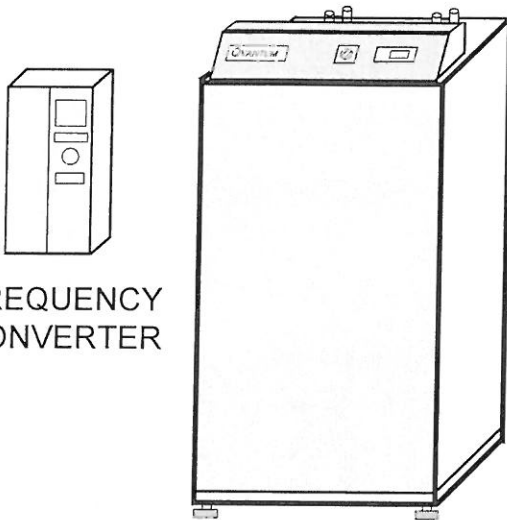


**CAPACITY CONTROLLED
GROUNDWATER HEATPUMP
Quantum Series VK**

HEATING 4 - 70 kW

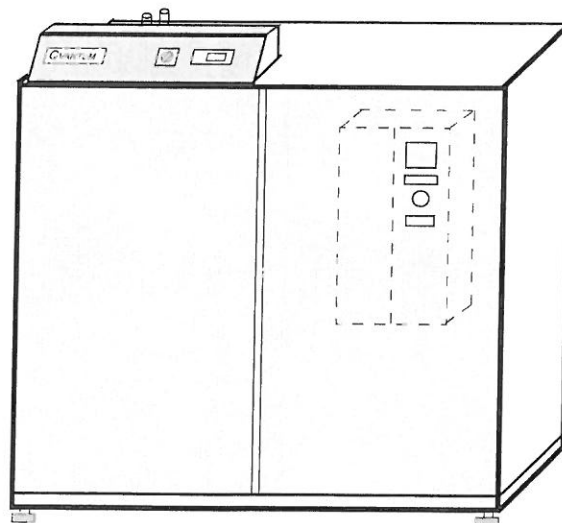
COOLING 3 - 49 kW

REFRIGERANTS: R407C , R134a



FREQUENCY
CONVERTER

QVANTUM Q10VK - Q15VK



FREQUENCY
CONVERTER

QVANTUM Q25VK - 65VK

REFRIGERANT R407C

Series Vk - R407C		Q10Vk	Q15Vk	Q25Vk	Q32Vk	Q48Vk	Q65Vk
Heating power max	kW	11,1	15,3	25,1	34,1	49,0	69,7
Heating power min	kW	3,9	6,0	7,5	11,4	14,9	21,4
Water flow (4,2)	l/s	0,26	0,36	0,60	0,81	1,17	1,66
Δt max/min	°C	10/4	10/4	10/3	10/3	10/3	10/3
ΔP _{condensor}	kPa	22	25	24	25	27	28
Max temp heating w	°C	55	55	55	55	55	55
Cooling power max	kW	7,7	11,2	17,7	23,7	33,7	48,5
Cooling power min	kW	2,8	4,7	5,2	8,3	10,6	15,6
Brine flow (3,8)	l/s	0,37	0,53	0,84	1,13	1,60	2,31
Δt max/min	°C	5/2	5/2	5/1,5	5/2	5/1,5	5/1,5
ΔP _{evaporator}	kPa	32	34	37	38	41	45
Frequency max / min	Hz	90/35	90/35	90/30	85/30	90/30	90/30

Output data at water entering evaporator +10 °C , water leaving condensor +45 °C

REFRIGERANT R134a

Series Vk - R134a		Q10Vk	Q15Vk	Q25Vk	Q32Vk	Q48Vk	Q65Vk
Heating power max	kW	7,5	10,5	17,8	23,9	35,0	47,0
Heating power min	kW	2,7	4,1	5,3	8,0	10,7	14,4
Water flow (4,2)	l/s	0,18	0,25	0,42	0,57	0,83	1,12
Δt max/min	°C	10/4	10/4	10/3	10/4	10/3	10/3
ΔP _{condensor}	kPa	15	15	16	17	19	19
Max temp heating w	°C	65	65	65	65	65	65
Cooling power max	kW	5,0	6,9	12,4	16,1	23,7	31,2
Cooling power min	kW	1,8	2,9	3,6	5,6	7,5	10,2
Brine flow(3,8)	l/s	0,24	0,33	0,59	0,77	1,13	1,49
Δt max/min	°C	5/2	5/2	5/1,5	5/2	5/1,5	5/1,5
ΔP _{evaporator}	kPa	28	26	33	29	34	29
Frequency max / min	Hz	90/35	90/35	90/30	85/30	90/30	90/30

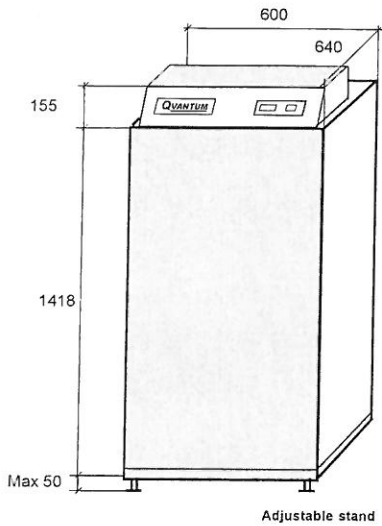
Output data at water entering evaporator +10 °C , water leaving condensor +45 °C

GENERAL DATA

Serie VK		Q10Vk	Q15Vk	Q25Vk	Q32Vk	Q48Vk	Q65Vk
Con.cooling side,Cu	mm	28	28	35	35	42	42
Con.heating side,Cu	mm	28	28	35	35	42	42
Refrgerant quantity	kg	1,1	1,3	2,3	2,8	3,5	5,5
Compressor	pcs	1	1	1	1	1	1
Electrical supp	v/ph	400/3	400/3	400/3	400/3	400/3	400/3
Fuse size *)	A	16	16	25	25	35	50
Max current *)	A	8,2	11,0	17,5	21,8	31,6	41
With	mm	600	600	1200	1200	1200	1200
Depth	mm	640	640	640	640	640	640
Height	mm	1573	1573	1573	1573	1573	1573
Weight	kg	120	135	176	182	207	282
Freq.conv.With	mm	800	800				
Depth	mm	600	600				
Height	mm	504	504				
Weight	kg	45	48				

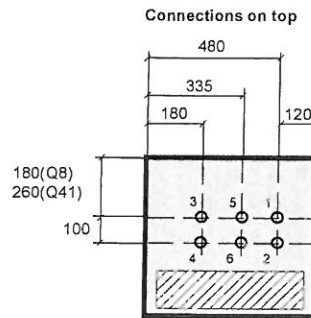
*) circulating pumps etc. not included

QVANTUM SERIES Q10VK - Q15VK



Nr	Connection
1	Inlet cooling medium
2	Outlet cooling medium
3	Outlet heating medium
4	Inlet heating medium
5	Outlet hotgas heating *)
6	Inlet hotgas heating *)
7	Inlet subcooler *)
8	Outlet subcooler *)

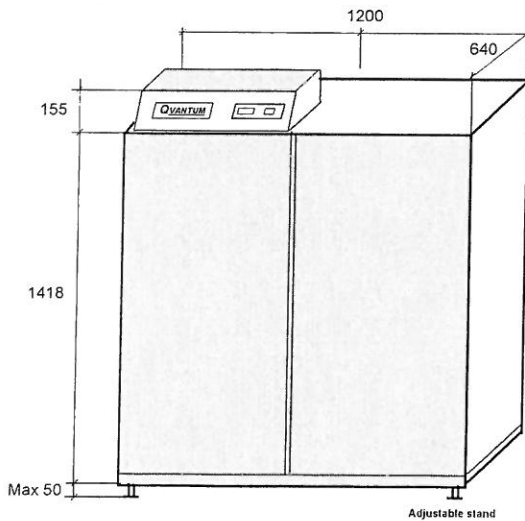
*) Hotgas and subcooler are not standard equipment



Q10-Q15 VK

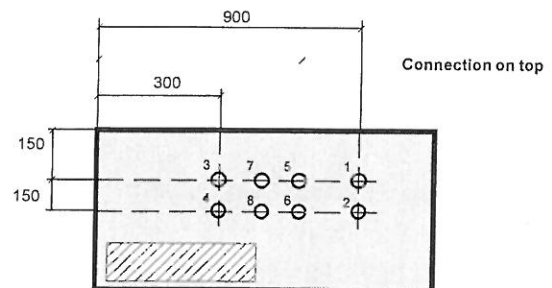
Dimensions frequency converter se: Technical data

QVANTUM SERIE Q25VK-65VK



Nr	Connection
1	Inlet cooling medium
2	Outlet cooling medium
3	Outlet heating medium
4	Inlet heating medium
5	Outlet hotgas heating *)
6	Inlet hotgas heating *)
7	Inlet subcooler *)
8	Outlet subcooler *)

*) Hotgas and subcooler are not standard equipment



Frequency converter inside unit