

Modine Manufacturing Company

Heating and Air Conditioning Division

General Offices: 17th and Holburn Sts., Racine, Wis.

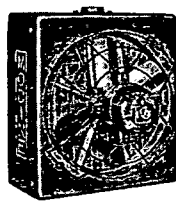
Factories at Racine, Wis. and La Porte, Ind.

Branches in all Principal Cities

MODINE UNIT HEATERS



Front View



Back View

Horizontal Delivery Models—Differing only in condenser design, these unit heaters are available with either steel or copper condensers, the latter being limited primarily to shipboard application.

Steel Condenser—Heavy cylindrical steel or iron tubes and headers brazed into a rugged unit of steam-carrying passages. Steel fins metallically bonded to tubes. Entire condenser coated with lead alloy for protection against external corrosion. Square shape of condenser provides uniform distribution of expansion stresses and absence of strain at joints where injury might result. Parallel alignment of fins eliminates possibility of dirt lodging between fins (as in pie-shaped alignment of round condenser) and clogging condenser.

Cone-Jet Deflectors—Verticals are regularly equipped with radial or spoke-like deflector assemblies illustrated above. Individually adjustable deflector blades make possible delivery of high, narrow jet-like cone of heated air from high elevation . . . or low, broad, softened-velocity cone from low elevation.

TrunCone Deflectors—Verticals can be furnished with special deflectors for use on units mounted at heights lower than recommended for Cone-Jet Deflectors.

Bonderized Casing—Casing protected from rust by Parker Bonderizing.

Safety Fan Guard—Staunch, steel safeguard built into unit protects against danger of unshielded fan.

CAPACITIES AND DIMENSIONS (For Steel-Condenser Units)

Model No.	Btu/hr*	Cfm	Rpm	Over-all Height	Width	Depth Less Motor
H-140 S/S	33,600	550	1635	17 1/2"	14 1/2"	9"
H-170 S/S	40,800	600	1530	20 1/2"	14 1/2"	9"
H-250 S/S	60,000	1060	1145	22 1/2"	19"	11"
H-350 S/S	84,000	1510	1120	24 1/2"	19"	11"
H-490 S/S	117,600	2300	1110	27 1/2"	23"	11 1/2"
H-580 S/S	139,200	2440	1125	27 1/2"	23"	11 1/2"
H-660 S/S	158,400	2660	1120	29 1/2"	24 1/2"	11 1/2"
H-715 S/S	171,600	2970	1115	29 1/2"	24 1/2"	11 1/2"
H-820 S/S	196,800	3640	1130	33 1/2"	26 1/2"	13"
H-1000 S/S	240,000	4350	1115	33 1/2"	26 1/2"	13"

*Btu based on 2 lb steam, 60 deg. ent. air and Rpm as indicated. Above models available with variable speed motors.

VERTICAL DELIVERY MODELS

Available with steel and copper condensers.

Steel Condenser—Heavy, cylindrical steel or iron tubes and headers brazed into a rugged unit of steam-carrying passages. Steel fins metallically bonded to tubes. Entire condenser coated with lead alloy for protection against external corrosion. Square shape of condenser provides uniform distribution of expansion stresses and absence of strain at joints where injury might result. Parallel alignment of fins eliminates possibility of dirt lodging between fins (as in pie-shaped alignment of round condenser) and clogging condenser.

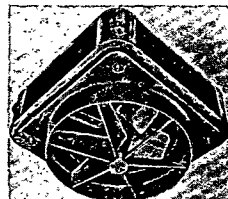
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TrunCone Deflectors—Verticals can be furnished with special deflectors for use on units mounted at heights lower than recommended for Cone-Jet Deflectors.

CAPACITIES AND DIMENSIONS (For Steel-Condenser Units)

Model No.	Btu/hr*	Cfm	Rpm	Overall Dimensions (Square)
V-200 S/S	48,000	820	1580	17 1/2"
V-290 S/S	69,600	1220	1130	22"
V-380 S/S	91,200	1830	1720	22"
V-540 S/S	129,500	2570	1130	31 1/2"
V-700 S/S	167,900	3810	1700	31 1/2"
V-760 S/S	182,200	3540	1120	31 1/2"
V-950 S/S	227,600	5120	1720	31 1/2"
V-1030 S/S	247,300	5000	1120	31 1/2"
V-1430 S/S	343,000	6120	1130	43 1/2"
V-2000 S/S	480,000	9450	1120	43 1/2"
V-2510 S/S	602,000	11000	1120	42 1/2"

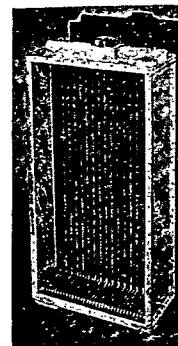
*Btu based on 2 lb steam, 60 deg. ent. air and Rpm as indicated. All but two largest of above models available with variable speed motors.



Bottom View

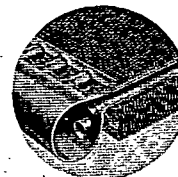
Modine Manufacturing Company

STANDARD BLAST HEATERS



Modine Standard Blast Heaters for heating, ventilating, air conditioning and drying systems are available with steel or copper coils, depending upon application. Modine design features provide great structural strength, light weight and highly effective heat transfer capacity with the ability to handle large volumes of air at lower-than-average static pressure losses. Wide range of sizes and types to meet practically any temperature, air movement and size requirement.

STEAM DISTRIBUTION TYPE BLAST HEATERS



Cross section of steel supply header and tubes



Cross section of copper supply header and tubes

This line of coils is characterized by the uniform distribution of steam throughout the entire heating surface . . . even when steam is partially throttled to meet system temperature demands. Inserted in each condenser tube is a steam-distributing tube having small, accurately sized and spaced orifices along its entire length. Steam entering the distributing tube is uniformly rationed through the orifices into the external or condenser tube . . . then flows as condensate into the return header.

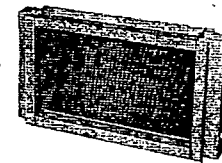
Uniform steam distribution provides a safeguard against freezing of condensate and tube damage, eliminating the need for preheaters or tempering coils. In addition to thus simplifying system design and control, uniform steam distribution solves the problem of stratification in the heated air-stream.

Steam distribution type coils can be furnished with copper or ferrous condensers as required by wartime regulations.

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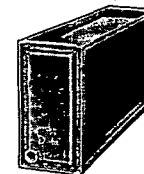
VENTILATION HEATERS

For marine use. Made in Pre-heater and Re-heater types with or without humidifiers. Patented design features permit high heat transfer with small face area. Casing design reduces weight to minimum without sacrificing strength.



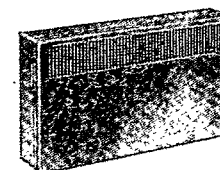
MODINE COOLING COILS

For use in central system cooling and air conditioning plants, Modine Cooling Coils, Cold Water Type, are installed with a blower fan and duct work. Adaptable where cold water or noncorrosive brine is used as the cooling medium. Coils are available in *Cleanable* and *Continuous Tube* types.



CONVECTORS

Widely used in offices, laboratories, first aid rooms, corridors and aboard Navy and merchant ships. Their popularity over cast iron radiators is due to attractive appearance, saving of floor and wall space, uniform temperatures and adaptability to automatic control. Furnished with copper or steel heating units in a variety of types and sizes.



CABINET UNIT HEATERS

Modine Cabinet Unit Heaters are designed for the heating of offices, lobbies, corridors, auditoriums, etc. Used in conjunction with a steam or hot water system, they eliminate the need for unsightly obsolete radiators.

Models include the Floor Cabinet, Wall Cabinet, Ceiling and Recessed types—each available in three capacities: 105, 310 and 450 E.D.R.

