

MODEL YCWL
WATER-COOLED SCROLL LIQUID CHILLER
STYLE A

Model #: YCWL0157SE

Serial #: 11551A75808314

50 tons to 200 tons
175 kW to 700 kW
60 Hz

2017

144 Ton



L: 12' 10"

W: 3' 1"

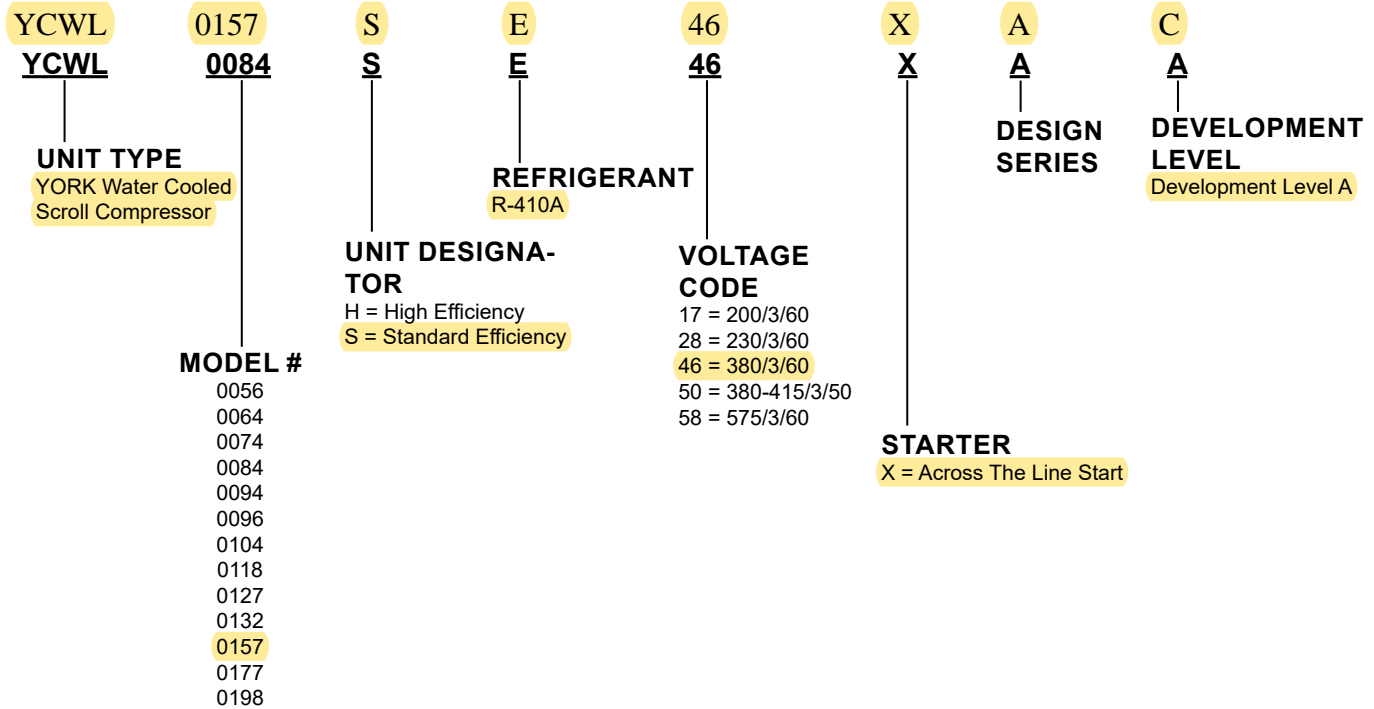
H: 6' 6"



Shipping Weight: 6,162 lbs
Operating Weight: 7,354 lbs



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
- NEC – National Electrical Code
- OSHA – Occupational Safety and Health Act



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

Physical Data - English

STANDARD EFFICIENCY (SE)

YCWL	0056SE	0064SE	0074SE	0084SE	0094SE	0104SE	0118SE	0132SE	0157SE	0177SE	0198SE
GENERAL UNIT DATA											
Nominal Unit Capacity (ton)	51.6	59.9	67.8	76.6	85.8	92.7	110.4	127.4	144.0	167.7	199.6
Number of Independent Refrigerant Circuits	2	2	2	2	2	2	2	2	2	2	2
Refrigerant Charge, R-410A, Ckt 1/Ckt. 2 (lb)	60/ 60	60/ 60	60/ 60	70/ 70	65/ 65	80/ 80	80/ 80	130/ 130	170/ 170	195/ 195	195/ 195
Oil Charge, Ckt. 1/Ckt. 2, (gal)	1.7/ 1.7	2.2/ 2.2	2.5/ 2.2	2.5/ 2.5	3.1/ 2.5	3.1/ 3.1	3.3/ 3.1	3.3/ 3.3	4.7/ 4.7	4.7/ 4.7	4.7/ 4.7
Shipping Weight (lb)	4067	4067	4337	4860	5317	5333	5363	6006	6626	7777	8132
Operating Weight (lb)	4200	4200	4470	5055	5632	5648	5678	6570	7354	8721	9076
COMPRESSORS, SCROLL											
Quantity per Chiller	4	4	4	4	4	4	4	4	4	5	6
Nominal Size Ckt. 1/ Ckt. 2	13-13/ 13-13	15-15/ 15-15	20-20/ 15-15	20-20/ 20-20	25-25/ 20-20	25-25/ 25-25	32-32/ 25-25	32-32/ 32-32	35-35/ 35-35	32-32- 32/ 32- 32	32-32- 32/ 32- 32-32
CONDENSER											
Water Volume (gal)	19.4	19.4	19.4	26.9	26.9	26.9	26.9	35.2	52.4	59.1	59.1
Maximum Water Side Pressure (psig)	150	150	150	150	150	150	150	150	150	150	150
Maximum Refrigerant Side Pressure (psig)	560	560	560	560	560	560	560	560	560	560	560
Dia. x Length (in. x ft)	13 x 8	13 x 8	13 x 8	14 x 8	14 x 8	14 x 8	14 x 8	16 x 8	18 x 10	18 x 10	18 x 10
Water Nozzle Connection Size, (in.)	4	4	4	4	4	4	4	5	5	5	5
EVAPORATOR											
Water Volume (gal)	22.4	22.4	22.4	22.4	37.3	37.3	37.3	59.8	57.6	77.0	77.0
Maximum Water Side Pressure (psig)	150	150	150	150	150	150	150	150	150	150	150
Maximum Refrigerant Side Pressure (psig)	450	450	450	450	450	450	450	450	450	450	450
Dia. x Length (in. x ft)	11 x 8	11 x 8	11 x 8	11 x 8	13 x 8	14 x 8	14 x 8	16 x 8	15 x 10	17 x 10	17 x 10
Water Nozzle Connection Size, (in.)	6	6	6	6	6	6	6	8	8	8	8

Unit Dimensions - 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

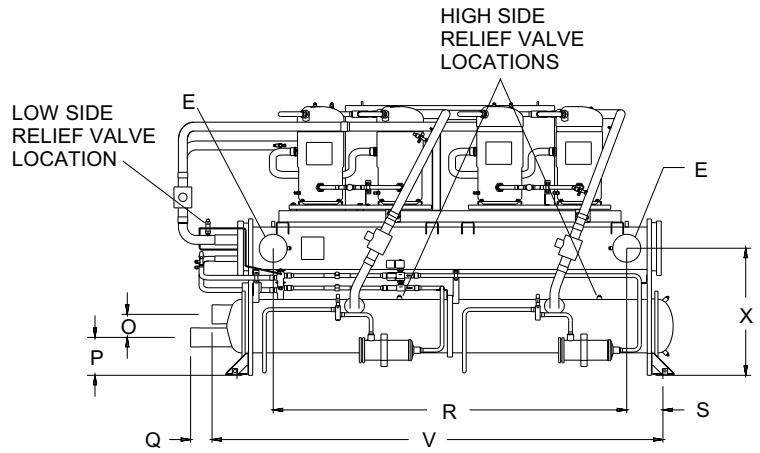
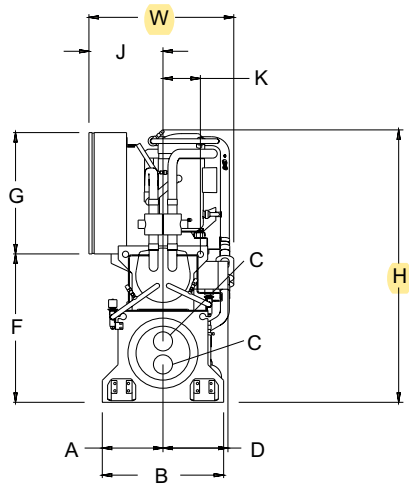
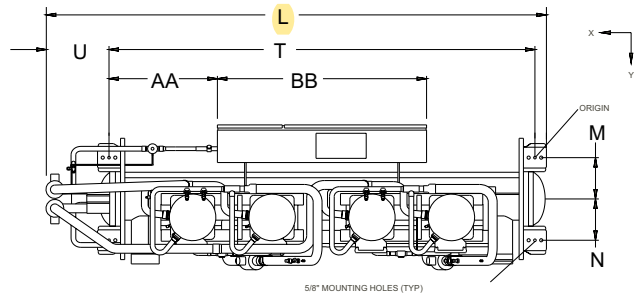
H* - for 200/230 volt units, which require a larger electrical enclosure.

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

Unit Dimensions - Four Compressor (Cont'd)

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



LD18410