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### HEATING, LIGHTS & CONTROLS

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**PROPELLER STYLE NATURAL GAS  
MODINE UNIT HEATERS**  
**HIGH EFFICIENCY**  
**HOT DAWG MODELS**

Ideal for greenhouse heating. Has adjustable horizontal deflector blades. Can be optionally furnished with added vertical blades. Operation can be automatic or manual.



Propeller Type	HD 30	HD 45	HD 60	HD 75	HD 100	HD 125
Btu/Hr Input	30,000	45,000	60,000	75,000	100,000	125,000
Btu/Hr Output	24,000	36,000	48,000	60,000	80,000	100,000
Vent Dia. (in.) *	3 or 5	3 or 5	3 or 5	3 or 5	4 or 6	4 or 6
CFM @ 70F	505	720	990	1,160	1,490	1,980
Air Temp Rise (F)	44	46	45	48	50	47
Maximum Mounting Height (ft.) **	10	10	12	14	12	16
Heat Throw (ft) **	25	27	36	38	42	56
Motor HP	1/25	1/15	1/12	1/12	1/12	1/8

**HD30AS0111 GAS 30M UNIT HEATER**

Order #: **55-003** –sold as each

**HD45AS0111 GAS 45M UNIT HEATER**

[special order item]

Order #: **55-0045** –sold as each

**HD60AS0111 GAS 60M UNIT HEATER**

Order #: **55-006** –sold as each

**HD75AS0111 GAS 75M UNIT HEATER**

Order #: **55-0075** –sold as each

**HDI00AS0111 GAS 100M UNIT HEATER**

Order #: **55-02110** –sold as each

**HDI25AS0111 GAS 125M UNIT HEATER**

Order #: **55-01125** –sold as each

**HDI25SS0111 GAS 125M SS HEATER**

[special order item]

With stainless steel heat exchanger

Order #: **55-012250** –sold as each

**HOTDAWG NG/LP CONVERSION KIT**

[special order item]

Need model # and serial # to assure proper conversion kit or for any other parts needed.

Order #: **55-3H34933-1** –sold as each

To Order Call: 405.787.4833 or 1.800.522.3376

Prices subject to change without notice

**MODINE PTP**  
**HIGH EFFICIENCY MODELS**

Modine model PTP High Efficiency heaters offer the same versatility as the HD models, but provide ratings from 150 to 400 MBH for larger heating requirements. These models include as standard a power exhauster that can be rotated up to 180 degrees, an IPI ignition system with 100% shut-off and continuous retry, totally enclosed motors, a six terminal wiring board, and many other product features that result in benefits to our customers.



Model #	Btu/hr Input	Btu/hr Output	Cfm	Air Temp Rise F	Heat Throw	Approx Shipping Weight	Vent Dia.
PTP150	150,000	120,000	2140	53	51	165	4"
PTP175	175,000	140,000	2725	48	50	210	4"
PTP200	200,000	160,000	2870	52	53	220	4"
PTP250	250,000	200,000	3995	47	62	265	6"
PTP300	300,000	240,000	4545	50	69	270	6"
PTP350	350,000	280,000	5280	50	65	310	6"
PTP400	400,000	320,000	5995	51	74	320	6"

**NATURAL GAS HIGH EFFICIENCY**

**PDP75AE0130 75M UNIT HEATER**  
**(OLDER MODEL)** [discontinued when sold]

Order #: **55-0200** –sold as each

**PTP150SS0111 150M SS UNIT HEATER**

With stainless steel heat exchanger

Order #: **55-PTP150** –sold as each

**PTP175SS0111 175M UNIT HEATER**

With stainless steel heat exchanger

Order #: **55-PTP175** –sold as each

**PTP 200SS0111 200M UNIT HEATER**

With stainless steel heat exchanger

Order #: **55-PTP200** –sold as each

**PTP250SS0111 250M SS HEATER**

With stainless steel heat exchanger

Order #: **55-PTP250** –sold as each

**PTP300SS0111 300M SS HEATER**

[special order item]

With stainless steel heat exchanger

Order #: **55-PTP300** –sold as each

**PTP350SS0111 350M UNIT HEATER**

[special order item]

Order #: **55-PTP350** –sold as each

## PROPELLER STYLE PROPANE UNIT HEATERS HIGH EFFICIENCY

All units with power venters, all PTP models have 409 stainless steel heat exchangerS.



**HD30AS012I PROPANE  
HOTDAWG 30M UNIT HEATER**  
[special order item]

Order #: **55-81030** –sold as each

**HD45AS012I PROPANE HOT DAWG 45M  
UNIT HEATER** [special order item]

Order #: **55-145** –sold as each

**HD60AS012I PROPANE HOTDAWG 60M  
UNIT HEATER** [special order item]

Order #: **55-HD60** –sold as each

**HD75AS012I PROPANE HOTDAWG 75M  
UNIT HEATER** [special order item]

Order #: **55-PV75** –sold as each

**HD100AS012I PROPANE HOTDAWG 100M  
UNIT HEATER** [special order item]

Order #: **55-01100** –sold as each

**HD100SS012I PROPANE HOTDAWG 100M  
SS HEATER** [special order item]

With stainless steel heat exchanger

Order #: **55-04105** –sold as each

**HD125AS012I PROPANE HOTDAWG 125M  
UNIT HEATER** [special order item]

Order #: **55-05130** –sold as each

**HDI25SS012I PROPANE HOTDAWG 125M  
SS HEATER** [special order item]

With stainless steel heat exchanger

Order #: **55-0122502I** –sold as each

**PTPI50SS012I PROPANE 150M SS HEATER**  
[special order item]

With stainless steel heat exchanger

Order #: **55-0150** –sold as each

**PTPI75SS012I PROPANE 175M UNIT  
HEATER** [special order item]

With stainless steel heat exchanger

Order #: **55-PRO175** –sold as each

**PTP200SS012I PROPANE 200M UNIT  
HEATER** [special order item]

Order #: **55-PTP200I** –sold as each

**PTP250SS012I PROPANE 250M UNIT  
HEATER** [special order item]

Order #: **55-PTP250PRO** –sold as each

**PTPSS012I PROPANE 300M UNIT HEATER**  
[special order item]

Order #: **55-05300** –sold as each

**PTP350SS012I PROPANE 350M UNIT  
HEATER** [special order item]

Order #: **55-PTP3502I** –sold as each

To Order Call: 405.787.4833 or 1.800.522.3376  
Prices subject to change without notice

**PROPELLER STYLE NATURAL GAS  
MODINE UNIT HEATERS  
STANDARD EFFICIENCY**

**PD30AA0111 GAS 30M  
HEATER [discontinued when sold]**

Order #: 55-01030 –sold as each



**PD75AA0130 GAS 75M UNIT HEATER**

[discontinued when sold]

Order #: 55-01075 –sold as each

**BLOWER STYLE  
HEATERS & ACCESSORIES**

**BDP150AE0130 GAS 150M HEATER**

[special order item]

Order #: 55-07150 –sold as each

**BD/BDP 150 DISCHARGE TRANSITION**

[special order item]

Square to round converter box to accept 18" convection tube

Order #: 55-61150 –sold as each

**BDP200SE0130 GAS 200M HEATER**

[special order item]

With stainless steel heat exchanger

Order #: 55-011705 –sold as each

**BD/BDP200 DISCHARGE TRANSITION**

[special order item]

Square to round converter box to accept 18" convection tube

Order #: 55-01170 –sold as each

**BV350AE0130 GAS 350M HEATER**

[product discontinued when sold]

Order #: 55-02195 –sold as each

**MODINE STEAM/HOT WATER  
HEATERS**

**HORIZONTAL BLOWING UNITS**

**HSB63 HORIZONTAL HOT WATER  
HEATER [special order item]**

These units provide 52,500 to 63,000 BTU/hour steam & 37,900 to 45,600 BTU/hour using hot water

Order #: 55-63S01 –sold as each

**HC86-01 HORIZONTAL HOT WATER  
HEATER [special order item]**

These units provide 61,500 to 86,000 BTU/hour steam & 44,600 to 60,200 BTU/hour using hot water

Order #: 55-HC86-01 –sold as each

**HSB108 HORIZONTAL HOT WATER  
HEATER [special order item]**

These units provide 86,500 to 108,000 BTU/hour steam & 66,100 to 83,700 BTU/hour using hot water

Order #: 55-108 –sold as each

**HSB165 HORIZONTAL HOT WATER  
HEATER [special order item]**

These units provide 143,000 to 165,000 BTU/hour steam & 113,200 to 130,900 BTU/hour using hot water

Order #: 55-HSB165 –sold as each

## VERTICAL BLOWING UNITS

### **V42S01 VERTICAL HOT WATER HEATER**

[special order item]

These units provide 33,000 to 42,000 BTU/hour steam & 23,000 to 30,100 BTU/hour using hot water

Order #: **55-81225** –sold as each

### **V78 VERTICAL HOT WATER HEATER**

[special order item]

These units provide 62,000 to 78,000 BTU/hour steam & 43,600 to 57,000 BTU/hour using hot water

Order #: **55-V78S01** –sold as each

### **TR-I TRUNCONE F/V-42TO V-95 HOT WATER HEATERS** [special order item]

Cone to hang under vertical hot water heaters to diffuse or deflect heat around greenhouse

Order #: **55-23115** –sold as each

### **PIPE HANGER ADAPTER KIT FOR VERTICAL HOT WATER HEATERS**

[special order item]

Used to mount or suspend vertical hot water heaters

Order #: **55-23128** –sold as each

## MODINE ELECTRIC HEATERS



Recommended for use only when gas or propane not available since electricity is most expensive fuel to operate. Electric unit heaters have lower installation costs and are easier to install, requiring no venting, piping, valves, traps, etc. but cost more to operate.

### **HER 50 ELECTRIC HEATER 17,100 BTU/HR**

[special order item]

240 volt, 5.0 kilowatts

Order #: **55-210501** –sold as each

### **HER 100 ELECTRIC HEATER 34,100 BTU/HR**

[special order item]

240 volt, 10 kilowatts

Order #: **55-01105** –sold as each

### **HE UNIT MOUNT THERMOSTAT**

[special order item]

Thermostat to mount right on heater to control the on/off cycles of that electric heater.

Order #: **55-907** –sold as each

### **SUMMER-WINTER TOGGLE SWITCH**

[special order item]

Manual switch to allow fan operation for air circulation separate from when heater is on.

Order #: **55-908** –sold as each

To Order Call: 405.787.4833 or 1.800.522.3376

*Prices subject to change without notice*

**HOLLAND HEATERS**

**HD256 HOLLAND GAS 256M HEATER** [special order item]

These units are known for their economical and clean operation. CO2 enrichment is an added feature of the Holland Heaters. All models have integrated connections for control by either thermostat or computer.



Order #: **55-01225** –sold as each

**SOUTHERN BURNERS**

Great open flame heaters for hobby greenhouses or under draped benches in propagating areas.

**AUTOMATIC C-I HEATER** [special order item]

The Model C-I Unit Heater is an open flame heater that does not need to be vented. Although it does require a fresh or combustible air intake from the outside of the greenhouse. The C-I is round in design-12.5 inches in diameter and 22 inches tall, constructed of non-rusting mill polished aluminum shell supporting a stainless steel burner rated at 20,000 BTU input.



Order #: **55-800** –natural gas –sold as each

Order #: **55-802** –propane –sold as each

**AUTO A-I VENTED HEATER**

The Model A-I Unit Heater is an enclosed flame heater that requires venting to the outside of the greenhouse. It also requires a fresh or combustible air intake from the outside of the greenhouse. The A-I is square in design-16.25 inches wide, 17.5 inches deep and 25 inches tall, constructed of a non-rusting, mill polished aluminum outer shell, supporting a 24 gauge aluminized steel firebox with vertical flues for maximum air circulation with a stainless steel enclosed burner rated at 25,000 BTU input. This heater must be vented with a 3 inch vent pipe for proper draft. Vent pipe, flashing and raincap are not included.



Order #: **55-801** –natural gas –sold as each

Order #: **55-803** –propane –sold as each [special order item]

**PORTABLE HEATERS**

**PROPANE CONVECTION HEATER**

Portable and adjustable heater to provide 75 to 250 M BTU per hour off propane tank.

Order #: **55-20427** –sold as each

**MILKHOUSE HEATER DAYTON 120V**

[special order item]



Small plug in heater to provide 2 levels of heat-4,436BTU from 1,300 watts on low or 5,120 BTU from 1,500 watts on high. Controlled with 1 to 10 manually set dial built into unit. 120 volt, 12.5 amps, tipover switch, power indicator with resettable thermal switch, 3-prong NEMA plug and thermal alarm.

Order #: **55-20934** –sold as each

**HEATER ACCESSORIES**

**3/4" UNIVERSAL GAS VALVE 24V**

[special order item]

Combination gas valve; Coil voltage: 24 VAC; Inlet/Outlet: 3/4 x 3/4 inches; BtuH capacity: 280,000; Gas type: natural/liquefied petroleum; side traps; inlet pressure tap; Low current: 0.23 Amp.

Order #: **55-20402** –sold as each

**3/4" UNIVERSAL GAS VALVE 24V**

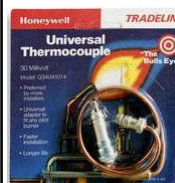
[special order item]

Combination gas valve; Coil voltage: 24 VAC; Inlet/Outlet: 1/2 x 3/4 inches; BtuH capacity: 230,000; Gas type: natural/liquefied petroleum; side taps; Low current: 0.23 Amp with 1/2" reducer bushing.



Order #: **55-20725** –sold as each

**36" UNIVERSAL THERMOCOUPLE**



Thermocouple; Length: 36 inches; universal adapter; stainless steel tip; outer jacket. To replace thermocouple on standing pilot heaters with valve to thermocouple distance of 36" or less.

Order #: **55-820142** –sold as each



## **48" UNIVERSAL THERMOCOUPLE**

Thermocouple; Length: 48 inches; universal adapter; stainless steel tip. To replace thermocouple on standing pilot heaters with valve to thermocouple distance of 48" or less.

Order #: **55-820337** –sold as each

## **3" DOUBLEWALL HEATER** **VENT STACK**

Used to vent gas or propane unit heaters that require 3" exhaust pipe stack.

### **3" X 18" D.W. VENT PIPE** [special order item]

Order #: **55-9318** –sold as each

### **3" X 2' D.W. VENT PIPE**

Order #: **55-9320** –sold as each

### **3" X 3' D.W. VENT PIPE**

Order #: **56-33** –sold as each

### **4' X 3" D.W. VENT PIPE** [special order item]

Order #: **55-9420** –sold as each

### **3" D.W. 90 DEGREE ELBOW**

Order #: **56-9003** –sold as each

### **3" D.W. 45 DEGREE ELBOW**

[special order item]

Order #: **55-9322** –sold as each

### **3" DOUBLE WALL VENT TOP**

Order #: **56-30** –sold as each

### **3" D.W. ADJUSTABLE ROOF FLASHING**

[special order item]

Order #: **55-9319** –sold as each

## **4" DOUBLEWALL HEATER** **VENT STACK**

Used to vent gas or propane unit heaters that require 4" exhaust pipe stack.

### **4" X 2' D.W. VENT PIPE**

Order #: **55-9402** –sold as each

### **4" X 3' D.W. VENT PIPE**

Order #: **55-9403** –sold as each

### **4" X 4' D.W. VENT PIPE**

Order #: **56-9404** –sold as each

### **4" X 5' D.W. VENT PIPE**

Order #: **56-9405** –sold as each

### **4" D.W. 90 DEGREE ELBOW**

Order #: **55-9490** –sold as each

### **4" D.W. VENT TOP**

Order #: **55-9413** –sold as each

### **4" D.W. DRAFTHOOD CONNECTOR**

[special order item]

Order #: **55-9404** –sold as each

To Order Call: 405.787.4833 or 1.800.522.3376

*Prices subject to change without notice*



**5" DOUBLEWALL HEATER  
VENT STACK**

Used to vent gas or propane unit heaters that require 5" exhaust pipe stack.

**12" X 5" D.W. VENT PIPE**

Order #: 55-9500 –sold as each

**2' X 5" D.W. VENT PIPE**

Order #: 55-95025 –sold as each

**3' X 5" D.W. VENT PIPE**

Order #: 55-9503 –sold as each

**4' X 5" D.W. VENT PIPE [special order item]**

Order #: 55-9504 –sold as each

**5' X 5" D.W. VENT PIPE**

Order #: 55-9505 –sold as each

**5" D.W. 90 DEGREE ELBOW**

Order #: 55-9590 –sold as each

**5" D.W. VENT TOP**

Order #: 55-9501 –sold as each

**5" D.W. DRAFT HOOD CONNECTOR**

[special order item]

Order #: 55-9502 –sold as each

**6" DOUBLEWALL HEATER  
VENT STACK**

Used to vent gas or propane unit heaters that require 6" exhaust pipe stack.

**12" X 6" D.W. VENT PIPE [special order item]**

Order #: 32-063 –sold as each

**12" X 6" DW ADJUSTABLE VENT PIPE**

[special order item]

Order #: 32-06012 –sold as each

**18" X 6" D.W. VENT PIPE [special order item]**

Order #: 55-9618 –sold as each

**2' X 6" D.W. VENT PIPE [special order item]**

Order #: 55-9602 –sold as each

**3' X 6" D.W. VENT PIPE**

Order #: 55-9603 –sold as each

**4' X 6" D.W. VENT PIPE**

Order #: 55-9604 –sold as each

**5' X 6" D.W. VENT PIPE [special order item]**

Order #: 55-96051 –sold as each

**6" D.W. 90 DEGREE ELBOW**

Order #: 55-9690 –sold as each

**6" D.W. 45 DEGREE ELBOW [special order item]**

Order #: 32-062 –sold as each

**6" D.W. VENT TOP**

Order #: 55-9613 –sold as each

**6" D.W. DRAFT HOOD CONNECTOR**

[special order item]

Order #: 55-9601 –sold as each

## 7" DOUBLEWALL HEATER VENT STACK

Used to vent gas or propane unit heaters that require 7" exhaust pipe stack.

### **2' X 7" D.W. VENT PIPE**

Order #: 55-914 –sold as each

### **3' X 7" D.W. VENT PIPE**

Order #: 55-917 –sold as each

### **4' X 7" D.W. VENT PIPE**

Order #: 55-9704 –sold as each

### **5' X 7" D.W. VENT PIPE**

Order #: 55-9141 –sold as each

### **7" D.W. 90 DEGREE ELBOW**

Order #: 55-915 –sold as each

### **7" D.W. DRAFT HOOD CONNECTOR**

Order #: 55-916 –sold as each

### **7" D.W. VENT TOP [special order item]**

Order #: 55-9713 –sold as each

## 8" DOUBLEWALL HEATER VENT STACK

Used to vent gas or propane unit heaters that require 8" exhaust pipe stack.

### **2' X 8" D.W. VENT PIPE [special order item]**

Order #: 55-9802 –sold as each

### **3' X 8" D.W. VENT PIPE [special order item]**

Order #: 55-9803 –sold as each

### **4' X 8" D.W. VENT PIPE**

Order #: 55-9890 –sold as each

### **5' X 8" D.W. VENT PIPE**

Order #: 55-9805 –sold as each

### **8" D.W. 90 DEGREE ELBOW**

[special order item]

Order #: 55-9804 –sold as each

### **8" D.W. VENT TOP [special order item]**

Order #: 55-9802 –sold as each

### **8" D.W. DRAFTHOOD CONNECTOR**

[special order item]

Order #: 55-9801 –sold as each

### **8" D.W. WALL THIMBLE [special order item]**

Order #: 55-9821 –sold as each

### **8" D.W. STORM COLLAR [special order item]**

Order #: 55-9820 –sold as each

Order #: 30-1332 –sold as each

## HEATER VENT STACK ACCESSORIES

### **4-7" MASTERFLASH FLASHING**

[special order item]

Flexible aluminum bottom plate to mount on flat or corrugated glazing with black rubber round pyramid with ridges at different pipe sizes to cut to size to seal around heater stack at roof or wall penetration.

Order #: **56-4510** –sold as each

### **12" X 12" HEATER STACK WALL PLATE**

Aluminum plates so you can cut hole for heater stack to penetrate and then install 2 plates at wall penetration for heater stack—one inside and one outside of wall. Cut hole in glazing at least one inch larger on all sides to allow separation from stack required by code and then use wall plates to snug to stack to cover gap and out over greenhouse glazing. Also available with precut holes for 3", 4", 5" or 6" Doublewall stacks.

Order #: **55-1212** –sold as each

Order #: **55-121203** –with precut hole for 3"

DW stack – sold as each

Order #: **55-121204** –with precut hole for 4"

DW stack – sold as each

Order #: **55-121205** –with precut hole for 5"

DW stack – sold as each

Order #: **55-121206** –with precut hole for 6"

DW stack – sold as each

## EQUIPMENT HANGING

### ALL THREAD

Used to suspend unit heaters, fanjets or other equipment from greenhouse frame

### **3/8" X 3' GALVANIZED ALL THREAD**

Order #: **55-0383** –sold as each

### **1/2" X 12' GALVANIZED ALL THREAD**

Order #: **55-21212** –sold as each

## CO2 BURNER

### **JOHNSON CO2 GENERATOR**

[special order item]

Open flame inside round metal cabinet to burn natural gas or propane to create carbon dioxide while also providing small amount of heat.

Order #: **30-1332** –sold as each

### **TRANSFORMER FOR JOHNSON CO2 BURNER** [special order item]

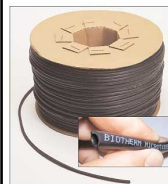
To reduce voltage from 120 volt to 24 volt to allow low voltage control of unit.

Order #: **30-1333** –sold as each

## MICROTUBE HEATING SYSTEM

### COMPONENTS

#### **1000' MICROTUBE EPDM TUBING**



The tubing can be placed on top of greenhouse benches, below expanded metal benches, on the ground for bedding plants, or buried in media beds for propagating woody ornamentals. Conceive an application and Bio-Therm tubing is up to the task. This high performance tubing is formulated to last, UV and chemical resistant, will handle foot and small cart traffic, warranted for 10 years—formulated to last for 50 years.

Order #: **552105** –per roll

#### **MICROTUBE WEDGELOCK "L" FITTING**



For manifolds or headers installed at the end of a bench/bed. Recommended for benches under 50' in length.

Order #: **56-100** –10 per package

#### **MICROTUBE "T" FITTING**



For manifolds or headers installed in center of a bench/bed. Sometimes called center-fed or butterfly headers. Recommended for benches over 50'.

Order #: **56-10011** –10 per package

## MICROTUBE SPLICE UNIONS

Used for tubing connection, in a new installation or to repair a tube in an existing system.

Order #: **55-99** –10 per package

## MICROTUBE TYPE “B” HERBI CLAMPS

Secures BioTherm micro tubing to “L” or “T” fittings. Nylon “66” compound lasts for many years in the greenhouse heat environment. Holds tight with “Double Serrated” jaw teeth.

Order #: **55-98** –10 per package

## MICROTUBE GOOF PLUG

In case you need to build your own manifolds and drill one too many holes, “Oh no, I goofed” —we have the solution.



Order #: **552027** –10 per package

## MICROTUBE GRABBER-TRAK PER LINEAR FOOT

Grabber-Trak acts as the guide for the BioTherm tubing, anchoring it in the best position possible. Grabber-Trak is made of a leading edge thermoplastic with a life expectancy of 50 years. It’s “L” shape provides ample space for staples, nails, or screws to attach it to bench frame. The “foot” is serrated, so adhesives can be used to attach it to greenhouse metal frame benches. Able to withstand temperatures up to 240 degrees and highly chemical resistant, Grabber-Trak is the answer to almost any tubing placement problem. With capabilities of spacing tubing in 1/2” increments, it is adaptable to any installation.

Order #: **55-971** –per linear foot

## BRASS HOSE BARB FOR 1/8”/EPDM TUBE

Brass adapters for building bottom heat headers. These are for header to hose connection.

Order #: **55-97** –25 per package

## QUART HEATING WATER TREATMENT

[special order item]

Solution to treat closed loop recirculated water in Biotherm or other hot water heating systems.

Order #: **552023** –sold as each

## MEGATUBE HEATING SYSTEM COMPONENTS

### 500’ ROLL MEGATUBE F/HEATING



[special order item]

This high performance tubing is formulated to last, UV and chemical resistant, will handle foot and small cart traffic, warranted for 10 years—designed to last for 50 years. Used in engineered MegaTube Systems on ground, in concrete slab and sometimes on rolling bench ap-

plications.

Order #: **55-995** –sold as roll

## WADSWORTH COMPUTER CONTROLS

### ENVIROSTEP COMPUTER CONTROL



SYSTEM [special order item]

Day, night and DIF setpoints, 12 programmable control relays, 7 days data in 15 minute increments, keypad for programming, alarm output comes with aspirated sensor. With optional web package can be tied into remote PC with up to 127 systems.

Order #: **554021** –sold as each

### VERSISTEP COMPUTER CONTROL



SYSTEM [special order item]

Controls 1 to 8 zones with day, night, DIF setpoints, 32 input channels, 24 programmable relay outputs. Includes aspirated temperature and humidity sensor, alarm outputs, keypad for programming and saves history in 15 minute increments.

Order #: **554023** –sold as each

### VERSISTEP SATELLITE CONTROL

[special order item]

Adds 16 additional outputs to be controlled by main Veristep controller. 1 satellite increases main system from 24 to 40 outputs and 2 satellites would increase outputs to 56.

Order #: **5540231** –sold as each

To Order Call: 405.787.4833 or 1.800.522.3376

Prices subject to change without notice

## WADSWORTH MULTI-STAGE TEMPERATURE CONTROLLERS

### **STEP-UP DIGITAL CONTROL SYSTEM**

[special order item]

Features 3 set points for day, night and DIF. Allows digital control of up to four cooling stages, a set point and two heating stages with aspirated sensor. Features digital display, turn knob control, save and help buttons and timed overrides.



Order #: **55-2802** –sold as each

### **CUSTOM RELAY PANEL [special order item]**

Panel fabricated to include prewired contactors/relays for your specific equipment to be controlled by a Wadsworth controller.

Order #: **55-0999** –sold as each

### **CUSTOM WIRING DIAGRAM**

[special order item]

Wiring diagram prepared for your specific operation to speed up installation of your Wadsworth control system and insure proper operation.

Order #: **55-0998** –sold as each

### **MINI STEP 4 STAGE CONTROL SYSTEM**

[special order item]

Basic staged controls for small freestanding greenhouses. Superior to multiple thermostats that can compete with one another. Factory programmed with one heat and three cooling stages to adjust from set point you set on key pad. Ships prewired to basic power relay panel.



Order #: **55-4000** –sold as each

### **ELECTRONIC 4 STAGE THERMOSTAT CONTROL**

Use as four stages of cooling, four stages of heating, two stages of each or some other combination. LCD display of current temperature and with keypad for easy programming.

Order #: **55-E1608** –sold as each

## PARTS FOR WADSWORTH MULTI STAGE CONTROLLERS

### **M4015 REPLACEMENT ASPIRATOR ONLY WITHOUT CABLE [special order item]**

Available while parts supply lasts.

Order #: **55-4015** –sold as each

### **CABLE FOR WADSWORTH ASPIRATOR G-0404 [special order item]**

Order #: **55471** –sold per foot

### **E0804 REPLACEMENT ASPIRATOR FAN FOR STEP 50 [special order item]**

Available while parts supply lasts.

Order #: **55452** –sold as each

### **S-9316 STEP 50 ASPIRATOR DC CIRCUIT BOARD ASSEMBLY REPLACEMENT**

[special order item]

Available while parts supply lasts

Order #: **55-9316** –sold as each

### **E-0314 CUBE RELAY (SPDT) FOR STEP 50 [special order item]**

There are six of these cube relays in the bottom of every Step 50. Available while parts supply lasts

Order #: **554553** –sold as each

### **DIN RAIL #S5220 KIT W/6 RELAYS [special order item]**

To replace all six HE-0314 cube relays and sockets in bottom of older Step 50 controller. Available while parts supply lasts

Order #: **55-S5220** –sold as each

### **S-9314 STEP 50 REPLACEMENT MAIN CIRCUIT BOARD [special order item]**

Available while parts supply lasts

Order #: **55447** –sold as each



## BARTLETT

### TEMPERATURE CONTROLLERS

These very nice digital controls feature 4 stages of cooling, 2 HAF or circulation stages and 2 heating stages with day, night and DIF setpoints. LED display, easy programming, alarm output, 24 hour clock, 7 day record keeping, automatic or manual operation. There are options to control shade curtains, lights, irrigation or misting systems and computer interface software to tie the units into a remote computer.



#### **GHK 12X2 DIGITAL CONTROLLER F/I SPEED MOTORS** [special order item]

With relay box and wiring diagrams for houses cooled by louvers and fans.

Order #: **55-AEZYWY** –sold as each

#### **GHK 12X12 DIGITAL CONTROLLER #AE24C2 F/2 SPEED MOTORS** [special order item]

With relay box and wiring diagrams for houses cooled by louvers and fans.

Order #: **55-GHK12** –sold as each

#### **GHK 12X2 DIGITAL CONTROLLER ONLY** [special order item]

Without relay box and wiring diagrams for houses cooled by louvers and fans.

Order #: **55-GHK12X2** –sold as each

#### **BARTLETT CONTROL LIGHT RELAY** [special order item]

Extra relay to allow control of greenhouse lighting system.

Order #: **55-LIGHK12** –sold as each

## SINGLE STAGE THERMOSTATS

### SINGLE STAGE DIGITAL J&D/PHASON THERMOSTAT



The VC141 is our best single stage thermostat with digital display and remote sensor is ideal for controlling exhaust fans, recirculation fans, inlets, cooling devices and heaters. It has a plastic NEMA 4 housing, adjustable temperature differential and is programmable with a quick touch of a button. Use for heating or cooling. Remote sensor with 8' cable. Digital temperature display. Touch pad control settings. Settings retained during power failure. Adjustable differential 1 F to 30 F. Temperature range 30 F to 220 F.

Order #: **55-VC0141** –sold as each

### T41 SINGLE STAGE DRAMM THERMOSTAT



Dramm Microfan mechanical thermostats are designed with rough environments in mind. These high quality thermostats are perfect for any situation where harsh conditions may damage less durable equipment. Protected in sealed PVC housings, these thermostats offer stainless steel coiled sensors and accuracy to 1 degree C. The SPDT (Single Pole Double Throw) switch contact (one set of contacts open on temperature rise as the other set closes) is a no load contact and offers superior accuracy. Designed to be placed in the area to be controlled, the Dramm Microfan Thermostats are perfect for heating, cooling, and ventilation control in greenhouses, factory building, warehouses, farms or anywhere requiring accuracy in control. This thermostat can be used for either heating or cooling control depending on the terminals connected.

Order #: **55-41** –sold as each

### SINGLE STAGE THERMOSTAT W/8' CORD



The VC15 single stage J&D thermostats can be used for heating or cooling. The plastic NEMA 4 housing with stainless steel sensor is ideal for any harsh environment or high moisture applications. Stainless steel sensor. Comes with water proof wire connectors. Works for heating or cooling. CSA NRTL UL equipment. One year warranty. 12 amps. Maximum ambient 120 F or 50 C.

Temperature range: 32 F to 104 F, 0 C to 40 C.

Order #: **55-VC15** –sold as each

To Order Call: 405.787.4833 or 1.800.522.3376

Prices subject to change without notice

## TWO STAGE THERMOSTATS

### **TWO STAGE DIGITAL J&D/PHASON THERMOSTAT**

The two stage thermostat with digital display and remote sensor is ideal for controlling exhaust fans, recirculation fans, inlets, cooling devices and heaters. The control can be used for two stages of cooling, two stages of heating, or one stage cooling plus one stage heating. It can also operate two speed fan motors. Easy to program with adjustable differential.



Order #: **55-VC241** –sold as each

### **T42 TWO STAGE DRAMM THERMOSTAT**

This thermostat can be used for either two stages of heating, two stages of cooling or one stage of heat and one stage of cooling control depending on the terminals connected.



Order #: **55-042** –sold as each

### **VARIABLE DIGITAL TEMPERATURE CONTROL** [discontinued when sold]

Phason brand to control up to 10 amps.

Order #: **55-VTC-1D** –sold as each

## FAN SPEED CONTROLS

### **H115 MANUAL HAF SPEED CONTROL**

Schaefer's manual controllers can be used on most Schaefer single speed fans to adjust air flow from 20% to 100% of fan output capacity. They also have the ability to turn the fan completely off. Supplied in water tight electrical enclosure with approved connectors. 115 VAC, 5 amps. Use H-115 on smaller (12" or smaller) circulation and exhaust fans.

Order #: **55-0115** –sold as each

### **VFT130144 VARIABLE FAN SPEED CONTROL** [special order item]

J&D control to regulate variable speed motors up to 10 amps from low to high speed.

Order #: **55-130144** –sold as each

## ALARM SYSTEM COMPONENTS

### **SENSAPHONE 800 ALARM DIALER**



Unit needs phone line connection and will dial up to eight numbers when temperature, power outage or other alarm channel is activated. Cheapest insurance you can buy for your greenhouse to make you aware of temperature conditions. The 800 dialer is equipped with up to 8 alert zones and allows

for user recordable messages.

Order #: **55-1000** –sold as each

### **SENSAPHONE 1104 ALARM DIALER**

[special order item]

Dials up to 4 phone numbers based on alarm condition from 2 channels like temperature, power outage, break-in, high sound levels, battery backup, etc. When connected to a phone like it will respond to an alarm by dialing the phone numbers you have programmed. When the call is answered an alert condition message is delivered in digitized speech.

Order #: **55-1101** –sold as each

### **50' ACCESS WIRE FOR SENSAPHONE**

Wire to connect sensors and switches to Sensaphone

Order #: **55-1102** –sold as each

### **MAGNETIC REED SWITCH F/ SENSAPHONE**

2 part switch to put by doors, windows, etc. to cause alarm when connection is broken.

Order #: **55-1103** –sold as each



## ALARM SYSTEMS & ACCESSORIES

### **WINLAND TEMP ALERT TA-I**

The economical TA-I Mechanical Temp Alert adds reliable and economical temperature protection to your residential or commercial security system.

The design can be used anywhere the monitoring of high and low temperature limits is critical. The unit measures temperatures from -30 to +130 degrees F (-34 to +54 C). Simply select an acceptable temperature range by setting the adjustable high and low limits. If temperatures in the monitored area rise above or fall below the set limits, the temperature indicator contacts one of the preset limit arms providing a dry contact closure, which working like a switch can be used to turn on an existing alarm panel, telephone communicator, or wireless alarm system.



Order #: **55-1014** –sold as each

### **RECHARGEABLE HORN ALARM**

[special order item]

Install with Temp Alert or Sensaphone to sound loud audible horn when greenhouse is in alarm mode for temperature or other condition.

Order #: **55-10681** –sold as each

## PL GROWERS LIGHTING EQUIPMENT

### **PL 2000 400 WATT REMOTE CONVERTIBLE BALLAST** [discontinued when sold]

Advanced light fixture from Europe that can operate as either high pressure sodium or metal halide with a flip of a switch and the changing of the bulb. Specify original bulb for high pressure sodium or metal halide

Order #: **18-0920** –sold as each

### **PL 2000 400 WATT HIGH PRESSURE SODIUM FIXTURE** [special order item]

Order #: **18-090** –sold as each

### **PL 2000 400 WATT METAL HALIDE FIXTURE** [special order item]

Order #: **18-0901** –sold as each

### **PL 2000 600 WATT HIGH PRESSURE SODIUM FIXTURE** [special order item]

Order #: **18-2C600** –sold as each

### **PL 2000 1000 WATT REMOTE CONVERTIBLE BALLAST** [special order item]

Remote ballast to reduce light frame shadow overhead and relocate ballast heat to a wall or under a bench. Specify original bulb for high pressure sodium or metal halide

Order #: **18-2010** –sold as each

### **PL 2000 1000 WATT HIGH PRESSURE SODIUM FIXTURE** [special order item]

Order #: **18-PL2000** –sold as each

### **PL 2000 1000 WATT METAL HALIDE FIXTURE** [special order item]

Order #: **18-2000/M100** –sold as each

## LIGHT MOUNTING EQUIPMENT

### **6'6" LONG CORD SET: 120V**

[special order item]

Can be ordered on fixtures so they are ready to plug in.

Order #: **18-094** –sold as each

### **SINGLE FIXTURE MOUNTING HARDWARE**

[special order item]

Kit of chain and clips to hang individual fixtures above crop.

Order #: **18-093** –sold as each

### **20' STEEL "U" LIGHT MOUNTING TRACK**

Hang overhead in greenhouse to support lights above benches or crops.

Order #: **18096** –sold as each

### **U-TRACK COUPLING FOR PL LIGHT**

Coupling to join multiple "U" tracks together.

Order #: **18097** –sold as each

To Order Call: 405.787.4833 or 1.800.522.3376

*Prices subject to change without notice*

**PL TRUSS MOUNTING "C" BRACKET  
(#C414)**

Two are required per fixture or ballast in most applications.

Order #: **18-092** –sold as each

**PARSOURCE GROWERS  
LIGHTING EQUIPMENT**

**400 WATT PARSOURCE HIGH PRESSURE  
SODIUM LIGHT W/ REMOTE  
BALLAST AND 8' POWER  
CORD [special order item]**

Order #: **18-55190** –sold as each



**400 WATT PARSOURCE HIGH PRESSURE  
SODIUM LIGHT W/  
STANDARD BALLAST AND  
REFLECTOR [special order item]**

Order #: **18-55190A** –sold as each



**BEAM FLICKER 400 WATT 120V  
[special order item]**

Rotating light for daylength or photoperiod applications. One fixture can provide daylength lighting in 30' x 96' greenhouse.

Order #: **18-58301** –sold as each



**REPLACEMENT LIGHT BULBS**

**400W PHILLIPS METAL HALIDE (MH) BULB  
[special order item]**

Order #: **18-400** –sold as each

**430 WATT PHILLIPS AGRO HIGH  
PRESSURE SODIUM (HPS) BULB**

Order #: **18-401** –sold as each

**1000 WATT HIGH PRESSURE SODIUM  
(HPS) BULB [special order item]**

Order #: **18-780** –sold as each

**1000W METAL HALIDE BULB  
[special order item]**

Order #: **18-BT371000** –sold as each