | 33 13/16  | 33 13/16  | 33 13/16  | 33 13/16  | 33 13/16  | 33 13/16  | 34 13/16  |
| H                        | 64 15/32  | 64 15/32  | 68 29/32  | 68 29/32  | 72 9/32   | 71 25/32  | 71 25/32  | 74 1/2    | 76 17/32  |
| H*                       | –         | –         | 70 1/2    | 70 1/2    | –         | 73 1/2    | 73 1/2    | –         | –         |
| H**                      | –         | –         | 70 1/2    | 70 1/2    | –         | 73 1/2    | 75        | 75        | –         |
| L                        | 119 5/8   | 119 5/8   | 125 15/16 | 125 15/16 | 125 15/16 | 124 1/8   | 124 1/8   | 123 5/16  | 143 7/16  |
| A                        | 14 1/2    | 14 1/2    | 14 1/2    | 14 1/2    | 14 1/2    | 14 1/2    | 14 1/2    | 14 1/2    | 15        |
| B                        | 29        | 29        | 29        | 29        | 29        | 29        | 29        | 29        | 30        |
| C                        | 4 1/2     | 4 1/2     | 4 1/2     | 4 1/2     | 4 1/2     | 4 1/2     | 4 1/2     | 5 9/16    | 5 9/16    |
| D                        | 15 17/32  | 15 17/32  | 15 17/32  | 15 17/32  | 11 25/32  | 15 17/32  | 15 17/32  | 16 1/32   | 16 1/32   |
| E                        | 6 5/8     | 6 5/8     | 6 5/8     | 6 5/8     | 6 5/8     | 6 5/8     | 6 5/8     | 8 5/8     | 8 5/8     |
| F                        | 35 15/32  | 35 15/32  | 35 15/32  | 35 15/32  | 35 15/32  | 38 1/2    | 38 1/2    | 40        | 41        |
| G                        | 29        | 29        | 29        | 29        | 29        | 29        | 29        | 29        | 29        |
| J                        | 17 11/16  | 17 11/16  | 17 11/16  | 17 11/16  | 17 11/16  | 17 11/16  | 17 11/16  | 17 11/16  | 17 11/16  |
| K                        | 8 15/16   | 8 15/16   | 8 15/16   | 8 15/16   | 12 1/4    | 12 1/4    | 12 1/4    | 12 3/4    | 17 25/32  |
| M                        | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 10 3/8    |
| N                        | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 10 3/8    |
| O                        | 5 1/2     | 5 1/2     | 5 1/2     | 7 1/8     | 7 1/8     | 7 1/8     | 7 1/8     | 8 1/8     | 8 5/8     |
| P                        | 9 1/8     | 9 1/8     | 9 1/8     | 8 3/8     | 8 3/8     | 8 3/8     | 8 3/8     | 7 7/8     | 8 1/2     |
| Q                        | 5 1/8     | 5 1/8     | 5 1/8     | 5 1/8     | 5 1/8     | 5 1/8     | 5 1/8     | 5 7/32    | 5 3/16    |
| R                        | 84 1/2    | 84 1/2    | 84 1/2    | 84 1/2    | 85        | 85        | 85        | 83        | 102       |
| S                        | 8 21/32   | 8 21/32   | 8 21/32   | 8 21/32   | 8 13/32   | 8 13/32   | 8 13/32   | 9 13/32   | 11 29/32  |
| T                        | 101 13/16 | 101 13/16 | 101 13/16 | 101 13/16 | 101 13/16 | 101 13/16 | 101 13/16 | 101 13/16 | 125 13/16 |
| U                        | 15 1/16   | 15 1/16   | 21 3/8    | 21 3/8    | 21 3/8    | 19 9/16   | 19 9/16   | 18 3/4    | 14 7/8    |
| V                        | 107 25/32 | 107 25/32 | 107 25/32 | 107 25/32 | 107 25/32 | 107 25/32 | 107 25/32 | 108 7/32  | 132 23/32 |
| X                        | 30 3/8    | 30 3/8    | 30 3/8    | 30 3/8    | 32        | 32        | 32        | 33 1/4    | 36 1/4    |
| AA                       | 25 29/32  | 25 29/32  | 25 29/32  | 25 29/32  | 25 29/32  | 25 29/32  | 25 29/32  | 25 29/32  | 35 17/32  |
| BB                       | 50        | 50        | 50        | 50        | 50        | 50        | 50        | 50        | 50        |

| HIGH EFFICIENCY (HE) |           |           |           |           |           |           |
|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| YCWL                 | 0064HE    | 0074HE    | 0084HE    | 0094HE    | 0118HE    | 0157HE    |
| W                    | 33 13/16  | 33 13/16  | 33 13/16  | 33 27/32  | 33 27/32  | 34 13/16  |
| H                    | 67 19/32  | 74 5/8    | 74 19/32  | 76 19/32  | 76 1/2    | 77 9/32   |
| H*                   | –         | 75        | 75        | –         | 77        | –         |
| H**                  | –         | 75        | 75        | –         | 77        | 76        |
| L                    | 124 3/8   | 123 5/16  | 125 11/16 | 121 3/4   | 123 5/16  | 143 7/16  |
| A                    | 14 1/2    | 14 1/2    | 14 1/2    | 15        | 15        | 15        |
| B                    | 29        | 29        | 29        | 30        | 30        | 30        |
| C                    | 4 1/2     | 4 1/2     | 4 1/2     | 5 9/16    | 5 9/16    | 5 9/16    |
| D                    | 11 25/32  | 16 1/32   | 16 1/32   | 16 1/32   | 16 1/32   | 16 1/32   |
| E                    | 6 5/8     | 8 5/8     | 8 5/8     | 8 5/8     | 8 5/8     | 8 5/8     |
| F                    | 35 15/32  | 40        | 40        | 42        | 42        | 41        |
| G                    | 29        | 29        | 29        | 29        | 29        | 29        |
| J                    | 17 11/16  | 17 11/16  | 17 11/16  | 17 11/16  | 17 11/16  | 17 11/16  |
| K                    | 12 1/4    | 12 3/4    | 12 3/4    | 12 3/4    | 12 3/4    | 17 25/32  |
| M                    | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 10 3/8    |
| N                    | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 9 7/8     | 10 3/8    |
| O                    | 7 1/8     | 7 1/8     | 7 1/8     | 8 5/8     | 8 5/8     | 8 5/8     |
| P                    | 8 1/4     | 8 1/4     | 8 1/4     | 8 1/2     | 8 1/2     | 8 1/2     |
| Q                    | 5 1/8     | 5 1/8     | 5 1/8     | 5 3/16    | 5 3/16    | 5 3/16    |
| R                    | 85        | 83        | 83        | 83        | 83        | 102       |
| S                    | 8 13/32   | 9 13/32   | 9 13/32   | 9 13/32   | 9 13/32   | 11 29/32  |
| T                    | 101 13/16 | 101 13/16 | 101 13/16 | 101 13/16 | 101 13/16 | 125 13/16 |
| U                    | 19 13/16  | 18 3/4    | 21 1/8    | 17 3/16   | 18 3/4    | 14 7/8    |
| V                    | 107 25/32 | 107 25/32 | 107 25/32 | 108 3/4   | 108 3/4   | 132 23/32 |
| X                    | 32        | 33 1/4    | 33 1/4    | 35 1/4    | 35 1/4    | 36 1/4    |
| AA                   | 25 29/32  | 28 9/32   | 25 29/32  | 27 15/32  | 25 29/32  | 37 21/32  |
| BB                   | 50        | 50        | 50        | 50        | 50        | 50        |

H\* - for 200/230 volt units, which require a larger electrical enclosure.

H\*\* - for multiple point circuit breaker units, 200/230 volt, which require a larger electrical enclosure.

## NOTES:

1. Recommended service clearances  
 Rear to wall: 20" (508mm)  
 Front to wall: 36" (915mm)  
 Top: 43" (1092mm)  
 Tube cleaning and removal: 132" (3353mm) either end
2. Relief valve connection sizes  
 Low side (suction line): 1/2" flare  
 High side (condenser): 5/8" NPTI

