

AIR SYSTEMS

VITALITY Axial Large Split

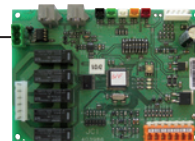
VAC / VAH - VIR 20 to 90 A



VITALITY Axial Fan Large Split

VAC/VAH - VIR 20 to 90 A

A complete range from 19.1 kW up to 86.1 kW



YKN2open

Features

- New 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

V A H 40 A

Nomenclature

A = version

Capacity range:
40 = 40 kW

Product category:
C = Cooling only
H = Heat Pump
R = Reversible
I = Indoor

A = Axial

V = Vitality

VITALITY Axial Fan Large Split

VAC/VAH - VIR 20 to 90 A



Technical features

INDOOR UNITS									
Cooling only and Heat pump	VIR	25A		40A		45A	60A	75A	90A
OUTDOOR UNITS									
Cooling only models	VAC	20A	25A	30A	40A	45A	60A	75A	90A
Cooling capacities	kW	19.10	23.00	28.80	35.10	42.90	54.00	72.30	86.10
Power input in cooling	kW	5.60	6.99	9.60	11.62	13.53	18.60	23.09	28.60
EER (4)		3.41	3.29	3.00	3.02	3.17	2.90	3.13	3.01
Refrigerant charge on site for 7 m piping length	kg	12	12	12.5	13.5	2 x 11	2 x 11.5	2 x 15.5	2 x 15
Heat pump models	VAH	20A	25A	30A	40A	45A	60A	75A	90A
Cooling capacities	kW	19.10	23.00	28.80	35.10	42.90	52.10	72.30	86.10
Power input in cooling	kW	5.60	6.99	9.60	11.62	13.53	18.60	23.09	28.60
EER (4)		3.41	3.29	3.00	3.02	3.17	2.80	3.13	3.01
Heating capacities	kW	21.20	25.20	31.90	41.00	44.80	59.40	81.00	93.10
Power input in heating	kW	4.94	6.73	8.41	12.09	12.69	17.06	22.13	28.82
COP (4)		4.29	3.74	3.79	3.39	3.53	3.48	3.66	3.23
Refrigerant charge on site for 7 m piping length	kg	12	12	12.5	13.5	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	19.3 / 140	2 x 12 / 95	2 x 15 / 118	2 x 19 / 140	2 x 25 / 198
Main switch (1)	A	20	25	32	40	50	63	80	100
Main cable to the outdoor unit (1)	Nbr x mm²	5 x 4	5 x 4	5 x 6	5 x 10	5 x 10	5 x 16	5 x 25	5 x 35
Interconnecting cable (1)	Nbr x mm²	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 1.5	4 x 2.5
Cable to standard thermostat (2)	Nbr x mm²	10 x 0.22							
Insulated refrigerant piping	Suction	1-1/8"	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"	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	m³/h	4 590	4 590	7 500	7 500	9 000	10 500	13 000
	Standard ESP	Pa	172		153		150	178	170
	ESP with HSD	Pa	267		242		203	277	289
	ESP with HSMD	Pa	267		242		203	277	289
Nett dimensions outdoor VAC / VAH	Height	mm	1 230	1 230	1 382	1 378	1 378 / 1 429	1 378 / 1 429	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	1 453	2 099
Nett dimensions indoor VIR	Height	mm	592		665		764	764	838
	Length	mm	1360		1740		2240	2240	2653
	Depth	mm	785		785		772	772	892
Nett weight	VAC / VAH	kg	227	228	250	397	560	562	610
	VIR	kg	128		173		250	250	340

(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 HSMD = High speed drive and motor

(4) 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

Codes

INDOOR UNITS								
Cooling only & heat pump models	VIR 25		VIR 40		VIR 45	VIR 60	VIR 75	VIR 90
	S662562574		S662564074		S662564574	S662566074	S662567574	S662569074
OUTDOOR UNITS								
Cooling only models	VAC 20	VAC 25	VAC 30	VAC 40	VAC 45	VAC 60	VAC 75	VAC 90
	S661502063	S661502563	S661503063	S661504163	S661504663	S661506163	S661507663	S661509163
Heat pump models	VAH 20	VAH 25	VAH 30	VAH 40	VAH 45	VAH 60	VAH 75	VAH 90
	S662512063	S662512563	S662513063	S662514163	S662514663	S662516263	S662517663	S662519163
Thermostat								
Delivered with the unit	DPC-1							

Accessories or options

Compatibility table / Codes

INDOOR UNITS									
Cooling only & heat pump		VIR 25A		VIR 40A		VIR 45A	VIR 60A	VIR 75A	VIR 90A
		S662562574		S662564074		S662564574	S662566074	S662567574	S662569074
OUTDOOR UNITS									
Cooling only models		VAC 20A	VAC 25A	VAC 30A	VAC 40A	VAC 45A	VAC 60A	VAC 75A	VAC 90A
		S661502063	S661502563	S661503063	S661504163	S661504663	S661506163	S661507663	S661509163
Heat pump models		VAH 20A	VAH 25A	VAH 30A	VAH 40A	VAH 45A	VAH 60A	VAH 75A	VAH 90A
		S662512063	S662512563	S662513063	S662514163	S662514663	S662516263	S662517663	S662519163
Thermostat									
Delivered with the unit		DPC-1							
Accessories or options for outdoor units									
		20A	25A	30A	40A	45A	60A	75A	90A
Low Ambient Kit	S606819974	0	0	0	0				
	S606819975					0	0	0	0
Soft start compressor	S606744692	0	0	0	0				
	S606744693					0	0	0	0
Copper-copper coil	Contact us	0	0	0	0	0	0	0	0
Blue fin	Contact us	0	0	0	0	0	0	0	0
Accessories or options for indoor units									
VIR models			25A	40A	45A	60A	75A	90A	
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	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	A
		S611082513	O						
Hot water coil and control (cable 20 m included)		S611084010		O					
		S611084512			O	O			
		S611087510					O	O	
50 m communication cable (Economizer/HWC)		S611087520 *	A	A	A	A	A	A	A
Return fan		S613995450			A	A			
		S613995750					A	A	
Vertical discharge Kit		S669482502	O						
		S669484002		O					
		S669486002			O	O			
		S669487502					O	O	
Indoor fan smooth start up to 5,5 kW		S606744690	O	O	O	O	O	O	O
High speed drive		S611991087	O						
		S611991089		O					
		S611991091			O		O		
		S611991092				O			
		S611991095							O
High speed drive and motor		S611991088	O						
		S611991090			O				
		S611991093				O			
		S611991094					O		
		S611991096							O

O = Option (factory fitted) A = Accessory (supplied loose) O/A = If you want this item factory fitted, precise it in the order form

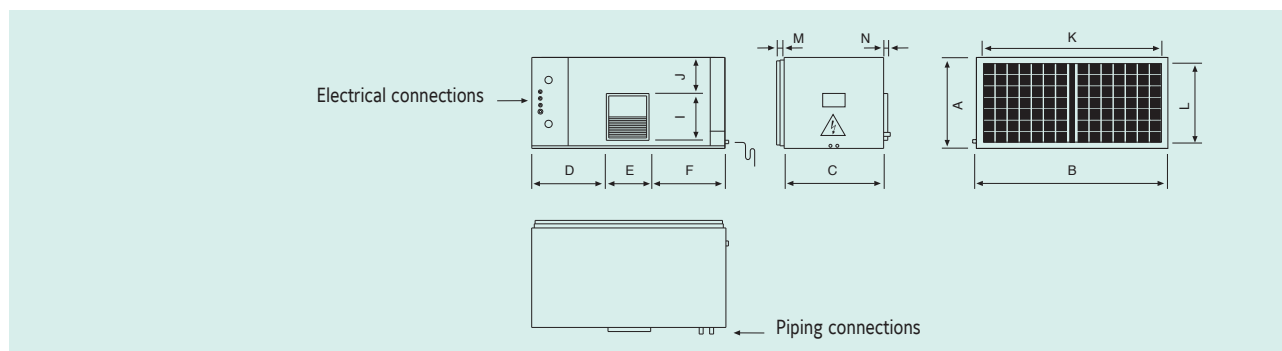
(1) Factory fitted, for horizontal airflow only.

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

Indoor units dimensions



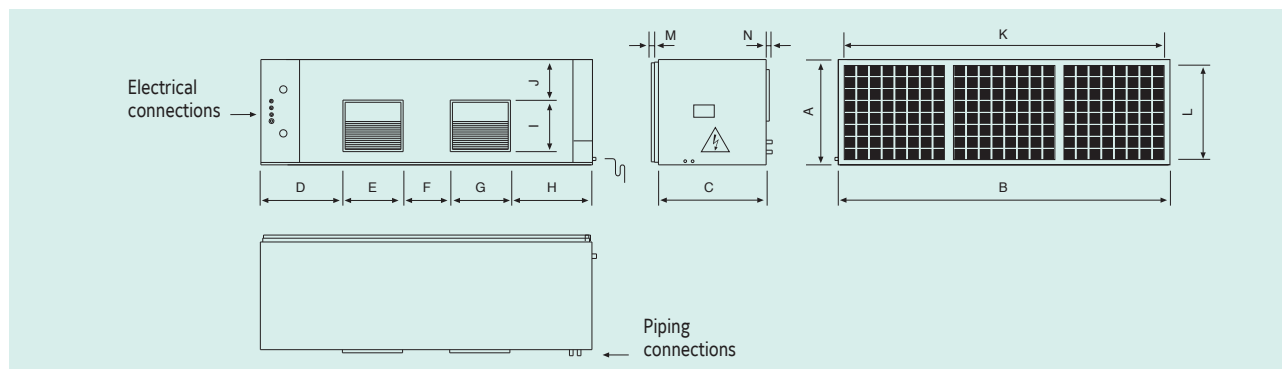
VIR 25A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR25A	592	1360	785	480	403	480	-	-	347	40	1094	520	21	25

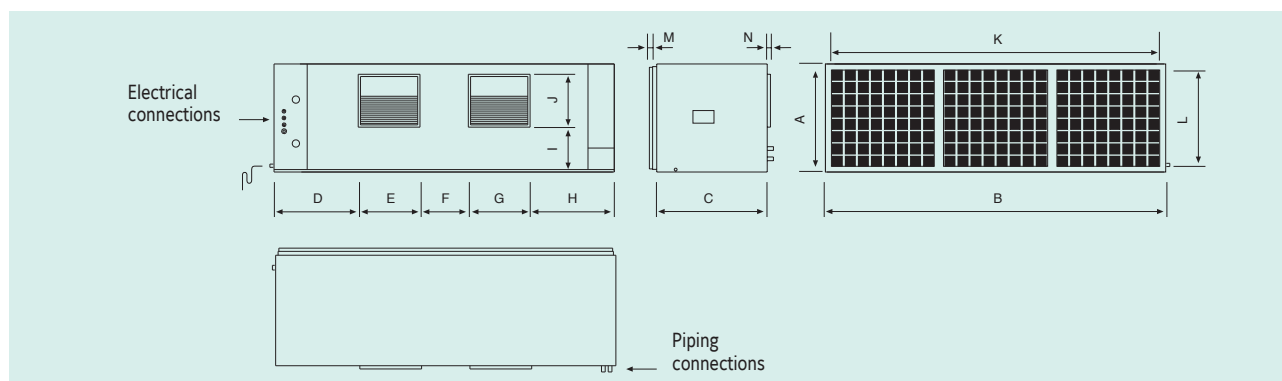
VIR 40-45-60A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR40A	665	1740	785	442	316	229	316	442	347	79	1337	593	21	25
VIR45A	764	2240	772	567	401	309	401	567	347	79	1920	692	21	25
VIR60A	764	2240	772	567	401	309	401	567	347	79	1920	692	21	25

VIR 75-90A

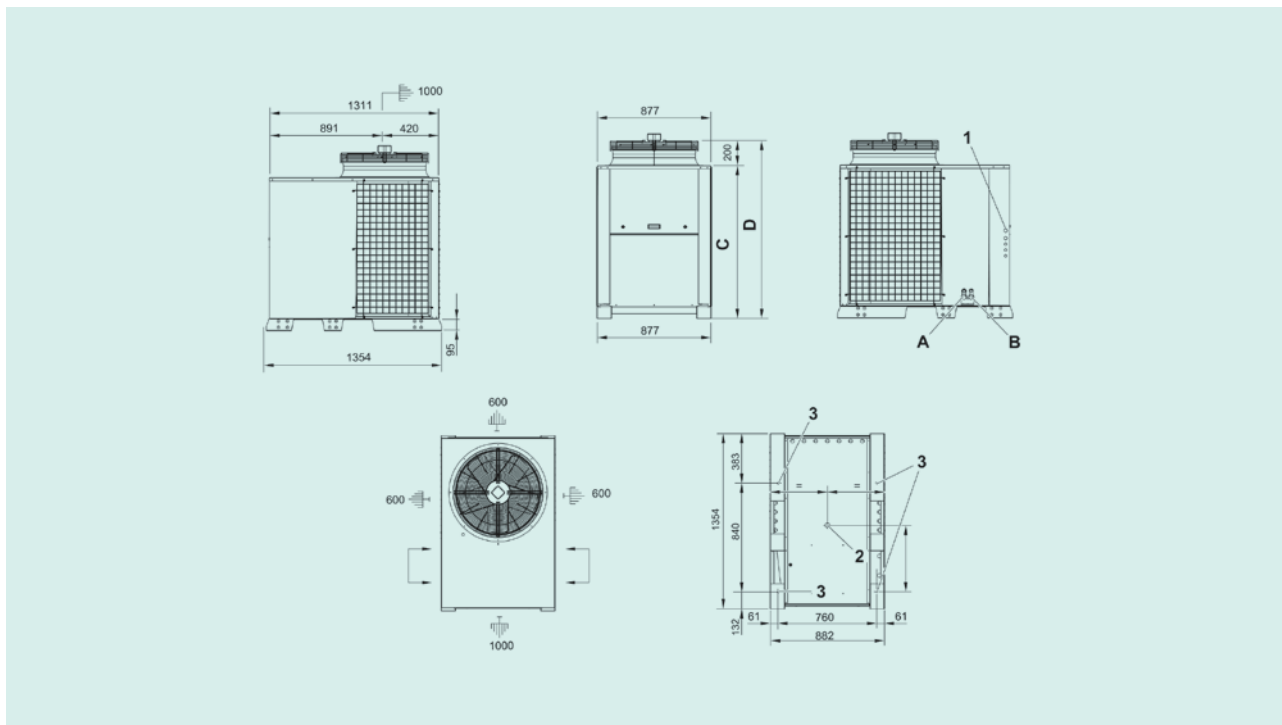


All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR75A	838	2653	892	663	478	376	478	663	409	79	2196	766	21	25
VIR90A	838	2653	892	663	478	376	478	663	409	79	2196	766	21	25

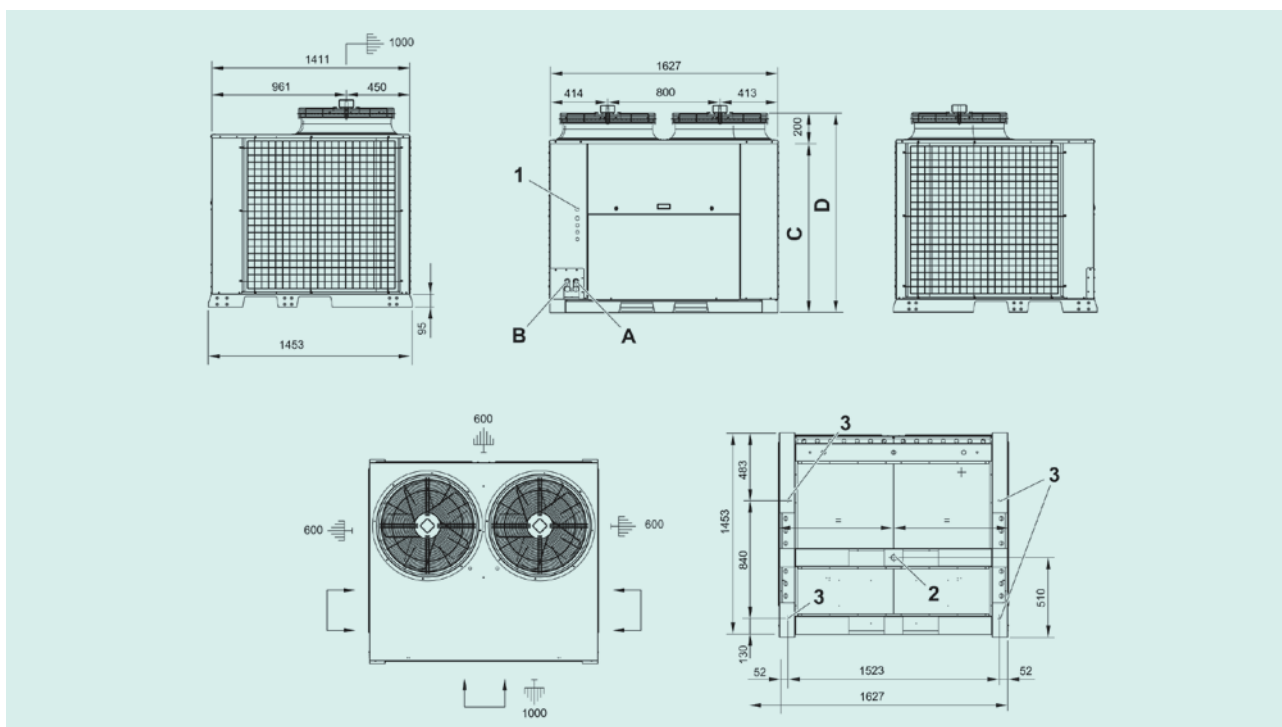
Dimensions and space requirements for outdoor units

VAC-VAH 20-25-30 A



All dimensions in mm. Drawings not a scale.

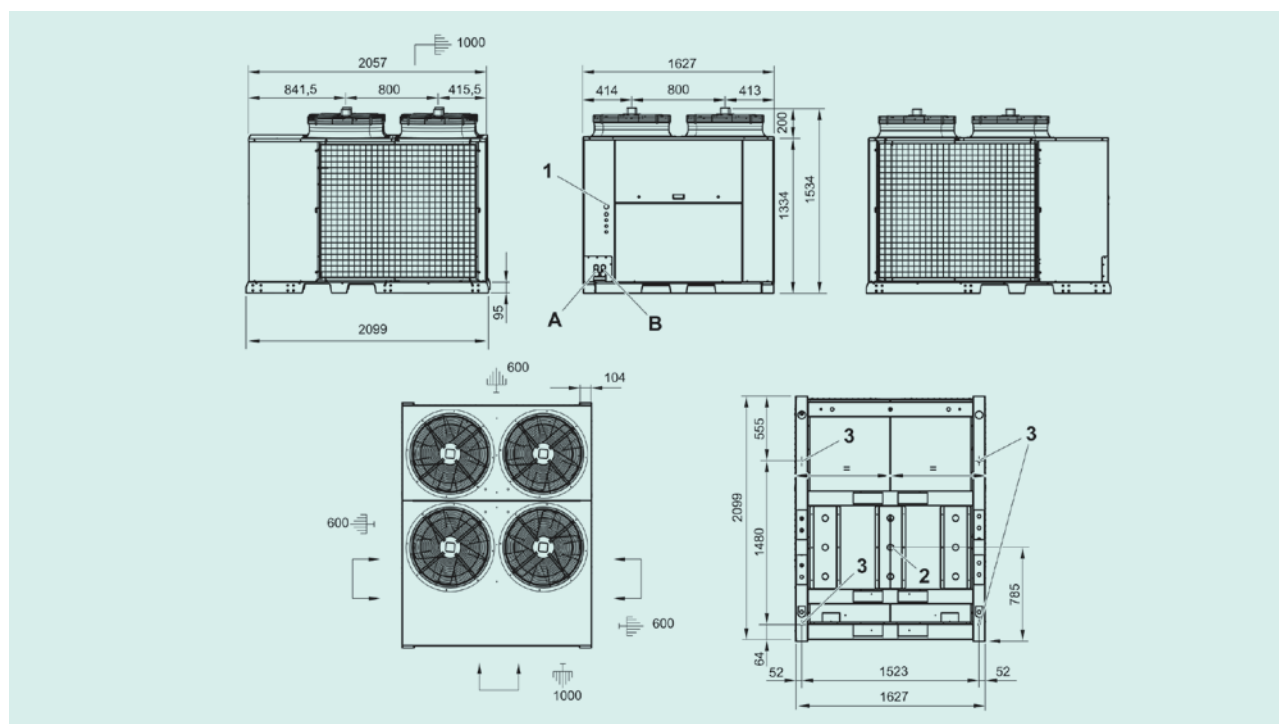
VAC-VAH 40-45-60 A



All dimensions in mm. Drawings not a scale.



VAC-VAH 75-90 A



All dimensions in mm. Drawings not a scale.

VAC-VAH 20-25-30 A

	A	B	C	D
Unit	Gas piping diameter	Liquid piping diameter	mm	mm
VAC20A	1-1/8"	1/2"	1 030	1 230
VAH20A	1-1/8"	1/2"	1 030	1 230
VAC25A	1-1/8"	1/2"	1 030	1 230
VAH25A	1-1/8"	1/2"	1 030	1 230
VAC30A	1-1/8"	5/8"	1 182	1 382
VAH30A	1-1/8"	5/8"	1 182	1 382

VAC-VAH 40-25-60 A

	A	B	C	D
Unit	Gas piping diameter	Liquid piping diameter	mm	mm
VAC40A	1-1/8"	5/8"	1 178	1 378
VAH40A	1-1/8"	5/8"	1 178	1 378
VAC45A	2 x 1-1/8"	2 x 1/2"	1 178	1 378
VAH45A	2 x 1-1/8"	2 x 1/2"	1 129	1 429
VAC60A	2 x 1-1/8"	2 x 5/8"	1 178	1 378
VAH60A	2 x 1-1/8"	2 x 5/8"	1 129	1 429

VAC-VAH 40-25-60 A

	A	B	C	D
Unit	Gas piping diameter	Liquid piping diameter	mm	mm
VAC75A	2 x 1-3/8"	2 x 7/8"	-	-
VAH75A	2 x 1-3/8"	2 x 7/8"	-	-
VAC90A	2 x 1-3/8"	2 x 7/8"	-	-
VAH90A	2 x 1-3/8"	2 x 7/8"	-	-

