

VITALITY Split Rooftop

VIRSAC / VIRSAH 20 to 90 AB

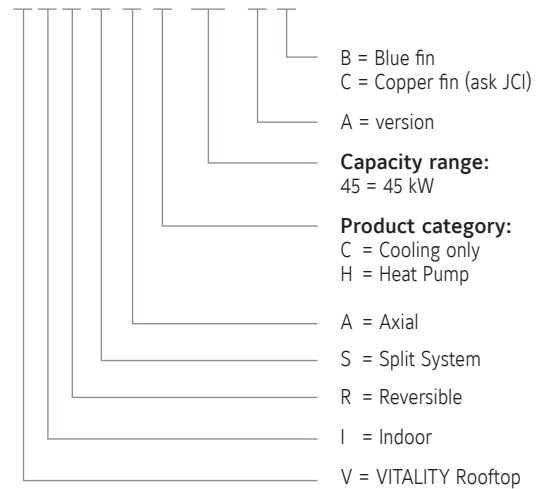
A complete range from 19.1 kW up to 86.1 kW



Features

- Split rooftop for installation where space is at a premium
- Available with energy efficient axial fan on outdoor unit
- YKN2open board
- High technology fan blades increases efficiency and reduces noise level
- Service valves
- Economizer or motorized damper
- Return fan
- Indoor air quality
- Hot water coil and control
- Scroll compressor with crankcase heater
- Digital thermostat DPC-1 included

VIRSAC 45 AB Nomenclature





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VIRSAC / VIRSAH 20 to 90 AB

Technical features

COMPLETE MODEL		VIRSAC20AB	VIRSAC25AB	VIRSAC30AB	VIRSAC45AB	VIRSAC60AB	VIRSAC75AB	VIRSAC90AB	
		VIRSAH20AB	VIRSAH25AB	VIRSAH30AB	VIRSAH45AB	VIRSAH60AB	VIRSAH75AB	VIRSAH90AB	
INDOOR UNITS									
Cooling only and Heat pump	VIR	25AB		40AB	45AB	60AB	75AB	90AB	
OUTDOOR UNITS									
Cooling only models	VAC	20AB	25AB	30AB	45AB	60AB	75AB	90AB	
Cooling capacities	kW	19.10	23.00	28.80	42.90	54.00	72.30	86.10	
Power input in cooling	kW	5.60	6.99	9.60	13.53	18.60	23.09	28.60	
SEER		3.49	3.30	3.01	3.32	3.10	3.21	3.25	
η _{s,c}		136.7	129.0	117.5	129.6	121.2	125.4	126.9	
Refrigerant charge on site for 7 m piping length	kg	12	12	12.5	2 x 11	2 x 11.5	2 x 15.5	2 x 15	
Heat pump models	VAH	20AB	25AB	30AB	45AB	60AB	75AB	90AB	
Cooling capacities	kW	19.10	23.00	28.80	42.90	52.10	72.30	86.10	
Power input in cooling	kW	5.60	6.99	9.60	13.53	18.60	23.09	28.60	
Heating capacities	kW	21.20	25.20	31.90	44.80	59.40	81.00	93.10	
Power input in heating	kW	4.94	6.73	8.41	12.69	17.06	22.13	28.82	
SCOP		2.97	2.96	2.96	3.03	3.02	2.98	2.96	
η _{s,h}		115.8	115.4	115.5	118.2	117.9	116.2	115.4	
Refrigerant charge on site for 7 m piping length	kg	12	12	12.5	2 x 11	2 x 11.5	2 x 15.5	2 x 15	
Power supply		400V/3 + N/ 50Hz							
Nominal / Starting current	A	8.5 / 74	11.8 / 95	15 / 118	2 x 12 / 95	2 x 15 / 118	2 x 19 / 140	2 x 25 / 198	
Main switch (1)	A	20	25	32	50	63	80	100	
Main cable to the outdoor unit (1)	Nbr x mm ²	5 x 4	5 x 4	5 x 6	5 x 10	5 x 16	5 x 25	5 x 35	
Interconnecting cable (1)	Nbr x mm ²	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 2.5	
Cable to standard thermostat (2)	Nbr x mm ²	10 x 0.22							
Insulated refrigerant piping	Suction	1-1/8"	1-1/8"	1-1/8"	2 x 1-1/8"	2 x 1-1/8"	2 x 1-3/8"	2 x 1-3/8"	
	Liquid	1/2"	1/2"	5/8"	2 x 1/2"	2 x 5/8"	2 x 7/8"	2 x 7/8"	
Evaporator fan VIR at nominal airflow (3)	Airflow	m ³ /h	4 590	4 590	7 500	9 000	10 500	13 000	16 000
	Standard ESP	Pa	172		153	150	178	170	240
	ESP with HSD	Pa	267		242	203	277	289	399
	ESP with HSDM	Pa	267		242	203	277	289	399
Nett dimensions outdoor VAC / VAH	Height	mm	1 230	1 230	1 382	1 378 / 1 429	1 378 / 1 429	1 534	1 534
	Length	mm	882	882	882	1 627	1 627	1 627	1 627
	Depth	mm	1 354	1 354	1 354	1 453	1 453	2 099	2 099
Nett dimensions indoor VIR	Height	mm	592		665	764	764	838	838
	Length	mm	1360		1740	2240	2240	2653	2653
	Depth	mm	785		785	772	772	892	892
Nett weight	VAC / VAH	kg	227	228	250	470	483	610	610
	VIR	kg	128		173	223	223	310	312

(1) For information only. These should be checked for compliance with local regulations depending also on installation and conductor type.

(2) Shield type cable only. (3) ESP = External static pressure HSD = High speed drive HSDM = High speed drive and motor

All the data are at EUROVENT conditions with 400V/3+N/50Hz.

Cooling : Entering indoor coil temp. 27°C / 19°C WB and outdoor temperature 35°C Heating : Entering indoor coil temp. 20°C and outdoor temperature 7°C / 6°C WB

Please note indoor and outdoor units can no longer be purchased as individual items, they can only be supplied as a matching pair to comprise the Split Rooftop system.

Vitality Split Rooftop systems comprise of following matched pairs:

CODES	PRODUCT	OLD PRODUCT	CODES	PRODUCT	OLD PRODUCT
S661522073	VIRSAC20AB (Blue fin)	VAC20AB + VIR 25 AB (Blue fin)	S662532073	VIRSAH20AB (Blue fin)	VAH20AB + VIR 25 AB (Blue fin)
S661522573	VIRSAC25AB (Blue fin)	VAC25AB + VIR 25 AB (Blue fin)	S662532573	VIRSAH25AB (Blue fin)	VAH25AB + VIR 25 AB (Blue fin)
S661523073	VIRSAC30AB (Blue fin)	VAC30AB + VIR 40 AB (Blue fin)	S662533073	VIRSAH30AB (Blue fin)	VAH30AB + VIR 40 AB (Blue fin)
S661524673	VIRSAC45AB (Blue fin)	VAC45AB + VIR 45 AB (Blue fin)	S662534673	VIRSAH45AB (Blue fin)	VAH45AB + VIR 45 AB (Blue fin)
S661526173	VIRSAC60AB (Blue fin)	VAC60AB + VIR 60 AB (Blue fin)	S662536173	VIRSAH60AB (Blue fin)	VAH60AB + VIR 60 AB (Blue fin)
S661527673	VIRSAC75AB (Blue fin)	VAC75AB + VIR 75 AB (Blue fin)	S662537673	VIRSAH75AB (Blue fin)	VAH75AB + VIR 75 AB (Blue fin)
S661529173	VIRSAC90AB (Blue fin)	VAC90AB + VIR 90 AB (Blue fin)	S662539173	VIRSAH90AB (Blue fin)	VAH90AB + VIR 90 AB (Blue fin)



Manufacturer reserves the rights to change specifications without prior notice.

Accessories or options

Compatibility table / Codes

VITALITY UNITS								
Cooling only models		VAC 20 AB	VAC 25 AB	VAC 30 AB	VAC 45 AB	VAC 60 AB	VAC 75 AB	VAC 90 AB
		S661522073	S661522573	S661523073	S661524673	S661526173	S661527673	S661529173
Heat pump models		VAH 20 AB	VAH 25 AB	VAH 30 AB	VAH 45 AB	VAH 60 AB	VAH 75 AB	VAH 90 AB
		S662532073	S662532573	S662533073	S662534673	S662536173	S662537673	S662539173
Thermostat								
Delivered with the unit		DPC-1						
YNK2Open Gateway BACnet / IP - JCI Metasys N2	S606791244	A	A	A	A	A	A	A
YNK2Open Gateway Modbus TCP / IP - JCI Metasys N2	S606791245	A	A	A	A	A	A	A
Accessories or options for outdoor units								
VAC/VAH models		20AB	25AB	30AB	45AB	60AB	75AB	90AB
Low Ambient Kit	S606819974	0	0	0				
	S606819975				0	0	0	0
Soft start compressor	S606744692	0	0	0				
	S606744693				0	0	0	0
Alarm relay board	S606791243	O/A	O/A	O/A	O/A	O/A	O/A	O/A
Copper-copper coil	Contact us	0	0	0	0	0	0	0
	S606819801	0	0	0				
Power cut-off switch control panel mounted	S606819802				0	0		
	S608819803						0	0
Accessories or options for indoor units								
VIR models		25A	40AB	45AB	60AB	75AB	90AB	
Electrical Heaters (inside the unit) (cable 20 m included)	10 kW (1 stage)	S611763704	O/A					
	15 kW (1 stage)	S611763714	O/A					
	10 kW (1 stage)	S611763724		O/A				
	20 kW (2 stages)	S611763734		O/A				
	15 kW (1 stage)	S611763744			O/A	O/A		
	30 kW (2 stages)	S611763754			O/A	O/A		
	30 kW (2 stages)	S611763764					O/A	O/A
	40 kW (2 stages)	S611763774					O/A	O/A
50 m connecting cable	1 stage	S611763780	A	A	A	A		
	2 stages	S611763781		A	A	A	A	
Economizer or Motorised damper (dry bulb sensors included) (cable 20 m included)	S613994250	A						
	S613994400		A					
	S613994450			A	A			
	S613994750					A	A	
Indoor air quality	S606819964	A	A	A	A	A	A	
	S611082513	0						
Hot water coil and control (cable 20 m included)	S611084010		0					
	S611084512			0	0			
	S611087510					0	0	
50 m communication cable (Economizer/HWC)	S611087520 *	A	A	A	A	A	A	
Return fan	S613995450			A	A			
	S613995750					A	A	
Vertical discharge Kit	S669482502	0						
	S669484002		0					
	S669486002			0	0			
	S669487502					0	0	
Indoor fan smooth start up to 5,5 kW	S606744690	0	0	0	0	0	0	
	S611991087	0						
High speed drive	S611991089		0					
	S611991091			0		0		
	S611991092				0			
	S611991095						0	
High speed drive and motor	S611991088	0						
	S611991090			0				
	S611991093				0			
	S611991094					0		
	S611991096						0	

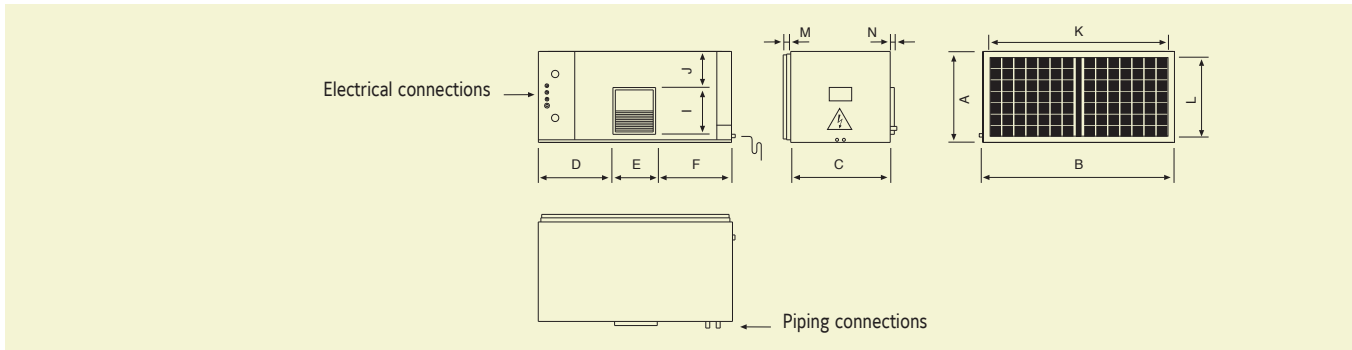
O = Option (factory fitted) A = Accessory (supplied loose) O/A = If you want this item factory fitted, precise it in the order form
(1) Factory fitted, for horizontal airflow only.

* If the unit is equipped with economizer and hot water coil, only 1 communication cable is necessary.

Indoor units dimensions



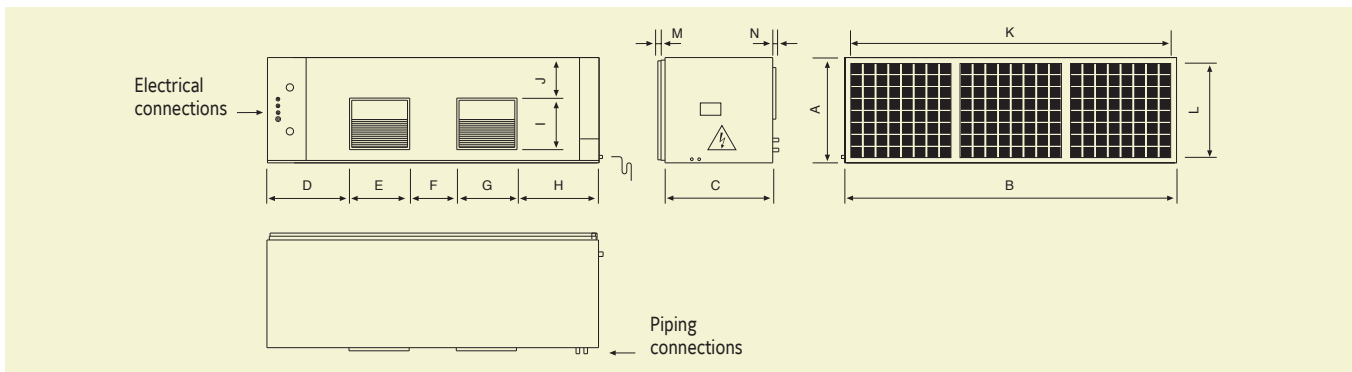
VIR 25 AB



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR 25 AB	592	1360	785	480	403	480	-	-	347	40	1094	520	21	25

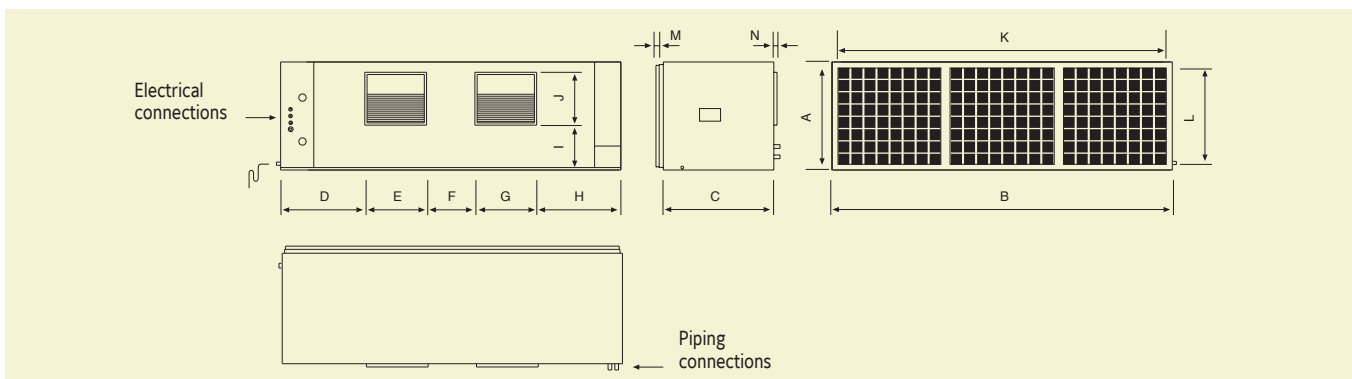
VIR 40-45-60 AB



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR 40 AB	665	1740	785	442	316	229	316	442	347	79	1337	593	21	25
VIR 45 AB	764	2240	772	567	401	309	401	567	347	79	1920	692	21	25
VIR 60 AB	764	2240	772	567	401	309	401	567	347	79	1920	692	21	25

VIR 75-90 AB

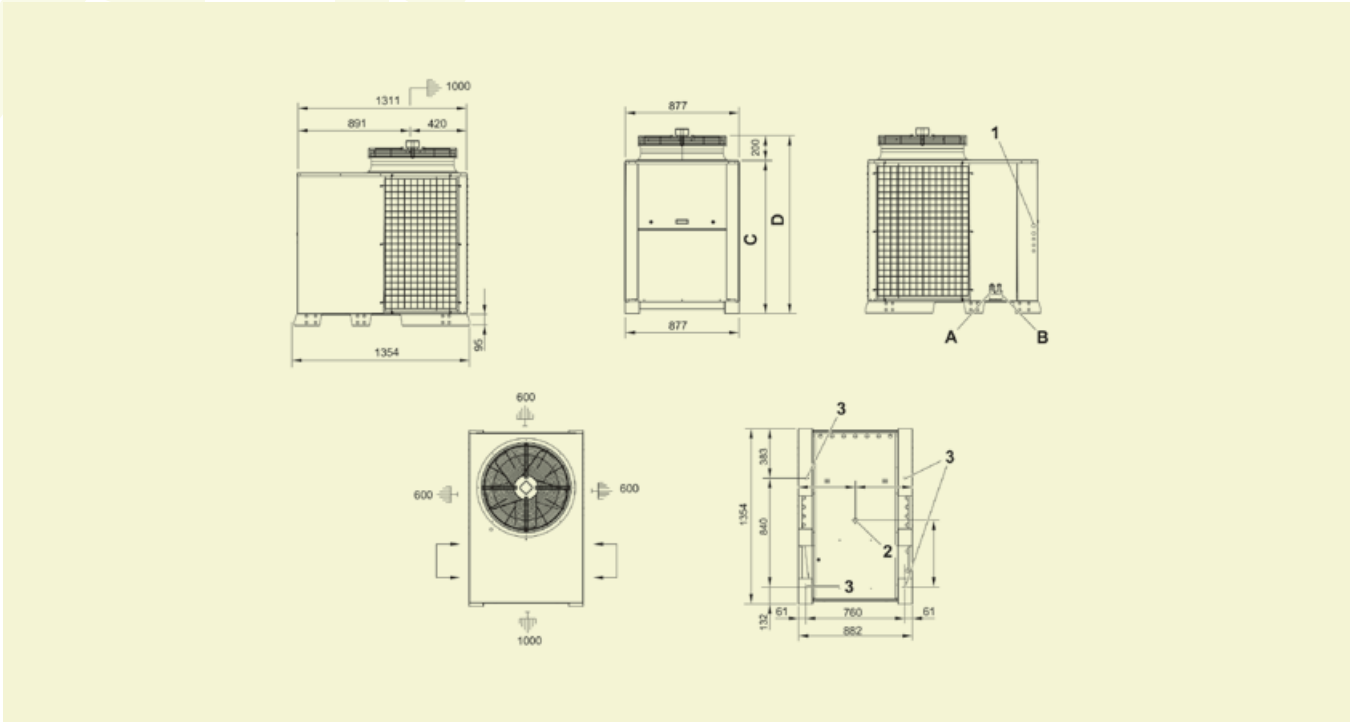


All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR 75 AB	838	2653	892	663	478	376	478	663	409	79	2196	766	21	25
VIR 90 AB	838	2653	892	663	478	376	478	663	409	79	2196	766	21	25

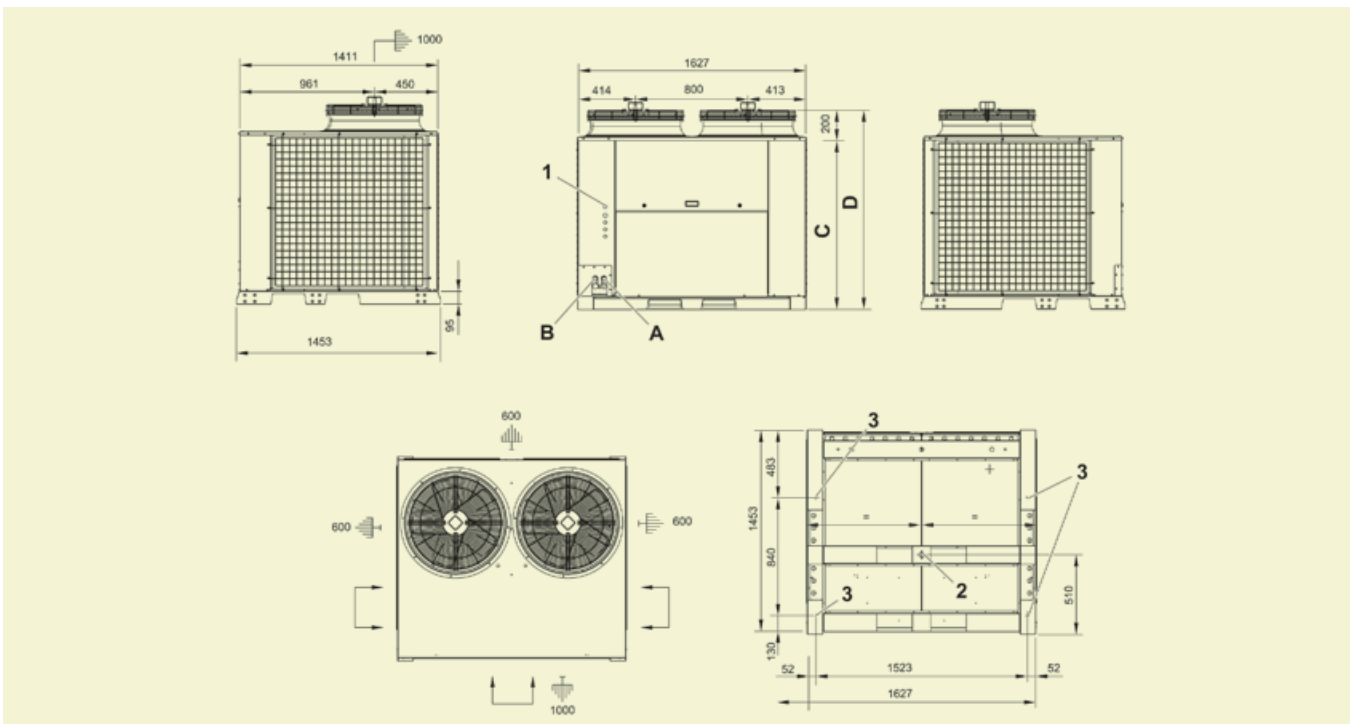
Dimensions and space requirements for outdoor units

VAC-VAH 20-25-30 AB



All dimensions in mm. Drawings not a scale.

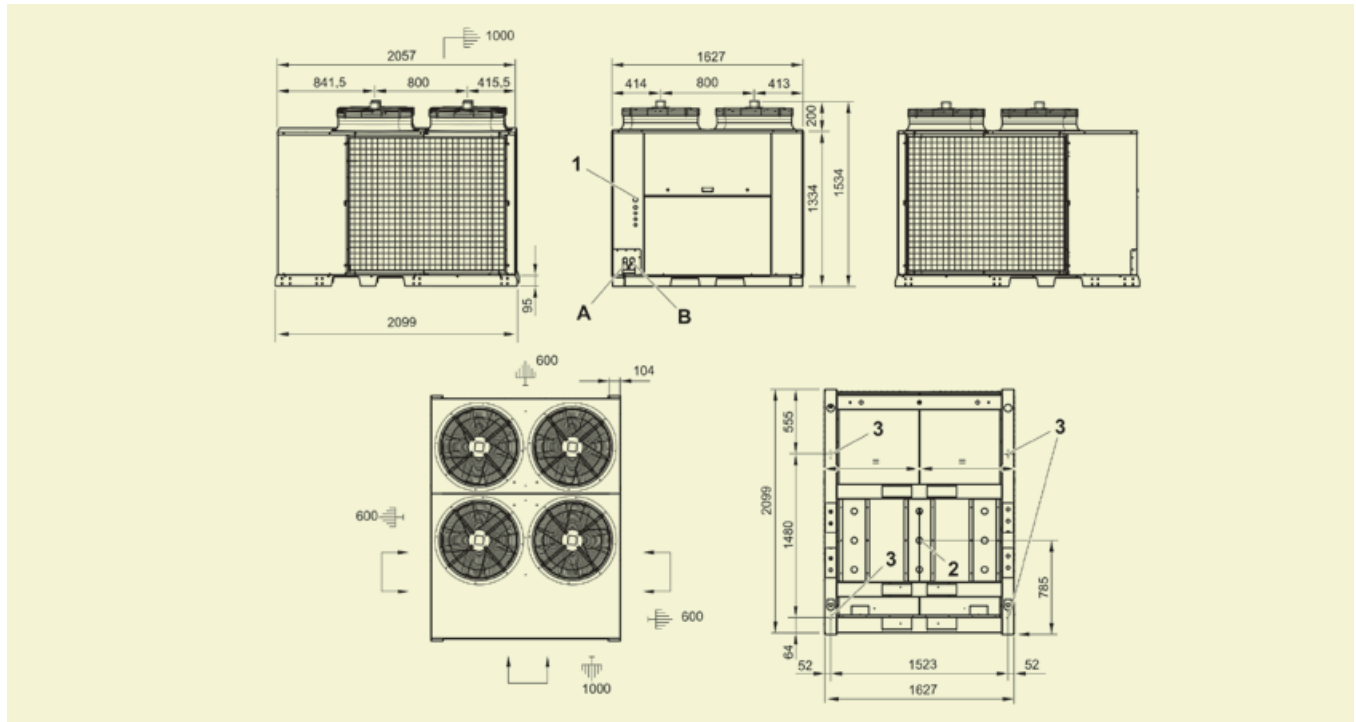
VAC-VAH 45-60 AB



All dimensions in mm. Drawings not a scale.



VAC-VAH 75-90 AB



All dimensions in mm. Drawings not a scale.

VAC-VAH 20-25-30 AB

	A	B	C	D
Unit	Gas piping diameter	Liquid piping diameter	mm	mm
VAC 20 AB	1-1/8"	1/2"	1030	1230
VAH 20 AB	1-1/8"	1/2"	1030	1230
VAC 25 AB	1-1/8"	1/2"	1030	1230
VAH 25 AB	1-1/8"	1/2"	1030	1230
VAC 30 AB	1-1/8"	5/8"	1182	1382
VAH 30 AB	1-1/8"	5/8"	1182	1382

VAC-VAH 45-60 AB

	A	B	C	D
Unit	Gas piping diameter	Liquid piping diameter	mm	mm
VAC 45 AB	2 x 1-1/8"	2 x 1/2"	1178	1378
VAH 45 AB	2 x 1-1/8"	2 x 1/2"	1129	1429
VAC 60 AB	2 x 1-1/8"	2 x 5/8"	1178	1378
VAH 60 AB	2 x 1-1/8"	2 x 5/8"	1129	1429

VAC-VAH 75-90 AB

	A	B	C	D
Unit	Gas piping diameter	Liquid piping diameter	mm	mm
VAC 75 AB	2 x 1-3/8"	2 x 7/8"	-	-
VAH 75 AB	2 x 1-3/8"	2 x 7/8"	-	-
VAC 90 AB	2 x 1-3/8"	2 x 7/8"	-	-
VAH 90 AB	2 x 1-3/8"	2 x 7/8"	-	-