

Compact, Rapid Heating of Liquids, Steam and Gases for the most Demanding Applications.



Infinity has developed and patented the most efficient and rapid response heater for all precision control processes with negligible pressure drops across it. Applications that demand precise temperature control and the fastest thermal response from an extremely tight footprint can now be attained with this new technology. The Ultra Response heat exchanger provides the fastest thermal response and power within the tightest envelope, when compared with all other conventional and non conventional heaters on the market.

This patented product was developed around the CRES electric heater design placed into a flow housing designed specifically accommodate your process pressure and temperature requirements. A wide range of special fittings and connectors can be used to facilitate new designs or retrofit existing applications.

The CRES heater operating in the fluid stream provides incredibly fast response time and far greater utility efficiency. Many different designs and configurations are available to suit your processes needs. If your process requires the most precise temperature control and fastest response, let the Ultra Response Heat Exchanger provide the advantage to your system. Integrated sensors are available as standard equipment on most CRES Heater arrangements.

The New Standard in electric heating



Infinity Fluids Corporation
 Norwich, CT 06360
 Phone - 888-565-8137
 Fax - 508-347-3674
www.infinityfluids.com
sales@infinityfluids.com

BENEFITS AND FEATURES:

- ∞ Fastest response of any electric heaters available
- ∞ Ultra compact size and weight
- ∞ Significantly reduce the size of your equipment with our new technology, while decreasing the overall weight of your system.
- ∞ Allows low and high flows to quickly be heated with the greatest accuracy available.
- ∞ Low flow housing volume, ensures ultra efficient and responsive control.
- ∞ Use on all liquids, gases and vapors including steam and instant steam generation.

SPECIFICATIONS:

- ∞ Compact heaters up to 16kW.
- ∞ Process temperatures to 600° C (1200° F)
- ∞ Low and High operating pressures
- ∞ Optional Finishes, electro-polished, passivated and bright annealed.
- ∞ Standard 1" NPT inlet and exit. Many other sizes and styles available upon request.
- ∞ Standard type k t/c or 100Ω Plat RTD 3 wire.

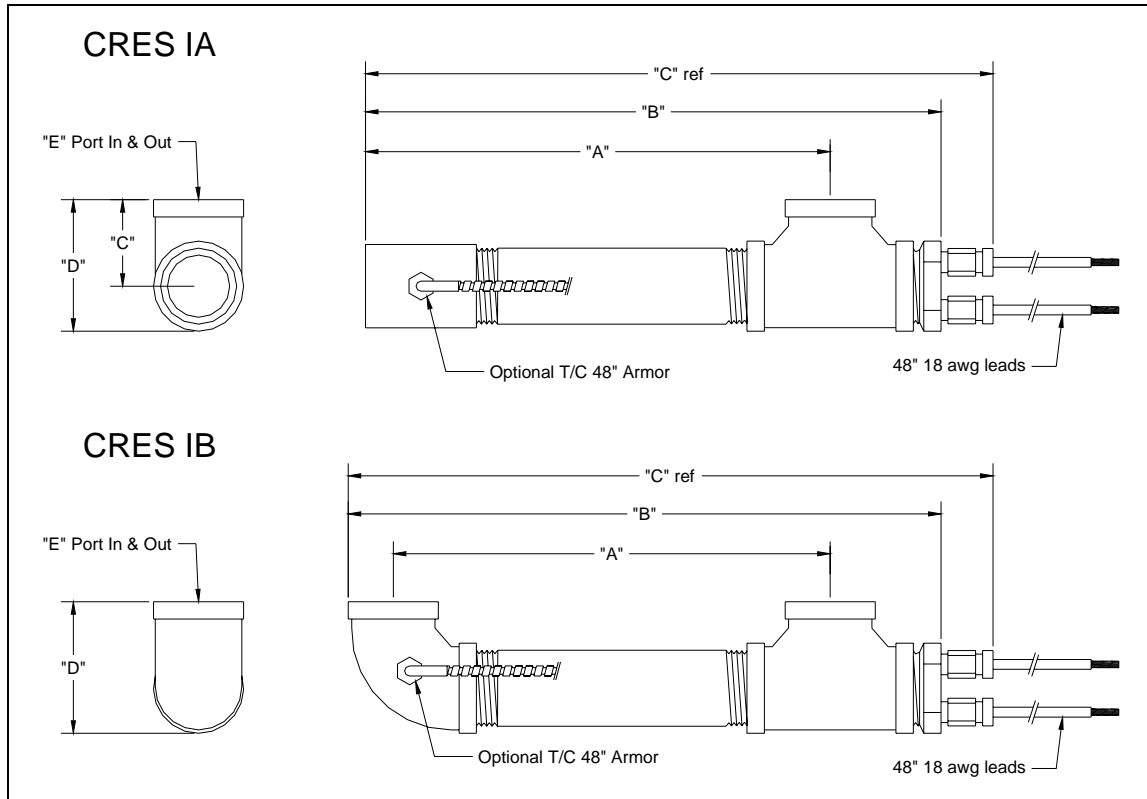
APPLICATIONS:

- ∞ All applications where circulation heaters or fast, compact, hi power electric heat is required.
- ∞ Aerospace, food and DI Water heating
- ∞ Fuel Cell gas and liquid heating.
- ∞ Printing, cleaning, pharmaceutical, bio-tech, sterilization and plastics industries.
- ∞ Purification.
- ∞ Humidity Generation.
- ∞ Metal, poly and ceramic parts cleaning.

CRES Heaters:

All CRES heaters will provide the most compact powerful solution in heating moving fluids, including liquids, gases and transition substances like saturated steam - super heated steam.

All CRES heaters are electrically isolated so contaminants in the flow stream will not affect the life of the heater, this is most important while heating compressed airs and gases where compressor oils and debris enters the heated media stream.



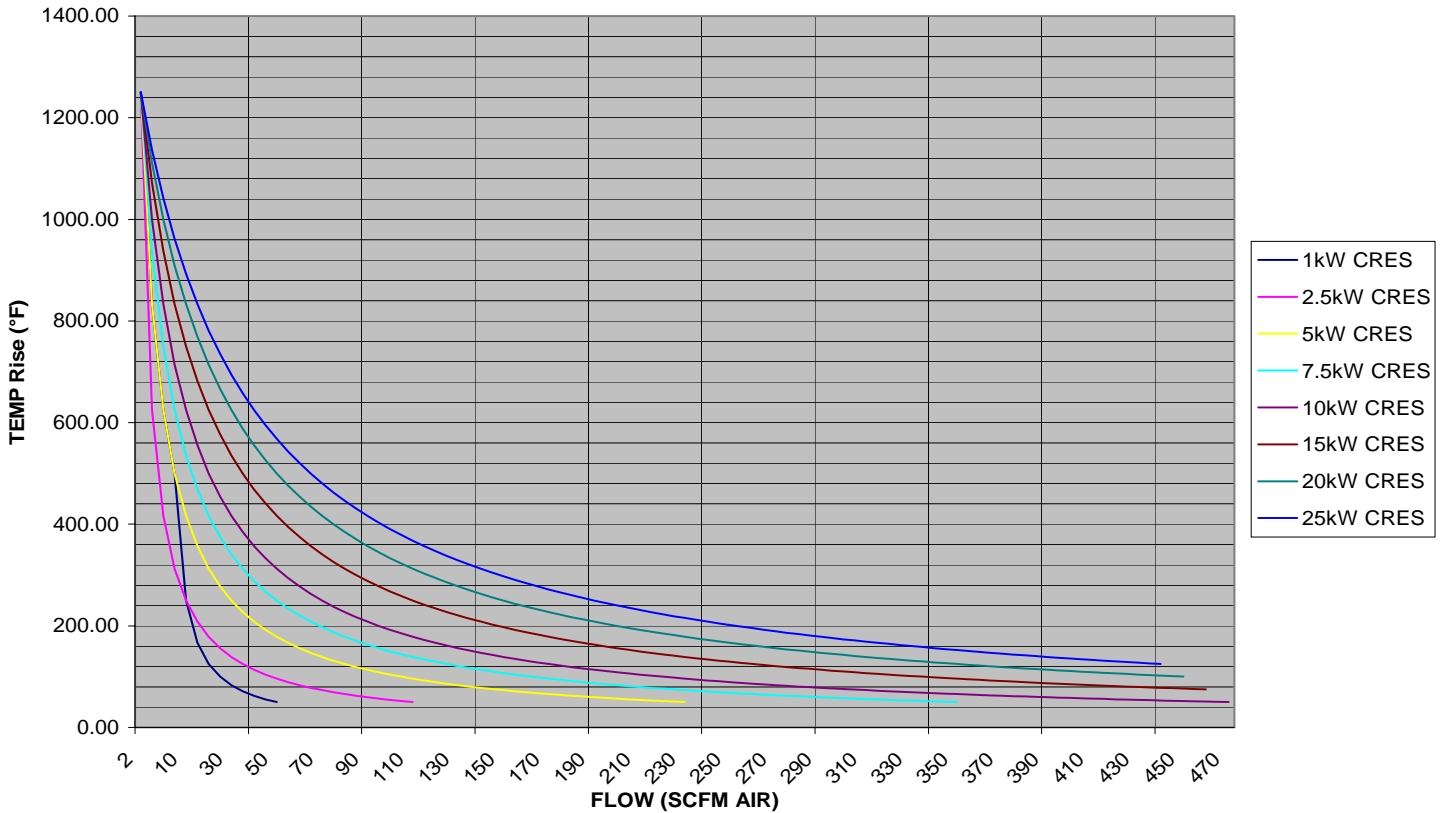
Model No.	A (in)	B (in)	C (in)	D (in)	E (in)	F (fnpt)	Volt	Watts
CRES-IA-24-1	8	10	12	1.625	1"	1"	120 / 240	1000
CRES-IA-24-2	8	10	12	1.625	1"	1"	120 / 240	2000
CRES-IA-24-3	9	12	14.5	2	1-1/4"	1-1/4"	120 / 240	3000
CRES-IA-24-5	9	12	14.5	2	1-1/4"	1-1/4"	120 / 240	5000
CRES-IA-24-7	9	12	14.5	2	1-1/4"	1-1/4"	120 / 240	7000
CRES-IA-48-8	12	15	17	2.25	1-1/2"	1-1/2"	240 / 480	8000
CRES-IA-48-10	12	15	17	2.25	1-1/2"	1-1/2"	120 / 240	10000

Model No.	A (in)	B (in)	C (in)	D (in)	E (in)	F (fnpt)	Volt	Watts
CRES-IB-24-1	8	10	12	1.625	1"	1"	120 / 240	1000
CRES-IB-24-2	8	10	12	1.625	1"	1"	120 / 240	2000
CRES-IB-24-3	9	12	14.5	2	1-1/4"	1-1/4"	120 / 240	3000
CRES-IB-24-5	9	12	14.5	2	1-1/4"	1-1/4"	120 / 240	5000
CRES-IB-24-7	9	12	14.5	2	1-1/4"	1-1/4"	120 / 240	7000
CRES-IB-48-8	12	15	17	2.25	1-1/2"	1-1/2"	240 / 480	8000
CRES-IB-48-10	12	15	17	2.25	1-1/2"	1-1/2"	120 / 240	10000



Infinity Fluids Corporation
 Norwich, CT 06360
 Phone - 888-565-8137
 Fax - 508-347-3674
www.infinityfluids.com
sales@infinityfluids.com

CRES Heater Air Flow v. Temp



Power Requirement for Air : **$kW = SCFM \times (T_{out} - T_{in}) / 2500$**

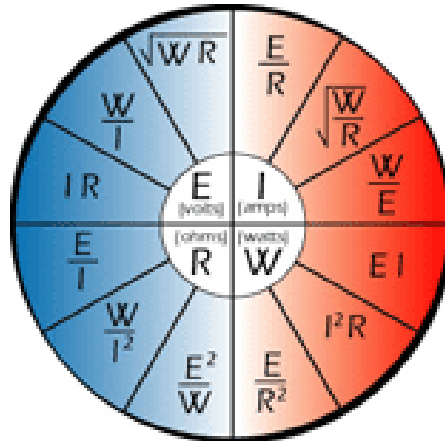
SCFM = SCFH/60 SCFH = SLPM / 28.3 SLPM = SCFH / 28.3 SCFM = (lbs.Air/Min) / (0.080 lbs/ft³)

Volts :

- = sqrt (watts x ohms)
- = watts / amps
- = amps x ohms

Ohms :

- = volts / amps
- = watts / amps²
- = volts² / watts



Amps :

- = volts / ohms
- = sqrt (watts / ohms)
- = watts / volts

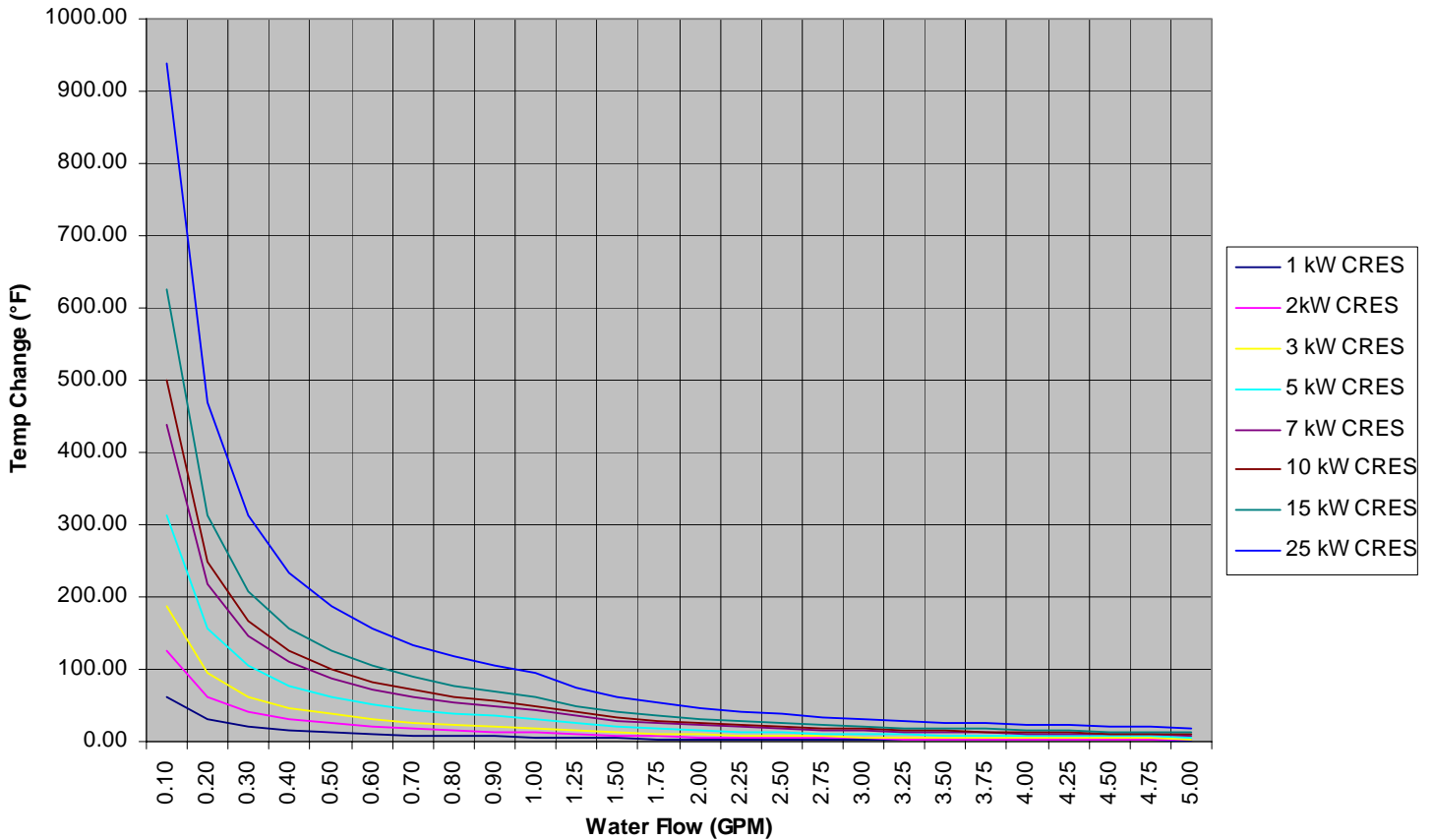
Watts :

- = volts / amps
- = amps² x ohms
- = volts / amps²



Infinity Fluids Corporation
 Norwich, CT 06360
 Phone - 888-565-8137
 Fax - 508-347-3674
 www.infinityfluids.com
 sales@infinityfluids.com

CRES Heater Water Flow v. Temp



Power Requirement for Water : **$kW = GPM \times (T_{out} - T_{in}) \times 0.16$**

CRES HEATERS:

- ∞ All SS construction
- ∞ Fastest Response Available
- ∞ Ultra Compact
- ∞ Easy to Install
- ∞ Easy to Service
- ∞ Inexpensive option to much larger circulation heaters
- ∞ Many sizes and configurations in Stock
- ∞ Patented design - Pat. No. 6,456,785



Our most economical heater available provides ease of use for new design, replacement or retrofit. If you have a new process or application, please contact one of our sales representatives to discuss your requirements. Our engineering staff has decades of experience and can design a single heater or a full turnkey process or system.



Infinity Fluids Corporation
 Norwich, CT 06360
 Phone - 888-565-8137
 Fax - 508-347-3674
 www.infinityfluids.com
 sales@infinityfluids.com