

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

Condenser—Copper and copper alloy, inlet to outlet, for maximum resistance to internal and external corrosion. Pure copper fins are metallically bonded to round, seamless, heavy-gauge red brass tubes for permanent contact and to insure uninterrupted heat conduction from primary to secondary surface. Modine-patented expansion bend permits tubes to expand or contract individually as temperature requires. All steam and condensate carrying passages are brazed into an integral pressure-resisting unit.

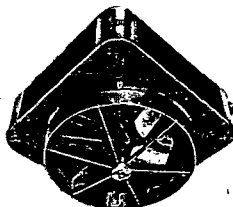
Direct - Pipe - Suspension—Modine patented feature permits suspending unit directly from supply line without additional time and labor wasting supports; also permits complete rotation of unit for redirection of air stream.

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

Model No.	Btu Hr.*	Cfm	Rpm	Over-All Height	Width	Depth Less Motor
H-102	24,500	410	1580	14"	11 1/2"	6"
H-144	34,600	585	1580	17 3/4"	14 1/2"	9"
H-184	44,200	685	1580	20 1/2"	14 1/2"	9"
H-254	61,000	1020	1140	22 1/2"	19"	11 1/2"
H-364	87,400	1500	1140	24"	19"	11 1/2"
H-474	113,800	1900	1140	27 1/2"	23"	11 1/2"
H-584	141,000	2400	1140	27 1/2"	23"	11 1/2"
H-704	169,000	2650	1140	29 1/2"	24 1/2"	11 1/2"
H-894	214,500	3600	1140	33 1/2"	26 1/2"	13 1/2"
H-1154	277,000	4300	1140	33 1/2"	26 1/2"	13 1/2"

★
VERTICAL
DELIVERY
MODELS
★

Bottom View

Condenser—All copper and copper alloy. Tubes are seamless red brass. Headers, inlet and outlet connections are heavy-walled copper pipes. Fins are pure copper. Brazing of all steam carrying passages and metallic bonding of fins to tubes insures rugged unit and continuously excellent heating. Hollow-square condenser literally grows as it heats up; retreats to normal size as it cools with complete distribution of stresses and absence of strains where injury might result. Parallel alignment of fins reduces possibility of dirt lodging between fins 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.

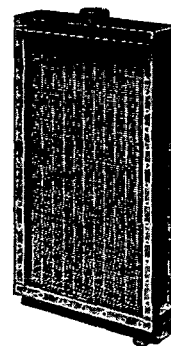
TrunCone Deflectors—Verticals can be furnished with special deflectors for use on units mounted at heights lower than recommended for Cone-Jet Deflectors.

CAPACITIES AND DIMENSIONS

Model No.	Btu/Hr.*	Cfm	Rpm	Overall Dimension (Square)
V-152	36,500	610	1580	17 1/2"
V-332	79,700	1370	1140	22"
V-604	145,000	2700	1140	33"
V-724	173,800	3400	1725	33"
V-794	190,200	3300	1140	33"
V-974	233,500	4300	1725	33"
V-1084	260,000	4550	1140	33"
V-1404	337,000	5600	1140	42 1/4"
V-2004	481,000	8000	1140	42 1/4"
V-2504	601,000	10,000	1140	42 1/4"

*Btu at 2 lb steam, 60 deg Ent. Air.

BLAST HEATERS



For modern air conditioning, heating, ventilating, drying and processing systems. Condenser is pure copper and copper alloy, inlet to outlet, for resistance to corrosion, durability, light weight and high heat transfer. "Floating" condenser construction provides safe expansion and contraction. Fins are metallically bonded to tubes to prevent corrosion from reducing heat transfer

capacity. Die formed fins promote greater heat transfer; permit use of smaller, lighter coils. Modine design permits use of ducts having cross-sectional areas no greater than those of condenser face. Wide range of capacities and sizes available in Standard and Booster Unit types.

STEAM DISTRIBUTION TYPE
BLAST HEATERS

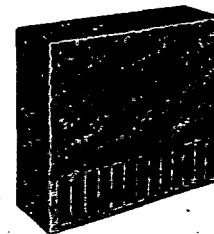
Cross-section supply end, showing double tube construction



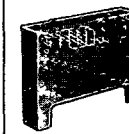
These coils are characterized by the uniform distribution of steam throughout entire heating surface . . . even when steam is partially throttled to meet system temperature demands. Inserted in each condenser tube is a steam-distributing tube with small, accurately-sized and spaced orifices along its entire length. Steam entering distributing tube is uniformly rationed through orifices into external or condenser tube . . . then flows as condensate into return header. Uniform steam distribution minimizes tendency of condensate freezing and tube damage; eliminates need for preheaters or tempering coils, thus simplifying system design and control; eliminates air stream stratification.

CABINET UNIT HEATERS

Designed for heating offices, lobbies, corridors, etc. . . . wherever quick, positive distribution of heat combined with quiet operation and gentle air movement are desirable. Has considerably greater heat output than convector of equivalent size. Employs copper heating coil for use on steam or hot water system. Mounted on wall or ceiling. Capacities: 105 Edr. and 310 and 450 Edr.



CONVECTOR RADIATION



Floor Cabinet Type

Built to meet modern residential, institutional, and commercial heating requirements, Modine convectors operate on the principle of *natural convection*. Cooler, heavier air is drawn in through the enclosure's bottom opening; comes in contact with copper heating unit that carries steam or hot water. As air is heated, it rises; is then circulated out into room through grille at top of enclosure.

Concealed copper heating unit combines compactness with high heat capacity—to give room added floor space as well as fast, even heating. Use of copper makes the heating unit almost instantly responsive to automatic control.

Enclosures are streamlined for simplicity and harmonize readily with any type of interior. Parker-Bonderized before being prime painted, the enclosures are less vulnerable to the formation and spread of rust.

Manually installed enclosure fronts can be installed in 30 seconds without tools. Easy removal of fronts assures convenience in cleaning and gives ready access to the heating unit.

Available in recessed and cabinet types.