

# THERMABLOCK™ ELECTRIC

## VAPORIZERS

Product Datasheet **1.7**

### ThermaBlock™ Electric Vaporizers

provide reliable and economical vaporization of a wide variety of cryogenic liquids and liquefied gases. The ThermaBlock™ has a compact size and simple installation. Connect the inlet and outlet piping, bring in a single power line and the unit is ready to operate. These electric units vaporize the liquid and provide superheat, warming the gas for downstream processes. The outlet temperature is automatically maintained by cycling the heaters on and off via a feedback loop using an adjustable temperature controller and temperature probe.

#### CONSTRUCTION:

Stainless steel heat transfer tubes and weather-resistant, replaceable electric cartridge heaters are clamped between extruded aluminum blocks. Controls are separated into high and low voltages and enclosed in NEMA 4 rated weatherproof cabinets. A temperature probe is used for precise temperature control.



### Optional Features

- Low Temperature Cut Off (LTCO) Kit featuring a temperature sensor and solenoid valve to prevent the flow of cold gas or liquid downstream of the vaporizer, 500 PSIG design pressure
- PB solenoid valve to control pressure building circuits on combo units and pressure builders

### Standard Features

- Replaceable stainless steel cartridge heaters
- NEMA 4 Electrical Cabinet
- Adjustable outlet temperature from 40°F to 120°F
- Fully automatic operation
- Compact design
- High temperature switch for safety
- ThermaBlock™ unit comes fully factory wired, tested and ready to install
- Quick delivery of standard units
- Built in accordance with ASME B31.3 Process Piping Code
- 304/304L/316 series Stainless Steel wetted parts
- Design pressure of 1,000 PSIG (TBT,TBV) and 500 PSIG (TBC,TBP)
- The electrical cabinet is UL/cUL marked
- Pallet base
- Pressure switch to control pressure building circuits on combo and pressure build models

# THERMABLOCK™ ELECTRIC

## VAPORIZERS

PROCESS VAPORIZERS								
Model	Nominal Power (kW)	Voltage				N2/O2 Capacity (SCFH, liquid)	CO2 Capacity (lb/hr, liquid)	Uncrated H x W x L (in.)
		208		480				
		Item Number	Amps	Item Number	Amps			
TBV9	9	21562050	25	21553455	11	2600	180	62 x 36 x 36
TBV15	15	21562051	42	21547647	19	4400	300	62 x 36 x 36
TBV30	30	21562052	83	21553456	37	8850	600	62 x 36 x 36
TBV40	40	NA	NA	21553457	49	11,800	800	62 x 36 x 36
TBV60	60	NA	NA	21553458	73	17,750	1200	62 x 36 x 36

COMBO VAPORIZERS											
Model	Nominal Power, Process (kW)	Nominal Power, Pressure Build (kW)	Voltage				N2/O2 Process Capacity (SCFH, liquid)	N2/O2 PB Capacity (SCFH, liquid)	CO2 Process Capacity (lb/hr, liquid)	CO2 PB Capacity (lb/hr, liquid)	Uncrated H x W x L (in.)
			208		480						
			Item Number	Amps	Item Number	Amps					
TBC20	15	5	21563474	56	21553464	25	4400	1450	300	100	70 x 36 x 36
TBC40	30	10	NA	NA	21553465	49	8850	2950	600	200	70 x 36 x 36
TBC60	50	10	NA	NA	21553466	73	14,750	2950	1000	200	70 x 36 x 36

TRIM HEATERS							
Model	Nominal Power (kW)	Voltage				N2/O2 Capacity (SCFH, gas)	Uncrated H x W x L (in.)
		208		480			
		Item Number	Amps	Item Number	Amps		
TBT9	9	21562060	25	21553459	11	12,000	62 x 36 x 36
TBT15	15	21562061	42	21553460	19	20,000	62 x 36 x 36
TBT30	30	21562062	83	21553461	37	40,000	62 x 36 x 36
TBT40	40	NA	NA	21553462	49	53,450	62 x 36 x 36
TBT60	60	NA	NA	21553463	73	80,300	62 x 36 x 42

PRESSURE BUILDERS								
Model	Nominal Power (kW)	Voltage				N2/O2 Capacity (SCFH, liquid)	CO2 Capacity (lb/hr, liquid)	Uncrated H x W x L (in.)
		208		480				
		Item Number	Amps	Item Number	Amps			
TBP9	9	21702513*	25	21702514*	11	2600	180	73 x 52 x 25
TBP18	18	21702516*	50	21702517*	22	5200	360	73 x 52 x 25
TBP30	30	21702519*	83	21702520*	37	8850	600	73 x 52 x 25
		*Standalone models						

## Key features

- Replaceable heater cartridges
- External temperature controller



Hang-under TBP Model