

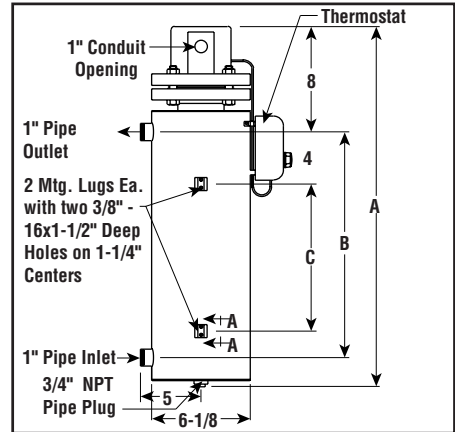
## NWHO & NWHOB

### Light & Medium Weight Oil Applications

- 3 - 10" ANSI Blind Flange Design
- 3 - 10" Carbon Steel Pipe Body, 150 Lb Construction
- 3 - 120kW
- 240 and 480V, 1 & 3 Phase
- General Purpose, Moisture Resistant/Explosion Resistant, Explosion Resistant or Moisture Resistant Terminal Enclosure
- 0.475" Dia. Steel Sheath Elements (20 - 23 W/In<sup>2</sup>)
- With & Without Side Mounted AR Thermostat (200 - 550°F)
- UL, CSA and Other Third Party Approval, Listing or Certification Available



### Dimensions (Inches) NWHO-03



*Note* — Add 2" to A dimension for E2 enclosure.

### Applications

**Light and Medium Weight Oil** — Temperature maintenance and heating of heat transfer oils. Improve flow ability of medium weight oils.

### Features

**Terminal Enclosure** — E1 General Purpose is standard. E2 Moisture Resistant/Explosion Resistant, E3 Explosion Resistant or E4 Moisture Resistant Enclosures available.

**Elements** — 0.475" diameter steel sheath elements.

**Flange** — 3 - 10" ANSI B-16.5 Blind flange with 1/2" thermowell for thermostat bulb and a 1/8" NPT threaded opening for a thermocouple or RTD.

**Vessel** — Pipe body and nozzles are ASTM A53B carbon steel pipe. The end disk is ASTM A516 Grade 70 carbon steel plate. Provided with thermal insulation and painted sheet metal jacket.

**Wiring** — Convenient field wiring terminals are provided for easy installation.

**Controls** — Series 3 and 6 stock and assembly stock heaters come equipped with side mounted thermostat. Series 18 and 27 are furnished without thermostat.

**WARNING — Hazard of Fire.** These devices function as temperature controls only. Because they do not fail-safe, an approved temperature and/or pressure safety control must be used for safe operation. Consult Controls section of this catalog.

### Specifications and Ordering Information

kW	Volts	Ckt & Phase	Dimensions (In.)			Model	Stock	PCN	Wt. (Lbs.)
			A	B	C				
<b>Series 3 — 3 inch, 150 lb carbon steel vessel — 3 steel elements (23 W/In<sup>2</sup>) with side mounted thermostat — 1" NPT pipe inlet and outlet</b>									
3	240	1-1	32-15/16	22-1/2	16-1/2	NWHO-03-003P-E1	AS	011615	70
3	240	1-3	32-15/16	22-1/2	16-1/2	NWHO-03-003P-E1	AS	011640	70
3	480	1-1	32-15/16	22-1/2	16-1/2	NWHO-03-003P-E1	AS	011674	70
3	480	1-3	32-15/16	22-1/2	16-1/2	NWHO-03-003P-E1	AS	011703	70
4.5	240	1-1	32-15/16	22-1/2	16-1/2	NWHO-03-04P5-E1	AS	011738	70
4.5	240	1-3	32-15/16	22-1/2	16-1/2	NWHO-03-04P5-E1	AS	101151	70
4.5	480	1-1	32-15/16	22-1/2	16-1/2	NWHO-03-04P5-E1	AS	011789	70
4.5	480	1-3	32-15/16	22-1/2	16-1/2	<b>NWHO-03-04P5-E1</b>	<b>S</b>	<b>101178</b>	70
6	240	1-1	42-15/16	32-1/2	26-1/2	NWHO-03-006P-E1	AS	011834	80
6	240	1-3	42-15/16	32-1/2	26-1/2	<b>NWHO-03-006P-E1</b>	<b>S</b>	<b>101274</b>	80
6	480	1-1	42-15/16	32-1/2	26-1/2	NWHO-03-006P-E1	NS	011885	80
6	480	1-3	42-15/16	32-1/2	26-1/2	<b>NWHO-03-006P-E1</b>	<b>S</b>	<b>101290</b>	80
7.5	480	1-1	55-7/16	45	39	NWHO-03-07P5-E1	AS	011930	94
7.5	480	1-3	55-7/16	45	39	NWHO-03-07P5-E1	AS	011965	94
9	240	1-1	55-7/16	45	39	NWHO-03-009P-E1	AS	011990	94
9	240	1-3	55-7/16	45	39	<b>NWHO-03-009P-E1</b>	<b>S</b>	<b>101514</b>	94
9	480	1-1	55-7/16	45	39	NWHO-03-009P-E1	AS	011279	94
9	480	1-3	55-7/16	45	39	<b>NWHO-03-009P-E1</b>	<b>S</b>	<b>101530</b>	94

**Stock Status:** S = stock AS = assembly stock NS = non-stock  
**To Order**—Specify model, volts, phase, kW, PCN and quantity.

## NWHO & NWHOB

Light & Medium  
Weight Oil Applications (*cont'd.*)

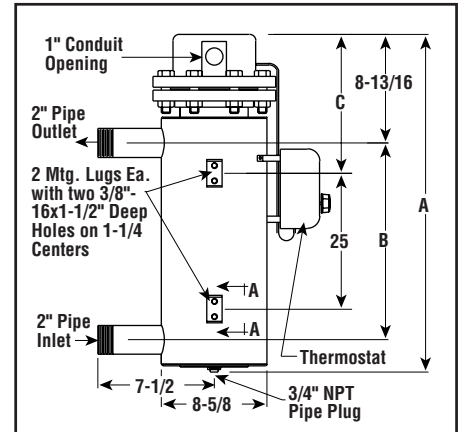
### Specifications and Ordering Information

kW	Volts	Ckt & Phase	Dimensions (In.)			Model	Stock	PCN	Wt. (Lbs.)
			A	B	C				
<b>Series 06 — 5 inch, 150 lb carbon steel vessel — 6 steel elements (23 W/in<sup>2</sup>) with side mounted thermostat — 2" NPT pipe inlet and outlet</b>									
12	240	1-3	41-3/4	30	11-3/8	NWHO-06-012P-E1	AS	101637	140
12	480	1-3	41-3/4	30	11-3/8	NWHO-06-012P-E1	AS	011560	140
15	240	1-3	48-3/4	37	14-1/8	<b>NWHO-06-015P-E1</b>	<b>S</b>	<b>101750</b>	155
15	480	1-3	48-3/4	37	14-1/8	<b>NWHO-06-015P-E1</b>	<b>S</b>	<b>101776</b>	155
20	240	2-3	60-1/4	48-1/2	20-5/8	<b>NWHO-06-020P-E1</b>	<b>S</b>	<b>101872</b>	176
20	480	1-3	60-1/4	48-1/2	20-5/8	<b>NWHO-06-020P-E1</b>	<b>S</b>	<b>101899</b>	176
25	240	2-3	73-5/8	61-7/8	27-5/16	NWHO-06-025P-E1	AS	011316	212
25	480	1-3	73-5/8	61-7/8	27-5/16	NWHO-06-025P-E1	AS	011367	212
30	240	2-3	86-5/8	74-7/8	33-7/8	NWHO-06-030P-E1	AS	011324	240
30	480	1-3	86-5/8	74-7/8	33-7/8	<b>NWHO-06-030P-E1</b>	<b>S</b>	<b>107537</b>	240
<b>Series 18 — 8 inch, 150 lb carbon steel vessel — 18 steel elements (20 W/in<sup>2</sup>) — 2-1/2" NPT - pipe inlet and outlet</b>									
30	240	3-3	53-1/4	32-11/16	29-3/16	NWHO-18-030P-E1	NS	080194	360
30	480	3-3	53-1/4	32-11/16	29-3/16	NWHO-18-030P-E1	NS	080207	360
40	240	3-3	60-1/4	39-11/16	36-3/16	NWHO-18-040P-E1	NS	080231	436
40	480	3-3	60-1/4	39-11/16	36-3/16	NWHO-18-040P-E1	NS	084005	436
50	240	3-3	67-7/8	47-5/16	43-13/16	NWHO-18-050P-E1	NS	080274	500
50	480	3-3	67-7/8	47-5/16	43-13/16	NWHO-18-050P-E1	NS	080282	500
60	240	3-3	77-3/8	56-13/16	53-5/16	NWHO-18-060P-E1	NS	080311	600
60	480	3-3	77-3/8	56-13/16	53-5/16	NWHO-18-060P-E1	NS	080320	600
70	240	3-3	86-3/8	65-13/16	62-5/16	NWHO-18-070P-E1	NS	080354	660
70	480	3-3	86-3/8	65-13/16	62-5/16	NWHO-18-070P-E1	NS	080362	660
80	240	3-3	96-3/8	75-13/16	72-5/16	NWHO-18-080P-E1	NS	080397	750
80	480	3-3	96-3/8	75-13/16	72-5/16	NWHO-18-080P-E1	NS	080400	750
<b>Series 27 — 10 inch, 150 lb carbon steel vessel — 27 steel elements (20 W/in<sup>2</sup>) — 3" NPT pipe inlet and outlet</b>									
80	240	3-3	77-9/16	52	48-1/2	NWHO-27-080P-E1	NS	095871	720
80	480	3-3	77-9/16	52	48-1/2	NWHO-27-080P-E1	NS	095898	720
90	240	3-3	81-9/16	56	52-1/2	NWHO-27-090P-E1	NS	095919	735
90	480	3-3	81-9/16	56	52-1/2	NWHO-27-090P-E1	NS	095935	735
100	480	3-3	87-9/16	62	58-1/2	NWHO-27-100P-E1	NS	095951	750
120	480	3-3	97-9/16	72	68-1/2	NWHO-27-120P-E1	NS	095994	765

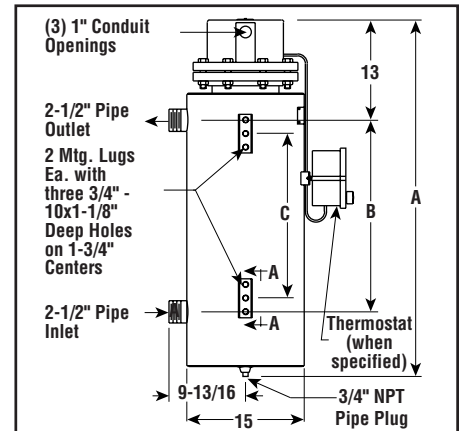
**Stock Status:** S = stock AS = assembly stock NS = non-stock  
**To Order**—Specify model, volts, phase, kW, PCN and quantity.  
**Note** — Refer to the Controls section for side mounted controls or control panels.

### Dimensions (Inches)

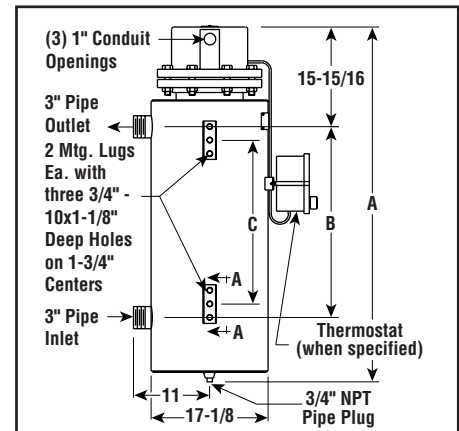
#### NWHO-06



#### NWHO-18



#### NWHO-27



## NWHO & NWHOB

Light & Medium Weight  
Oil Applications (*cont'd.*)

### Specifications and Ordering Information

kW	Volts	Ckt & Phase	Dimensions (In.)			Model	Stock	PCN	Wt. (Lbs.)
			A	B	C				
<b>Series 18 - 8 inch, 150 lb carbon steel vessel — 18 baffled steel elements (20 W/in<sup>2</sup>) — 2-1/2" NPT pipe inlet and outlet</b>									
30	240	3-3	53-1/4	32-11/16	29-3/16	NWHOB-18-030P-E1	NS	080215	366
30	480	3-3	53-1/4	32-11/16	29-3/16	NWHOB-18-030P-E1	NS	080223	368
40	240	3-3	60-1/4	39-11/16	36-3/16	NWHOB-18-040P-E1	NS	080256	442
40	480	3-3	60-1/4	39-11/16	36-3/16	NWHOB-18-040P-E1	NS	080266	442
50	240	3-3	67-7/8	47-5/16	43-13/16	NWHOB-18-050P-E1	NS	080290	506
50	480	3-3	67-7/8	47-5/16	43-13/16	NWHOB-18-050P-E1	NS	080303	506
60	240	3-3	77-3/8	56-13/16	53-5/16	NWHOB-18-060P-E1	NS	080338	606
60	480	3-3	77-3/8	56-13/16	53-5/16	NWHOB-18-060P-E1	NS	080346	606
70	240	3-3	86-3/8	65-13/16	62-5/16	NWHOB-18-070P-E1	NS	080370	666
70	480	3-3	86-3/8	65-13/16	62-5/16	NWHOB-18-070P-E1	NS	080389	666
80	240	3-3	96-3/8	75-13/16	72-5/16	NWHOB-18-080P-E1	NS	080418	756
80	480	3-3	96-3/8	75-13/16	72-5/16	NWHOB-18-080P-E1	NS	080426	756
<b>Series 27 - 10 inch, 150 lb carbon steel vessel — 27 baffled steel elements (20 W/in<sup>2</sup>) — 3" NPT pipe inlet and outlet</b>									
80	240	3-3	77-9/16	52	48-1/2	NWHOB-27-080P-E1	NS	095880	726
80	480	3-3	77-9/16	52	48-1/2	NWHOB-27-080P-E1	NS	095900	726
90	240	3-3	81-9/16	56	52-1/2	NWHOB-27-090P-E1	NS	095927	741
90	480	3-3	81-9/16	56	52-1/2	NWHOB-27-090P-E1	NS	095943	741
100	480	3-3	87-9/16	62	58-1/2	NWHOB-27-100P-E1	NS	095960	756
120	480	3-3	97-9/16	72	68-1/2	NWHOB-27-120P-E1	NS	096006	771
<b>Stock Status:</b> S = stock AS = assembly stock NS = non-stock <b>To Order</b> —Specify model, volts, phase, kW, PCN and quantity. <b>Note</b> — Refer to the Controls section for side mounted controls or control panels.									

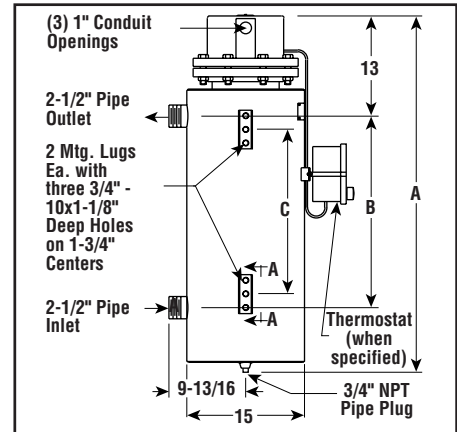
### Ordering Information

To Order — Complete the Model Number using the Matrix provided.

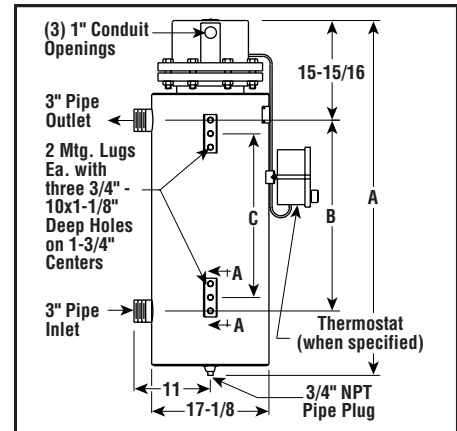
Model	Light and Medium Weight Oil		
NWHO B	Oil Circulation Heater		
	Internal Baffles		
	Code	Number of Elements	
	03	Three	
	06	Six	
	18	Eighteen	
	27	Twenty Seven	
	Code	kW	
	003P	3	015P 15
	04P5	4.5	020P 20
	006P	6	025P 25
	07P5	7.5	030P 30
	009P	9	040P 40
	012P	12	050P 50
			060P 60
			070P 70
			080P 80
			090P 90
			100P 100
			120P 120
	Code	Terminal Enclosure	
	E1	General Purpose	
	E2	Moisture Resistant/Explosion Resistant	
	E3	Explosion Resistant	
	E4	Moisture Resistant	
NWHOB 18	030P	E1	Typical Model Number

### Dimensions (Inches)

#### NWHOB-18



#### NWHOB-27



#### NWHOB-AA

