IMMERSION HEATERS

ET SERIES

Immersion Heaters are primarily used to help maintain oil temperature to avoid cold startups in cold operating conditions. They may also be utilized in water and other solutions.

Standard Features:

- Keeps oil at approximately 80°F
- Automatic built-in fixed setting thermostat normally closes at 70°F and opens at 100°F
- Will not burn oil
- UL recognized and CSA certified
- Weatherproof wiring enclosure (NEMA 4)
- 22 W/sq in power density on all ET Series heaters
- *Interior thermostat has a 250VAC maximum rating

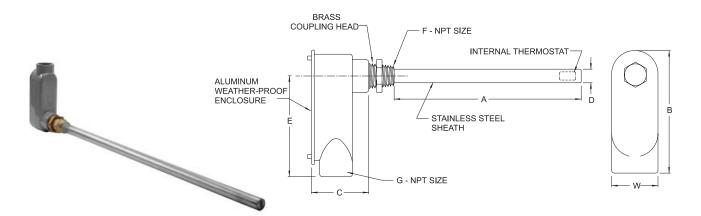
CAUTION:

- Heaters must be mounted horizontally
- Do not mount from the top down
- Heaters must be immersed at all times
- Heaters are not rated for DC current

- For tanks larger than 500 gallon use multiple heaters
- Heaters over 10 amps, 480 volt, or three phase must be used with a contactor
- Amps = Watts ÷ Volts for single phase
- Amps = Watts ÷ (Volts x 1.73) for three phase
- Wiring diagram included with heater
- Please refer to Immersion Heaters Install and Wiring Instructions for information on installation (Appendix RA-13 on page RA-A13

NOTE:

The ET Series heaters will function when operated at lower than rated voltage, but with associated reductions in power output and efficiency



Common Options Available

- Ambiant Thermostat: open at 60° F/close at 40° F - 10A/240 VAC max (Part No. T-60)

Custom Options Available

- •Three Phase available on ET8 Models (add -3 to part number)
- Explosion proof models available

ET Series											
	Reservoir Size			NPT		Dimensions (inches)					
Part No.	(gal)	Wattage	Volts	F	G	A	В	С	D	E	W
ET2-121	up to 10	125	120	1/2*	1/2	7.00	4.50	2.20	.70	3.60	1.30
ET2-251	up to 25	250	120	1/2*	1/2	8.00	4.50	2.20	.70	3.60	1.30
ET2-252	up to 25	250	240	1/2*	1/2	8.00	4.50	2.20	.70	3.60	1.30
ET3-501	25-50	500	120	3/4	3/4	12.60	5.10	2.50	.75	4.10	1.50
ET3-502	25-50	500	240	3/4	3/4	12.60	5.10	2.50	.75	4.10	1.50
ET3-504	25-50	500	480	3/4	3/4	12.60	5.10	2.50	.75	4.10	1.50
ET3-1001	50-100	1000	120	3/4	3/4	22.60	5.10	2.50	.75	4.10	1.50
ET3-1002	50-100	1000	240	3/4	3/4	22.60	5.10	2.50	.75	4.10	1.50
ET3-1004	50-100	1000	480	3/4	3/4	22.60	5.10	2.50	.75	4.10	1.50
ET8-2502	100-250	2500	240	2	1 1/4	23.00	8.20	3.70	1.90	6.70	2.80
ET8-2504	100-250	2500	480	2	1 1/4	23.00	8.20	3.70	1.90	6.70	2.80
ET8-5002	250-500	5000	240	2	1 1/4	44.00	8.20	3.70	1.90	6.70	2.80
ET8-5004	250-500	5000	480	2	1 1/4	44.00	8.20	3.70	1.90	6.70	2.80
*Bushing included to accomodate 3/4 inch NPT coupling											

Installation and Wiring Instructions for ET Heaters

- 1 Must be immersed at all times.
- 2 Mount horizontally only
- 3 Operate on rated voltage-heaters are not dual voltage
- 4 Use on A.C. only
- 5 Lead wires are color coded- heater leads are red, thermostat leads are black
- 6 T-60 Ambient Air Thermostat (Optional) set to close at 40F to be wired into circuit at points T1 and T2-See diagram D
- 7 Above 10 amp draw or 480V or 3 Phase-use a relay-See diagram B or C
- 8 To calculate amperage draw:

Single Phase: $Amps = \underbrace{Watts}_{V \text{ olts}}$

3Phase: Amps = <u>Watts</u> Volts X 1.73

