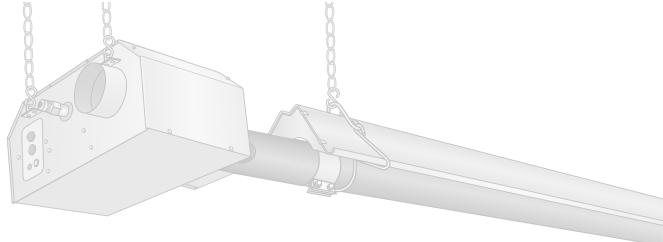
Tube Heater Price List

Heaters & Accessories

Effective 09-01-14

mm-dd-vv

All orders are subject to acceptance by Brant Radiant Heaters Limited, Paris, Ontario at prices in effect at date of shipment. All prices are F.O.B. Paris, Ontario. All Province, Federal, or Municipal taxes in effect at the time of shipment or imposed at any future time on our products shall be the responsibility of the customer. We reserve the right to change specifications on our products without prior notice to the customer.



Gas-Fired, Low Intensity, Infrared Tube Heaters

34 Scott Ave., Paris, Ontatio N3L 3R1 Phone: 519-442-7823 • Fax: 519-442-7321 www.brantradiant.com • sales@brantradiant.com

15% restocking charge on any returned items.

TABLE OF CONTENTS									
Helpful Steps to PricesPage 2	Single & Two-Stage T-StatsPage 7								
Tube Heater Models & PricesPage 3	Stainless Steel Options								
Add-On Options & MP AccessoriesPage 4	3" & 4" Venting Accessories								
Extensions, Hardware & Misc. AccessoriesPage 5	Advanced Controls, & Electrical ComponentsPage 10								
Quantity & Misc. AccessoriesPage 6	Burner & Kit PricingPage 11								

Replacement parts information is available online at www.reverberray.com/parts and in the product manual.

The following key symbols (found within) designate the following:

SYMBOL	DESCRIPTION
<u>Underlined Item</u>	New item or price, from prior accessory guide, or heater price sheet.
Part No. in BOLD	An item that has further technical information available, ex.: spec sheet, instructions, etc.

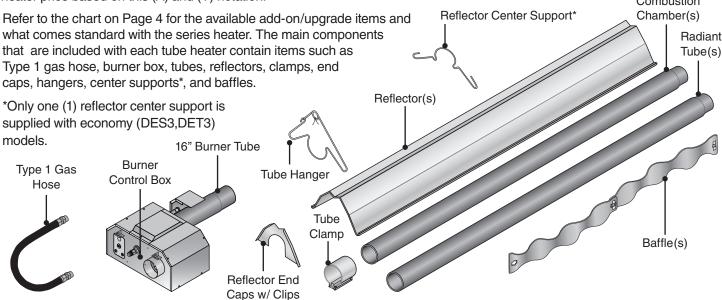
Note: Add-ons must be ordered as a separate line item and tagged to the appropriate heater.

BULK PACK ORDERS Please TAG: Job Name on purchase order to help us be made aware that an order can be bulk packed to destination. 10' skid, charge \$35.00 available on request.

HELPFUL STEPS WHEN PRICING LOW INTENSITY TUBE HEATERS

Step 1: Heater Selection (Pages 3-4)

Refer to the chart on Page 3 for available model heaters based on series, tube length, BTU and gas type. Gas type MUST be indicated on all orders. The Available Models chart denotes each heater model column with a letter (A) or (T) which indicates the combustion chamber tube material for that model. (A) indicates an aluminized combustion tube and (T) indicates a titanium stabilized combustion tube. NOTE: This does not apply for stainless steel model heaters. Be sure to use the correct tube heater price based on this (A) and (T) notation.



Step 2: Accessory Selection (Pages 4-5)

Chain sets (P/N: THCS) or gripple cables (P/N: THGH10) are typically necessary for hanging each heater (refer to page 5 for required quantities). Additional accessories such as 90° elbows, "U" fittings, protective guards, side shields and decorative grills may be used. There are also options to upgrade certain features to stainless steel. Refer to the descriptions of each accessory for further details.

Step 3: Controls Selection (Page 6)

Single-stage, two-stage, advanced controls and modulating controls (page 4) are available. When heaters are common vented or common intake, they MUST be controlled by the same thermostat.

Single-stage heaters are built standard for 120V controls but have options for 24V controls. The most common option is the use of one relay transformer (P/N: R8285B) per 24V thermostat as there are no heater modifications necessary with this option. Another option is to specify the 24-volt add-on (P/N: 24VAO) per heater at time of ordering. An external transformer (P/N: 4000-01V) is also needed per thermostat with this option.

Two-stage heaters are built standard for 24V controls. When using a single heater to a single thermostat on the HL Series and the LD Series models, there is no need for additional components because the internal 24V of the heater can power the thermostat. When installing more than one heater onto the same thermostat, one HLRP(B) relay add-on is necessary per heater. Scenarios that have the relays installed will also need one external transformer (P/N: 4000-01V) per thermostat. If the relay add-ons are forgotten or not known at the time of order, there are external panels (refer to page 6) that can be purchased that will allow for multiple heaters to be controlled by the same 24V thermostat.

Modulating heaters have control options for specific needs. Refer to the MP controls section (page 4) and consult the factory if further support is needed.

Step 4: Venting Selection (Page 8)

Sidewall or rooftop venting accessories include 3", 4", or 6" options. Basic applications should include a sidewall vent kit or a rooftop vent kit. When common venting two or more heaters together refer to the dual vent material options. (For 6" venting refer to page 5)

Step 5: Extended Warranties (Page 10)

All limited warranties are defined in the product insert manual for the particular series of heaters. We have additional extended warranties available on page 9. Please note, extended warranties cover manufacture defects. If you have special circumstances when bidding a job, please contact the factory for pricing support.

LOW INTENSITY TUBE HEATERS

Commercial & Industrial Heaters

SERIES	20 FT.	25 FT.	30 FT.	40 FT. (A)	40 FT. (T)	50 FT. (A)	50 FT. (T)	60 FT.	70 FT.	80 FT.
MP	N/A									N/A
HL2/HL3		N/A								N/A
DX2/DX3		N/A								
DET3		N/A								N/A
DES3		N/A								N/A
SV		N/A								·

NOTE: See Available Models chart below for combustion chamber tube construction. (A) Aluminized or (T) Titanium.

															A۱	/Al	LA	BLI	ΕN	10[ÞΕΙ	LS																
MODEL FT-BTU-GAS	20-50 N or P	20-60 N or P	20-65 N or P	20-75 N or P	20-80 N or P	20-100 N or P	25-80 N or P	30-50 N or P*	30-60 N or P	30-65 N or P	30-75 N or P	30-80 N or P	30-100 N or P	30-115 N or P	30-125 N or P	40-50 N or P	40-60 N or P	40-65 N or P	40-75 N or P	40-80 N or P	40-100 N or P	40-115 N or P	40-125 N or P	40-150 N or P	40-175 N or P	50-100 N or P	50-115 N or P	50-125 N or P	50-150 N or P	50-175 N or P	50-200 N or P	60-125 N or P	60-150 N or P	60-175 N or P	60-200 N or P	70-175 N or P	70-200 N or P	80-200 N or P
Comb. Tube	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Т	Т	Α	Α	Α	Т	Т	Т	Α	Т	Т	Т	Т	Т	Т
MP							•					•		•						•		•		•			•		•		•		•		•		•	
HL2			•	•	•	•				•	•	•	•		•			•	•	•	•		•	•	•	•		•	•	•	•		•	•	•	•	•	
DX2	•	•		•	•	•		•	•		•	•	•		•	•	•		•	•	•		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•
HL3			•	•						•	•		•		•			•	•		•		•	•	•			•	•	•	•		•	•	•	•	•	
DX3	•	•		•				•	•		•		•		•	•	•		•		•		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•
DET3			•	•						•	•		•					•	•		•		•	•				•	•	•	•		•	•	•			
DES3	•	•		•				•	•		•		•			•	•		•		•		•	•		•		•	•	•	•	•	•	•	•	•	•	
SV**	•	•		•		•		•	•		•		•		•	•	•		•		•		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•

^{**} Additional Models Available, Consult Factory

Stainless Steel Commercial & Industrial Heaters (Harsh Enviroments)

SERIES	20 FT.	30 FT.	40 FT.	50 FT.	60 FT.
HL-SS					
DX-SS					

AVAILABLE MODELS												
MODEL FT-BTU-GAS	20-75 N or P	30-75 N or P	30-100 N or P	40-75 N or P	40-100 N or P	40-125 N or P	40-150 N or P	50-100 N or P	50-125 N or P	50-150 N or P	60-125 N or P	60-150 N or P
Comb. Tube	Α	A	A	A	A	A	Т	A	A	Т	Α	Т
HL-SS**	•	•	•	•	•	•	•		•	•		•
DX-SS**	•	•	•	•	•	•	•	•	•	•	•	•

Low BTU/Select Residential Heaters

SERIES	10 FT.	15 FT.	20 FT.	30 FT.
LD3	N/A			
LS3				

		AVA	ILA	BLE	Ξ M	ODE	ELS			
MODEL FT-BTU-GAS	10-25 N or P*	10-30 N or P*	10-40 N or P	15-25 N or P*	15-30 N or P*	15-40 N or P*	15-50 N or P	20-40 N or P*	20-50 N or P	30-50 N or P*
Comb. Tube	Α	Α	Α	A	A	Α	Α	Α	A	Α
LD3						•	•	•	•	•
LS3	•	•		•	•	•	•	•	•	•

Low Clearance Heaters

SERIES	30 FT.	40 FT.	50 FT.	60 FT.
CL				
СХ				

	AVAILABLE MODELS												
MODEL FT-BTU-GAS	30-50 N or P*	30-60 N or P	30-65 N or P	40-50 N or P	40-60 N or P	40-65 N or P	40-75 N or P	40-80 N or P	50-75 N or P	50-80 N or P	50-100 N or P	60-100 N or P	
Comb. Tube	Α	Α	Α	A	Α	Α	Α	Α	Α	Α	A	Α	
CL			•			•	•	•	•	•	•	•	
СХ	•	•		•	•		•	•	•	•	•	•	

Shipping/Boxing

All models are shipped with 1) 30 in. Type 1 Rubber Hose **RH-1/2 or RH-3/4** and reflector center supports **TP-82** (BR-4IH) for each 10 ft. section. All hangers **TP-19B**(BR-4HGR) are included for 10 ft. center mounts clamps are located directly on pipes**TP-21B** (TP-21). Also a pair of End Cap Relfectors with clips **BR-ECR** and a user manual.

						ΑC	D-O	N / U			
PART NO.		D	ESCR	IPTIO	N		LIS	Т\$			
SILSEAL	36 add are wa wire, p protect site co	ol box is ded and ater-tight bower cont the interminations. See See See See See See See See See Se									
PC-36	added to be p This is	to any to alugged an add er. unit. (tube hea into a 1 -on opti	er cord s ater. All 20V gro on only. rd on all	ows hea unded o Maximu	aters outlet. um					
ALUM-AO	black of maxim recom moistu	de hot re coated 1 num effic mended ire lader Series	or ighly r								
	Required ALUM-AO per Heater*										
MODEL	10'	20'	30'	40'	50'	60'	70'	80'			
STRAIGHT	RAIGHT N/A 1 2 3* 4* 5* 6*										

PGF	RADE ITEMS	5	
	PART NO.	DESCRIPTION	LIST \$
	For 3" Models DB-5EA-SUB	This option substitutes one 10' tube & reflector for two 5' sections. One clamp and one hanger packed with pipes is added to	
	For 4" Models 5EA-SUB	existing accessories supplied. This is ideal for making "U" heaters from 30', 50' & 70'	
	"DES/DET" Series CR-5EA-SUB	models. Maximum one per unit, add-on option only.	
	OD-KIT	Outdoor approval kit for HL2, DX2, HL3, DX3, LS3, LD3, CL and CX Series. For use when applying heaters outdoor. Includes: PC-36, 24V control cord (when applicable), SILSEAL, 90° air inlet cap. (WIV-4)	
	24-VAO	24V controls for single stage series heaters. Internal relay and transformer for ease of operation to a stand-alone unit.	
	24-VAOX	Internal relay and not included separate external transformer (HL-T) required for multiple units to be controlled on one stat.	
	HLRB	Optional internal relay for HL2 and LD3 Series heaters. See page 6 for details.	
	HLRP	Optional internal dual relays for HL3 Series heaters. See page 6 for details.	

^{*150,000-200,000} Btu/h models require one less ALUM-AO.

NOTE: Refer to chart below for add-on & upgrade option availability. See page 7 for stainless steel accessories.

							Δ	VA	ILAI	BLE	OF	PTIC	ONS	;								
MODEL	SILSEAL	OD-KIT	PC-36	24VAO	HLRB / HLRP	5EA-SUB	ALUM-AO	SSCBAO	SSTAO	SSTAO-5	SSRAO	SSRAO-5	SSTRAO	SSTRAO-5	SSC-##	SSB-##	SSE-SS	CWO	EWO	OMdA	Type 1 Hose	GC-50 "Valve"
HL2	0	0	0	S	0	0	S	0	Χ	Χ	0	0	Χ	Χ	0	0	0	0	0	N	S	0
DX2	0	0	0	0	Ν	0	S	0	Χ	Χ	0	0	Χ	Χ	0	0	0	0	0	N	S	0
HL3	Ν	0	S	S	0	0	S	Ν	Χ	Χ	0	0	Χ	Χ	0	0	0	0	0	N	S	0
DX3	N	0	S	0	Ν	0	S	N	Χ	Χ	0	0	Χ	Х	0	0	0	0	0	N	S	0
DET3	Ν	0	S	S	0	0	0	N	Χ	Χ	0	0	Х	Х	0	0	0	0	0	N	S	0
DES3	Ν	0	S	0	Ν	0	0	Ν	Χ	Χ	0	0	Χ	Χ	0	0	0	0	0	N	S	0
LD3	Ν	0	S	S	0	0	S	Ν	N	Ν	0	0	Ν	Ν	Ν	Ν	0	0	0	N	S	0
LS3	Ν	0	S	0	Ν	0	S	Ν	N	Ν	0	0	Ν	Ν	Ν	Ν	0	0	0	N	S	0
CL	0	0	0	S	0	0	S	0	N	Χ	0	0	Х	0	0	0	0	0	0	N	S	0
СХ	0	0	0	0	Ν	0	S	0	Ν	Χ	0	0	Χ	0	0	0	0	0	0	N	S	0
HLV	0	N	0	S	S	0	0	0	Χ	Χ	0	0	Х	Х	0	0	0	0	0	0	S	0
SV	0	Ν	Ν	Ν	Ν	0	S	0	Χ	Χ	0	0	Χ	Χ	0	0	0	0	0	N	S	0
HL-SS	S	0	0	S	0	0	Ν	S	Χ	Χ	S	0	Χ	Х	S	S	0	0	0	N	S	0
DX-SS	S	0	0	0	N	0	N	S	Χ	Х	S	0	Х	Χ	S	S	0	0	0	N	S	0

	OPTIONS KEY
0	Option Available.
N	Option Not Available.
S	Standard Feature.
х	Available in BTU Range of 75,000- 150,000 Only.

IMPORTANT: Specify add-on item at time of order. Be sure to tag appropriate heater for add-on.

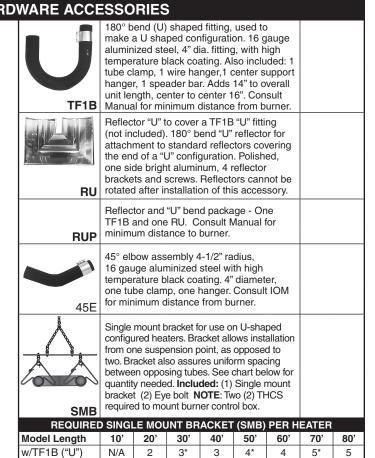
	MP S	ERIES CO	TNC	ROL OPTIO	NS
PART NO.	DESCRIPTION	LIST \$		PART NO.	
MP Series MP Series	This advanced microprocessor based controller, loaded with powerful and custom features, is a smart logic controller that offers optimal performance out of your MP Series heater. Allows heater(s) to modulate will full PID controller that			MP-P	Poter heat envir contr dial p
REVERBER RAY Anthoritor	considers various inputs and outputs, utilizes the current set temperature (based on an on-board thermistor or an externally connected zone sensor), mode selected,			MP-T	Ther stage
PUI	and other variables to determine the rate of modulation. Optional integration with remote sensors (sold separately).			MP-T-OD	Outo

PART NO.	DESCRIPTION	LIST \$
MP-P	Potentiometer. Used to control MP Series heater(s) in outdoor or spot heating environments to allows the user to manually control the heater's firing rate based on the dial position.	
IVIT-F	a.a. pooliio	
	Thermistor option for when using a single stage controller.	
MP-T		
MP-T-OD	Outdoor Sensor Option.	

	EX	TENSION A
PART NO.	DESCRIPTION	LIST \$
10EA	Ten foot heater extension assembly includes ten foot, 4" diameter, 16 gauge, aluminized steel tube with high temperature black coating, ten foot reflector, 4" reflector center support, 4" tube clamp and one 4" hanger and 2 clips.	
20EA	2) 10EAs in one box.	
30EA	3) 10EAs in one box.	
TR-C	Titanium Extention Assembly, ten foot titanium tube ten foot reflector, 4" reflector center support, 4" s.s tube clamp and one 4" hanger and 2 clips.	
TR-60	Five foot aluminum heater extension assembly, five foot aluminum tube, five foot reflector, 4" reflector center support, 4" tube clamp and one 4" hanger and 2 clips.	

AC	CESSORIES	;	
	PART NO.	DESCRIPTION	LIST \$
	10HRE	Ten foot heater extension assembly includes ten foot, 4" diameter, 16 gauge, hot rolled steel tube with blackened appearance, ten foot reflector, 4" tube clamp and one 4" hanger and 2 clips No RCS center support is included. This extension must be shipped via truck line.	
	20HRE	2) 10HREs in one box.	
	30HRE	3) 10HREs in one box.	
	HRE-60	Five foot heater extension assembly. See 10 HRE for contents and specs.	
	DB-10EA	Ten foot heater extension assembly includes ten foot, 16 gauge, 3 in. diameter, aluminized steel tube with high temperature black coating, ten foot reflector, 3 in. reflector center support, 3 in. tube clamp and one 3 in. hanger and 2 clips.	
	DB-TR60	Five foot aluminum heater extension assembly includes 5 ft., 16 ga., 3 in. diameter, See DB-10EA for accessories included.	

	MISCELLAN	EOUS	HAF
E6	Elbow - 6" radius, 90° bend, 4" diameter 16 gauge aluminized steel with black coating, one tube clamp, one hanger. Consult IOM for minimum distance from burner. Sq. dimension 15" x 15."		
RE	Reflector Elbow - 90° bend, with polished, one side bright reflector elbow, 2 reflector brackets and screws. Designed to fit atop one elbow (not included). Sq. dimension 27" x 27." Field assembly required. (Specify 45° assembly)		
REP	Reflector and elbow package - One RE and one E6. Consult IOM for minimum distance to burner. No end caps or clips included.		
REP-45	Reflector and elbow package - One RE and one E6, mounted on a 45 degree angle. Consult IOM for minimum distance to burner. No end caps or clips included.		
PHS	Protective Heat Shield. For use on 0° mounted reflectors only. 30" x 12" 304 grade stainless steel. For attachment below reflector in heat sensitive areas.		
SSE	62" long x 10-1/2" wide. Side shield extension polished one side bright, used to direct infrared rays downward - away from sidewalls and combustibles with two 0° mounting brackets, 8 screws and 2 brackets. NOTE: Two (2) SSE required to span each 10-ft reflector section. Maintain published clearances when using this accessory.		



Model requires 5EA-SUB accessory package when installing in a U-shaped configuration.

	OTHER ACCESSORIES									
GC-50	CSA Design Certified ball valve, 2 PSI maximum pressure, 1/2" x 1/2" FPT, with 1/8" NPT side pressure tap.			RH-1	30 in. (1/2" I.D.) rubber hose connector for low intensity heaters applied in Canada (25 - 125 MBH).					
CLEARANCE SAFETY LIMIT WARNING MAINTAIN CLEARANCE PROMTUBE HEATER TO VEHICLES AND COMBUSTIBLE MATERIALS. THAT IS A COMBUSTIBLE OF THE COMBUSTIBLE	Clearance Saftey Limit Sign. 8.5" x 11". Sign is designed to be hung or adhere at clearance to combustables limit. Repeats clearance warnings.			RH-3	30 in. (3/4" I.D.) rubber hose connector for low intensity heaters applied in Canada (140 - 200 MBH).					

				MI	SCEL	LAN	EOU:	S HA
PART NO.		D	ESCR	IPTIO	N		LIS	Т\$
THGH10	foot le	e tube h ngth of l er per a lbs. wit						
THCS	for har	Five foot chain set with 2 "S" hooks used for hanging heater. Bulldog coil chain, trade size #1, wire gauge 12, and a working load limit of 155 lbs. each.						
RVA-CS	1 – ch	in moui ain, and to stru						
REQUIRE	D CHAI							
Model Length	10'	15-20'	25-30'	35-40'	45-50'	55-60'	65-70'	80'

REQUIRED CHAIN SETS PER HEATER (FOR 10' CENTERS)											
Model Length	10'	15-20'	25-30'	35-40'	45-50'	55-60'	65-70'	80'			
STRAIGHT*	4	5	6	7	8	9	10	11			
w/TF1B ("U")	N/A	6	8	8	10	10	12	12			
S-HOOK	*Straight refers to models in a straight configuration (10' centers). THCS for HLV series: Three (3) per burner box; one (1) for each 10ft. tube section.										

BK

"Brass Knuckles." Reflector mounting bracket that allows for mounting the reflector on specified angles. Attaches to TP19B wire hanger. Preset bends allow for a 15, 30, or 45 degree mounting angle. See chart below for quantity needed. BK attaches to standard hangers.

REQUIRED BR-MAH FITTINGS PER HEATER											
Model Length	10'	20'	30'	40'	50'	60'	70'	80'			
STRAIGHT*	2	3	4	5	6	7	8	9			
w/TF1B ("U")	3	4	5	6	7	8	9	10			



BRDG

Decorative Grill designed to encase radiant tubes. Attaches to reflector - use side clearance data. Mounts at 0-45 degrees. Finished in a highly polished aluminum casing and eggcrate bottom surface. 60" x 18" x 4.5". Field assembly required. Use DCSP chart for quantity required. Not for 'U' tubes.

DWARE ACCESSORIES										
PART NO.		D	ESCR	IPTIO	N		LIS	T \$		
PG	standa with 1- on styl Typica from b tube a	Protective guard. Designed to attach to standard reflector. 5' long x 13-1/4" wide with 1-1/4" slots. Galvanized wire with slipon style mounting channels. Typically used to prevent debris or objects from becoming lodged between radiant tube and reflector. Should be used when mounting heaters below 8 ft.								
	REQ	UIRED	GUARE	S PER	HEATE	R				
Model Length	10'	20'	30'	40'	50'	60'	70'	80'		
STRAIGHT*	2	4	6	8	10	12	14	16		
w/TF1B ("U")	N/A	N/A 4 6 8 10 12 14								
	*Straight refers to models in a straight configuration. PG for HLV series: Two (2) for each 10 ft. tube section.									



Drop ceiling side panels. Polished one side bright. Used to direct infrared rays away from ceiling tiles. 62" in length, mounts with 2 zip screws to the heaters reflector. Shipped in sets of 2 pieces.

DCSP

F	REQUIRED BR-CRP PER HEATER (SETS)							
Model Length	Model Length 10' 20' 30' 40' 50' 60' 70' 80'							
STRAIGHT	2	4	6	8	10	12	14	16



Aluminum Egg Crate - 24" x 48". Designed to fit into a standard 2' x 4' ceiling tile opening. Crate has 1/2" x 1/2" openings and is 1/2" thick. Mounts 1-1/2" below the bottom of the tube. See chart below for quantity needed. Used in conjunction with DCSP (see above).

S - DUAL VENT MATERIALS

REQUIRED ALUMINUM EGG CRATES PER HEATER								
Model Length	10'	20'	30'	40'	50'	60'	70'	80'
STRAIGHT	3	6	9	12	15	18	21	24

AIR COMPONENTS



Wall inlet cap, 4" O.D. with bird screen. For use with outside air option. Bird screen insures open air flow to unit. Used for 0-20' of 4" intake.(Common on all models)



4" flexible air inlet rubber hose with DWV adapter affixed. Mates to 4" DWV pipe. Clear color for visibility. Includes 4" DWV adapter and worm clamp. 18" in length.

	6 INCH VENT N	IATERIAL
PART NO.	DESCRIPTION	LIST \$
	Field Controls 6 in. vent terminal with internal screen. Can only be used for dual side wall venting of V2 200,000 Btu/h models only. Diameter is 12.5 in.	
SK-6		
	Dual exhaust assembly, Y-shaped, 26 gauge galvanized steel with baffle. 4 in. O.D. x 6 in. O.D. x 4 in. O.D. Two adjustable elbows included to ease installation. For use when common venting two heaters. Heaters must share a common thermostat.	
YSM	Dimensions - 14 in. left-right, 13 in. high.	

PART NO.	DESCRIPTION	LIST \$
Y	Dual exhaust assembly, Y-shaped, 16 gauge aluminized steel. 4 in. O.D. x 6 in. O.D. x 4 in. O.D. Two tube clamps included. For use when common venting two heaters. Heaters must share a common thermostat. Dimensions - 21.5 in. left-right, 13 in. high.	
RT	Dual exhaust assembly, r-shaped, 16 gauge aluminized steel with high temperature black coating 4 in. O.D. x 6 in. O.D. x 4 in. O.D. Two tube clamps included. For use when common venting two heaters that meet at a 90° angle. Heaters must share a common thermostat.	

Consult local codes when venting

CURRENT SINGLE STAGE THERMOSTATS

PART NO.	DESCRIPTION	LIST \$
WR-S	White Rogers thermostat. 4,4° to 26,6°C range. White plastic cover, 120-277 VAC, 22.0 amps. May be used to switch either 120V, 240V, or 277V. Consult amp rating unit for proper sizing.	
TF-115	Thermostat with rain tight enclosure and 40° to 100°F range. Rugged weatherproof control for use in agricultural, industrial and commercial environments with heavy moisture atmospheres. 16.0 FLA, 25.0 amps resistive at 120V. Watertight NEMA 4X when used with watertight connections (24, 120 or 220V). Consult amp rating of unit for proper sizing.	

PART NO.	DESCRIPTION	LIST \$
TH-PSPLV	LuxPro 120V programmable line voltage thermostat. No relay transformer required. 5/2-day(4-period) operation. 45°-90°F range. Single stage operation,16 Amp@ 120V (3 tube heaters max.) single pull. Features include °C/°F display, easy programming, timers, wall plate included and more. 120V only. Replaces PSP-510.	
284-50	Thermostat with rain tight enclosure and 20° to 120°F range. Rugged weatherproof control for use in agricultural, industrial and commercial environments with heavy moisture atmospheres. 10.0 FLA, 25.0 amps resistive at 120V. Watertight CSA ENC. 3 weather proof enclosure. (24, 120 or 220V). Consult amp rating of unit for proper sizing. Limited stock.	

TWO-STAGE CONTROLS

Hi-Low Relay Panels / Boards

Relay panels or boards must be used anytime two or more HL2, HL3, AG2, or LD3 heaters are operating on the same thermostat (or common vented). Relay boards (HLRB/HLRP) are (at the time of production) internally mounted into the burner box. This must be specified at the time of order. One board is needed per heater. An external transformer is needed to power the control. Relay Boards (HLRB/HLRP) are preferred over panels. **Specify the HLRP for HL3 models only.**

PART NO.	DESCRIPTION	LIST \$
ET5MS	Columbus Electric two-stage, double throw, low or line voltage thermostat. 50°F to 90°F range (125, 250 or 277V). Non-adjustable, preset 2° high/low fire differential. UL Listed and CSA Certified.	
TH-BRTS	Braeburn non-programmable 24V two- stage heat/1 cool thermostat. 1 Amp per terminal (3 Amp max. load) allows operation of up to 8 two-stage heaters w/ HLRB/ HLRP boards and transformer. 45° to 90°F (7°-32°C) heat/cool range. Operates on either constant 24VAC or two (2) AA alkaline batteries. Digital display, adjustable differential.	
TH-BR52	Braeburn two-stage or single-stage control with flexible programming for residential and commercial applications. 7 Day, 5-2 Day or Non-Programmable. 45°-90°F control range. Indoor or outdoor remote sensing capable. Multi-Level keypad lockout. Bright blue backlight. Hardwire or battery powered. Meets California Title 24 guidelines.	
RS-BR53	Indoor sensor for use with TH-BR52 thermostat. Mounts up to 200 ft. away. Sense range of 40°-99°F depending on thermostat. Contemporary design for any decor.	

HLRB in burner box	HLRP in burner box	2 boards inside NEMA (1) box	4 boards inside NEMA (1) box	6 boards inside NEMA (1) box	10 boards inside NEMA (1) box
HLRB	HLRP	HLPNL-2	HLPNL-4	HLPNL-6	HLPNL-10
RELAY BOARD 155-1-1 69 1 15 distant full contracts to selfd	PRE 2000	NOTE: When placing an order, be to specify which models will receit the HLRB/P. Replacement parts of TP-825/1325.			

PART NO.	DESCRIPTION	LIST \$
WM TH-109	Two-stage t-stat with rain tight enclosure. 40° to 100°F range. Rugged weatherproof control for use in agricultural, industrial, and commercial environments with heavy moisture atmospheres. Consult amp rating of unit for proper sizing. 24, 120, 208, 240 and 277 VAC.	
energy PSP-722	Lux Pro Millivolt or 24V Programmable thermostat with batteries. 7-day (4-Period) operation. 40°-90°F Range. 2 amps at 24V AC. (20 heaters w/HLRB and 4000-01V). Single or dual stage operation. Adjustable tempetature differential (.25-2.25). Features include °C/°F display, easy programming, vacation, timers and "Energy Star" compliant.	
RS-BR54	Outdoor sensor for use with TH-BR52 thermostat. Mounts outdoors up to 200 ft. away. Sense range capability of -40°-99°F depending on thermostat. Contemporary design for any decor. NOTE: Cannot be used in place of the indoor sensor.	
RS-BR53BB	2 pc. black box to house the RS-BR53. Use for radiant sensing applications.	

	STAIN	LESS STE
PART NO.	DESCRIPTION	LIST \$
TP-26D	304 grade stainless steel radiant tube. 16 gauge, 4 in. x 10 ft., high temperature black coated.	
TP-26E	409 stainless steel combustion tube. 16 gauge, 4 in. x 10 ft., high temperature black coated. (Limited stock)	
SSR	120 in. 304 grade, polished stainless steel reflector.	
SST-60	60 in. 304 grade stainless steel tube. 16 gauge, stainless steel. High temperature black coated.	
5EA-SUB-SS	This option will substitute one 10' piece of radiant tubing & reflector with two 5' pieces. One clamp and one hanger is included (4" accessories pending model # with 5EA-SUB-SS). This is ideal for making "U" heaters from 30', 50' & 70' models. Maximum one 5EA-SUB-SS per heater. This is an add-on option only.	
TF1B-SS	4 in. 304 grade stainless steel 180° U-shaped fitting, with high temp black coating See TF1B on page 4. Includes (1) stainless steel clamp,(1) TP-19C hanger, and (2) stainless steel reflector end caps with clips, galvanized speader bar.	
BR-4UAS	Reflector and "U" bend package - One TF1B-SS and one RU-SS.	
THCS-SS	30 in. stainless steel chain set with two "S" hooks. See THCS on page 5 for quantity required per heater.	

EL	ACCESSOF	RIES	
	PART NO.	DESCRIPTION	LIST \$
	RE-SS	304 grade stainless steel reflector elbow 90° bend to cover an elbow (E6) fitting (not included). Field assembly required. 27 in. x 27 in. square. (Specify 45° assembly)	
	RU-SS	304 grade stainless steel reflector "U" to cover a TF1B "U" fitting (not included). Field assembly required. 27 in. x 27 in. square.	
	SSR-60	60 in. 304 grade, polished stainless steel reflector.	
	E6-SS	304 grade stainless steel elbow. 6" radius, 90° bend, 4" diameter, 16 gauge stainless steel with black coating. Includes (1) stainless steel tube clamp, and (1) stainless steel hanger.	
	SSE-SS	304 grade stainless steel side shield extension. Used to direct infrared rays downward away from sidewalls and combustibles with (2) 0° mounting brackets,	
	BK-SS	Stainless steel "Brass Knuckles." Reflector mounting bracket attaches to wire hanger allowing the reflector to be mounted on a 15, 30 or 45 angle. See BK on page 5 for quantity required per heater.	
	REP-SS	304 grade stainless reflector and elbow package - One RE-SS and one E6-SS. Consult IOM for minimum distance to burner. No end caps or clips included. (Specify 45° assembly)	

				STA IN	II EC	e et	CEI	ADD-
PART NO.		D		IPTIO		331		T\$
SSTAO	existin alumin steel to AG2 o	Stainless steel tube add-on upgrades existing radiant exchangers from titanium/ aluminized to 16 ga., 304 grade stainless steel tubes. HL2, DX2, HL3, DX3, AG1 & AG2 only. One needed per 10 ft. of tube. Sold as an add-on to an order.						
SSTAO-5		de a 5 ft stainles		ized tub	e to 304	4		
SSRAO	add-or existin highly reflecte order.	Specifying the stainless steel reflector add-on to your order upgrades the existing .025", aluminum reflectors to highly polished, 304 grade stainless steel reflectors. Only sold as an add-on to an order. One SSRAO is needed per 10 ft. of reflector. For use on all models.						
SSRAO-5		Upgrade a 5 ft. aluminized reflector to 304 grade stainless steel.						
SSTRAO	upgrad stainle <u>must</u> l	Stainless steel tube & reflector add-on upgrades existing tubes and reflectors to stainless steel. Sold as an add-on and must be specified at the time of order. HL2, DX2, HL3, DX3, AG2 & AG1 Series						
SSTRAO-5	Upgra		. alumin stainless	iized tub steel.	e & refl	ector		
SSREC	(2) Stainless steel Reflector end caps.							
REQUIRED	STAIN	NLESS	STEE	EL AD	D-ONS	S PER	HEAT	ER
MODEL	10 Ft.	20 Ft.	30 Ft.	40 Ft.	50 Ft.	60 Ft.	70 Ft.	80 Ft.
STRAIGHT	1	2	3	4	5	6	7	8

PAR	ΓNO.		DESC	CRIPTIO	N	1	LIST \$
SS	CBAO	stainless sealed, P attachme (i.e. T-Stat	steel. Cor C-36 add nts are wa t wire, pov	itrol box is ed and ele ater-tight c	ectrical connections ction) For H		
SST	AO-16		of tube a	dd-ons. Fo	inless without HL2, DX		
SSC-##			4 in. galva		Jpgrade el tube clam	nps	\$ See below
-10 N/A	-20	-30	-40	-50	-60	-70	-80
S	SB-##	standard (TP-19C) stainless	galvanize and 4 in. steel. Pric	d steel 4 in RCS (TP-	below are	ger	\$See below
-10 N/A	-20	-30	-40	-50	-60	-70	-80

TP-19C	Stainless steel 4 in. wire hangers.	
TP-829	Stainless steel 4 in. reflector center support	

IMPORTANT NOTES

- SSCBAO is only available for the HL2, DX2, CL and CX Series.
- Upgrading tubes (SSTAO or SSTRAO) is available for HL2, DX2, HL3,DX3, AG2, and AG2 series only. Only available on 75,000 -150,000 BTU/H
- Upgrading reflectors (SSRAO) is available for all models.

When placing orders, please specify which heaters are to be upgraded. \\

	400E000PIE0	HOED ON	
PART NO.	ACCESSORIES DESCRIPTION	LIST \$	-)
U DB-TF1B	180° bend (U) shaped fitting, used to make the heater into a U shaped configuration. 16 gauge aluminized steel, 3 in. diameter fitting, with high temperature black coating. Also included: 1 tube clamp, 1 wire hanger, 1 speader bar. For use on a 3 in20 ft. model.		
WVE-3	3 in. O.D. galvanized steel vent outlet cap with flapper. Flapper insures proper static pressure for proper unit operation. <u>Must</u> be used in unvented applications. Not for use in residential applications (all residential heaters <u>must</u> be externally vented).		
DB-208	3 in. Duravent vent cap. Used for sidewall venting of the 3 in. Series models. Diameter is 7-3/4 in.		
18 in. DB-209 48 in. DB-BVP	3 in. x 18 in. (48in.)doublewall B-vent. Used for penetrations through combustible walls or roofs while venting 3 in. models.		
DB-210	3 in. wall thimble. Used in conjunction with B-vent for penetrations through combustible walls and/or roofs.		
DB-211	3 in. Duravent B to C adapter. This union is used to join C-vent with B-vent.		

Y ON 3-IN	CHT	UBE MODELS	
PART	NO.	DESCRIPTION	LIST \$
)B-E6	Elbow package - 90° bend, 3 in diameter, 16 gauge aluminized steel elbow with high temperature black coating. Includes 1) 3" tube clamp, 1) 3" hanger. (Specify 45° assembly)	
DB	-REP	Reflector and elbow package - 90° bend, 3 in., 16 gauge aluminized steel elbow with high temperature black coating and polished, one side bright reflector elbow, one 3 in. tube clamp, and one hanger. (Specify 45° assembly)	
DB	-RUP	Reflector and 3" O.D. 180° U-bend package. One DB-TF1B and one RU reflector cover. Polished one side bright. Reflectors cannot be rotated after installation of this accessory. Field assembly required. (Specify 45° assembly)	
D	B-SC	3 in. storm collar. For use with 3 in. venting through the roof. Prevents rain from entering flashing. Galvanized steel construction.	
DB	YSM	Dual exhaust assembly, "Y" shaped, 26 gauge galvanized steel, 3 in. O.D. x 4 in. O.D. x 3 in. O.D. Units connect at a 90° angle to the 3 in. leg. 4 in. vent connection is crimped for ease of vent hook-up. Adjustable elbows are not included. Heaters must share a common thermostat.	
DB	-DSK SK-48	3 in. vent package. Complete sidewall venting kit for lengths up to 12 feet. Includes: 1) DB-208, 1)DB-209, 1)DB-210, 1)DB-211, 1) DB-SC. 30 in. assembled length. For the DB-DSK-48 sub the DB-208 for a DB-BVP 48 in. assembled length.	

	4	INCH VENT
PART NO.	DESCRIPTION	LIST \$
ANY CANA	Galvanized steel vent outlet cap 4 in. O.D. with flapper. Flapper insures proper static pressure for proper unit operation. Must be used with unvented units.	
WVE-GALV		
SWD-4	4" Duravent sidewall vent cap. All aluminum construction. Diameter is 8-3/4 in.	
WT-4	4 in. wall thimble. Protection for venting through a sidewall application. Measures 8.5 in. outer diameter, 6.5 in. inner diameter. Adjustible 4 in. to 6 in. depth.	
SK4	Field Controls 4 in. vent terminal with internal screen. For use when side wall venting. V2 200,000 Btu/h models only. Diameter is 10.25 in.	
SK4-VK	V2 200,000 Btu/h model vent kit. same as 4-DSK, substitute SK4 for SWD-4.	
18BV-4	4 in. Doublewall B-vent. Used for penetrating through combustible wall and/or roofs. 18 in. long.	
BR-36-BV	4 in. Doublewall B-vent. Used for penetrating through combustible wall and/or roofs. 36 in. long.	
BR-48-BV	4 in. Doublewall B-vent. Used for penetrating through combustible wall and/or roofs. 48 in. long.	
BVP-4	4 in. Doublewall "B" type vent. Used for penetrating through combustible wall and/or roofs. 60 in. long.	
Canault lass	Lodes when venting	

	LIST \$
4 in. drafthood connector. B-C adapter for connecting vent pieces.	
4 in. storm collar. For use with 4 in. venting through the roof. Galvanized steel. Prevents rain from entering flashing.	
4 in. side wall vent terminal with screen. 16 gauge aluminized steel construction, 18 in. long, one 4 in. clamp,.Bird screen on exhaust end. Not approved on 200,000 Btu/h models.	
4 in. Duravent sidewall vent kit with all items for sidewall venting. Includes: SWD-4, WT-4, 18BV-4, DHC-4,SC-4. No vent pipe material is included. 29 in. long when fully assembled. NOT APPROVED FOR V2 200,000 Btu/h MODELS.	
4 in. Duravent vent kit with all items for sidewall venting. Includes: SWD-4, WT-4, BR-36-BV, BV-4, DHC-4,SC-4. No vent pipe material is included. 47 in. long when fully assembled.	
4 in. Duravent vent kit with all items for sidewall venting. Includes: SWD-4, WT-4, BR-48-BV, DHC-4,SC-4. No vent pipe material is included. 59 in. long when fully assembled.	
4 in. Duravent vent kit with all items for sidewall venting. Includes: SWD-4, WT-4, BR-60-BV, DHC-4,SC-4. No vent pipe material is included. 71 in. long when fully assembled.	
	4 in. storm collar. For use with 4 in. venting through the roof. Galvanized steel. Prevents rain from entering flashing. 4 in. side wall vent terminal with screen. 16 gauge aluminized steel construction, 18 in. long, one 4 in. clamp, Bird screen on exhaust end. Not approved on 200,000 Btu/h models. 4 in. Duravent sidewall vent kit with all items for sidewall venting. Includes: SWD-4, WT-4, 18BV-4, DHC-4,SC-4. No vent pipe material is included. 29 in. long when fully assembled. NOT APPROVED FOR V2 200,000 Btu/h MODELS. 4 in. Duravent vent kit with all items for sidewall venting. Includes: SWD-4, WT-4, BR-36-BV, BV-4, DHC-4,SC-4. No vent pipe material is included. 47 in. long when fully assembled. 4 in. Duravent vent kit with all items for sidewall venting. Includes: SWD-4, WT-4, BR-48-BV, DHC-4,SC-4. No vent pipe material is included. 59 in. long when fully assembled.

MATERIALS

ADVANCED CONTROL OPTIONS

PART NO.	DESCRIPTION	LIST \$
TH-1F95-TS	White Rogers Programmable MV-30V, single or two stage, touch-screen display thermostat with remote sensing. Adjustable temperature differential (0.6-1.2). 4 and 2 period; 7 or 5+1+1 day programming options. 1.5 amps per terminal allows operation of up to 30 two-stage heaters w/ HLRB boards and transformer. Used with one (1) remote sensor (RS-F145).	
RS-F145	Remote sensor for use with TH-1F95-TS. For indoor use only. Sensor can be placed up to 200 feet away.	
1.0 . 1 10		
RS-F145-OD	Remote sensor for use with TH-1F95-TS. For outdoor use. Sensor can be placed up to 200 feet away.	
N3-F 143-OD		
TH-HWC2	Electronic temperature controller with 2 temperature inputs, 4 SPDT relays, single or two stage. 1 RS-SIS sensor included. 24,120 240V°F, max 2 sensors, heaters require 24VAO or HLRP.	
	Remote 1097 ohm outdoor air temperature sensor for use with TH-HWC2 (probe mounted in weather-proof case).	
RS-ODS		
De cio	Remote 1097 ohm indoor air temperature sensor (probe only). For use with TH-HWC2.	
RS-SIS		
	Wall mount remote 1097 OHM air sensor for use with TH-HWC2 (probe mounted in case).	
RS-WRS		<u> </u>

PART NO.	DESCRIPTION	LIST \$
archide Seprentin	State-of-the-art pre-programed building management controller panel. Use as a stand-alone unit or part of an overall building management system. Features include a password protected LCD user interface with keypad, 4 daily set-points, runtime tracking, ability to label each zone, expandable, housed in a stylish and durable enclosure.	See 32, 74 & 116 interfaces below
PCOXS-32	Designed to handle small applications. Accommodates up to 3 single stage / 2 dual stage heater zones. Maximum of 20 single stage / 10 dual stage heaters per zone.	
PCOXS-74	Designed to handle mid-sized applications. Accommodates up to 7 single stage / 4 dual stage heater zones. Maximum of 20 single stage / 10 dual stage heaters per zone.	
PCOXS-116	Designed to handle large applications. Accommodates up to 11 single stage/6 dual stage heater zones. Maximum of 20 single stage/10 dual stage heaters per zone.	
PCOXS-OP	Optional wall mounted display enables users to communicate with the PCOXS Controller up to 1600ft. away. Operator panel offers a graphic display providing management of each zone. User-friendly keypad allows zone parameters to be accessed and modified.	
PCOXS-RS	Deluxe wall mount 24V remote temperature sensor. 14°F to 158°F temperature range. Delivers a 4-20mA signal to controller up to 300 ft. 10Kohm.	
PCOXS- ODRS	Outdoor deluxe wall mount 24V remote temperature sensor. 14°F to 158°F temperature range. Delivers a 4-20mA signal to controller up to 300 ft. 10Kohm.	
BBS-AO	Black bulb sensor add-on. Upgrade remote sensor to be enclosed in a black bulb for jobs that require radiant temperature sensing inside a black bulb. This is compatible with controls that have temperature probes that can fit inside of the bulb casing. Contact factory for guidance.	

ELECTRICAL COMPONENTS AND MISCELLANEOUS CONTROL DEVICES

PART NO.	DESCRIPTION	LIST \$
	40 VA transformer 120-24V. AC primary & secondary. Mounted on 4 x 4 base plate. Can be used for all 24V heaters or controls manufactured or provided by Detroit Radiant Products.	
4000-01V		
	Weatherproof enclosure package with 4-hour timer and on-off control. Ideal for use in outdoor heating applications where timer control is desired. Package for two-stage scenarios. Can operate up to 120V-20 amp. Can also be used for 24V switching. Field assembly and wiring required.	
WEP-TS		

PART NO.	DESCRIPTION	LIST \$
ERK	The External Relay Kit accessory can be used on HL3, HL2, LS3 & LD3 models that require multiple heaters on one thermostat. This can mount on or near the heater. One ERK is needed per heater. Used in standard environments.	
	Similar to ERK but utilizes a very rugged Nema 6P rated enclosure for use in wet and corrosive environments.	
ERK-HE		

BURNER PRICING*			
PART NO.	DESCRIPTION	LIST \$	
BRN-FT-BTU-GAS-MP	MP Series Burner, Hose & Baffle		
BRN-FT-BTU-GAS-HL2	HL2 Series Burner, Hose & Baffle		
BRN-FT-BTU-GAS-HL3	HL3 Series Burner, Hose & Baffle		
BRN-FT-BTU-GAS-DX2	DX2 Series Burner, Hose & Baffle		
BRN-FT-BTU-GAS-DX3	DX3 Series Burner, Hose & Baffle		
BRN-FT-BTU-GAS-DET3	DET3 Series Burner, Hose & Baffle		
BRN-FT-BTU-GAS-DES3	DES3 Series Burner, Hose & Baffle		
BRN-FT-BTU-GAS-LD3	LD3 Series Burner, Hose & Baffle		
BRN-FT-BTU-GAS-LS3	LS3 Series Burner, Hose & Baffle		
BRN-FT-BTU-GAS-AG2	AG2 Series Burner, Hose & Baffle		
BRN-FT-BTU-GAS-AG1	AG1 Series Burner, Hose & Baffle		

* Please state	Model/L	ength/BTU/Gas
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^{*}Component burners do not include any mounting accessories.

NOTE: CL, CX Series burners are not sold separately.

ADDITIONAL KIT PRICING			
PART NO.	DESCRIPTION	STANDARD LIST \$	
DB-10Kit	10 Ft. Full 3" Mounting Kit		
DB-20Kit	20 Ft. Full 3" Mounting Kit		
DB-30Kit	30 Ft. Full 3" Mounting Kit		
10-Kit	10 Ft. Full 4" Mounting Kit		
20-Kit	20 Ft. Full 4" Mounting Kit		
30-Kit	30 Ft. Full 4" Mounting Kit		
40-Kit	40 Ft. Full 4" Mounting Kit		
50-Kit	50 Ft. Full 4" Mounting Kit		
60-Kit	60 Ft. Full 4" Mounting Kit		
70-Kit	70 Ft. Full 4" Mounting Kit		
80-Kit	80 Ft. Full 4" Mounting Kit		

Additional Mounting Kit includes applicable hangers, clamps and center supports. Also included is (1) RH-1 or RH-3, (2) reflector end caps, and (8) clips. **Note**: Kits for 150-200 MBH models receive one stainless steel tube clamp.

LIMITED WARRANTY GUIDELINES AND OPTIONS****

All limited warranties, are defined in the product insert manual for the particular series of heaters. Please contact the factory for further information on the terms and conditions.

STANDARD WARRANTY	BURNER BOX COMPONENTS	TUBES/ EXCHANGERS	BURNER
DX2, DX3, CL, CX	1 YEAR	5 YEARS	10 YEARS
LD3, LS3, SV	1 YEAR	3 YEARS	5 YEARS
DET3, DES3	1 YEAR	2 YEARS	3 YEARS
HLV***	1 YEAR	5 YEARS	10 YEARS
HL2, HL3	3 YEARS	5 YEARS	10 YEARS
AG1	1 YEAR	5 YEARS	10 YEARS
AG2	3 YEARS	5 YEARS	10 YEARS

EXTENDED WARRANTY OPTIONS****			
cwo	Control Extended Warranty Option. (Max. 4 year extension) \$30.00 (net) per year, per heater.		
EWO	Exchanger Extended Warranty Option. (Max. 10 year total or 5 year extension) \$7.00 (net) per year, per tube.		
VPWO:	HLV Vacuum Pump Extended Warranty Option. (Max. 5 year total or 4 year extension) \$94.00 (net) per year, per pump.		

^{****} Prior approval from the factory is required when quoting extended warranties.

^{***} Vacuum pump - 1 year.

IN HOUSE GAS CONVERSIONS				
S1-CONV.	Converting a single stage heater from LP to Natural Gas or Natural Gas to LP. Kit includes 1 gas valve, 1 burner orifice, 1 air collar and 1 new rating label. Model and serial number must be specified. Conversion can be made depending on age and condition of heater.			
S2-CONV.	Converting a two stage heater from LP to Natural Gas or Natural Gas to LP. Kit includes 1 gas valve, 1 burner orifice, 1 air collar and 1 new rating label. Model and serial number must be specified. Conversion can be made depending on age and condition of heater.			