



VERANO[®]
by: MDL Solutions

MDL Solutions VKF **TECHNICAL** catalogue

2015_01

VKF





VKF

Facade Convector type VKF



In some buildings that having glazed façades throughout many storeys, a façade convection heater would be a perfect match. A mechanism of natural convection being used in a façade convection heater would stop a mass of cold air naturally falling down in such buildings.

The cold draught that is falling down in such a case would just simply mix with warm air produced by façade convection heater, whilst any building occupants would not experience unpleasant cold draught feeling. Façade convection heater is available in many sizes and colours, it would well compose with many frames of façades and will certainly heat any interior in very discrete manner.

An innovative heating technology and also high quality of raw materials being used for manufacturing a façade convection heater prove that this may be ideal heating emitters system for glazed buildings. Low thermal inertia would enable a quick reaction for any thermal conditions changes whilst high thermal dynamics would reduce the system running costs.

VKF

VKF-5,5/12/L-12

The equipment of Verano façade Convector

STANDARD equipment::

- casing made of aluminum or hot-dip galvanized steel sheet with zinc magnesium coating, powder painted in RAL 9007
- copper and aluminum heat exchanger powder-coated in black RAL 9005 with air vent
- fixing elements
- water connection 2xIT ¾".

ADDITIONAL equipment:

- casing can be powder coated in any RAL color

Please remember!

Order Code for façade heater type VKF is:
VKF-5,5/12/L-12

where:

H - Heater height [mm]

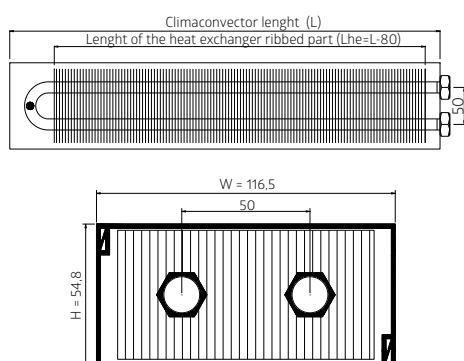
W - Heater width [mm]

L - Heater length [mm]

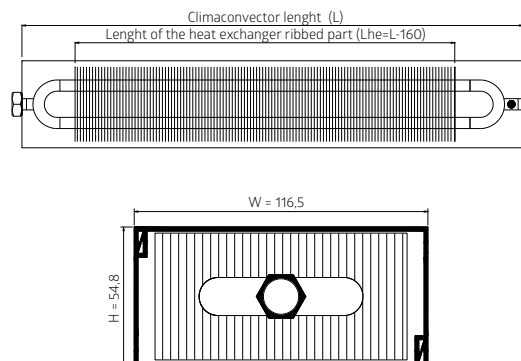
Dimensions [mm]

DIMENSIONS	[mm]
Heater height (H)	55
Heater width (W)	120
Heater length (L)	700 ÷ 16000
The maximum length of a single element	6000

Heater length $L \leq 8000$ mm



Heater length $L > 8000$ mm - $L \leq 16000$ mm



Please note !!!! It is possible to custom the length of the connection chamber to make connection valves and pipes invisible.

Thermal output [W]

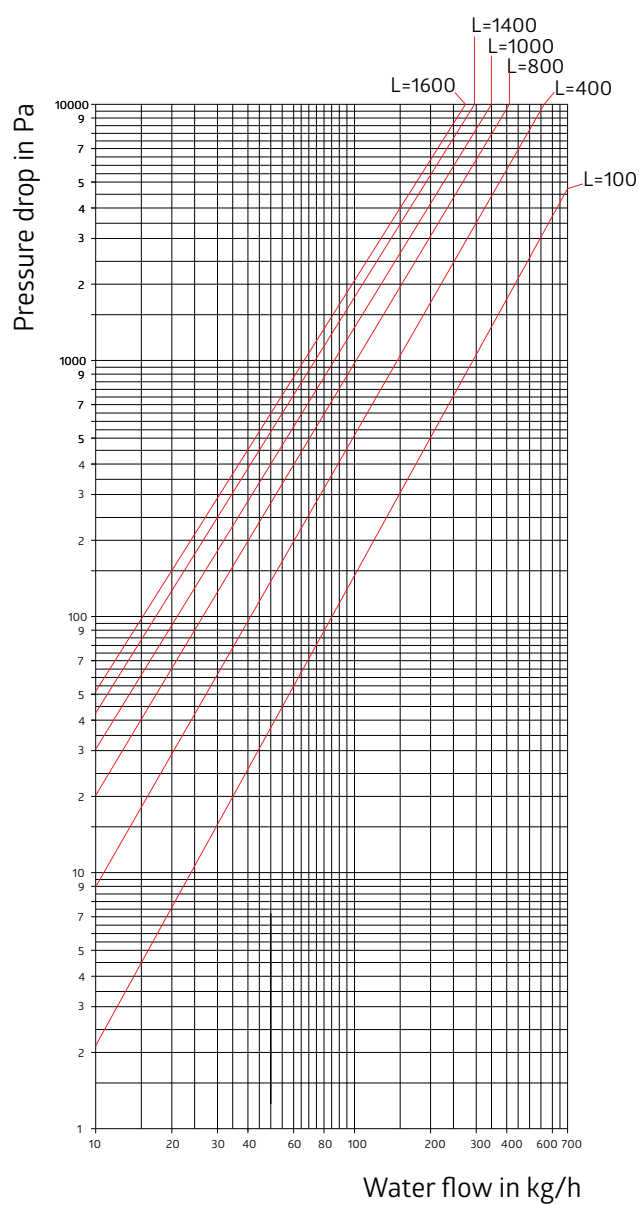
$T_s / T_r / T_i$ °C	Heat output of finned convector W/m
90/70/20	453
75/65/20	349
70/55/20	276
55/45/20	167
50/40/20	129

Normative thermal output [W] DIN EN 442-1 for the room air temperature $T_i = 20^\circ\text{C}$

Additional information

Water capacity for 1m long heat exchanger	0,31 dm ³
Maximum working pressure	1,0 MPa
Test pressure	1,3 MPa
Maximum operating temperature	110°C

Pressure losses [Pa]



Correction factors of heating outputs

Correction factors of heating outputs for façade heater type VKF for parameters other than 75/65/20°C

Heating medium temperature (°C)		Room air temperature Ti (°C)						
Ts	Tr	5	8	12	16	20	24	32
90	85	2,054	1,947	1,808	1,672	1,539	1,410	1,162
	80	1,965	1,860	1,723	1,589	1,458	1,331	1,087
	75	1,877	1,774	1,638	1,507	1,378	1,253	1,014
	70	1,791	1,689	1,556	1,426	1,300	1,177	0,943
85	80	1,877	1,774	1,638	1,507	1,378	1,253	1,014
	75	1,791	1,689	1,556	1,426	1,300	1,177	0,943
	70	1,706	1,605	1,474	1,346	1,222	1,102	0,873
	65	1,622	1,523	1,394	1,269	1,147	1,029	0,805
80	75	1,706	1,605	1,474	1,346	1,222	1,102	0,873
	70	1,622	1,523	1,394	1,269	1,147	1,029	0,805
	65	1,539	1,442	1,315	1,192	1,073	0,957	0,739
	60	1,458	1,362	1,238	1,117	1,000	0,887	0,674
75	70	1,539	1,442	1,315	1,192	1,073	0,957	0,739
	65	1,458	1,362	1,238	1,117	1,000	0,887	0,674
	60	1,378	1,284	1,162	1,043	0,929	0,819	0,611
	55	1,300	1,207	1,087	0,971	0,860	0,752	0,550
70	65	1,378	1,284	1,162	1,043	0,929	0,819	0,611
	60	1,300	1,207	1,087	0,971	0,860	0,752	0,550
	55	1,222	1,132	1,014	0,901	0,792	0,687	0,491
	50	1,147	1,058	0,943	0,832	0,726	0,624	0,435
65	60	1,222	1,132	1,014	0,901	0,792	0,687	0,491
	55	1,147	1,058	0,943	0,832	0,726	0,624	0,435
	50	1,073	0,986	0,873	0,765	0,661	0,562	0,380
	45	1,000	0,915	0,805	0,700	0,599	0,503	0,328
60	55	1,073	0,986	0,873	0,765	0,661	0,562	0,380
	50	1,000	0,915	0,805	0,700	0,599	0,503	0,328
	45	0,929	0,846	0,739	0,636	0,538	0,446	0,278
	40	0,860	0,778	0,674	0,575	0,480	0,391	0,230
55	50	0,929	0,846	0,739	0,636	0,538	0,446	0,278
	45	0,860	0,778	0,674	0,575	0,480	0,391	0,230
	40	0,792	0,713	0,611	0,515	0,424	0,338	0,186
	35	0,726	0,649	0,550	0,457	0,369	0,287	0,144
50	45	0,792	0,713	0,611	0,515	0,424	0,338	0,186
	40	0,726	0,649	0,550	0,457	0,369	0,287	0,144
	35	0,661	0,587	0,491	0,402	0,317	0,240	0,106
45	40	0,661	0,587	0,491	0,402	0,317	0,240	0,106
	35	0,599	0,527	0,435	0,348	0,268	0,194	0,072

An examples of installation



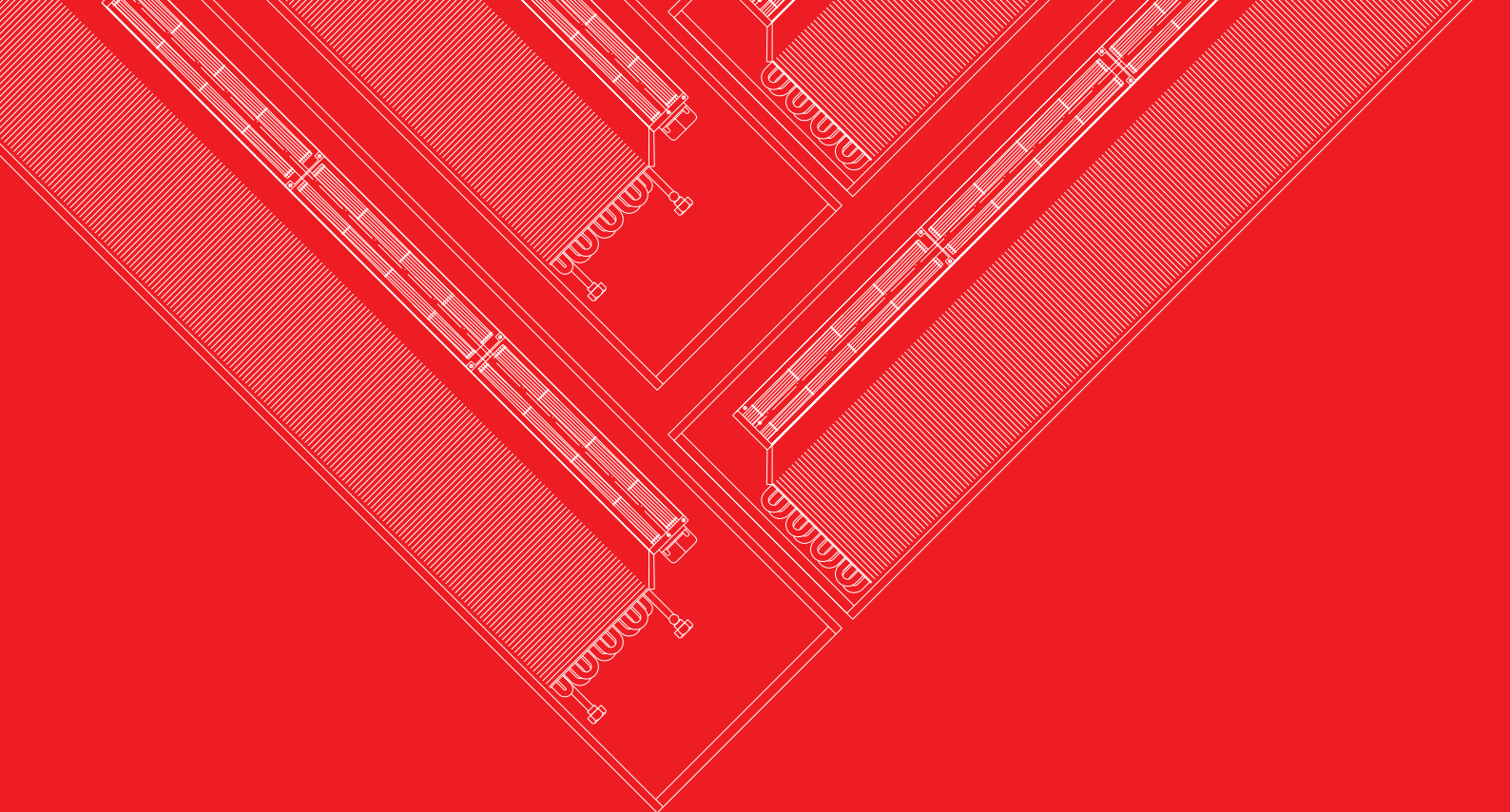
An example of installation without fixing the supply and return pipes



An example of installation passing through the facade, with fixing the supply and return pipes



An example of installation without fixing supply and return pipes, passing through the facade.



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The manufacturer reserves the right to make changes to the design, color and specification.
Illustrations may include optional accessories. Printing technology can affect the differences in the forward colors.
Please contact to your local sales agent for the newest information of Verano products.