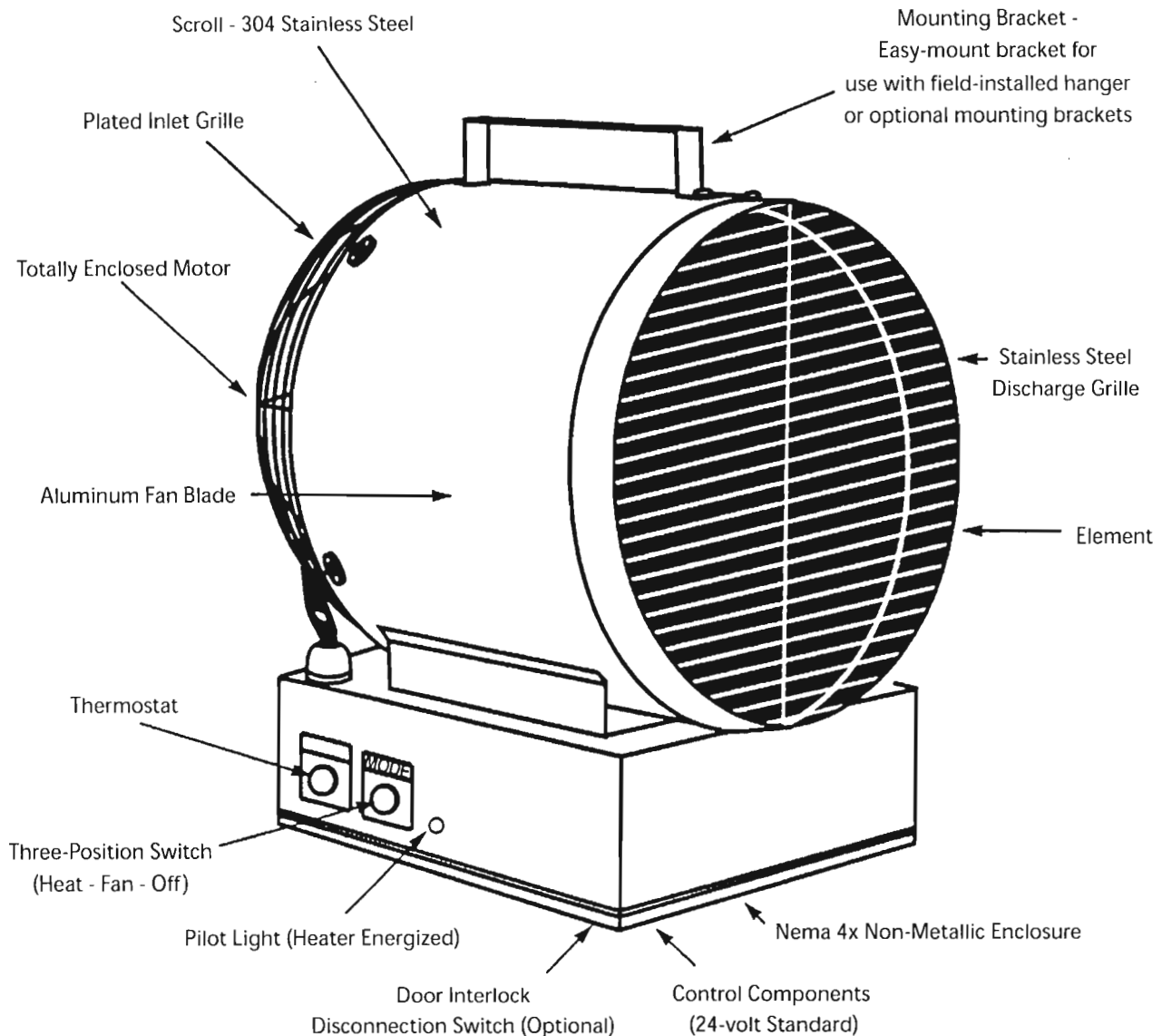




**Brasch Washdown Unit Heaters**

# BRASCH WASHDOWN UNIT Heaters

## for Corrosion-Resistant Applications



Rugged construction, stainless steel enclosure for use in wet\* and corrosive\* atmospheres (non-hazardous locations).

\*Refer to installation and application data for applicable environments or consult factory.

The BWUH unit heaters are electric unit heaters constructed for use in areas that require washing or hosing of equipment due to dirty or dusty industrial environment in non-hazardous locations. The totally-enclosed watertight construction made

with corrosion-resistant material make the BWUH Series ideal for industrial heating applications. The BWUH Series is made with all built-in controls and safety temperature controls wired in a non-metallic Nema 4x control panel with single-point power connections.



## Standard Features:

- Up to 48 KW
- Up to 400 Volts
- Disconnect switch with enclosure interlock
- Heavy-duty 304 stainless steel shroud
- Nema 4x non-metallic control panel
- 24-volt transformer and control circuit
- 3-position switch (off - heat - fan)
- Capillary thermostat with stainless steel sensor
- Automatic reset thermal cutout
- Totally enclosed UL Listed motor
- Pilot light (power on indicator)
- Chrome-plated finned tubular element
- Control panel on bottom of unit for ease in installation and service
- Single-point power connection
- Meets all ETL, NEC, and OSHA requirements (when installed as directed)
- Corrosion-resistant in high humidity and water-saturated areas (for areas where corrosion-resistance is needed in non-hazardous areas, contact factory for heater applications and optional materials). ABS type approved.

## Options

- Teflon anodized aluminum fan blade (3-30 kw only)
- Remote 24-volt thermostat
- Stainless steel wall/ceiling mounting bracket (3.3-15 kw)
- Cast iron painted mounting bracket available on all units for wall/ceiling or pipe mounting
- Hanging bracket for use with threaded rod

Powder Coated, Epoxy Painted, Stainless Steel Model Available. Monel Element Available. Consult Factory.

## Sample Specification

The electric unit heater shall be Brasch BWUH Series rated for washdown applications and shall include built-in controls. Heaters shall be ETL Listed assemblies containing all limits and controls as required by ETL Semko. specifications. Controls shall be housed in a Nema 4x non-metallic control enclosure fixed to bottom of unit heater. The control enclosure will open from bottom for ease of installation and service. The control enclosure will include contactors, 24-volt transformer, fusing (NEC required) pilot light (power on), thermostat and 3-position switch (heat - off - fan).

The heater scroll will be 16 gauge 304 stainless steel with 304 stainless steel outlet louvre. The inlet grille will be chrome plated.

The motor shall be totally enclosed, permanently lubricated, designed to resist moisture and corrosion, and factory-wired to Nema 4x enclosure.

Single point line voltage connection available for 208, 240, 277, and 480 volt service.

Door interlock disconnect on Nema 4x control enclosure shall be factory installed and wired.

Heavy-duty heating elements factory wired and sealed for washdown application shall be stainless steel for corrosion resistance.

## Washdown Unit Heater

Catalog Number	KW	BTU HR	Heater Volts	Phase	Standard Control Voltage	Max. Amps	Motor Voltage	HP	RPM
BWUH3.3-2081	3.3	11200	208	1	24	15.9	208	1/30	1550
BWUH3.3-2083	3.3	11200	208	3	24	19.2	208	1/30	1550
BWUH3.3-2401	3.3	11200	240	1	24	13.7	240	1/30	1550
BWUH3.3-2403	3.3	11200	240	3	24	7.9	240	1/30	1550
BWUH3.3-2771	3.3	11200	277	1	24	11.9	277	1/30	1550
BWUH3.3-4803	3.3	11200	480	3	24	4.0	480	1/30	1550
BWUH5.0-2081	5.0	17100	208	1	24	24.1	208	1/30	1550
BWUH5.0-2083	5.0	17100	208	3	24	13.9	208	1/30	1550
BWUH5.0-2401	5.0	17100	240	1	24	20.8	240	1/30	1550
BWUH5.0-2403	5.0	17100	240	3	24	12.1	240	1/30	1550
BWUH5.0-2771	5.0	17100	277	1	24	18.1	277	1/30	1550
BWUH5.0-4803	5.0	17100	480	3	24	6.1	480	1/30	1550
BWUH7.5-2081	7.5	25600	208	1	24	36.1	208	1/30	1550
BWUH7.5-2083	7.5	25600	208	3	24	20.8	208	1/30	1550
BWUH7.5-2401	7.5	25600	240	1	24	31.3	240	1/30	1550
BWUH7.5-2403	7.5	25600	240	3	24	18.0	240	1/30	1550
BWUH7.5-2771	7.5	25600	277	1	24	27.0	277	1/30	1550
BWUH7.5-4803	7.5	25600	480	3	24	9.0	480	1/30	1550
BWUH10-2081	10.0	34130	208	1	24	47.8	208	1/30	1550
BWUH10-2083	10.0	34130	208	3	24	27.7	208	1/30	1550
BWUH10-2041	10.0	34130	240	1	24	41.2	240	1/30	1550
BWUH10-2403	10.0	34130	240	3	24	24.1	240	1/30	1550
BWUH10-2771	10.0	34130	277	1	24	36.1	277	1/30	1550
BWUH10-4803	10.0	34130	480	3	24	12.1	480	1/30	1550
BWUH15-2081	15.0	51200	208	1	24	72.1	208	1/30	1550
BWUH15-2083	15.0	51200	208	3	24	41.7	208	1/30	1550
BWUH15-2041	15.0	51200	240	1	24	62.5	240	1/30	1550
BWUH15-2403	15.0	51200	240	3	24	36.1	240	1/30	1550
BWUH15-4803	15.0	51200	480	3	24	18.1	480	1/30	1550
BWUH20-2083	20.0	68260	208	3	24	55.6	208	1/3	1625
BWUH20-2403	20.0	68260	240	3	24	48.2	240	1/3	1625
BWUH20-4803	20.0	68260	480	3	24	24.1	480	1/3	1625
BWUH25-2083	25.0	85325	208	3	24	69.5	208	1/3	1625
BWUH25-2403	25.0	85325	240	3	24	60.2	240	1/3	1625
BWUH25-4803	25.0	85325	480	3	24	30.1	480	1/3	1625
BWUH30-2083	30.0	102390	208	3	24	83.9	208	1/3	1625
BWUH30-2403	30.0	102390	240	3	24	72.3	240	1/3	1625
BWUH30-4803	30.0	102390	480	3	24	36.1	480	1/3	1625
BWUH40-4803	40.0	136520	480	3	24	46.2	480	1/3	1625
BWUH48-4803	48.0	163824	480	3	24	57.8	480	1/3	1625

KW	CFM Outlet	RPM Outlet	F° Temp Rise Outlet	Air Throw Ft.	Rec. Mtg. Height/Ft.	Weight	Mounting Bracket
3.3	400	500	26	20	6	58	A5520
5.0	400	500	40	20	6	58	A5520
7.5	400	500	60	20	6	58	A5520
10.0	700	660	45	28	6	64	A5520
15.0	700	660	45	28	6	64	A5520
20.0	1400	1000	45	35	6	158	W5550
25.0	1400	1000	56	35	6	158	W5550
30.0	1400	1000	68	35	6	158	W5550
40.0	1800	1000	70	42	6	193	W5550
48.0	1800	1000	84	42	6	193	W5550

Figure 1

Figure 2

Figure 3

Dimension Data								
Heater Size	A	B	C	D	E	F	G	H
3-7.5	12	18	19.75	15.25	16.25	6 ft.	8.00	6.00
10-15	14	19	21.75	15.25	18.00	6 ft.	8.00	6.00
20-30	16	27	28.75	19.50	17.50	6 ft.	15.50	4.50
40-48	18	31	30.75	19.50	19.50	6 ft.	21.75	2.75

### Mounting Bracket Kits

A5520  
3.3-15 kw only

Ideal for use in buildings that have substantial walls. Arm (only) can be bolted directly to structure steel.

WALL BRACKET  
MOUNTING ARM  
WALL OR STRUCTURE WMK

Simple and economical if adequate overhead structure exists. Requires 1/2" pipe, cut and threaded (not supplied).

ROOF OR OVERHEAD STRUCTURE  
1/2" PIPE (NOT SUPPLIED)  
HMK

Particularly useful in buildings with insufficient strength to use other type of mounts. Requires 3 1/2" pipe (4" O.D. - not supplied).

COLUMN STABILIZING COMPONENTS  
MOUNTING BRACKET  
ATTACHMENT ASSY.  
3 1/2" SCHEDULE 40 (PIPE) (NOT SUPPLIED)  
BASE ASSEMBLY  
PMK

### Optional - Wall Mounted Thermostat

The TW series of controls is intended for use in harsh environments. They tolerate continuous spraying with water, high humidity, airborne contaminants and moderately corrosive conditions. The nickel plated sensing bulb is attached directly to the bottom of the case where it is shielded from damage or accumulators of insulating particles. The molded Noryl case is sealed at the cover with a neoprene gasket and the adjusting knob opening is closed with a lubricated O ring. The T109 has been tested and found to meet the requirements for NEMA 4x enclosures.

High levels of accuracy and sensitivity are provided by the T109. Switching is done by heavy duty, precision, snap action switches. Setting is accomplished by rotating the adjusting knob. The dial face is printed with large contrasting numbers and letters on a lustrous background for good visibility. Force and motion for switch actuation are provided by changes in temperature expanding or contracting the fluid contained with the sensing bulb and transmitted hydraulically and through an appropriate linkage to the switch operator. Color coding clearly identifies the function of each conductor.

### Raintight Industrial Thermostat

Model	Controls	Switch Action	Operation
TA109	Heating	SPST	Opens circuit on temp rise
TD109	Heating, 2pole	2 SPST	Opens two switches on temp. rise

The T109 is available with the following characteristics: Range 40 - 100°F Differential: 2.5°F

Electrical Ratings:			
	120VAC	240VAC	277VAC
Full Load	16.0A	12.0A	10.0A
Locked Rotor	80.0A	60.0A	50.0A
Non-inductive	24.0A	25.0A	22.0A
Pilot Duty	125VA	125VA	125VA



## Limited Warranty

All Brasch Manufacturing Company, Inc. products covered in this bulletin are warranted against defects in workmanship and materials for one year from date of purchase. This warranty does not apply to damage from accident, misuse or alteration; nor where the connected voltage is more than 5% above product nameplate voltage; nor to equipment improperly installed or wired or maintained in violation of installation instructions. This warranty is valid only in the fifty states of the United States. No other written or oral warranty applies. No employee, agent, dealer or other person is authorized to extend warranty on behalf of Brasch Manufacturing Company.

The customer shall be responsible for all costs incurred in the removal or reinstallation and shipping of the product for repairs. Inoperative units should be returned to Brasch, attention of Service Manager for repair or replacement at our option. Product will be returned freight prepaid. Repair or replacement is the exclusive remedy available from Brasch who is not liable for damages of any kind, including incidental and consequential damage.



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