



COMPETITIVE OPTIVIEW RETROFIT GRAPHIC CONTROL PANEL OFFER

PRICING AND ORDERING

Supersedes: Nothing

Form 160.10-PO1 (1101)

INTRODUCTION

This document includes the information you will need to price and order competitive retrofit OptiView control panels. The competitive OptiView control panel is the retrofit Graphic Control Center with enhanced hardware and software for competitive chillers.

APPLICATION AND PRICING MATRIX

Tables 1, 2, and 3 are designed to assist you in performing three functions related to the OptiView retrofit kits:

- Identify which chiller models and starter types are currently covered by retrofit kits.
- Provide the current Master List Price for the retrofit kits.
- Correctly identify the specific retrofit kit part number for your chiller model and starter type.

PANEL PRICING

The Competitive OptiView panel qualifies for SQ pricing **if SQ pricing is requested at the time the order is placed!** To determine your current SQ multiplier, consult your manager, or, within the U.S., reference the Service Marketing intranet web site. On the intranet go to: York Central / Engineered Systems / Global Service / Pricing Box (in reference section).

ORDERING INSTRUCTIONS

U.S. OFFICES – All orders from U.S. service offices **MUST** be faxed directly to the Parts Distribution Center office in York, PA. Use the following fax and phone numbers:

Fax Orders: 717-771-7294
Phone Inquiries: 717-771-7292

INTERNATIONAL OFFICES – All international orders should be placed through the standard Parts Distribution Center order correspondent located in the Baltimore, MD office.

WHAT IS INCLUDED IN AN OPTIVIEW RETROFIT KIT

- English version OptiView control panel in a NEMA 4/12 enclosure (no other enclosure types are currently available as a standard), good for 50 and 60 Hz applications
- Analog I/O & Digital I/O Mounted on NEMA 4 Back-Plate with 3-Fuse Bracket
- Wiring harnesses, cables, and special electrical connectors
- All required pressure transducers
- All required temperature sensors
- Mounting hardware and other assorted materials
- Wiring diagrams and Retrofit Instructions

WHAT IS NOT INCLUDED IN AN OPTIVIEW RETROFIT KIT

- Shipping cost, which varies depending on location and desired shipping type. Check with the PDC for options and estimated cost.
- Miscellaneous common wiring, conduit, piping, and hardware required to complete the installation. (Estimated cost of \$500 - \$750)
- Current Transformers are to be ordered separately as shown in Table 4.
- Standard operation and maintenance manuals and service instructions.
- Hot Gas Kits are not addressed in the Competitive OptiView retrofit kits. Please contact Bob Wayne at (717) 771- 6357 for hot gas conversion selections.

**TABLE 1 – OPTIVIEW PANEL APPLICATION AND PRICING MATRIX
CARRIER LOW PRESSURE MONO SHELL CENTRIFUGAL CHILLER**

CHILLER MODEL & STYLE (MONO SHELL ONLY)	STARTER TYPE	REFRIGERANT	OPTIVIEW KIT NUMBER	MASTER LIST PRICE
Carrier 19D, 19DK	Electro-Mechanical Starter	11 or 123	375-47040-101	\$16,000
Carrier 19DA, DG	Electro-Mechanical Starter	11 or 123	375-47040-102	
Carrier 19DH, DR	Electro-Mechanical Starter	11 or 123	375-47040-103	

Application Notes:

1. **All transducers on the chiller must be replaced with those included in the kit.**
2. **All temperature sensors on the chiller must be replaced with those include in the kit.**
3. Carrier 19DM Style chillers contain a variable diffuser wall that is not controlled by this kit. **Service Marketing will not support this chiller type at the present time.**
4. Consult Service Marketing for Carrier 17 Series chillers and any other models.
5. Carrier Solid State Starters are not supported. Consult Service Marketing for retrofit of York’s Solid State Starter.

**TABLE 2 – OPTIVIEW PANEL APPLICATION AND PRICING MATRIX
CARRIER HIGH PRESSURE DUAL SHELL CENTRIFUGAL CHILLERS**

CHILLER MODEL & STYLE (DUAL SHELL ONLY)	STARTER TYPE	REFRIGERANT	OPTIVIEW KIT NUMBER	MASTER LIST PRICE
Carrier 19XR	Electro-Mechanical Starter	134	375-47041-101	\$16,000

Application Notes:

1. **All transducers on the chiller must be replaced with those included in the kit.**
2. **All temperature sensors on the chiller must be replaced with those include in the kit.**
3. This kit is also applicable to the 19XL High Pressure chiller for both R-22 and R-134 water applications.
4. The Carrier 19XR Frame 5 chiller includes a Variable Diffuser Ring that is not controlled with this kit. **Service Marketing will not support this chiller.**
5. Carrier Solid State Starters are not supported. Consult Service Marketing for retrofit of York’s Solid State Starter.

**TABLE 3 – OPTIVIEW PANEL APPLICATION AND PRICING MATRIX
TRANE LOW PRESSURE DUAL SHELL CENTRIFUGAL CHILLER**

CHILLER MODEL & STYLE	STARTER TYPE	REFRIGERANT	OPTIVIEW KIT NUMBER	MASTER LIST PRICE
Trane CVHE	Electro-Mechanical Starter	11 or 123	375-47045-101	\$17,500
Trane CVHF	Electro-Mechanical Starter	11 or 123	375-47045-102	
Trane CVHB	Electro-Mechanical Starter	11 or 123	375-47045-103	

Application Notes:

1. **All transducers on the chiller must be replaced with those included in the kit.**
2. **All temperature sensors on the chiller must be replaced with those include in the kit.**
3. For Trane chiller types CVHE and CVHF with control panel types UCP695 (Classic Panel) and UCP1, all components in kit will be provided as listed on page 1 and only those parts specified as locally sourced should be required.
4. For Trane UCP2 control panels, check for installation of modules below in the UCP2 control panel or starter and include the cost of materials and extra labor as required.
 - a. UCP2 with Stepper module requires replacement of stepper motor with standard 120VAC actuator model number MOT2970, available from Trane (approx. cost \$600-700 material, 2 hours labor).
 - b. UCP2 with Starter module requires removal of starter interface in starter cabinet and rewiring of starter with new timers (approx. cost 300.00 material, 6 hours labor). Contact Service Marketing for Bill of Materials, drawing, and installation instructions.
 - c. UCP2 with Starter module using a 4160 VAC starter also requires a phase monitor (approx. Cost \$100.00 material, 2 hours labor). Phase Monitor available from Kele , Model LPVR, specify voltage.
 - d. UCP2 with Purge module requires purchase of Human Interface Device, model number MOD00377, available from Trane, to be installed in door of auxiliary panel and connected to Purifier purge unit (approx. cost \$450.00 material, 4 hours labor)
 - e. All Trane parts may be acquired through MidWest Parts Center, (800) 368-8385.
5. Consult the Service Marketing Department for any other modules directly connected to the chiller.
6. Trane Solid State Starters are not supported. Consult Service Marketing for retrofit of York's Solid State Starter

TABLE 4 – SELECT CURRENT TRANSFORMER KIT FROM TABLE BELOW:

MOTOR VOLTAGE	FLA	"CT" RATIO	CURRENT TRANSFORMER KIT PART NUMBER
200/600	65-111	200:1	366-82720-001
	112-224	350:1	002
	225-829	700:1	003
	830-1790	1400:1	004
2300/4160	11-18	200:1	001
	19-37	200:1	001
	38-123	200:1	001
	124-264	350:1	002

LABOR ESTIMATES

The estimated labor and tasks required to perform an OptiView panel retrofit are itemized in Tables 5, 6, and 7. These estimates assume that some tasks can be done concurrently with others. If the retrofit can be scheduled with other work requiring removal of the charge or equalization, like a compressor inspection, the labor savings can be even greater.

Since, to date we have very limited retrofit experience with these new kits and instructions, it is suggested that a generous labor allowance be used on the first few jobs you quote. After the technicians have gained some experience, future jobs can be bid with greater certainty and probably with fewer labor hours. Note that no travel time is included in these estimates and they assume easy access.

**TABLE 5 – CARRIER LOW PRESSURE CHILLERS
ESTIMATED LABOR AND TASK LIST**

Task	Labor Hours
Obtain and transport thermal refrigerant pressurization equipment (if not available on site)	5
Recover refrigerant from chiller	8
Remove, clean, drill and tap oil sump and replace	8
Mark all wiring in existing panel	4
Install chilled water temperature sensors	4
Install new weld-o-lets and refrigerant temperature sensors	8
Install new weld-o-let and condenser water temperature sensor	7
Install five pressure transducers	8
Install transducer cables and wiring harnesses	8
Remove Existing Control Panel	6
Install mounting bracket assembly and mount OptiView Panel	8
Complete Control Wiring	8
Complete Power Wiring	6
Install CM-2 module in panel and CT's at starter	4
Pressurize unit and leak test	8
Evacuate chiller and recharge refrigerant	12
Program, Start-Up and Commission	8
Housekeeping and Material Acquisition	8
Travel Time	
Total Hours 128	128

**TABLE 6 – CARRIER HIGH PRESSURE CHILLERS
ESTIMATED LABOR AND TASK LIST**

Task	Labor Hours
Obtain and transport thermal refrigerant pressurization equipment (if not available on site)	5
Recover refrigerant from chiller	8
Remove, clean, drill and tap oil sump and replace	8
Mark all wiring in existing panel	4
Install chilled water temperature sensors	4
Install new weld-o-lets and refrigerant temperature sensors	11
Install new weld-o-let and condenser water temperature sensor	8
Install five pressure transducers	12
Install transducer cables and wiring harnesses	8
Remove Existing Control Panel	6
Install mounting bracket assembly and mount OptiView Panel	8
Complete Control Wiring	8
Complete Power Wiring	6
Install CM-2 module in panel and CT's at starter	4
Pressurize unit and leak test	8
Evacuate chiller and recharge refrigerant	12
Program, Start-Up and Commission	8
Housekeeping and Material Acquisition	8
Travel Time	
Total Hours 136	136

**TABLE 7 – TRANE LOW PRESSURE CHILLERS
ESTIMATED LABOR AND TASK LIST**

Task	Labor Hours
Obtain and transport thermal refrigerant pressurization equipment (if not available on site)	5
Recover refrigerant from chiller	8
Remove, clean, drill and tap oil sump and replace	8
Mark all wiring in existing panel	4
Install chilled water temperature sensors	4
Install new weld-o-lets and refrigerant temperature sensors	11
Install new weld-o-let and condenser water temperature sensor	8
Install five pressure transducers	12
Install transducer cables and wiring harnesses	8
Remove Existing Control Panel	6
Install mounting bracket assembly and mount OptiView Panel	8
Install new analog signal conditioners	8
Complete Control Wiring	8
Complete Power Wiring	6
Install CM-2 module in panel and CT's at starter	4
Pressurize unit and leak test	8
Evacuate chiller and recharge refrigerant	12
Program, Start-Up and Commission	8
Housekeeping and Material Acquisition	8
Travel Time	
Total Hours 144	144