LC-210



LC-210 LIGHT COMMERCIAL SLOPE-TOP ENCLOSURES FOR HYDRONIC HEATING





LC-210 LIGHT COMMERCIAL SLOPE-TOP ENCLOSURES

The Vulcan LC-210 offers an outstanding value in a light commercial hydronic heating enclosure. Capable of utilizing two tiers of element, the LC-210 offers high output in a low profile slope-top enclosure. The 3 1/4 inch depth and slope top make this attractive enclosure a real space-saver. LC-210 elements are available in both copper/aluminum and steel in a wide variety of sizes and outputs.

For ease of installation, the LC-210 features a self locating bracket with pre-punched mounting holes. The stamped pencil-proof louvers prevent trash accumulation on the element while meeting the specifications of demanding engineers and architects. And, because the LC-210 does not require a full backplate, it can be mounted off of the finished floor.

All Vulcan LC-210 enclosures feature a durable electrostaticbaked enamel finish and are available in Vulcan's full selection of colors. Constructed of 18 gauge cold rolled steel (16 guage optional), this durable enclosure is ideal for dormitories, military housing, nursing homes, offices and reception areas.

All of Vulcan's commercial hydronic products are made from recycled materials. Material recycled contents can be obtained from your local Vulcan representative or by viewing the www.vulcanrad.com website. Vulcan is a participating member of USGBC-LEEDS.

FEATURES

- Two Tier Capacity
- Heavy 18 Gauge Enclosure (16 Gauge Optional)
- Narrow 3¹/₄ Inch Depth
- Low 10¹/₄ Inch Height
- Stamped Pencil-Proof Louvers
- Broad Choice of Elements
- Baked Enamel Finish
- Self-Locating Brackets



GENERAL LAYOUT

RATINGS LC-210 RATINGS*

		CTEEL E		STEAM	HOT WATER (AVG.)							
		SIEEL E	215°	200°	190°	180°	170°	160°	150°			
I.P.S.	CATALOG	FIN SIZE	EIN I/ETE	FIN	MTG. HEIGHT	FACTOR	FACTOR					
SIZE	DESIGNATION	IN INCHES	FIN/F I	THICKNESS	IN INCHES	1.00	0.86	0.78	0.69	0.61	0.53	0.45
1"	VR11	2 ³ ⁄ ₄ x 3 ³ ⁄ ₄	40	0.024	14 ¹ ⁄ ₄	910	785	710	630	555	485	410
1"	VR12	2 ³ ⁄ ₄ x 5	40	0.024	14 ¼	▶ 910	785	710	630	555	485	410 <
1 1⁄4"	VR13	2 ³ ⁄ ₄ x 5	40	0.024	14 1/4	930	800	725	625	570	495	420

	00		STEAM	HOT WATER (AVG.)								
		PPEK/ALUMI		215°	200°	190°	180°	170°	160°	150°		
TUBE	CATALOG	FIN SIZE	EIN L/ETE	FIN	MTG. HEIGHT	FACTOR			FAC	TOR		
SIZE	DESIGNATION	IN INCHES	FIN/F I	THICKNESS	IN INCHES	1.00	0.86	0.78	0.69	0.61	0.53	0.45
3∕₄"	VR02	2 ³ ⁄ ₄ x 2 ¹ ⁄ ₂	60	0.010	14 1⁄4	1140	980	890	785	695	605	515
3∕4"	VR04	2 ³ ⁄ ₄ x 3 ³ ⁄ ₄	50	0.011	14 1⁄4	1170	1010	915	810	715	620	530 ◀
1"	VR03	2 ³ ⁄ ₄ x 2 ¹ ⁄ ₂	55	0.011	14 1/4	1090	935	850	755	665	575	490
1"	VR05	2 ³ ⁄ ₄ x 3 ³ ⁄ ₄	50	0.011	14 1/4	1130	979	880	780	690	600	510
1"	VR06	2 ³ ⁄ ₄ x 5	40	0.020	14 1/4	1200	1030	935	830	730	630	540
1"	VR07	2 ³ ⁄ ₄ x 5	50	0.020	14 1/4	▶ 1210	1040	945	835	740	645	545 ◀
1 1⁄4"	VR08	2 ³ ⁄ ₄ x 3 ³ ⁄ ₄	50	0.020	14 1/4	1150	990	895	795	700	610	515
1 1⁄4"	VR09	2 ³ ⁄ ₄ x 5	40	0.020	14 1/4	1150	990	895	795	700	610	515
1 ¹ ⁄4"	VR10	2 ³ ⁄ ₄ x 5	50	0.020	14 1/4	1230	1060	960	850	750	655	555 ◀

RATING BTU/H WITH (2) TIER ELEMENT 31/2" CENTERED

	CO			STEAM	HOT WATER (AVG.)							
	CO	PPEK/ALUMI	215°	200°	190°	180°	170°	160°	150°			
TUBE	CATALOG	FIN SIZE		FIN	MTG. HEIGHT	FACTOR			FAC	TOR		
SIZE	DESIGNATION	IN INCHES	FIN/F I	THICKNESS	IN INCHES	1.00	0.86	0.78	0.69	0.61	0.53	0.45
3⁄4"	VR02	2 ³ ⁄ ₄ x 2 ¹ ⁄ ₂	55	0.011	14 ¹ ⁄ ₄	1560	1340	1215	1075	950	825	700
1"	VR03	2 ³ ⁄ ₄ x 2 ¹ ⁄ ₂	55	0.011	14 1/4	1600	1375	1250	1105	975	845	720

▶ Bold, italicized units are (R rated

When ordering Element, specify fin thickness. (Example: VR02 w/0.011 fins) • The ratings of the charts above include factors shown in the chart below for the recommended mounting height. Two tier ratings are based on 31/2" between elements. Ratings are in BTU per hour per lineal foot of active length. "Active length" is the catalog ordering length less 4". • The water ratings applicable to water flow rates of three or more feet per second, have been determined by applying factors shown to 1.B.R. Steam Ratings (which have been approved by the Institute of Boiler and Radiator Manufacturers). • Elements unpainted. • If the unit is to be installed at a height different than the recommended mounting height, the 1.B.R. rating must be adjusted as follows:

I.B.R. RATING MULTIPLIED BY: FACTOR FROM TABLE B FOR THE ACTUAL MOUNTING HEIGHT FACTOR FROM TABLE B FOR THE RECOMMENDED MOUNTING HEIGHT

MOUNTING HEIGHT IN IN.	18 or less	19	20	21	22	23	24	25	26	27	28	29	30	32	34	36	38 or more
FACTOR 31/4" OFFSET	1.100	1.100	1.098	1.091	1.085	1.078	1.071	1.065	1.058	1.051	1.045	1.038	1.031	1.019	1.012	1.006	1.000

CAT NO.	A MIN.	A MAX.				
VR02	5-15/16 (150.8)	8-7/16 (214.3)				
VR03	6-1/6 (154)	8-5/8 (219.1)				
VR04	6-9/16 (166.7)	8-15/16 (227)				
VR05	6-9/16 (166.7)	9-1/8 (231.8)				
VR06	7 1/0 (101)	8-11/16 (220.7)				
VR07	7-1/8 (181)					
VR08	6-11/16 (169.9)	9-1/4 (235)				
VR09	E 2/16 (102 C)	0.44/46 (000.5)				
VR10	7-3/16 (182.6)	8-11/16 (220.7)				
VR11	6-11/16 (169.9)	9-3/16 (233.4)				
VR12	E 2/16 (102 C)	8-11/16 (220.7)				
VR13	7-3/16 (182.6)					



Dimensions are in inches. Dimensions in parenthesis are in millimeters.

SPECIFICATIONS FOR THE LC-210

ACCESSORIES

Furnish and install where shown on all plans/drawings, Vulcan LC-210 Finned Tube Enclosure and Element as described or approved equal of both quality and BTU capacity. Ratings are to be I=B=R approved.

The finned tube enclosure, as called out LC-210, will be manufactured from 18 gauge (16 gauge optional) bonderized C.R.S. which has been degreased with a high temperature and high pressure alkaline spray, cold water rinsed, dried, sprayed with iron phosphate anti-rust solution, cold water spray rinsed, sprayed with a phosphate sealer and warm air blow dried before the application of the high solids, high polymer baked prime finish. The air discharge louvers are to be die formed stamped into the steel enclosure. The louver openings are to be "Pencil Proof". All lateral bends are to be formed on bottoming dies to ensure continuity of all adjoining enclosures and accessories. The enclosure lengths are to be provided in 6 inch increments from 2 feet through 8 feet long. The enclosure is to fully engage in a continuous full length mounting strip mounted to the wall. A two (2) inch joiner strip is to be used where two pieces of enclosure are adjoining each other in a run.

All accessories will be die formed 18 gauge cold rolled steel and finished with the baked prime finish described above. The accessories will overlap the installed enclosure and are to provide adjustment for make-up in the installed runs of enclosure.

The brackets are to be of a one piece, die formed construction. The material is to be 14 gauge C.R.S. with a baked prime finish. The bracket is to be self locating for vertical positioning at installation. The bottom horizontal leg is to snap into bottom bend of the enclosure and is to support the element when slide shoes are used. The top horizontal leg is to support the adjustable element hanger. Adjustable rod hangers are to be supplied when specified. These will be used in conjunction with the various elements that do not incorporate a nylon slide. They will also be used when the installation requires pitch adjustment for steam applications.

The mounting strip is to be supplied in eight (8) foot lengths. It will be die formed heavy gauge, galvannealed material.

All elements are to be of the mechanically expanded type to ensure that proper fin to tube bonding is maximized. Copper/Aluminum elements are to be provided with one end mechanically swaged (flared) for proper assembly. Steel/Steel element are to be provided with both ends threaded to accept all domestic NPT fittings or cut square and chamfered for field welding.

In the interest of product improvement, we reserve the right to make changes without notice.





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