



# C-BOS Policy – Start-up Labor Pricing Policy

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<b>Title:</b>	North America HVAC Equipment Start-up Labor Pricing Policy	<b>Number:</b>	06-43.460-SSA
<b>Owner:</b>	Patrick Foley, Manager, EW Technical Support	<b>Effective Date:</b>	15-August-2015
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## POLICY STATEMENT

The purpose of this policy is to institute a start-up procedure to:

1. Provide our customers with a quality start-up of all York/JCI HVAC Equipment Sales units & assets.
2. Protect JCI from latent defects caused by transportation, installation, defective materials, etc.

**Protect and Maximize JCI's margin recognition through project risk evaluation and collaboration, by the HVAC Equipment Sales and JCI Service Teams.**

The cost of start-up is calculated using Start-up Labor Allowance and Sell Price Tables which are appended to this memo.

This policy is to be used by all North America Service, Installation, Sales, and Performance Contracting personnel.

SUMMARY OF CHANGES

Rev 1.0

Startup Labor Allowances

- Updated startup labor allowances based on factory/ field review.

Rev 1.1

Startup Labor Rates

- Updated startup labor rates to a branch by branch rate and eliminated the region and State Rates.

TABLE OF CONTENTS

Policy statement ..... 1

Protect and Maximize JCI’s margin recognition through project risk evaluation and collaboration, by the HVAC Equipment Sales and JCI Service Teams..... 1

Summary of Changes ..... 2

Table of Contents ..... 2

START-UP Labor Services ..... 4

Mandatory Commissioning By JCI Service ..... 4

Optional Commissioning By Service ..... 4

HVAC Equipment Sales Responsibility ..... 5

Service Responsibility ..... 7

Contract Specifications ..... 7

Operator Training ..... 8

Additional Considerations ..... 8

JCI Services beyond Standard YORKworks Start-up Service Labor ..... 8

Form-3/Form-7/Form-9/Form-10/Form-11 assembly ..... 8

HVAC Equipment Storage Services..... 9

Titan, CYK, YST, medium voltage centrifugal chillers ..... 9

Field Performance and Sound Testing Assistance..... 10

Industrial Petro-chemical, Federal, Prisons, High tech, and Manufacturing customers ..... 10

YK Derivatives (OM’s, CYKs, YSTs, YKEPs) Special Controls ..... 10

E-Link Gateways ..... 10

Airmod / VSD’s ..... 11

Refrigerant Monitors ..... 11

reference information..... 12

FOB Destination Inspection ..... 12

Table 1 – North America Start-up Labor Allowance Large Tonnage Products ..... 13

Table 1A – North America Start-up Labor Allowance Small Tonnage / CUE /AHU Products ..... 14

Table 1B – North America YPC Absorption Start-up Labor Allowance ..... 15

Table No. 2 – North America Start-up Sell Price (\$ per day) Large Tonnage ..... 16

Table No. 2 – Canada Start-up Sell Price (\$ US per day) for Large Tonnage ..... 16

Table No. 2A – North America Start-up Sell Price (\$ per day) Small Tonnage ..... 17

Table No. 2A – Canada Start-up Selling Price (\$ US per day) for Small Tonnage Units ... **Error! Bookmark not defined.**

Table No. 3 – North America E-Link Gateway Pricing Large Tonnage OptiView YT, YD, YK (Field Mounted, Installed & Commissioned) ..... 18

Table No. 4 – North America E-Link Gateway Pricing Large Tonnage OptiView YS, YR (Field Mounted, Installed & Commissioned) ..... 19

## **C-BOS Policy – Start-up Labor Pricing Policy**

Table No. 5 – North America E-Link Gateway Pricing Large Tonnage OptiView YS Heat Pump (Field Mounted, Installed & Commissioned) .....	20
Table No. 6 – North America E-Link Gateway Pricing Large Tonnage OptiView YST (Field Mounted, Installed & Commissioned) .....	21
Table No. 7 – North America E-Link Gateway Pricing Large Tonnage Non-OptiView YG, YB, YIA, YPC .....	22
Table No. 8 – North America E-Link Gateway Pricing Large Tonnage OptiView YIA (Field Mounted, Installed & Commissioned) .....	23
Table No. 10 – North America E-Link Gateway Pricing Small Tonnage Non-Enclosure YCWL, YCRL, YCAL, YCUL, YLAA, YLUA; (Field Mounted, Installed & Commissioned) .....	24
Table No. 11 – North America E-Link Gateway Pricing Small Tonnage Non-Enclosure YCIV, YCAV, YVAA; (Field Mounted, Installed & Commissioned).....	25
Table No. 12 – North America E-Link Gateway Pricing Small Tonnage / Enclosure YCIV, YCAV, YVAA; (Field Mounted, Installed & Commissioned).....	26
Table No. 13 – North America E-Link Gateway Pricing Small Tonnage Enclosure YCWS, YCRS, YCAS, YPAL .....	27
Table No. 14 – North America E-Link Gateway Pricing Small Tonnage Enclosure YLCS, YEAS.....	28
Table No. 16 – North America E-Link Gateway Pricing Large Tonnage OptiView YMC <sup>2</sup> (Field Mounted, Installed & Commissioned) .....	29
Table No. 15 – North America Airmod / VSD Pricing .....	30

### START-UP LABOR SERVICES

This policy is to be used by all personnel in consideration of all HVAC Equipment commissioning. Building Systems and Equipment Sales Engineers and Managers should make additional considerations for asset quantities, site complexity & reassembly, site location, terms & conditions, training requirements, etc. in their bidding strategy.

Failure to follow this policy may result in the JCI organization absorbing additional commissioning costs affecting JCI overall margin erosion.

Branch General Managers or Regional Vice Presidents, with authority over the Service team where the equipment is being installed, may make exceptions to the pricing to commission the HVAC Equipment based on the contents of this Policy and collaboration with NA Sales and Operations support.

### Mandatory Commissioning By JCI Service

Commissioning by Service personnel is mandatory and may not be deleted or reduced for any reason for the following equipment:

- YK centrifugal chillers
- YMC<sup>2</sup> centrifugal chillers
- YD centrifugal chillers
- CYK centrifugal chillers
- YKEP centrifugal chillers
- Titan centrifugal chillers
- YS, YVWA and YR screw chillers
- YG and YB gas engine chillers
- YST steam turbine chillers, YIA and YPC absorption chillers
- YCAS/YCAV/YCIV/YVAA, YLPA air-cooled chillers
- E-Link gateways

### Optional Commissioning By Service

Start-up on the following equipment, water-cooled, air-cooled DX chillers, Millennium, Eco2, Airmod (VSDs) and air handler units are optional.

- YCWL/YCWS water cooled chillers
- YCRL/YCRS remote condenser chillers
- YCAL/YCUL/YLAA/YLUA air cooled chillers
- UPG Products
- Eco2/YPAL
- Airmods and variable speed drives associated with AHU fans and pumps
- WCSC L-Series Units

JCI has established standard rates to commission HVAC Equipment Sales products and assets. The allotted commissioning time is based upon the equipment being completely ready for start-up and on the labor being performed by Service in an efficient, effective manner. Reasonable time (1-Hour or Less) must be allowed to provide operational training for customer's personnel at the time of start-up (on the same day).

### HVAC EQUIPMENT SALES RESPONSIBILITY

- Equipment Sales must make the Service teams aware of any unusual project or site conditions so that all appropriate cost is accounted for prior to bid day.
- When the job site is greater than 75 miles from the Service team home location, add one (1) day to the start-up labor allowance or mileage cost, per appropriate tables, to cover start-up Commissioning Labor.
- Equipment Sales orders booked with start-up Labor, and 12 months have passed from the release for manufacture date, the start-up order and line will be adjusted to the current year's start-up labor rate (per attached Tables).
- Equipment Sales will order, track shipment, coordinates equipment delivery with their customers as well as Service teams.
- Equipment Sales is responsible for sending the pre-start-up check list and YORK CHILLER BAS COMMUNICATIONS CHECKLIST to their customer, ensuring they are completed and returned to the Service team. Equipment Sales will provide the Service team two weeks notification prior to the HVAC Equipment being ready for start-up. The Equipment Sales Manager is responsible to make sure the unit is ready to be started before Service is asked to go to the jobsite.
  - Equipment Sales is responsible for reconciling any damage that may occur during shipment or off loading and rigging of the equipment or asset.
  - If the equipment or asset requires repair by the Service team and the damage was caused by Customers or a Freight Carrier, a new order and line will be created in the EOT and Price Summary by Equipment Sales for the repair. The pricing for the repair will be Cost/Burden plus 39% GM.
  - The Service team will provide Equipment Sales with a proposal for these repairs. The Service Team is not to perform repair work on damaged equipment directly for customers or Freight Carriers prior to start-up and commissioning. After start-up, the Service team may accept a PO directly from customers (including contractors).

**Equipment Documentation Concession (DSC):** Process to handle errors, omissions and concessions associated with HVAC Equipment Documentation. Equipment Sales is responsible for identifying DSC (Documentation Slippage) and Equipment Product Technical Support teams are responsible for approving the claims. Used to handle concessions prior to or after product shipment (e.g. YORKworks drawings were incorrect causing rework in the field by a contractor or Service). P&L-Manufacturing Engineering Responsibility, Engineering revenue is impacted. The costs will be charged to Engineering using an inter-company account number. The pricing for the repair, parts, or service will be Cost/Burden. The work will be booked as a DSC claim using the current warranty claims process and executed by the Service team in NxGen. See the Equipment Documentation Slippage and Concession (DSC) Policy.

- **Start-up Booking Process:** Project Engineers/ Agents will continue to add line items in Yorkworks as they do today. PEs/ Agents will source line items to the Service team using the Purchasing View. When the order is sourced by the PE, an NxGen SR will be created instead of a purchase order, and the NxGen SR number will be visible on the line in IIS. There will be an NxGen SR for every unit and for each stand-alone order. NxGen SRs for all product codes will be created at the time of sourcing with the exception of 7251 (Elinks) and 7253 (Start-Up). These can be sourced at anytime, but will not initiate a NxGen SR until the BOL is cut (interim or finalized). Once a quote (SR) has been created, no change can be made to the per unit BTP on that order. (Lines can be cancelled and quantities can be increased or decreased) If a line is canceled after being sourced (assuming there are no costs on the SR), the Commissioning Team needs to be notified via email. Since NxGen SRs with cost cannot be cancelled, the Branch General Manager will make a determination on how the costs will be handled (write off, billed, etc.). If a pricing increase is needed after an SR is created, a new order will need to be added and sourced for the adjusted amount (using product code 7010 – this product code should be used for no other purpose). Changes to the BTP value per unit in IIS are not allowed after the NxGen SR has been created. If an increase is necessary, an Adjustment order will need to be added using Product Code 7010. Once cost has hit the NxGen SR, no cancellations will be allowed.

- **Best Business Practices**

**Scenario 1:** Branches are concerned about carrying any WIP cost related to Start Up work.

There will be little to no aged WIP since the new Start Up process generates unique Truck Based SRs for each Start Up product code. Each can be closed and "billed" as work is completed.

In the case of ELink Start Up however, the ELink may be purchased in advance of executing the equipment start up.

**Recommendation:**

The Branch should plan to carry this WIP cost. Any other process to create additional SRs or move costs will create additional work. The cost of inefficiency will likely not be offset by any TWC benefit considering the nominal cost of the ELink product .

**Scenario 2:** Branches may receive customer calls related to a post Start Up problem. The outcome may result in 1) an Equipment change order, 2) a warranty call, or 3) a customer concession.

**Recommendation:**

To keep branch work effort to a minimum, the branch should open an L&M SR and then handle each of the scenarios as follows:

- If the customer will pay for the service through the equipment contract, communicate to the equipment team to issue a 'contract change order' for a Start Up with order line Product Code 7252 (Other Services). Use NxGen job adjustments to move cost from the L&M SR to the Start Up SR so that the cost will be transferred to the equipment contract.
- If the equipment contract is closed and the customer will pay for the service work, close and bill the NxGen L&M SR.
- If the work is covered by SD Warranty, use the approved NxGen Business Process to update the L&M SR to a Warranty SR
- If the work is not billable to the customer nor covered under warranty, use the approved NxGen Business Process to update the L&M SR to Customer Concession.
- If the work is not billable to the customer nor covered under a DSC claim, communicate to the equipment team to issue a 'contract change order' for a Start Up with order line Product Code 7252 (Other Services). Use NxGen job adjustments to move cost from the L&M SR to the Start Up SR so that the cost will be transferred to the equipment contract.

### SERVICE RESPONSIBILITY

- The Service Team will start the properly prepared HVAC Equipment in the allotted time. If this is not done, because of inefficiency by the performing Service Technician, the performing team will absorb the additional time.
- The Service Team will make certain all warranty-related defects found at time of start-up are approved for repair by HVAC Equipment Quality Assurance, isolated and charged to warranty rather than being absorbed in the start-up allowance. Only the cost associated with the repair of the warranty will be absorbed by HVAC Equipment Manufacturing. The Service Team will respond to customer warranty related requests in a reasonable amount of time (within 2-Hours by phone) and will convey when a service technician may be available to investigate the request for warranty service. (See Global Warranty Policy)
- The Service Team will make certain all non-start-up related issues are isolated and charged to a new NxGen contract (DSC will be charged to a Warranty SR) rather than being absorbed in the start-up allowance. The Branch will contact the Commissioning Services for guidance on booking additional service work outside the standard start-up policy. The Branch will provide the Commissioning Services with a **written proposal** of scope priced at **cost/burden plus 39% GM** along with the estimate SOV breakdown. If there is a change in site conditions or original scope, Service will provide a re-estimate for approval prior to completing additional work. Equipment Sales will process the revision according to policy. This work will be invoiced in NxGen at cost plus 25% GM. Service will not perform additional repairs unless the repair has been approved through the Equipment Sales or Manufacturing DSC approval process. See the Engineering Documentation Slippage & Concessions (DSC) Policy.
- **CSA will manage the quote (NxGen SR). The following rules apply:**
  - The quote type field will be “Field Quote” and the sub-type is “PCAT quoted”.
  - Service Teams are not able to manually create these in NxGen.
  - Quotes will be validated and if error free, will automatically create SRs.
  - Quotes with errors will be put into an error queue, to be managed by the Commissioning Team in the SBRC.
  - There will be one quote per unit for Start-up/ Elinks.
  - Form 3 through 11 supervision (7250) and other JCI Services (7252) will always be quoted separately.
- Once work is completed, branch will use established SBRC L&M sub-statuses to send NxGen SR to the Commissioning Team for invoicing. The SBRC Commissioning Team will review the invoice, including validating start-up docs are attached as necessary. If validation is not successful the SR will be returned to the branch, and no payment will be made to the invoice or cost applied to the equipment contract.

### CONTRACT SPECIFICATIONS

- If the customer and/or mechanical contractor specifications require more start-up time and services than called for in this policy, the specified amount of time and service must be included in the equipment contract and sold to the customer.
- No contract can be sold with less start-up time than called for in this policy.

### **OPERATOR TRAINING**

- One session of training for operating personnel is included in the standard start-up allowance. JCI bases this on the estimated bare minimum (1-Hour) requirements for such training. Training will consist of start/stopping the equipment, navigational view of the control panel, overview of safety and cycling shutdowns and minimum maintenance schedule.
- Any additional training required by job specifications, owner requirements, and/or contract must be added to the Equipment Sales EOT and Price Summary at the rates shown in the attached Tables.
- Video Taping – Terms and conditions requests for videotaping of training must be approved by Director, Operations NA and Legal Counsel.
- Additional training over and above the training to be completed as stated above can be selected in a minimum of 4 hour increments. To purchase, make your selections in Yorkworks for the specific product. Daily rates and notes apply.

### **ADDITIONAL CONSIDERATIONS**

- Specific project requirements, contract specifications, and/or certain HVAC Equipment Sales products and assets may create a requirement for additional start-up and/or service supervision by Service.
- These requirements include, but are not limited to:

#### **JCI Services beyond Standard YORKworks Start-up Service Labor**

- Services beyond standard YORKworks start-up service labor associated with large tonnage customer products, Form-3 through Form-11 Reassembly, supervision of reassembly, testing services, service & repair, subcontract labor, project management, etc will be quoted by Service at current JCI street rates (fair market value) to Equipment Sales prior to proposal submission to its customer.
- Equipment Sales and the Service team will collaborate on the additional scope, so that a written proposal and budget can be produced. The written proposal will be provided to Equipment Sales as backup should JCI be the successful bidder in the award of an order.
- These additional services are firm lump sum proposals and the Service team assumes the risk or benefit associated with the performance of these additional service scopes.
- Equipment Sales should not assume any revenue or revenue sharing will be provided if there is efficiency upside performance by the Service team, nor should the Service team expect additional compensation due to inefficiencies or missed scope pricing (tax, freight, etc) on its part in the performance of the work.
- Scope changes or additional services associated with released Equipment Sales orders will be handled as outlined in this policy.

#### **Form-3/Form-7/Form-9/Form-10/Form-11 assembly**

- There are cases where Equipment Sales is required to provide products and assets to JCI customers in sub-components. These deliverables are usually associated with product, project access, and space constraints.
- Specific products include Titans, YKEP's, YST's, CYK's, YD's, YMC<sup>2</sup>, and AHU's. One or more pieces of the chiller or asset could be shipped loose for assembly and/or reassembly in the field. Normally the customer (Mechanical Contractor) to Equipment Sales is responsible for the reassembly of the chiller, and/or other asset and their sub-components.
- To protect JCI from latent defects associated with these Form-3/Form-7/Form-9/Form-10/Form-11 assemblies JCI requires that this work either be performed by the Service team or at a minimum under the supervision of the Service team.
- Equipment Sales Engineers and Branch Managers, and Foremen shall collaborate and agree on the additional JCI scope of work and start-up / Supervision cost. This cost must be added to the Equipment Sales Equipment Order at the labor rates shown in the attached Tables to cover the scope of work. Quote request forms for chiller and AHU assemblies are available on the Commissioning Services website and in PFM.

### HVAC Equipment Storage Services

- Equipment Sales must secure a quote from The Service Team for Storage Services. This service may be associated with long / short term storage, or delayed start-up of the HVAC Equipment. These services depending on the product and the length of service can be complex. YORKworks does not automatically calculate storage services (choosing delayed start-up in YORKworks does not cover this, it only delays the warranty start date).
- A quote request form for long term storage is available on the Commissioning Services website and in PFM.

### Titan, CYK, YST, medium voltage centrifugal chillers

- The Titan centrifugal chiller requires an enormous amount of Equipment Sales & Service coordination/collaboration, field erection, assembly, supervision, commissioning, and project management. These chillers and sub-components are delivered to the project site on six to seven eighteen wheeler trailers.
- Additional internal or vendor commissioning cost may be associated with Steam Turbine and medium voltage chiller starters & VSD's. Equipment Sales Engineers and Branch Managers, CTMs and Foremen shall collaborate and agree on the additional JCI scope of work and start-up / Supervision and/or vendor supplied cost.
- On notification of a potential opportunity the Equipment Sales Engineer should contact the Product Marketing Manager for Titan Chillers, the Branch PM and Major PM (should be considered), to begin the qualification, and risk evaluation of the opportunity.
- The Regional Major Project Team with the support of the Building Efficiency Project Support team should be considered to work and collaborate with the Equipment Sales Engineer and Branch Manager, Branch PM, and Foremen.
- These chillers are normally sold to JCI end customers and JCI will collaborate to secure at a minimum the following chiller deliverables (Rigging, Erection, Assembly, Commissioning), as well as the entire installation as much as practical (Depending on Customer Purchase) to provide our JCI customers with a quality product.

Here are the development and execution services that are associated with the Titan, CYK and YST Centrifugal Chillers:

- ◆ Customer / Equipment Order , specification development
  - ◆ Risk evaluation
  - ◆ Internal scope development
  - ◆ Internal budget development
  - ◆ Proposal collaboration and development
  - ◆ Major Installation Team
  - ◆ Field Service supervision
  - ◆ Subcontractor management
  - ◆ Chiller erection
  - ◆ Chiller assembly
  - ◆ Chiller commissioning
  - ◆ Chiller performance assistance
  - ◆ Chiller operational training
- Following this policy with regard to these products will minimize JCI's exposure to back charges, liquidated damages, litigation, etc, and provide our JCI customer with a quality product and start-up.

- Understanding the complexity and strategic bidding strategies associated with the deliverable of these products requires an enormous collaboration effort by the entire project team. As such the Service team scope of work and start-up / Supervision will be priced at market bearable cost including escalation associated with the lead time deliverable of these products, as well as appropriate levels of proficiency & risk, and warranty cost on all JCI scopes of work.
- The services associated with the sale of a Titan Centrifugal chiller will be booked as Installation lines in the Equipment Sales Order regardless if JCI only sells the chiller to the customer or if it's sold as an entire Prime LOB Turnkey Installation.

In the latter the Titan equipment will not be marked up by the Service team.

### **Field Performance and Sound Testing Assistance**

- Project specification / contract requirements may require that field performance and sound testing be included in the project. All field performance & Sound Testing will be performed by a JCI (Industrial Systems Engineer) from York, PA.
- The cost for the (Industrial Systems Engineer) will be carried by Equipment Sales as a Sales line item in the Equipment Sales Order.
- There is a considerable amount of assistance (Equipment setup, equipment breakdown, supervision, and project management) that is required to be performed by the Service team during these tests.
- Equipment Sales Engineers and Branch Managers and/or TTLs and Foremen shall collaborate and agree on the additional Service team's scope of work and start-up / Supervision cost.
- This cost must be added to the Equipment Sales Order and price summary at the rates shown in the attached Tables to cover the scope of work.

### **Industrial Petro-chemical, Federal, Prisons, High tech, and Manufacturing customers**

- The commissioning associated with these JCI customer sites can be very complex as well as the customer's requirements very demanding.
- Specifications, safety, entry access, and documentation requirements add additional cost to these JCI customers' projects. Equipment Sales as part of their sales strategy will collaborate with the Service team to gain an understanding of these JCI customer requirements. The additional Service team's scope should be sold upfront with the equipment to the customer. Failure to follow this policy may result in the Branch absorbing additional Commissioning Services costs affecting JCI overall margin erosion.
- Equipment Sales Engineers and Branch Managers and/or TTLs and Foremen shall collaborate and agree on the additional Service team's scope of work and start-up / Supervision cost. This cost must be added to the HVAC Equipment Sales Order at the rates shown in the attached Tables to cover the scope of work.

### **YK Derivatives (OM's, CYKs, YSTs, YKEPs) Special Controls**

- Project specifications / contract requirements may require Equipment Sales to provide a chiller that has special controls such as Allen Bradley, Bentley Nevada vibration, etc. Equipment Sales Engineers should contact the service team when one of these products is considered for a project. Additional commissioning labor as well as a higher level of expertise is required to commission these products. The expertise to support these special products or assets is not resident in all JCI Branches. Additional resources to support commissioning may be required to be flown to the project site to support the start-up. The additional assistance will come from the Industrial Systems Team from York, PA, or the Major Installation Team, Milwaukee. Equipment Sales Engineers and Branch Managers and/or TTLs and Foremen shall collaborate and agree on the additional Service team's scope of work and start-up / Supervision cost. This cost must be added to the HVAC Equipment Sales Order at the rates shown in the attached Tables.

### **E-Link Gateways**

- The E-Link Gateway is the interface of choice between HVAC Equipment (York and JCI Branded chiller products) and third party control systems. The pricing in the attached E-Link tables is made up of the E-Link hardware, installation kits, the labor to install on the chiller product, commissioning labor, and labor warranty. Pricing does not include remote installation. It is the Service team's responsibility to order the E-Link and supporting subcomponents using the current AOMS pricing and a .265 multiplier. E-Link purchased hardware has a material only warranty policy through the JCI Controls RMA process. Labor warranty will be handled as follows: The Commissioning Services / ES team will book in NxGen all service line items and will book in each start-up contract containing an E-Link \$300 cost to cover any labor to trouble shoot, repair, or replace an E-Link product as warranty cost code for 1 year from installation and start-up. If the Elink is Factory Mounted then the Elink warranty will follow the unit warranty coverage. Equipment Sales will enter E-Links as service orders and line items in YORKworks / CMS / CBS / Price Summary for the dollar amount listed in the attached E-Link Tables under (Domestic L&M) using the appropriate communication protocol required for the project or can select them for factory mounting in Yorkworks.
- Equipment Sales will provide the Service team with the signed YORK CHILLER BAS COMMUNICATIONS CHECKLIST which identifies what protocol is required for third party communications. The Service team will order the E-Link, supporting kits, field install, and commission based on established rates within this policy.
- When Equipment Sales sells an overseas or global project requiring an E-Link, the E-Link will be selected in YORKworks for the amount listed in the attached tables (Global Material Only) using the appropriate communication protocol required for the project.
- Equipment Sales is responsible for providing submittals, O&M's, documentation, engineering, etc to the customer.
- E-Links for some models of YR, and YS Heat Pump chillers require additional programming setup by SIS. This additional cost is included in the pricing referenced below. The Service team will contract directly with SIS to complete the programming.
- Current production Scroll products (YCWL, YCRL, YCAL, YCUL, and YLAA) are equipped with an IPU-II board which supports native BACnet, Modbus and N2 protocols. An E-Link is not required for these protocols, but Service receives additional start-up dollars to set up these boards for a third party controls interface. LON protocol will require an E-Link installation. Starting October 1, 2010, this installation will be performed by the manufacturing facility. The Service team receives additional start-up dollars to commission these factory-installed E-Links.
- Older scroll products not equipped with an IPU-II board will require an E-Link for all protocols.
- Starting December 1, 2010 E-Link installation will be performed on all Optiview equipped chillers by the manufacturing facility. The Service team receives additional start-up dollars to commission these factory-installed E-Links.
- For LON E-links and E-links requiring additional setup by SIS, please refer to the notes in the tables.

### **Airmod / VSD's**

- This policy supersedes any and all other York Airmod / VSD pricing policies, pre-acquisition and post-acquisition. Equipment Sales will select Airmod / VSD start-up commissioning labor in YORKworks for the amount listed in the attached Table.

### **Refrigerant Monitors**

- This policy supersedes any and all other York refrigerant monitor pricing policies pre-acquisition and post-acquisition. Installation, start-up and commissioning of refrigerant monitors are not included in the daily allowance and regional pricing rates in this policy. Equipment Sales Engineers and Branch Managers and/or TTLs and Foremen shall collaborate and agree on the additional Service team's scope of work and start-up / Supervision cost. This cost must be added to the HVAC Equipment Sales EOT and price summary at the rates shown in the attached Table.

### REFERENCE INFORMATION

- YORK CHILLER BAS COMMUNICATIONS CHECKLIST – Commissioning Service web page
- FOF – Factory Order Form – will be attached to the SR in NxGen
- Warranty documents – Service Operations warranty web page
- The following links can be found under Products & Service/Delivery:
- Pre-start-up Checklists - Internal Product Literature Homepage
- Start-up Checklists - Internal Product Literature Homepage
- Equipment Service Literature - Internal Product Literature Homepage
- York Equipment Integration – York Chiller Integration Home Page
- Systems Integration Services (SIS) – SIS Home Page
- Service Pricing forms – Commissioning Service web page; PFM
  - Air Handler Quote Request Form
  - Chiller Quote Request Form
  - Long Term Storage Quote Request Form

### FOB Destination Inspection

Project specifications / contract requirements may require Equipment Sales to ship equipment Freight On Board Destination. The pricing for the Service team to perform the required inspection will be quoted by the Manager of Domestic Customer Service. The standard price is **\$500.00 per truck, for Refinery, Mine, Nuclear sites the Rate for 1<sup>st</sup> truck is \$800 and each additional truck will be \$500.** Refer to FOB Destination BOS work instruction for procedures to be followed in regards to these inspections.

## APPENDIX

**Table 1 – North America Start-up Labor Allowance Large Tonnage Products**

Product	Notes	Days Required First unit	Days Required Each Additional Unit
YK R134a Centrifugal Chiller - J and K Compressors (Deduct 1 day for Form 1 Shipment)	1,3,6	3	3
YK R134a Centrifugal Chiller - All other compressors (Deduct 1 day for Form 1 Shipment)	1,3,6	3	2
YK MILLENIUM VSD (When shp'd w/unit)	1,3,6	0	
YK Field Commissioning of Factory Mounted E-Link	1	0.4	0.4
YMC <sup>2</sup> R134a Centrifugal Chiller (Deduct 1 day for Form 1 Shipment)	1,3,6	3	2
YMC <sup>2</sup> MILLENIUM VSD (When shp'd w/unit)	1,3,6	0	0
YMC <sup>2</sup> Field Commissioning of Factory Mounted E-Link	1	0.4	0.4
YD Centrifugal Chiller	1,3,6	4	4
YD Field Commissioning of Factory Mounted E-Link	1	0.4	0.4
CYK, YKEP Centrifugal Chiller	1,3,6	8	8
YS Screw Chiller	1,3,6	3	2
YS Field Commissioning of Factory Mounted E-Link	1	0.4	0.4
YS S7 1250 Ton Screw Chiller	1,3,6	5	5
YG Gas Engine Chiller	1,3,6	11	11
YB Packaged Gas Engine Chiller	1,3,6	7	7
YST Steam Turbine Drive Chiller	1,3,6	11	11
YST Field Commissioning of Factory Mounted E-Link	1	0.4	0.4
OM Titan Chiller (Quote by Field Service)	1,3,6	Quoted	Quoted
YIA Single stage Absorption	1,3,5,6	5	5
YIA Optiview Field Commissioning of Factory Mounted E-Link	1	0.4	0.4
YPC Paraflow Absorption (See Attached Table)	1,3,6	-	-
<b>Additional Training- Additional customer training</b>	1	.5	.5
<b>Notes:</b> <ol style="list-style-type: none"> <li>See Table 2 for start-up daily rates.</li> <li>See Table 2A for start-up daily rates.</li> <li>Only for units shipped FORM 1 (charged) or FORM 2 one (1) piece with nitrogen holding charge. For units shipped FORM 3, FORM 7, FORM 9, FORM 10, FORM 11 in two (2) or more pieces, days required and service performed must be quoted by the Project Manager or Branch Manager.</li> <li>Start-up labor is optional – No warranty labor without start-up.</li> <li>Days are for YIA units shipped in one (1) piece. The standard shipment is one (1) piece for Models 1A1 through 10E3, and two (2) pieces for Models 12F1 to 14F3. For two or more pieces, days required and service performed must be quoted by the Project Manager or Branch Manager.</li> <li>Volume discounting applies when units are installed at the same location and ready for consecutive start within allotted start up days (no time lapse between start).</li> </ol>			

**Table 1A – North America Start-up Labor Allowance Small Tonnage / CUE /AHU Products**

Product	Notes	Days Required First unit	Days Required Each Additional Unit
<b>YCWS / YCWL</b> Water Cooled Chiller (Pre-charged)	2,3,6	1	0.5
<b>YCWS</b> - Water Cooled Chiller (407C) (Refrigerant shipped separately)	2,3,6	2	1
<b>YVWA</b> Field Commissioning of Factory Mounted E-link	2	.4	.4
<b>YVWA-</b> Water Cooled Screw Chiller	2,3,6	1.5	1
<b>YCRS / YCRL</b> Remote Condenser Chiller	2,3,6	2	1
<b>WCSC</b> Water Cooled Self Contained L-Series Units (LSWU025 through LSWU040)	2,3,4	0.5	0.5
<b>WCSC</b> Water Cooled Self Contained L-Series Units (LSWU050 through LSWU060)	2,3,4	0.75	0.75
<b>WCSC</b> Water Cooled Self Contained L-Series Units (LSWU062 through LSWU105)	2,3,4	1	1
<b>YCAL / YCUL / YLAA / YLUA / YLPA</b> Air Cooled Chiller & Conditioning Unit	2,3,4,6	1	0.5
<b>YLAA</b> with Hydro kit option Add these days if JCI service commissions	2,3,4,6	1.5	1
<b>YCAS / YCAV / YCIV</b> 90/230 Ton Air Cooled Screw 1-2 Comp	2,3,6	2	1
<b>YCAS / YCAV / YCIV</b> 240/400 Ton Air Cooled Screw 3-4 Comp	2,3,6	2	2
<b>YVAA</b> 150/500 Ton Air Cooled Screw 1-2 Comp	2,3,6	1	1
<b>YCIV, YCAV, YVAA, YVWA</b> Field Commissioning of Factory Mounted E-Link or IPU interface	2	0.4	0.4
<b>YPAL</b>	2,3,6	1	1
<b>YPAL IPU Interface Commissioning</b>	2	0.4	0.4
<b>UPG Commercial Unitary Equipment (direct from Norman) &lt; 20 Tons CUE</b>	2	0.5	0.5
<b>UPG Commercial Unitary Equipment (direct from Norman) &gt; 20 Tons</b>	2	1	1
<b>AIRMOD VSD (VSD only - See Attached Table)</b>	2,6	-	-
<b>AHU's Solution</b> (Indoor & outdoor AHU Only)	2,6	.5	.5
<b>AHU's Custom (Quote from Service)</b>	2,6	-	-
<b>Additional Training- Additional customer training</b>	2	.5	.5
<b>Notes:</b> 1. See Table 2 for start-up daily rates. 2. See Table 2A for start-up daily rates. 3. Only for units shipped FORM 1 (charged) or FORM 2 one (1) piece with nitrogen holding charge. For units shipped FORM 3, FORM 7, FORM 9, FORM 10, FORM 11 in two (2) or more pieces, days required and service performed must be quoted by the Service Project Manager or Service Branch Manager. 4. Start-up labor is optional – No warranty labor without start-up. 5. Days are for YIA units shipped in one (1) piece. The standard shipment is one (1) piece for Models 1A1 through 10E3, and two (2) pieces for Models 12F1 to 14F3. For two or more pieces, days required and service performed must be quoted by the Service Project Manager or Service Branch Manager. 6. Volume discounting applies when units are installed at the same location and ready for consecutive start within allotted start up days (no time lapse between start).			

**Table 1B – North America YPC Absorption Start-up Labor Allowance**

Product	Notes	Charge Shipped Separate		Unit Shipped Pre-Charged	
		Days required first unit	Days req'd each add'l unit	Days required first unit	Days req'd each add'l unit
<b>Steam YPC</b> 14SC – 19S G models have been discontinued	1,2,3,4	6	6	5	5
<b>Direct Fired YPC</b> 12SC -19S G models have been discontinued	1,2,3,4	6	6	5	5

**Notes:**

1. See Table 2 for start-up daily rates.
2. Units ordered without a factory test will be shipped with separate charge as standard. If available, units ordered with a factory test will be shipped pre-charged as standard.
3. Days are for units shipped in one (1) piece. Two (2) or more pieces, days required and service performed must be quoted by the Project Manager or Branch Manager.
4. Days are required for one (1) start-up of cooling/heating units. If job conditions prevent the unit from being run on cooling and heating during the initial start-up, then one (1) extra day per unit must be added.

**Table No. 2 – North America/ Canada Start-up Sell Price (\$ per day) Large Tonnage**

Tier	2015	2016	2017	2018	
1	\$880	\$880	\$880	\$968	
2	\$960	\$960	\$960	\$1,056	
3	\$1040	\$1040	\$1040	\$1,144	
4	\$1120	\$1120	\$1120	\$1,232	
5	\$1200	\$1200	\$1200	\$1,320	
6	\$1280	\$1280	\$1280	\$1,408	
7	\$1360	\$1360	\$1360	\$1,496	
8	\$1440	\$1440	\$1440	\$1,584	
9	\$1440	\$1440	\$1440	\$1,584	
10	\$1520	\$1520	\$1520	\$1,672	
11	\$1600	\$1600	\$1600	\$1,760	
12	\$1680	\$1680	\$1680	\$1,848	
13	\$1760	\$1760	\$1760	\$1,936	

**Note:**

1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.
2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.
3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.
4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.
5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.
6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016
7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017
8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018

**Table No. 2A – North America/ Canada Start-up Sell Price (\$ per day) Small Tonnage**

Tier	2015	2016	2017	2018	
1	\$880	\$880	\$880	\$968	
2	\$960	\$960	\$960	\$1,056	
3	\$1040	\$1040	\$1040	\$1,144	
4	\$1120	\$1120	\$1120	\$1,232	
5	\$1200	\$1200	\$1200	\$1,320	
6	\$1280	\$1280	\$1280	\$1,408	
7	\$1360	\$1360	\$1360	\$1,496	
8	\$1440	\$1440	\$1440	\$1,584	
9	\$1440	\$1440	\$1440	\$1,584	
10	\$1520	\$1520	\$1520	\$1,672	
11	\$1600	\$1600	\$1600	\$1,760	
12	\$1680	\$1680	\$1680	\$1,848	
13	\$1760	\$1760	\$1760	\$1,936	

- Note:**
1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.
  2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.
  3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.
  4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.
  5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.
  6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016
  7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017
  8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018

**Table No. 3 – North America E-Link Gateway Pricing Large Tonnage OptiView YT, YD, YK (Field Mounted, Installed & Commissioned)**

Large Tonnage - Protocol (YT, YD, YK)	2015 Domestic / L&M	2015 Global Material Only	2016 Domestic / L&M	2016 Global Material Only	2017 Domestic / L&M	2017 Global Material Only	75 – 100 Miles	100 – 125 Miles	125 – 150 Miles
BACnet (MS/TP) OptiView Chiller Panel	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
Modbus (RTU) OptiView Chiller Panel	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
N2 (JCI) OptiView Chiller Panel	\$2000	\$1107	\$2000	\$1107	\$2000	\$1107	\$469	\$625	\$786
LONWORKS (LON) OptiView Chiller Panel	\$3040	\$2137	\$3040	\$2137	\$3040	\$2137	\$469	\$625	\$786
<b>Note:</b> <ol style="list-style-type: none"> <li>1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.</li> <li>2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.</li> <li>3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.</li> <li>4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.</li> <li>5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.</li> <li>6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016</li> <li>7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017</li> <li>8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018</li> <li>9. The pricing above does not include submittals, O&amp;M's, documentation, engineering, etc. support.</li> <li>10. Labor warranty (\$300) is included in the above pricing and will be booked in the Branch performing the commissioning.</li> </ol>									

**Table No. 4 – North America E-Link Gateway Pricing Large Tonnage OptiView YS, YR (Field Mounted, Installed & Commissioned)**

Large Tonnage - Protocol (YS, YR)	2015 Domestic / L&M	2015 Global Material Only	2016 Domestic / L&M	2016 Global Material Only	2017 Domestic / L&M	2017 Global Material Only	75 – 100 Miles	100 – 125 Miles	125 – 150 Miles
BACnet (MS/TP) OptiView Chiller Panel	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
Modbus (RTU) OptiView Chiller Panel	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
N2 (JCI) OptiView Chiller Panel	\$2000	\$1107	\$2000	\$1107	\$2000	\$1107	\$469	\$625	\$786
LONWORKS (LON) OptiView Chiller Panel	\$3040	\$2137	\$3040	\$2137	\$3040	\$2137	\$469	\$625	\$786
<p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.</li> <li>2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.</li> <li>3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.</li> <li>4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.</li> <li>5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.</li> <li>6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016</li> <li>7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017</li> <li>8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018</li> <li>9. The pricing above does not include submittals, O&amp;M's, documentation, engineering, etc. support.</li> <li>10. Labor warranty (\$300) is included in the above pricing and will be booked in the Branch performing the commissioning.</li> </ol>									

**Table No. 5 – North America E-Link Gateway Pricing Large Tonnage OptiView YS Heat Pump (Field Mounted, Installed & Commissioned)**

Large Tonnage - Protocol (YS Heat Pump)	2015 Domestic / L&M	2015 Global Material Only	2016 Domestic / L&M	2016 Global Material Only	2017 Domestic / L&M	2017 Global Material Only	75 – 100 Miles	100 – 125 Miles	125 – 150 Miles
BACnet (MS/TP) OptiView Chiller Panel	\$7302	\$6402	\$7302	\$6402	\$7302	\$6402	\$469	\$625	\$786
Modbus (RTU) OptiView Chiller Panel	\$7302	\$6402	\$7302	\$6402	\$7302	\$6402	\$469	\$625	\$786
N2 (JCI) OptiView Chiller Panel	\$7302	\$6402	\$7302	\$6402	\$7302	\$6402	\$469	\$625	\$786
LONWORKS (LON) OptiView Chiller Panel	\$8335	\$7435	\$8335	\$7435	\$8335	\$7435	\$469	\$625	\$786

**Note:**

1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.
2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.
3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.
4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.
5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.
6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016
7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017
8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018
9. The pricing above does not include submittals, O&M's, documentation, engineering, etc. support.
10. Labor warranty (\$300) is included in the above pricing and will be booked in the Branch performing the commissioning.
11. E-Link's for YS Heat Pump chillers require additional programming setup by SIS.

**C-BOS Policy – Start-up Labor Pricing Policy**

**Table No. 6 – North America E-Link Gateway Pricing Large Tonnage OptiView YST (Field Mounted, Installed & Commissioned)**

Large Tonnage - Protocol (YST)	2015 Domestic / L&M	2015 Global Material Only	2016 Domestic / L&M	2016 Global Material Only	2017 Domestic / L&M	2017 Global Material Only	75 – 100 Miles	100 – 125 Miles	125 – 150 Miles
BACnet (MS/TP) OptiView Chiller Panel	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
Modbus (RTU) OptiView Chiller Panel	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
N2 (JCI) OptiView Chiller Panel	\$2000	\$1107	\$2000	\$1107	\$2000	\$1107	\$469	\$625	\$786
LONWORKS (LON) OptiView Chiller Panel	\$3040	\$2137	\$3040	\$2137	\$3040	\$2137	\$469	\$625	\$786

**Note:**

1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.
2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.
3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.
4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.
5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.
6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016
7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017
8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018
9. The pricing above does not include submittals, O&M's, documentation, engineering, etc. support.
10. Labor warranty (\$300) is included in the above pricing and will be booked in the Branch performing the commissioning.

**Table No. 7 – North America E-Link Gateway Pricing Large Tonnage Non-OptiView YG, YB, YIA, YPC**

Large Tonnage - Protocol (YG, YB, YIA, YPC)	2015 Domestic / L&M	2015 Global Material Only	2016 Domestic / L&M	2016 Global Material Only	2017 Domestic / L&M	2017 Global Material Only	75 – 100 Miles	100 – 125 Miles	125 – 150 Miles
BACnet (MS/TP)	\$3060	\$1366	\$3060	\$1366	\$3060	\$1366	\$469	\$625	\$786
Modbus (RTU)	\$3060	\$1366	\$3060	\$1366	\$3060	\$1366	\$469	\$625	\$786
N2 (JCI)	\$3060	\$1366	\$3060	\$1366	\$3060	\$1366	\$469	\$625	\$786
LONWORKS (LON)	\$4093	\$2398	\$4093	\$2398	\$4093	\$2398	\$469	\$625	\$786
<p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.</li> <li>2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.</li> <li>3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.</li> <li>4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.</li> <li>5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.</li> <li>6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016</li> <li>7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017</li> <li>8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018</li> <li>9. The pricing above does not include submittals, O&amp;M's, documentation, engineering, etc. support.</li> <li>10. Labor warranty (\$300) is included in the above pricing and will be booked in the Branch performing the commissioning.</li> </ol>									

**Table No. 8 – North America E-Link Gateway Pricing Large Tonnage OptiView YIA (Field Mounted, Installed & Commissioned)**

Large Tonnage - Protocol (YIA)	2015 Domestic / L&M	2015 Global Material Only	2016 Domestic / L&M	2016 Global Material Only	2017 Domestic / L&M	2017 Global Material Only	75 – 100 Miles	100 – 125 Miles	125 – 150 Miles
BACnet (MS/TP) OptiView Chiller Panel	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
Modbus (RTU) OptiView Chiller Panel	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
N2 (JCI) OptiView Chiller Panel	\$2000	\$1107	\$2000	\$1107	\$2000	\$1107	\$469	\$625	\$786
LONWORKS (LON) OptiView Chiller Panel	\$3040	\$2137	\$3040	\$2137	\$3040	\$2137	\$469	\$625	\$786
<p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.</li> <li>2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.</li> <li>3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.</li> <li>4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.</li> <li>5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.</li> <li>6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016</li> <li>7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017</li> <li>8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018</li> <li>9. The pricing above does not include submittals, O&amp;M's, documentation, engineering, etc. support.</li> <li>10. Labor warranty (\$300) is included in the above pricing and will be booked in the Branch performing the commissioning.</li> </ol>									

**Table No. 9 – North America E-Link Gateway Pricing Small Tonnage Non-Enclosure YCWL, YCRL, YCAL, YCUL, YLAA, YLUA;  
(Field Mounted, Installed & Commissioned)**

Small Tonnage - Protocol (YCWL, YCRL, YCAL, YCUL, YLAA, YLUA)	2015 Domestic / L&M	2015 Global Material Only	2016 Domestic / L&M	2016 Global Material Only	2017 Domestic / L&M	2017 Global Material Only	75 – 100 Miles	100 – 125 Miles	125 – 150 Miles
BACnet (MS/TP) See Note 10	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
Modbus (RTU) See Note 10	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
N2 (JCI) E-Link See Note 11	\$2000	\$1107	\$2000	\$1107	\$2000	\$1107	\$469	\$625	\$786
LONWORKS (LON) See Note 12	\$3040	\$2137	\$3040	\$2137	\$3040	\$2137	\$469	\$625	\$786
<p>Note:</p> <ol style="list-style-type: none"> <li>1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.</li> <li>2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.</li> <li>3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.</li> <li>4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.</li> <li>5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.</li> <li>6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016</li> <li>7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017</li> <li>8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018</li> <li>9. The pricing above does not include submittals, O&amp;M's, documentation, engineering, etc. support.</li> <li>10. Labor warranty (\$300) is included in the above pricing and will be booked in the Branch performing the commissioning.</li> <li>11. Current production Scroll products (YCWL, YCRL, YCAL, YCUL, YLAA) are equipped with an IPU-II board which supports native BACnet and Modbus protocols. An E-Link is not required for these protocols.</li> <li>12. Starting October 1, 2010, production Scroll products (YCWL, YCRL, YCAL, YCUL, YLAA) are equipped with an IPU-II board which will support native N2 protocol. An E-Link will not be required for this protocol.</li> <li>13. LON protocol will require an E-Link installation.</li> </ol>									

**Table No. 10 – North America E-Link Gateway Pricing Small Tonnage Non-Enclosure YCIV, YCAV, YVAA;  
(Field Mounted, Installed & Commissioned)**

Small Tonnage - Protocol (YCIV, YCAV, YVAA)	2015 Domestic / L&M	2015 Global Material Only	2016 Domestic / L&M	2016 Global Material Only	2017 Domestic / L&M	2017 Global Material Only	75 – 100 Miles	100 – 125 Miles	125 – 150 Miles
BACnet (MS/TP)	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
Modbus (RTU)	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
N2 (JCI) E-Link	\$2000	\$1107	\$2000	\$1107	\$2000	\$1107	\$469	\$625	\$786
<p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.</li> <li>2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.</li> <li>3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.</li> <li>4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.</li> <li>5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.</li> <li>6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016</li> <li>7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017</li> <li>8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018</li> <li>9. The pricing above does not include submittals, O&amp;M's, documentation, engineering, etc. support.</li> <li>10. Labor warranty (\$300) is included in the above pricing and will be booked in the Branch performing the commissioning.</li> </ol>									

**Table No. 11 – North America E-Link Gateway Pricing Small Tonnage / Enclosure YCIV, YCAV, YVAA;  
(Field Mounted, Installed & Commissioned)**

Small Tonnage - Protocol (YCIV, YCAV, YVAA)	2015 Domestic / L&M	2015 Global Material Only	2016 Domestic / L&M	2016 Global Material Only	2017 Domestic / L&M	2017 Global Material Only	75 – 100 Miles	100 – 125 Miles	125 – 150 Miles
LONWORKS (LON) – See Notes 10-14	\$4971	\$2398	\$5021	\$2398	\$5021	\$2398	\$469	\$625	\$786
<p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.</li> <li>2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.</li> <li>3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.</li> <li>4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.</li> <li>5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.</li> <li>6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016</li> <li>7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017</li> <li>8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018</li> <li>9. The pricing above does not include submittals, O&amp;M's, documentation, engineering, etc. support.</li> <li>10. Labor warranty (\$300) is included in the above pricing and will be booked in the Branch performing the commissioning.</li> <li>11. For YCIV and YCAV chillers using an E-Link with LON protocol the E-Link must be installed inside the building remotely from the chiller equipment by the installing contractor.</li> <li>12. DO NOT INSTALL THE E-LINK UNDER THE EQUIPMENT CONTROL OR POWER PANEL WHEN USING LON.</li> <li>13. For YCIV, YCAV, YVAA chillers using an E-Link with LON protocol the installing contractor must use double shielded cable for the comm's between the equipment and the remote mounted E-Link.</li> <li>14. For YCIV, YCAV, YVAA chillers using an E-Link with LON protocol the installing contractor should not route the comm's cable in the same conduit, trunk, direct buried trench, or near the power voltage for the equipment.</li> <li>15. For YCIV, YCAV, YVAA chillers using an E-Link with LON protocol the installation is by others (NOT Service)</li> </ol>									

**Table No. 12 – North America E-Link Gateway Pricing Small Tonnage Enclosure YCWS, YCRS, YCAS, YPAL**

Small Tonnage - Protocol (YCWS, YCRS, YCAS, YPAL)	2015 Domestic / L&M	2015 Global Material Only	2016 Domestic / L&M	2016 Global Material Only	2017 Domestic / L&M	2017 Global Material Only	75 – 100 Miles	100 – 125 Miles	125 – 150 Miles
BACnet (MS/TP)	\$3060	\$1366	\$3060	\$1366	\$3060	\$1366	\$469	\$625	\$786
Modbus (RTU)	\$3060	\$1366	\$3060	\$1366	\$3060	\$1366	\$469	\$625	\$786
N2 (JCI)	\$3060	\$1366	\$3060	\$1366	\$3060	\$1366	\$469	\$625	\$786
LONWORKS (LON)	\$4093	\$2398	\$4093	\$2398	\$4093	\$2398	\$469	\$625	\$786
<b>Note:</b> <ol style="list-style-type: none"> <li>1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.</li> <li>2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.</li> <li>3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.</li> <li>4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.</li> <li>5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.</li> <li>6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016</li> <li>7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017</li> <li>8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018</li> <li>9. The pricing above does not include submittals, O&amp;M's, documentation, engineering, etc. support.</li> <li>10. Labor warranty (\$300) is included in the above pricing and will be booked in the Branch performing the commissioning.</li> </ol>									

**Table No. 13 – North America E-Link Gateway Pricing Small Tonnage Enclosure YLCS, YEAS**

Small Tonnage - Protocol (YLCS, YEAS)	2015 Domestic / L&M	2015 Global Material Only	2016 Domestic / L&M	2016 Global Material Only	2017 Domestic / L&M	2017 Global Material Only	75 – 100 Miles	100 – 125 Miles	125 – 150 Miles
BACnet (MS/TP)	\$3060	\$1366	\$3060	\$1366	\$3060	\$1366	\$469	\$625	\$786
Modbus (RTU)	\$3060	\$1366	\$3060	\$1366	\$3060	\$1366	\$469	\$625	\$786
N2 (JCI)	\$3060	\$1366	\$3060	\$1366	\$3060	\$1366	\$469	\$625	\$786
LONWORKS (LON)	\$4093	\$2398	\$4093	\$2398	\$4093	\$2398	\$469	\$625	\$786
<p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.</li> <li>2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.</li> <li>3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.</li> <li>4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.</li> <li>5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.</li> <li>6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016</li> <li>7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017</li> <li>8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018</li> <li>9. The pricing above does not include submittals, O&amp;M's, documentation, engineering, etc. support.</li> <li>10. Labor warranty (\$300) is included in the above pricing and will be booked in the Branch performing the commissioning.</li> </ol>									

**Table No. 14 – North America E-Link Gateway Pricing Large Tonnage OptiView YMC<sup>2</sup> (Field Mounted, Installed & Commissioned)**

Large Tonnage - Protocol (YMC <sup>2</sup> )	2015 Domestic / L&M	2015 Global Material Only	2016 Domestic / L&M	2016 Global Material Only	2017 Domestic / L&M	2017 Global Material Only	75 – 100 Miles	100 – 125 Miles	125 – 150 Miles
BACnet (MS/TP) E-Link OptiView Chiller Panel	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
Modbus (RTU) E-Link OptiView Chiller Panel	\$2007	\$1107	\$2007	\$1107	\$2007	\$1107	\$469	\$625	\$786
N2 (JCI) E-Link OptiView Chiller Panel	\$2000	\$1107	\$2000	\$1107	\$2000	\$1107	\$469	\$625	\$786
LONWORKS (LON) E-Link OptiView Chiller Panel	\$3040	\$2137	\$3040	\$2137	\$3040	\$2137	\$469	\$625	\$786
<p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. Add one day using the above rates per equipment that the Project site is beyond 75 miles of the service point.</li> <li>2. The daily sell price will be applied for the year the equipment is commissioned not booked sold, or released.</li> <li>3. HVAC Equipment Engineer will select the anticipated commissioning Year based on lead time report and specific project installation time.</li> <li>4. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.</li> <li>5. Orders released for manufacturing prior to Oct 1<sup>st</sup> and the start-up commissioning service dollars booked in will remain booked at the published start-up rates at the time of release. There will be no reduction or increase in start-up rates for the released for manufacturing orders. Only customer Changes will be accepted.</li> <li>6. 2016 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2015 to Sept 2016</li> <li>7. 2017 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2016 to Sept 2017</li> <li>8. 2018 Pricing will apply to all Engineered Equipment orders requiring start-up labor from Oct 2017 to Sept 2018</li> <li>9. The pricing above does not include submittals, O&amp;M's, documentation, engineering, etc. support.</li> <li>10. Labor warranty (\$300) is included in the above pricing and will be booked in the Branch performing the commissioning.</li> <li>11. Orders released with start-up Labor, and 12 months have passed from the release for manufacture date, the start-up order and line will be adjusted to the current year's start-up labor rate (per this Table).</li> </ol>									

**Table No. 15 – North America Airmod / VSD Pricing**

# of Drives	Groups	1 to 100 HP Range	Notes	2015	2016	2017	75 – 100 Miles	100 – 125 Miles	125 – 150 Miles
1	Start-up 1-2 VSD	1 to 2 VSD 1 to 100 Hp	1,2,3,5,6,7	\$679	\$699	\$769	\$469	\$625	\$786
2			1,2,3,5,6,7	\$679	\$699	\$769	\$469	\$625	\$786
3	Start-up 3-5 VSD	3 to 5 VSD 1 to 100 Hp	1,2,3,5,6,7	\$1698	\$1749	\$1,924	\$939	\$1,250	\$1,563
4			1,2,3,5,6,7	\$1698	\$1749	\$1,924	\$939	\$1,250	\$1,563
5			1,2,3,5,6,7	\$1698	\$1749	\$1,924	\$1,250	\$1,563	\$1,874
6	Start-up 6-11 VSD	6 to 11 VSD 1 to 100 Hp	1,2,3,5,6,7	\$2035	\$2096	\$2,306	\$1,250	\$1,563	\$1,874
7			1,2,3,5,6,7	\$2373	\$2444	\$2,688	\$1,563	\$1,874	\$2,185
8			1,2,3,5,6,7	\$2715	\$2796	\$3,076	\$1,563	\$1,874	\$2,185
9			1,2,3,5,6,7	\$3074	\$3166	\$3,483	\$1,874	\$2,185	\$2,497
10			1,2,3,5,6,7	\$3394	\$3496	\$3,846	\$1,874	\$2,185	\$2,497
11			1,2,3,5,6,7	\$3731	\$3843	\$4,227	\$2,185	\$2,497	\$2,807
12	Start-up 12-20VSD	12 to 20 VSD 1 to 100 Hp	1,2,3,5,6,7	\$4073	\$4195	\$4,615	\$2,185	\$2,497	\$2,807
13			1,2,3,5,6,7	\$4411	\$4543	\$4,997	\$2,497	\$2,807	\$3,119
14			1,2,3,5,6,7	\$4751	\$4894	\$5,383	\$2,497	\$2,807	\$3,119
15			1,2,3,5,6,7	\$5090	\$5243	\$5,767	\$2,807	\$3,119	\$3,430
16			1,2,3,5,6,7	\$5454	\$5618	\$6,180	\$2,807	\$3,119	\$3,430
17			1,2,3,5,6,7	\$5770	\$5943	\$6,537	\$3,119	\$3,430	\$3,742
18			1,2,3,5,6,7	\$6109	\$6292	\$6,921	\$3,119	\$3,430	\$3,742
19			1,2,3,5,6,7	\$6448	\$6641	\$7,305	\$3,430	\$3,742	\$4,053
20	Start-up 20+ VSD	20+ VSD 1 to 100 HP	1,2,3,4,5,6,7,8	\$6788	\$6992	\$7,691	\$3,430	\$3,742	\$4,053

**Note:**

1. When the mileage is greater than 75 miles, add dollars \$\$\$ to the project and price summary based on this table.
2. When the service point is greater than 150 miles contact the local Service Branch for a Special Quote on mileage and living expenses.
3. 2015, 2016, 2017, 2018 pricing will be applied on all Engineered Equipment orders released for manufacturing after Oct-1<sup>st</sup> of the new business year with a deadline date of Jan-1<sup>st</sup> of the same business year for all orders released prior to Oct-1<sup>st</sup> of previous business year.
4. Orders released for manufacturing prior to Oct-1<sup>st</sup> of the new business year and the start-up dollars booked in NxGen will remain booked at the published start-up rates at the time of release unless Note 6 is applies. There will be no reduction in start-up rates for the released for manufacturing orders. Only customer deductive Changes can change the start-up line item on these orders.
5. For greater than 100 HP drives, contact your local Branch office for start-up pricing
6. Above pricing is based on commissioning a VSD every two hours. If one or more of the VSD's in the group is not ready for commissioning on the same day an additional half a day charge at the labor rates in this table will need to be applied to the order
7. For each drive over twenty in number, use pricing for start up of 20 VSDs, plus \$328 per additional drive

**Table 16-Branch Startup Tier Identification**

Region	Sub-Region	Branch	Large_Tier	Small_tier
Canada Region	Calgary AB CB SubRegion	Calgary AB Service - 7710	8	7
Canada Region	Edmonton Red Deer AB CB SubRegion	Edmonton AB Service - 7728	7	6
Canada Region	Halifax St Johns CB SubRegion	Halifax NS Service - 7705	3	2
Canada Region	Halifax St Johns CB SubRegion	St. John's NF Service - 7738	4	3
Canada Region	Hamilton ON CB SubRegion	Hamilton ON Service - 7724	7	5
Canada Region	London ON CB SubRegion	London ON Service - 7718	7	6
Canada Region	Montreal Granby CB SubRegion	Montreal PQ Service - 7704	4	3
Canada Region	Ottawa ON CB SubRegion	Ottawa ON Service - 7733	6	5
Canada Region	Quebec City PQ CB SubRegion	Quebec City PQ Service - 7734	4	3
Canada Region	Saskatoon Regina SK CB SubRegion	Regina SK Service - 7703	5	4
Canada Region	Saskatoon Regina SK CB SubRegion	Saskatoon SK Service - 7717	5	3
Canada Region	Toronto Oshawa ON CB SubRegion	Toronto ON East Service - 7706	7	5
Canada Region	Vancouver Victoria BC CB SubRegion	Vancouver BC Service - 7768	7	6
Canada Region	Vancouver Victoria BC CB SubRegion	Victoria BC Service Branch - 7PT2	6	5
Central Region	Ann Arbor MI CB SubRegion	Ann Arbor - 0944	7	6
Central Region	Appleton WI CB SubRegion	Appleton Service - 0601	4	3
Central Region	Calumet City IL CB SubRegion	Calumet City IL Service Branch - 0918	10	9
Central Region	Calumet City IL CB SubRegion	South Bend IN Service - 0527	5	3
Central Region	Cedar Rapids IA Quad Cities CB SubRegion	Cedar Rapids Service Branch - 0418	7	5
Central Region	Cedar Rapids IA Quad Cities CB SubRegion	Eastern Iowa/Quad Cities Svc - 0114	8	6
Central Region	Chicago Rockford IL CB SubRegion	Chicago Service Branch - 0510	10	9
Central Region	Chicago Rockford IL CB SubRegion	Rockford IL Service Branch - 0205	10	9
Central Region	Cincinnati OH CB SubRegion	Cincinnati Service - 0364	5	3
Central Region	Cleveland OH CB SubRegion	Cleveland Service - 0926	6	5
Central Region	Columbus OH CB SubRegion	Columbus Service - 0685	7	5
Central Region	Des Moines IA CB SubRegion	Des Moines IA Service - 0140	5	4
Central Region	Detroit MI CB SubRegion	Detroit South - 0277	6	5
Central Region	Evansville IN CB SubRegion	Evansville IN Service - 0123	4	3
Central Region	Indianapolis IN CB SubRegion	Indianapolis IN Service - 0941	6	4
Central Region	Kalamazoo Grand Rapids MI CB SubRegion	Grand Rapids Service - 0361	6	4
Central Region	Kalamazoo Grand Rapids MI CB SubRegion	Kalamazoo Service - 0265	6	5
Central Region	Louisville Lexington KY CB SubRegion	Lexington KY Service Branch - 0476	4	3
Central Region	Louisville Lexington KY CB SubRegion	Louisville KY Service - 0275	4	3
Central Region	Madison WI CB SubRegion	Madison Service - 0812	7	6

## C-BOS Policy – Start-up Labor Pricing Policy

Central Region	Madison WI CB SubRegion	Western Wisconsin Service - 0669	5	4
Central Region	Milwaukee WI CB SubRegion	Milwaukee Service - 0933	8	6
Central Region	Peoria IL CB SubRegion	Peoria IL Service Branch - 0942	7	5
Central Region	Saginaw Traverse MI CB SubRegion	Saginaw Service - 0806	7	5
Central Region	St Louis MO CB SubRegion	St. Louis MO Service - 0204	7	6
Central Region	Toledo OH CB SubRegion	Toledo Service - 0618	9	8
Mid Atlantic Region	Allentown PA CB SubRegion	Allentown PA SVC - 0614	9	8
Mid Atlantic Region	Baltimore MD CB SubRegion	Baltimore MD Service - 0319	6	4
Mid Atlantic Region	Charleston WV CB SubRegion	Charleston WV Service - 0659	6	5
Mid Atlantic Region	Charlottesville VA CB SubRegion	Charlottesville VA Service - 0254	4	3
Mid Atlantic Region	Hershey PA Harrisburg PA CB SubRegion	Harrisburg Service - 0810	6	5
Mid Atlantic Region	Norfolk VA CB SubRegion	Norfolk VA Service - 0212	3	2
Mid Atlantic Region	Philadelphia PA CB SubRegion	Philadelphia Service - 0607	12	10
Mid Atlantic Region	Pittsburgh PA CB SubRegion	Pittsburgh Service - 0370	6	5
Mid Atlantic Region	Richmond VA CB SubRegion	Richmond VA Service - 0620	4	2
Mid Atlantic Region	Roanoke VA CB SubRegion	Roanoke VA Service - 0932	5	4
Mid Atlantic Region	Salisbury Wilmington CB SubRegion	Delmarva - 0260	8	6
Mid Atlantic Region	South New Jersey NJ CB SubRegion	South Jersey NJ Service - 0615	11	10
Mid Atlantic Region	Union NJ CB SubRegion	North Jersey Service - 0608	7	6
Mid Atlantic Region	Washington DC CB SubRegion	East Washington DC Service - 0484	7	5
Mid Atlantic Region	Wilkes-Barre PA CB SubRegion	Wilkes Barre PA Service - 0610	9	7
Mid Atlantic Region	Youngstown OH CB SubRegion	Youngstown Service - 0619	7	6
Northeast Region	Albany NY Burlington VT CB SubRegion	Albany NY Service - 0115	8	6
Northeast Region	Boston MA CB SubRegion	Boston MA Service - 0623	11	10
Northeast Region	Buffalo NY CB SubRegion	Buffalo NY Service - 0936	6	4
Northeast Region	Erie PA CB SubRegion	Erie PA Service - 0611	6	5
Northeast Region	Long Island NY CB SubRegion	Long Island NY Service Branch - 0363	9	7
Northeast Region	Manchester NH Portland ME CB SubRegion	Manchester NH Service - 0202	6	4
Northeast Region	New York NY CB SubRegion	New York City Service Branch - 0050	10	9
Northeast Region	Providence RI CB SubRegion	Providence RI Service - 0135	12	11
Northeast Region	Rochester NY CB SubRegion	Rochester NY Service - 0209	6	4
Northeast Region	Springfield MA Hartford New HavenCT CB SubReg	Northern Connecticut Service - 0266	9	8
Northeast Region	Syracuse NY CB SubRegion	Syracuse NY Service - 0634	8	6
Northeast Region	Westchester NY CB SubRegion	Westchester NY Service Branch - 0948	7	6
Northwest Region	Anchorage AK CB SubRegion	Anchorage AK Service - 0328	8	6
Northwest Region	Cheyenne Ft. Collins CB SubRegion	Casper WY Service - 0130	4	3
Northwest Region	Cheyenne Ft. Collins CB SubRegion	Cheyenne/FT Collins Service - 0132	8	6

## C-BOS Policy – Start-up Labor Pricing Policy

Northwest Region	Colorado Springs CO CB SubRegion	Colorado Springs CO Service - 0125	5	3
Northwest Region	Denver CO CB SubRegion	Denver CO Service - 0825	5	3
Northwest Region	Duluth MN CB SubRegion	Duluth Service - 0358	6	5
Northwest Region	Fargo ND CB SubRegion	Fargo Service - 0802	4	2
Northwest Region	Kansas City MO CB SubRegion	Kansas City MO Service - 0819	7	6
Northwest Region	Kansas City MO CB SubRegion	Topeka KS Service - 0250	7	5
Northwest Region	Minneapolis Rochester MN CB SubRegion	Minneapolis Service - 0288	8	6
Northwest Region	Minneapolis Rochester MN CB SubRegion	St. Cloud Minnesota - 0487	7	6
Northwest Region	Montana CB SubRegion	Great Fall MT Service - 0329	3	2
Northwest Region	Oklahoma City OK CB SubRegion	Oklahoma City OK Service - 0919	4	3
Northwest Region	Omaha Lincoln NE CB SubRegion	Omaha NE Service - 0943	6	5
Northwest Region	Portland Medford OR CB SubRegion	Portland OR Service - 0424	11	9
Northwest Region	Salt Lake City UT CB SubRegion	Salt Lake City UT Service - 0121	5	4
Northwest Region	Seattle WA CB SubRegion	Seattle WA Service - 0830	9	7
Northwest Region	Sioux Falls SD CB SubRegion	Sioux Falls Service - 0515	3	1
Northwest Region	Spokane WA Boise ID CB SubRegion	Boise ID Service - 0131	3	1
Northwest Region	Spokane WA Boise ID CB SubRegion	Spokane WA Service - 0134	4	3
Northwest Region	Springfield MO Fayetteville AR CB SubRegion	Fayetteville AR Service - 0248	3	2
Northwest Region	Springfield MO Fayetteville AR CB SubRegion	Springfield MO Service - 0249	7	5
Northwest Region	Tulsa OK CB SubRegion	Tulsa OK Service - 0247	5	3
Northwest Region	Wichita KS CB SubRegion	Wichita KS Service - 0246	5	4
South Region	Albuquerque NM El Paso TX CB SubRegion	Albuquerque NM Service - 0650	5	3
South Region	Albuquerque NM El Paso TX CB SubRegion	El Paso Service Branch - 0816	4	2
South Region	Austin Waco TX CB SubRegion	Austin Service - 0894	3	1
South Region	Austin Waco TX CB SubRegion	Waco Service - 0269	3	1
South Region	Baton Rouge Lafayette LA CB SubRegion	Baton Rouge LA Service - 0073	3	2
South Region	Baton Rouge Lafayette LA CB SubRegion	Lafayette Service - 0682	5	4
South Region	Baton Rouge Lafayette LA CB SubRegion	Lake Charles SVC - 0198	4	3
South Region	Beaumont TX Lake Charles LA CB SubRegion	Beaumont Service - 0286	3	2
South Region	Corpus Christi TX CB SubRegion	Corpus Christi Service - 0649	3	2
South Region	Dallas Fort Worth Irving TX CB SubRegion	Fort Worth Service - 0208	3	2
South Region	Dallas Fort Worth Irving TX CB SubRegion	North Texas Service - 0430	3	2
South Region	Gulf Coast CB SubRegion	Gulf Coast Service - 0218	3	2
South Region	Gulf Coast CB SubRegion	Jackson MS Service - 0645	5	3
South Region	Houston TX CB SubRegion	Houston Industrial Service Br - 0477	4	3
South Region	Houston TX CB SubRegion	Houston Service - 0408	4	3
South Region	Knoxville Chattanooga TN CB SubRegion	Knoxville TN Service - 0602	4	3

## C-BOS Policy – Start-up Labor Pricing Policy

South Region	Little Rock AR CB SubRegion	Little Rock AR - 0221	3	2
South Region	Little Rock AR CB SubRegion	Memphis TN Service - 0916	5	4
South Region	Lubbock TX CB SubRegion	Lubbock Service - 0294	4	2
South Region	Nashville TN CB SubRegion	Chattanooga TN Service Branch - 0475	5	4
South Region	Nashville TN CB SubRegion	Nashville TN Service - 0514	6	5
South Region	New Orleans LA CB SubRegion	New Orleans LA Service - 0217	4	3
South Region	San Antonio TX CB SubRegion	San Antonio Service - 0893	3	2
South Region	Shreveport LA CB SubRegion	Shreveport LA Service - 0220	2	1
Southeast Region	Albany GA CB SubRegion	Albany GA Service - 0519	4	2
Southeast Region	Asheville NC CB SubRegion	Asheville NC Service - 0633	3	1
Southeast Region	Atlanta GA CB SubRegion	AtlantaGA Service - 0935	4	3
Southeast Region	Birmingham AL CB SubRegion	Birmingham AL Service - 0520	4	3
Southeast Region	Charleston SC CB SubRegion	Charleston SC Service - 0215	5	3
Southeast Region	Charlotte NC CB SubRegion	Charlotte NC Service - 0925	3	2
Southeast Region	Columbia SC CB SubRegion	Columbia SC Service - 0284	5	4
Southeast Region	Fayetteville Raleigh NC CB SubRegion	Raleigh NC Service - 0627	4	3
Southeast Region	Greensboro NC CB SubRegion	Greensboro NC Service - 0664	3	2
Southeast Region	Greenville SC CB SubRegion	Greenville. SC Service - 0342	2	1
Southeast Region	Jacksonville Gainesville FL CB SubRegion	Jacksonville FL Service - 0245	3	2
Southeast Region	Miami FL CB SubRegion	Miami FL Service - 0913	4	3
Southeast Region	Orlando FL CB SubRegion	Orlando FL Service - 0314	3	2
Southeast Region	Savannah GA CB SubRegion	Savannah GA Service - 0652	5	3
Southeast Region	Tampa FL CB SubRegion	Tampa FL Service - 0362	4	3
Southeast Region	Tri-Cities TN CB SubRegion	Tri-Cities TN Service - 0632	3	2
Southeast Region	Wilmington NC CB SubRegion	Wilmington NC Service - 0628	3	2
West Region	Guam Honolulu HI CB SubRegion	Honolulu HI Service - 0420	7	5
West Region	Las Vegas NV CB SubRegion	Las Vegas NV Service - 0197	8	7
West Region	Los Angeles CA CB SubRegion	Los Angeles Service - 0373	8	7
West Region	Phoenix AZ CB SubRegion	Phoenix AZ Service - 0639	7	5
West Region	Sacramento Reno Bakersfield Fresno CA CB SubReg	Fresno/Bakersfield Service Br - 0456	10	8
West Region	Sacramento Reno Bakersfield Fresno CA CB SubReg	Sacramento CA Service - 0502	5	3
West Region	Sacramento Reno Bakersfield Fresno CA CB SubReg	Sacramento West - 0422	8	7
West Region	San Diego CA CB SubRegion	San Diego CA Service - 0929	9	7
West Region	Santa Rosa San Francisco CA CB SubRegion	Bay Area Metro Service - 0421	12	11
West Region	Tucson AZ CB SubRegion	Tucson AZ Service - 0930	7	5