YORK®

BY JOHNSON CONTROLS

CHILLER REPLACEMENT CONTRACTORS GUIDE

YCAL – 15 to 65 TONS
AIR COOLED SCROLL CHILLER

YLAA – 70 to 175 TONS
AIR COOLED SCROLL CHILLER

YVAA – 150 to 500 TONS
AIR COOLED SCREW CHILLER

YCWL – 50 to 200 TONS
WATER COOLED SCROLL CHILLER

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YLAA – 70 to 175 TONS
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AIR COOLED SCREW CHILLER

YCWL – 50 to 200 TONS
WATER COOLED SCROLL CHILLER

In-stock Chillers Ready for Quick Shipment

When You Need Cooling Fast!

Complete packages for quick **'Plug & Play'** installation

Unit Benefits

Air-cooled Scroll Chillers

Air-cooled chillers using scroll-compressor technology ranging from 15 to 175 tons. Standard feature include:

- Voltages: 200V, 230V, 380V, 460V, 380-415V/50Hz, 575V
- Chilled-water supply range: 40 - 55°F; brine supply to 10°F
- Ambient operation between 0 - 115°F
- Single-point power connection reduces wiring costs
- Non-fused disconnect switch simplifies installation and servicing
- Control transformer eliminates separate control wiring
- Micro-computer control panel is very user-friendly
- Low-noise fans reduce radiated sound
- Victaulic-grooved water connections reduce installation costs
- Complies with ASHRAE Standard 90.1 on energy efficiency
- Options are available upon request

Air-cooled Screw Chillers

Air-cooled chillers using YORK® VSD Screw technology ranging from 150 to 500 tons. Standard features include:

- Voltages: 200V, 230V, 380V, 400V, 460V, 380-415V/50Hz, 575V
- Chilled-water supply range: 40 - 55°F; brine supply to 15°F
- Ambient operation between 0 - 125°F
- Single-point power connection reduces wiring costs
- Non-fused disconnect switch simplifies installation and servicing
- Control transformer eliminates separate control wiring
- VSD increases reliability at start-up and shut-down
- Micro-computer control panel is very user-friendly
- Low-noise fans reduce radiated sound
- Victaulic-grooved water connections reduce installation costs
- Complies with ASHRAE Standard 90.1 on energy efficiency
- Options are available upon request

Water-cooled Scroll Chillers

Water-cooled chillers using scroll-compressor technology ranging from 50 to 200 tons. Standard features include:

- Voltages: 200V, 230V, 380V, 460V, 380-415V/50Hz, 575V
- Chilled-water supply range: 40 - 55°F; brine supply to 15°F
- Single-point power connection reduces wiring costs
- Non-fused disconnect switch simplifies installation and servicing
- Control transformer eliminates separate control wiring
- Micro-computer control panel is very user-friendly
- Complies with ASHRAE Standard 90.1 on energy efficiency
- Non-reversing heat pump function (leaving condenser temperature control)
- Options are available upon request

Need temporary cooling?

If you need cooling while we are customizing your unit, Johnson Controls can provide a rental unit. We make available a wide range of products including chillers, rooftop units, air handlers, towers and peripheral equipment. Our service includes delivery, installation, start-up, maintenance, and financing. If interested in this option please contact the JCI Rental Department at:

1-800-JCI-RNTL (1800-524-7685)

www.johnsoncontrols.com/rental

Need more than the standard unit?

If you need a chiller quickly but need some customization of features, Johnson Controls can make it happen. Customization features include:

- Suction-pressure readouts
- Service-Isolation valves
- Hot gas by-pass
- Brine cooling as low as 10°F
- Functional witness testing
- Hydronics package
- Epoxy Coated Cond. Coils
- Options are available upon request

Need Replacement Parts?

Your brand HVAC parts source for air cooled, water cooled, and absorption chillers. We are able to ship out the HVAC parts that you need as soon as possible. If you need items urgently (for a hospital, school or other critical application) we can prioritize this requirement and work with our supplier for expediting. If you have a need for replacement parts please contact the JCI Parts Department at :

1-800-932-1701

Ways to Reduce Your Risk, Expand Your Business and Increase Your Profits

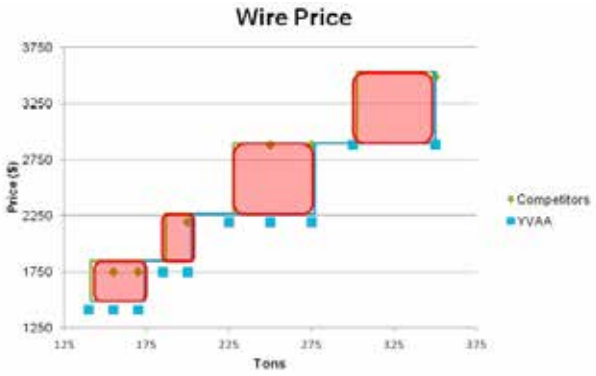
OPTION I
Use Variable Speed Technology to Create Chiller Replacement Opportunities

Compressor motor control via a variable frequency drive allows you as the installing contractor to give your customer more tonnage without changing the electrical power supply. Also, emergency generator size can be reduced when feeding chillers with variable speed compressors.

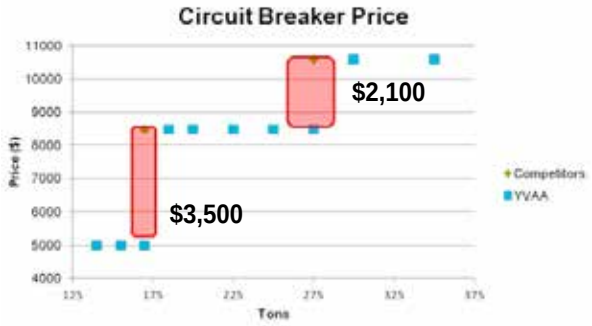
For Example: Your customer has an existing chiller that produces 165 tons at ARI conditions. The MCA for this chiller is 374 amps and the existing wire and breaker size was installed to meet this MCA. Your customer is short on capacity during peak hours of the day. YORK has an YVAA0248CEV that produces 225 tons with an MCA of 374. This will give you an extra 61 tons without changing out the wires or breakers.

On the other hand, if your customer doesn't have a need for additional capacity, and the installation requires electrical power component upgrades, the first cost savings when using smaller breakers, wire and conduit is substantial.

$310 Average Wire Savings



Potential For a Smaller Circuit Breaker Frame Size



OPTION II
Use Energy Performance to Differentiate Your Replacement Offering

The YORK Latitude variable speed air-cooled chiller allows you as the installing contractor to offer your customers a replacement alternative that is as much as 25% more efficient than existing chillers.

For Example: Your customer wants to replace an existing 350-ton chiller. You as the installing contractor can offer either a standard efficiency chiller or the YORK optimized variable speed chiller. The optimized offering will save the customer over $17,000/year*. With this level of annual savings, you can offer your customer a $21,250 additive alternate with a 1.25 year simple payback. The price premium for the optimized offering is $7,000, which allows you to capture $14,250 of additional gross profit.

*see the next page for the Average Energy Cost (AEC) calculation

Annual Savings / Average Energy Cost (AEC) Calculation

Input Variables:

IPLV = Integrated Part Load Value (kW/TON) = (12) / (IPLV EER)
FLT = Full Load Tons (tons)
ACL = Average Chiller Load (tons) = (FLT) x (0.58)
RATE = Commercial Energy Cost ($/kWh)
OH – Average Chiller Operating Hours (hrs)

Output Functions:

AEC = (IPLV) x (ACL) x (RATE) x (OH)
Annual Savings = $AEC_{\text{Existing or Base Bid}} - AEC_{\text{New}}$

Example

Input Variables:

$IPLV_{\text{Existing or Base Bid}}$ = 15.4 EER
$IPLV_{\text{New}}$ = 19.0 EER
$FLT_{\text{Existing or Base Bid}}$ = 350 tons
FLT_{New} = 350 tons
RATE = $0.1016/kWh
OH = 5000 hrs

Calculations:

$AEC_{\text{Existing or Base Bid}}$ = (IPLV) x (ACL) x (RATE) x (OH)
$AEC_{\text{Existing or Base Bid}}$ = (12 / (IPLV EER)) x ((FLT) x (0.58)) x (RATE) x (OH)
$AEC_{\text{Existing or Base Bid}}$ = (12 / 15.4 EER) x (350 tons x 0.58) x ($0.1016/kWh) x (5000 hrs)
$AEC_{\text{Existing or Base Bid}}$ = $80,356.36

AEC_{New} = (IPLV) x (ACL) x (RATE) x (OH)
AEC_{New} = (12 / (IPLV EER)) x ((FLT) x (0.58)) x (RATE) x (OH)
AEC_{New} = (12 / 19.0 EER) x (350 tons x 0.58) x ($0.1016/kWh) x (5000 hrs)
AEC_{New} = $65,130.95

Annual Savings = $AEC_{\text{Existing or Base Bid}} - AEC_{\text{New}}$
Annual Savings = $80,356.36 - $65,130.95
Annual Savings = $15,225.41 / year

YCAL
15 to 65 Tons
Air Cooled Scroll Chiller

YCAL RIGGING

WARNING — To ensure warranty coverage, this equipment must be commissioned and serviced by an authorized Johnson Controls Service Mechanic or a qualified service person experienced in chiller installation. Installation must comply with all applicable codes, particularly in regard to electrical wiring and other safety elements such as relief valves, HP cutout settings, design working pressures, and ventilation requirements consistent with the amount and type of refrigerant charge. Lethal voltages exist within the control panels. Before servicing, open and tag all disconnect switches.

Installation Check List

The following items must be checked before placing the units in operation.

1. Inspect the unit for shipping damage.
2. Rig Unit using spreader bars.
3. Open the unit only to install water piping system. Do not remove protective covers from water connections until piping is ready for attachment. Check water piping to ensure cleanliness.
4. Pipe unit using good piping practice *(see ASHRAE handbook section 215 and 195)*.
5. Check to see that the unit is installed and operated within limitations (*Refer to Operational and Voltage Limitations located in Section 1 of the YCAL Operations and Maintenance Guide [Form 150.62-NM8]*).

The following pages outline detailed procedures to be followed to install and startup the chiller.

Handling

These units are shipped as completely assembled units containing full operating charge, and care should be taken to avoid damage due to rough handling.

WARNING —The unit should be lifted by inserting hooks through the holes provided in the unit base rails. Spreader bars should be used to avoid crushing the unit frame rails with lifting chains.

Inspection

Immediately upon receiving the unit, it should be inspected for possible damage which may have occurred during transit. If damage is evident, it should be noted in the carrier's freight bill. A written request for inspection by the carrier's agent should be made at once. *See Instruction manual, Form 50.15-NM for more information and details*.

Location and Clearances

These units are designed for outdoor installations on ground level, rooftop, or beside a building. Location should be selected for minimum sun exposure and to insure adequate supply of fresh air for the condenser. The units must be installed with sufficient clearances for air entrance to the condenser coil, for air discharge away from the condenser, and for servicing access.

In installations where winter operation is intended and show accumulations are expected, additional height must be provided to ensure normal condenser air flow.

Clearances are listed under Dimensions in Section 1 of the YCAL Operations and Maintenance Guide form 150.62-NM8.

EXAMPLE OF PROPER LIFTING

AIR COOLED SCROLL CHILLER
YCAL Style E - 15 to 65 TONS (R-410A)

BENEFITS

- Maintenance free, hermetic scroll compressor utilizes fewer moving parts to minimize breakdown
- Components and circuitry designed for lower minimum circuit ampacities (MCA) to allow use of smaller wire for reduced power wiring costs
- Electronic, digital-based controls ensure reliable, solid-state monitoring and control
- Units ship with full ref. charge and undergo factory pressure and operational testing to minimize field setup time
- Two refrigerant circuits on units over 35 tons allows redundant operation
- Industry's only 18-month air cooled warranty that covers all parts
- Wide range of options to fit any design requirement. (Acoustical treatments, Hydrokit packages etc)

UPGRADE OPTIONS

- Remote Cooler
- Power Options --> 200, 230, 380, 460, 575 (Not available on all models, refer to Engineering Guide):
- Single Point Terminal Block, Non-fused Disconnect Switch, Circuit Breaker, Control Transformer
- Control Options:
- Low Ambient Kit extends operating range to 0 deg. F from +25 deg. F
- Discharge Pressure Transducers and Readout Capability (standard) allows unit to sense and display discharge pressure
- Low Temperature Brine for chilling below 30 deg. F
- Motor Current Module allows monitoring of compressor motor current, provides extra protection against compressor reverse rotation, phase-loss and phase imbalance
- Hot Gas Bypass for continuous, stable operation at capacities as low as 5% capacity
- Service Isolation Valve - suction and discharge (ball type) isolation valves are added to unit per system; includes a system high pressure relief valve in compliance with ASHRAE 15
- Pre-coated, Post-coated Epoxy Dipped or Copper Fin condenser coils
- Unit Enclosure Options:
- Wire Panels (full unit-standard): coated, heavy gauge welded wire mesh mounted on exterior of unit to prevent unauthorized access
- Louvered Panels (full unit): to protect condenser coils, visually screen internal components and prevent unauthorized access
- Sound Attenuation:
- Compressor Acoustic Sound Blanket
- Ultra Quiet fans
- Vibration Isolators - 1" spring, 2" spring or neoprene pad isolators for mounting under unit base rails

AIR COOLED SCROLL CHILLER
YCAL Style E - 15 to 65 TONS

PACKAGE DESCRIPTION:

- Shipped complete from the factory ready for field installation and use
- Fully charged with HFC-410A and initial oil charge
- Baked on powder paint
- Heavy gauge, formed galvanized steel base
- Operational and Pressure Tested

Compressors:

- Suction-gas cooled, hermetic scroll compressors
- Large internal volume and oil reservoir provides greater liquid tolerance
- Crankcase heaters for extra protection against liquid migration

Condenser:

- Low noise, direct drive, maximum efficiency fans with corrosion resistant aluminum hub and composite blades; statically and dynamically balanced
- Totally enclosed air over (TEAO) type fan motors, current protected and permanently sealed
- Seamless, internally enhanced copper fin & tube coils arranged in staggered rows; mechanically expanded to full-height aluminum fins
- Design Working Pressure 650 PSIG
- Integral subcooling included

Cooler:

- Equipped with a heater controlled by separate thermostat for freeze protection to –20 deg. F
- Covered by closed cell foam insulation
- Inlet and outlet are grooved for compatibility with field supplied victaulic connections

Controls:

- All controls housed in a NEMA 3R/12 cabinet with gasket sealed, hinged & latched door
- LCD, 40-character display with backlight
- Color coded, sealed keypad
- Standard controls permit operation from 25 to 125 deg F.

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCAL0019EE46	15.4	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.0 / 2.9
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	14.6 / 4.3
Design Flow Rate (gpm)	37.0	Min. Ambient Temp. (°F)	25.0	**Physical Data**	
Pressure Drop (ft.)	6.3	Max. Ambient Temp. (°F)	115.0	Rigging Wt. (lbs.)	1454
Fluid	Water			Operating Wt. (lbs.)	1481
Fouling Factor	0.00010				
Water Volume (gal)	3.3				

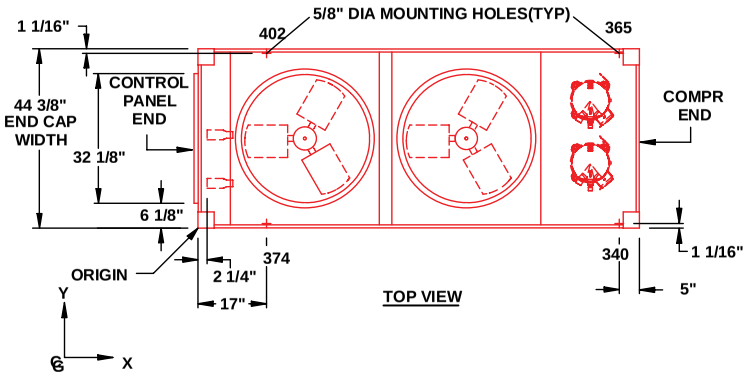
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	18.6/18.6			
Compressor Start Current (LRA)	114.0/114.0			
Fan QTY/FLA (each)	2/1.3			

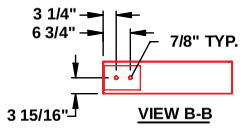
Single Point				
Min. Circuit Ampacity	44.9			
Min. Non-Fused Disconnect (Amps)	60			
Min. Dual Element Fuse Size (Amps)	50			
Max. Dual Element Fuse Size (Amps)	60			
Min. Circuit Breaker (Amps)	50			
Max. Circuit Breaker (Amps)	60			
Wire Lugs Per Phase*	1			
Wire Range (Lug Size)	(1)#14 - #2/0			
Total Amps	39.8		**Operating Condition Electrical Data**	
Inrush (PW) Amps	114.0		Compressor kW	17.6
Starter Type	Across the Line		Total Fan kW	1.0
			Total kW	18.6

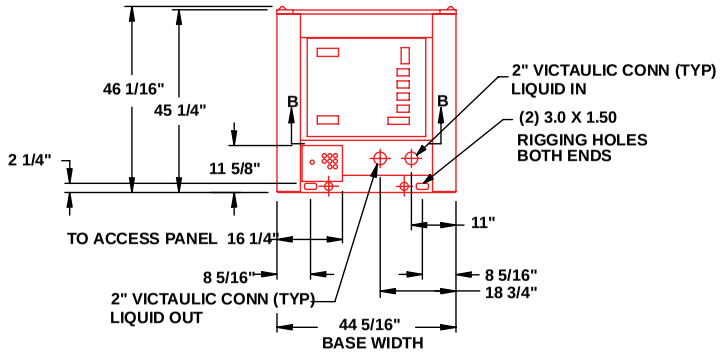
Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only **Installing contractor must include vent and drain accommodations in the chilled water piping near the evaporator. A strainer, preferably 40 mesh, must be installed in the cooler inlet just ahead of the cooler. This is important to protect the cooler from the entrance of large particles which could cause damage to the evaporator.**

Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	15.4	17.6	10.0 / 2.9
50.0	70.2	9.1	6.3	16.0 / 4.7

NOTES:
1. PLACEMENT ON A LEVEL SURFACE FREE OF OBSTRUCTIONS (INCLUDING SNOW, FOR WINTER OPERATION) OR AIR RECIRCULATION ENSURES RATED PERFORMANCE, RELIABLE OPERATION AND EASE OF MAINTENANCE. SITE RESTRICTIONS MAY COMPROMISE MINIMUM CLEARANCES INDICATED BELOW, RESULTING IN UNPREDICTABLE AIR FLOW PATTERNS AND POSSIBLE DIMINISHED PERFORMANCE. YORK'S UNIT CONTROLS WILL OPTIMIZE OPERATION WITHOUT NUISANCE HIGH PRESSURE SAFETY CUTOUT; HOWEVER, THE SYSTEM DESIGNER MUST CONSIDER POTENTIAL PERFORMANCE DEGRADATION. RECOMMENDED MINUMUM CLEARANCES: COIL SIDE - 6' COMPRESSOR SIDE - 4'; CONTROL SIDE - 6'; TOP - NO OBSTRUCTIONS ALLOWED; DISTANCE BETWEEN ADJACENT UNITS - 10'. NO MORE THEN ONE ADJACENT WALL MAY BE HIGHER THEN THE UNIT.
2. WEIGHTS (LB):SHIPPING - 1,454, OPERATING - 1,481.
3. CENTER OF GRAVITY FROM ORIGIN: X= 58.6", Y= 22.9" .
4. INSTALLING CONTRACTOR MUST INCLUDE VENT AND DRAIN ACCOMODATIONS IN CHILLED WATER PIPING NEAR THE EVAPORATOR.
5. A STRAINER, PREFERABLY 40 MESH, MUST BE INSTALLED IN THE COOLER INLET JUST AHEAD OF THE COOLER. THIS IS IMPORTANT TO PROTECT THE COOLER FROM THE ENTRANCE OF LARGE PARTICLES WHICH COULD CAUSE DAMAGE TO THE EVAPORATOR.

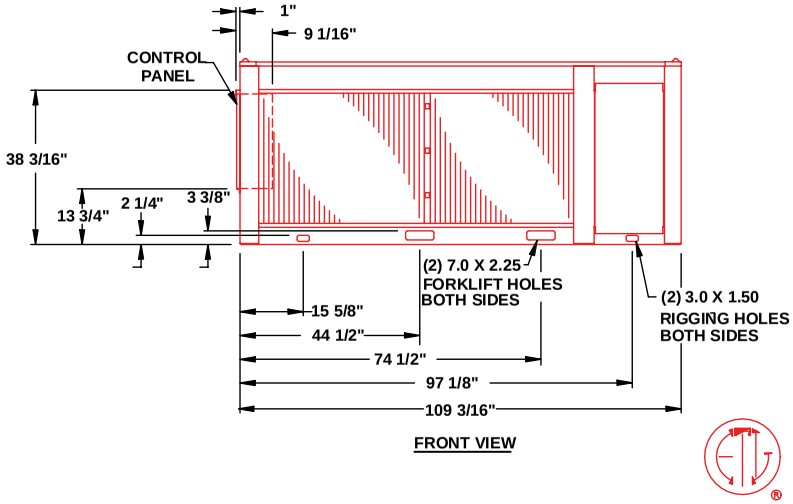






POWER: SINGLE POINT SUPPLY WITH TERMINAL BLOCK

R-410A CHILLER



PRODUCT DRAWING	Project Name : Contractors Guide	Sold To :	Date :	YORK A JOHNSON CONTROLS COMPANY
AIR-COOLED SCROLL CHILLER	Location :	Cust Purch Order# :	Rev. Date :	
MODEL: YCAL0019EE46	Engineer :	York Contract# :	Form : 150.64-EG1	
NOT FOR CONSTRUCTION	Contractor :	UNIT	Dwg. Lev. : 03/05	
	For :	TAG:	Dwg. Scale : NTS	

MODEL: YCAL0019EE46
AHRI CAPACITY 15.4 TONS

YCAL 15 TO 40

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCAL0022EE46	18.7	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.0 / 2.9
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	15.5 / 4.5
Design Flow Rate (gpm)	44.8	Min. Ambient Temp. (°F)	25.0	**Physical Data**	
Pressure Drop (ft.)	4.9	Max. Ambient Temp. (°F)	115.0	Rigging Wt. (lbs.)	1567
Fluid	Water			Operating Wt. (lbs.)	1597
Fouling Factor	0.00010				
Water Volume. (gal)	3.6				

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	20.0/20.0			
Compressor Start Current (LRA)	125.0/125.0			
Fan QTY/FLA (each)	2/1.3			

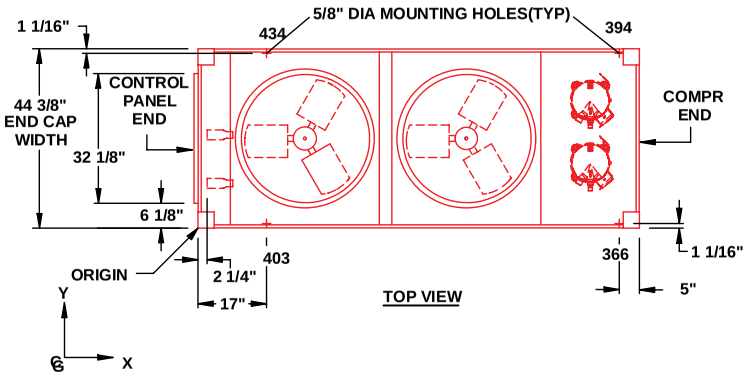
Single Point				
Min. Circuit Ampacity	48.1			
Min. Non-Fused Disconnect (Amps)	60			
Min. Dual Element Fuse Size (Amps)	60			
Max. Dual Element Fuse Size (Amps)	60			
Min. Circuit Breaker (Amps)	60			
Max. Circuit Breaker (Amps)	60			
Wire Lugs Per Phase*	1			
Wire Range (Lug Size)	(1)#14 - #2/0			
Total Amps	42.6		**Operating Condition Electrical Data**	
Inrush (PW) Amps	125.0		Compressor kW	21.5
Starter Type	Across the Line		Total Fan kW	1.0
	48.1		Total kW	22.5

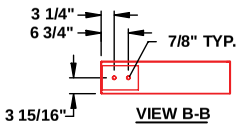
Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only **Installing contractor must include vent and drain accommodations in the chilled water piping near the evaporator. A strainer, preferably 40 mesh, must be installed in the cooler inlet just ahead of the cooler. This is important to protect the cooler from the entrance of large particles which could cause damage to the evaporator.**

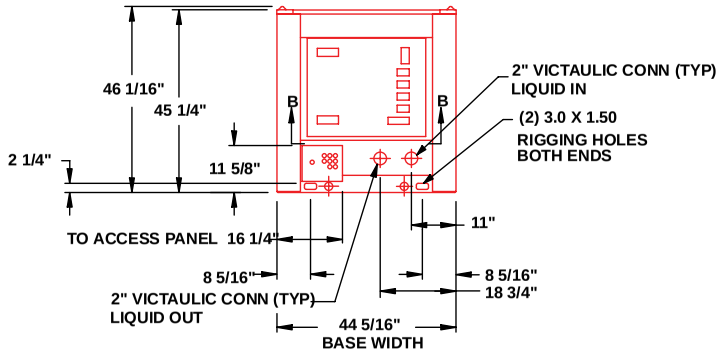
Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	18.7	21.5	10.0 / 2.9
50.0	72.1	11.5	7.2	16.9 / 5.0

NOTES:

1. PLACEMENT ON A LEVEL SURFACE FREE OF OBSTRUCTIONS (INCLUDING SNOW, FOR WINTER OPERATION) OR AIR RECIRCULATION ENSURES RATED PERFORMANCE, RELIABLE OPERATION AND EASE OF MAINTENANCE. SITE RESTRICTIONS MAY COMPROMISE MINIMUM CLEARANCES INDICATED BELOW, RESULTING IN UNPREDICTABLE AIR FLOW PATTERNS AND POSSIBLE DIMINISHED PERFORMANCE. YORK'S UNIT CONTROLS WILL OPTIMIZE OPERATION WITHOUT NUISANCE HIGH PRESSURE SAFETY CUTOUT; HOWEVER, THE SYSTEM DESIGNER MUST CONSIDER POTENTIAL PERFORMANCE DEGRADATION. RECOMMENDED MINUMUM CLEARANCES: COIL SIDE - 6' COMPRESSOR SIDE - 4'; CONTROL SIDE - 6'; TOP - NO OBSTRUCTIONS ALLOWED; DISTANCE BETWEEN ADJACENT UNITS - 10'. NO MORE THEN ONE ADJACENT WALL MAY BE HIGHER THEN THE UNIT.
2. WEIGHTS (LB):SHIPPING - 1,567, OPERATING - 1,597.
3. CENTER OF GRAVITY FROM ORIGIN: X= 58.5", Y= 22.9" .
4. INSTALLING CONTRACTOR MUST INCLUDE VENT AND DRAIN ACCOMODATIONS IN CHILLED WATER PIPING NEAR THE EVAPORATOR.
5. A STRAINER, PREFERABLY 40 MESH, MUST BE INSTALLED IN THE COOLER INLET JUST AHEAD OF THE COOLER. THIS IS IMPORTANT TO PROTECT THE COOLER FROM THE ENTRANCE OF LARGE PARTICLES WHICH COULD CAUSE DAMAGE TO THE EVAPORATOR.

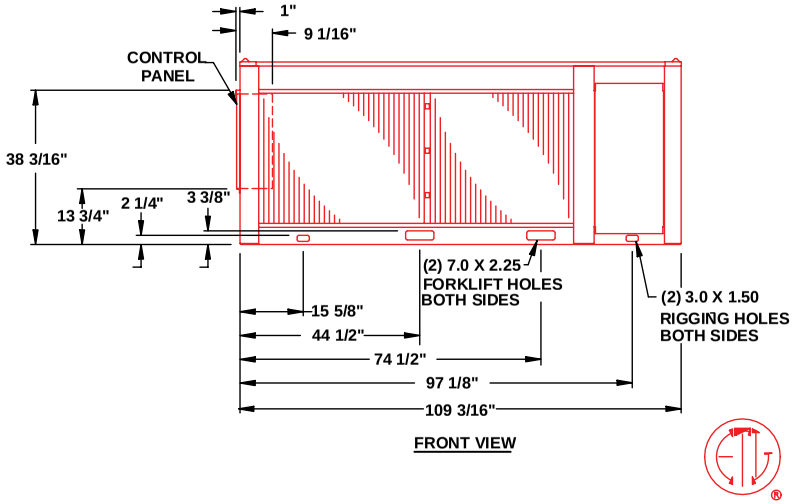






POWER: SINGLE POINT SUPPLY WITH TERMINAL BLOCK

R-410A CHILLER



PRODUCT DRAWING AIR-COOLED SCROLL CHILLER MODEL: YCAL0022EE46 NOT FOR CONSTRUCTION	Project Name : Contractors Guide Location : Engineer : Contractor : For :	Sold To : Cust Purch Order# : York Contract# : UNIT TAG:	Date : Rev. Date : Form : 150.64-EG1 Dwg. Lev. : 03/05 Dwg. Scale : NTS	YORK® A JOHNSON CONTROLS COMPANY

YORK® A JOHNSON CONTROLS COMPANY

MODEL: YCAL0022EE46
AHRI CAPACITY 18.7 TONS

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCAL0028EE46	25.6	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.1 / 3.0
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	13.4 / 3.9
Design Flow Rate (gpm)	61.3	Min. Ambient Temp. (°F)	25.0	**Physical Data**	
Pressure Drop (ft.)	8.9	Max. Ambient Temp. (°F)	115.0	Rigging Wt. (lbs.)	1798
Fluid	Water			Operating Wt. (lbs.)	1835
Fouling Factor	0.00010				
Water Volume. (gal)	2.5				

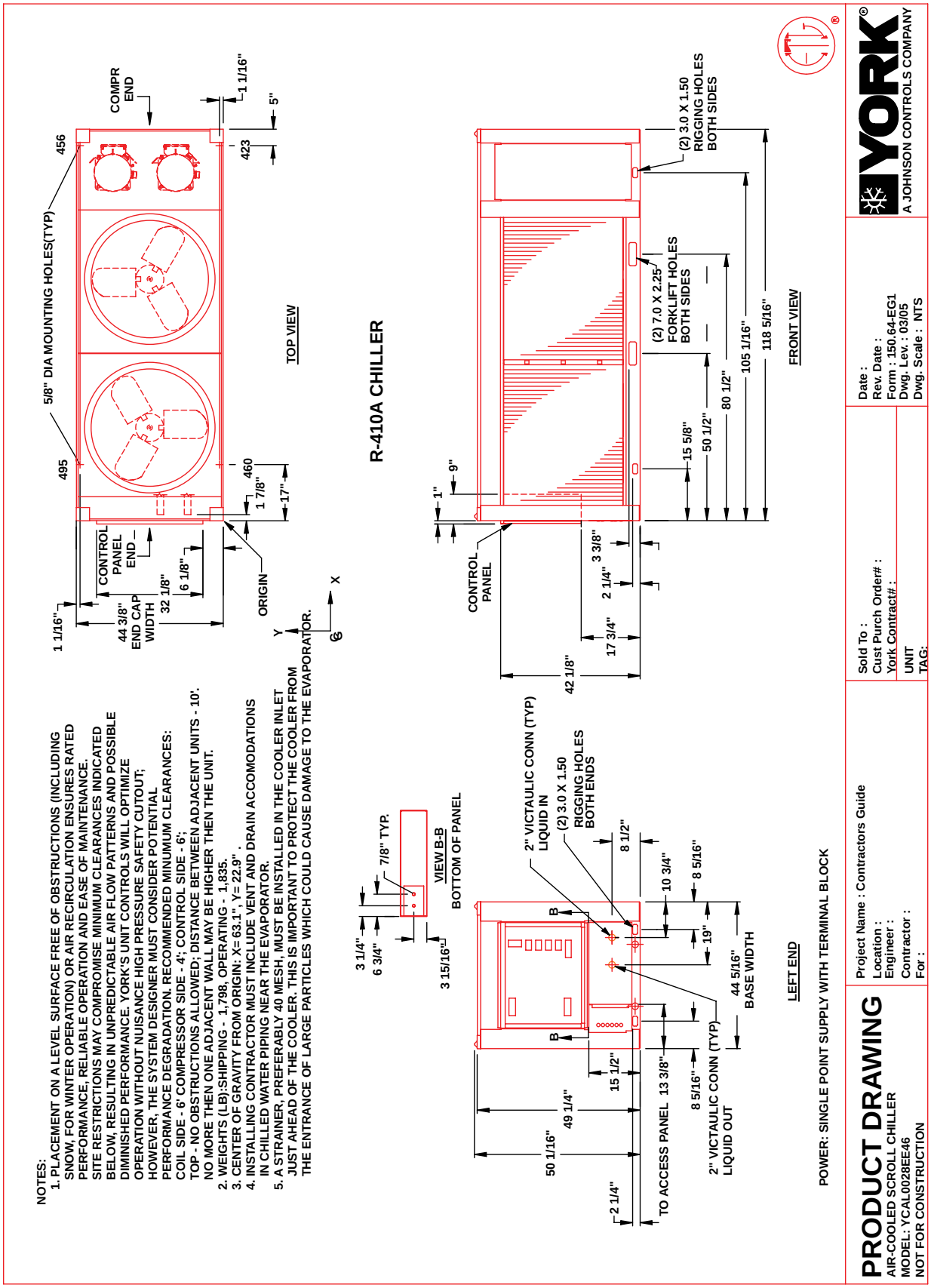
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	23.1/26.9			
Compressor Start Current (LRA)	150.0/187.0			
Fan QTY/FLA (each)	2/4.0			

Single Point				
Min. Circuit Ampacity	64.7			
Min. Non-Fused Disconnect (Amps)	100			
Min. Dual Element Fuse Size (Amps)	80			
Max. Dual Element Fuse Size (Amps)	90			
Min. Circuit Breaker (Amps)	80			
Max. Circuit Breaker (Amps)	90			
Wire Lugs Per Phase*	1			
Wire Range (Lug Size)	(1)#14 - #2/0			
Total Amps	58.0		**Operating Condition Electrical Data**	
Inrush (PW) Amps	187.0		Compressor kW	27.5
Starter Type	Across the Line		Total Fan kW	3.0
			Total kW	30.5

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only **Installing contractor must include vent and drain accommodations in the chilled water piping near the evaporator. A strainer, preferably 40 mesh, must be installed in the cooler inlet just ahead of the cooler. This is important to protect the cooler from the entrance of large particles which could cause damage to the evaporator.**

Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	25.6	27.5	10.1 / 3.0
50.8	71.9	15.7	11.7	14.3 / 4.2

MODEL: YCAL0028EE46
AHRI CAPACITY 25.6 TONS



NOTES:
1. PLACEMENT ON A LEVEL SURFACE FREE OF OBSTRUCTIONS (INCLUDING SNOW, FOR WINTER OPERATION) OR AIR RECIRCULATION ENSURES RATED PERFORMANCE, RELIABLE OPERATION AND EASE OF MAINTENANCE. SITE RESTRICTIONS MAY COMPROMISE MINIMUM CLEARANCES INDICATED BELOW, RESULTING IN UNPREDICTABLE AIR FLOW PATTERNS AND POSSIBLE DIMINISHED PERFORMANCE. YORK'S UNIT CONTROLS WILL OPTIMIZE OPERATION WITHOUT NUISANCE HIGH PRESSURE SAFETY CUTOUT; HOWEVER, THE SYSTEM DESIGNER MUST CONSIDER POTENTIAL PERFORMANCE DEGRADATION. RECOMMENDED MINUMUM CLEARANCES: COIL SIDE - 6' COMPRESSOR SIDE - 4'; CONTROL SIDE - 6'; TOP - NO OBSTRUCTIONS ALLOWED; DISTANCE BETWEEN ADJACENT UNITS - 10'. NO MORE THEN ONE ADJACENT WALL MAY BE HIGHER THEN THE UNIT.
2. WEIGHTS (LB):SHIPPING - 1,798, OPERATING - 1,835.
3. CENTER OF GRAVITY FROM ORIGIN: X= 63.1", Y= 22.9" .
4. INSTALLING CONTRACTOR MUST INCLUDE VENT AND DRAIN ACCOMODATIONS IN CHILLED WATER PIPING NEAR THE EVAPORATOR.
5. A STRAINER, PREFERABLY 40 MESH, MUST BE INSTALLED IN THE COOLER INLET JUST AHEAD OF THE COOLER. THIS IS IMPORTANT TO PROTECT THE COOLER FROM THE ENTRANCE OF LARGE PARTICLES WHICH COULD CAUSE DAMAGE TO THE EVAPORATOR.

POWER: SINGLE POINT SUPPLY WITH TERMINAL BLOCK

PRODUCT DRAWING
AIR-COOLED SCROLL CHILLER
MODEL: YCAL0028EE46
NOT FOR CONSTRUCTION

Project Name : Contractors Guide
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :
UNIT
TAG:

Date :
Rev. Date :
Form : 150.64-EG1
Dwg. Lev. : 03/05
Dwg. Scale : NTS

YORK® A JOHNSON CONTROLS COMPANY

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCAL0033EE46	28.6	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.5 / 3.1
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	14.5 / 4.2
Design Flow Rate (gpm)	68.4	Min. Ambient Temp. (°F)	25.0	**Physical Data**	
Pressure Drop (ft.)	11.0	Max. Ambient Temp. (°F)	115.0	Rigging Wt. (lbs.)	2034
Fluid	Water			Operating Wt. (lbs.)	2077
Fouling Factor	0.00010				
Water Volume. (gal)	5.2				

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	26.9/26.9			
Compressor Start Current (LRA)	187.0/187.0			
Fan QTY/FLA (each)	2/4.0			

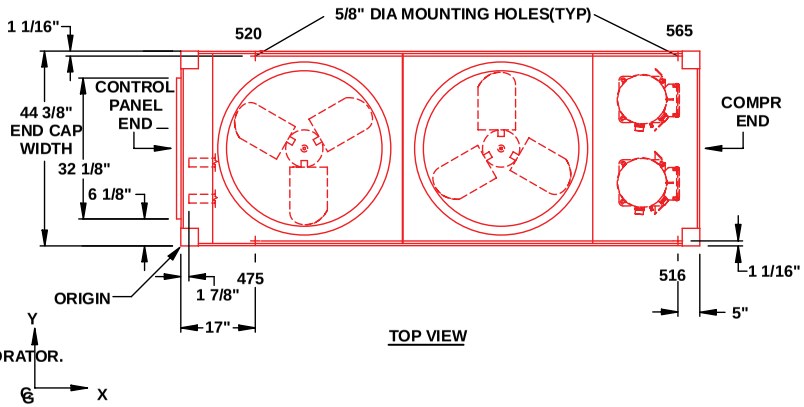
Single Point				
Min. Circuit Ampacity	66.7			
Min. Non-Fused Disconnect (Amps)	100			
Min. Dual Element Fuse Size (Amps)	80			
Max. Dual Element Fuse Size (Amps)	90			
Min. Circuit Breaker (Amps)	80			
Max. Circuit Breaker (Amps)	90			
Wire Lugs Per Phase*	1			
Wire Range (Lug Size)	(1)#14 - #2/0			
Total Amps	61.8		**Operating Condition Electrical Data**	
Inrush (PW) Amps	187.0		Compressor kW	29.6
Starter Type	Across the Line		Total Fan kW	3.0
			Total kW	32.6

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only **Installing contractor must include vent and drain accommodations in the chilled water piping near the evaporator. A strainer, preferably 40 mesh, must be installed in the cooler inlet just ahead of the cooler. This is important to protect the cooler from the entrance of large particles which could cause damage to the evaporator.**

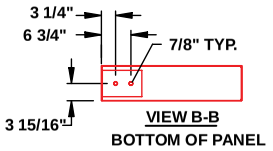
Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	28.6	29.6	10.5 / 3.1
50.0	70.0	16.6	11.2	15.7 / 4.6

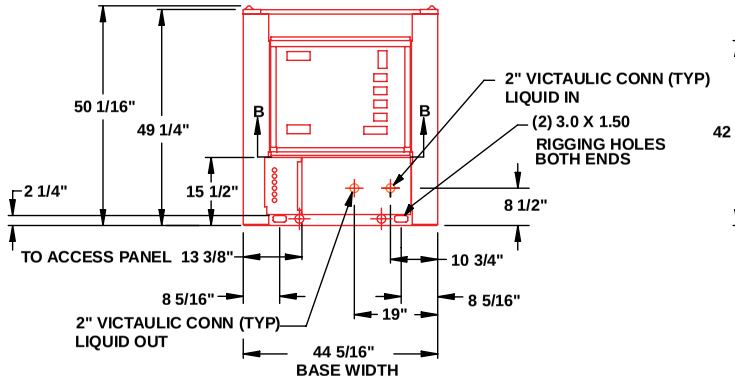
NOTES:

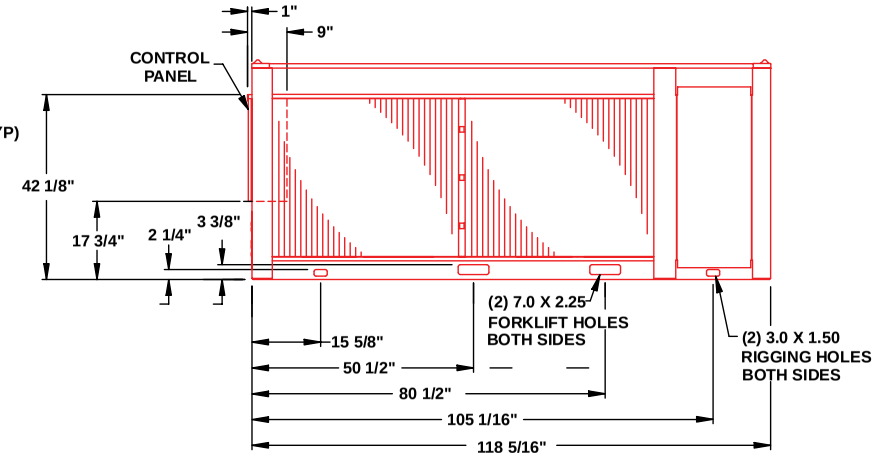
1. PLACEMENT ON A LEVEL SURFACE FREE OF OBSTRUCTIONS (INCLUDING SNOW, FOR WINTER OPERATION) OR AIR RECIRCULATION ENSURES RATED PERFORMANCE, RELIABLE OPERATION AND EASE OF MAINTENANCE. SITE RESTRICTIONS MAY COMPROMISE MINIMUM CLEARANCES INDICATED BELOW, RESULTING IN UNPREDICTABLE AIR FLOW PATTERNS AND POSSIBLE DIMINISHED PERFORMANCE. YORK'S UNIT CONTROLS WILL OPTIMIZE OPERATION WITHOUT NUISANCE HIGH PRESSURE SAFETY CUTOUT; HOWEVER, THE SYSTEM DESIGNER MUST CONSIDER POTENTIAL PERFORMANCE DEGRADATION. RECOMMENDED MINUMUM CLEARANCES: COIL SIDE - 6' COMPRESSOR SIDE - 4'; CONTROL SIDE - 6'; TOP - NO OBSTRUCTIONS ALLOWED; DISTANCE BETWEEN ADJACENT UNITS - 10'. NO MORE THEN ONE ADJACENT WALL MAY BE HIGHER THEN THE UNIT.
2. WEIGHTS (LB):SHIPPING - 2,034, OPERATING - 2,077.
3. CENTER OF GRAVITY FROM ORIGIN: X= 67.1", Y= 23.1" .
4. INSTALLING CONTRACTOR MUST INCLUDE VENT AND DRAIN ACCOMODATIONS IN CHILLED WATER PIPING NEAR THE EVAPORATOR.
5. A STRAINER, PREFERABLY 40 MESH, MUST BE INSTALLED IN THE COOLER INLET JUST AHEAD OF THE COOLER. THIS IS IMPORTANT TO PROTECT THE COOLER FROM THE ENTRANCE OF LARGE PARTICLES WHICH COULD CAUSE DAMAGE TO THE EVAPORATOR.



R-410A CHILLER







POWER: SINGLE POINT SUPPLY WITH TERMINAL BLOCK

PRODUCT DRAWING AIR-COOLED SCROLL CHILLER MODEL: YCAL0033EE46 NOT FOR CONSTRUCTION	Project Name : Contractors Guide Location : Engineer : Contractor : For :	Sold To : Cust Purch Order# : York Contract# : UNIT TAG:	Date : Rev. Date : Form : 150.64-EG1 Dwg. Lev. : 03/05 Dwg. Scale : NTS

YORK® A JOHNSON CONTROLS COMPANY

YORK® A JOHNSON CONTROLS COMPANY

MODEL: YCAL0033EE46
AHRI CAPACITY 28.6 TONS

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCAL0043EE46	37.2	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.1 / 3.0
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	14.5 / 4.2
Design Flow Rate (gpm)	89.2	Min. Ambient Temp. (°F)	25.0	**Physical Data**	
Pressure Drop (ft.)	6.1	Max. Ambient Temp. (°F)	115.0	Rigging Wt. (lbs.)	2942
Fluid	Water			Operating Wt. (lbs.)	2967
Fouling Factor	0.00010				
Water Volume. (gal)	2.7				

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	20.0/20.0	20.0/20.0		
Compressor Start Current (LRA)	125.0/125.0	125.0/125.0		
Fan QTY/FLA (each)	2/3.4	2/3.4		

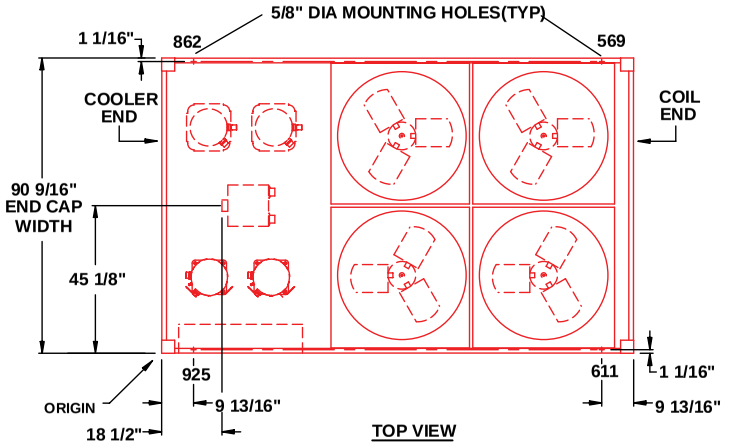
Single Point				
Min. Circuit Ampacity	99.2			
Min. Non-Fused Disconnect (Amps)	150			
Min. Dual Element Fuse Size (Amps)	110			
Max. Dual Element Fuse Size (Amps)	110			
Min. Circuit Breaker (Amps)	110			
Max. Circuit Breaker (Amps)	110			
Wire Lugs Per Phase*	1			
Wire Range (Lug Size)	(1)#14 - #2/0			
Total Amps	93.7		**Operating Condition Electrical Data**	
Inrush (PW) Amps	125.0		Compressor kW	38.8
Starter Type	Across the Line		Total Fan kW	5.6
			Total kW	44.4

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only **Installing contractor must include vent and drain accommodations in the chilled water piping near the evaporator. A strainer, preferably 40 mesh, must be installed in the cooler inlet just ahead of the cooler. This is important to protect the cooler from the entrance of large particles which could cause damage to the evaporator.**

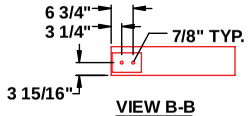
Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	37.2	38.8	10.1 / 3.0
75.0	83.3	30.0	24.4	12.0 / 3.5
50.0	69.0	21.1	14.2	14.9 / 4.4
25.0	55.0	11.5	6.6	17.3 / 5.1

NOTES:

1. PLACEMENT ON A LEVEL SURFACE FREE OF OBSTRUCTIONS (INCLUDING SNOW, FOR WINTER OPERATION) OR AIR RECIRCULATION ENSURES RATED PERFORMANCE, RELIABLE OPERATION AND EASE OF MAINTENANCE. SITE RESTRICTIONS MAY COMPROMISE MINIMUM CLEARANCES INDICATED BELOW, RESULTING IN UNPREDICTABLE AIR FLOW PATTERNS AND POSSIBLE DIMINISHED PERFORMANCE. YORK'S UNIT CONTROLS WILL OPTIMIZE OPERATION WITHOUT NUISANCE HIGH PRESSURE SAFETY CUTOUT; HOWEVER, THE SYSTEM DESIGNER MUST CONSIDER POTENTIAL PERFORMANCE DEGRADATION. RECOMMENDED MINUMUM CLEARANCES: COIL SIDE - 6' COMPRESSOR SIDE - 4'; CONTROL SIDE - 6'; TOP - NO OBSTRUCTIONS ALLOWED; DISTANCE BETWEEN ADJACENT UNITS - 10'. NO MORE THEN ONE ADJACENT WALL MAY BE HIGHER THEN THE UNIT.
2. WEIGHTS (LB):SHIPPING - 2,942, OPERATING - 2,967.
3. CENTER OF GRAVITY FROM ORIGIN: X= 59.6", Y= 43.6" .
4. INSTALLING CONTRACTOR MUST INCLUDE VENT AND DRAIN ACCOMODATIONS IN CHILLED WATER PIPING NEAR THE EVAPORATOR.
5. A STRAINER, PREFERABLY 40 MESH, MUST BE INSTALLED IN THE COOLER INLET JUST AHEAD OF THE COOLER. THIS IS IMPORTANT TO PROTECT THE COOLER FROM THE ENTRANCE OF LARGE PARTICLES WHICH COULD CAUSE DAMAGE TO THE EVAPORATOR.

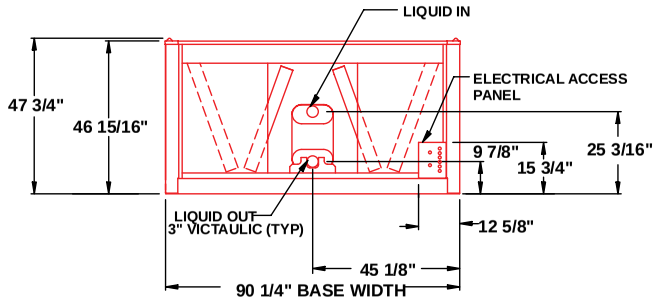


TOP VIEW

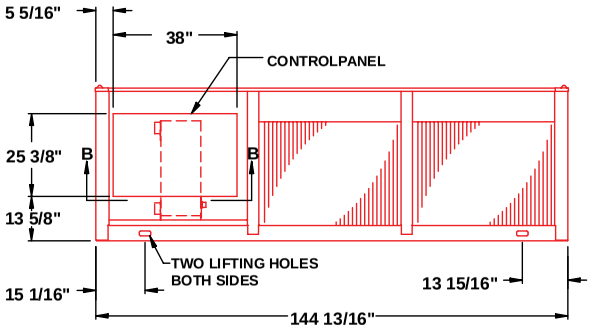


VIEW B-B

BOTTOM OF PANEL



LEFT END



FRONT VIEW

POWER: SINGLE POINT SUPPLY WITH TERMINAL BLOCK

PRODUCT DRAWING AIR-COOLED SCROLL CHILLER MODEL: YCAL0043EE46 NOT FOR CONSTRUCTION	Project Name : Contractors Guide Location : Engineer : Contractor : For :	Sold To : Cust Purch Order# : York Contract# : UNIT TAG:	Date : Rev. Date : Form : 150.62-EG1 Dwg. Lev. : 01/02 Dwg. Scale : NTS	YORK® A JOHNSON CONTROLS COMPANY

YORK® A JOHNSON CONTROLS COMPANY

MODEL: YCAL0043EE46
AHRI CAPACITY 37.2 TONS

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCAL0046EE46	39.4	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.2 / 3.0
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	14.7 / 4.3
Design Flow Rate (gpm)	94.5	Min. Ambient Temp. (°F)	25.0	**Physical Data**	
Pressure Drop (ft.)	5.1	Max. Ambient Temp. (°F)	115.0	Rigging Wt. (lbs.)	2968
Fluid	Water			Operating Wt. (lbs.)	3000
Fouling Factor	0.00010				
Water Volume. (gal)	3.5				

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	20.7/20.7	20.0/20.0		
Compressor Start Current (LRA)	125.0/125.0	125.0/125.0		
Fan QTY/FLA (each)	2/3.4	2/3.4		

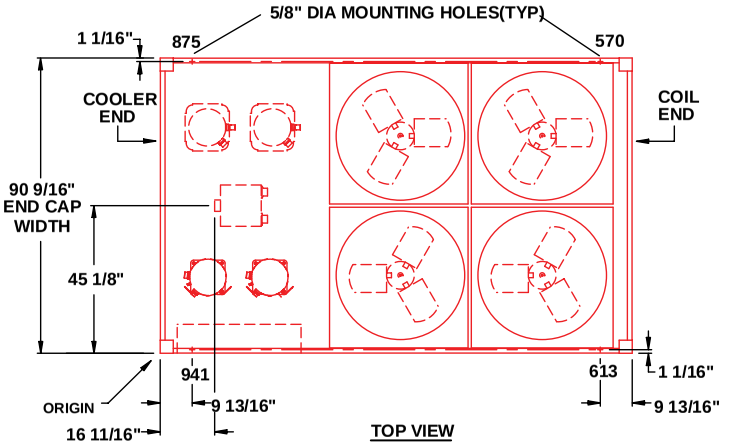
Single Point				
Min. Circuit Ampacity	100.8			
Min. Non-Fused Disconnect (Amps)	150			
Min. Dual Element Fuse Size (Amps)	110			
Max. Dual Element Fuse Size (Amps)	110			
Min. Circuit Breaker (Amps)	110			
Max. Circuit Breaker (Amps)	110			
Wire Lugs Per Phase*	1			
Wire Range (Lug Size)	(1)#14 - #2/0			
Total Amps	95.1		**Operating Condition Electrical Data**	
Inrush (PW) Amps	125.0		Compressor kW	41.0
Starter Type	Across the Line		Total Fan kW	5.6
			Total kW	46.6

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only **Installing contractor must include vent and drain accommodations in the chilled water piping near the evaporator. A strainer, preferably 40 mesh, must be installed in the cooler inlet just ahead of the cooler. This is important to protect the cooler from the entrance of large particles which could cause damage to the evaporator.**

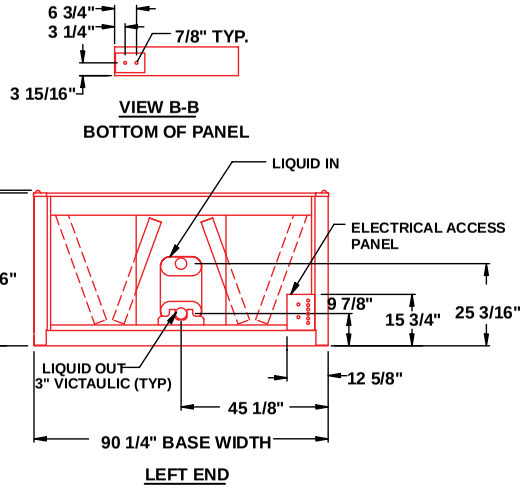
Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	39.4	41.0	10.2 / 3.0
73.2	82.9	31.5	25.2	12.3 / 3.6
50.0	69.1	22.4	14.9	15.2 / 4.5
23.2	55.0	11.6	6.5	17.5 / 5.1

NOTES:

1. PLACEMENT ON A LEVEL SURFACE FREE OF OBSTRUCTIONS (INCLUDING SNOW, FOR WINTER OPERATION) OR AIR RECIRCULATION ENSURES RATED PERFORMANCE, RELIABLE OPERATION AND EASE OF MAINTENANCE. SITE RESTRICTIONS MAY COMPROMISE MINIMUM CLEARANCES INDICATED BELOW, RESULTING IN UNPREDICTABLE AIR FLOW PATTERNS AND POSSIBLE DIMINISHED PERFORMANCE. YORK'S UNIT CONTROLS WILL OPTIMIZE OPERATION WITHOUT NUISANCE HIGH PRESSURE SAFETY CUTOUT; HOWEVER, THE SYSTEM DESIGNER MUST CONSIDER POTENTIAL PERFORMANCE DEGRADATION. RECOMMENDED MINUMUM CLEARANCES:
   COIL SIDE - 6' COMPRESSOR SIDE - 4'; CONTROL SIDE - 6';
   TOP - NO OBSTRUCTIONS ALLOWED; DISTANCE BETWEEN ADJACENT UNITS - 10'.
   NO MORE THEN ONE ADJACENT WALL MAY BE HIGHER THEN THE UNIT.
2. WEIGHTS (LB):SHIPPING - 2,968, OPERATING - 3,000.
3. CENTER OF GRAVITY FROM ORIGIN: X= 59.2", Y= 43.5" .
4. INSTALLING CONTRACTOR MUST INCLUDE VENT AND DRAIN ACCOMODATIONS IN CHILLED WATER PIPING NEAR THE EVAPORATOR.
5. A STRAINER, PREFERABLY 40 MESH, MUST BE INSTALLED IN THE COOLER INLET JUST AHEAD OF THE COOLER. THIS IS IMPORTANT TO PROTECT THE COOLER FROM THE ENTRANCE OF LARGE PARTICLES WHICH COULD CAUSE DAMAGE TO THE EVAPORATOR.

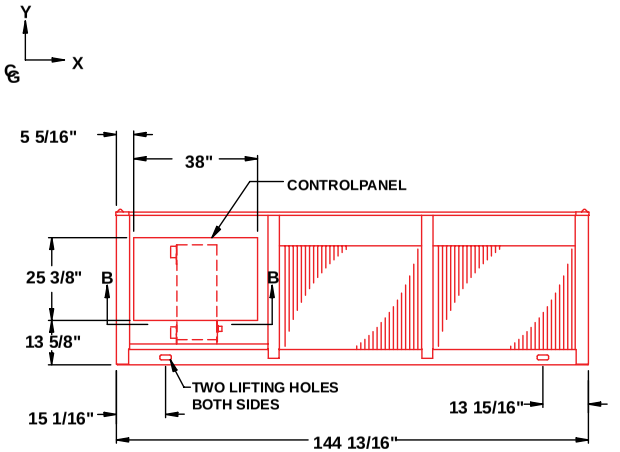


TOP VIEW



VIEW B-B
BOTTOM OF PANEL

LEFT END



FRONT VIEW

POWER: SINGLE POINT SUPPLY WITH TERMINAL BLOCK

PRODUCT DRAWING AIR-COOLED SCROLL CHILLER MODEL: YCAL0046EE46 NOT FOR CONSTRUCTION	Project Name : Contractors Guide Location : Engineer : Contractor : For :	Sold To : Cust Purch Order# : York Contract# : UNIT TAG:	Date : Rev. Date : Form : 150.62-EG1 Dwg. Lev. : 01/02 Dwg. Scale : NTS

YORK® A JOHNSON CONTROLS COMPANY

YORK® A JOHNSON CONTROLS COMPANY

MODEL: YCAL0046EE46
AHRI CAPACITY 39.4 TONS

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCAL0052EE46	46.2	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.2 / 3.0
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	15.1 / 4.4
Design Flow Rate (gpm)	110.8	Min. Ambient Temp. (°F)	25.0	**Physical Data**	
Pressure Drop (ft.)	9.2	Max. Ambient Temp. (°F)	115.0	Rigging Wt. (lbs.)	3170
Fluid	Water			Operating Wt. (lbs.)	3208
Fouling Factor	0.00010				
Water Volume. (gal)	3.5				

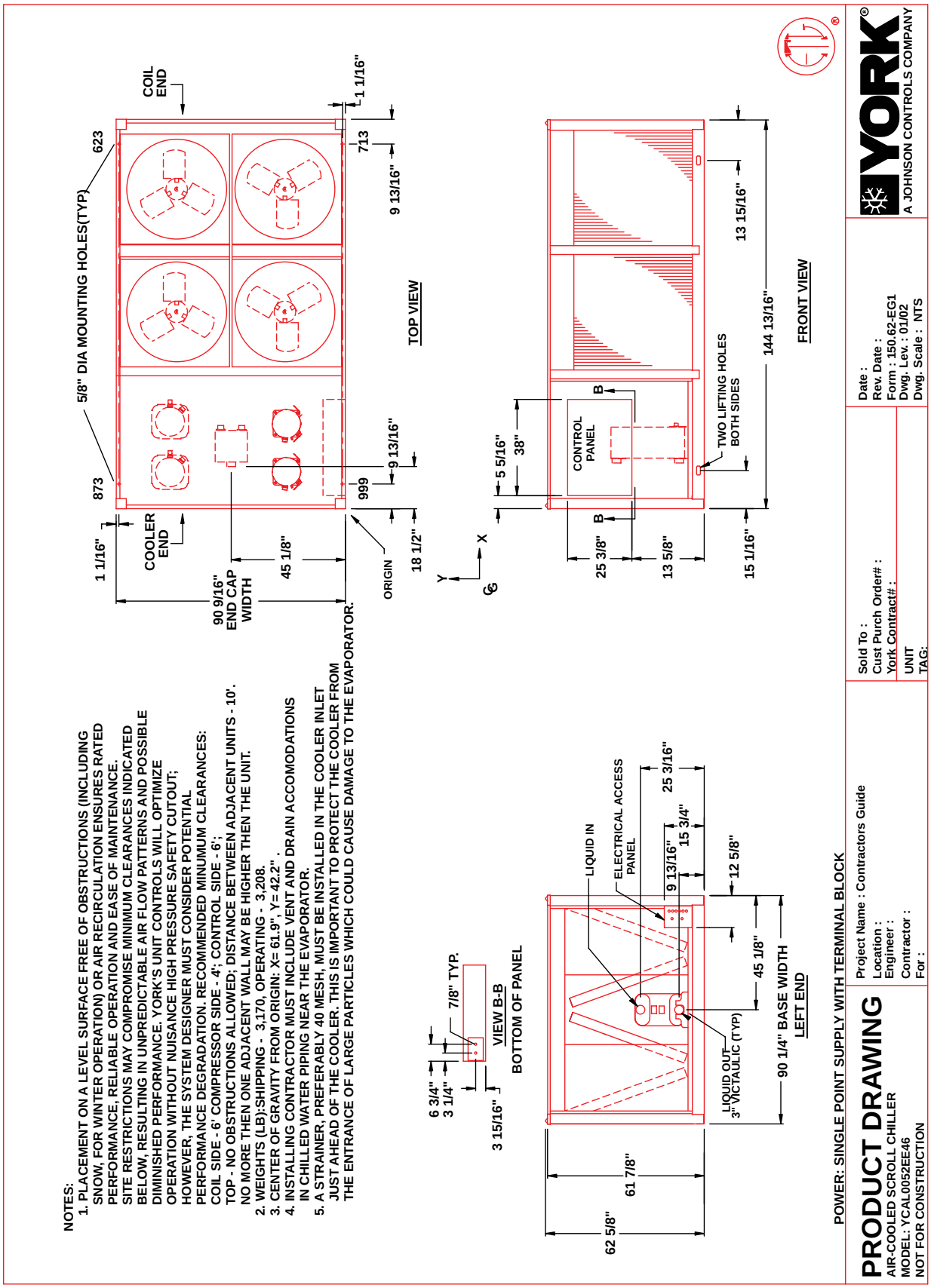
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	23.1/23.1	23.1/23.1		
Compressor Start Current (LRA)	150.0/150.0	150.0/150.0		
Fan QTY/FLA (each)	2/4.0	2/4.0		

Single Point				
Min. Circuit Ampacity	114.2			
Min. Non-Fused Disconnect (Amps)	150			
Min. Dual Element Fuse Size (Amps)	125			
Max. Dual Element Fuse Size (Amps)	125			
Min. Circuit Breaker (Amps)	125			
Max. Circuit Breaker (Amps)	125			
Wire Lugs Per Phase*	1			
Wire Range (Lug Size)	(1)#14 - #2/0			
Total Amps	108.4		**Operating Condition Electrical Data**	
Inrush (PW) Amps	150.0		Compressor kW	47.9
Starter Type	Across the Line		Total Fan kW	6.7
			Total kW	54.6

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only **Installing contractor must include vent and drain accommodations in the chilled water piping near the evaporator. A strainer, preferably 40 mesh, must be installed in the cooler inlet just ahead of the cooler. This is important to protect the cooler from the entrance of large particles which could cause damage to the evaporator.**

Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	46.2	47.9	10.2 / 3.0
75.0	83.4	37.3	30.7	12.0 / 3.5
50.0	69.5	26.6	17.6	15.2 / 4.5
25.0	55.0	15.1	7.8	19.1 / 5.6

MODEL: YCAL0052EE46
AHRI CAPACITY 46.2 TONS



YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCAL0056EE46	56.2	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.1 / 3.0
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	14.7 / 4.3
Design Flow Rate (gpm)	134.7	Min. Ambient Temp. (°F)	25.0	**Physical Data**	
Pressure Drop (ft.)	9.9	Max. Ambient Temp. (°F)	115.0	Rigging Wt. (lbs.)	3206
Fluid	Water			Operating Wt. (lbs.)	3244
Fouling Factor	0.00010				
Water Volume. (gal)	4.1				

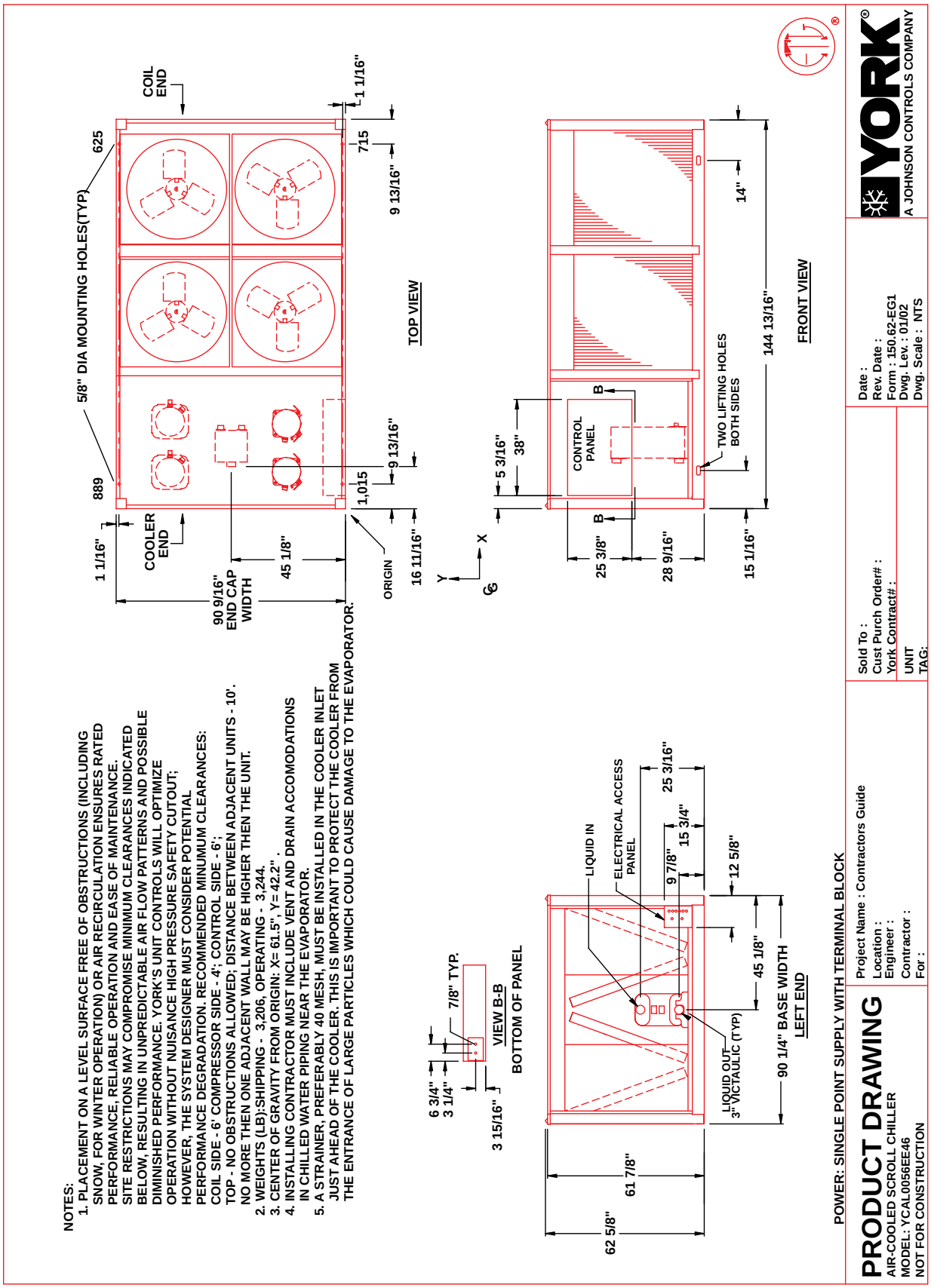
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	26.9/26.9	26.9/26.9		
Compressor Start Current (LRA)	187.0/187.0	187.0/187.0		
Fan QTY/FLA (each)	2/4.0	2/4.0		

Single Point				
Min. Circuit Ampacity	130.3			
Min. Non-Fused Disconnect (Amps)	150			
Min. Dual Element Fuse Size (Amps)	150			
Max. Dual Element Fuse Size (Amps)	150			
Min. Circuit Breaker (Amps)	150			
Max. Circuit Breaker (Amps)	150			
Wire Lugs Per Phase*	1			
Wire Range (Lug Size)	(1)#14 - #2/0			
Total Amps	123.6		**Operating Condition Electrical Data**	
Inrush (PW) Amps	187.0		Compressor kW	60.3
Starter Type	Across the Line		Total Fan kW	6.7
			Total kW	67.0

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only **Installing contractor must include vent and drain accommodations in the chilled water piping near the evaporator. A strainer, preferably 40 mesh, must be installed in the cooler inlet just ahead of the cooler. This is important to protect the cooler from the entrance of large particles which could cause damage to the evaporator.**

Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	56.2	60.3	10.1 / 3.0
75.0	83.6	45.5	38.8	12.0 / 3.5
50.0	69.4	32.2	22.6	14.9 / 4.4
25.0	55.0	18.0	10.2	18.1 / 5.3

MODEL: YCAL0056EE46
AHRI CAPACITY 56.2 TONS



YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCAL0066EE46	66.1	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.1 / 3.0
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	15.1 / 4.4
Design Flow Rate (gpm)	158.4	Min. Ambient Temp. (°F)	25.0	**Physical Data**	
Pressure Drop (ft.)	8.3	Max. Ambient Temp. (°F)	115.0	Rigging Wt. (lbs.)	4097
Fluid	Water			Operating Wt. (lbs.)	4142
Fouling Factor	0.00010				
Water Volume. (gal)	4.9				

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	33.9/33.9	26.9/26.9		
Compressor Start Current (LRA)	250.0/250.0	187.0/187.0		
Fan QTY/FLA (each)	2/4.0	2/1.3		

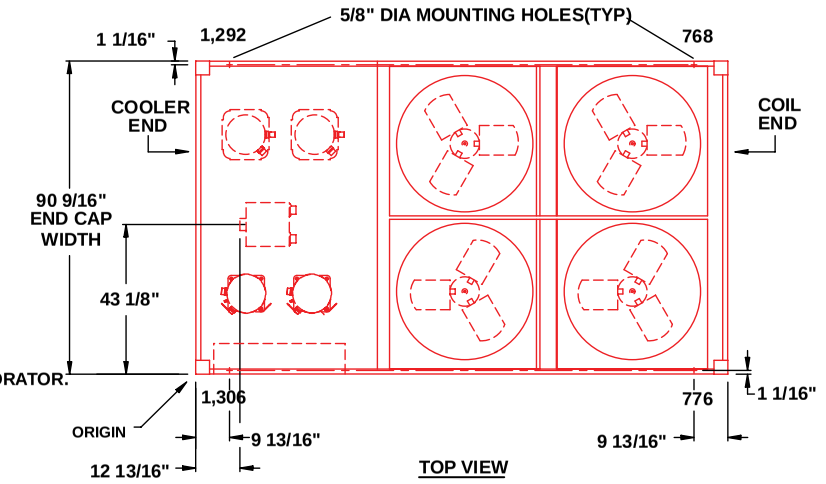
Single Point				
Min. Circuit Ampacity	146.0			
Min. Non-Fused Disconnect (Amps)	200			
Min. Dual Element Fuse Size (Amps)	175			
Max. Dual Element Fuse Size (Amps)	175			
Min. Circuit Breaker (Amps)	175			
Max. Circuit Breaker (Amps)	175			
Wire Lugs Per Phase*	1			
Wire Range (Lug Size)	(1)#6 - 350			
Total Amps	137.6		**Operating Condition Electrical Data**	
Inrush (PW) Amps	250.0		Compressor kW	72.1
Starter Type	Across the Line		Total Fan kW	6.7
			Total kW	78.8

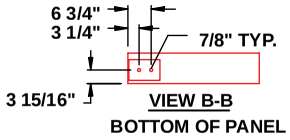
Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only **Installing contractor must include vent and drain accommodations in the chilled water piping near the evaporator. A strainer, preferably 40 mesh, must be installed in the cooler inlet just ahead of the cooler. This is important to protect the cooler from the entrance of large particles which could cause damage to the evaporator.**

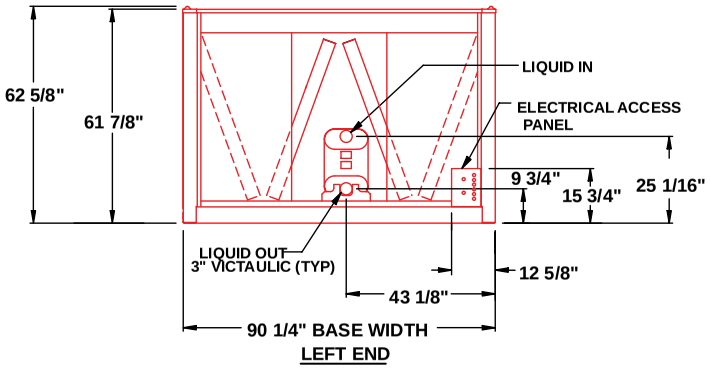
Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	66.1	72.1	10.1 / 3.0
71.5	82.6	52.5	42.2	12.9 / 3.8
50.0	69.3	37.8	26.6	15.2 / 4.5
21.5	55.0	18.5	10.3	18.5 / 5.4

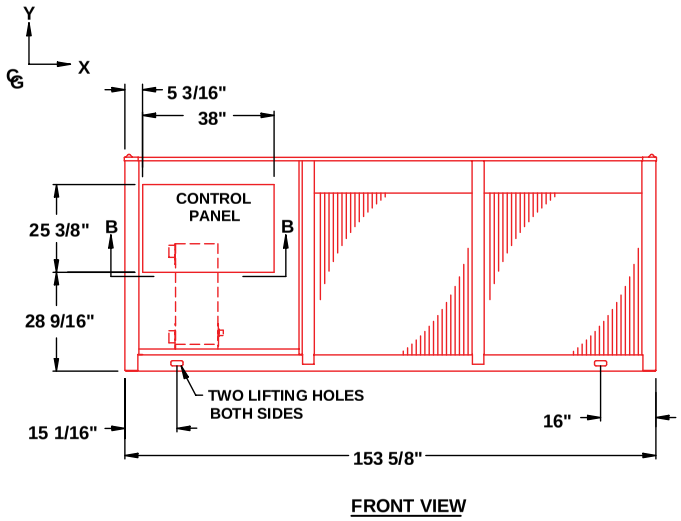
NOTES:

1. PLACEMENT ON A LEVEL SURFACE FREE OF OBSTRUCTIONS (INCLUDING SNOW, FOR WINTER OPERATION) OR AIR RECIRCULATION ENSURES RATED PERFORMANCE, RELIABLE OPERATION AND EASE OF MAINTENANCE. SITE RESTRICTIONS MAY COMPROMISE MINIMUM CLEARANCES INDICATED BELOW, RESULTING IN UNPREDICTABLE AIR FLOW PATTERNS AND POSSIBLE DIMINISHED PERFORMANCE. YORK'S UNIT CONTROLS WILL OPTIMIZE OPERATION WITHOUT NUISANCE HIGH PRESSURE SAFETY CUTOUT; HOWEVER, THE SYSTEM DESIGNER MUST CONSIDER POTENTIAL PERFORMANCE DEGRADATION. RECOMMENDED MINUMUM CLEARANCES: COIL SIDE - 6' COMPRESSOR SIDE - 4'; CONTROL SIDE - 6'; TOP - NO OBSTRUCTIONS ALLOWED; DISTANCE BETWEEN ADJACENT UNITS - 10'. NO MORE THEN ONE ADJACENT WALL MAY BE HIGHER THEN THE UNIT.
2. WEIGHTS (LB):SHIPPING - 4,097, OPERATING - 4,142.
3. CENTER OF GRAVITY FROM ORIGIN: X= 59.7", Y= 44.9" .
4. INSTALLING CONTRACTOR MUST INCLUDE VENT AND DRAIN ACCOMODATIONS IN CHILLED WATER PIPING NEAR THE EVAPORATOR.
5. A STRAINER, PREFERABLY 40 MESH, MUST BE INSTALLED IN THE COOLER INLET JUST AHEAD OF THE COOLER. THIS IS IMPORTANT TO PROTECT THE COOLER FROM THE ENTRANCE OF LARGE PARTICLES WHICH COULD CAUSE DAMAGE TO THE EVAPORATOR.









POWER: SINGLE POINT SUPPLY WITH TERMINAL BLOCK

PRODUCT DRAWING AIR-COOLED SCROLL CHILLER MODEL: YCAL0066EE46 NOT FOR CONSTRUCTION	Project Name : Contractors Guide Location : Engineer : Contractor : For :	Sold To : Cust Purch Order# : York Contract# : UNIT TAG:	Date : Rev. Date : Form : 150.62-EG1 Dwg. Lev. : 01/02 Dwg. Scale : NTS

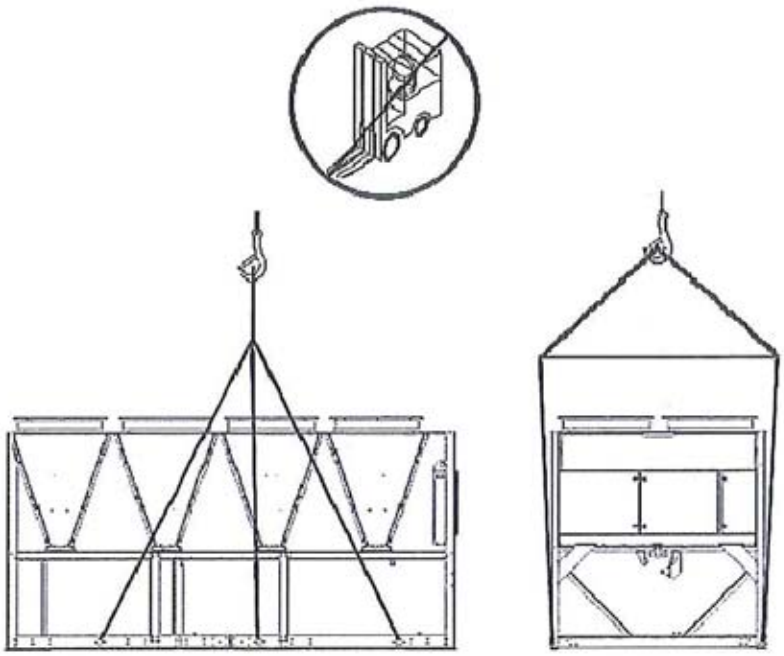
YORK® A JOHNSON CONTROLS COMPANY

YORK® A JOHNSON CONTROLS COMPANY

MODEL: YCAL0066EE46
AHRI CAPACITY 66.1 TONS

YLAA
70 to 175 Tons
Air Cooled Scroll Chiller

YLAA RIGGING



Typical Lifting Arrangement - 8 Fan Models

Typical Lifting Arrangement - 4 Fan Models

Use spreader bars to avoid lifting chains hitting the chiller.

CAUTION — Never lift the chiller using a forklift or by hooking to the top rails. Use only the lifting holes provided.

Lifting instructions are placed on a label on the chiller and on the shipping bag.

AIR COOLED SCROLL CHILLER
YLAA - 70 to 175 TONS

BENEFITS

- Optimized design for R-410A refrigerant (No EPA Phase out date)
- Available in 2-tiers of efficiency:
  - Standard Efficiency: 9.6 – 10.0 EER
  - High Efficiency: 10.1 an above EER
- Best Part Load Efficiency with an IPLV as high as 15.9.
- The YLAA always qualifies for LEED credit through Enhanced Refrigerant Management.
  - This chiller utilizes 30-50% less refrigerant than conventional scroll chiller design.
- Standard ambient operation from 30 to 115-deg F
- Maintenance free, hermetic scroll compressor utilizes fewer moving parts to minimize breakdown
- Components and circuitry designed for lower minimum circuit ampacities (MCA) to allow use of smaller wire for reduced power wiring costs
- Electronic, digital-based controls ensure reliable, solid-state monitoring and control
- Units ship evacuated with initial oil charge and undergo factory pressure and operational testing to minimize field setup time
- Two refrigerant circuits allows redundant operation.
- Industry's only 18-month air cooled warranty that covers all parts
- Wide range of options to fit any design requirement. (Acoustical treatments, Hydrokit packages etc)

UPGRADE OPTIONS

- Remote Cooler
- Power Options --> 200, 230, 380, 460, 575 (Not available on all models, refer to Engineering Guide):
- Single Point Terminal Block, Terminal Block with Individual Circuit Breakers, Circuit Breaker, Non-fused Disconnect Switch or Non-fused Disconnect Switch with Individual System Circuit Breakers
- Control Options: Low Ambient Kit extends operating range to 0 deg. F from +30 deg. F
- Discharge Pressure Transducers and Readout Capability allows unit to sense and display discharge pressure
- Low Temperature Brine for chilling below 30 deg. F (which includes Electronic Expansion Valve)
- Motor Current Module allows monitoring of compressor motor current, provides extra protection against compressor reverse rotation, phase-loss and phase imbalance
- Hot Gas Bypass for continuous, stable operation at capacities as low as 5% capacity
- Service Isolation Valve - suction and discharge (ball type) isolation valves are added to unit per system; includes a system high pressure relief valve in compliance with ASHRAE 15
- Post-coated Epoxy Dipped
- Unit Enclosure Options:
  - Wire Panels (full unit): coated, heavy gauge welded wire mesh mounted on exterior of unit to prevent unauthorized access
  - Louvered Panels (condenser coils only): louvered panels mounted over exterior condenser coil faces to protect coils
  - Louvered Panels (full unit): to protect condenser coils, visually screen internal components and prevent unauthorized access
  - Louvered (condensers)/Wire Panels (mechanicals): Louvered steel panels on external condenser coil faces, heavy-gauge welded-wire mesh around base
- Sound Attenuation:
- Compressor Acoustic Sound Blanket
- Ultra Quiet fans
- Vibration Isolators - 1" spring, 2" spring or neoprene pad isolators for mounting under unit base rails

AIR COOLED SCROLL CHILLER
YLAA - 70 to 175 TONS

PACKAGE DESCRIPTION:

- Shipped complete from the factory ready for field installation and use
- Fully charged with HFC-410A and initial oil charge
- Baked on powder paint
- Heavy gauge, formed galvanized steel base
- Operational and Pressure Tested

Compressors:

- Suction-gas cooled, hermetic scroll compressors
- Large internal volume and oil reservoir provides greater liquid tolerance
- Crankcase heaters for extra protection against liquid migration

Condenser:

- Low noise, direct drive, maximum efficiency fans with corrosion resistant aluminum hub and composite blades; statically and dynamically balanced
- The fan motors are Totally Enclosed Air-Over, current protected. They feature ball bearings that are double-sealed and permanently lubricated.
- Condenser coils are made of a single material to avoid galvanic corrosion due to dissimilar metals. Coils and headers are brazed as one piece.
- Design Working Pressure 650 PSIG
- Integral subcooling included

Evaporator:

- Equipped with a heater controlled by separate thermostat for freeze protection to –20 deg. F
- Covered by closed cell foam insulation
- Inlet and outlet are grooved for compatibility with field supplied victaulic connections

Refrigerant Circuit:

- Independent circuits per compressor
- Each refrigerant circuit includes: liquid line shutoff valve with charging port, low side pressure relief device, filter-drier, solenoid valve, sight glass with moisture indicator, thermostatic expansion valves, and flexible, closed-cell foam insulated suction line and suction pressure transducer.

Controls:

- All controls housed in a NEMA 3R/12 cabinet with gasket sealed, hinged & latched door
- LCD, 40-character display with backlight
- Color coded, sealed keypad
- Standard controls permit operation from 30 to 115 deg F.

Unit Type and Size	
ID	YLAA-B0070SE
Number of Compressors	6
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2

Technical Data		
Refrigerant Type		R410A
Cooling Capacity	TR	71.8
Total Power Input	kW	84.8
EER	EER	10.2
IPLV	EER	16
NPLV	EER	16
Sound Pressure (Hemispherical Method)	dB(A)	87
Sound Pressure Measured at	ft	3.3

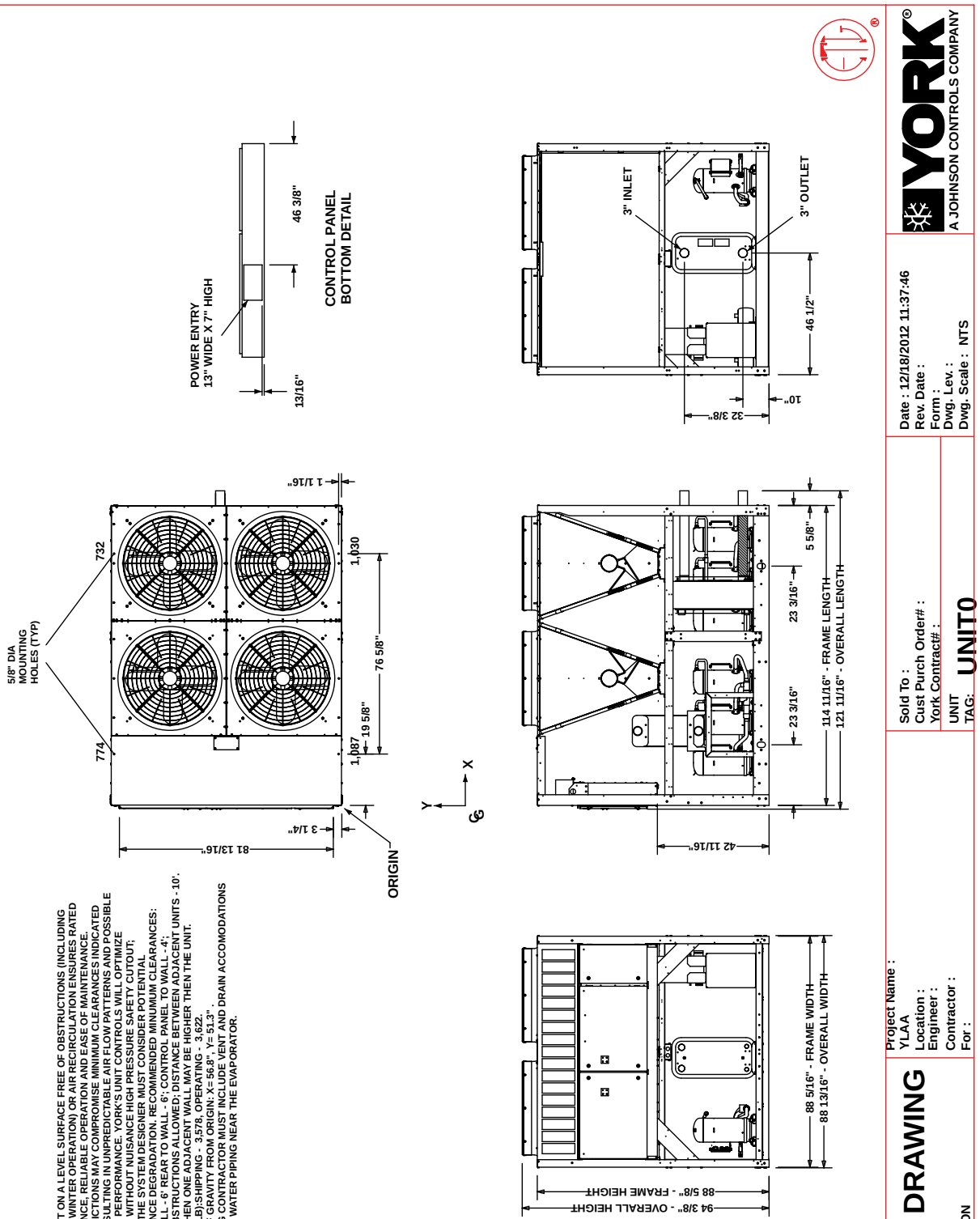
Evaporator		
Evaporator Type		Plate Heat Exchanger
Fluid Volume	USGAL	5.4
Fluid Type		Water
Entering Liquid Temperature	°F	54
Leaving Liquid Temperature	°F	44
EvaporatingTemperature	°F	38.7 / 38.7
Total Flow Rate	USGPM	171.2
Total Pressure Drop	ft H2O	11.4
Fouling Factor	h.ft².F/Btu	0.0001
Fluid Connection Diameter	in	3"

Condenser (Air Cooled)		
Ambient Air Temperature	°F	95
Condensing Temperature	°F	122.5 / 122.5
Number of Fans		4
Altitude	ft	0
Total Air Flow	cfm	59329
Total Fan Power	kW	6.7

Electrical Data		
Nominal Voltage / Voltage Limits		460-3-60 / 414-506
Min. Circuit Ampacity	A	160
Max. Fuse / CB Rating	A	175
Min. Fuse / CB Rating	A	175
Wire Lugs Per Phase		1
Wire Range (Lug Size)		#4 - 500 kcmil

Weights and Dimensions		
Shipping Weight	lb	3578
Operating Weight	lb	3623
Refrigerant Charge	lb	101
Overall Length	in	116.1
Overall Width	in	88.3
Overall Height	in	94.2

MODEL: YLAA-B0070SE
AHRI CAPACITY 71.8 TONS



NOTES:
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2. WEIGHTS (LB):SHIPPING - 3,578, OPERATING - 3,622.
3. CENTER OF GRAVITY FROM ORIGIN: X= 56.8", Y= 51.3" .
4. INSTALLING CONTRACTOR MUST INCLUDE VENT AND DRAIN ACCOMODATIONS IN CHILLED WATER PIPING NEAR THE EVAPORATOR.

PRODUCT DRAWING

MODEL: YLAA0070SE46
NOT FOR CONSTRUCTION

Project Name :
YLAA
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :

UNIT TAG: UNIT0

Date : 12/18/2012 11:37:46
Rev. Date :
Form :
Dwg. Lev. :
Dwg. Scale : NTS

YORK
A JOHNSON CONTROLS COMPANY

Unit Type and Size	
ID	YLAA-B0080SE
Number of Compressors	6
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2

Technical Data		
Refrigerant Type		R410A
Cooling Capacity	TR	77.7
Total Power Input	kW	94.4
EER	EER	9.9
IPLV	EER	15.4
NPLV	EER	15.4
Sound Pressure (Hemispherical Method)	dB(A)	88
Sound Pressure Measured at	ft	3.3

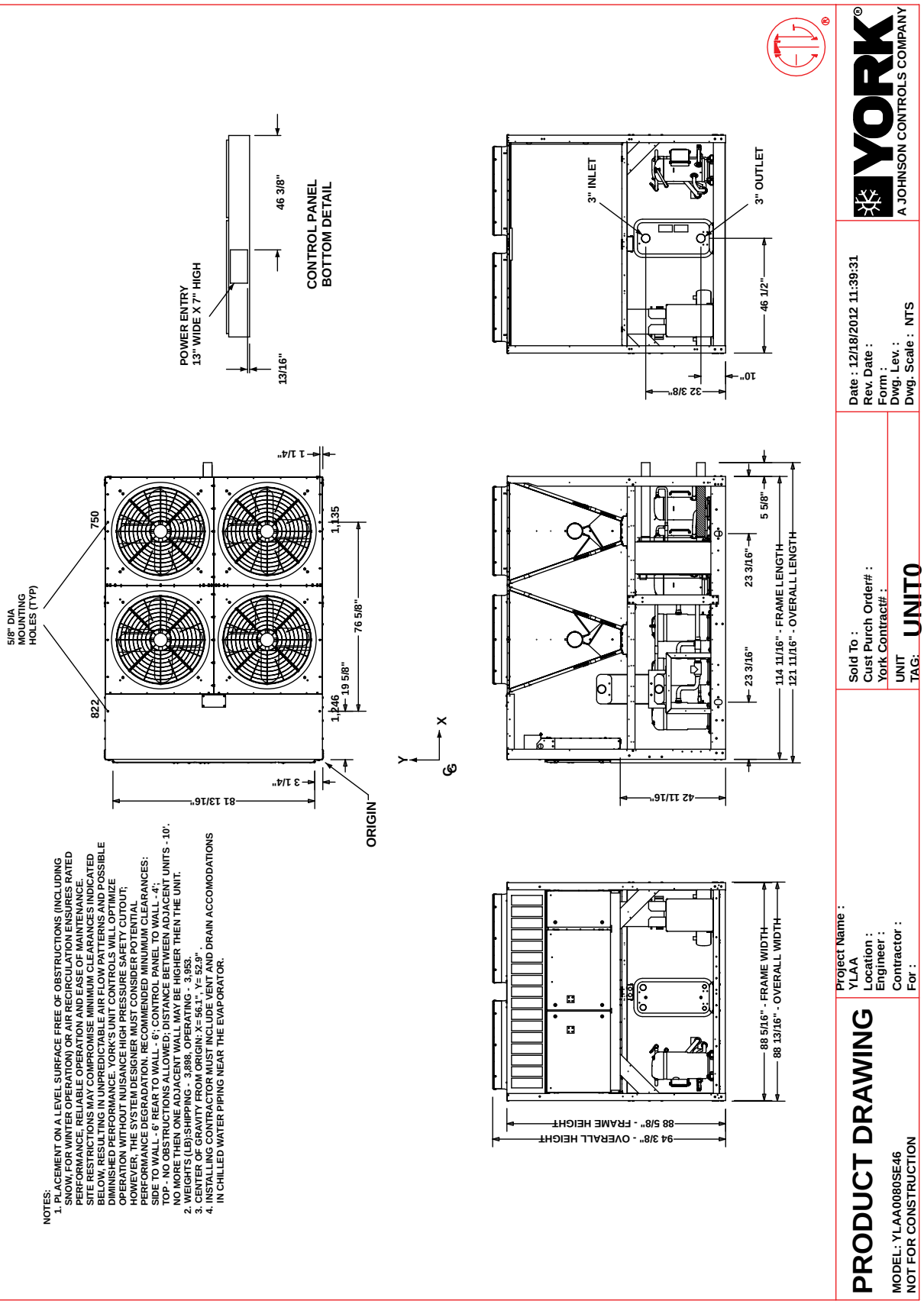
Evaporator		
Evaporator Type		Plate Heat Exchanger
Fluid Volume	USGAL	6.7
Fluid Type		Water
Entering Liquid Temperature	°F	54
Leaving Liquid Temperature	°F	44
EvaporatingTemperature	°F	38.7 / 39
Total Flow Rate	USGPM	185.4
Total Pressure Drop	ft H2O	9
Fouling Factor	h.ft².F/Btu	0.0001
Fluid Connection Diameter	in	3"

Condenser (Air Cooled)		
Ambient Air Temperature	°F	95
Condensing Temperature	°F	126.1 / 122.9
Number of Fans		4
Altitude	ft	0
Total Air Flow	cfm	59329
Total Fan Power	kW	6.7

Electrical Data		
Nominal Voltage / Voltage Limits		460-3-60 / 414-506
Min. Circuit Ampacity	A	173
Max. Fuse / CB Rating	A	200
Min. Fuse / CB Rating	A	200
Wire Lugs Per Phase		1
Wire Range (Lug Size)		#4 - 500 kcmil

Weights and Dimensions		
Shipping Weight	lb	3898
Operating Weight	lb	3954
Refrigerant Charge	lb	106
Overall Length	in	116.1
Overall Width	in	88.3
Overall Height	in	94.2

MODEL: YLAA-B0080SE
AHRI CAPACITY 77.7 TONS



NOTES:
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2. WEIGHTS (LB):SHIPPING - 3,898, OPERATING - 3,953.
3. CENTER OF GRAVITY FROM ORIGIN: X= 56.1", Y= 52.9" .
4. INSTALLING CONTRACTOR MUST INCLUDE VENT AND DRAIN ACCOMODATIONS IN CHILLED WATER PIPING NEAR THE EVAPORATOR.

PRODUCT DRAWING

MODEL: YLAA0080SE46
NOT FOR CONSTRUCTION

Project Name :
YLAA
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :

UNIT TAG: UNIT0

Date : 12/18/2012 11:39:31
Rev. Date :
Form :
Dwg. Lev. :
Dwg. Scale : NTS

YORK
A JOHNSON CONTROLS COMPANY

Unit Type and Size	
ID	YLAA-B0090SE
Number of Compressors	5
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2

Technical Data		
Refrigerant Type		R410A
Cooling Capacity	TR	83.9
Total Power Input	kW	103.4
EER	EER	9.7
IPLV	EER	15.5
NPLV	EER	15.5
Sound Pressure (Hemispherical Method)	dB(A)	88
Sound Pressure Measured at	ft	3.3

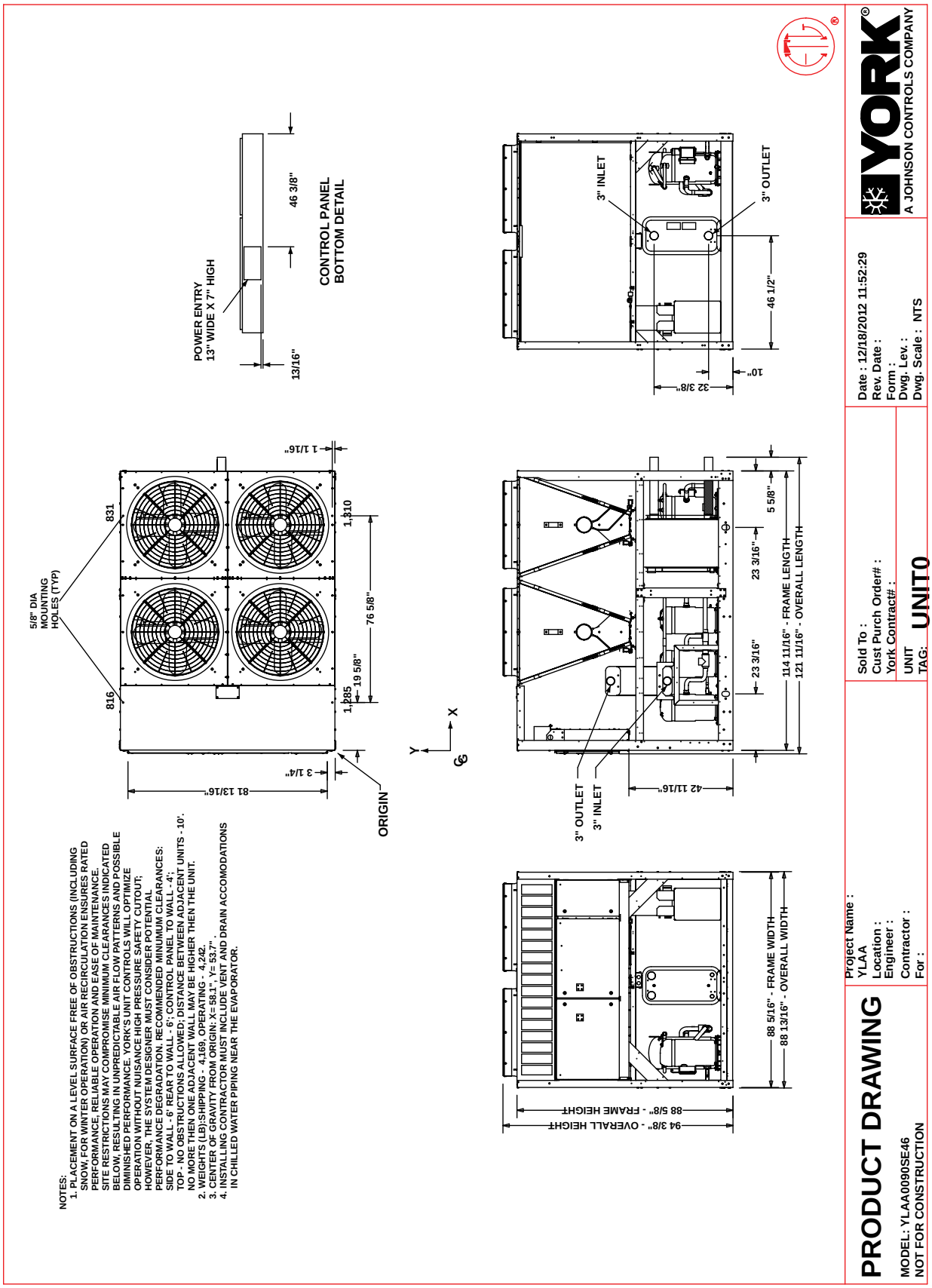
Evaporator		
Evaporator Type		Plate Heat Exchanger
Fluid Volume	USGAL	8.8
Fluid Type		Water
Entering Liquid Temperature	°F	54
Leaving Liquid Temperature	°F	44
EvaporatingTemperature	°F	39.4 / 39.4
Total Flow Rate	USGPM	199.7
Total Pressure Drop	ft H2O	7
Fouling Factor	h.ft².F/Btu	0.0001
Fluid Connection Diameter	in	3"

Condenser (Air Cooled)		
Ambient Air Temperature	°F	95
Condensing Temperature	°F	126.1 / 127.2
Number of Fans		4
Altitude	ft	0
Total Air Flow	cfm	59329
Total Fan Power	kW	6.7

Electrical Data		
Nominal Voltage / Voltage Limits		460-3-60 / 414-506
Min. Circuit Ampacity	A	192
Max. Fuse / CB Rating	A	225
Min. Fuse / CB Rating	A	225
Wire Lugs Per Phase		1
Wire Range (Lug Size)		#4 - 500 kcmil

Weights and Dimensions		
Shipping Weight	lb	4169
Operating Weight	lb	4241
Refrigerant Charge	lb	115
Overall Length	in	116.1
Overall Width	in	88.3
Overall Height	in	94.2

MODEL: YLAA-B0090SE
AHRI CAPACITY 83.9 TONS



Unit Type and Size	
ID	YLAA-B0091HE
Number of Compressors	4
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2

Technical Data		
Refrigerant Type		R410A
Cooling Capacity	TR	88.2
Total Power Input	kW	98.3
EER	EER	10.8
IPLV	EER	15
NPLV	EER	14.9
Sound Pressure (Hemispherical Method)	dB(A)	88
Sound Pressure Measured at	ft	3.3

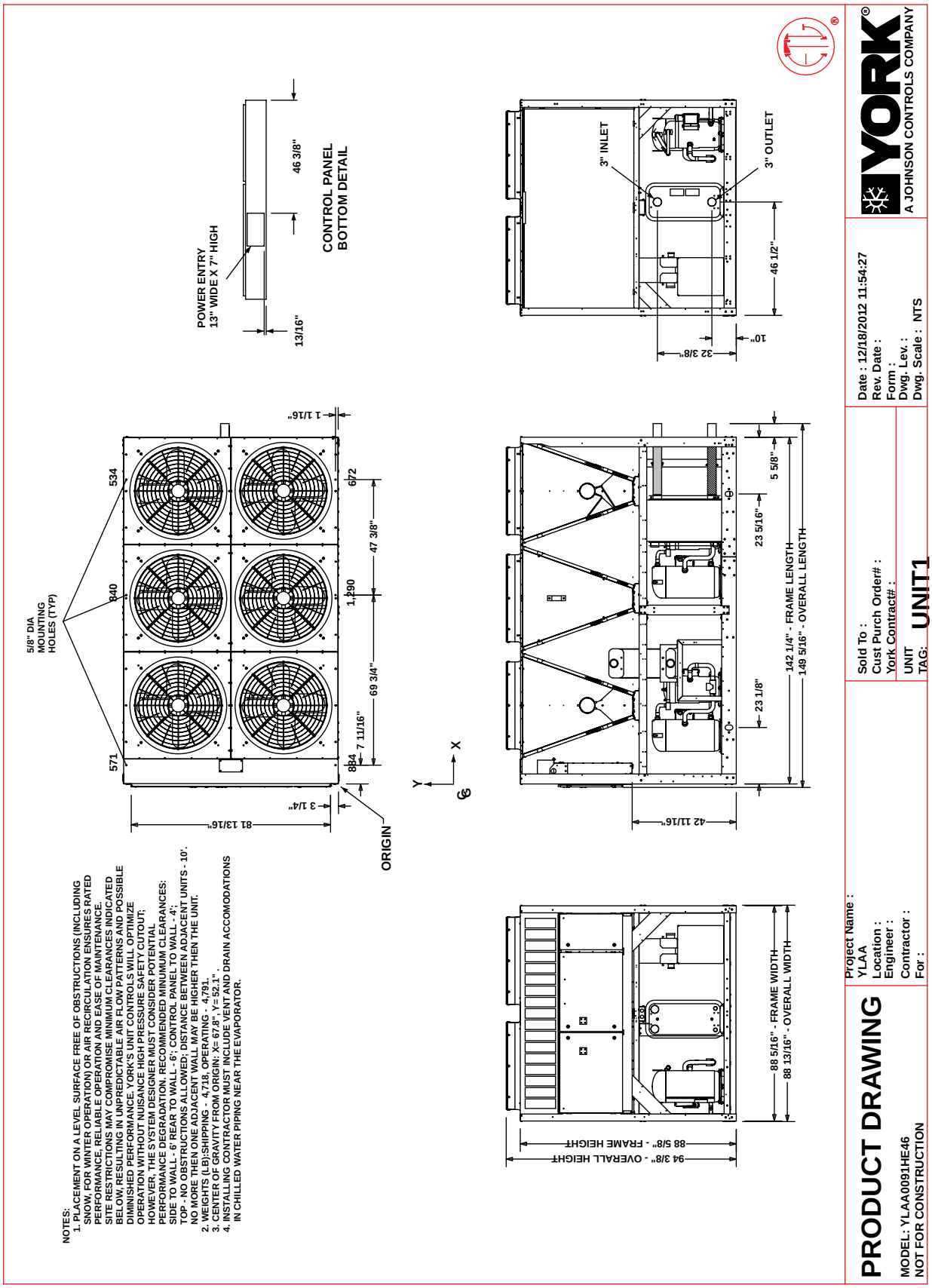
Evaporator		
Evaporator Type		Plate Heat Exchanger
Fluid Volume	USGAL	8.8
Fluid Type		Water
Entering Liquid Temperature	°F	54
Leaving Liquid Temperature	°F	44
EvaporatingTemperature	°F	39.2 / 39.2
Total Flow Rate	USGPM	210.8
Total Pressure Drop	ft H2O	7.7
Fouling Factor	h.ft².F/Btu	0.0001
Fluid Connection Diameter	in	3"

Condenser (Air Cooled)		
Ambient Air Temperature	°F	95
Condensing Temperature	°F	117.7 / 117.7
Number of Fans		6
Altitude	ft	0
Total Air Flow	cfm	88993
Total Fan Power	kW	10.1

Electrical Data		
Nominal Voltage / Voltage Limits		460-3-60 / 414-506
Min. Circuit Ampacity	A	200
Max. Fuse / CB Rating	A	250
Min. Fuse / CB Rating	A	225
Wire Lugs Per Phase		1
Wire Range (Lug Size)		#4 - 500 kcmil

Weights and Dimensions		
Shipping Weight	lb	4718
Operating Weight	lb	4791
Refrigerant Charge	lb	115
Overall Length	in	142.7
Overall Width	in	88.3
Overall Height	in	94.2

MODEL: YLAA-B0091HE
AHRI CAPACITY 88.2 TONS



YLAA
91 TO 130

Air Cooled Scroll Chiller
Performance Specification

Unit Type and Size	
ID	YLAA-B0100SE
Number of Compressors	5
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2

Technical Data		
Refrigerant Type		R410A
Cooling Capacity	TR	95.8
Total Power Input	kW	119.1
EER	EER	9.7
IPLV	EER	14.3
NPLV	EER	14.3
Sound Pressure (Hemispherical Method)	dB(A)	88
Sound Pressure Measured at	ft	3.3

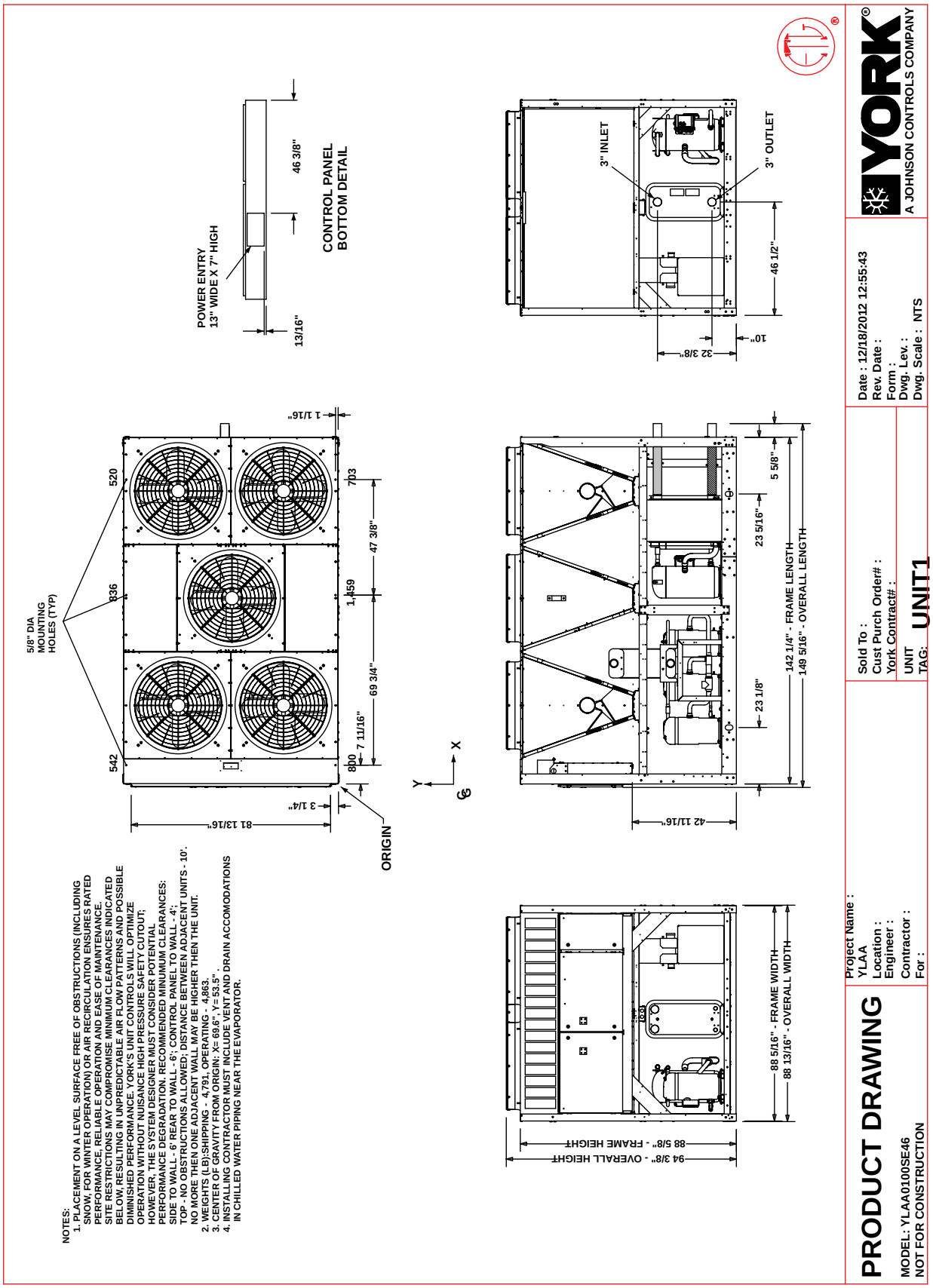
Evaporator		
Evaporator Type		Plate Heat Exchanger
Fluid Volume	USGAL	8.8
Fluid Type		Water
Entering Liquid Temperature	°F	54
Leaving Liquid Temperature	°F	44
EvaporatingTemperature	°F	39.6 / 38.5
Total Flow Rate	USGPM	228.2
Total Pressure Drop	ft H2O	9
Fouling Factor	h.ft².F/Btu	0.0001
Fluid Connection Diameter	in	3"

Condenser (Air Cooled)		
Ambient Air Temperature	°F	95
Condensing Temperature	°F	122.7 / 123.6
Number of Fans		5
Altitude	ft	0
Total Air Flow	cfm	74161
Total Fan Power	kW	8.4

Electrical Data		
Nominal Voltage / Voltage Limits		460-3-60 / 414-506
Min. Circuit Ampacity	A	223
Max. Fuse / CB Rating	A	250
Min. Fuse / CB Rating	A	250
Wire Lugs Per Phase		1
Wire Range (Lug Size)		#4 - 500 kcmil

Weights and Dimensions		
Shipping Weight	lb	4791
Operating Weight	lb	4864
Refrigerant Charge	lb	112
Overall Length	in	142.7
Overall Width	in	88.3
Overall Height	in	94.2

MODEL: YLAA-B0100SE
AHRI CAPACITY 95.8 TONS



Air Cooled Scroll Chiller
Performance Specification

Unit Type and Size	
ID	YLAA-B0101HE
Number of Compressors	5
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2

Technical Data		
Refrigerant Type		R410A
Cooling Capacity	TR	98.5
Total Power Input	kW	116.1
EER	EER	10.2
IPLV	EER	15.4
NPLV	EER	15.4
Sound Pressure (Hemispherical Method)	dB(A)	89
Sound Pressure Measured at	ft	3.3

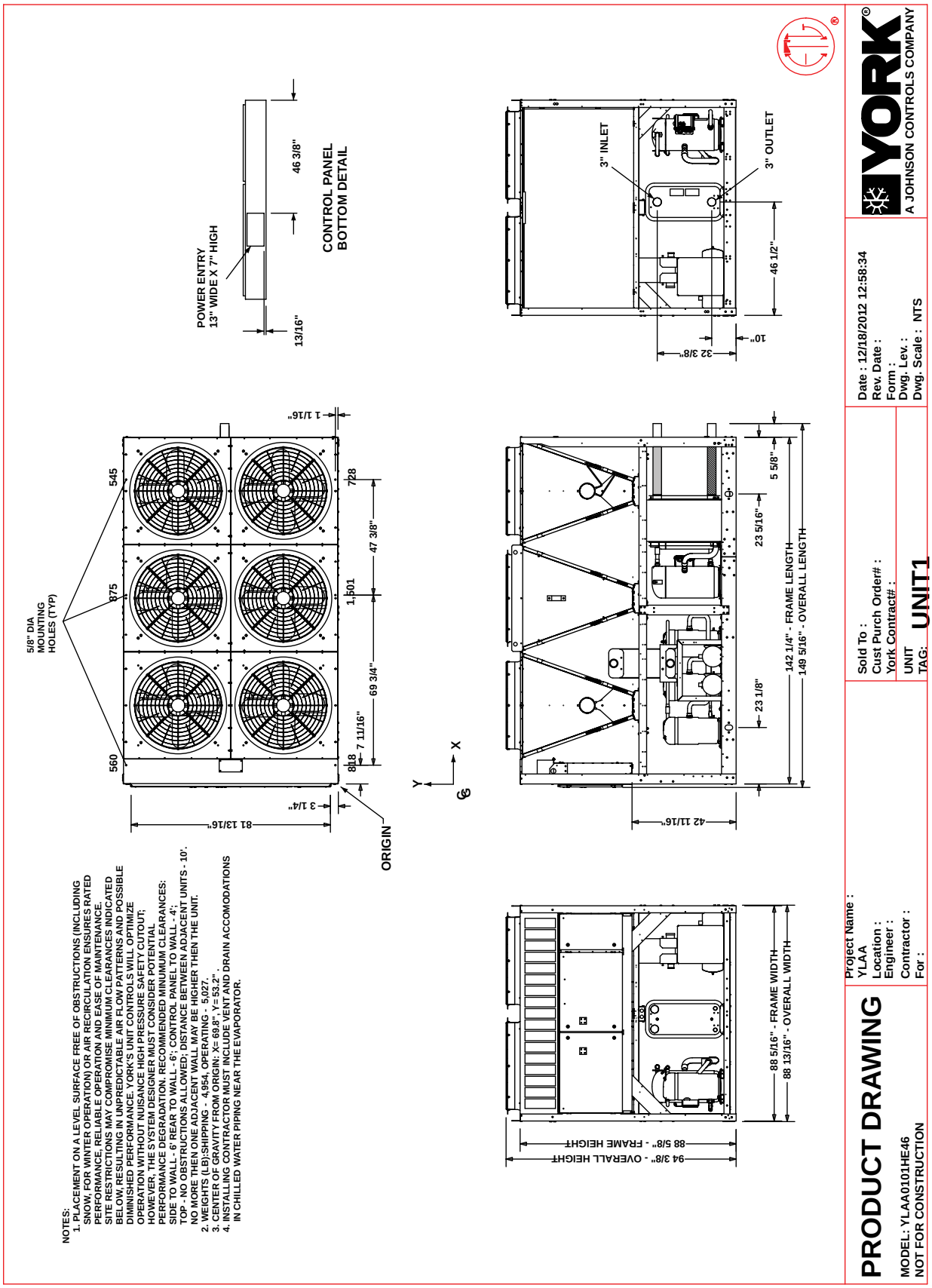
Evaporator		
Evaporator Type		Plate Heat Exchanger
Fluid Volume	USGAL	8.8
Fluid Type		Water
Entering Liquid Temperature	°F	54
Leaving Liquid Temperature	°F	44
EvaporatingTemperature	°F	39.6 / 38.1
Total Flow Rate	USGPM	234.6
Total Pressure Drop	ft H2O	9.4
Fouling Factor	h.ft².F/Btu	0.0001
Fluid Connection Diameter	in	3"

Condenser (Air Cooled)		
Ambient Air Temperature	°F	95
Condensing Temperature	°F	125.2 / 117.7
Number of Fans		6
Altitude	ft	0
Total Air Flow	cfm	88993
Total Fan Power	kW	10.1

Electrical Data		
Nominal Voltage / Voltage Limits		460-3-60 / 414-506
Min. Circuit Ampacity	A	227
Max. Fuse / CB Rating	A	250
Min. Fuse / CB Rating	A	250
Wire Lugs Per Phase		1
Wire Range (Lug Size)		#4 - 500 kcmil

Weights and Dimensions		
Shipping Weight	lb	4954
Operating Weight	lb	5026
Refrigerant Charge	lb	126
Overall Length	in	142.7
Overall Width	in	88.3
Overall Height	in	94.2

MODEL: YLAA-B0101HE
AHRI CAPACITY 98.5 TONS



Unit Type and Size	
ID	YLAA-B0115SE
Number of Compressors	4
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2

Technical Data		
Refrigerant Type		R410A
Cooling Capacity	TR	113.9
Total Power Input	kW	140.9
EER	EER	9.7
IPLV	EER	14.6
NPLV	EER	14.6
Sound Pressure (Hemispherical Method)	dB(A)	88
Sound Pressure Measured at	ft	3.3

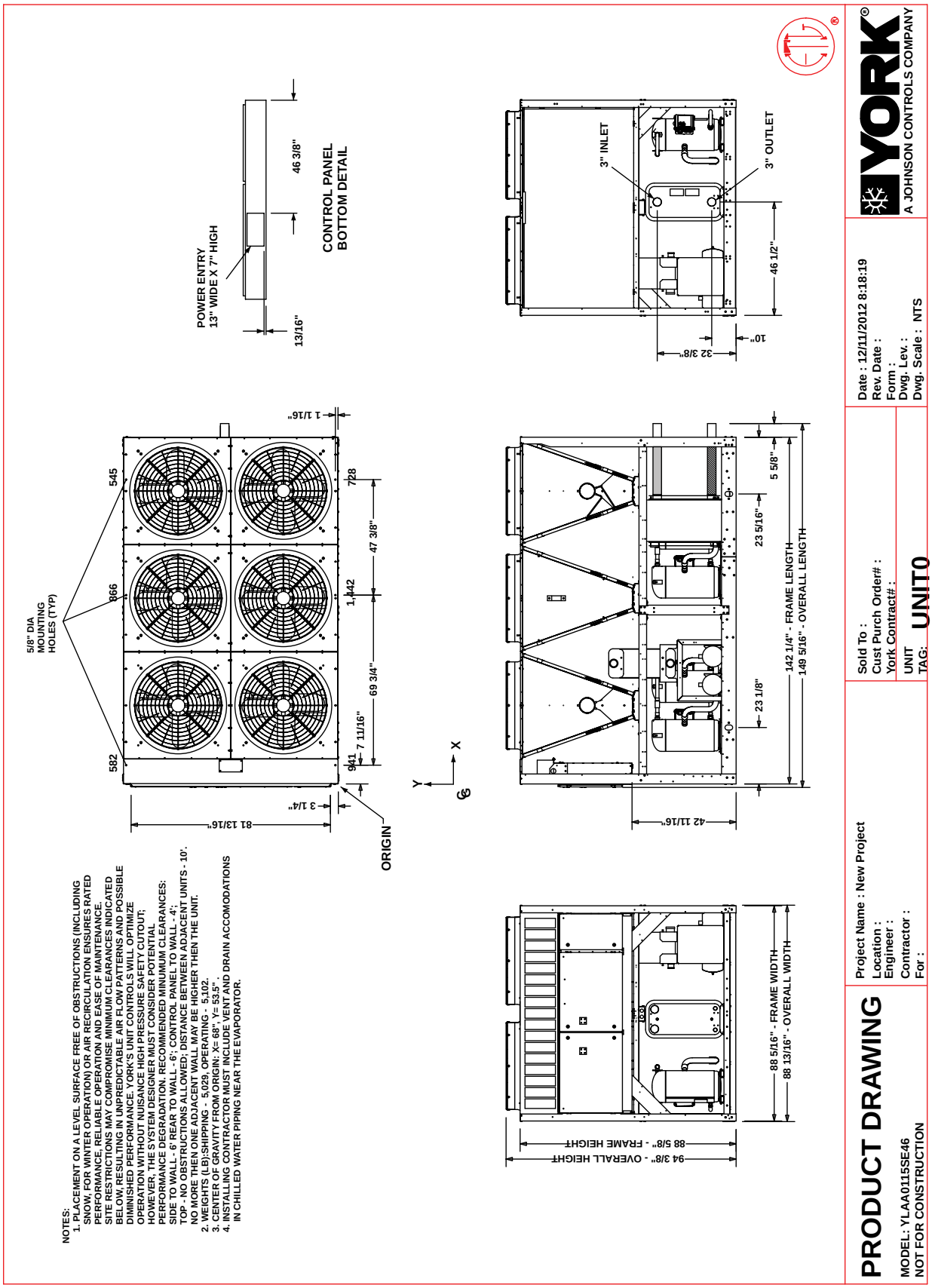
Evaporator		
Evaporator Type		Plate Heat Exchanger
Fluid Volume	USGAL	8.8
Fluid Type		Water
Entering Liquid Temperature	°F	54
Leaving Liquid Temperature	°F	44
EvaporatingTemperature	°F	38.3 / 38.3
Total Flow Rate	USGPM	272.6
Total Pressure Drop	ft H2O	12.4
Fouling Factor	h.ft².F/Btu	0.0001
Fluid Connection Diameter	in	3"

Condenser (Air Cooled)		
Ambient Air Temperature	°F	95
Condensing Temperature	°F	124 / 124
Number of Fans		6
Altitude	ft	0
Total Air Flow	cfm	88993
Total Fan Power	kW	10.1

Electrical Data		
Nominal Voltage / Voltage Limits		460-3-60 / 414-506
Min. Circuit Ampacity	A	256
Max. Fuse / CB Rating	A	300
Min. Fuse / CB Rating	A	300
Wire Lugs Per Phase		1
Wire Range (Lug Size)		#4 - 500 kcmil

Weights and Dimensions		
Shipping Weight	lb	5029
Operating Weight	lb	5101
Refrigerant Charge	lb	119
Overall Length	in	142.7
Overall Width	in	88.3
Overall Height	in	94.2

MODEL: YLAA-B0115SE
AHRI CAPACITY 113.9 TONS



Unit Type and Size	
ID	YLAA-B0120SE
Number of Compressors	4
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2

Technical Data		
Refrigerant Type		R410A
Cooling Capacity	TR	119.6
Total Power Input	kW	143.3
EER	EER	10
IPLV	EER	14.8
NPLV	EER	14.8
Sound Pressure (Hemispherical Method)	dB(A)	88
Sound Pressure Measured at	ft	3.3

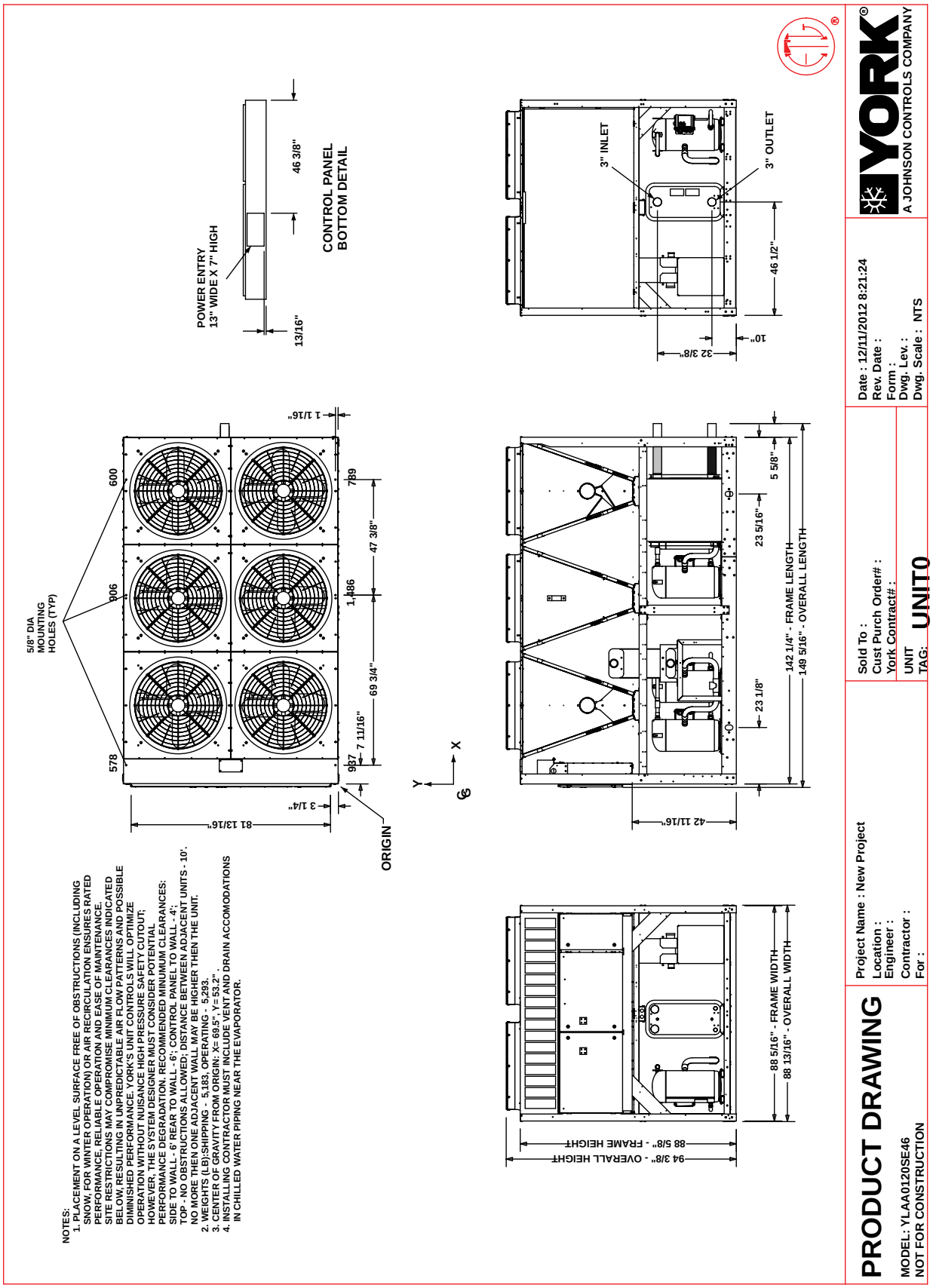
Evaporator		
Evaporator Type		Plate Heat Exchanger
Fluid Volume	USGAL	13.2
Fluid Type		Water
Entering Liquid Temperature	°F	54
Leaving Liquid Temperature	°F	44
EvaporatingTemperature	°F	40.6 / 40.6
Total Flow Rate	USGPM	285.3
Total Pressure Drop	ft H2O	8.4
Fouling Factor	h.ft².F/Btu	0.0001
Fluid Connection Diameter	in	3"

Condenser (Air Cooled)		
Ambient Air Temperature	°F	95
Condensing Temperature	°F	125.1 / 125.1
Number of Fans		6
Altitude	ft	0
Total Air Flow	cfm	88993
Total Fan Power	kW	10.1

Electrical Data		
Nominal Voltage / Voltage Limits		460-3-60 / 414-506
Min. Circuit Ampacity	A	256
Max. Fuse / CB Rating	A	300
Min. Fuse / CB Rating	A	300
Wire Lugs Per Phase		1
Wire Range (Lug Size)		#4 - 500 kcmil

Weights and Dimensions		
Shipping Weight	lb	5183
Operating Weight	lb	5293
Refrigerant Charge	lb	128
Overall Length	in	142.7
Overall Width	in	88.3
Overall Height	in	94.2

MODEL: YLAA-B0120SE
AHRI CAPACITY 119.6 TONS



YLAA
91 TO 130

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller Performance Specification

Unit Type and Size		
ID		YLAA-B0136SE
Number of Compressors		6
Compressor Type		Scroll - Hermetic
Number of Compressor Circuits		2

Technical Data		
Refrigerant Type		R410A
Net Cooling Capacity	TR	129.9
Total Power Input	kW	154.3
EER	EER	10.1
IPLV	EER	15.5
NPLV	EER	16.5
Sound Power	dB(A)	93

Evaporator		
Evaporator Type		Plate Heat Exchanger
Fluid Volume	USGAL	10
Fluid Type		Water
Entering Liquid Temperature	°F	54
Leaving Liquid Temperature	°F	44
EvaporatingTemperature	°F	37.2 / 39.6
Total Flow Rate	USGPM	310.7
Total Pressure Drop	ft H2O	13.4
Fouling Factor	h.ft².F/Btu	0.0001
Fluid Connection Diameter	in	4"
Min Fluid Flow Rate	USGPM	120
Max Fluid Flow Rate	USGPM	625

Condenser (Air Cooled)		
Ambient Air Temperature	°F	95
Condensing Temperature	°F	126.9 / 113.2
Number of Fans		8
Altitude	ft	0
Total Air Flow	cfm	120776
Total Fan Power	kW	13.4

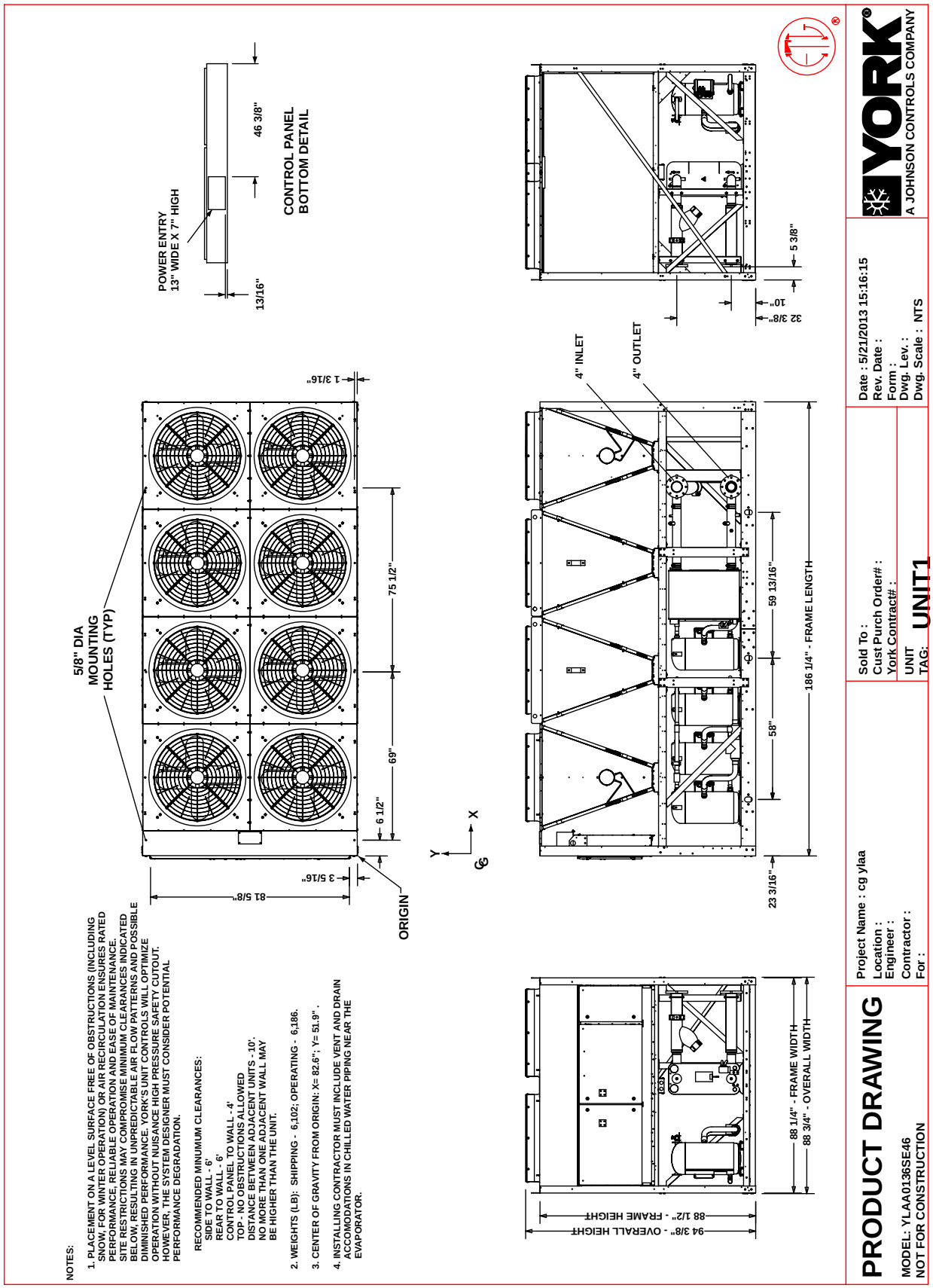
Electrical Data		
Nominal Voltage / Voltage Limits		460-3-60 / 414-506
Min. Circuit Ampacity	A	285
Max. Fuse / CB Rating	A	300
Min. Fuse / CB Rating	A	300
Unit Short Circuit Current Withstand	[kA]	5
Wire Lugs Per Phase		1
Wire Range (Lug Size)		#4 - 500 kcmil

Weights and Dimensions		
Shipping Weight	lb	6103
Operating Weight	lb	6187
Refrigerant Charge	lb	146
Overall Length	in	187.7
Overall Width	in	88.3
Overall Height	in	94.2
Software Version		YW13.02a

Certified in accordance with the AHRI Air-Cooled Water Chilling Packages Using Vapor Compression Cycle Certification Program, which is based on AHRI Standard 550/590 (I-P). Certified units may be found in the AHRI Directory at www.ahridirectory.org Auxiliary components included in total KW - Oil heaters, Chiller controls. Auxiliary power is already included in the compressor and fan power

AHRI CERTIFIED
www.ahridirectory.org
Air-Cooled Chillers
AHRI Standard 550/590

MODEL: YLAAB0136SE
AHRI CAPACITY 129.9 TONS



YLAA
91 TO 130

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller Performance Specification

Unit Type and Size		
ID		YLAA-B0142HE
Number of Compressors		6
Compressor Type		Scroll - Hermetic
Number of Compressor Circuits		2

Technical Data		
Refrigerant Type		R410A
Net Cooling Capacity	TR	132.1
Total Power Input	kW	152.3
EER	EER	10.4
IPLV	EER	14.4
NPLV	EER	16.2
Sound Power	dB(A)	96

Evaporator		
Evaporator Type		Plate Heat Exchanger
Fluid Volume	USGAL	13.2
Fluid Type		Water
Entering Liquid Temperature	°F	54
Leaving Liquid Temperature	°F	44
EvaporatingTemperature	°F	39.2 / 41.5
Total Flow Rate	USGPM	315.4
Total Pressure Drop	ft H2O	10
Fouling Factor	h.ft².F/Btu	0.0001
Fluid Connection Diameter	in	4"
Min Fluid Flow Rate	USGPM	150
Max Fluid Flow Rate	USGPM	625

Condenser (Air Cooled)		
Ambient Air Temperature	°F	95
Condensing Temperature	°F	123.1 / 116.4
Number of Fans		8
Altitude	ft	0
Total Air Flow	cfm	120776
Total Fan Power	kW	13.4

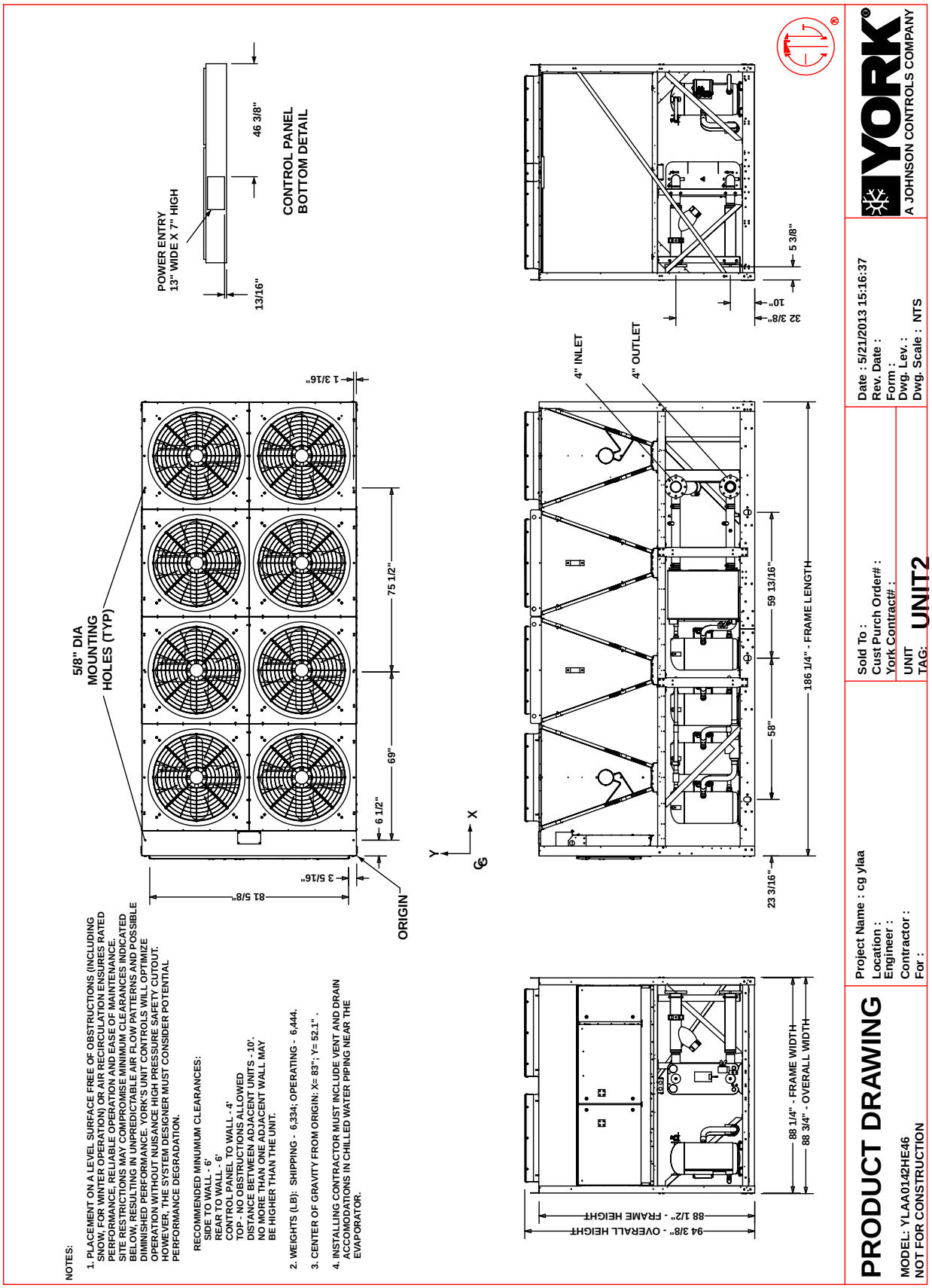
Electrical Data		
Nominal Voltage / Voltage Limits		460-3-60 / 414-506
Min. Circuit Ampacity	A	285
Max. Fuse / CB Rating	A	300
Min. Fuse / CB Rating	A	300
Unit Short Circuit Current Withstand	[kA]	5
Wire Lugs Per Phase		1
Wire Range (Lug Size)		#4 - 500 kcmil

Weights and Dimensions		
Shipping Weight	lb	6333
Operating Weight	lb	6444
Refrigerant Charge	lb	157
Overall Length	in	187.7
Overall Width	in	88.3
Overall Height	in	94.2
Software Version		YW13.02a

Certified in accordance with the AHRI Air-Cooled Water Chilling Packages Using Vapor Compression Cycle Certification Program, which is based on AHRI Standard 550/590 (I-P). Certified units may be found in the AHRI Directory at www.ahridirectory.org Auxiliary components included in total KW - Oil heaters, Chiller controls. Auxiliary power is already included in the compressor and fan power

AHRI CERTIFIED
www.ahridirectory.org
Air-Cooled Chillers
AHRI Standard 550/590

MODEL: YLAAB0142HE
AHRI CAPACITY 132.1 TONS



YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller Performance Specification

Unit Type and Size		
ID		YLAA-B0156HE
Number of Compressors		5
Compressor Type		Scroll - Hermetic
Number of Compressor Circuits		2

Technical Data		
Refrigerant Type		R410A
Net Cooling Capacity	TR	147.3
Total Power Input	kW	173.2
EER	EER	10.2
IPLV	EER	15.5
NPLV	EER	15.8
Sound Power	dB(A)	97

Evaporator		
Evaporator Type		Plate Heat Exchanger
Fluid Volume	USGAL	10
Fluid Type		Water
Entering Liquid Temperature	°F	54
Leaving Liquid Temperature	°F	44
EvaporatingTemperature	°F	36.9 / 38.7
Total Flow Rate	USGPM	351.9
Total Pressure Drop	ft H2O	16.7
Fouling Factor	h.ft².F/Btu	0.0001
Fluid Connection Diameter	in	4"
Min Fluid Flow Rate	USGPM	120
Max Fluid Flow Rate	USGPM	625

Condenser (Air Cooled)		
Ambient Air Temperature	°F	95
Condensing Temperature	°F	118.8 / 117.1
Number of Fans		10
Altitude	ft	0
Total Air Flow	cfm	150440
Total Fan Power	kW	16.8

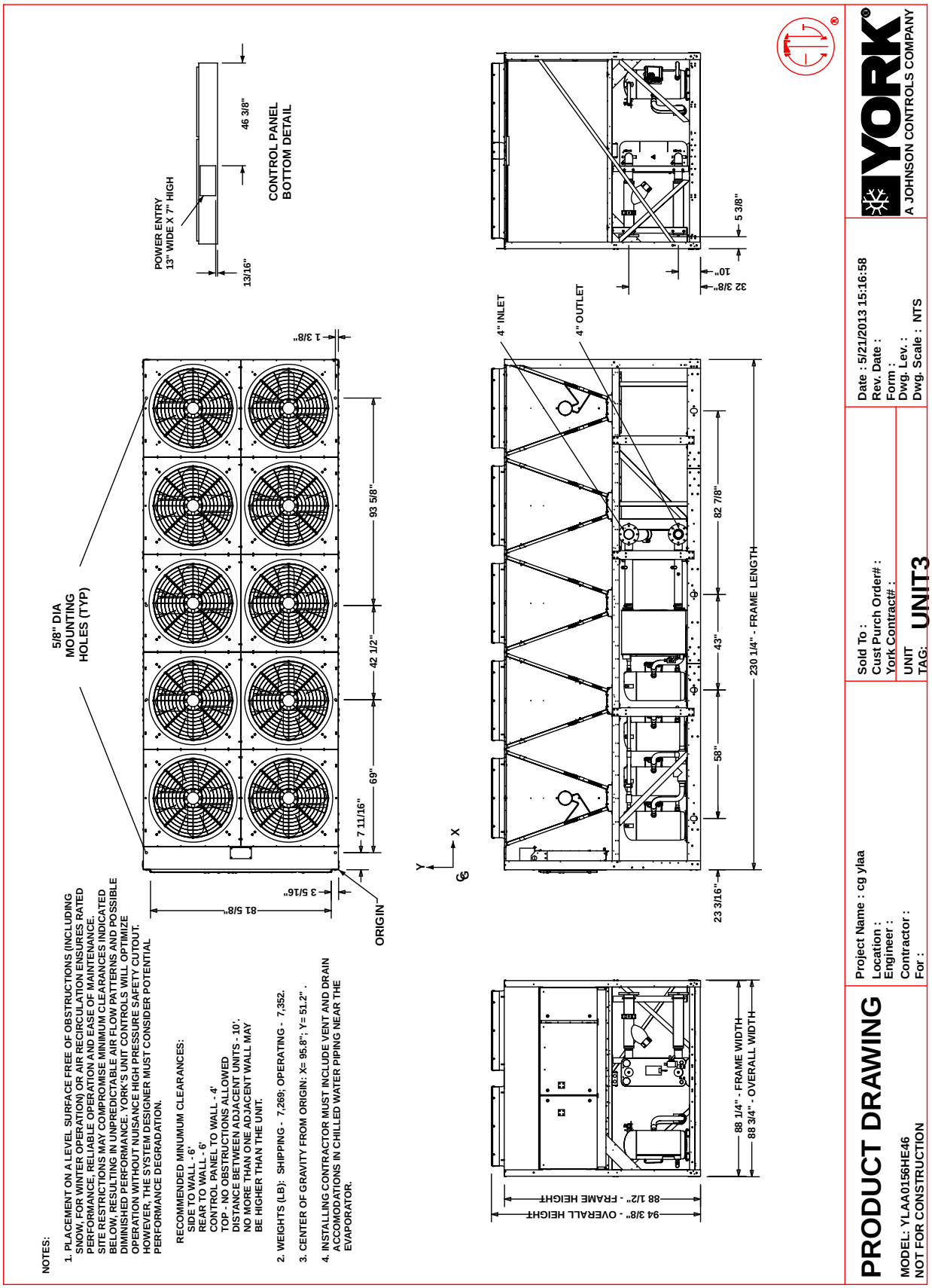
Electrical Data		
Nominal Voltage / Voltage Limits		460-3-60 / 414-506
Min. Circuit Ampacity	A	319
Max. Fuse / CB Rating	A	350
Min. Fuse / CB Rating	A	350
Unit Short Circuit Current Withstand	[kA]	5
Wire Lugs Per Phase		1
Wire Range (Lug Size)		#4 - 500 kcmil

Weights and Dimensions		
Shipping Weight	lb	7269
Operating Weight	lb	7353
Refrigerant Charge	lb	172
Overall Length	in	232.7
Overall Width	in	88.3
Overall Height	in	94.2
Software Version		YW13.02a

Certified in accordance with the AHRI Air-Cooled Water Chilling Packages Using Vapor Compression Cycle Certification Program, which is based on AHRI Standard 550/590 (I-P). Certified units may be found in the AHRI Directory at www.ahridirectory.org Auxiliary components included in total KW - Oil heaters, Chiller controls. Auxiliary power is already included in the compressor and fan power

AHRI CERTIFIED
www.ahridirectory.org
Air-Cooled Chillers
AHRI Standard 550/590

MODEL: YLAAB0156SE
AHRI CAPACITY 147.3 TONS



YLAA
131 TO 175

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller
Performance Specification

Unit Type and Size		
ID		YLAA-B0170SE
Number of Compressors		6
Compressor Type		Scroll - Hermetic
Number of Compressor Circuits		2

Technical Data		
Refrigerant Type		R410A
Net Cooling Capacity	TR	170.5
Total Power Input	kW	208.6
EER	EER	9.8
IPLV	EER	15.1
NPLV	EER	15.9
Sound Power	dB(A)	97

Evaporator		
Evaporator Type		Plate Heat Exchanger
Fluid Volume	USGAL	10
Fluid Type		Water
Entering Liquid Temperature	°F	54
Leaving Liquid Temperature	°F	44
EvaporatingTemperature	°F	37 / 37
Total Flow Rate	USGPM	407.4
Total Pressure Drop	ft H2O	22.1
Fouling Factor	h.ft².F/Btu	0.0001
Fluid Connection Diameter	in	4"
Min Fluid Flow Rate	USGPM	120
Max Fluid Flow Rate	USGPM	625

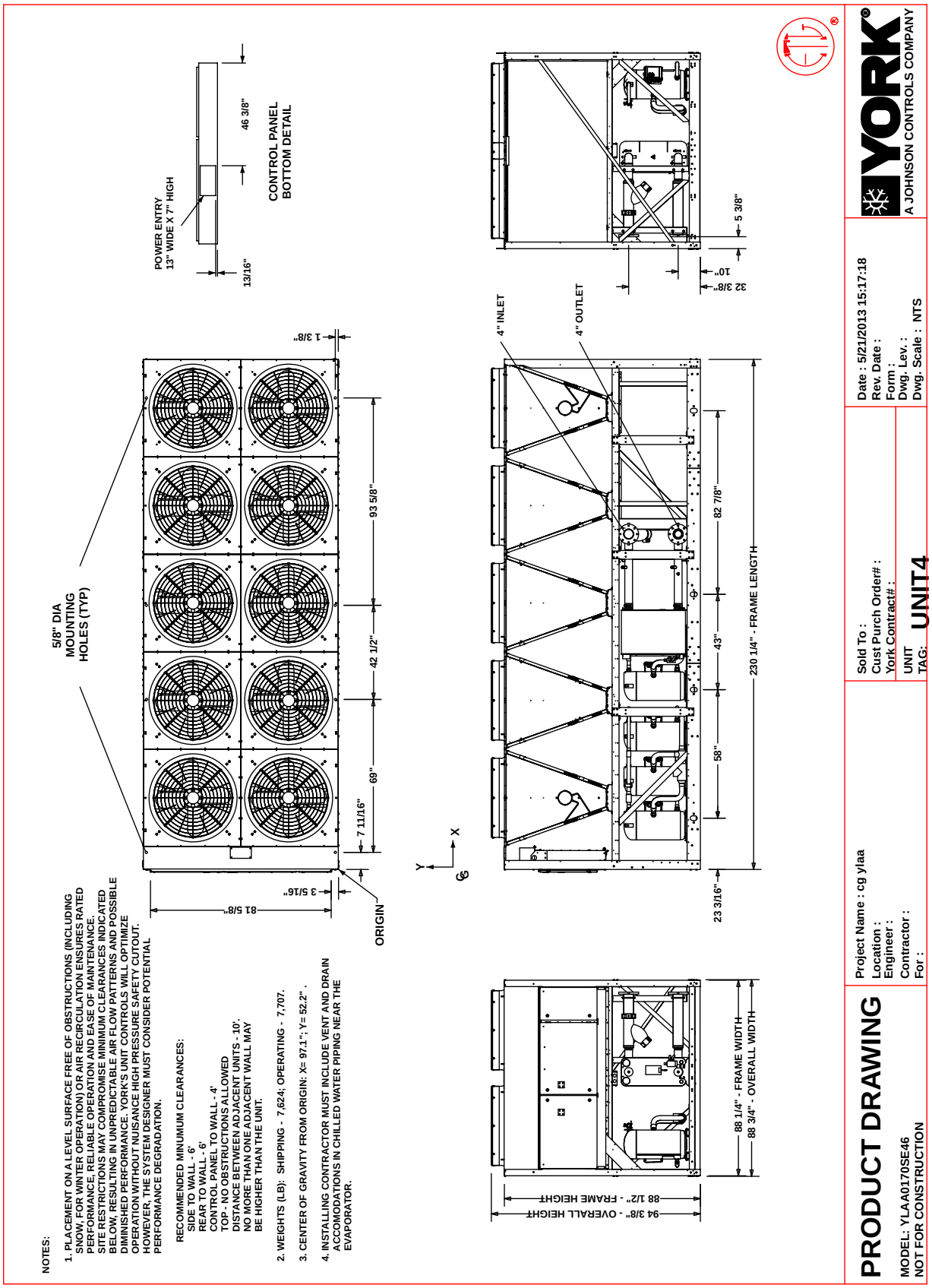
Condenser (Air Cooled)		
Ambient Air Temperature	°F	95
Condensing Temperature	°F	121.3 / 121.3
Number of Fans		10
Altitude	ft	0
Total Air Flow	cfm	150440
Total Fan Power	kW	16.8

Electrical Data		
Nominal Voltage / Voltage Limits		460-3-60 / 414-506
Min. Circuit Ampacity	A	372
Max. Fuse / CB Rating	A	400
Min. Fuse / CB Rating	A	400
Unit Short Circuit Current Withstand	[kA]	5
Wire Lugs Per Phase		2
Wire Range (Lug Size)		#4 - 500 kcmil

Weights and Dimensions		
Shipping Weight	lb	7624
Operating Weight	lb	7708
Refrigerant Charge	lb	179
Overall Length	in	232.7
Overall Width	in	88.3
Overall Height	in	94.2
Software Version		YW13.02a

Certified in accordance with the AHRI Air-Cooled Water Chilling Packages Using Vapor Compression Cycle Certification Program, which is based on AHRI Standard 550/590 (I-P). Certified units may be found in the AHRI Directory at www.ahridirectory.org Auxiliary components included in total KW - Oil heaters, Chiller controls. Auxiliary power is already included in the compressor and fan power

MODEL: YLAAB0170SE
AHRI CAPACITY 170.5 TONS



YLAA
131 TO 175

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Scroll Chiller Performance Specification

Unit Type and Size		
ID		YLAA-B0175HE
Number of Compressors		6
Compressor Type		Scroll - Hermetic
Number of Compressor Circuits		2

Technical Data		
Refrigerant Type		R410A
Net Cooling Capacity	TR	176
Total Power Input	kW	211.1
EER	EER	10
IPLV	EER	15.1
NPLV	EER	16
Sound Power	dB(A)	97

Evaporator		
Evaporator Type		Plate Heat Exchanger
Fluid Volume	USGAL	14.3
Fluid Type		Water
Entering Liquid Temperature	°F	54
Leaving Liquid Temperature	°F	44
EvaporatingTemperature	°F	39.6 / 39.6
Total Flow Rate	USGPM	420
Total Pressure Drop	ft H2O	16.4
Fouling Factor	h.ft².F/Btu	0.0001
Fluid Connection Diameter	in	4"
Min Fluid Flow Rate	USGPM	180
Max Fluid Flow Rate	USGPM	650

Condenser (Air Cooled)		
Ambient Air Temperature	°F	95
Condensing Temperature	°F	122 / 122
Number of Fans		10
Altitude	ft	0
Total Air Flow	cfm	150440
Total Fan Power	kW	16.8

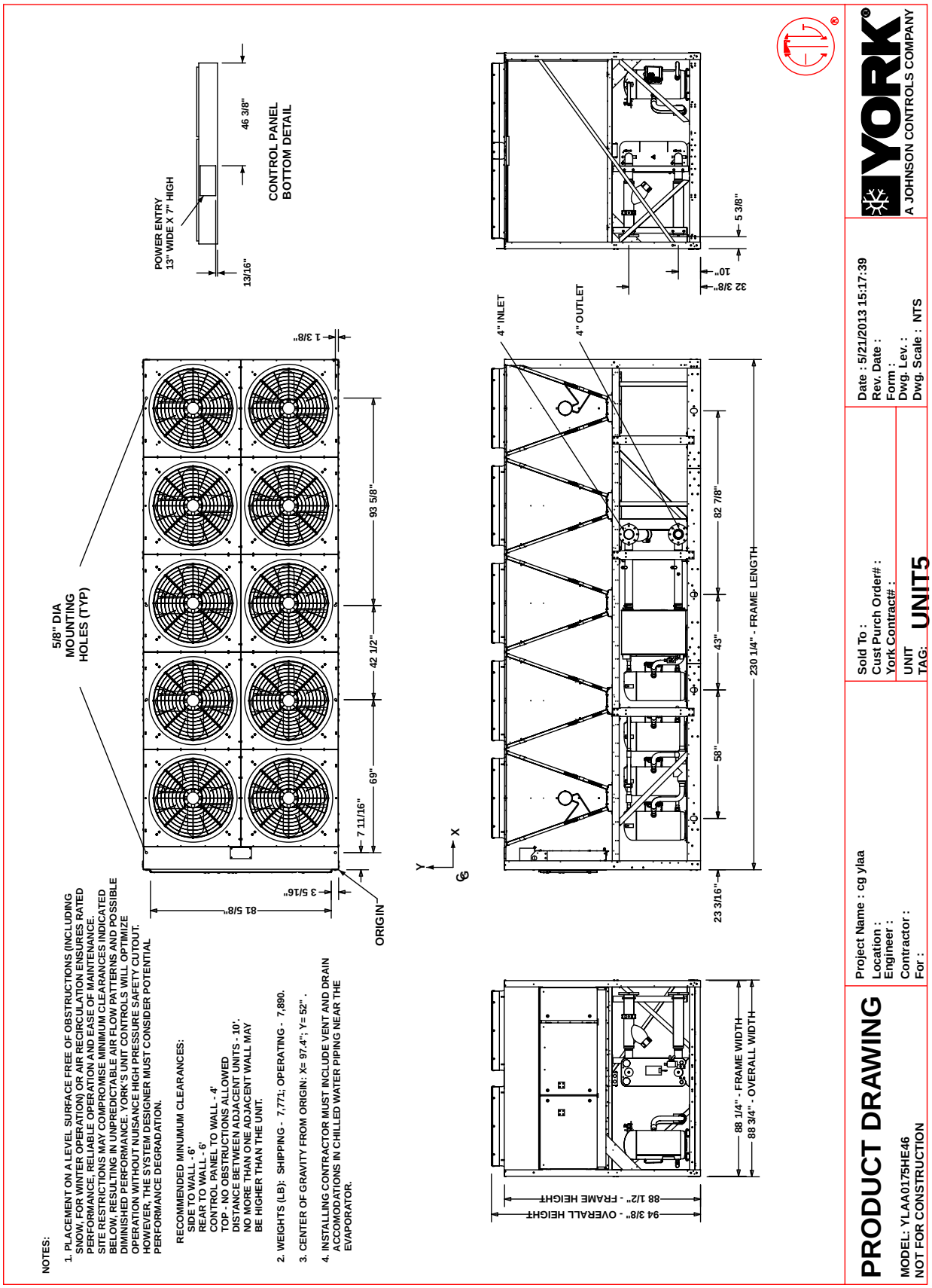
Electrical Data		
Nominal Voltage / Voltage Limits		460-3-60 / 414-506
Min. Circuit Ampacity	A	372
Max. Fuse / CB Rating	A	400
Min. Fuse / CB Rating	A	400
Unit Short Circuit Current Withstand	[kA]	5
Wire Lugs Per Phase		2
Wire Range (Lug Size)		#4 - 500 kcmil

Weights and Dimensions		
Shipping Weight	lb	7772
Operating Weight	lb	7891
Refrigerant Charge	lb	187
Overall Length	in	232.7
Overall Width	in	88.3
Overall Height	in	94.2
Software Version		YW13.02a

Certified in accordance with the AHRI Air-Cooled Water Chilling Packages Using Vapor Compression Cycle Certification Program, which is based on AHRI Standard 550/590 (I-P). Certified units may be found in the AHRI Directory at www.ahridirectory.org Auxiliary components included in total KW - Oil heaters, Chiller controls. Auxiliary power is already included in the compressor and fan power

AHRI CERTIFIED
www.ahridirectory.org
Air-Cooled Chillers
AHRI Standard 550/590

MODEL: YLAAB0175HE
AHRI CAPACITY 176 TONS



YLAA
131 TO 175

YVAA
150 to 500 Tons
Air Cooled Screw Chiller

YVAA RIGGING

Lifting Unit

Container lugs should be inserted into the holes provided in the bottom of the frame rail.

Use spreader bars to avoid lifting chains hitting the chiller. Various methods of spreader bar arrangements may be used; keeping in mind the intent is to keep the unit stable and to keep the chains from hitting the chiller and causing damage.

WARNING — Never lift the chiller using a forklift or by hooking the top rails. Use only the lifting holes provided.

Lifting instructions are placed on a label on the chiller and on the shipping bag.

Delivery and Storage

To ensure consistent quality and maximum reliability, all units are tested and inspected before leaving the factory. Units are shipped completely assembled and containing refrigerant under pressure. Units are shipped without export crating unless crating has been specified on the Sales Order.

If the unit is to be put into storage, prior to installation, the following precautions should be observed.

- The chiller must be “blocked” so that the base is not permitted to sag or bow.
- Ensure that all openings, such as water connections, are securely capped.
- Do not store where exposed to ambient air temperatures exceeding 43°C (110°F).
- The condensers should be covered to protect the coils and fins from potential damage and corrosion, particularly where building work is in progress.
- The unit should be stored in a location where there is minimal activity in order to limit the risk of accidental physical damage.
- To prevent inadvertent operation of the pressure relief devices the unit must not be steam cleaned.
- It is recommended that the unit is periodically inspected during storage.

Inspection

Remove any transit packing and inspect the unit to ensure that all components have been delivered and that no damage has occurred during transit. If any damage is evident, it should be noted on the carrier’s freight bill and a claim entered in accordance with the instructions given on the advice note.

Major damage must be reported immediately to your local Johnson Controls representative.

Moving the Chiller

Prior to moving the unit, ensure that the installation site is suitable for installing the unit and is easily capable of supporting the weight of the unit and all associated services.

The units are designed to be lifted using shackles or safety hooks. A spreader bar or frame should be used in order to prevent damage to the unit from the lifting chains. (*Refer to Figure 4 on Page 20 of the Operations and Maintenance Guide [Form 201.28-NM1.1 (812)] for hooks.*)

Units are provided with lifting eyes in the sites of the base frame, which can be attached directly using container lugs, shackles or safety hooks (*Refer to Figure 4 on Page 20 of the Operations and Maintenance Guide [Form 201.28-NM1.1 (812)] for proper lifting illustration*).

WARNING — The unit must only be lifted by the base frame at the points provided. Never move the unit on rollers, or lift the unit using a forklift truck.

Care should be taken to avoid damaging the condenser cooling fins when moving the unit.

Lifting Weights

For details of weights and weight distribution, refer to the data shipped in the chiller information packet and unit nameplate.

AIR COOLED SCREW CHILLER
YVAA - 150 to 500 TONS (R-134A)

BENEFITS

- Continuous function, microprocessor controlled Variable Speed Drive (VSD) for valve less, smooth capacity control to 10% of chiller capacity
- Chiller speed matched to system requirements at off-peak conditions resulting in lower energy usage
- Use of VSD reduces compressor moving parts by 50%
- Soft motor start with no electrical inrush reduces components stress, heat buildup
- Operating efficiencies at off-design conditions results in IPLVs as high as 19.8 EER
- Standard full load power factor of 95%, maintained throughout operating range resulting in improved energy savings
- Superior acoustic operation at off-design conditions
- HFC-R134a standard for long term availability and zero ODP
- Wide range of options to fit any design requirement
- Competitors MCA is an average of 10% higher than YORK's
- Lower MCA allows for smaller wiring and smaller circuit breakers therefore lower costs
- Allows for replacing chiller and increasing tonnage without replacing electrical components
- Industry's only 18-month air cooled warranty that covers all parts.

UPGRADE OPTIONS

- Remote Cooler
- Factory mounted non-fused disconnect switch or circuit breaker
- Epoxy Post Coated, Pre Coated or Post Coated for tube and fin
- Seamless internally enhanced copper fin & tube coils arranged in staggered rows; mechanically bonded to full eight aluminum fins
- Evaporator Options:
  - 1-1/2" Insulation (double thickness)
  - Raised Face Flange Accessory for cooler nozzles
- Flow Switch Accessory: Vapor proof, SPDT, NEMA 3R switch, 150psig
- Suction service isolation valve per circuit (discharge valve standard)
- Unit Enclosure Options:
  - Wire Panels (full unit): coated, heavy gauge welded wire mesh mounted on exterior of unit to prevent unauthorized access to refrigerant components
  - Louvered Panels (condenser coils only): Painted to match unit; louvered panels mounted over exterior condenser coils faces to visually screen unit, protects coils
  - Louvered Panels (full unit): Painted to match unit; to protect condenser coils, visually screen internal components and prevent unauthorized access
  - Louvered (condensers)/Wire Panels (mechanicals): Louvered steel panels on external condenser coil faces, heavy-gauge welded-wire mesh around base to prevent unauthorized access
- Sound Attenuation:
- SilentNight™ controls to force lower sound levels on demand or per user schedule
- Ultra quiet fans, compressor sound blankets and/or acoustical enclosures
- Vibration Isolation: Neoprene, 1" spring isolators or 2" spring isolators

AIR COOLED SCREW CHILLER
YVAA - 150 to 500 TONS

PACKAGE DESCRIPTION:

- Self contained, designed for outdoor installation
- Baked on powder paint
- Heavy gauge, formed galvanized steel base
- Factory mounted control transformer
- ARI-Standard 550/590-11 Rated & Certified
- All exposed wiring routed through liquid-tight, non-metallic conduit

Compressors:

- Reliable VSD driven semi-hermetic twin screw
- High efficiency, accessible hermetic motor with redundant overload protection
- Temperature actuated body cartridge heater
- Acoustically tuned discharge gas muffler
- Design pressure of compressor 450 PSIG

Condenser:

- Low noise, full airflow cross section fans for maximum efficiency; statically & dynamically balanced for low vibration operation; positioned in extended orifices for low sound
- High efficiency, direct drive, 3-phase totally enclosed fan motors with double sealed, permanently lubricated ball bearings
- Condenser coils are made of a single material to avoid galvanic corrosion due to dissimilar metals. Coils and headers are brazed as one piece
- Design Working Pressure 450 PSIG

Electrical:

- Competitors MCA is an average of 10% higher than YORK's
- Lower MCA allows for smaller wiring and smaller circuit breakers therefore lower costs
- Allows for replacing chiller and increasing tonnage without replacing electrical components

Evaporator:

- High efficiency Hybrid falling film cooler; refrigerant in shell and water in tubes
- Removable heads to access copper tubes
- Air vent and water drain connections
- Heater protection to -20 deg. F ambient
- Insulated with ¾" closed cell foam
- Design working pressure 150 PSIG water side and 235 PSIG on refrigerant side

Refrigerant circuit:

- Independent circuits per compressor
- Computer controlled bending of refrigerant pipe reduces over 60% of pipe brazed joints
- Liquid line components include: manual shutoff valve with charging port, removable core filter-drier, solenoid valve, sight glass with moisture indicator, electronic expansion valves
- Discharge line proided with manual compressor shutoff service valve
- External Oil separators with no moving parts, 450 PSIG design working pressure

Controls:

- All controls housed in a NEMA 3R cabinet with gasket sealed, hinged & latched door
- VSD section includes dedicated inverter for each compressor
- Control display accessible without opening main cabinet doors
- LCD, 80-character display with backlight
- Color coded, sealed keypad
- Standard controls permit operation from 0 to 125 deg F ambient temperature

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Screw Chiller
Performance Specification

Unit Tag	Qty.	Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
	1	YVAA0153BAF46	150.0	460/3/60	R134a

Pin:

BASE MODEL	POWER	CONTROLS	PIPING	COMP	EVAPORATOR	COND	CABINET	MISC	WARR
YVAA0153BAF46BA	VSXX	XTAXLXXXX60	44XOXXX	S189W	1SXXA2B	MXF	PXXXX	XXXX	BXSX
5 10 15		20 25 30	35	40	45	50	55	60	65

Evaporator Data		Evaporator Data (Cont.)		Performance Data	
EWT (°F)	54.0	Min. Flow Rate (gpm)	250.0	EER / COP	10.1 / 3.0
LWT (°F)	44.0	Max. Flow Rate (gpm)	950.0	IPLV	15.1 / 4.4
Design Flow Rate (gpm)	359.6			**Minimum Unit Capacity**	**10 %**
Pressure Drop (ft.)	5.6	**Condenser Data**		**Physical Data**	
Fluid	Water	Ambient Temp. Design (°F)	95.0	Rigging Wt. (lbs.)	11518
Fouling Factor	0.00010	Altitude (ft.)	0	Operating Wt. (lbs.)	11979
Water Volume (gal)	58.0	Ambient Temp. Min (°F)	0.0		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	109	109		
Fan QTY/FLA (each)	4/3.3	4/3.3		

Single Point				
Min. Circuit Ampacity	275			
Recommended Fuse/CB Rating	350			
Max. Inverse Time CB Rating	350			
Max. Dual Element Fuse Size (Amps)	350			
Unit Short Circuit Withstand (STD)	30kA			
Wire Lugs Per Phase*	2			
Wire Range (Lug Size)	#2 - 600 KCM			
Unit Power Factor	0.95			
Control KVA	2.0		**Operating Condition Electrical Data**	
Starter Type	VSD		Compressor kW	162.6
			Total Fan kW	14.8
			Total kW	177.4

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

AHRI CERTIFIED®

Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	150.0	162.6	10.1 / 3.0
75.0	80.0	112.5	86.2	13.3 / 3.9
50.0	65.0	75.0	43.0	16.3 / 4.8
25.0	55.0	37.5	18.2	17.6 / 5.2

SOUND POWER LEVELS (In Accordance with AHRI 370) – Octave Band Center Frequency, Hz
YVAA0153BAF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	LWA
100.0	95.0	95.0	95.0	96.0	98.0	95.0	87.0	83.0	78.0	99.0
75.0	80.0	95.0	95.0	96.0	95.0	92.0	86.0	82.0	78.0	97.0
50.0	65.0	94.0	94.0	95.0	94.0	91.0	85.0	81.0	77.0	96.0
25.0	55.0	91.0	91.0	92.0	91.0	88.0	82.0	78.0	73.0	92.0

SOUND PRESSURE LEVELS in dB at 30.0 (ft.) **
YVAA0153BAF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	dBA
100.0	95.0	68.0	68.0	69.0	71.0	68.0	60.0	56.0	51.0	72.0
75.0	80.0	68.0	68.0	69.0	68.0	65.0	59.0	55.0	51.0	70.0
50.0	65.0	67.0	67.0	68.0	67.0	64.0	58.0	54.0	50.0	69.0
25.0	55.0	64.0	64.0	65.0	64.0	61.0	55.0	51.0	46.0	65.0

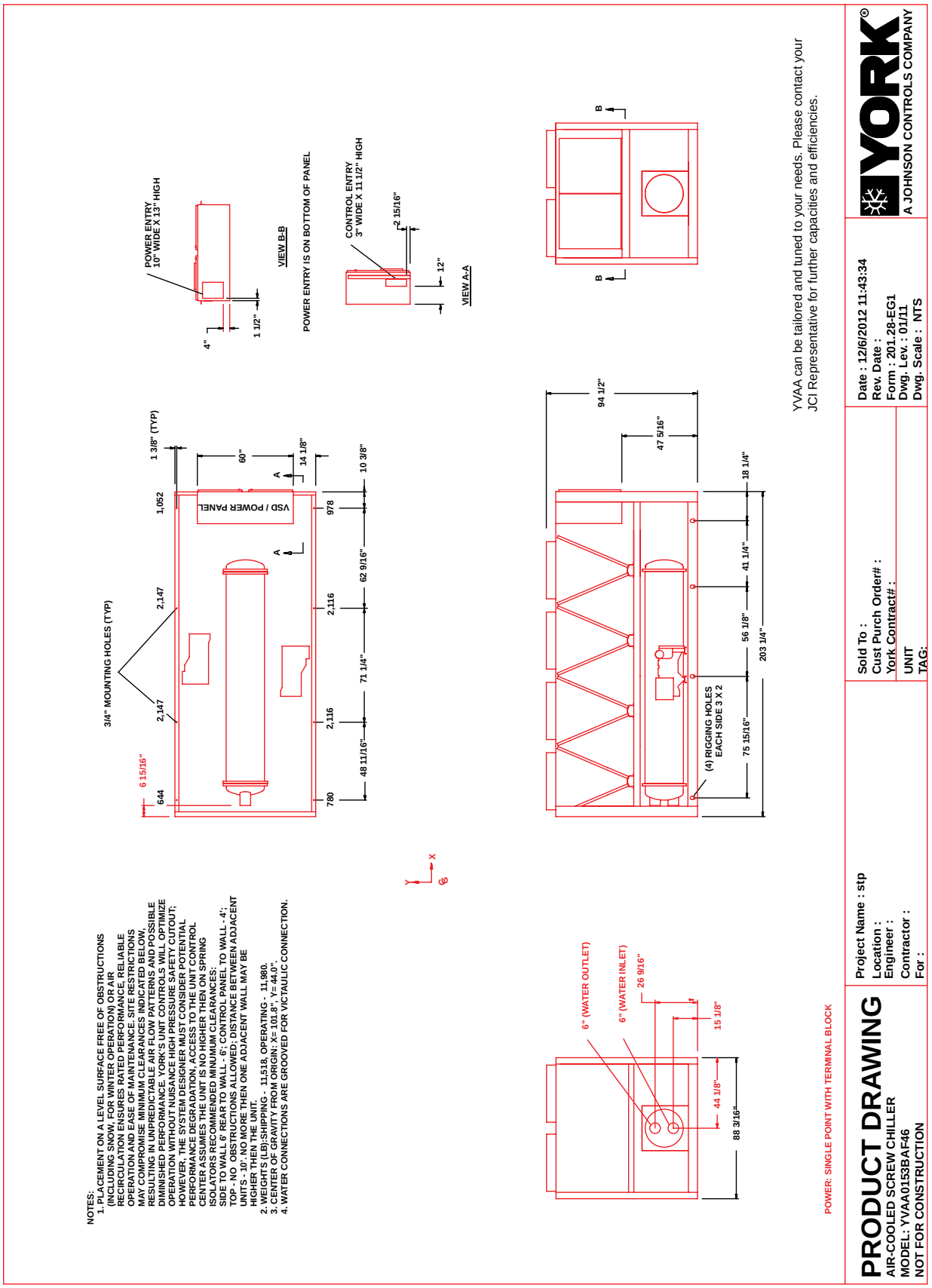
** Chiller is assumed to be a point source on a reflecting surface (hemispherical radiation)

Performance at AHRI Conditions
YVAA0153BAF46

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.1 / 3.0
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	15.1 / 4.4
Flow Rate (gpm)	359.6			Capacity (Tons)	150.0
Pressure Drop (ft.)	5.6				
Fluid	Water				
Fouling Factor	0.00010				
Water Volume (gal)	58.0				

If you need a model or capacity between nominal sizes shown here, we can configure units within 1 ton increments. Please contact you JCI Sales Representative for selections and pricing.

MODEL: YVAA0153BAF46
AHRI CAPACITY 150.0 TONS



NOTES:
1. PLACEMENT ON A LEVEL SURFACE FREE OF OBSTRUCTIONS (INCLUDING SNOW, FOR WINTER OPERATION) OR AIR RECIRCULATION ENSURES RATED PERFORMANCE, RELIABLE OPERATION AND EASE OF MAINTENANCE. SITE RESTRICTIONS MAY COMPROMISE MINIMUM CLEARANCES INDICATED BELOW, RESULTING IN UNPREDICTABLE AIR FLOW PATTERNS AND POSSIBLE DIMINISHED PERFORMANCE. YORK'S UNIT CONTROLS WILL OPTIMIZE OPERATION WITHOUT NUISANCE HIGH PRESSURE SAFETY CUTOUT; HOWEVER, THE SYSTEM DESIGNER MUST CONSIDER POTENTIAL PERFORMANCE DEGRADATION. ACCESS TO THE UNIT CONTROL CENTER ASSUMES THE UNIT IS NO HIGHER THEN ON SPRING ISOLATORS RECOMMENDED MINIMUM CLEARANCES:
SIDE TO WALL 6' REAR TO WALL - 6'; CONTROL PANEL TO WALL - 4';
TOP - NO OBSTRUCTIONS ALLOWED; DISTANCE BETWEEN ADJACENT UNITS - 10'; NO MORE THEN ONE ADJACENT WALL MAY BE HIGHER THEN THE UNIT.
2. WEIGHTS (LBS) SHIPPING - 11518, OPERATING - 11,980.
3. CENTER OF GRAVITY FROM ORIGIN; X= 101.8", Y= 44.0".
4. WATER CONNECTIONS ARE GROOVED FOR VICTAULIC CONNECTION.

YVAA can be tailored and tuned to your needs. Please contact your JCI Representative for further capacities and efficiencies.

POWER: SINGLE POINT WITH TERMINAL BLOCK

PRODUCT DRAWING
AIR-COOLED SCREW CHILLER
MODEL: YVAA0153BAF46
NOT FOR CONSTRUCTION

Project Name : stp
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :
UNIT
TAG:

Date : 12/6/2012 11:43:34
Rev. Date :
Form : 201.28-EG1
Dwg. Lev. : 01/11
Dwg. Scale : NTS

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A JOHNSON CONTROLS COMPANY

Air Cooled Screw Chiller
Performance Specification

Unit Tag	Qty.	Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
	1	YVAA0183ABF46	175.0	460/3/60	R134a

Pin:

BASE MODEL	POWER	CONTROLS	PIPING	COMP	EVAPORATOR	COND	CABINET	MISC	WARR
YVAA0183ABF46BA	VSXX	XTAXLXXXX60	44XOXXX	S192W	1SXXA2B	MXF	PXXXX	XXXX	BXSX
5 10 15		20 25 30	35	40	45	50	55	60	65

Evaporator Data		Evaporator Data (Cont.)		Performance Data	
EWT (°F)	54.0	Min. Flow Rate (gpm)	200.0	EER / COP	10.4 / 3.0
LWT (°F)	44.0	Max. Flow Rate (gpm)	750.0	IPLV	15.4 / 4.5
Design Flow Rate (gpm)	419.5			**Minimum Unit Capacity**	**10 %**
Pressure Drop (ft.)	11.4	**Condenser Data**		**Physical Data**	
Fluid	Water	Ambient Temp. Design (°F)	95.0	Rigging Wt. (lbs.)	12019
Fouling Factor	0.00010	Altitude (ft.)	0	Operating Wt. (lbs.)	12460
Water Volume (gal)	48.0	Ambient Temp. Min (°F)	0.0		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	139	111		
Fan QTY/FLA (each)	6/3.3	4/3.3		

Single Point				
Min. Circuit Ampacity	322			
Recommended Fuse/CB Rating	450			
Max. Inverse Time CB Rating	450			
Max. Dual Element Fuse Size (Amps)	450			
Unit Short Circuit Withstand (STD)	30kA			
Wire Lugs Per Phase*	2			
Wire Range (Lug Size)	#2 - 600 KCM			
Unit Power Factor	0.95			
Control KVA	2.0		**Operating Condition Electrical Data**	
Starter Type	VSD		Compressor kW	184.4
			Total Fan kW	17.9
			Total kW	202.4

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

AHRI CERTIFIED®

Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	175.0	184.4	10.4 / 3.0
75.0	80.0	131.3	97.8	13.5 / 4.0
50.0	65.0	87.5	49.4	16.5 / 4.8
25.0	55.0	43.7	22.0	17.9 / 5.2

SOUND POWER LEVELS (In Accordance with AHRI 370) – Octave Band Center Frequency, Hz
YVAA0183ABF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	LWA
100.0	95.0	96.0	96.0	97.0	98.0	94.0	88.0	84.0	80.0	99.0
75.0	80.0	96.0	96.0	97.0	96.0	94.0	87.0	83.0	79.0	98.0
50.0	65.0	94.0	95.0	95.0	95.0	91.0	86.0	82.0	78.0	96.0
25.0	55.0	91.0	91.0	92.0	91.0	88.0	82.0	78.0	73.0	93.0

SOUND PRESSURE LEVELS in dB at 30.0 (ft.) **
YVAA0183ABF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	dBA
100.0	95.0	69.0	69.0	70.0	71.0	67.0	61.0	57.0	53.0	72.0
75.0	80.0	69.0	69.0	70.0	69.0	67.0	60.0	56.0	52.0	71.0
50.0	65.0	67.0	68.0	68.0	68.0	64.0	59.0	55.0	51.0	69.0
25.0	55.0	64.0	64.0	65.0	64.0	61.0	55.0	51.0	46.0	66.0

** Chiller is assumed to be a point source on a reflecting surface (hemispherical radiation)

Performance at AHRI Conditions
YVAA0183ABF46

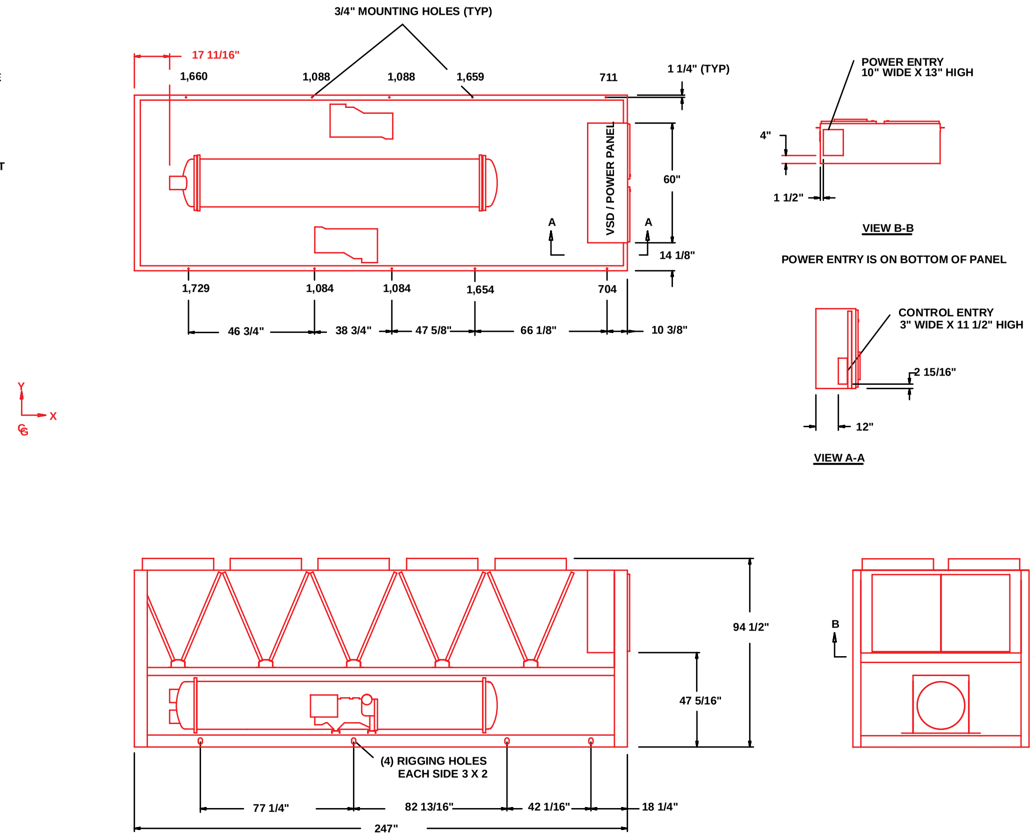
Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.4 / 3.0
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	15.4 / 4.5
Flow Rate (gpm)	419.5			Capacity (Tons)	175.0
Pressure Drop (ft.)	11.4				
Fluid	Water				
Fouling Factor	0.00010				
Water Volume (gal)	48.0				

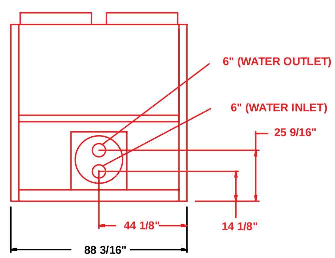
If you need a model or capacity between nominal sizes shown here, we can configure units within 1 ton increments. Please contact you JCI Sales Representative for selections and pricing.

YORK
A JOHNSON CONTROLS COMPANY

MODEL: YVAA0183ABF46
AHRI CAPACITY 175.0 TONS

NOTES:
1. PLACEMENT ON A LEVEL SURFACE FREE OF OBSTRUCTIONS (INCLUDING SNOW, FOR WINTER OPERATION) OR AIR RECIRCULATION ENSURES RATED PERFORMANCE, RELIABLE OPERATION AND EASE OF MAINTENANCE. SITE RESTRICTIONS MAY COMPROMISE MINIMUM CLEARANCES INDICATED BELOW, RESULTING IN UNPREDICTABLE AIR FLOW PATTERNS AND POSSIBLE DIMINISHED PERFORMANCE. YORK'S UNIT CONTROLS WILL OPTIMIZE OPERATION WITHOUT NUISANCE HIGH PRESSURE SAFETY CUTOUT; HOWEVER, THE SYSTEM DESIGNER MUST CONSIDER POTENTIAL PERFORMANCE DEGRADATION, ACCESS TO THE UNIT CONTROL CENTER ASSUMES THE UNIT IS NO HIGHER THEN ON SPRING ISOLATORS RECOMMENDED MINUMUM CLEARANCES:
SIDE TO WALL 6' REAR TO WALL - 6'; CONTROL PANEL TO WALL - 4';
TOP - NO OBSTRUCTIONS ALLOWED; DISTANCE BETWEEN ADJACENT UNITS - 10'. NO MORE THEN ONE ADJACENT WALL MAY BE HIGHER THEN THE UNIT.
2. WEIGHTS (LB):SHIPPING - 12,019, OPERATING - 12,460.
3. CENTER OF GRAVITY FROM ORIGIN: X= 128.4", Y= 44.2".
4. WATER CONNECTIONS ARE GROOVED FOR VICTAULIC CONNECTION.





POWER: SINGLE POINT WITH TERMINAL BLOCK

YVAA can be tailored and tuned to your needs. Please contact your JCI Representative for further capacities and efficiencies.

PRODUCT DRAWING AIR-COOLED SCREW CHILLER MODEL: YVAA0183ABF46 NOT FOR CONSTRUCTION	Project Name : stp Location : Engineer : Contractor : For :	Sold To : Cust Purch Order# : York Contract# : UNIT TAG:	Date : 12/6/2012 11:51:6 Rev. Date : Form : 201.28-EG1 Dwg. Lev. : 01/11 Dwg. Scale : NTS	YORK A JOHNSON CONTROLS COMPANY

YVAA
150 TO 200

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Screw Chiller
Performance Specification

Unit Tag	Qty.	Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
	1	YVAA0233BEF46	200.0	460/3/60	R134a

Pin:

BASE MODEL	POWER	CONTROLS	PIPING	COMP	EVAPORATOR	COND	CABINET	MISC	WARR
YVAA0233BEF46BA	VSXX	XTAXLXXXX60	44XOXXX	S176W	1SXXA2B	MXF	PXXXX	XXXX	BXSX
5 10 15		20 25 30	35	40	45	50	55	60	65

Evaporator Data		Evaporator Data (Cont.)		Performance Data	
EWT (°F)	54.0	Min. Flow Rate (gpm)	250.0	EER / COP	10.5 / 3.1
LWT (°F)	44.0	Max. Flow Rate (gpm)	950.0	IPLV	15.2 / 4.5
Design Flow Rate (gpm)	479.4			**Minimum Unit Capacity**	**10 %**
Pressure Drop (ft.)	9.2	**Condenser Data**		**Physical Data**	
Fluid	Water	Ambient Temp. Design (°F)	95.0	Rigging Wt. (lbs.)	13288
Fouling Factor	0.00010	Altitude (ft.)	0	Operating Wt. (lbs.)	13750
Water Volume (gal)	58.0	Ambient Temp. Min (°F)	0.0		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	158	135		
Fan QTY/FLA (each)	7/3.3	5/3.3		

Single Point				
Min. Circuit Ampacity	375			
Recommended Fuse/CB Rating	500			
Max. Inverse Time CB Rating	500			
Max. Dual Element Fuse Size (Amps)	500			
Unit Short Circuit Withstand (STD)	30kA			
Wire Lugs Per Phase*	2			
Wire Range (Lug Size)	#2 - 600 KCM			
Unit Power Factor	0.95			
Control KVA	2.0		**Operating Condition Electrical Data**	
Starter Type	VSD		Compressor kW	208.4
			Total Fan kW	21.1
			Total kW	229.4

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

AHRI CERTIFIED®

Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	200.0	208.4	10.5 / 3.1
75.0	80.0	150.0	111.2	13.5 / 4.0
50.0	65.0	100.0	56.5	16.2 / 4.7
25.0	55.0	50.0	23.9	17.3 / 5.1

SOUND POWER LEVELS (In Accordance with AHRI 370) – Octave Band Center Frequency, Hz
YVAA0213ADF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	LWA
100.0	95.0	97.0	97.0	98.0	97.0	94.0	88.0	84.0	80.0	99.0
75.0	80.0	97.0	97.0	98.0	97.0	93.0	88.0	84.0	80.0	99.0
50.0	65.0	96.0	96.0	97.0	96.0	93.0	87.0	83.0	78.0	97.0
25.0	55.0	93.0	93.0	94.0	94.0	90.0	84.0	80.0	76.0	95.0

SOUND PRESSURE LEVELS in dB at 30.0 (ft.) **
YVAA0213ADF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	dBA
100.0	95.0	70.0	70.0	71.0	70.0	67.0	61.0	57.0	53.0	72.0
75.0	80.0	70.0	70.0	71.0	70.0	66.0	61.0	57.0	53.0	72.0
50.0	65.0	69.0	69.0	70.0	69.0	66.0	60.0	56.0	51.0	70.0
25.0	55.0	66.0	66.0	67.0	67.0	63.0	57.0	53.0	49.0	68.0

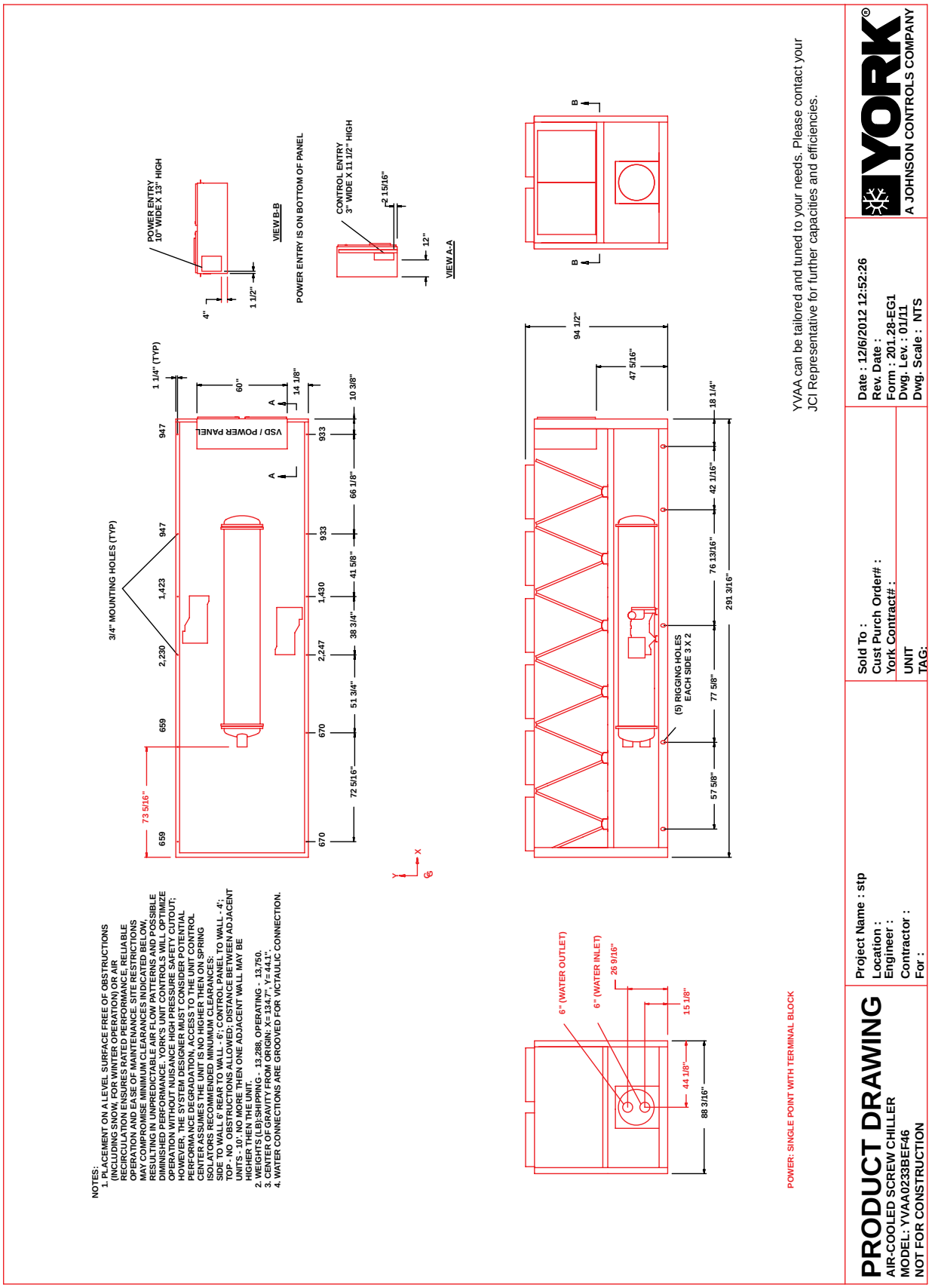
** Chiller is assumed to be a point source on a reflecting surface (hemispherical radiation)

Performance at AHRI Conditions
YVAA0213ADF46

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.5 / 3.1
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	15.2 / 4.5
Flow Rate (gpm)	479.4			Capacity (Tons)	200.0
Pressure Drop (ft.)	9.2				
Fluid	Water				
Fouling Factor	0.00010				
Water Volume (gal)	58.0				

If you need a model or capacity between nominal sizes shown here, we can configure units within 1 ton increments. Please contact you JCI Sales Representative for selections and pricing.

MODEL: YVAA0233BEF46
AHRI CAPACITY 200.0 TONS



YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Screw Chiller
Performance Specification

Unit Tag	Qty.	Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
	1	YVAA0273DGF46	250.0	460/3/60	R134a

Pin:

BASE MODEL	POWER	CONTROLS	PIPING	COMP	EVAPORATOR	COND	CABINET	MISC	WARR
YVAA0273DGF46BA	VSXX	XTAXLXXXX60	44XOXXX	S188W	1SXXA2B	MXF	XXXXX	XXXX	BXSX
5 10 15		20 25 30	35	40	45	50	55	60	65

Evaporator Data		Evaporator Data (Cont.)		Performance Data	
EWT (°F)	54.0	Min. Flow Rate (gpm)	300.0	EER / COP	10.8 / 3.2
LWT (°F)	44.0	Max. Flow Rate (gpm)	1150.0	NPLV	16.0 / 4.7
Design Flow Rate (gpm)	598.3			**Minimum Unit Capacity**	**10 %**
Pressure Drop (ft.)	15.2	**Condenser Data**		**Physical Data**	
Fluid	Water	Ambient Temp. Design (°F)	95.0	Rigging Wt. (lbs.)	16275
Fouling Factor	0.00010	Altitude (ft.)	0	Operating Wt. (lbs.)	17103
Water Volume (gal)	82.0	Ambient Temp. Min (°F)	0.0		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	175	175		
Fan QTY/FLA (each)	7/3.3	7/3.3		

Single Point				
Min. Circuit Ampacity	444			
Recommended Fuse/CB Rating	600			
Max. Inverse Time CB Rating	600			
Max. Dual Element Fuse Size (Amps)	600			
Unit Short Circuit Withstand (STD)	30kA			
Wire Lugs Per Phase*	2			
Wire Range (Lug Size)	#2 - 600 KCM			
Unit Power Factor	0.95			
Control KVA	2.0		**Operating Condition Electrical Data**	
Starter Type	VSD		Compressor kW	253.5
			Total Fan kW	24.2
			Total kW	277.7

Notes:	* Use Copper Conductors only

AHRI CERTIFIED®

Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	250.0	253.5	10.8 / 3.2
75.0	80.0	187.5	135.2	14.0 / 4.1
50.0	65.0	125.0	68.3	17.2 / 5.0
25.0	55.0	62.5	29.0	18.9 / 5.5

SOUND POWER LEVELS (In Accordance with AHRI 370) – Octave Band Center Frequency, Hz
YVAA0273DGF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	LWA
100.0	95.0	97.0	97.0	98.0	97.0	94.0	88.0	84.0	80.0	99.0
75.0	80.0	97.0	97.0	98.0	97.0	93.0	88.0	84.0	80.0	99.0
50.0	65.0	96.0	96.0	97.0	96.0	93.0	87.0	83.0	78.0	97.0
25.0	55.0	93.0	93.0	94.0	94.0	90.0	84.0	80.0	76.0	95.0

SOUND PRESSURE LEVELS in dB at 30.0 (ft.) **
YVAA0213ADF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	dBA
100.0	95.0	71.0	71.0	72.0	73.0	70.0	63.0	59.0	54.0	74.0
75.0	80.0	71.0	71.0	72.0	71.0	67.0	62.0	58.0	53.0	72.0
50.0	65.0	69.0	69.0	70.0	70.0	66.0	61.0	57.0	52.0	71.0
25.0	55.0	66.0	67.0	67.0	67.0	63.0	58.0	54.0	49.0	68.0

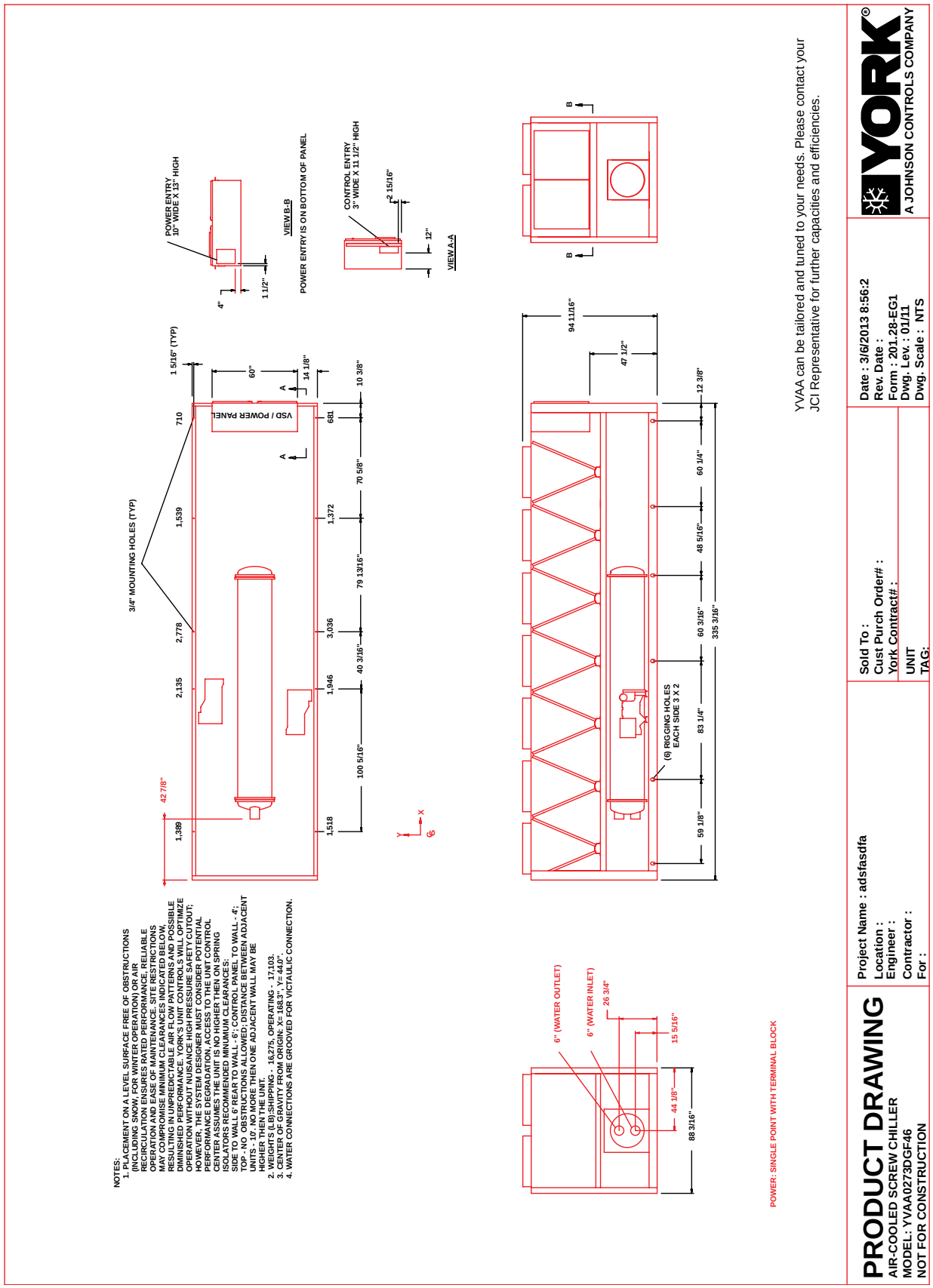
** Chiller is assumed to be a point source on a reflecting surface (hemispherical radiation)

Performance at AHRI Conditions
YVAA0273DGF46

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.8 / 3.2
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	16.0 / 4.7
Flow Rate (gpm)	599.8			Capacity (Tons)	249.9
Pressure Drop (ft.)	15.3				
Fluid	Water				
Fouling Factor	0.00010				
Water Volume (gal)	82.0				

If you need a model or capacity between nominal sizes shown here, we can configure units within 1 ton increments. Please contact you JCI Sales Representative for selections and pricing.

MODEL: YVAA0273DGF46
AHRI CAPACITY 250.0 TONS



YVAA
201 TO 500

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Screw Chiller
Performance Specification

Unit Tag	Qty.	Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
	1	YVAA0343EKF46	300.0	460/3/60	R134a

Pin:

BASE MODEL	POWER	CONTROLS	PIPING	COMP	EVAPORATOR	COND	CABINET	MISC	WARR
YVAA0343EKF46BA	VSXX	XTAXLXXXX60	44XOXXX	S179W	1SXXA2B	MXF	PXXXX	XXXX	BXSX
5 10 15		20 25 30	35	40	45	50	55	60	65

Evaporator Data		Evaporator Data (Cont.)		Performance Data	
EWT (°F)	54.0	Min. Flow Rate (gpm)	400.0	EER / COP	10.9 / 3.2
LWT (°F)	44.0	Max. Flow Rate (gpm)	1500.0	IPLV	15.5 / 4.5
Design Flow Rate (gpm)	719.1			Minimum Unit Capacity	10 %
Pressure Drop (ft.)	11.8	**Condenser Data**		**Physical Data**	
Fluid	Water	Ambient Temp. Design (°F)	95.0	Rigging Wt. (lbs.)	19315
Fouling Factor	0.00010	Altitude (ft.)	0	Operating Wt. (lbs.)	20175
Water Volume (gal)	113.0	Ambient Temp. Min (°F)	0.0		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	209	209		
Fan QTY/FLA (each)	9/3.3	9/3.3		

Single Point				
Min. Circuit Ampacity	533			
Recommended Fuse/CB Rating	700			
Max. Inverse Time CB Rating	700			
Max. Dual Element Fuse Size (Amps)	700			
Unit Short Circuit Withstand (STD)	30kA			
Wire Lugs Per Phase*	3			
Wire Range (Lug Size)	#2 - 600 KCM			
Unit Power Factor	0.95			
Control KVA	2.0		**Operating Condition Electrical Data**	
Starter Type	VSD		Compressor kW	300.3
			Total Fan kW	30.5
			Total kW	330.8

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

AHRI CERTIFIED®

Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	300.0	300.3	10.9 / 3.2
75.0	80.0	225.0	162.5	13.9 / 4.1
50.0	65.0	150.0	85.1	16.5 / 4.8
25.0	55.0	75.0	38.1	17.8 / 5.2

SOUND POWER LEVELS (In Accordance with AHRI 370) – Octave Band Center Frequency, Hz
YVAA0343EKF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	LWA
100.0	95.0	99.0	99.0	100.0	99.0	98.0	92.0	87.0	83.0	102.0
75.0	80.0	99.0	99.0	100.0	100.0	98.0	91.0	88.0	84.0	102.0
50.0	65.0	97.0	97.0	98.0	98.0	95.0	89.0	85.0	81.0	100.0
25.0	55.0	94.0	94.0	95.0	94.0	92.0	87.0	83.0	79.0	96.0

SOUND PRESSURE LEVELS in dB at 30.0 (ft.) **
YVAA0343EKF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	dBA
100.0	95.0	72.0	72.0	73.0	72.0	71.0	65.0	60.0	56.0	75.0
75.0	80.0	72.0	72.0	73.0	73.0	71.0	64.0	61.0	57.0	75.0
50.0	65.0	70.0	70.0	71.0	71.0	68.0	62.0	58.0	54.0	73.0
25.0	55.0	67.0	67.0	68.0	67.0	65.0	60.0	56.0	52.0	69.0

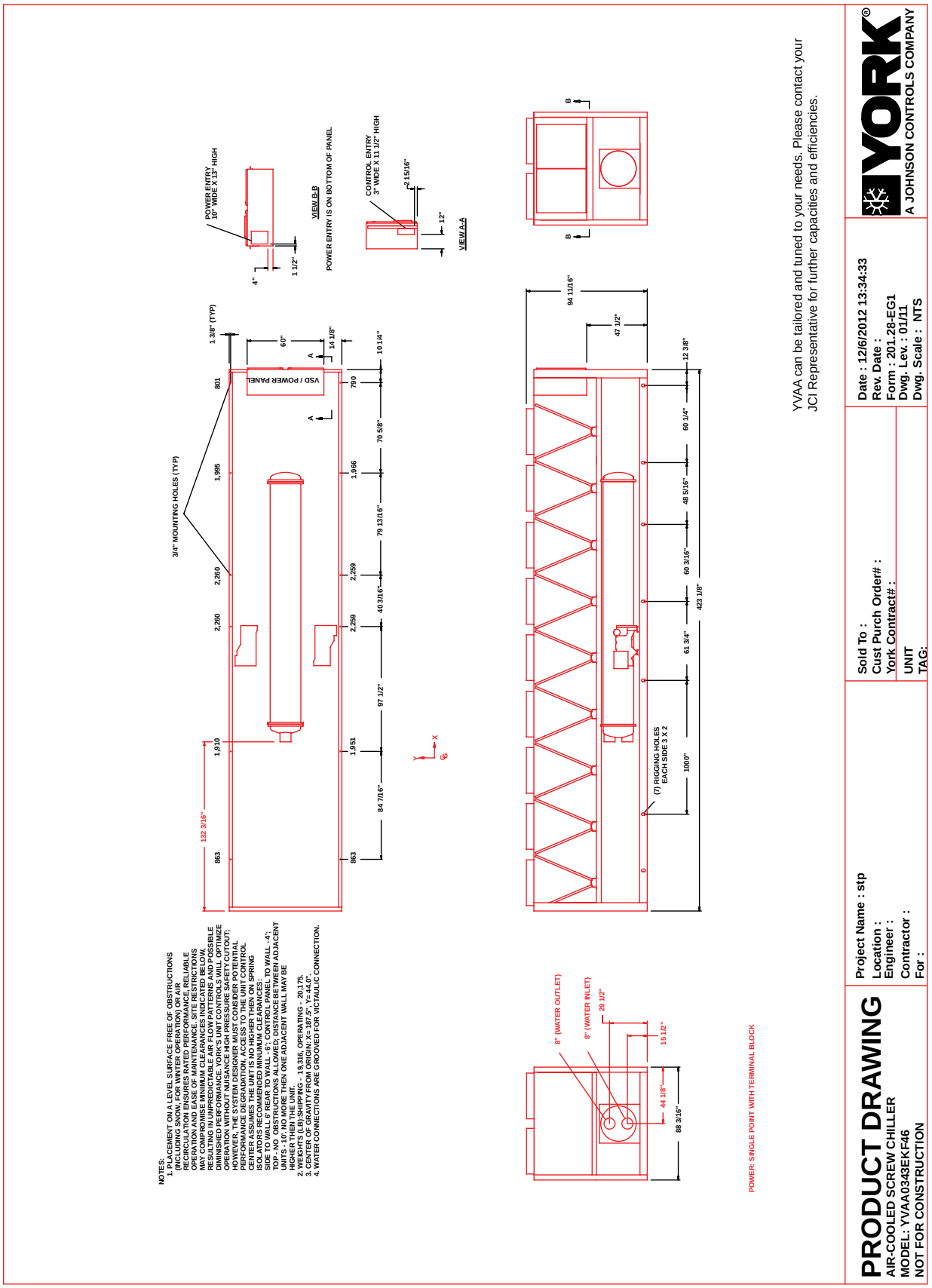
** Chiller is assumed to be a point source on a reflecting surface (hemispherical radiation)

Performance at AHRI Conditions
YVAA0343EKF46

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.9 / 3.2
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	15.5 / 4.5
Flow Rate (gpm)	719.1			Capacity (Tons)	300.0
Pressure Drop (ft.)	11.8				
Fluid	Water				
Fouling Factor	0.00010				
Water Volume (gal)	113.0				

If you need a model or capacity between nominal sizes shown here, we can configure units within 1 ton increments. Please contact you JCI Sales Representative for selections and pricing.

MODEL: YVAA0343EKF46
AHRI CAPACITY 300.0 TONS



YVAA
201 TO 500

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Screw Chiller
Performance Specification

Unit Tag	Qty.	Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
	1	YVAA0373FJF46	350.0	460/3/60	R134a

Pin:

BASE MODEL	POWER	CONTROLS	PIPING	COMP	EVAPORATOR	COND	CABINET	MISC	WARR
YVAA0373FJF46BA	VSXX	XTAXLXXXX60	44XOXXX	S196W	1SXXA2B	MXF	XXXXX	XXXX	BXSX
5 10 15		20 25 30	35	40	45	50	55	60	65

Evaporator Data		Evaporator Data (Cont.)		Performance Data	
EWT (°F)	54.0	Min. Flow Rate (gpm)	460.0	EER / COP	10.4 / 3.0
LWT (°F)	44.0	Max. Flow Rate (gpm)	1540.0	NPLV	15.0 / 4.4
Design Flow Rate (gpm)	837.7			**Minimum Unit Capacity**	**10 %**
Pressure Drop (ft.)	11.2	**Condenser Data**		**Physical Data**	
Fluid	Water	Ambient Temp. Design (°F)	95.0	Rigging Wt. (lbs.)	22346
Fouling Factor	0.00010	Altitude (ft.)	0	Operating Wt. (lbs.)	23405
Water Volume (gal)	96.0	Ambient Temp. Min (°F)	0.0		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	327	178		
Fan QTY/FLA (each)	7/3.3	7/3.3		

Single Point				
Min. Circuit Ampacity	658			
Recommended Fuse/CB Rating	800			
Max. Inverse Time CB Rating	800			
Max. Dual Element Fuse Size (Amps)	800			
Unit Short Circuit Withstand (STD)	30kA			
Wire Lugs Per Phase*	2			
Wire Range (Lug Size)	#2 - 600 KCM			
Unit Power Factor	0.95			
Control KVA	3.0		**Operating Condition Electrical Data**	
Starter Type	VSD		Compressor kW	372.6
			Total Fan kW	31.8
			Total kW	404.4

Notes:	* Use Copper Conductors only

AHRI CERTIFIED®

Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	350.0	372.6	10.4 / 3.0
75.0	80.0	262.5	203.4	13.3 / 3.9
50.0	65.0	175.0	105.5	16.1 / 4.7
25.0	55.0	87.5	44.4	17.4 / 5.1

SOUND POWER LEVELS (In Accordance with AHRI 370) – Octave Band Center Frequency, Hz
YVAA0373FJF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	LWA
100.0	95.0	99.0	99.0	100.0	103.0	100.0	97.0	96.0	85.0	105.0
75.0	80.0	99.0	100.0	100.0	100.0	97.0	91.0	88.0	83.0	102.0
50.0	65.0	98.0	98.0	99.0	98.0	95.0	89.0	86.0	83.0	100.0
25.0	55.0	96.0	96.0	97.0	97.0	92.0	87.0	84.0	81.0	98.0

SOUND PRESSURE LEVELS in dB at 30.0 (ft.) **
YVAA0373FJF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	dBA
100.0	95.0	72.0	72.0	73.0	76.0	73.0	70.0	69.0	58.0	78.0
75.0	80.0	72.0	73.0	73.0	73.0	70.0	64.0	61.0	56.0	75.0
50.0	65.0	71.0	71.0	72.0	71.0	68.0	62.0	59.0	56.0	73.0
25.0	55.0	69.0	69.0	70.0	70.0	65.0	60.0	57.0	54.0	71.0

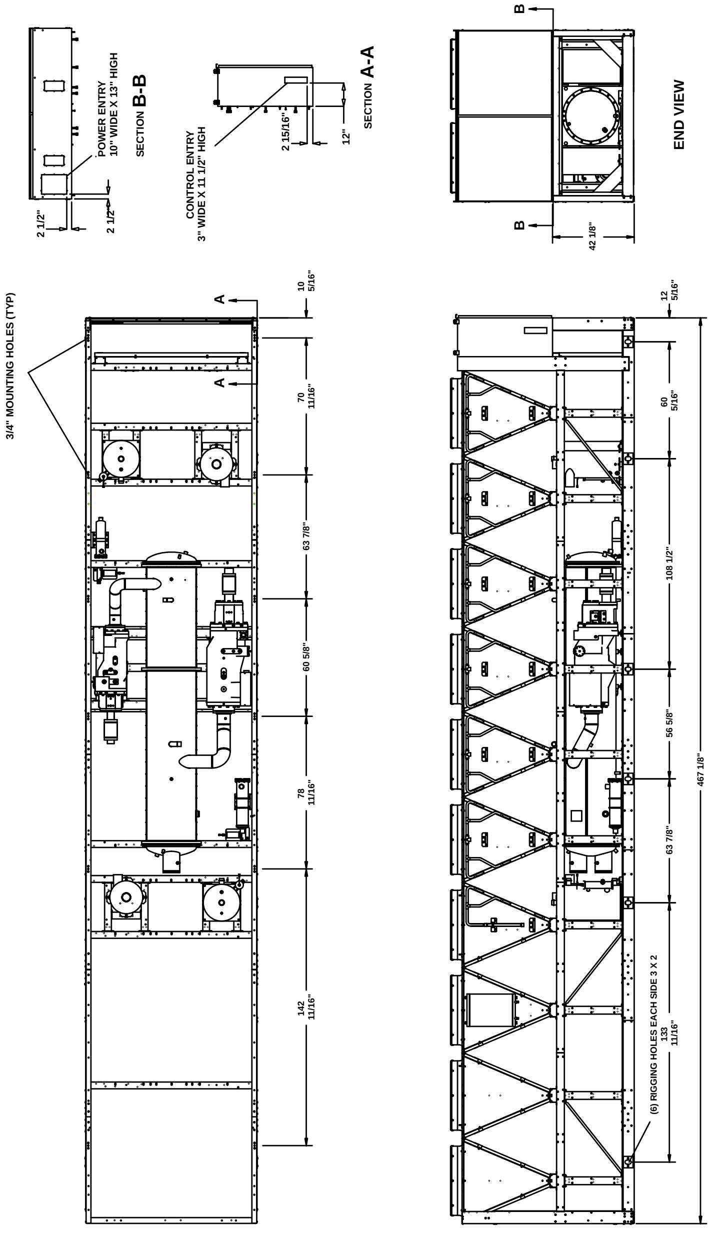
** Chiller is assumed to be a point source on a reflecting surface (hemispherical radiation)

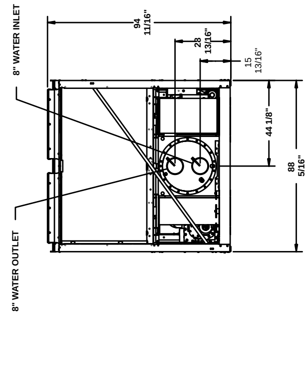
Performance at AHRI Conditions
YVAA0373FJF46

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.4 / 3.0
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	15.0 / 4.4
Flow Rate (gpm)	839.7			Capacity (Tons)	349.9
Pressure Drop (ft.)	11.3				
Fluid	Water				
Fouling Factor	0.00010				
Water Volume (gal)	96.0				

If you need a model or capacity between nominal sizes shown here, we can configure units within 1 ton increments. Please contact you JCI Sales Representative for selections and pricing.

MODEL: YVAA0373EKF46
AHRI CAPACITY 350.0 TONS





NOTES:
1. PLACEMENT ON A LEVEL SURFACE FREE OF OBSTRUCTIONS (INCLUDING SNOW, FOR WINTER OPERATION) OR AIR RECIRCULATION ENSURES RATED PERFORMANCE, RELIABLE OPERATION AND EASE OF MAINTENANCE. SITE RESTRICTIONS MAY COMPROMISE MINIMUM CLEARANCES INDICATED BELOW, RESULTING IN UNPREDICTABLE AIR FLOW PATTERNS AND POSSIBLE DIMINISHED PERFORMANCE. YORK'S UNIT CONTROLS WILL OPTIMIZE OPERATION WITHOUT NUISANCE HIGH PRESSURE SAFETY CUTOUT; HOWEVER, THE SYSTEM DESIGNER MUST CONSIDER POTENTIAL PERFORMANCE DEGRADATION, ACCESS TO THE UNIT CONTROL CENTER ASSUMES THE UNIT IS NO HIGHER THEN ON SPRING ISOLATORS RECOMMENDED MINUMUM CLEARANCES:
SIDE TO WALL 6' REAR TO WALL - 6'; CONTROL PANEL TO WALL - 4'; TOP - NO OBSTRUCTIONS ALLOWED; DISTANCE BETWEEN ADJACENT UNITS - 10'. NO MORE THEN ONE ADJACENT WALL MAY BE HIGHER THEN THE UNIT.
2. WEIGHTS (LB):SHIPPING - 22,346, OPERATING - 23,405.
3. CENTER OF GRAVITY FROM ORIGIN: X= 200.3", Y= 46.6".
4. WATER CONNECTIONS ARE GROOVED FOR VICTAULIC CONNECTION.

YVAA can be tailored and tuned to your needs. Please contact your JCI Representative for further capacities and efficiencies.

PRODUCT DRAWING AIR-COOLED SCREW CHILLER MODEL: YVAA0373FJF46 NOT FOR CONSTRUCTION	Project Name : adsfasdfa Location : Engineer : Contractor : For :	Sold To : Cust Purch Order# : York Contract# : UNIT TAG:	Date : 3/5/2013 14:21:26 Rev. Date : Form : 201.28-EG1 Dwg. Lev. : 01/11 Dwg. Scale : NTS	YORK A JOHNSON CONTROLS COMPANY

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Screw Chiller
Performance Specification

Unit Tag	Qty.	Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
	1	YVAA0443FMF46	400.0	460/3/60	R134a

Pin:

BASE MODEL	POWER	CONTROLS	PIPING	COMP	EVAPORATOR	COND	CABINET	MISC	WARR
YVAA0443FMF46BA	VDXX	XTAXLXXXX60	44XOXXX	S172W	1SXXA2B	MXF	PXXXX	XXXX	BXSX
5 10 15		20 25 30	35	40	45	50	55	60	65

Evaporator Data		Evaporator Data (Cont.)		Performance Data	
EWT (°F)	54.0	Min. Flow Rate (gpm)	460.0	EER / COP	10.6 / 3.1
LWT (°F)	44.0	Max. Flow Rate (gpm)	1540.0	IPLV	14.8 / 4.3
Design Flow Rate (gpm)	958.8			Minimum Unit Capacity	10 %
Pressure Drop (ft.)	14.3	**Condenser Data**		**Physical Data**	
Fluid	Water	Ambient Temp. Design (°F)	95.0	Rigging Wt. (lbs.)	25942
Fouling Factor	0.00010	Altitude (ft.)	0	Operating Wt. (lbs.)	27001
Water Volume (gal)	96.0	Ambient Temp. Min (°F)	0.0		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	287	287		
Fan QTY/FLA (each)	12/3.3	12/3.3		

Single Point				
Min. Circuit Ampacity	398	398		
Min. Non-Fused Disconnect (Amps)	600	600		
Min. Dual Element Fuse Size (Amps)	600	600		
Max. Dual Element Fuse Size (Amps)	600	600		
Min. Circuit Breaker (Amps)	600	600		
Max. Circuit Breaker (Amps)	600	600		
Wire Range (Lug Size) *	#2 - 600 KCM	#2 - 600 KCM		
Unit Power Factor	0.95	0.95		
Control KVA	3.0		**Operating Condition Electrical Data**	
Starter Type	VSD		Compressor kW	414.4
			Total Fan kW	38.0
			Total kW	452.4

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

AHRI CERTIFIED®

Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	400.0	414.4	10.6 / 3.1
75.0	80.0	300.0	231.7	13.2 / 3.9
50.0	65.0	200.0	120.9	15.8 / 4.6
25.0	55.0	100.0	53.3	17.3 / 5.1

SOUND POWER LEVELS (In Accordance with AHRI 370) – Octave Band Center Frequency, Hz
YVAA0443FMF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	LWA
100.0	95.0	100.0	100.0	101.0	102.0	99.0	95.0	93.0	88.0	104.0
75.0	80.0	100.0	100.0	101.0	102.0	100.0	92.0	90.0	85.0	104.0
50.0	65.0	99.0	99.0	100.0	100.0	96.0	90.0	87.0	85.0	101.0
25.0	55.0	96.0	96.0	97.0	98.0	93.0	87.0	84.0	82.0	98.0

SOUND PRESSURE LEVELS in dB at 30.0 (ft.) **
YVAA0443FMF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	dBA
100.0	95.0	73.0	73.0	74.0	75.0	72.0	68.0	66.0	61.0	77.0
75.0	80.0	73.0	73.0	74.0	75.0	73.0	65.0	63.0	58.0	77.0
50.0	65.0	72.0	72.0	73.0	73.0	69.0	63.0	60.0	58.0	74.0
25.0	55.0	69.0	69.0	70.0	71.0	66.0	60.0	57.0	55.0	71.0

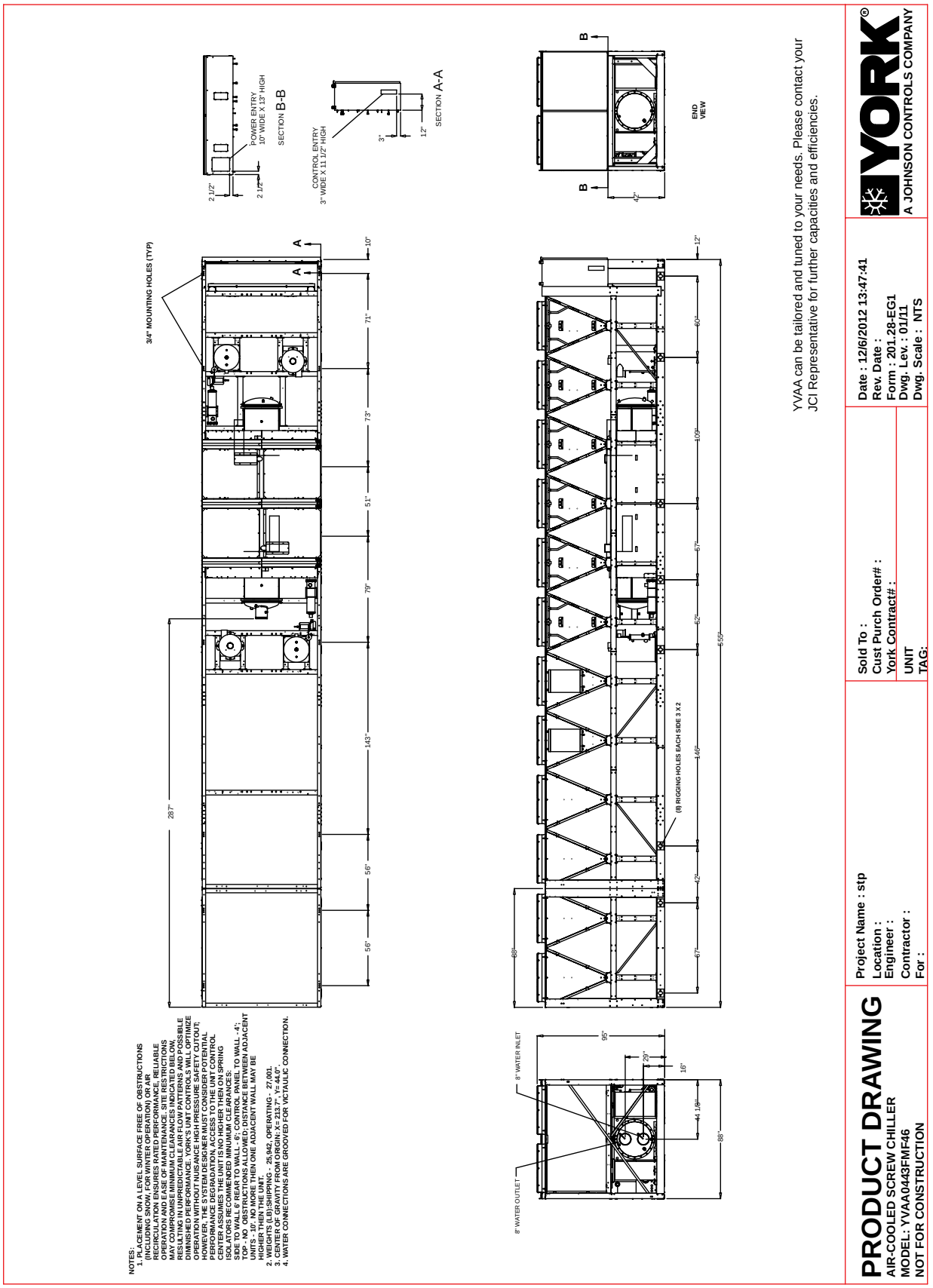
** Chiller is assumed to be a point source on a reflecting surface (hemispherical radiation)

Performance at AHRI Conditions
YVAA0443FMF46

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.6 / 3.1
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	14.8 / 4.3
Flow Rate (gpm)	958.8			Capacity (Tons)	400.0
Pressure Drop (ft.)	14.3				
Fluid	Water				
Fouling Factor	0.00010				
Water Volume (gal)	96.0				

If you need a model or capacity between nominal sizes shown here, we can configure units within 1 ton increments. Please contact you JCI Sales Representative for selections and pricing.

MODEL: YVAA0443FMF46
AHRI CAPACITY 400.0 TONS



YVAA can be tailored and tuned to your needs. Please contact your JCI Representative for further capacities and efficiencies.

PRODUCT DRAWING
AIR-COOLED SCREW CHILLER
MODEL: YVAA0443FMF46
NOT FOR CONSTRUCTION

Project Name : stp
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :
UNIT
TAG:

Date : 12/6/2012 13:47:41
Rev. Date :
Form : 201.28-EG1
Dwg. Lev. : 01/11
Dwg. Scale : NTS

YORK
A JOHNSON CONTROLS COMPANY

YVAA
201 TO 500

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Screw Chiller
Performance Specification

Unit Tag	Qty.	Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
	1	YVAA0523HMF46	450.0	460/3/60	R134a

Pin:

BASE MODEL	POWER	CONTROLS	PIPING	COMP	EVAPORATOR	COND	CABINET	MISC	WARR
YVAA0523HMF46BA	VDXX	XTAXLXXXX60	44XOXXX	S183W	1SXXA2B	MXF	PXXXX	XXXX	BXSX
5 10 15		20 25 30	35	40	45	50	55	60	65

Evaporator Data		Evaporator Data (Cont.)		Performance Data	
EWT (°F)	54.0	Min. Flow Rate (gpm)	550.0	EER / COP	10.9 / 3.2
LWT (°F)	44.0	Max. Flow Rate (gpm)	1880.0	IPLV	15.4 / 4.5
Design Flow Rate (gpm)	1078.7			Minimum Unit Capacity	10 %
Pressure Drop (ft.)	14.8	**Condenser Data**		**Physical Data**	
Fluid	Water	Ambient Temp. Design (°F)	95.0	Rigging Wt. (lbs.)	28427
Fouling Factor	0.00010	Altitude (ft.)	0	Operating Wt. (lbs.)	29784
Water Volume (gal)	147.0	Ambient Temp. Min (°F)	0.0		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	312	312		
Fan QTY/FLA (each)	13/3.3	13/3.3		

Single Point				
Min. Circuit Ampacity	423	423		
Min. Non-Fused Disconnect (Amps)	700	700		
Min. Dual Element Fuse Size (Amps)	700	700		
Max. Dual Element Fuse Size (Amps)	700	700		
Min. Circuit Breaker (Amps)	700	700		
Max. Circuit Breaker (Amps)	700	700		
Wire Range (Lug Size) *	#2 - 600 KCM	#2 - 600 KCM		
Unit Power Factor	0.95	0.95		
Control KVA	3.0		**Operating Condition Electrical Data**	
Starter Type	VSD		Compressor kW	452.4
			Total Fan kW	41.1
			Total kW	493.6

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

AHRI CERTIFIED®

Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	450.0	452.4	10.9 / 3.2
75.0	80.0	337.5	251.2	13.7 / 4.0
50.0	65.0	225.0	131.9	16.4 / 4.8
25.0	55.0	112.5	58.2	18.2 / 5.3

SOUND POWER LEVELS (In Accordance with AHRI 370) – Octave Band Center Frequency, Hz
YVAA0523HMF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	LWA
100.0	95.0	101.0	101.0	102.0	102.0	101.0	96.0	92.0	87.0	104.0
75.0	80.0	100.0	101.0	102.0	103.0	100.0	93.0	92.0	86.0	104.0
50.0	65.0	99.0	99.0	100.0	100.0	96.0	91.0	87.0	85.0	101.0
25.0	55.0	96.0	96.0	97.0	97.0	93.0	87.0	84.0	81.0	98.0

SOUND PRESSURE LEVELS in dB at 30.0 (ft.) **
YVAA0523HMF46 (Equipped with Low Sound Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	dBA
100.0	95.0	74.0	74.0	75.0	75.0	74.0	69.0	65.0	60.0	77.0
75.0	80.0	73.0	74.0	75.0	76.0	73.0	66.0	65.0	59.0	77.0
50.0	65.0	72.0	72.0	73.0	73.0	69.0	64.0	60.0	58.0	74.0
25.0	55.0	69.0	69.0	70.0	70.0	66.0	60.0	57.0	54.0	71.0

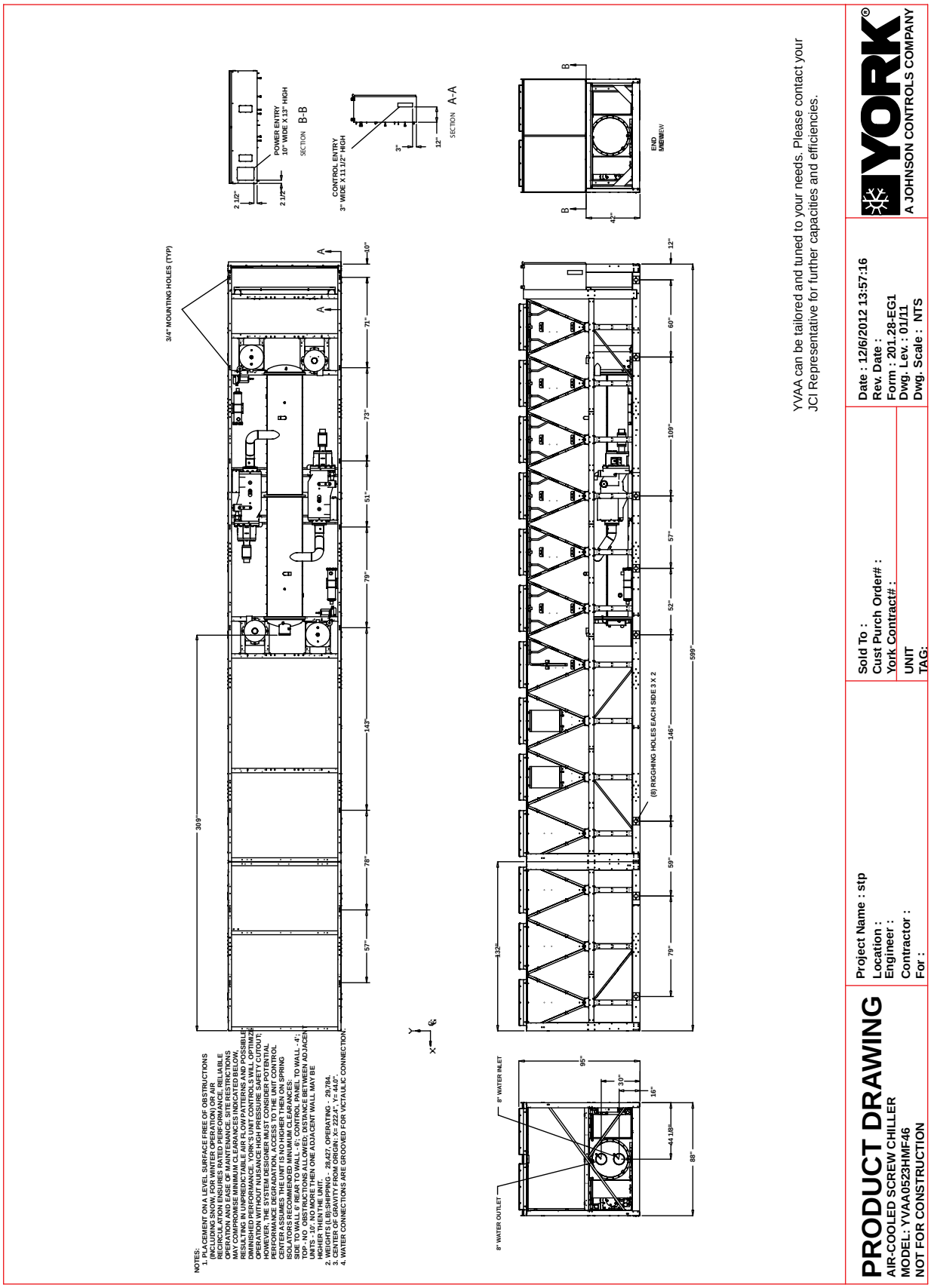
** Chiller is assumed to be a point source on a reflecting surface (hemispherical radiation)

Performance at AHRI Conditions
YVAA0523HMF46

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.9 / 3.2
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	15.4 / 4.5
Flow Rate (gpm)	1078.6			Capacity (Tons)	450.0
Pressure Drop (ft.)	14.8				
Fluid	Water				
Fouling Factor	0.00010				
Water Volume (gal)	147.0				

If you need a model or capacity between nominal sizes shown here, we can configure units within 1 ton increments. Please contact you JCI Sales Representative for selections and pricing.

MODEL: YVAA0523HMF46
AHRI CAPACITY 450.0 TONS



YVAA can be tailored and tuned to your needs. Please contact your JCI Representative for further capacities and efficiencies.

PRODUCT DRAWING
AIR-COOLED SCREW CHILLER
MODEL: YVAA0523HMF46
NOT FOR CONSTRUCTION

Project Name : stp
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :
UNIT
TAG:

Date : 12/6/2012 13:57:16
Rev. Date :
Form : 201.28-EG1
Dwg. Lev. : 01/11
Dwg. Scale : NTS

YORK
A JOHNSON CONTROLS COMPANY

YVAA
201 TO 500

YORK
A JOHNSON CONTROLS COMPANY

Air Cooled Screw Chiller
Performance Specification

Unit Tag	Qty.	Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
	1	YVAA0523HMG46	500.0	460/3/60	R134a

Pin:

BASE MODEL	POWER	CONTROLS	PIPING	COMP	EVAPORATOR	COND	CABINET	MISC	WARR
YVAA0523HMG46BA	VDXX	XTAXLXXXX60	44XOXXX	S200W	1SXXA3B	MXG	XXXXX	XXXX	BXSX
5 10 15		20 25 30	35	40	45	50	55	60	65

Evaporator Data		Evaporator Data (Cont.)		Performance Data	
EWT (°F)	54.0	Min. Flow Rate (gpm)	400.0	EER / COP	10.5 / 3.1
LWT (°F)	44.0	Max. Flow Rate (gpm)	1400.0	IPLV	14.4 / 4.2
Design Flow Rate (gpm)	1199.9			Minimum Unit Capacity	10 %
Pressure Drop (ft.)	51.4	**Condenser Data**		**Physical Data**	
Fluid	Water	Ambient Temp. Design (°F)	95.0	Rigging Wt. (lbs.)	29365
Fouling Factor	0.00010	Altitude (ft.)	0	Operating Wt. (lbs.)	30722
Water Volume (gal)	147.0	Ambient Temp. Min (°F)	0.0		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	341	341		
Fan QTY/FLA (each)	13/5.1	13/5.1		

Single Point				
Min. Circuit Ampacity	478	478		
Min. Non-Fused Disconnect (Amps)	800	800		
Min. Dual Element Fuse Size (Amps)	800	800		
Max. Dual Element Fuse Size (Amps)	800	800		
Min. Circuit Breaker (Amps)	800	800		
Max. Circuit Breaker (Amps)	800	800		
Wire Range (Lug Size) *	#2 - 600 KCM	#2 - 600 KCM		
Unit Power Factor	0.95	0.95		
Control KVA	3.0		**Operating Condition Electrical Data**	
Starter Type	VSD		Compressor kW	495.3
			Total Fan kW	74.7
			Total kW	570.0

Notes:	* Use Copper Conductors only

AHRI CERTIFIED®

Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	500.0	495.3	10.5 / 3.1
75.0	80.0	375.0	272.8	12.8 / 3.8
50.0	65.0	250.0	151.9	15.5 / 4.5
25.0	55.0	125.0	63.4	16.2 / 4.7

SOUND POWER LEVELS (In Accordance with AHRI 370) – Octave Band Center Frequency, Hz
YVAA0523HMG46 (Equipped with High Airflow Fans)

Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	LWA
100.0	95.0	103.0	117.0	116.0	110.0	107.0	103.0	96.0	90.0	113.0
75.0	80.0	103.0	117.0	116.0	110.0	106.0	102.0	94.0	89.0	112.0
50.0	65.0	101.0	115.0	114.0	107.0	103.0	99.0	91.0	87.0	110.0
25.0	55.0	99.0	113.0	112.0	105.0	101.0	97.0	90.0	85.0	108.0

SOUND PRESSURE LEVELS in dB at 30.0 (ft.) **
YVAA0523HMG46 (Equipped with High Airflow Fans)

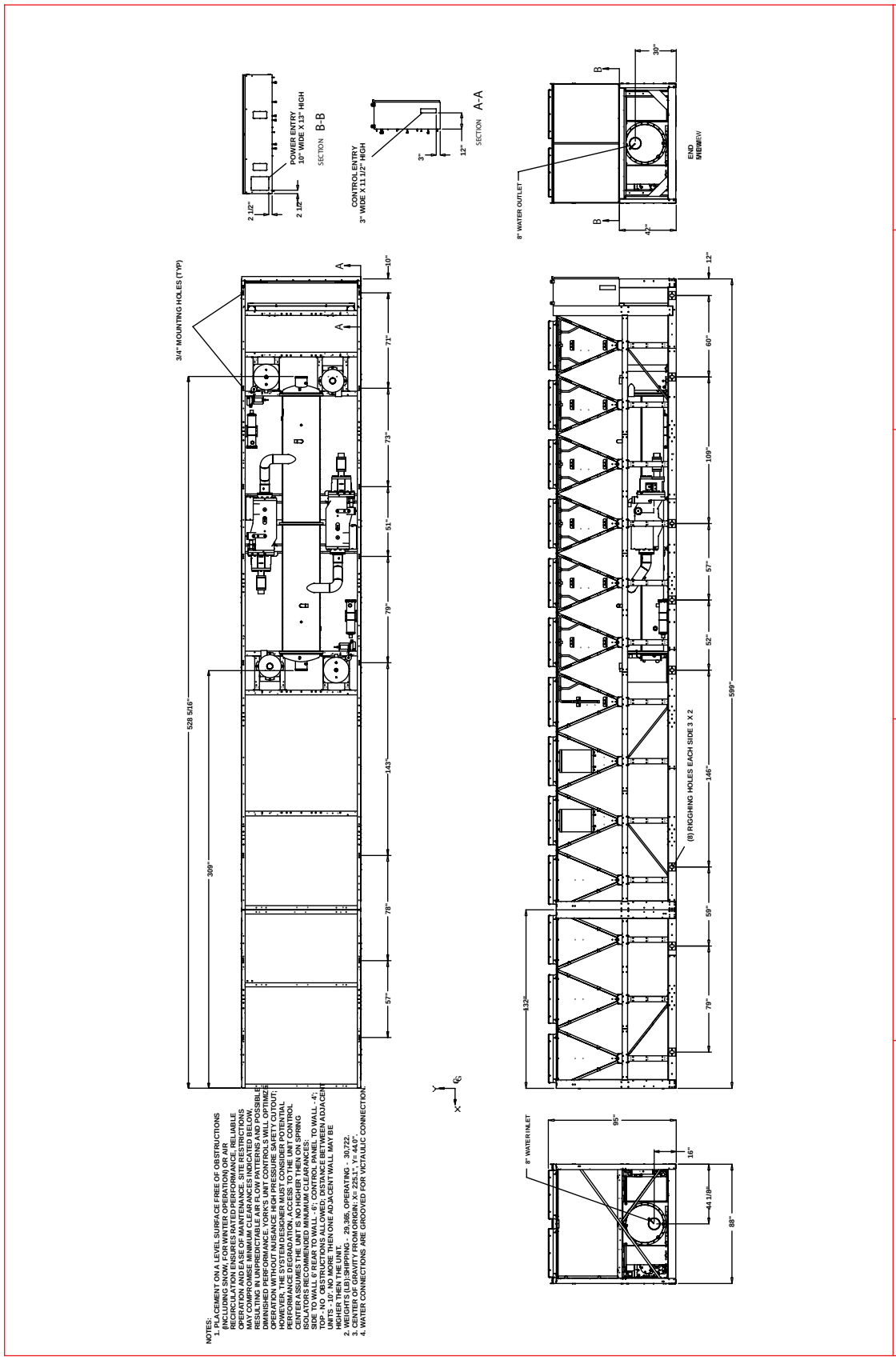
Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	dBA
100.0	95.0	76.0	90.0	89.0	83.0	80.0	76.0	69.0	63.0	86.0
75.0	80.0	76.0	90.0	89.0	83.0	79.0	75.0	67.0	62.0	85.0
50.0	65.0	74.0	88.0	87.0	80.0	76.0	72.0	64.0	60.0	83.0
25.0	55.0	72.0	86.0	85.0	78.0	74.0	70.0	63.0	58.0	81.0

** Chiller is assumed to be a point source on a reflecting surface (hemispherical radiation)

Performance at AHRI Conditions
YVAA0523HMG46

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	10.5 / 3.1
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	14.4 / 4.2
Flow Rate (gpm)	1199.9			Capacity (Tons)	500.0
Pressure Drop (ft.)	51.4				
Fluid	Water				
Fouling Factor	0.00010				
Water Volume (gal)	147.0				

If you need a model or capacity between nominal sizes shown here, we can configure units within 1 ton increments. Please contact you JCI Sales Representative for selections and pricing.



PRODUCT DRAWING
AIR-COOLED SCREW CHILLER
MODEL: YVAA0523HMG46
NOT FOR CONSTRUCTION

Project Name : examples - Small tonnage BOM
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :
UNIT
TAG:

Date : 4/26/2013 9:55:8
Rev. Date :
Form : 201.28-EG1
Dwg. Lev. : 01/11
Dwg. Scale : NTS

YORK
A JOHNSON CONTROLS COMPANY

YVAA
201 TO 500

YCWL
50 to 200 Tons
Water Cooled Scroll Chiller

YCWL RIGGING

Delivery and Storage

To ensure consistent quality and maximum reliability, all units are tested and inspected before leaving the factory. Units are shipped completely assembled and containing refrigerant under pressure. Units are shipped without export crating unless this has been specified on the Sales Order.

If the unit is to be put into storage, before installation, the following precautions should be observed:

Ensure that all openings, such as water connections, are securely capped.

Do not store where exposed to ambient air temperatures exceeding 107°F (42°C).

The unit should be stored in a location where there is minimal activity to limit the risk of accidental physical damage.

To prevent inadvertent operation of the pressure relief devices the unit must not be steam cleaned.

It is recommended that the unit is periodically inspected during storage.

Inspection

Immediately upon receiving the unit, it should be inspected for possible damage which may have occurred during transit. If damage is evident, it should be noted in the carrier's freight bill. A written request for inspection by the carrier's agent should be made at once. *See "Instruction Manual", Form 50.15-NM for more information and details.*

Major damage must be reported immediately to your local Johnson Controls representative.

Moving the Unit

Before moving the unit, ensure that the installation site is suitable for installing the unit and is capable of supporting the weight of the unit and all associated services.

The units are designed to be lifted using either lifting chains or a fork lift.

Lifting by Crane / Hoist

A spreader frame should be used to prevent damage to the unit from the lifting chains *(Refer to page 34 of the Operations and Maintenance Guide [Form 201.26-NM1])*.

NOTE: The unit must only be lifted a the points provided.

WATER COOLED SCROLL CHILLER
YCWL - 50 to 200 TONS

BENEFITS

- IPLV as high as 25.4 EER provide cost effective operation
- Designed for low acoustics without additional sound treatment
- Wide range of options to fit any design requirement
- HFC-410A Standard for zero ODP and low global warming potential; long service life
- Multiple scroll compressors offer redundancy and accurate capacity matching
- Native BACnet MSTP & Modbus communications for BAS integration

UPGRADE OPTIONS

- Low temperature brine chilling to 15°F
- Power Options:
  - Single Point Power Connection to Terminal Block, Non-fused Disconnect or Circuit Breaker
  - Multiple Point Power Connection to Circuit Breakers for retrofit projects
  - Compressor Overloads to limit MCA (ideal for retrofit applications)
- Heat Pump (non-reversing) option to 130°F leaving condenser water temperature for energy conservation
- Remote Condenser YCRL variant for remote condenser applications
- Evaporator Options:
  - Victaulic Flange Accessory for cooler nozzles
  - Flow switch: Vapor proof, SPDT, NEMA 4X switch, 150 psig
- Vibration Isolators - Neoprene isolators, 1" spring isolators or 2" spring isolators

WATER COOLED SCROLL CHILLER
YCWL - 50 to 200 TONS

PACKAGE DESCRIPTION:

- Completely assembled with all piping and wiring ready for field installation
- Pressure and operational tested
- Provided with HFC-410A charge and initial oil charge
- Can be provided with optional overspray coat of Caribbean Blue enamel paint

Compressors:

- Reliable suction-gas cooled hermetic scrolls
- High efficiency motors with redundant overload protection
- Microprocessor controlled compressor staging regulates chiller capacity to 15% of maximum
- Design Working Pressure 560 PSIG

Condenser:

- Cleanable, thru-tube type with removable heads
- Integral subcooling standard
- Equipped with relief valves
- Steel shell and copper tubes

Evaporator:

- High efficiency DX cooler, refrigerant in tubes and chilled liquid through baffled shell
- Two independent circuits per chiller
- Removable heads to access copper tubes
- Water vent and drain connections
- Insulated with 3/4" closed cell foam
- Design working pressure 150 PSIG waterside and 400 PSIG on refrigerant side

Refrigerant Circuit:

- Tandem or trio compressors per circuit
- Liquid line components include: shut-off valve with charging port, high-absorption removable core filter-drier, solenoid valve, sight glass with moisture indicator, thermal or electronic expansion valves (depending on options)
- Entire suction line and liquid line between expansion valve and cooler insulated with flexible closed-cell foam insulation

Controls:

- All controls housed in a NEMA 1 cabinet with gasket sealed, hinged & latched door
- LCD, 40-character display with backlight
- Color coded, 32-button sealed keypad

YORK
A JOHNSON CONTROLS COMPANY

Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0056SE46	52.4	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	16.1 / 4.7
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	21.3 / 6.2
Flow Rate (gpm)	125.6	Flow Rate (gpm)	153.2	**Physical Data**	
Pressure Drop (ft.)	12.2	Pressure Drop (ft.)	10.6	Rigging Wt. (lbs.)	3515
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	3648
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	22.4	Water Vol. (gal)	19.4		

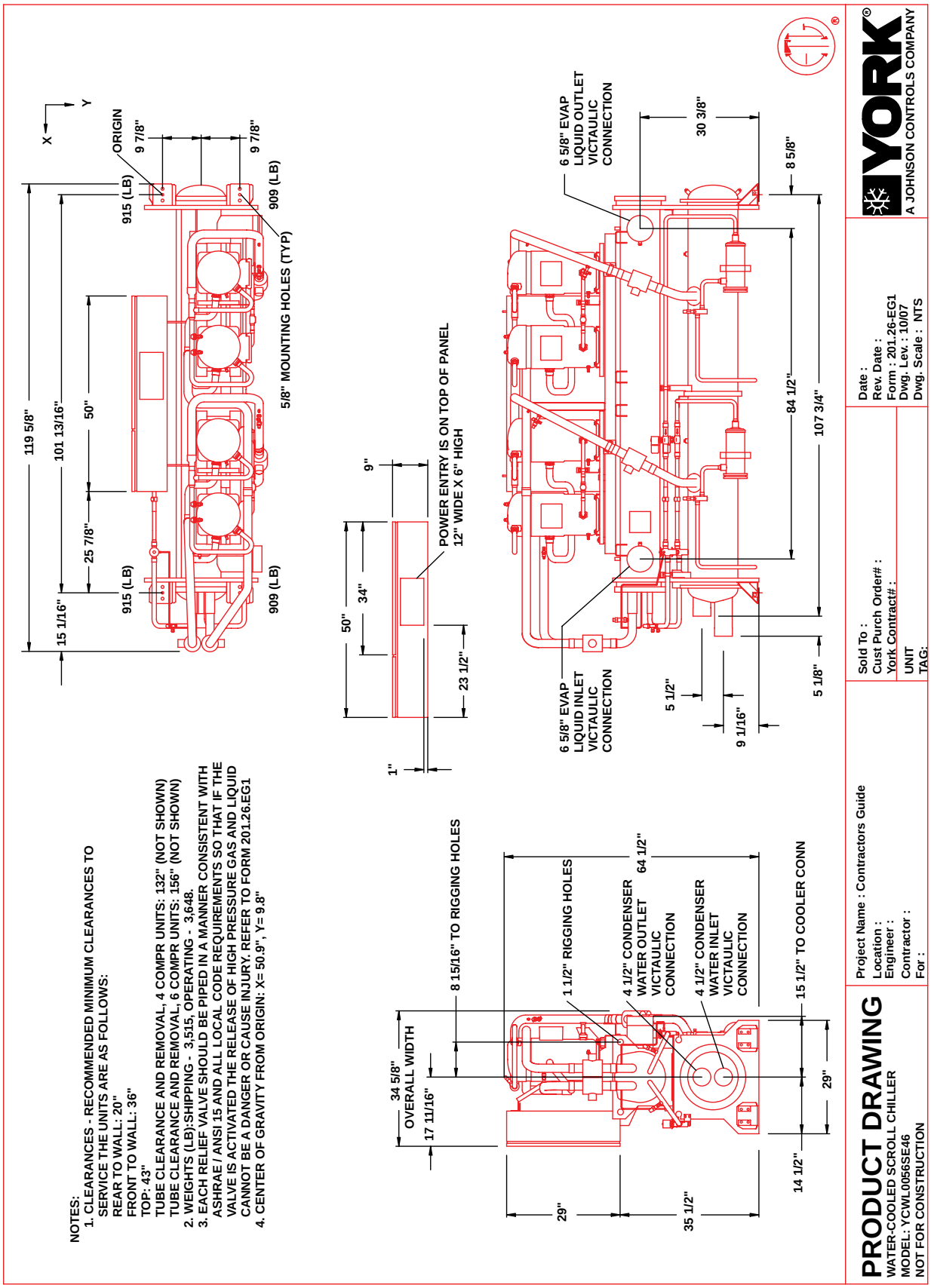
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	23.1/23.1	23.1/23.1		
Compressor Start Current (LRA)	150.0/150.0	150.0/150.0		

Single Point				
Min. Circuit Ampacity	98.0			
Min. Non-Fused Disconnect (Amps)	150.0			
Min. Circuit Breaker (Amps)	110.0			
Max. Circuit Breaker (Amps)	110.0			
Wire Range (Lug Size) *	(1)#12 - #1			
Grounding Wire Lug Size				
Total Amps	92.4		**Operating Condition Electrical Data**	
Inrush (PW) Amps	150.0		Compressor kW	39.2
Starter Type	Across the Line		Total kW	39.2

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	52.4	85.0	95.0	39.2	16.1 / 4.7
75.0	41.1	76.4	84.0	26.3	18.8 / 5.5
50.0	29.0	67.1	72.4	15.4	22.6 / 6.6
25.0	14.2	65.0	67.6	7.3	23.3 / 6.8

MODEL: YCWL0056SE46
AHRI CAPACITY 52.4 TONS



NOTES:
1. CLEARANCES - RECOMMENDED MINIMUM CLEARANCES TO SERVICE THE UNITS ARE AS FOLLOWS:
   REAR TO WALL: 20"
   FRONT TO WALL: 36"
   TOP: 43"
   TUBE CLEARANCE AND REMOVAL, 4 COMPR UNITS: 132" (NOT SHOWN)
   TUBE CLEARANCE AND REMOVAL, 6 COMPR UNITS: 156" (NOT SHOWN)
2. WEIGHTS (LB):SHIPPING - 3,515, OPERATING - 3,648.
3. EACH RELIEF VALVE SHOULD BE PIPED IN A MANNER CONSISTENT WITH ASHRAE / ANSI 15 AND ALL LOCAL CODE REQUIREMENTS SO THAT IF THE VALVE IS ACTIVATED THE RELEASE OF HIGH PRESSURE GAS AND LIQUID CANNOT BE A DANGER OR CAUSE INJURY. REFER TO FORM 201.26.EG1
4. CENTER OF GRAVITY FROM ORIGIN: X= 50.9", Y= 9.8"

PRODUCT DRAWING
WATER-COOLED SCROLL CHILLER
MODEL: YCWL0056SE46
NOT FOR CONSTRUCTION

Project Name : Contractors Guide
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :

UNIT
TAG:

Date :
Rev. Date :
Form : 201.26-EG1
Dwg. Lev. : 10/07
Dwg. Scale : NTS

YORK
A JOHNSON CONTROLS COMPANY

YORK
A JOHNSON CONTROLS COMPANY

Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0064SE46	59.9	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	15.7 / 4.6
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	19.9 / 5.8
Flow Rate (gpm)	143.6	Flow Rate (gpm)	175.8	**Physical Data**	
Pressure Drop (ft.)	15.7	Pressure Drop (ft.)	13.4	Rigging Wt. (lbs.)	3883
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	4016
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	22.4	Water Vol. (gal)	19.4		

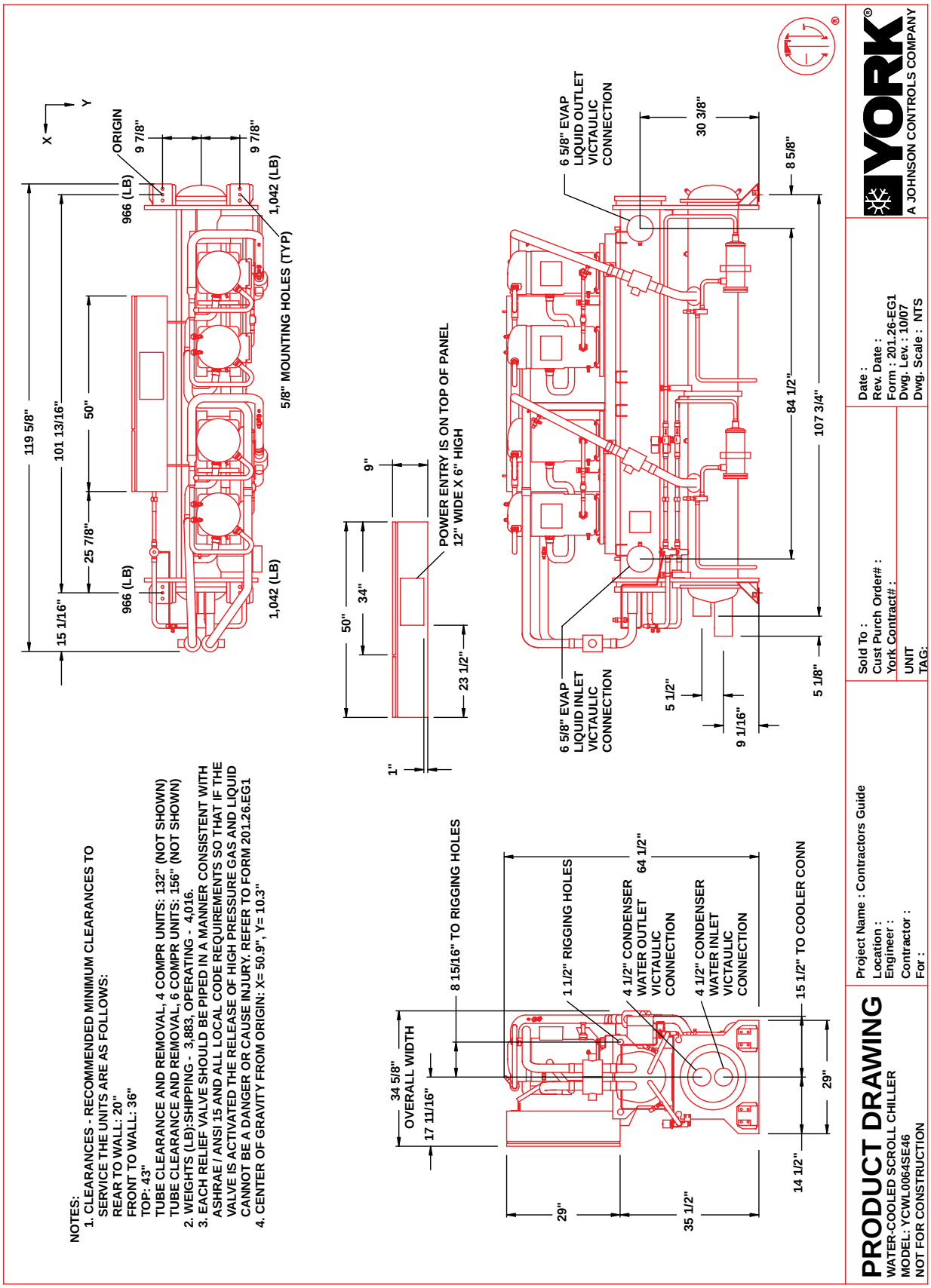
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	26.9/26.9	26.9/26.9		
Compressor Start Current (LRA)	187.0/187.0	187.0/187.0		

Single Point				
Min. Circuit Ampacity	114.0			
Min. Non-Fused Disconnect (Amps)	150.0			
Min. Circuit Breaker (Amps)	125.0			
Max. Circuit Breaker (Amps)	125.0			
Wire Range (Lug Size) *	(1)#10 - 300			
Grounding Wire Lug Size				
Total Amps	107.6		**Operating Condition Electrical Data**	
Inrush (PW) Amps	187.0		Compressor kW	45.7
Starter Type	Across the Line		Total kW	45.7

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	59.9	85.0	95.0	45.7	15.7 / 4.6
75.0	47.1	76.4	84.1	31.1	18.2 / 5.3
50.0	33.3	67.2	72.5	19.1	20.9 / 6.1
25.0	16.3	65.0	67.6	9.2	21.2 / 6.2

MODEL: YCWL0064SE46
AHRI CAPACITY 59.9 TONS



NOTES:
1. CLEARANCES - RECOMMENDED MINIMUM CLEARANCES TO SERVICE THE UNITS ARE AS FOLLOWS:
   REAR TO WALL: 20"
   FRONT TO WALL: 36"
   TOP: 43"
   TUBE CLEARANCE AND REMOVAL, 4 COMPR UNITS: 132" (NOT SHOWN)
   TUBE CLEARANCE AND REMOVAL, 6 COMPR UNITS: 156" (NOT SHOWN)
2. WEIGHTS (LB):SHIPPING - 3,883, OPERATING - 4,016.
3. EACH RELIEF VALVE SHOULD BE PIPED IN A MANNER CONSISTENT WITH ASHRAE / ANSI 15 AND ALL LOCAL CODE REQUIREMENTS SO THAT IF THE VALVE IS ACTIVATED THE RELEASE OF HIGH PRESSURE GAS AND LIQUID CANNOT BE A DANGER OR CAUSE INJURY. REFER TO FORM 201.26.EG1
4. CENTER OF GRAVITY FROM ORIGIN: X= 50.9", Y= 10.3"

PRODUCT DRAWING
WATER-COOLED SCROLL CHILLER
MODEL: YCWL0064SE46
NOT FOR CONSTRUCTION

Project Name : Contractors Guide
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :

UNIT
TAG:

Date :
Rev. Date :
Form : 201.26-EG1
Dwg. Lev. : 10/07
Dwg. Scale : NTS

YORK
A JOHNSON CONTROLS COMPANY

YORK
A JOHNSON CONTROLS COMPANY

Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0064HE46	62.4	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	16.5 / 4.8
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	20.2 / 5.9
Flow Rate (gpm)	149.6	Flow Rate (gpm)	181.7	**Physical Data**	
Pressure Drop (ft.)	7.4	Pressure Drop (ft.)	6.6	Rigging Wt. (lbs.)	4533
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	4848
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	59.8	Water Vol. (gal)	26.9		

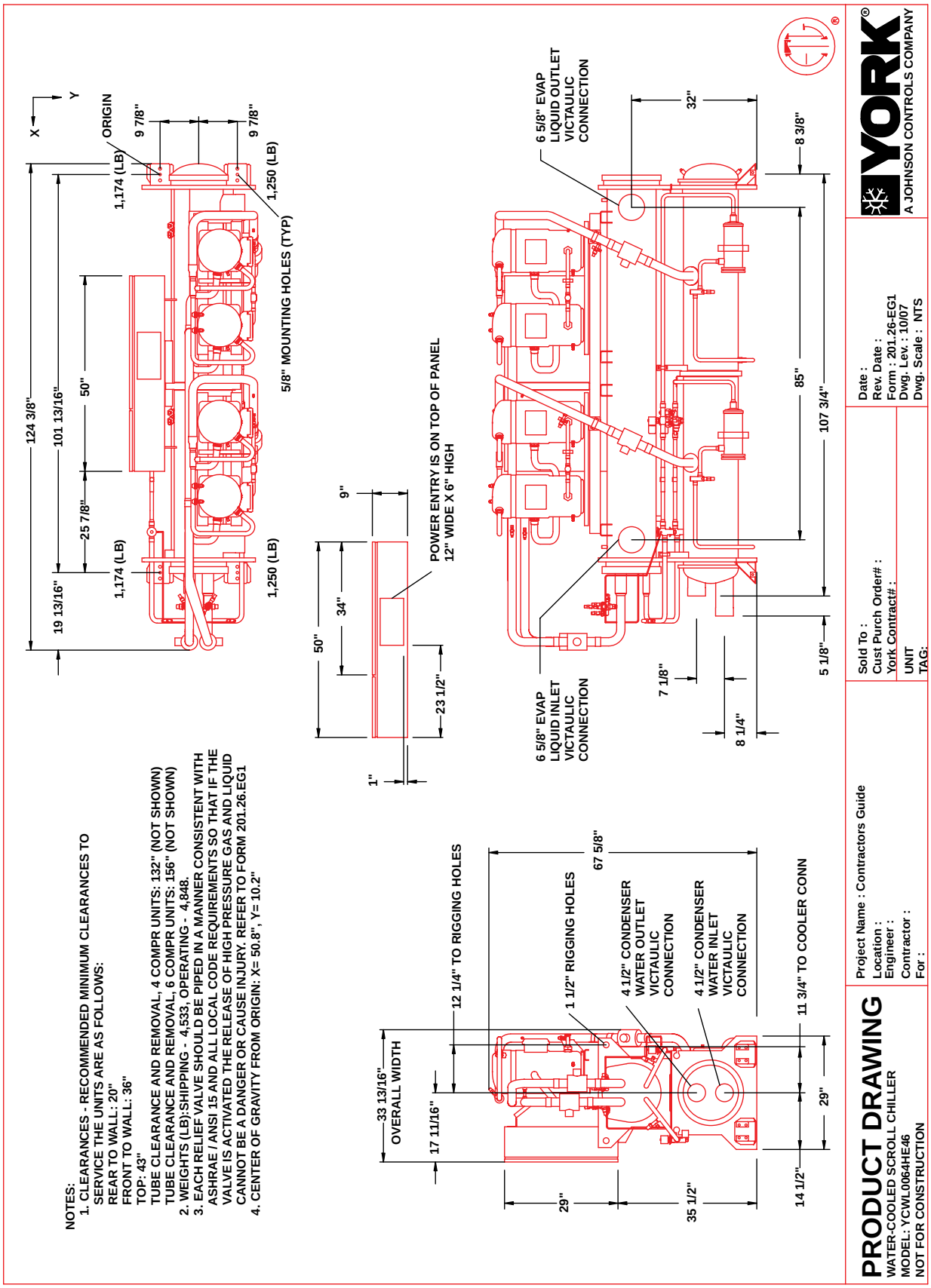
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	26.9/26.9	26.9/26.9		
Compressor Start Current (LRA)	187.0/187.0	187.0/187.0		

Single Point				
Min. Circuit Ampacity	114.0			
Min. Non-Fused Disconnect (Amps)	150.0			
Min. Circuit Breaker (Amps)	125.0			
Max. Circuit Breaker (Amps)	125.0			
Wire Range (Lug Size) *	(1)#10 - 300			
Grounding Wire Lug Size				
Total Amps	107.6		**Operating Condition Electrical Data**	
Inrush (PW) Amps	187.0		Compressor kW	45.5
Starter Type	Across the Line		Total kW	45.5

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	62.4	85.0	95.0	45.5	16.5 / 4.8
75.0	48.5	76.0	83.6	31.0	18.8 / 5.5
50.0	33.4	66.4	71.5	18.9	21.2 / 6.2
25.0	16.3	65.0	67.5	9.2	21.3 / 6.2

MODEL: YCWL0064HE46
AHRI CAPACITY 62.4 TONS



YORK
A JOHNSON CONTROLS COMPANY

Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0074SE46	67.8	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	15.2 / 4.5
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	20.2 / 5.9
Flow Rate (gpm)	162.5	Flow Rate (gpm)	200.2	**Physical Data**	
Pressure Drop (ft.)	19.9	Pressure Drop (ft.)	16.8	Rigging Wt. (lbs.)	4061
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	4194
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	22.4	Water Vol. (gal)	19.4		

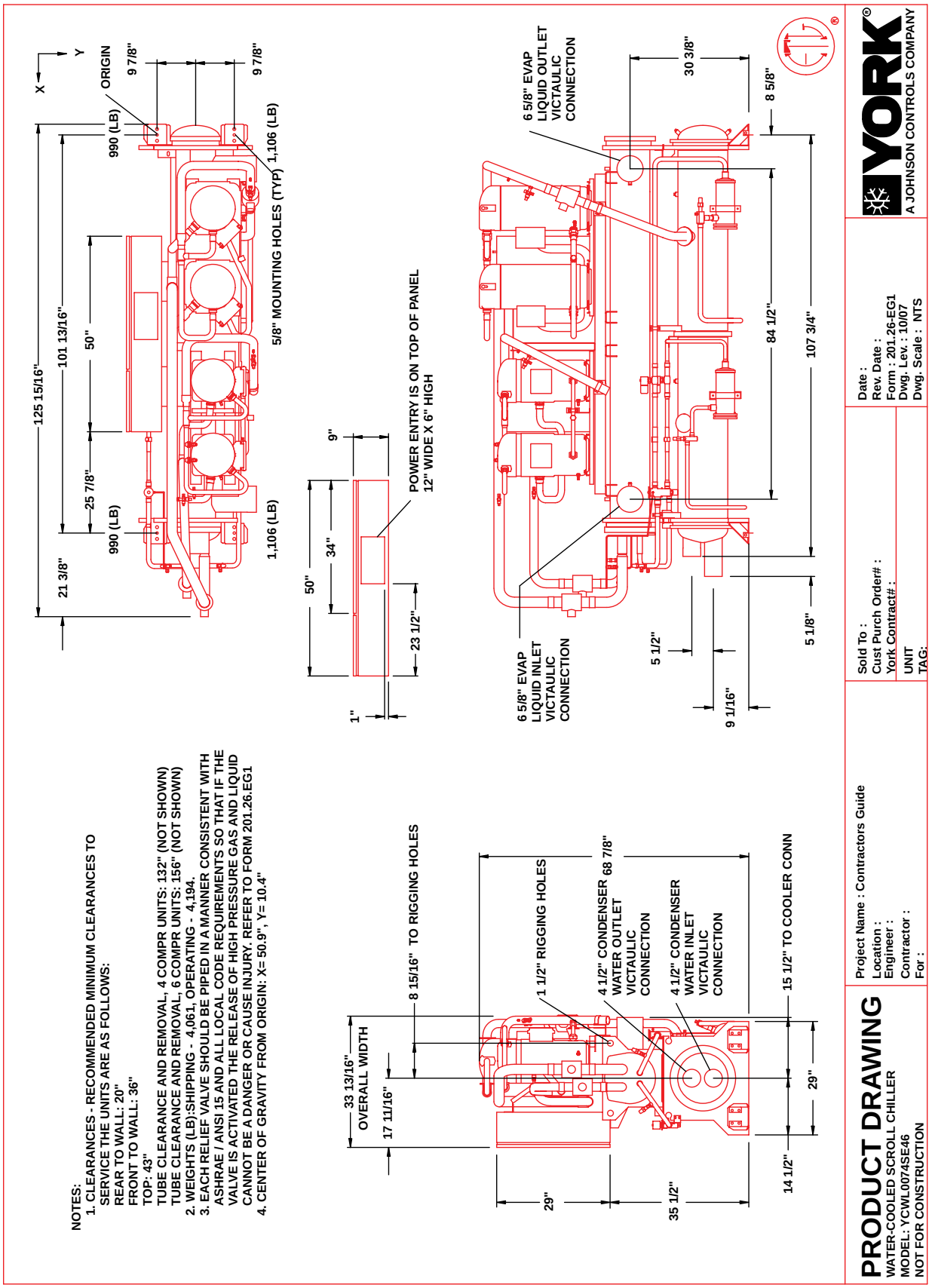
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	30.4/30.4	26.9/26.9		
Compressor Start Current (LRA)	225.0/225.0	187.0/187.0		

Single Point				
Min. Circuit Ampacity	122.0			
Min. Non-Fused Disconnect (Amps)	150.0			
Min. Circuit Breaker (Amps)	150.0			
Max. Circuit Breaker (Amps)	150.0			
Wire Range (Lug Size) *	(1)#10 - 300			
Grounding Wire Lug Size				
Total Amps	114.6		**Operating Condition Electrical Data**	
Inrush (PW) Amps	225.0		Compressor kW	53.6
Starter Type	Across the Line		Total kW	53.6

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	67.8	85.0	95.0	53.6	15.2 / 4.5
72.2	52.5	76.0	83.5	34.1	18.5 / 5.4
50.0	38.7	67.8	73.2	21.8	21.2 / 6.2
22.2	16.2	65.0	67.3	9.2	21.2 / 6.2

MODEL: YCWL0074SE46
AHRI CAPACITY 67.8 TONS



NOTES:
1. CLEARANCES - RECOMMENDED MINIMUM CLEARANCES TO SERVICE THE UNITS ARE AS FOLLOWS:
   REAR TO WALL: 20"
   FRONT TO WALL: 36"
   TOP: 43"
   TUBE CLEARANCE AND REMOVAL, 4 COMPR UNITS: 132" (NOT SHOWN)
   TUBE CLEARANCE AND REMOVAL, 6 COMPR UNITS: 156" (NOT SHOWN)
2. WEIGHTS (LB):SHIPPING - 4,061, OPERATING - 4,194.
3. EACH RELIEF VALVE SHOULD BE PIPED IN A MANNER CONSISTENT WITH ASHRAE / ANSI 15 AND ALL LOCAL CODE REQUIREMENTS SO THAT IF THE VALVE IS ACTIVATED THE RELEASE OF HIGH PRESSURE GAS AND LIQUID CANNOT BE A DANGER OR CAUSE INJURY. REFER TO FORM 201.26.EG1
4. CENTER OF GRAVITY FROM ORIGIN: X= 50.9" , Y= 10.4"

PRODUCT DRAWING
WATER-COOLED SCROLL CHILLER
MODEL: YCWL0074SE46
NOT FOR CONSTRUCTION

Project Name : Contractors Guide
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :
UNIT
TAG:

Date :
Rev. Date :
Form : 201.26-EG1
Dwg. Lev. : 10/07
Dwg. Scale : NTS

YORK
A JOHNSON CONTROLS COMPANY

YORK
A JOHNSON CONTROLS COMPANY

Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0074HE46	72.7	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	16.3 / 4.8
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	20.7 / 6.1
Flow Rate (gpm)	174.4	Flow Rate (gpm)	212.0	**Physical Data**	
Pressure Drop (ft.)	6.0	Pressure Drop (ft.)	8.6	Rigging Wt. (lbs.)	4911
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	5406
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	59.8	Water Vol. (gal)	26.9		

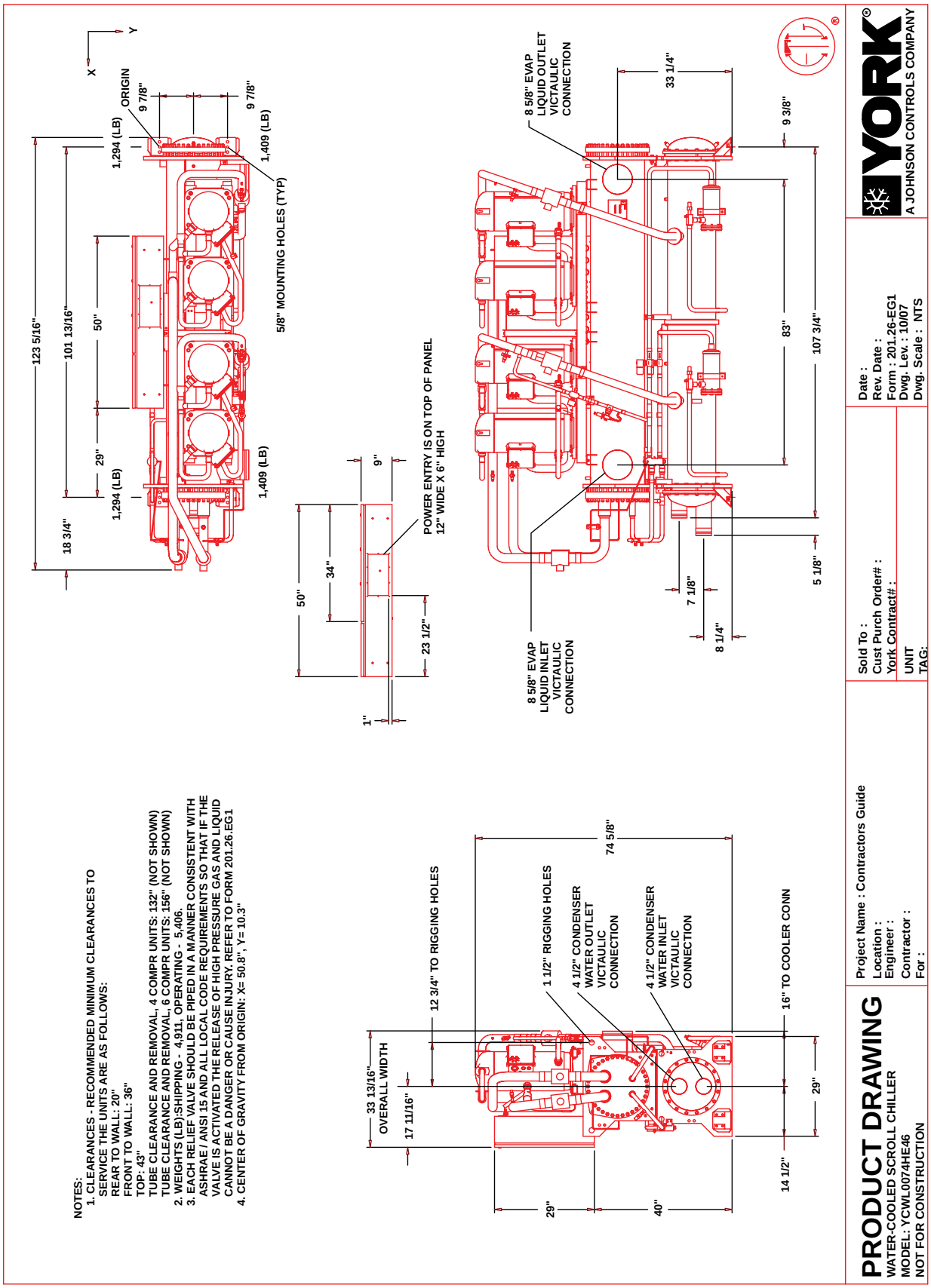
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	30.4/30.4	26.9/26.9		
Compressor Start Current (LRA)	225.0/225.0	187.0/187.0		

Single Point				
Min. Circuit Ampacity	122.0			
Min. Non-Fused Disconnect (Amps)	150.0			
Min. Circuit Breaker (Amps)	150.0			
Max. Circuit Breaker (Amps)	150.0			
Wire Range (Lug Size) *	(1)#10 - 300			
Grounding Wire Lug Size				
Total Amps	114.6		**Operating Condition Electrical Data**	
Inrush (PW) Amps	225.0		Compressor kW	53.4
Starter Type	Across the Line		Total kW	53.4

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	72.7	85.0	95.0	53.4	16.3 / 4.8
72.2	54.6	75.0	82.3	33.7	19.4 / 5.7
50.0	38.9	66.4	71.5	21.4	21.9 / 6.4
22.2	16.2	65.0	67.1	9.1	21.3 / 6.2

MODEL: YCWL0074HE46
AHRI CAPACITY 72.7 TONS



NOTES:
1. CLEARANCES - RECOMMENDED MINIMUM CLEARANCES TO SERVICE THE UNITS ARE AS FOLLOWS:
   REAR TO WALL: 20"
   FRONT TO WALL: 36"
   TOP: 43"
   TUBE CLEARANCE AND REMOVAL, 4 COMPR UNITS: 132" (NOT SHOWN)
   TUBE CLEARANCE AND REMOVAL, 6 COMPR UNITS: 156" (NOT SHOWN)
2. WEIGHTS (LB):SHIPPING - 4,911. OPERATING - 5,406.
3. EACH RELIEF VALVE SHOULD BE PIPED IN A MANNER CONSISTENT WITH ASHRAE / ANSI 15 AND ALL LOCAL CODE REQUIREMENTS SO THAT IF THE VALVE IS ACTIVATED THE RELEASE OF HIGH PRESSURE GAS AND LIQUID CANNOT BE A DANGER OR CAUSE INJURY. REFER TO FORM 201.26.EG1
4. CENTER OF GRAVITY FROM ORIGIN: X= 50.8", Y= 10.3"

PRODUCT DRAWING
WATER-COOLED SCROLL CHILLER
MODEL: YCWL0074HE46
NOT FOR CONSTRUCTION

Project Name : Contractors Guide
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :
UNIT
TAG:

Date :
Rev. Date :
Form : 201.26-EG1
Dwg. Lev. : 10/07
Dwg. Scale : NTS

YORK
A JOHNSON CONTROLS COMPANY

YORK
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Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0084SE46	76.6	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	15.8 / 4.6
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	21.4 / 6.3
Flow Rate (gpm)	183.5	Flow Rate (gpm)	224.6	**Physical Data**	
Pressure Drop (ft.)	24.9	Pressure Drop (ft.)	9.5	Rigging Wt. (lbs.)	4489
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	4684
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	22.4	Water Vol. (gal)	26.9		

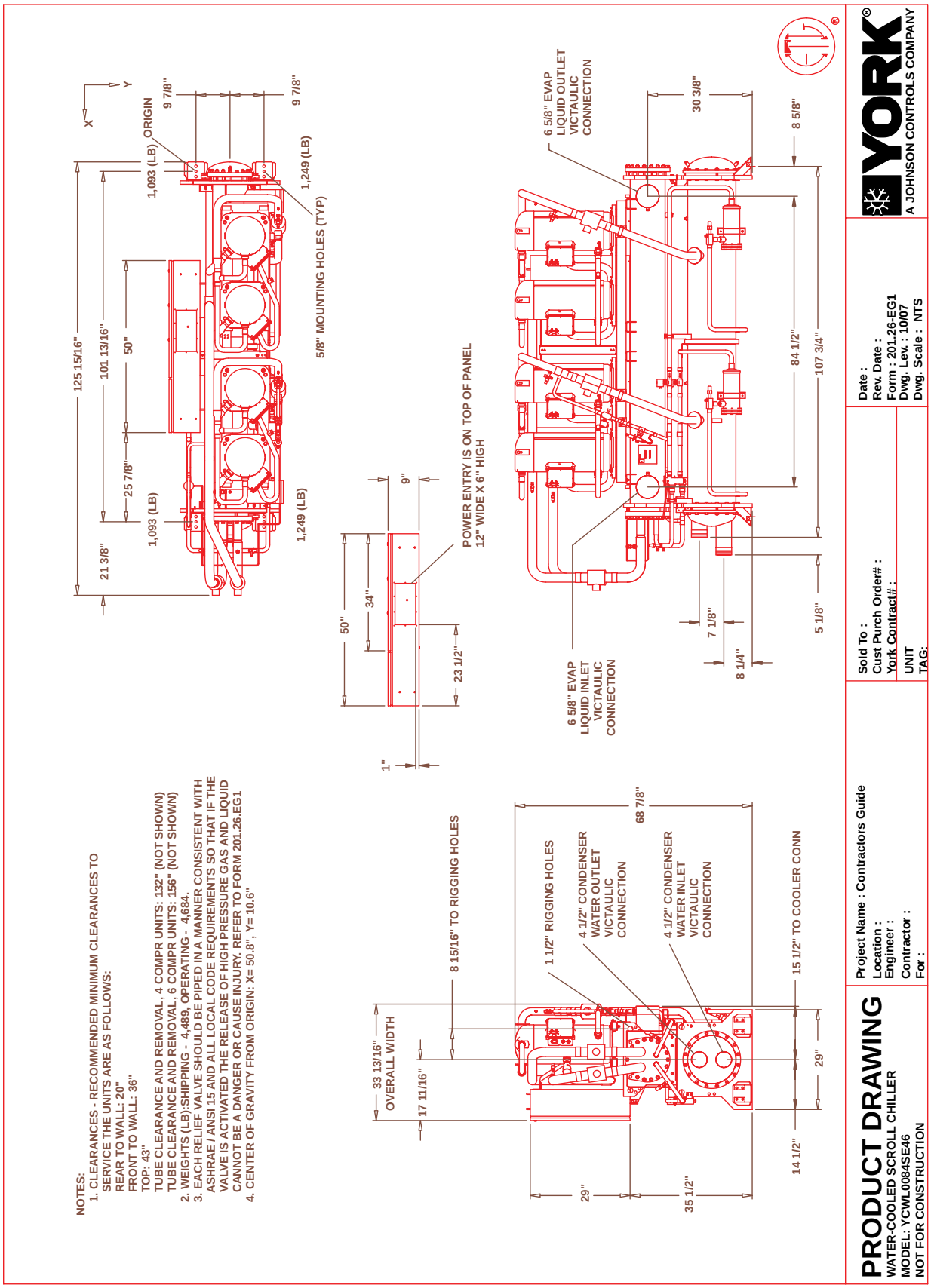
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	30.4/30.4	30.4/30.4		
Compressor Start Current (LRA)	225.0/225.0	225.0/225.0		

Single Point				
Min. Circuit Ampacity	129.0			
Min. Non-Fused Disconnect (Amps)	150.0			
Min. Circuit Breaker (Amps)	150.0			
Max. Circuit Breaker (Amps)	150.0			
Wire Range (Lug Size) *	(1)#10 - 300			
Grounding Wire Lug Size				
Total Amps	121.6		**Operating Condition Electrical Data**	
Inrush (PW) Amps	225.0		Compressor kW	58.3
Starter Type	Across the Line		Total kW	58.3

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	76.6	85.0	95.0	58.3	15.8 / 4.6
75.0	61.0	76.9	84.6	39.7	18.4 / 5.4
50.0	44.3	68.2	73.6	23.5	22.7 / 6.7
25.0	21.9	65.0	67.7	11.1	23.8 / 7.0

MODEL: YCWL0084SE46
AHRI CAPACITY 76.6 TONS



YORK
A JOHNSON CONTROLS COMPANY

Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0084HE46	82.6	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	16.8 / 4.9
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	21.9 / 6.4
Flow Rate (gpm)	198.0	Flow Rate (gpm)	239.5	**Physical Data**	
Pressure Drop (ft.)	7.6	Pressure Drop (ft.)	10.6	Rigging Wt. (lbs.)	5089
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	5584
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	59.8	Water Vol. (gal)	26.9		

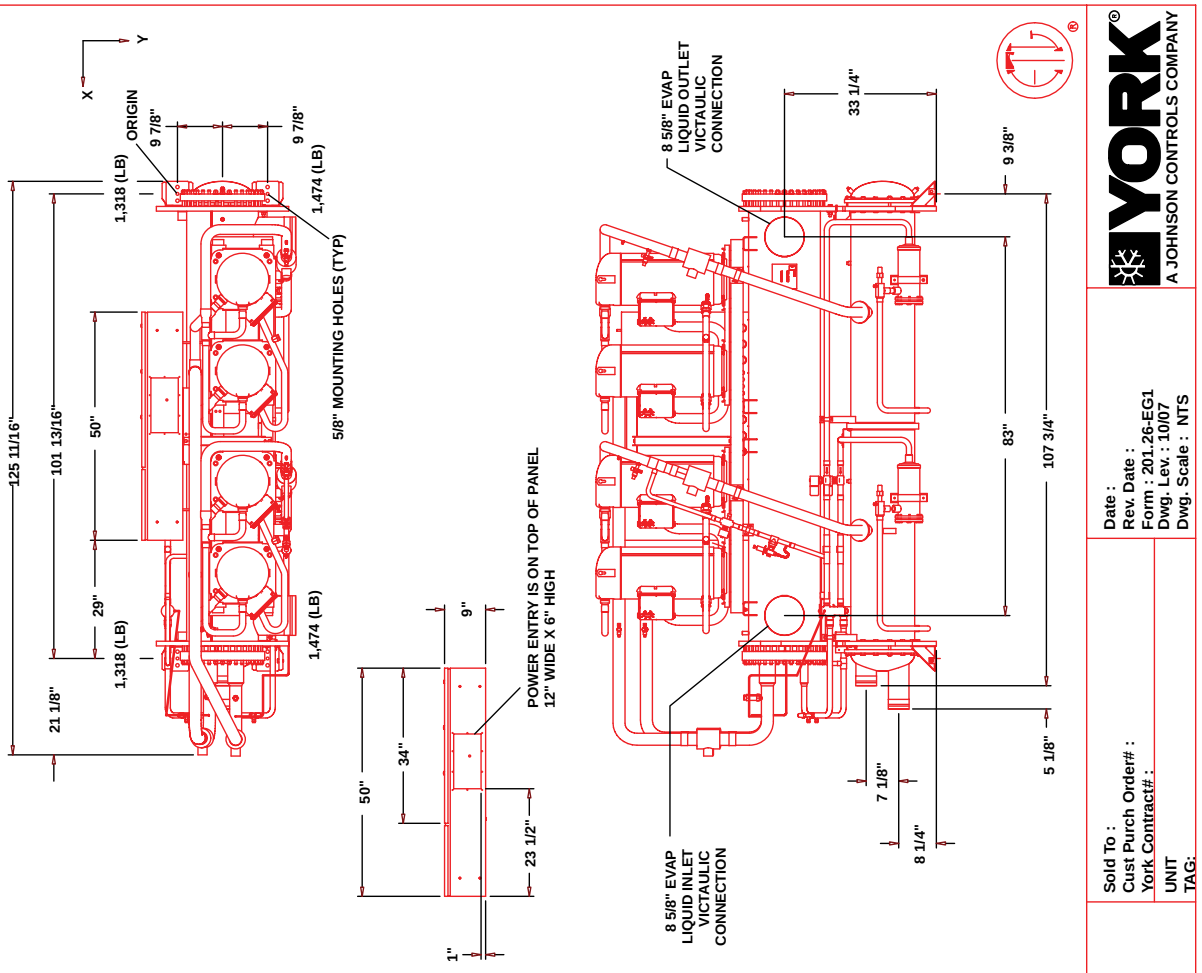
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	30.4/30.4	30.4/30.4		
Compressor Start Current (LRA)	225.0/225.0	225.0/225.0		

Single Point				
Min. Circuit Ampacity	129.0			
Min. Non-Fused Disconnect (Amps)	150.0			
Min. Circuit Breaker (Amps)	150.0			
Max. Circuit Breaker (Amps)	150.0			
Wire Range (Lug Size) *	(1)#10 - 300			
Grounding Wire Lug Size				
Total Amps	121.6		**Operating Condition Electrical Data**	
Inrush (PW) Amps	225.0		Compressor kW	58.9
Starter Type	Across the Line		Total kW	58.9

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	82.6	85.0	95.0	58.9	16.8 / 4.9
75.0	64.4	76.2	83.8	39.7	19.5 / 5.7
50.0	44.7	66.6	71.8	23.0	23.3 / 6.8
25.0	21.9	65.0	67.5	11.0	23.8 / 7.0

MODEL: YCWL0084HE46
AHRI CAPACITY 82.6 TONS



NOTES:
1. CLEARANCES - RECOMMENDED MINIMUM CLEARANCES TO SERVICE THE UNITS ARE AS FOLLOWS:
   REAR TO WALL: 20"
   FRONT TO WALL: 36"
   TOP: 43"
   TUBE CLEARANCE AND REMOVAL, 4 COMPR UNITS: 132" (NOT SHOWN)
   TUBE CLEARANCE AND REMOVAL, 6 COMPR UNITS: 156" (NOT SHOWN)
2. WEIGHTS (LB):SHIPPING - 5,089. OPERATING - 5,584.
3. EACH RELIEF VALVE SHOULD BE PIPED IN A MANNER CONSISTENT WITH ASHRAE / ANSI 15 AND ALL LOCAL CODE REQUIREMENTS SO THAT IF THE VALVE IS ACTIVATED THE RELEASE OF HIGH PRESSURE GAS AND LIQUID CANNOT BE A DANGER OR CAUSE INJURY. REFER TO FORM 201.26.EG1
4. CENTER OF GRAVITY FROM ORIGIN: X= 50.8", Y= 10.5"

PRODUCT DRAWING
WATER-COOLED SCROLL CHILLER
MODEL: YCWL0084HE46
NOT FOR CONSTRUCTION

Project Name : Contractors Guide
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :
UNIT
TAG:

Date :
Rev. Date :
Form : 201.26-EG1
Dwg. Lev. : 10/07
Dwg. Scale : NTS

YORK
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Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0094SE46	85.9	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	16.2 / 4.7
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	21.5 / 6.3
Flow Rate (gpm)	205.8	Flow Rate (gpm)	250.8	**Physical Data**	
Pressure Drop (ft.)	13.2	Pressure Drop (ft.)	11.5	Rigging Wt. (lbs.)	5023
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	5338
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	37.3	Water Vol. (gal)	85.0		

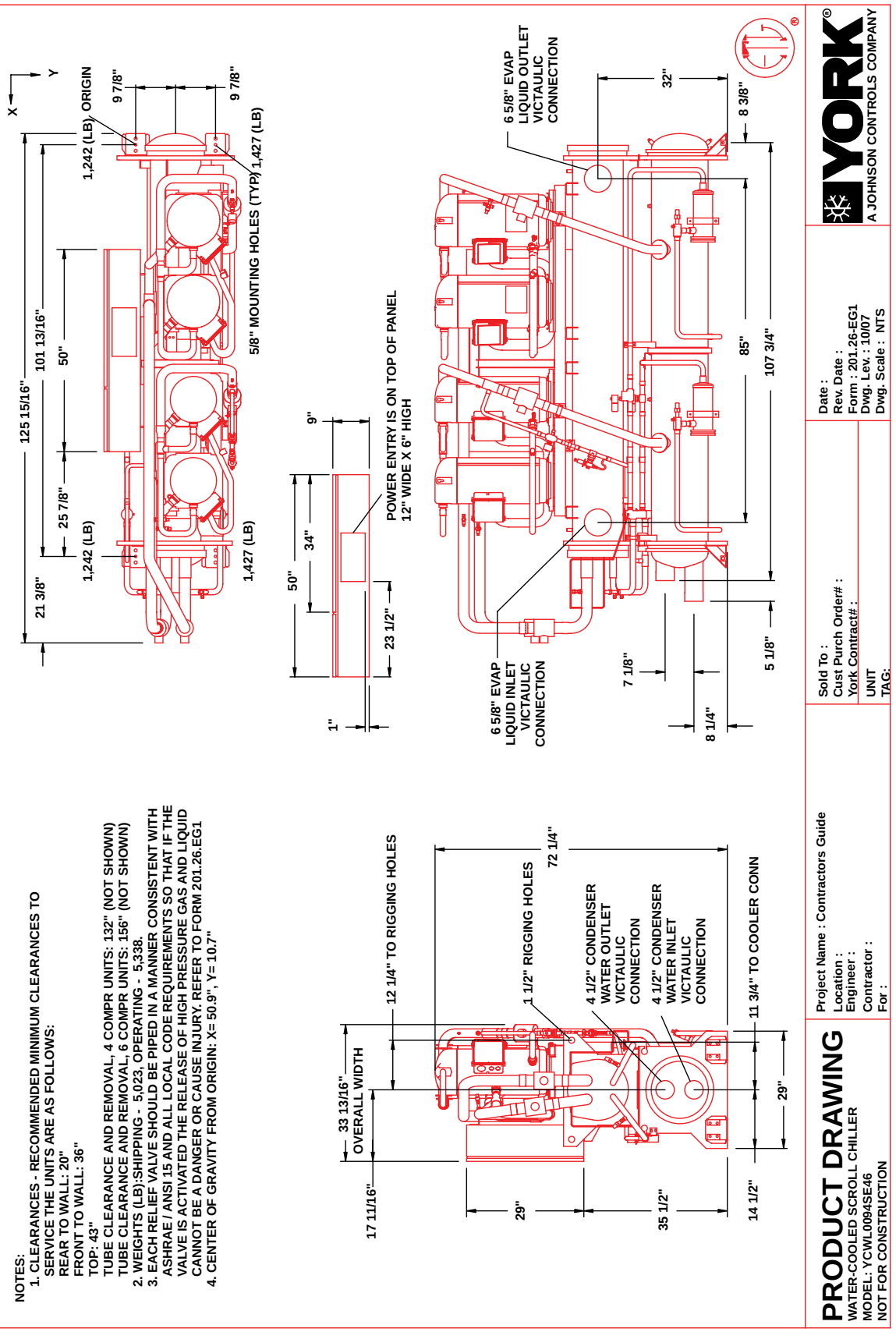
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	42.9/42.9	30.4/30.4		
Compressor Start Current (LRA)	250.0/250.0	225.0/225.0		

Single Point				
Min. Circuit Ampacity	157.0			
Min. Non-Fused Disconnect (Amps)	200.0			
Min. Circuit Breaker (Amps)	175.0			
Max. Circuit Breaker (Amps)	200.0			
Wire Range (Lug Size) *	(1)#10 - 300			
Grounding Wire Lug Size				
Total Amps	146.6		**Operating Condition Electrical Data**	
Inrush (PW) Amps	250.0		Compressor kW	63.8
Starter Type	Across the Line		Total kW	63.8

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	85.9	85.0	95.0	63.8	16.2 / 4.7
72.6	66.6	76.0	83.6	41.6	19.2 / 5.6
50.0	47.8	67.2	72.5	25.4	22.5 / 6.6
22.6	21.9	65.0	67.4	11.0	23.8 / 7.0

MODEL: YCWL0094SE46
AHRI CAPACITY 85.9 TONS



NOTES:
1. CLEARANCES - RECOMMENDED MINIMUM CLEARANCES TO SERVICE THE UNITS ARE AS FOLLOWS:
   REAR TO WALL: 20"
   FRONT TO WALL: 36"
   TOP: 43"
   TUBE CLEARANCE AND REMOVAL, 4 COMPR UNITS: 132" (NOT SHOWN)
   TUBE CLEARANCE AND REMOVAL, 6 COMPR UNITS: 156" (NOT SHOWN)
2. WEIGHTS (LB):SHIPPING - 5,023, OPERATING - 5,338.
3. EACH RELIEF VALVE SHOULD BE PIPED IN A MANNER CONSISTENT WITH ASHRAE / ANSI 15 AND ALL LOCAL CODE REQUIREMENTS SO THAT IF THE VALVE IS ACTIVATED THE RELEASE OF HIGH PRESSURE GAS AND LIQUID CANNOT BE A DANGER OR CAUSE INJURY. REFER TO FORM 201.26.EG1
4. CENTER OF GRAVITY FROM ORIGIN: X= 50.9", Y= 10.7"

PRODUCT DRAWING
WATER-COOLED SCROLL CHILLER
MODEL: YCWL0094SE46
NOT FOR CONSTRUCTION

Project Name : Contractors Guide
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :
UNIT
TAG:

Date :
Rev. Date :
Form : 201.26-EG1
Dwg. Lev. : 10/07
Dwg. Scale : NTS

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Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0094HE46	89.4	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	16.9 / 5.0
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	21.9 / 6.4
Flow Rate (gpm)	214.3	Flow Rate (gpm)	258.5	**Physical Data**	
Pressure Drop (ft.)	8.7	Pressure Drop (ft.)	5.4	Rigging Wt. (lbs.)	5773
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	6412
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	59.8	Water Vol. (gal)	44.1		

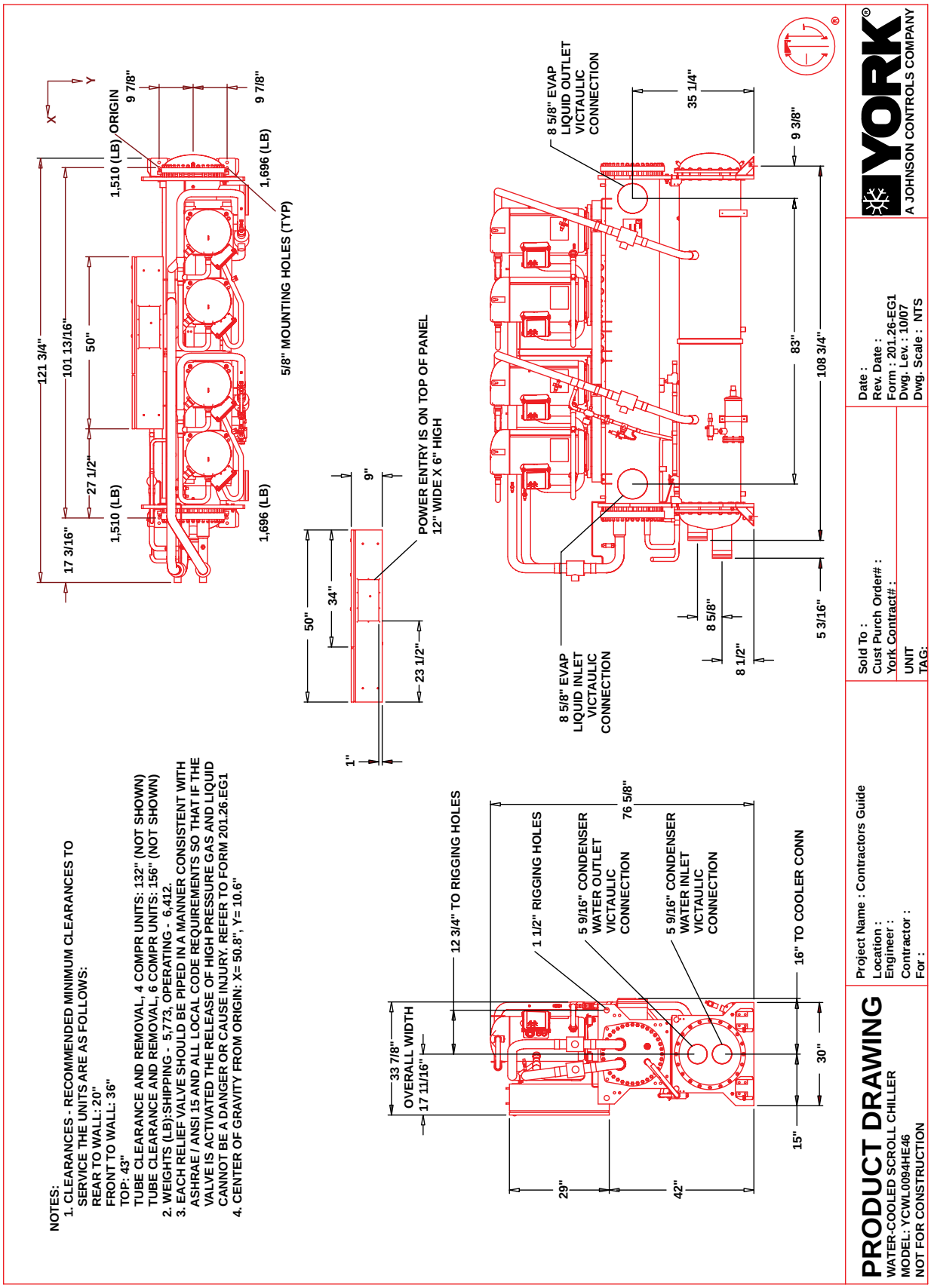
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	42.9/42.9	30.4/30.4		
Compressor Start Current (LRA)	250.0/250.0	225.0/225.0		

Single Point				
Min. Circuit Ampacity	157.0			
Min. Non-Fused Disconnect (Amps)	200.0			
Min. Circuit Breaker (Amps)	175.0			
Max. Circuit Breaker (Amps)	200.0			
Wire Range (Lug Size) *	(1)#10 - 300			
Grounding Wire Lug Size				
Total Amps	146.6		**Operating Condition Electrical Data**	
Inrush (PW) Amps	250.0		Compressor kW	63.5
Starter Type	Across the Line		Total kW	63.5

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	89.4	85.0	95.0	63.5	16.9 / 5.0
72.6	68.5	75.6	83.1	41.1	20.0 / 5.9
50.0	47.9	66.4	71.6	25.1	23.0 / 6.7
22.6	21.9	65.0	67.3	10.9	24.1 / 7.1

MODEL: YCWL0094HE46
AHRI CAPACITY 89.4 TONS



YORK
A JOHNSON CONTROLS COMPANY

Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0104SE46	92.8	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	16.2 / 4.7
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	20.9 / 6.1
Flow Rate (gpm)	222.5	Flow Rate (gpm)	271.0	**Physical Data**	
Pressure Drop (ft.)	11.0	Pressure Drop (ft.)	13.1	Rigging Wt. (lbs.)	5157
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	5472
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	37.3	Water Vol. (gal)	26.9		

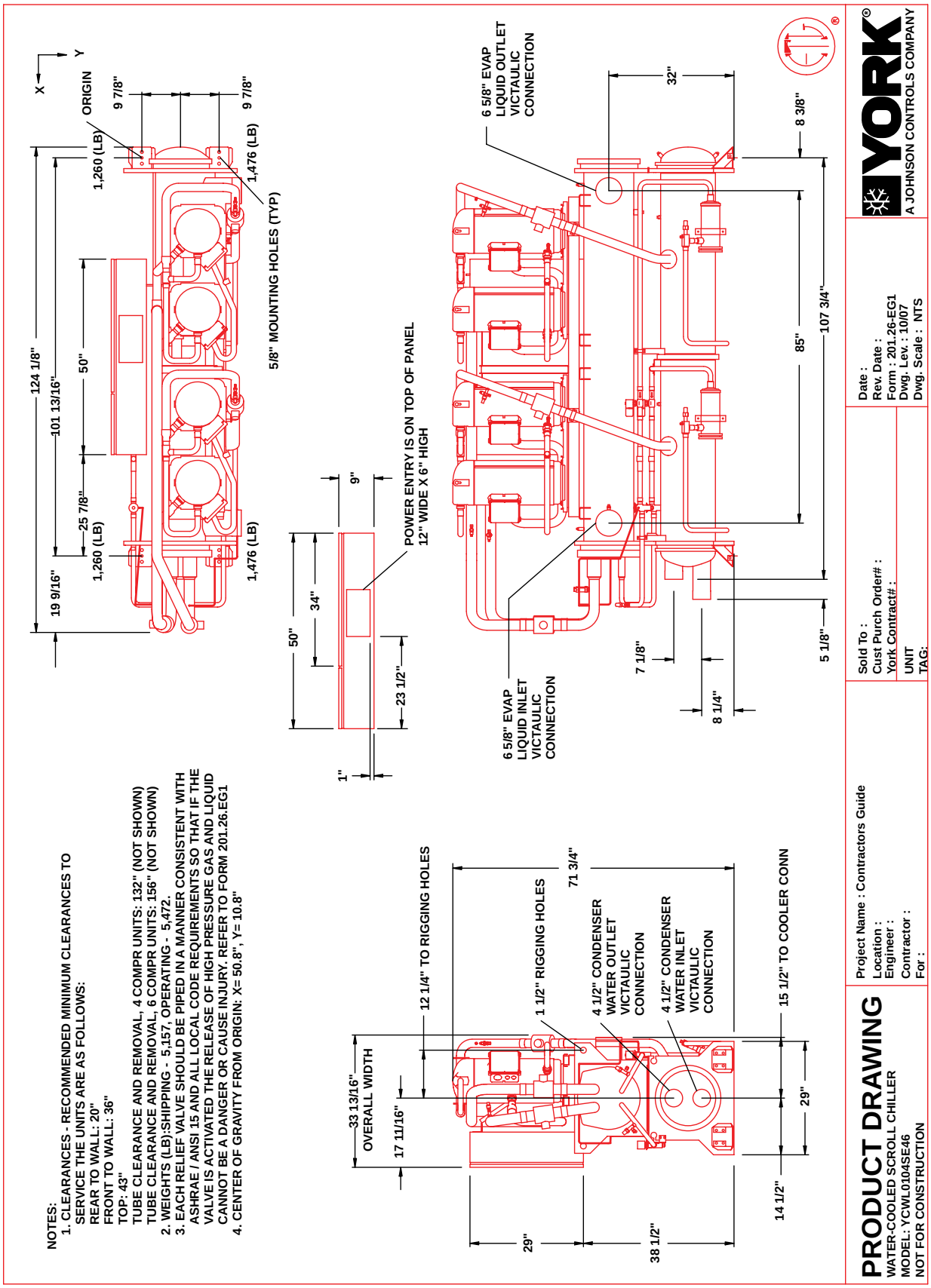
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	42.9/42.9	42.9/42.9		
Compressor Start Current (LRA)	250.0/250.0	250.0/250.0		

Single Point				
Min. Circuit Ampacity	182.0			
Min. Non-Fused Disconnect (Amps)	200.0			
Min. Circuit Breaker (Amps)	200.0			
Max. Circuit Breaker (Amps)	225.0			
Wire Range (Lug Size) *	(1)#4 - 500			
Grounding Wire Lug Size				
Total Amps	171.6		**Operating Condition Electrical Data**	
Inrush (PW) Amps	250.0		Compressor kW	68.9
Starter Type	Across the Line		Total kW	68.9

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	92.8	85.0	95.0	68.9	16.2 / 4.7
75.0	72.6	76.3	83.9	46.5	18.7 / 5.5
50.0	50.9	66.9	72.2	27.6	22.2 / 6.5
25.0	24.9	65.0	67.5	13.2	22.6 / 6.6

MODEL: YCWL0104SE46
AHRI CAPACITY 92.8 TONS



YCWL
91 TO 130

YORK
A JOHNSON CONTROLS COMPANY

Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0118SE46	110.5	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	15.6 / 4.6
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	23.5 / 6.9
Flow Rate (gpm)	264.8	Flow Rate (gpm)	324.5	**Physical Data**	
Pressure Drop (ft.)	15.1	Pressure Drop (ft.)	17.8	Rigging Wt. (lbs.)	4983
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	5298
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	37.3	Water Vol. (gal)	26.9		

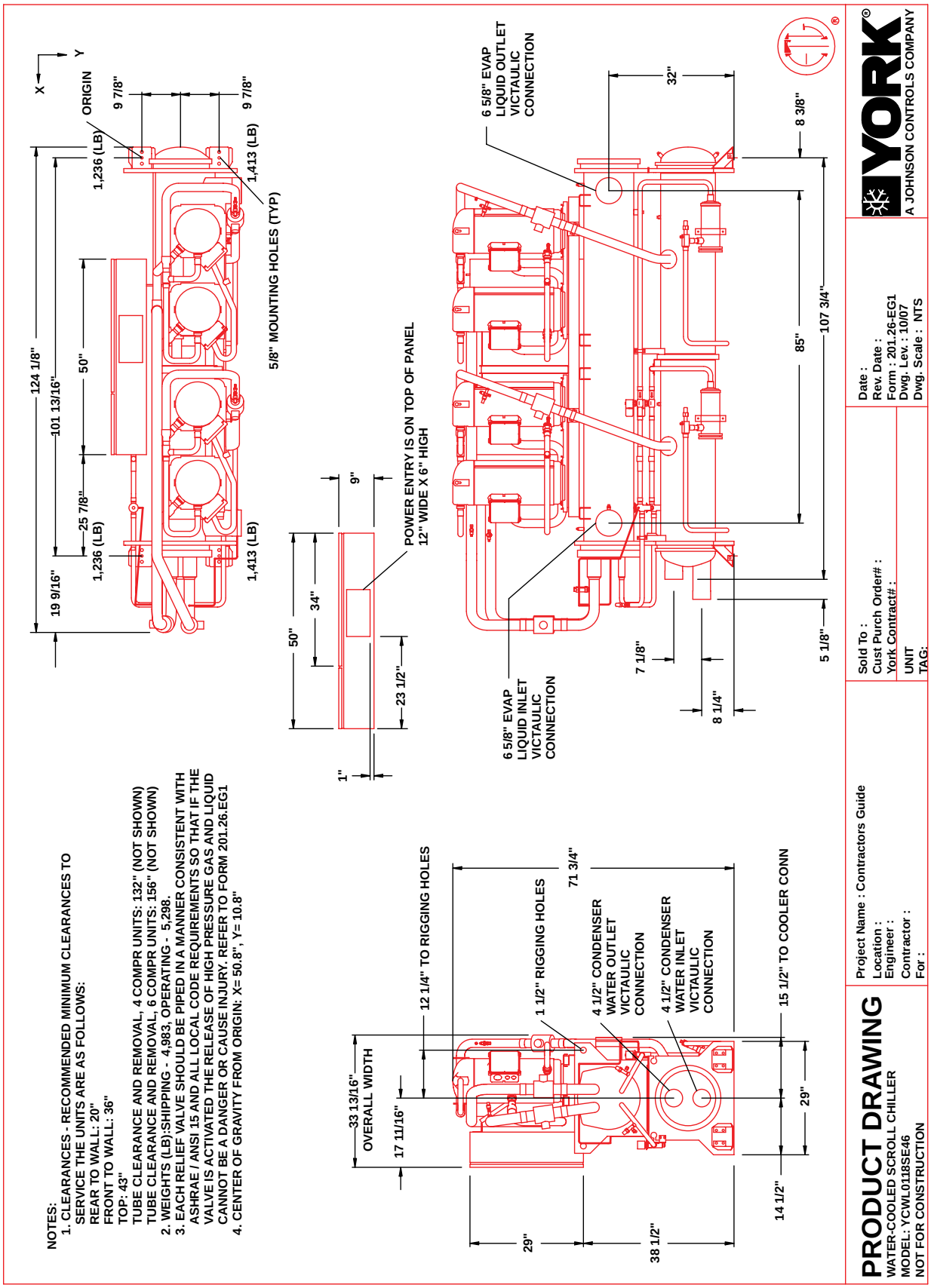
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	54.5/54.5	42.9/42.9		
Compressor Start Current (LRA)	310.0/310.0	250.0/250.0		

Single Point				
Min. Circuit Ampacity	208.4			
Min. Non-Fused Disconnect (Amps)	250.0			
Min. Circuit Breaker (Amps)	225.0			
Max. Circuit Breaker (Amps)	310.0			
Wire Range (Lug Size) *	(1)#4 - 500			
Grounding Wire Lug Size				
Total Amps	194.8		**Operating Condition Electrical Data**	
Inrush (PW) Amps	310.0		Compressor kW	84.9
Starter Type	Across the Line		Total kW	84.9

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	117.2	85.0	95.0	83.1	16.9 / 5.0
71.8	89.7	75.6	83.0	49.7	21.7 / 6.4
50.0	64.4	67.0	72.1	29.4	26.3 / 7.7
21.8	27.7	65.0	67.2	11.9	27.9 / 8.2

MODEL: YCWL0118SE46
AHRI CAPACITY 110.5 TONS



YORK
A JOHNSON CONTROLS COMPANY

Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0118HE46	117.2	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	16.9 / 5.0
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	24.7 / 7.2
Flow Rate (gpm)	280.8	Flow Rate (gpm)	334.0	**Physical Data**	
Pressure Drop (ft.)	14.1	Pressure Drop (ft.)	8.4	Rigging Wt. (lbs.)	5733
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	6372
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	59.8	Water Vol. (gal)	44.1		

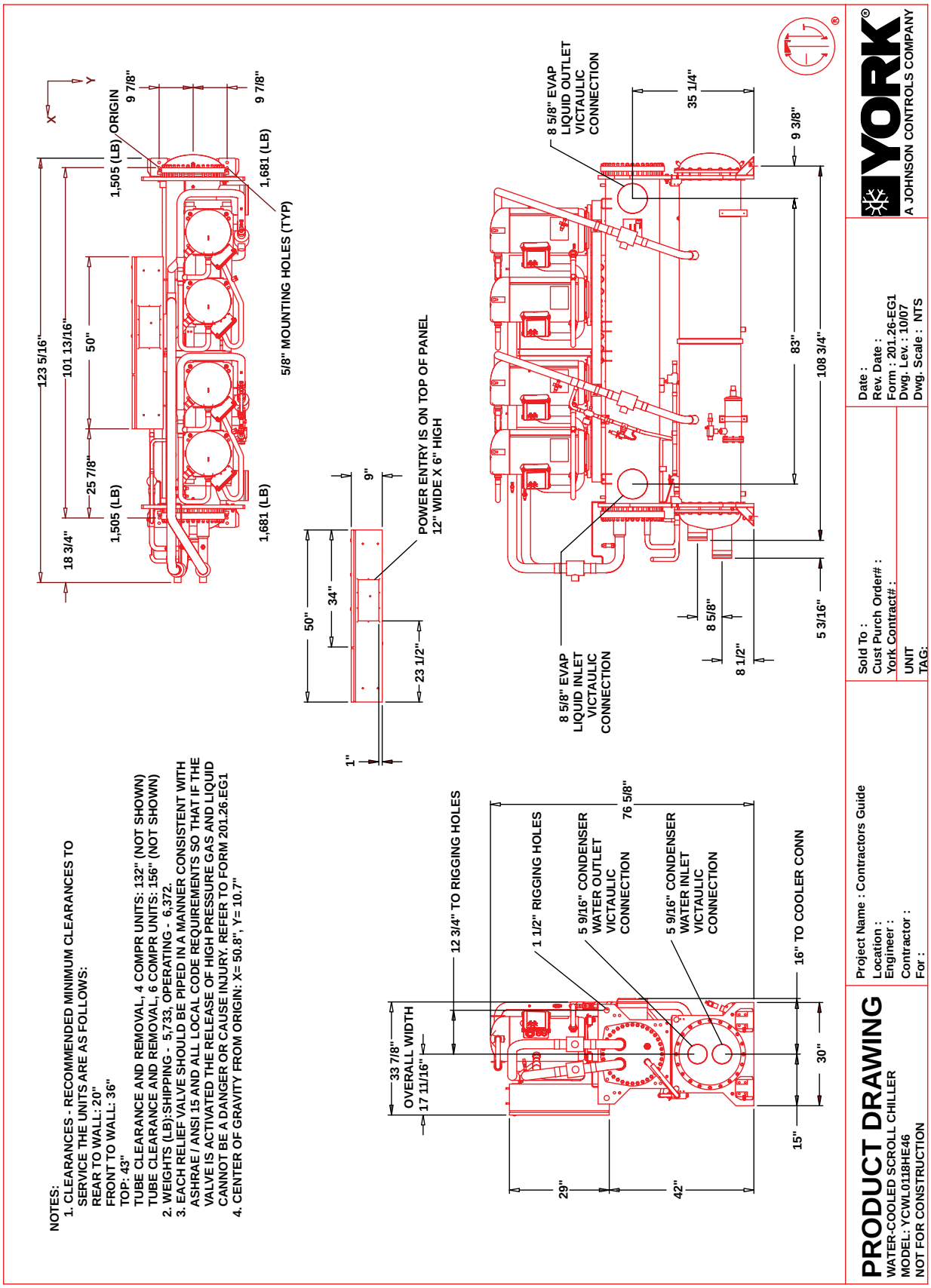
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	54.5/54.5	42.9/42.9		
Compressor Start Current (LRA)	310.0/310.0	250.0/250.0		

Single Point				
Min. Circuit Ampacity	208.4			
Min. Non-Fused Disconnect (Amps)	250.0			
Min. Circuit Breaker (Amps)	225.0			
Max. Circuit Breaker (Amps)	310.0			
Wire Range (Lug Size) *	(1)#4 - 500			
Grounding Wire Lug Size				
Total Amps	194.8		**Operating Condition Electrical Data**	
Inrush (PW) Amps	310.0		Compressor kW	83.1
Starter Type	Across the Line		Total kW	83.1

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	117.2	85.0	95.0	83.1	16.9 / 5.0
71.8	89.7	75.6	83.0	49.7	21.7 / 6.4
50.0	64.4	67.0	72.1	29.4	26.3 / 7.7
21.8	27.7	65.0	67.2	11.9	27.9 / 8.2

MODEL: YCWL0118HE46
AHRI CAPACITY 117.2 TONS



YORK
A JOHNSON CONTROLS COMPANY

Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0132SE46	127.4	460/3/60	R410A

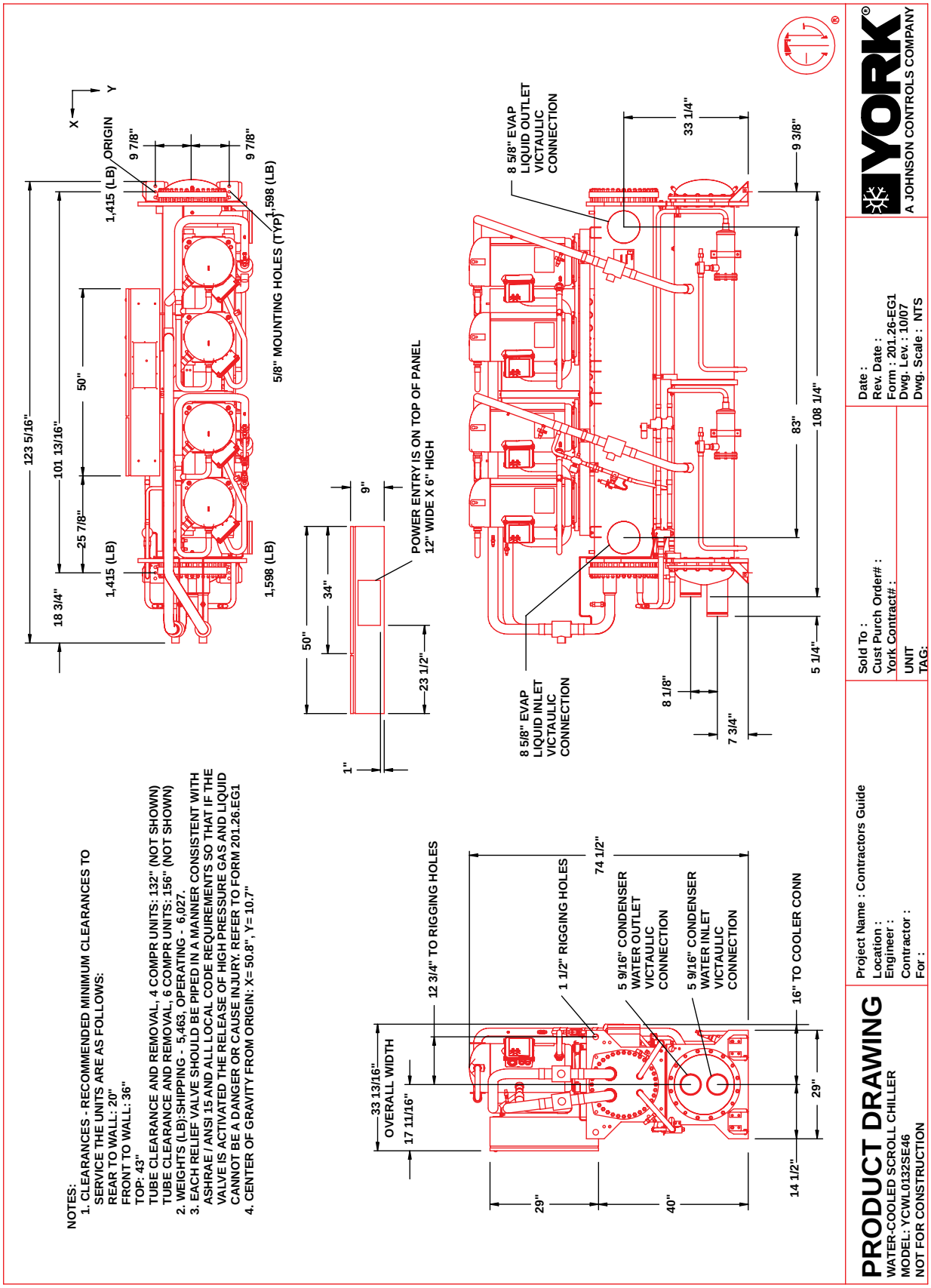
Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	16.1 / 4.7
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	23.4 / 6.9
Flow Rate (gpm)	305.3	Flow Rate (gpm)	372.0	**Physical Data**	
Pressure Drop (ft.)	16.5	Pressure Drop (ft.)	14.8	Rigging Wt. (lbs.)	5463
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	6027
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	59.8	Water Vol. (gal)	35.2		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	54.5/54.5	54.5/54.5		
Compressor Start Current (LRA)	310.0/310.0	310.0/310.0		

Single Point				
Min. Circuit Ampacity	231.6			
Min. Non-Fused Disconnect (Amps)	400.0			
Min. Circuit Breaker (Amps)	310.0			
Max. Circuit Breaker (Amps)	310.0			
Wire Range (Lug Size) *	(1)#4 - 500			
Grounding Wire Lug Size				
Total Amps	218.0		**Operating Condition Electrical Data**	
Inrush (PW) Amps	310.0		Compressor kW	94.7
Starter Type	Across the Line		Total kW	94.7

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	127.4	85.0	95.0	94.7	16.1 / 4.7
75.0	100.2	76.5	84.1	61.0	19.7 / 5.8
50.0	70.8	67.2	72.4	33.7	25.2 / 7.4
25.0	34.7	65.0	67.5	15.9	26.2 / 7.7


NOTES:
1. CLEARANCES - RECOMMENDED MINIMUM CLEARANCES TO SERVICE THE UNITS ARE AS FOLLOWS:
REAR TO WALL: 20"
FRONT TO WALL: 36"
TOP: 43"
TUBE CLEARANCE AND REMOVAL, 4 COMPR UNITS: 132" (NOT SHOWN)
TUBE CLEARANCE AND REMOVAL, 6 COMPR UNITS: 156" (NOT SHOWN)
2. WEIGHTS (LB):SHIPPING - 5,463, OPERATING - 6,027.
3. EACH RELIEF VALVE SHOULD BE PIPED IN A MANNER CONSISTENT WITH ASHRAE / ANSI 15 AND ALL LOCAL CODE REQUIREMENTS SO THAT IF THE VALVE IS ACTIVATED THE RELEASE OF HIGH PRESSURE GAS AND LIQUID CANNOT BE A DANGER OR CAUSE INJURY. REFER TO FORM 201.26.EG1
4. CENTER OF GRAVITY FROM ORIGIN: X= 50.8", Y= 10.7"
123 5/16"
101 13/16"
18 3/4"
25 7/8"
50"
1,415 (LB)
1,598 (LB)
ORIGIN
X
Y
9 7/8"
5/8" MOUNTING HOLES (TYP)
POWER ENTRY IS ON TOP OF PANEL
12" WIDE X 6" HIGH
9"
34"
23 1/2"
1"
8 5/8" EVAP LIQUID OUTLET VICTAULIC CONNECTION
8 5/8" EVAP LIQUID INLET VICTAULIC CONNECTION
33 1/4"
9 3/8"
83"
108 1/4"
8 1/8"
7 3/4"
5 1/4"
33 13/16"
OVERALL WIDTH
17 11/16"
12 3/4" TO RIGGING HOLES
1 1/2" RIGGING HOLES
74 1/2"
5 9/16" CONDENSER WATER OUTLET VICTAULIC CONNECTION
5 9/16" CONDENSER WATER INLET VICTAULIC CONNECTION
16" TO COOLER CONN
29"
40"
14 1/2"
PRODUCT DRAWING
WATER-COOLED SCROLL CHILLER
MODEL: YCWL0132SE46
NOT FOR CONSTRUCTION
Project Name : Contractors Guide
Location :
Engineer :
Contractor :
For :
Sold To :
Cust Purch Order# :
York Contract# :
UNIT
TAG:
Date :
Rev. Date :
Form : 201.26-EG1
Dwg. Lev. : 10/07
Dwg. Scale : NTS
YORK
A JOHNSON CONTROLS COMPANY

YORK
A JOHNSON CONTROLS COMPANY

Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0157SE46	144.0	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	16.5 / 4.8
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	23.5 / 6.9
Flow Rate (gpm)	345.1	Flow Rate (gpm)	419.0	**Physical Data**	
Pressure Drop (ft.)	17.3	Pressure Drop (ft.)	15.3	Rigging Wt. (lbs.)	6163
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	6891
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	57.6	Water Vol. (gal)	52.4		

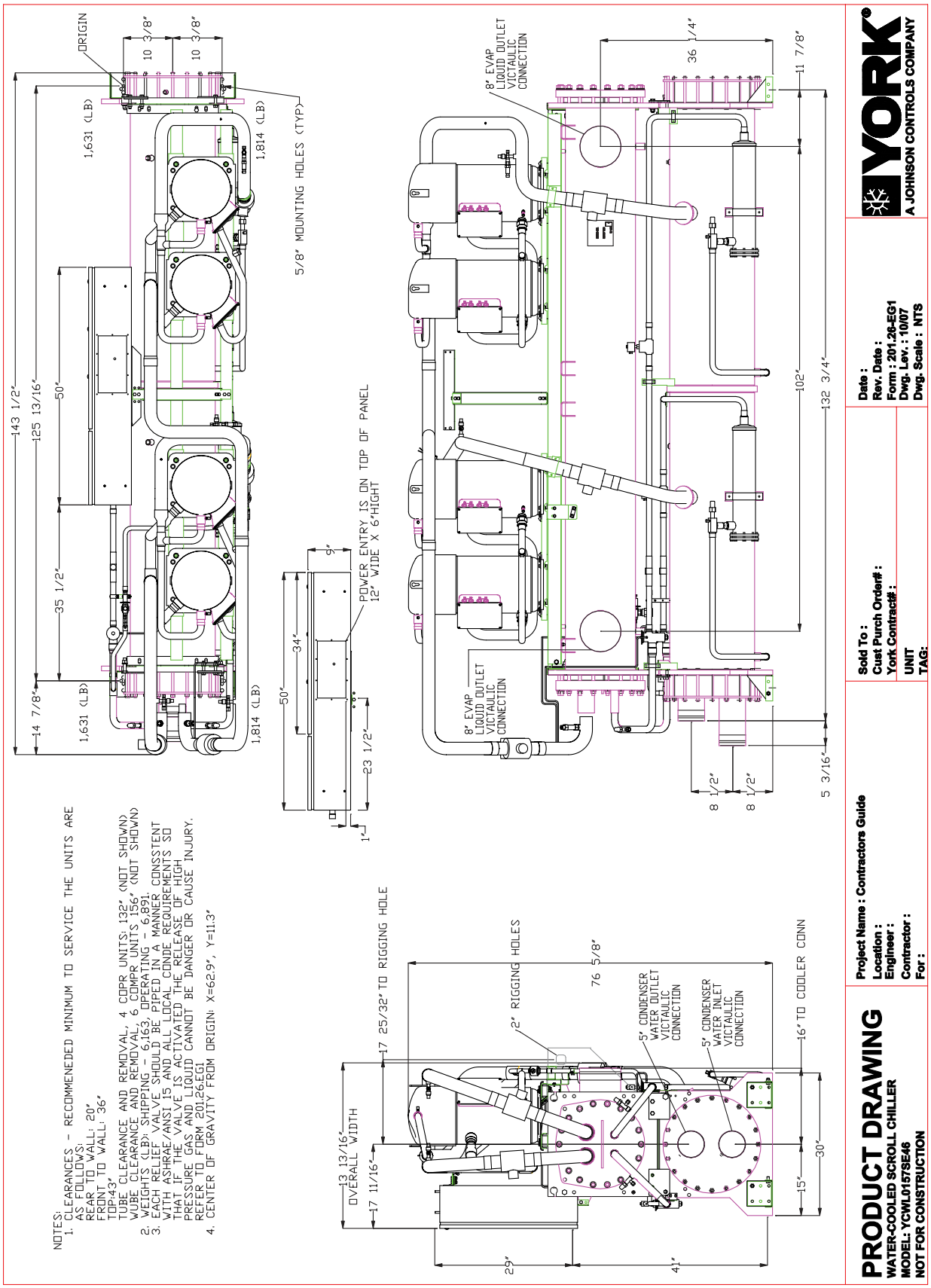
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	54.5/54.5	54.5/54.5		
Compressor Start Current (LRA)	310.0/310.0	310.0/310.0		

Single Point				
Min. Circuit Ampacity	231.6			
Min. Non-Fused Disconnect (Amps)	400.0			
Min. Circuit Breaker (Amps)	250.0			
Max. Circuit Breaker (Amps)	250.0			
Wire Range (Lug Size) *	() -			
Grounding Wire Lug Size				
Total Amps	218.0		**Operating Condition Electrical Data**	
Inrush (PW) Amps	310.0		Compressor kW	104.7
Starter Type	Across the Line		Total kW	104.7

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	144.0	85.0	95.0	104.7	16.5 / 4.8
75.0	113.5	76.5	84.2	68.1	20.0 / 5.9
50.0	80.2	67.3	72.5	38.0	25.3 / 7.4
25.0	39.3	65.0	67.5	17.9	26.3 / 7.7

MODEL: YCWL0157SE46
AHRI CAPACITY 144.0 TONS



NOTES:
1. CLEARANCES - RECOMMENEDED MINIMUM TO SERVICE THE UNITS ARE AS FOLLOWS:
   REAR TO WALL: 20"
   FRONT TO WALL: 36"
   TOP:43"
   TUBE CLEARANCE AND REMOVAL, 4 COPR UNITS: 132" (NOT SHOWN)
   WUBE CLEARANCE AND REMOVAL, 6 COMPR UNITS 156" (NOT SHOWN)
2. WEIGHTS (LB): SHIPPING - 6,163, OPERATING - 6,891.
3. EACH RELIEF VALVE SHOULD BE PIPED IN A MANNER CONSSTENT WITH ASHRAE/ANSI 15 AND ALL LOCAL CONDE REQUIREMENTS SO THAT IF THE VALVE IS ACTIVATED THE RELEASE OF HIGH PRESSURE GAS AND LIQUID CANNOT BE DANGER OR CAUSE INJURY. REFER TO FORM 201.26.EG1
4. CENTER OF GRAVITY FROM ORIGIN: X=62.9", Y=11.3"

PRODUCT DRAWING
WATER-COOLED SCROLL CHILLER
MODEL: YCWL0157SE46
NOT FOR CONSTRUCTION

Project Name : Contractors Guide
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :
UNIT
TAG:

Date :
Rev. Date :
Form : 201.26-EG1
Dwg. Lev. : 10/07
Dwg. Scale : NTS

YORK
A JOHNSON CONTROLS COMPANY

YCWL
131 TO 200

YORK
A JOHNSON CONTROLS COMPANY

Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0157HE46	148.5	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	17.1 / 5.0
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	24.2 / 7.1
Flow Rate (gpm)	355.9	Flow Rate (gpm)	422.4	**Physical Data**	
Pressure Drop (ft.)	11.6	Pressure Drop (ft.)	12.4	Rigging Wt. (lbs.)	6863
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	7807
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	77.0	Water Vol. (gal)	59.1		

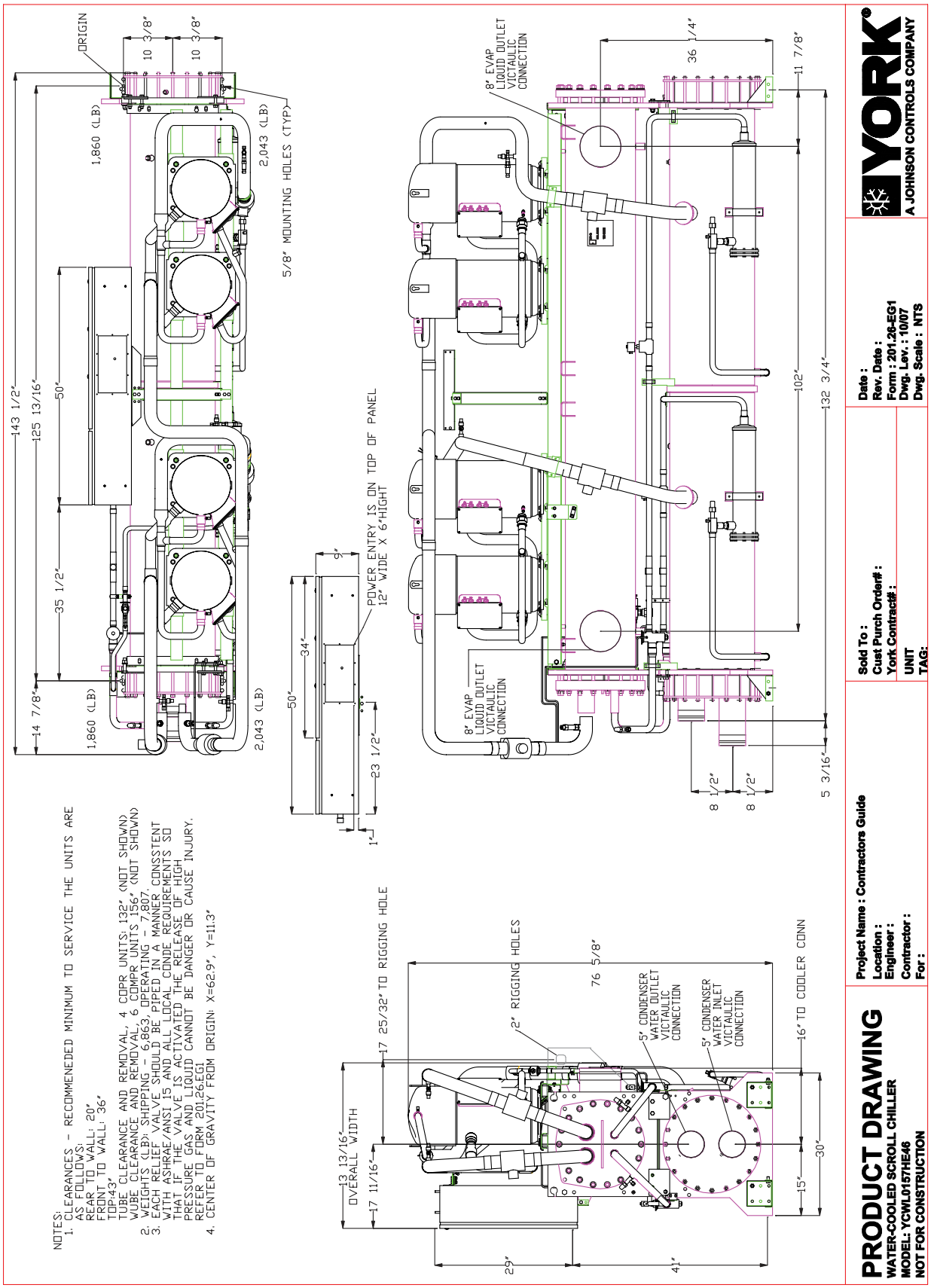
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	54.5/54.5	54.5/54.5		
Compressor Start Current (LRA)	310.0/310.0	310.0/310.0		

Single Point				
Min. Circuit Ampacity	231.6			
Min. Non-Fused Disconnect (Amps)	400.0			
Min. Circuit Breaker (Amps)	250.0			
Max. Circuit Breaker (Amps)	250.0			
Wire Range (Lug Size) *	() -			
Grounding Wire Lug Size				
Total Amps	218.0		**Operating Condition Electrical Data**	
Inrush (PW) Amps	310.0		Compressor kW	104.3
Starter Type	Across the Line		Total kW	104.3

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	148.5	85.0	95.0	104.3	17.1 / 5.0
75.0	116.8	76.5	84.1	67.2	20.9 / 6.1
50.0	81.4	66.9	72.1	37.7	25.9 / 7.6
25.0	39.9	65.0	67.5	17.8	26.9 / 7.9

MODEL: YCWL0157HE46
AHRI CAPACITY 148.5 TONS



NOTES:
1. CLEARANCES - RECOMMENEDED MINIMUM TO SERVICE THE UNITS ARE AS FOLLOWS:
   REAR TO WALL: 20"
   FRONT TO WALL: 36"
   TOP:43"
   TUBE CLEARANCE AND REMOVAL, 4 COMPR UNITS: 132" (NOT SHOWN)
   TUBE CLEARANCE AND REMOVAL, 6 COMPR UNITS 156" (NOT SHOWN)
2. WEIGHTS (LB): SHIPPING - 6,863, OPERATING - 7,807.
3. EACH RELIEF VALVE SHOULD BE PIPED IN A MANNER CONSISTENT WITH ASHRAE/ANSI 15 AND ALL LOCAL CONDE REQUIREMENTS SO THAT IF THE VALVE IS ACTIVATED THE RELEASE OF HIGH PRESSURE GAS AND LIQUID CANNOT BE DANGER OR CAUSE INJURY. REFER TO FORM 201.26.EG).
4. CENTER OF GRAVITY FROM ORIGIN: X=62.9", Y=11.3"

PRODUCT DRAWING
WATER-COOLED SCROLL CHILLER
MODEL: YCWL0157HE46
NOT FOR CONSTRUCTION

Project Name : Contractors Guide
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :
UNIT
TAG:

Date :
Rev. Date :
Form : 201.26-EG1
Dwg. Lev. : 10/07
Dwg. Scale : NTS

YORK
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YORK
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Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0177SE46	166.6	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	17.1 / 5.0
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	25.4 / 7.4
Flow Rate (gpm)	399.3	Flow Rate (gpm)	477.9	**Physical Data**	
Pressure Drop (ft.)	14.2	Pressure Drop (ft.)	15.3	Rigging Wt. (lbs.)	7318
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	8262
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	77.0	Water Vol. (gal)	59.1		

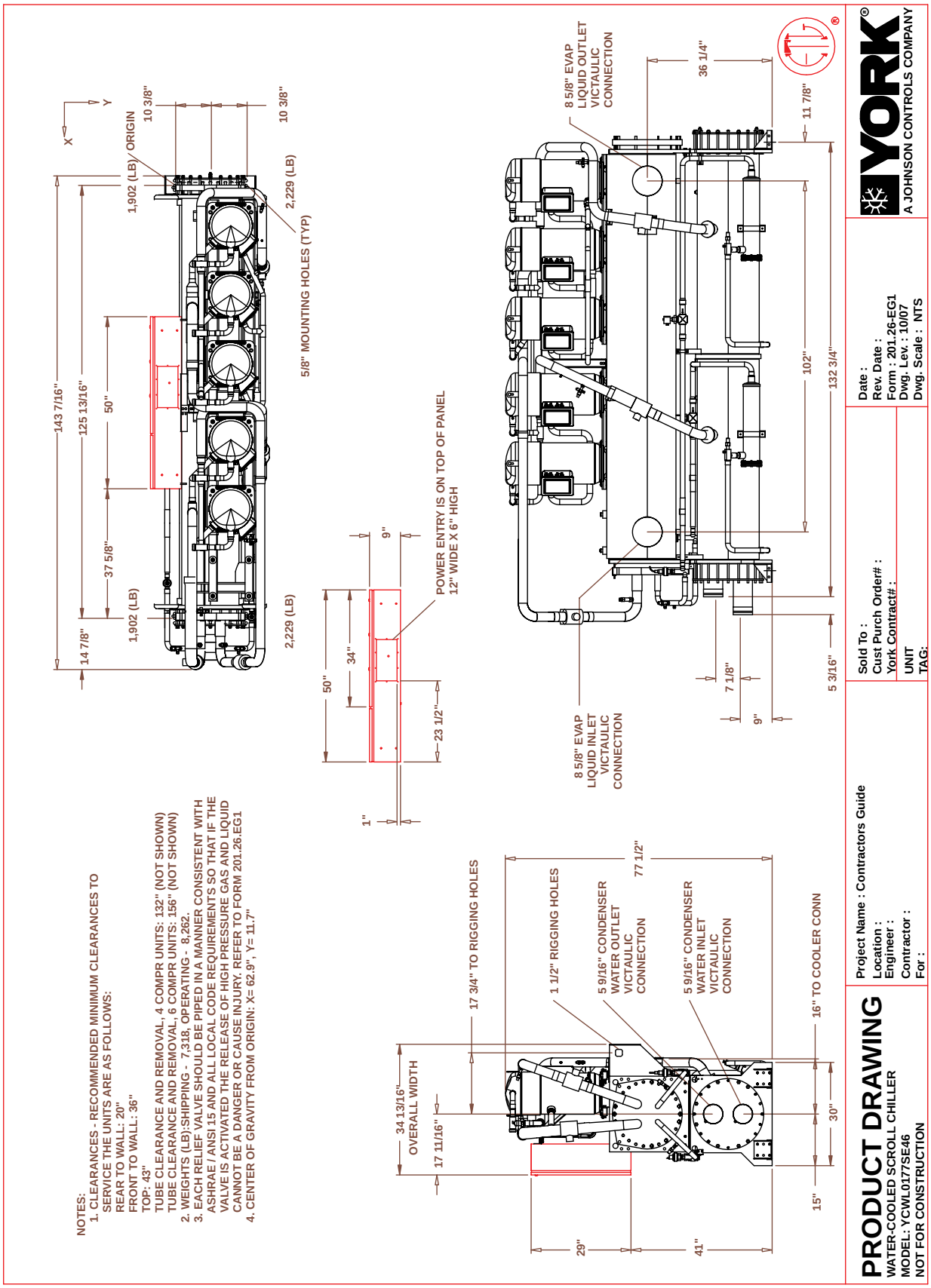
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	49.2/49.2/49.2	49.2/49.2		
Compressor Start Current (LRA)	242.0/242.0/242.0	242.0/242.0		

Single Point				
Min. Circuit Ampacity	258.0			
Min. Non-Fused Disconnect (Amps)	400.0			
Min. Circuit Breaker (Amps)	300.0			
Max. Circuit Breaker (Amps)	300.0			
Wire Range (Lug Size) *	(1)#4 - 500			
Grounding Wire Lug Size				
Total Amps	246.0		**Operating Condition Electrical Data**	
Inrush (PW) Amps	242.0		Compressor kW	117.1
Starter Type	Across the Line		Total kW	117.1

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	166.6	85.0	95.0	117.1	17.1 / 5.0
80.0	141.0	78.8	87.1	80.8	20.9 / 6.1
60.0	108.3	71.0	77.2	52.8	24.6 / 7.2
40.0	73.3	65.0	69.1	31.0	28.4 / 8.3
20.0	35.6	65.0	67.0	15.2	28.2 / 8.3

MODEL: YCWL0177SE46
AHRI CAPACITY 166.6 TONS



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Water Cooled Scroll Chiller
Performance Specification

Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
YCWL0198SE46	198.4	460/3/60	R410A

Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	EWT (°F)	85.0	EER / COP	16.8 / 4.9
LWT (°F)	44.0	LWT (°F)	95.0	EER IPLV/COP IPLV	24.8 / 7.3
Flow Rate (gpm)	475.6	Flow Rate (gpm)	566.2	**Physical Data**	
Pressure Drop (ft.)	19.6	Pressure Drop (ft.)	20.4	Rigging Wt. (lbs.)	7673
Fluid	Water	Fluid	Water 0.0	Operating Wt. (lbs.)	8617
Fouling Factor	0.00010	Fouling Factor	0.00025		
Water Vol. (gal)	77.0	Water Vol. (gal)	59.1		

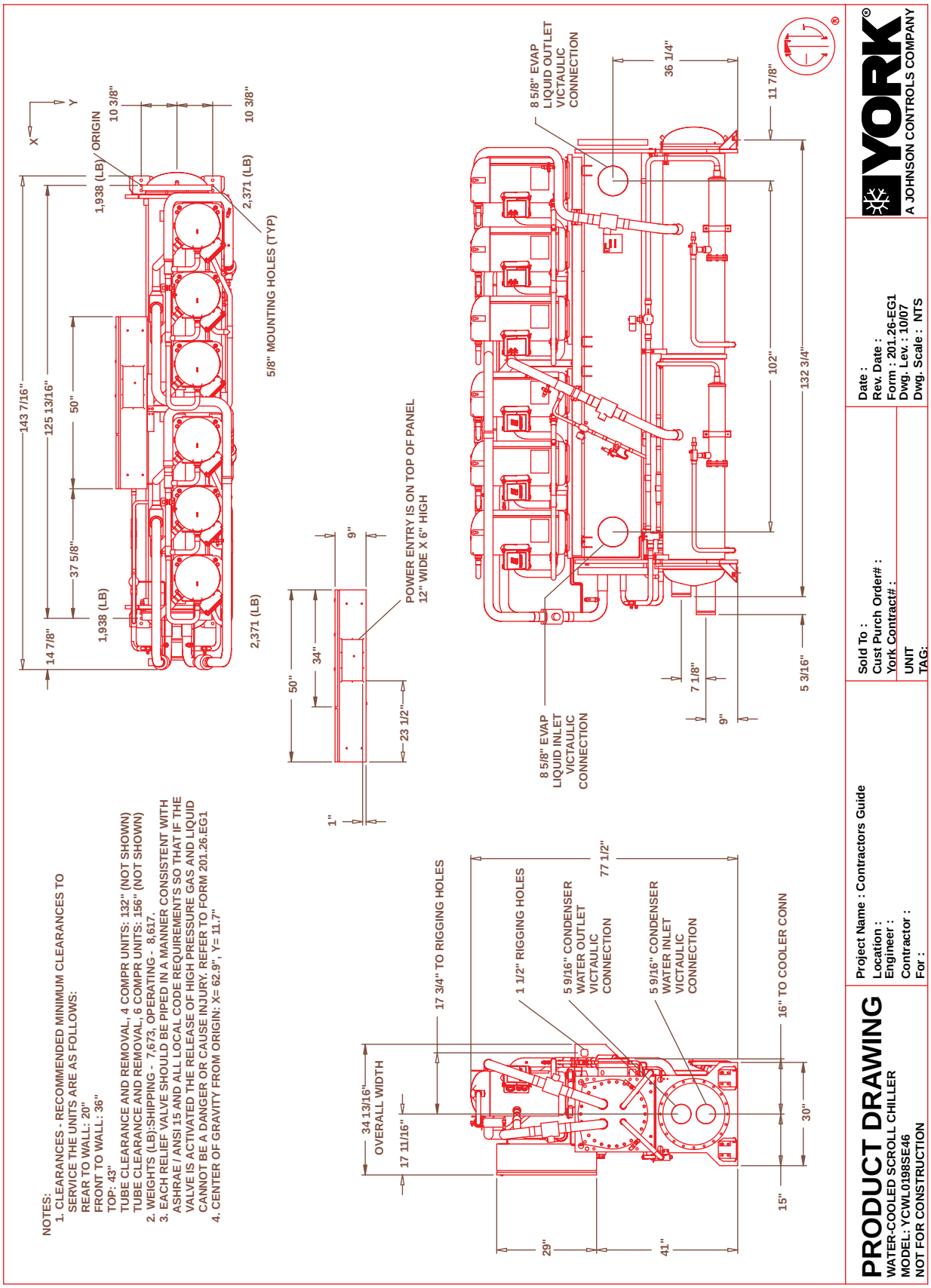
Electrical Data				
Circuit	1	2	3	4
Compressor RLA	49.2/49.2/49.2	49.2/49.2/49.2		
Compressor Start Current (LRA)	242.0/242.0/242.0	242.0/242.0/242.0		

Single Point				
Min. Circuit Ampacity	308.0			
Min. Non-Fused Disconnect (Amps)	400.0			
Min. Circuit Breaker (Amps)	350.0			
Max. Circuit Breaker (Amps)	350.0			
Wire Range (Lug Size) *	(1)#4 - 500			
Grounding Wire Lug Size				
Total Amps	295.2		**Operating Condition Electrical Data**	
Inrush (PW) Amps	242.0		Compressor kW	141.9
Starter Type	Across the Line		Total kW	141.9

Notes:	RATED AND CERTIFIED IN ACCORDANCE WITH AHRI STANDARD 550/590. * Use Copper Conductors only

Part Load Rating Data					
Load %	Capacity (Tons)	Cond. EWT (°F)	Cond. LWT (°F)	Compressor kW	Unit Efficiency
100.0	198.4	85.0	95.0	141.9	16.8 / 4.9
83.3	172.0	79.7	88.1	106.6	19.4 / 5.7
66.7	144.2	74.1	81.0	76.0	22.8 / 6.7
50.0	110.2	67.2	72.4	50.6	26.1 / 7.6
33.3	73.0	65.0	68.4	31.5	27.8 / 8.1
16.7	35.8	65.0	66.7	15.5	27.7 / 8.1

MODEL: YCWL0198SE46
AHRI CAPACITY 198.4 TONS



PRODUCT DRAWING
WATER-COOLED SCROLL CHILLER
MODEL: YCWL0198SE46
NOT FOR CONSTRUCTION

Project Name : Contractors Guide
Location :
Engineer :
Contractor :
For :

Sold To :
Cust Purch Order# :
York Contract# :
UNIT
TAG:

Date :
Rev. Date :
Form : 201.26-EG1
Dwg. Lev. : 10/07
Dwg. Scale : NTS

YORK
A JOHNSON CONTROLS COMPANY

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Johnson Controls