

# APAC

Commercial HVAC





## APAC by Rinnai

APAC Air Conditioning is an important part of the Rinnai group of companies. Headquartered in Japan, the Rinnai Corporation has an international presence through 13 subsidiaries and affiliates around the world.

Rinnai Australia was established in 1971 and since then has been providing Australians with the comfort, convenience and reliability of Rinnai appliances. Our vision is to be market leaders in the provision of innovative products and services within our target business arenas, and to meet a growing demand for value based products, environmental sustainability and renewable energy efficiency.

Rinnai Australia currently operates a number of class leading manufacturing facilities in Australia, and is proud to add APAC Air Conditioning to its existing portfolio of significant Australian brands.



Rinnai







## Rinnai Manufacturing Malaysia

Rinnai Manufacturing Malaysia produces some of the world's most efficient HVAC products – APAC. RMM was opened to help support the growth of APAC across the region with a facility matching the local Australian production capabilities. Our innovative and tailored approach focusing on relentless R&D, design, and manufacturing capability, further adds to Rinnai's existing superior technical and state-of-the-art manufacturing facilities globally.

Our manufacturing facility located in Selangor, Malaysia is an extension of our APAC facility in Australia, bringing together the same world-class innovative products to the region, supported by a large international sales, distribution and service network.

Being the supplier of choice for industrial and commercial air conditioning throughout Australia for decades, and now with the backing of Rinnai Corporation, our strategic investment aims to position Malaysia as the regional technology hub within the Southeast Asia driving towards as the centre of excellence and innovation.



## APAC Advantage

With a legacy spanning over 45 years, APAC Air Conditioning have spared Australians from enduring our ever-changing climate extremes.

Now APAC is back, bigger and better than ever. With the support of Rinnai Japan, one of the world's leading supplier of Hot Water, Heating and Cooling products, you can rest assured knowing APAC will deliver when the heat is on. Australian designed, our units are not only ready for new developments, they're also the perfect replacement for ageing APAC units nearing the end of their operating life.

Engineered with consultants, building owners, facilities managers and installers in mind, APAC's expertly crafted systems have one of the lowest costs of ownership in its class.







## Reduced Energy Costs

Our APAC range pushes the boundary in high efficiency ratings so you can enjoy up to 31%\* energy savings, lowering your power bills significantly.



## Customisable

Unmatched list of factory fitted options to make the product suitable for almost any commercial or industrial projects.



## Reliability

High efficiency direct drive fans ensure low ongoing maintenance costs, and better reliability



Engineered & Built in Malaysia



Performance Tested  
in a NATA accredited  
Test Laboratory



Quality Assurance  
Built in a production facility  
with a certified quality  
management system to  
ISO9001

\*Statistic based on comparison with legacy APAC products. Refer to table at <https://www.apacair.com.au/replacements/> for comparison.

# APAC Production

## Investing in Manufacturing

### World-Class Manufacturing

Rinnai Manufacturing in both Australia and Malaysia produces some of the world's most efficient HVAC products – APAC. Our innovative and tailored approach focusing on relentless R&D, design, and manufacturing capability, further adds to Rinnai's existing superior technical and state-of-the-art manufacturing facilities globally.

Our manufacturing facility located in Selangor, Malaysia is an extension of our APAC facility in Melbourne, Australia, bringing the same world-class innovative products to the region, supported by a large international sales, distribution and service network.







## Trusted Performance

Apac has one of the few NATA certified test laboratory's in the region to ensure compliance with the relevant standards. You can rest assured with proven performance in the field.

## Yukawa NATA Certified Laboratory

Yukawa Lab is one of Australia's and Asia's largest testing facilities for Australian, Pacific and Asian high-end appliance testing. Our NATA accredited laboratories are AS ISO/IEC 17025 and AS/NZS ISO 9001 certified, ensuring our test laboratories and environmental chambers are independently audited and international best practices are followed.

- NATA certified 2022; capacity is up to 200kW and the temperature tolerance is  $\pm 0.5^{\circ}\text{C}$
- One of the few NATA approved test facilities in the region.

**YUKAWA**



# APAC Technology



## Scroll Compressors

Scroll type compressors for increased efficiency and reliability.



## EC Plug Fans

Speed controlled high static direct drive impeller with Electronically Commutated (EC) variable speed motor for lower energy use.



## Outdoor Coil Guard

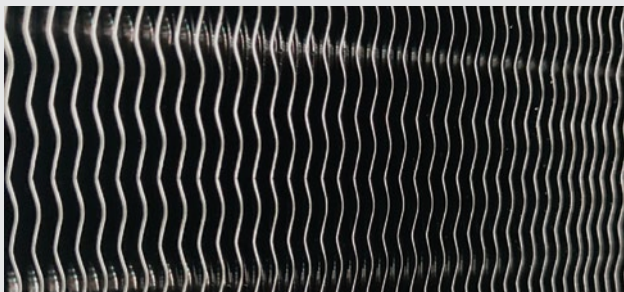
Provides protection from the elements and impact damage.



## Hybrid Axial Fan

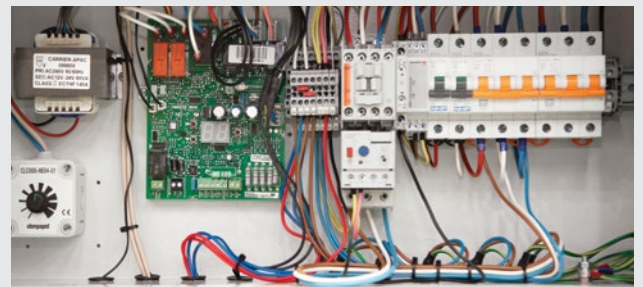
Speed controlled direct drive external rotor motor with hybrid blades for improved efficiency and performance.





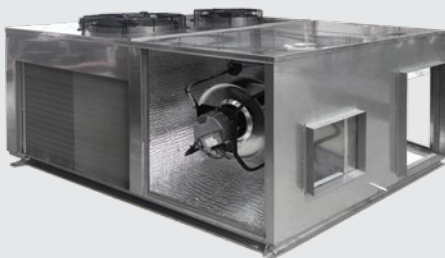
## Coil Corrosion Protection

Epoxy coated outdoor coils for improved corrosion resistance.



## Open Controls

Compatible with all BMS control systems and simple 24-volt control circuit for easy fault diagnostics.



## Customised Designs

Many pre-engineered factory fitted options to suit your application.



## Engineered Products

Our team can engineer products specifically for your application based on your project requirements.

# APAC Signature Product Lineup



**Rooftop Package Unit**

12-230kW capacity range



**Compact Rooftop Package Unit**

29-48kW capacity range



**Split Ducted Unit (Low Profile)**

12-45kW capacity range



**Split Ducted Unit (Horizontal)**

24-95kW capacity range





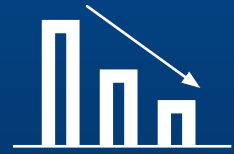
## Vertical Package Unit

12-45kW capacity range



## Split Ducted Unit (Vertical)

12-45kW capacity range



## Up to 31%\* more energy efficient

High efficiency ratings with up to 31% energy savings compared to the existing APAC equivalent unit.



## Fastest changeovers

A perfect match to the APAC unit size, footprint, ductwork, mains power and controls, avoiding costly modifications.



## Quieter operation with 12db(A) sound reduction

Outdoor fans slow down when the ambient temperature falls, up to a 20% noise reduction.

\* Statistic based on comparison with legacy APAC products. Refer to table at <https://www.apacair.com.au/replacements/> for comparison.

# Signature Rooftop Package Unit

## Features

- Scroll type compressors
- EC plug fans with high static capability up to 500pa
- Hybrid axial fan (12-45kW)
- EC hybrid axial fan (55-95kW)
- TXV refrigerant control
- Condenser coil anti-corrosion protection
- Open controls
- 25mm PE closed cell insulation
- Phase fail protection relay
- MEPS certified
- BCA compliant

## Factory options customised to order

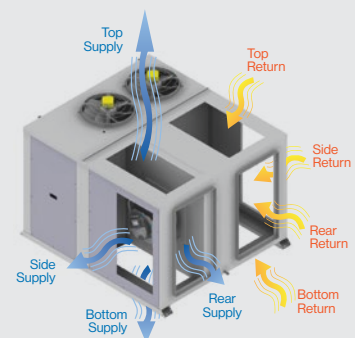
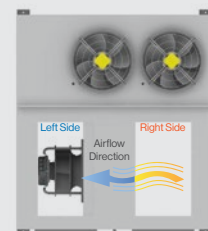
- Compressor soft starter
- High static pressure outdoor fans
- Double layered insulation to indoor section
- Capacity modulation control
- Outdoor coil(s) with anti-corrosion post-treatment
- Indoor coil(s) with anti-corrosion post-treatment
- Outdoor coil guards, powder coated
- Discharge & suction isolation valves
- Liquid line isolation valves across filter drier
- Cable markers
- Fire relay
- APAC Supply & Return connections
- High Level Interface (HLI) Modbus connectivity
- Integrated filter frame 50mm
- Economiser – dampers and actuators (no controls)

## Factory options engineered to order

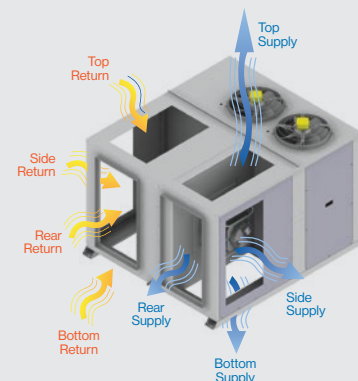
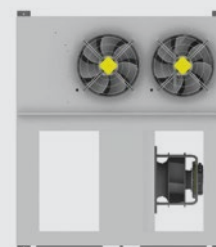
- 316 stainless steel cabinet, unpainted
- 304 stainless steel cabinet, powder coated
- Stainless steel external fixings
- Outdoor coil(s) copper / copper
- Indoor coil(s) copper / copper
- Power supply – no neutral (415/3/50)
- Ductable air off in lieu of standard axial

## Handing options

### Left hand supply air (standard)



### Right hand supply air (optional)





# Signature Rooftop Package Specifications (12 to 95kW)

Model Number (Reverse Cycle)	Packaged Unit	P012AHR	P015AHR	P018AHR	P020AHR	P023AHR	P024AHR	P030AHR	P035AHR	P040AHR	P045AHR	P055AHR	P065AHR	P075AHR	P085AHR	P095AHR
Rated Cooling	Total Capacity (kW) <sup>3</sup>	12.57	15.54	17.43	20.53	22.89	25.14	30.82	34.08	39.76	44.78	52.98	63.89	72.95	83.74	94.04
	Sensible <sup>3</sup>	9.70	12.09	13.58	15.99	18.20	19.38	26.23	28.49	33.32	37.57	44.29	54.5	58.51	69.34	77.49
	EER (kW/ikW) <sup>3</sup>	3.59	3.70	3.49	3.60	3.32	3.59	3.67	3.47	3.29	3.14	3.06	3.28	3.49	3.47	3.24
Rated Heating <sup>1</sup>	Total Capacity (kW)	11.90	14.70	16.70	20.60	22.50	23.80	30.20	33.60	40.10	42.90	54.40	65.00	73.40	84.30	96.10
	COP	3.66	3.87	3.71	3.81	3.63	3.66	3.59	3.61	3.61	3.77	3.40	3.61	3.59	3.60	3.60
MEPS Certified	MEPS Certified/ BCA	Yes												BCA Compliant		
Operating Range	Maximum °C	+50														
	Minimum °C	-10														
Capacity Steps	%	0/100					0/50/100									
Compressor	Type	Scroll														
	Starter	D.O.L (Optional Soft Starter)														
	Qty	1					2									
Outdoor Fan	Type	Hybrid Axial										EC Hybrid Axial				
	Speed Control	Variable Speed										Pressure Transducer				
	Qty	2														
Refrigerant System	Type	R410A														
	Charge Per Circuit kg	3.95	5.30	5.70	7.30	6.80	3.95	5.30	5.70	7.30	6.80	5.75	6.75	9.50	11.00	10.80
	No of Circuits	1					2									
Indoor Fan	Type	EC Plug														
	Speed Control	Potentiometer														
	Qty	1										2				
Airflow Indoor (L/s)	Nominal	625	800	890	1040	1190	1250	1600	1780	2080	2380	2880	3550	3750	4400	4930
	Maximum	781	1000	1113	1300	1488	1563	2000	2225	2600	2975	3600	4438	4688	5500	6163
	Minimum	469	600	668	780	893	938	1200	1335	1560	1785	2160	2663	2813	3300	3698
Available External Static Pressure	Pa	High Static Capability (See Fan Performance Curves)														
IP Rating		IP44														
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz														
Rated Load Amps <sup>4</sup>	Total	6.8	8.1	9.8	10.4	11.4	13.6	15.9	19.4	20.7	23	31.1	35.5	38.1	43.6	56.4
Full Load Amps <sup>5</sup>	Total	12.3	14.6	16.1	20.0	20.0	23.8	28.4	31.4	39.8	39.8	49.8	55.4	61.4	73.6	79.6
Dimensions (mm)	Height	1162					1190					1390	1595		1800	
	Width	1550					1850					1850	2200			
	Length	1700					2400					2400			2750	
Nominal Weight <sup>2</sup> .	kg	350	364	372	390		615	625	635	648	650	730	900	920	1060	1070
Rated Sound Power	db(A)	61.7			66.6		66.5			66.3		70.9	71.5			

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

# Signature Rooftop Package Unit

## Features

- Scroll type compressors
- EC plug fans with high static capability up to 500pa
- EC hybrid axial fan
- TXV refrigerant control
- Condenser coil anti-corrosion protection
- 25mm PE closed cell insulation
- Phase fail protection relay
- MEPS certified
- BCA compliant

## Factory options customised to order

- Compressor soft starter
- High static pressure outdoor fans
- Double layered insulation to indoor section
- Capacity modulation control
- Outdoor coil(s) with anti-corrosion post-treatment
- Indoor coil(s) with anti-corrosion post-treatment
- Outdoor coil guards, powder coated
- Discharge & suction isolation valves
- Liquid line isolation valves across filter drier
- Economiser – dampers and actuators (no controls)
- High Level Interface (HLI) Modbus connectivity
- Integrated filter frame 50mm
- APAC Supply & Return connections
- Cable markers
- Fire relay

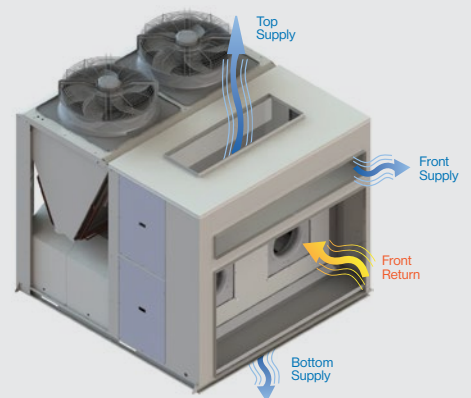
## Factory options engineered to order

- 316 stainless steel cabinet, unpainted
- 304 stainless steel cabinet, powder coated
- Stainless steel external fixings
- Outdoor coil(s) copper / copper
- Indoor coil(s) copper / copper
- Power supply – no neutral (415/3/50)
- Ductable air off in lieu of standard axial

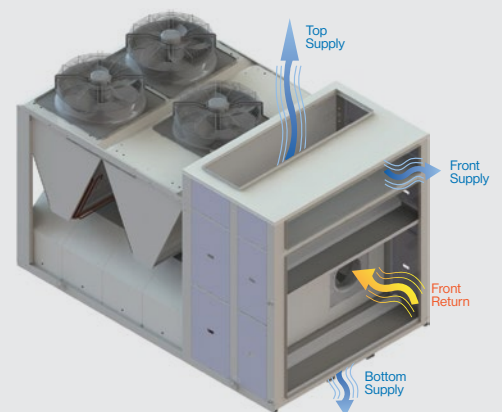
Available as Ducted Split configuration as required.

## Handing options

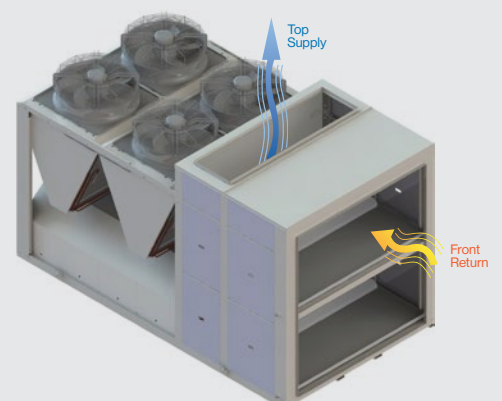
P115AHR3SA



P150-170AHR3SA



P200-230AHR3SA





# Signature Rooftop Package Specifications (115 to 230kW)

Model Number (Reverse Cycle)	Packaged Unit	P115AHR	P150AHR	P170AHR	P200AHR	P230AHR
Rated Cooling	Total Capacity (kW) <sup>3</sup>	111.44	149.51	167.17	199.35	222.89
	Sensible <sup>3</sup>	9116	121.25	136.74	161.67	182.32
	EER (kW/ikW) <sup>3</sup>	3.27	3.47	3.27	3.47	3.27
Rated Heating <sup>1</sup>	Total Capacity (kW)	109.10	144.28	163.64	192.37	218.19
	COP	4.00	4.01	4.00	4.01	4.00
MEPS Certified	MEPS Certified/BCA	Yes				
Operating Range	Maximum °C	+50				
	Minimum °C					
Capacity Steps	%	4	6	6	8	8
Compressor	Type	Tandem Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	2	3	3	4	4
Outdoor Fan	Type	EC Axial				
	Speed Control	Pressure Transducer				
	Qty	2	3	3	4	4
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	13.7	13.7	13.7	13.7	13.7
	No of Circuits	2	3	3	4	4
Indoor Fan	Type	EC Plug				
	Speed Control	Potentiometer				
	Qty	1				
Airflow Indoor (L/s)	Nominal	5750	7500	8625	10000	11500
	Maximum	7188	9375	10781	12500	14375
	Minimum	4313	5625	6467	7500	8625
Available External Static Pressure	Pa	High Static Capability (See Fan Performance Curves)				
IP Rating		IP44				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps <sup>4</sup>	Total	59.4	79.9	89.2	106.5	117.8
Full Load Amps <sup>5</sup>	Total	100.4	127.8	150.6	170.4	200.8
Dimensions (mm)	Height	2381	2400		2400	
	Width	2242	2242		2242	
	Length	2400	3735		4085	
Nominal Weight <sup>2</sup> .	kg	1610	1810	2010	2210	2410
Rated Sound Power	db(A)	75.6	77.4	77.4	78.6	78.6

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

# Signature Compact Rooftop Package Unit

## Features

- Tandem scroll compressors for high system efficiency at full & part load
- 35% smaller footprint than equivalent RTU
- 25% less gas charge than equivalent RTU
- 42% less components than equivalent RTU
- EC plug fans with high static capability up to 500pa
- EC hybrid axial fan
- TXV refrigerant control
- Condenser coil anti-corrosion protection
- Open controls
- 25mm PE closed cell insulation
- Phase fail protection relay
- MEPS certified

## Factory options customised to order

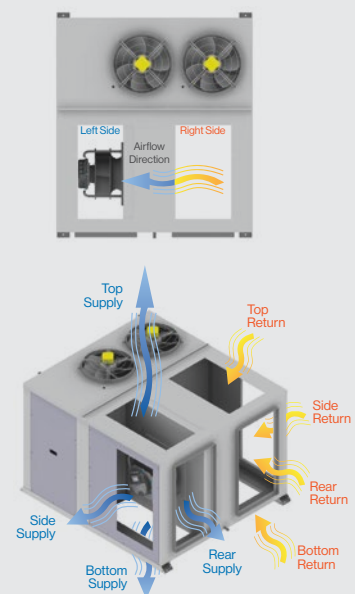
- Compressor soft starter
- High static pressure outdoor fans
- Double layered insulation to indoor section
- Capacity modulation control
- Outdoor coil(s) with anti-corrosion post-treatment
- Indoor coil(s) with anti-corrosion post-treatment
- Outdoor coil guards, powder coated
- Discharge & suction isolation valves
- Liquid line isolation valves across filter drier
- Cable markers
- Fire relay
- APAC Supply & Return connections
- High Level Interface (HLI) Modbus connectivity
- Integrated filter frame 50mm
- Economiser – dampers and actuators (no controls)

## Factory options engineered to order

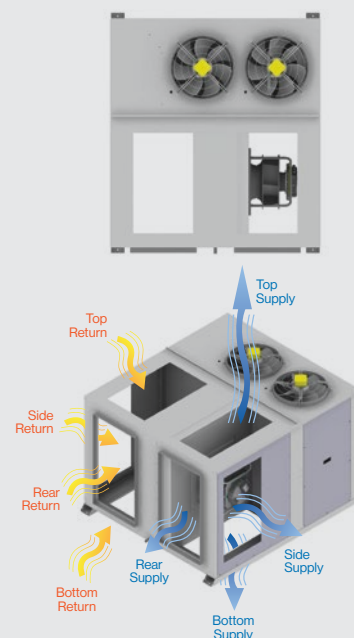
- 316 stainless steel cabinet, unpainted
- 304 stainless steel cabinet, powder coated
- Stainless steel external fixings
- Outdoor coil(s) copper / copper
- Indoor coil(s) copper / copper
- Power supply – no neutral (415/3/50)
- Ductable air off in lieu of standard axial

## Handing options

### Left hand supply air (standard)



### Right hand supply air (optional)





# Signature Compact Specifications (29 to 48kW)

Model Number (Reverse Cycle)	Packaged Unit	P029AHR	P033AHR	P038AHR	P043AHR	P048AHR
Rated Cooling	Total Capacity (kW) <sup>3</sup>	31.00	32.30	37.60	42.21	45.84
	Sensible <sup>3</sup>	24.76	26.65	30.42	34.70	38.09
	EER (kW/ikW) <sup>3</sup>	3.41	3.25	3.30	3.20	3.16
Rated Heating <sup>1</sup>	Total Capacity (kW)	30.10	33.00	39.58	43.93	47.48
	COP	3.88	3.67	3.66	3.62	3.65
MEPS Certified		Yes				
Operating Range	Maximum °C	+50				
	Minimum °C	-10				
Capacity Steps	%	0/50/100				
Compressor	Type	Tandem Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	1				
Outdoor Fan	Type	EC Axial				
	Speed Control	Pressure Transducer				
	Qty	1				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	6.75	6.75	9.5	11	10.8
	No of Circuits	1				
Indoor Fan	Type	EC Plug				
	Speed Control	Potentiometer				
	Qty	1				
Airflow Indoor (L/s)	Nominal	1613	1775	1875	2200	2470
	Maximum	2016	2219	2344	2750	3088
	Minimum	1210	1331	1406	1650	1853
Available External Static Pressure	Pa	High Static Capability (See Performance Curves)				
IP Rating		IP44				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps <sup>4</sup> .	Total	15.3	17.3	19.8	22.7	26.6
Full Load Amps <sup>5</sup> .	Total	26.7	29.3	35.7	35.8	38.2
Total Dimensions (mm)	Height		1555		1760	
	Width	1550				
	Length	1850				
Nominal Weight <sup>2</sup> .	Total kg	465	470	490	540	570
Rated Sound Power	db(A)		68.5			

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

# Signature Split Ducted Unit (Low Profile)

## Features

- Low profile space saving design suitable for in-ceiling installation
- EC direct drive centrifugal blower (12-23kW)
- EC plug fans 024-045 with high static capability up to 500pa
- Hybrid axial fan (12-45kW)
- TXV refrigerant control
- Condenser coil anti-corrosion protection
- Open controls
- 25mm PE closed cell insulation
- Phase fail protection relay
- MEPS certified

## Factory options customised to order

### Outdoor

- Compressor soft starter
- Copper/copper coil(s)
- Capacity modulation control
- High static pressure outdoor fans
- Outdoor coil(s) with anti-corrosion post-treatment
- Outdoor coil guards, powder coated
- Discharge & suction isolation valves
- High Level Interface (HLI) Modbus connectivity
- Cable markers

### Indoor

- Double layered insulation to indoor section
- Copper/copper coil(s)
- Indoor coil(s) with anti-corrosion post-treatment

## Factory options engineered to order

### Outdoor

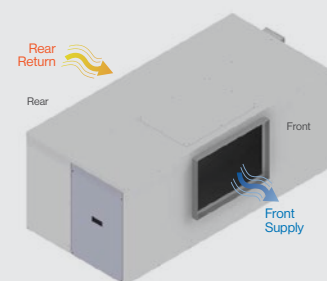
- 316 stainless steel cabinet, unpainted
- 304 stainless steel cabinet, powder coated
- Stainless steel external fixings
- Coil(s) copper / copper
- Power supply – no neutral (415/3/50)
- Ductable air off in lieu of standard axial

### Indoor

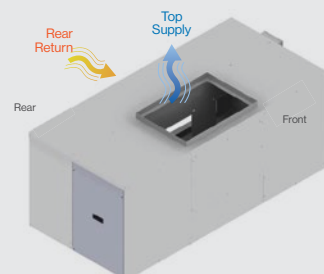
- Stainless steel external fixings
- Coil(s) copper / copper
- Power supply – no neutral (415/3/50)
- R22/R407C application

## Handing options (Indoor)

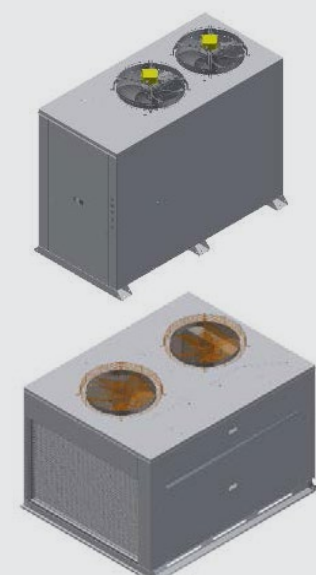
### Front supply / Rear return



### Top supply / Rear return



## Handing (Outdoor)





# Signature Split Ducted Low Profile Specifications (12 to 45kW)

Model Number (Reverse Cycle)	Indoor Unit	S012ILR	S015ILR	S018ILR	S020ILR	S023ILR	S024ILR	S030ILR	S035ILR	S040ILR	S045ILR
	Outdoor Unit	S012OVR	S015OVR	S018OVR	S020OVR	S023OVR	S024OVR	S030OVR	S035OVR	S040OVR	S045OVR
Rated Cooling	Total Capacity (kW) <sup>3</sup>	12.57	15.54	17.43	20.53	22.89	25.15	31.02	34.13	39.78	45.27
	Sensible <sup>3</sup>	9.7	12.13	13.45	15.88	18.17	19.39	25.97	28.12	33.42	36.62
	EER (kW/ikW) <sup>3</sup>	3.50	3.70	3.49	3.60	3.32	3.59	3.60	3.44	3.40	3.27
Rated Heating <sup>1</sup>	Total Capacity (kW)	11.90	14.70	16.70	20.60	22.50	23.80	30.20	33.60	40.10	43.50
	COP	3.66	3.87	3.71	3.81	3.63	3.66	3.60	3.78	3.61	3.71
MEPS Certified		Yes									
Operating Range	Maximum °C	+50									
	Minimum °C	-10									
Capacity Steps	%	0/100					0/50/100				
Compressor	Type	Scroll									
	Starter	D.O.L (Optional Soft Starter)									
	Qty	1					2				
Outdoor Fan	Type	Hybrid Axial									
	Speed Control	Pressure Transducer									
	Qty	2									
Refrigerant System	Type	R410A									
	Charge Per Circuit kg	3.95	5.30	5.70	7.30	6.80	3.95	5.30	5.70	7.30	6.80
	No of Circuits	1					2				
Indoor Fan	Type	EC Centrifugal Blower					EC Plug				
	Speed Control	Variable Speed					Potentiometer				
	Qty	1					2				
Airflow Indoor (L/s)	Nominal	625	835	875	990	1120	1250	1670	1750	1985	2235
	Maximum	781	1044	1094	1238	1400	1563	2088	2188	2481	2794
	Minimum	469	626	656	743	840	938	1253	1313	1489	1676
Available External Static Pressure	Pa	+200 Pa					High Static Capability (See Fan Performance Curves)				
IP Rating		IP44									
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz									
Rated Load Amps <sup>4</sup>	Outdoor/Indoor/ Total	6.5 / 2.1 /8.6	7.5/ 2.8/ 11.3	9.1/ 4.0/ 13.1	9.4/ 4.2/ 13.6	10.3/ 5.8/ 15.1	12.8/ 0.6/13.6	14.7/ 1.1/ 15.8	18.1/2/19.1	19.2/ 1.4/ 20.6	20.9/1.8/22.7
Full Load Amps <sup>5</sup>	Outdoor/Indoor/ Total	9.7/ 4.4/ 14.1	12/4.4/16.4	13.5/4.4/17.9	17.4/ 5.9/ 23.3		19.6/5.2/24.8	24.2/5.2/29.4	27.2/5.2/32.4	35.2/5.2/40.4	
Outdoor Dimensions (mm)	Height	1162					1190				
	Width	730					1850				
	Length	1550					1425				
Indoor Dimensions (mm)	Height	444			455		690				
	Width	1225			1500		1700			2250	
	Length	655			625		820				
Indoor and Outdoor Pipe Connection Diameter	Liquid mm (inch)	9.5 (3/8") x 1			9.5 (3/8") x 1		9.5 (3/8") x 2			9.5 (3/8") x 2	
	Gas mm (inch)	19.1 (3/4") x 1			22.2 (7/8") x 1		19.1 (3/4") x 2			22.2 (7/8") x 2	
Nominal Weight <sup>2</sup> .	Outdoor kg	211	214	217	220	223	362	382	389	414	
Nominal Weight <sup>2</sup> .	Indoor kg	70			74		192	200		233	
Rated Sound Power	db(A)	61.7			66.6		66.5			68.7	

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

# Signature Split Ducted Unit (Horizontal)

## Features

- Field configurable supply air outlet
- EC plug fans with high static capability up to 500pa
- Hybrid axial fan (12-45kW)
- EC hybrid axial fan (55-95kW)
- TXV refrigerant control
- Condenser coil anti-corrosion protection
- Open controls
- 25mm PE closed cell insulation
- Phase fail protection relay
- MEPS certified
- BCA compliant

## Factory options customised to order

### Outdoor

- Compressor soft starter
- Copper/copper coil(s)
- Capacity modulation control
- High static pressure outdoor fans
- Outdoor coil(s) with anti-corrosion post-treatment
- Outdoor coil guards, powder coated
- Discharge & suction isolation valves
- High Level Interface (HLI) Modbus connectivity
- Cable markers

### Indoor

- Double layered insulation to indoor section
- Copper/copper coil(s)
- Indoor coil(s) with anti-corrosion post-treatment

## Factory options engineered to order

### Outdoor

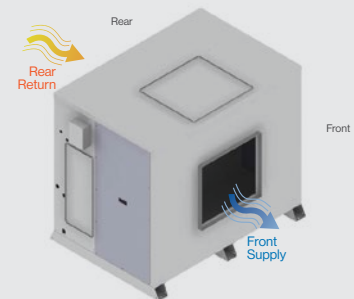
- 316 stainless steel cabinet, unpainted
- 304 stainless steel cabinet, powder coated
- Stainless steel external fixings
- Coil(s) copper / copper
- Power supply – no neutral (415/3/50)
- Ductable air off in lieu of standard axial

### Indoor

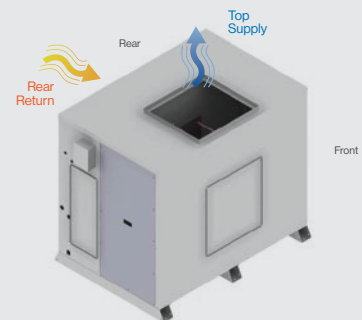
- Stainless steel external fixings
- Coil(s) copper / copper
- Power supply – no neutral (415/3/50)
- R22/R407C application

## Handing options (Indoor)

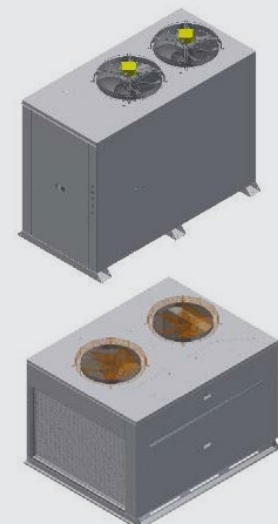
### Front supply / Rear return (Standard)



### Top supply / Rear return (Field configurable)



## Handing (Outdoor)





# Signature Split Ducted Horizontal Specifications (24 to 95kW)

Model Number (Reverse Cycle)	Indoor Unit	S024IHR	S030IHR	S035IHR	S040IHR	S045IHR	S055IHR	S065IHR	S075IHR	S085IHR	S095IHR
	Outdoor Unit	S024OVR	S030OVR	S035OVR	S040OVR	S045OVR	S055OVR	S065OVR	S075OVR	S085OVR	S095OVR
Rated Cooling	Total Capacity (kW) <sup>3</sup>	25.14	31.02	34.13	39.78	45.27	52.90	63.88	72.95	83.74	94.04
	Sensible <sup>3</sup>	19.38	25.97	28.12	33.42	36.62	44.01	54.5	58.5	69.34	77.49
	EER (kW/ikW) <sup>3</sup>	3.59	3.60	3.44	3.40	3.27	3.07	3.28	3.49	3.47	3.24
Rated Heating <sup>1</sup>	Total Capacity (kW)	23.80	30.20	33.60	40.10	43.50	54.30	65.00	73.40	84.30	96.10
	COP	3.66	3.60	3.78	3.61	3.71	3.39	3.61	3.59	3.60	
MEPS Certified		Yes							BCA Compliant		
Operating Range	Maximum °C	+50									
	Minimum °C	-10									
Capacity Steps	%	0/50/100									
Compressor	Type	Scroll									
	Starter	D.O.L (Optional Soft Starter)									
	Qty	2									
Outdoor Fan	Type	Hybrid Axial					EC Hybrid Axial				
	Speed Control	Variable Speed					Pressure Transducer				
	Qty	2									
Refrigerant System	Type	R410A									
	Charge Per Circuit kg	3.95	5.30	5.70	7.30	6.80	5.75	6.75	9.50	11.00	10.80
	No of Circuits	2									
Indoor Fan	Type	EC Plug									
	Speed Control	Potentiometer									
	Qty	1					2				
Airflow Indoor (L/s)	Nominal	1250	1670	1750	1985	2235	2880	3550	3750	4400	4930
	Maximum	1563	2088	2188	2481	2794	3600	4438	4688	5500	6163
	Minimum	938	1253	1313	1489	1676	2160	2663	2813	3300	3698
Available External Static Pressure	Pa	High Static Capability (See Fan Performance Curves)									
IP Rating		IP44									
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz									
Rated Load Amps <sup>4</sup>	Outdoor/Indoor/ Total	12.9/ 1/13.6	14.8/ 1.2/ 15.9	18/1.3/19.4	19.4/ 1.3/ 20.7	211/1.7/23	28.6/2.5/31.1	32.7/2.2/34.9	35.3/2.8/38.1	40.2/3.3/43.5	52.2/4.1/56.3
Full Load Amps <sup>5</sup>	Outdoor/Indoor/ Total	19.6/4.2/23.8	24.2/4.2/28.4	27.2/4.2/31.4	35.2/4.6/39.8	35.2/4.6/39.8	45.2/4.6/49.8	47/8.4/55.4	53/8.4/61.4	65/8.6/73.6	71/8.6/79.6
Outdoor Dimensions (mm)	Height	1190					1390	1595		1800	
	Width	1850					2200				
	Length	1425									
Indoor Dimensions (mm)	Height	1195					1400	1605		1805	
	Width	1600								1850	
	Length	1100									
Indoor and Outdoor Pipe Connection Diameter	Liquid mm (inch)	9.5 (3/8") x 2			9.5 (3/8") x 2		12.7 (1/2") x 2			15.9 (5/8") x 2	
	Gas mm (inch)	19.1 (3/4") x 2			22.2 (7/8") x 2		28.6 (1-1/8") x 2			28.6 (1-1/8") x 2	
Nominal Weight <sup>2</sup> .	Outdoor kg	362	382	389	414		510	600	610	761	783
Nominal Weight <sup>2</sup> .	Indoor kg	201	204		233		290	340		461	
Rated Sound Power	db(A)	66.5			66.3		70.9	71.5			

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

# Signature Vertical Package Unit

## Features

- Scroll type compressors
- EC plug fans with high static capability up to 500pa
- Hybrid axial fan (12-45kW)
- TXV refrigerant control
- Condenser coil anti-corrosion protection
- Open controls
- 25mm PE closed cell insulation
- Phase fail protection relay
- MEPS certified

## Factory options customised to order

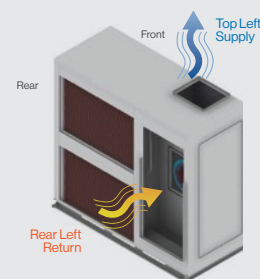
- Compressor soft starter
- High static pressure outdoor fans
- Double layered insulation to indoor section
- Capacity modulation control
- Outdoor coil(s) with anti-corrosion post-treatment
- Indoor coil(s) with anti-corrosion post-treatment
- Outdoor coil guards, powder coated
- Discharge & suction isolation valves
- Liquid line isolation valves across filter drier
- High Level Interface (HLI) Modbus connectivity
- APAC Supply & Return connections
- Cable markers
- Fire relay

## Factory options engineered to order

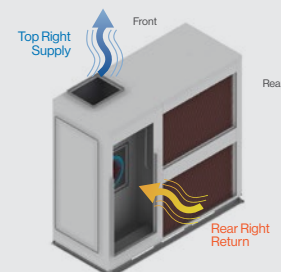
- 316 stainless steel cabinet, unpainted
- 304 stainless steel cabinet, powder coated
- Stainless steel external fixings
- Outdoor coil(s) copper / copper
- Indoor coil(s) copper / copper
- Power supply – no neutral (415/3/50)
- Ductable air off in lieu of standard axial

## Handing options (Indoor)

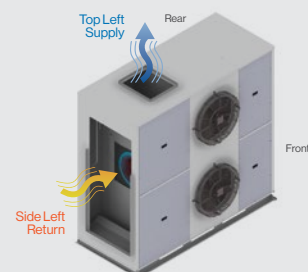
### Top left supply / Rear left return



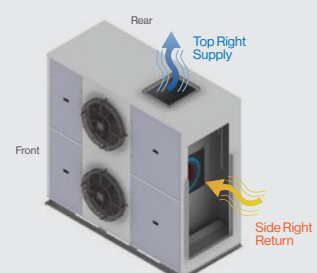
### Top right supply / Rear right return



### Top left supply / Side left return



### Top right supply / Side right return





# Signature Vertical Package Unit Specifications (12 to 45kW)

Model Number (Reverse Cycle)	Vertical Packaged	P012AVR	P015AVR	P018AVR	P020AVR	P023AVR	P024AVR	P030AVR	P035AVR	P040AVR	P045AVR
Rated Cooling	Total Capacity (kW) <sup>3</sup>	12.30	15.50	17.50	20.00	22.80	25.14	31.00	34.13	39.78	45.27
	Sensible <sup>3</sup>	9.42	12.50	13.50	15.30	17.50	18.86	25.25	27.06	31.25	35.00
	EER (kW/ikW) <sup>3</sup>	3.52	3.60	3.43	3.39	3.28	3.59	3.60	3.44	3.40	3.27
Rated Heating <sup>1</sup>	Total Capacity (kW)	11.90	14.70	16.70	20.60	22.50	23.80	30.20	34.25	40.09	43.53
	COP	3.66	3.87	3.71	3.81	3.63	3.66	3.60	3.85	3.61	3.77
MEPS Certified		Yes									
Operating Range	Maximum °C	+50									
	Minimum °C	-10									
Capacity Steps	%	0/50/100									
Compressor	Type	Scroll									
	Starter	D.O.L (Optional Soft Starter)									
	Qty	1					2				
Outdoor Fan	Type	Hybrid Axial									
	Speed Control	Pressure Transducer									
	Qty	1					2				
Refrigerant System	Type	R410A									
	Charge Per Circuit kg	3.95	5.30	5.70	7.30	6.80	3.95	5.30	5.70	7.30	6.80
	No of Circuits	1					2				
Indoor Fan	Type	EC Plug									
	Speed Control	Potentiometer									
	Qty	1								2	
Airflow Indoor (L/s)	Nominal	625	835	875	990	1120	1250	1670	1750	1985	2235
	Maximum	781	1044	1094	1238	1400	1563	2088	2188	2481	2794
	Minimum	469	626	656	743	840	938	1253	1313	1489	1676
Available External Static Pressure	Pa	High Static Capability (See Performance Curves)									
IP Rating		IP55					IP44				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz									
Rated Load Amps <sup>4</sup>	Total	5.60	6.88	8.50	9.72	12.40	13.90	16.10	19.80	21.20	23.50
Full Load Amps <sup>5</sup>	Total	12.40	14.70	16.20	20.20		23.80	28.40	31.40	40.50	
Dimensions (mm)	Height	1579			1965		2140				
	Width	1375			1370		2250				
	Length	850					950				
Nominal Weight <sup>2</sup>	kg	250	270		300		570	580	590	610	620
Rated Sound Power	db(A)	63.5			66.9		66.5			68.7	

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

# Signature Split Ducted Unit (Vertical)

## Features

- Floor mounted vertical design with space saving footprint
- EC plug fans with high static capability up to 500pa
- Hybrid axial fan (12-45kW)
- TXV refrigerant control
- Condenser coil anti-corrosion protection
- Open controls
- 25mm PE closed cell insulation
- Phase fail protection relay
- MEPS certified

## Factory options customised to order

### Outdoor

- Compressor soft starter
- Copper/copper coil(s)
- High static pressure outdoor fans
- Capacity modulation control
- Outdoor coil(s) with anti-corrosion post-treatment
- Outdoor coil guards, powder coated.
- Discharge & suction isolation valves
- High Level Interface (HLI) Modbus connectivity
- Cable markers

### Indoor

- Double layered insulation to indoor section
- Copper/copper coil(s)
- Indoor coil(s) with anti-corrosion post-treatment

## Factory options engineered to order

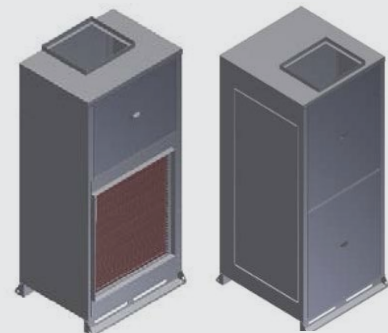
### Outdoor

- 316 stainless steel cabinet, unpainted
- 304 stainless steel cabinet, powder coated
- Stainless steel external fixings
- Coil(s) copper / copper
- Power supply – no neutral (415/3/50)
- Ductable air off in lieu of standard axial

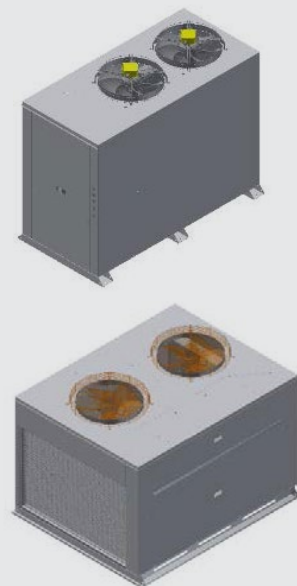
### Indoor

- Stainless steel external fixings
- Coil(s) copper / copper.
- Power supply – no neutral (415/3/50)
- R22/R407C application

## Handing options (Indoor)



## Handing (Outdoor)



# Signature Split Ducted Unit (Vertical) Specifications (12 to 45kW)

Model Number (Reverse Cycle)	Indoor Unit	S012IVR	S015IVR	S018IVR	S020IVR	S023IVR	S024IVR	S030IVR	S035IVR	S040IVR	S045IVR
	Outdoor Unit	S012OVR	S015OVR	S018OVR	S020OVR	S023OVR	S024OVR	S030OVR	S035OVR	S040OVR	S045OVR
Rated Cooling	Total Capacity (kW) <sup>3</sup>	12.30	15.50	17.50	20.00	22.80	25.15	31.02	34.13	39.78	45.27
	Sensible <sup>3</sup>	9.42	12.50	13.50	15.30	17.50	19.39	25.97	28.12	32.42	36.62
	EER (kW/ikW) <sup>3</sup>	3.52	3.60	3.43	3.39	3.28	3.59	3.60	3.44	3.40	3.27
Rated Heating <sup>1</sup>	Total Capacity (kW)	11.90	14.70	16.70	20.60	22.50	23.80	30.20	33.60	40.10	43.50
	COP	3.66	3.87	3.71	3.81	3.63	3.66	3.60	3.78	3.61	3.71
MEPS Certified		Yes									
Operating Range	Maximum °C	+50									
	Minimum °C	-10									
Capacity Steps	%	0/100					0/50/100				
Compressor	Type	Scroll									
	Starter	D.O.L (Optional Soft Starter)									
	Qty	1					2				
Outdoor Fan	Type	Hybrid Axial									
	Speed Control	Pressure Transducer									
	Qty	2									
Refrigerant System	Type	R410A									
	Charge Per Circuit kg	3.95	5.3	5.7	7.3	6.8	3.95	5.30	5.70	7.30	6.80
	No of Circuits	1					2				
Indoor Fan	Type	EC Plug									
	Speed Control	Potentiometer									
	Qty	1								2	
Airflow Indoor (L/s)	Nominal	625	835	875	990	1120	1250	1670	1750	1985	2235
	Maximum	781	1044	1094	1238	1400	1563	2088	2188	2481	2794
	Minimum	469	626	656	743	840	938	1253	1313	1489	1676
Available External Static Pressure	Pa	High Static Capability (See Performance Curves)									
IP Rating		IP44									
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz									
Rated Load Amps <sup>4</sup>	Outdoor/Indoor/Total	6.5/0.5/7.0	7.5/0.9/8.4	9.1/0.9/10.0	9.4/1.0/10.4	10.3/1.3/11.6	12.8/ 1.1/13.6	14.7/ 1.4/ 15.9	18/1.8/19.2	19.2/ 2/ 20.6	20.9/2.6/22.6
Full Load Amps <sup>5</sup>	Outdoor/Indoor/Total	9.7/2.6/12.3	12/2.6/14.6	13.5/2.6/16.1	17.4/2.6/20.0	17.4/2.6/16.1	19.6/4.2/23.8	24.2/4.2/28.4	27.2/4.2/31.4	35.2/5.3/40.5	35.2/5.3/40.5
Outdoor Dimensions (mm)	Height	1162					1190				
	Width	730					1850				
	Length	1550					1425				
Indoor Dimensions (mm)	Height	1580			1810		2140				
	Width	850			850		925				
	Length	625			625		950				
Indoor and Outdoor Pipe Connection Diameter	Liquid mm (inch)	9.5 (3/8") x 1			9.5 (3/8") x 1		9.5 (3/8") x 2			9.5 (3/8") x 2	
	Gas mm (inch)	19.1 (3/4") x 1			22.2 (7/8") x 1		19.1 (3/4") x 2			22.2 (7/8") x 2	
Nominal Weight <sup>2</sup> .	Outdoor kg	211	214	217	220	223	362	382	389	414	
Nominal Weight <sup>2</sup> .	Indoor kg	127	131		147		192	200		225	
Rated Sound Power	db(A)	61.7			66.6		66.5			68.7	

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)



# The Perfect Upgrade



Our commercial and industrial range of products are a near perfect fit for most legacy APAC units in capacity, footprint, ductwork, controls and power supply connections.

## Features

- Low installation costs. A perfect match to the APAC unit size, footprint, ductwork, mains power and controls avoiding costly modifications.
- Low noise. Fans slow down during low ambient for less noise, with up to 20% less sound.
- Low cost of ownership. High efficiency direct drive fans ensure low maintenance costs.
- Reduced energy costs. High efficiency ratings with up to 31% energy savings compared to legacy APAC equivalent products.
- Australian designed and engineered. Built to operate in Australia's toughest conditions.

# APAC Replacement Matrix

		APAC Model Numbers			
	kW's	New SA Series	AE Series	AD & AA Series	S Series
Rooftop	11-12	P012AHR3SA			S11HP/BH
	14	P015AHR3SA		P014AHR9AD	S14HP/BH
	15-16	P015AHR3SA	P015AHR9AE	P016AHR9AA	S16HP/BH
	17-18	P018AHR3SA	P018AHR9AE	P017AHR9AA	S18HP/BH
	19-20	P020AHR3SA		P019AHR9AA	S20HP/BH
	20-21	P020AHR3SA	P021AHR9AE		S21HP/BH
	23	P023AHR3SA	P024AHR9AE	P023AHR9AA	S24HP/BH
	24-25	P024AHR3SA			S25HP/BH
	26-28	P028AHR3SA		P026AHR9AA	
	30	P030AHR3SA	P030AHR9AE	P030AHR9AA	
	32-33	P033AHR3SA		P032AHR9AA	S32HP/BH
	35-36	P035AHR3SA	P036AHR9AE	P036AHR9AD	S35HP/BH
	37-38	P038AHR3SA			S37HP/BH
	40	P040AHR3SA	P040AHR9AE		
	42-43	P043AHR3SA		P042AHR9AD	
	45-46	P045AHR3SA	P046AHR9AE	P046AHR9AD	S45HP/BH
	46-48	P048AHR3SA			S46HP/BH
	51	P055AHR3SA			S51HP/BH
	55	P055AHR3SA	P055AHR9AE	P055AHR9AD	S56HP/BH
	64-65	P065AHR3SA	P064AHR9AD	P064AHR9AD	S65HP/BH
	75	P075AHR3SA	P075AHR9AD	P075AHR9AD	
	80	P085AHR3SA			S80HP/BH
	85	P085AHR3SA	P085AHR9AD	P085AHR9AD	
	95	P095AHR3SA	P096AHR9AD	P096AHR9AD	S95HP/BH
Split Ducted Horizontal	12	S012ILR			S11HP/EL
	14	S015ILR		S014IHR9AD	S14HP/ EL
	15-16	S015ILR	S015IHR9AE	S016IHR9AA	S16HP/EL
	17-18	S018ILR	S018IHR9AE	S017IHR9AA	S18HP/ EL
	19-20	S020ILR		S019IHR9AA	S20HP/EL
	20-21	S020ILR	S021IHR9AE		S21HP/EL
	23	S023ILR	S024IHR9AE	S023IHR9AA	S22-24HP/EL
	24-25	S024ILR-IHR			S25HP/EL
	26-28	S028ILR		S026IHR9AA	S28HP/EL
	30	S030ILR-IHR	S030IHR9AE	S030IHR9AA	S30HP/EL
	32-33	S033ILR		S032IHR9AA	S33HP/EL
	35-36	S035ILR-IHR	S036IHR9AE	S036IHR9AD	S35HP/EL
	38-43	S038-040-043ILR-IHR	S040IHR9AE	S042IHR9AD	S38-40HP/EL
	45-48	S045-048ILR-IHR	S046IHR9AE	S046IHR9AD	S45-46HP/EL
	51	S055IHR			S51HP/EL
	55	S055IHR	S055IHR9AE	S055IHR9AD	S56HP/EL
	64-65	S065IHR	S064IHR9AD	S064IHR9AD	S65HP/EL
	75	S075IHR	S075IHR9AD	S075IHR9AD	
	80	S085IHR			S80HP/EL
	85	S085IHR	S085IHR9AD	S085IHR9AD	
95	S095IHR	S096IHR9AD	S096IHR9AD	S95HP/EL	
Vertical Package	12	P012AVR3SA			S12HP/BV
	15	P015AVR3SA			S15HP/BV
	18	P018AVR3SA			S17HP/BV
	20	P020AVR3SA			S20HP/BV
	23	P023AVR3SA			
	24-25	P024AVR3SA			S25HP/BV
	30	P030AVR3SA			S30HP/BV
	35	P035AVR3SA			S35HP/BV
	40	P040AVR3SA			
45	P045AVR3SA			S45HP/BV	
Split Ducted Vertical	12	S012IVR			S12CEV or HP/EV
	15	S015IVR			S15CEV or HP/EV
	18	S018IVR			S17CEV or HP/EV
	20	S020IVR			S20CEV or HP/EV
	23	S023IVR			
	24-25	S024IVR			S25CEV or HP/EV
	30	S030IVR			S30CEV or HP/EV
	35	S035IVR			S35CEV or HP/EV
	40	S040IVR			
45	S045IVR			S45CEV or HP/EV	

# Global Product Lineup

Cooling Only & Reverse Cycle



**Under - Over (Horizontal)  
Packaged Unit**

012-023kW capacity range



**Side - By - Side (Horizontal)  
Package Unit**

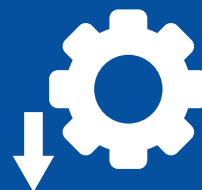
012-095kW capacity range





## Split Ducted Unit (Low Profile)

012-046kW capacity range



## Low Operating Costs

Our APAC range pushes the boundary in high efficiency ratings so you can enjoy up to 31%\* energy savings, lowering your power bills significantly.



## Low Cost of Ownership

High efficiency direct drive fans ensure low ongoing maintenance costs.



## Longer Lasting

Engineered and built to operate in world's toughest conditions.

\* Statistic based on comparison with legacy APAC products. Refer to table at <https://www.apacair.com.au/replacements/> for comparison.

# Global Under-Over Horizontal Packaged Unit

## Features

- Galvanised type steel cabinet painted inside & out
- Scroll type compressor
- EC blower type indoor fan with speed control
- External rotor motor type outdoor fan(s)
- TXV refrigerant control
- Removable outdoor coil guards
- 1000hrs Epoxy coated outdoor coils
- Robust controls
- PE type closed cell insulation
- Safety protection circuit
- Phase fail relay
- Fire relay

## Factory options – Customised to order (CTO)

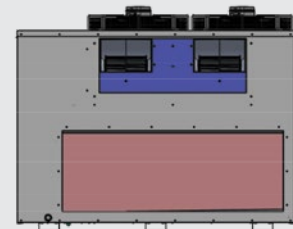
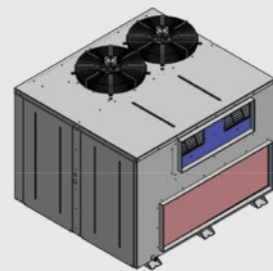
- Compressor soft start
- High static outdoor fans
- Double layered insulation to indoor section (50mm)
- Capacity modulation control
- Outdoor coil(s) with anti-corrosion post treatment
- Indoor coil(s) with anti-corrosion post treatment
- Discharge & suction isolation valves
- Liquid isolation valves
- Compressor sound jackets
- IP55 Rating
- Modbus high level interface

## Factory options – Engineered to order (ETO)

- 316 stainless steel cabinet, unpainted
- 316L stainless steel external fasteners
- Outdoor coil(s) copper / copper
- Indoor coil(s) copper / copper

## Handing options

**Centre Under Return**  
**Centre Over Supply**



# Global Under-Over Horizontal Packaged Unit (Cool Only) 12-23kW

Model Number (Cooling Only)	Packaged Unit	P012AHC3SA-C-S2061001	P015AHC3SA-C-S2061001	P018AHC3SA-C-S2061001	P020AHC3SA-C-S2061001	P023AHC3SA-C-S2061001
Rated Cooling	Total Capacity (kW)3	12.57	15.54	17.43	20.53	22.89
	Sensible 3	9.70	12.13	13.45	15.88	18.17
	EER (kW/kW)3	3.50	3.70	3.49	3.60	3.32
AHRI Compliant	AHRI 210/240	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	+10				
Capacity Steps	%	0/100				
Compressor	Type	Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	1				
Outdoor Fan	Type	Axial				
	Speed Control	2 Speed Via Capacitor				
	Qty	2				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	3.95	5.30	5.70	7.30	6.80
	No of Circuits	1				
Indoor Fan	Type	Twin EC Blower				
	Speed Control	Variable Speed				
	Qty	1				
Airflow Indoor (L/s)	Nominal	625	835	875	990	1120
	Maximum	781	1044	1094	1238	1400
	Minimum	469	626	656	743	840
Available External Static Pressure	Pa	+200 Pa				
IP Rating		IP44 (Optional IP55)				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps4	Total	8.60	11.30	13.10	13.60	15.10
Full Load Amps5	Total	14.1	16.4	17.9	23.3	
Dimensions (mm)	Height	1091				1191
	Width	1352				1527
	Length	1276				1426
Nominal Weight2.	kg	215	231	238	295	
Rated Sound Power	db(A)	61.7			66.6	

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

Date	Document #	Approved By	Revision
16/8/2023	TDT001693	CM	A

NOTE: Due to continuous improvement Rinnai reserve the right to change details without notice.



# Global Under-Over Horizontal Packaged Unit (Reverse Cycle) 12-23kW

Model Number (Reverse Cycle)	Packaged Unit	P012AHR3SA-C-S2061001	P015AHR3SA-C-S2061001	P018AHR3SA-C-S2061001	P020AHR3SA-C-S2061001	P023AHR3SA-C-S2061001
Rated Cooling	Total Capacity (kW) <sup>3</sup>	12.57	15.54	17.43	20.53	22.89
	Sensible <sup>3</sup>	9.70	12.13	13.45	15.88	18.17
	EER (kW/ikW) <sup>3</sup>	3.50	3.70	3.49	3.60	3.32
Rated Heating <sup>1</sup>	Total Capacity (kW)	11.90	14.70	16.70	20.60	22.50
	COP	3.66	3.87	3.71	3.81	3.63
AHRI Compliant	AHRI 210/240	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	-10				
Capacity Steps	%	0/100				
Compressor	Type	Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	1				
Outdoor Fan	Type	Axial				
	Speed Control	2 Speed Via Capacitor				
	Qty	2				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	3.95	5.30	5.70	7.30	6.80
	No of Circuits	1				
Indoor Fan	Type	Twin EC Blower				
	Speed Control	Variable Speed				
	Qty	1				
Airflow Indoor (L/s)	Nominal	625	835	875	990	1120
	Maximum	781	1044	1094	1238	1400
	Minimum	469	626	656	743	840
Available External Static Pressure	Pa	+200 Pa				
IP Rating		IP44				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps <sup>4</sup>	Total	8.60	11.30	13.10	13.60	15.10
Full Load Amps <sup>5</sup>	Total	14.1	16.4	17.9	23.3	
Dimensions (mm)	Height	1091				1191
	Width	1352				1527
	Length	1276				1426
Nominal Weight <sup>2</sup>	kg	215	231	237	295	
Rated Sound Power	db(A)	61.7			66.6	

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

Date	Document #	Approved By	Revision
11/5/2023	TDT000502	CM	B

NOTE: Due to continuous improvement Rinnai reserve the right to change details without notice.

# Global Side-By-Side Horizontal Packaged Unit

## Features

- Galvanised type steel cabinet painted inside & out
- Scroll type compressor
- EC plug type indoor fan with high static capability
- External rotor motor type outdoor fan(s)
- TXV refrigerant control
- Removable outdoor coil guards
- 1000hrs Epoxy coated outdoor coils
- Robust controls
- PE type closed cell insulation
- Safety protection circuit
- Phase fail relay
- Fire relay

## Factory options – Customised to order (CTO)

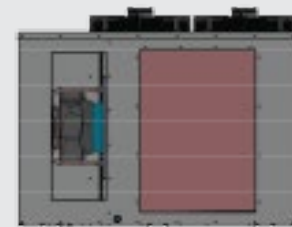
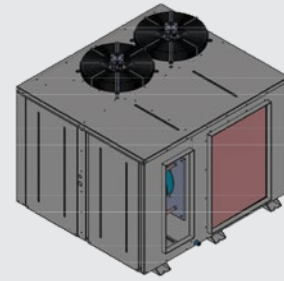
- Compressor soft start
- High static outdoor fans
- Double layered insulation to indoor section (50mm)
- Capacity modulation control
- Outdoor coil(s) with anti-corrosion post treatment
- Indoor coil(s) with anti-corrosion post treatment
- Discharge & suction isolation valves
- Liquid isolation valves
- Compressor sound jackets
- IP55 Rating
- Modbus high level interface

## Factory options – Engineered to order (ETO)

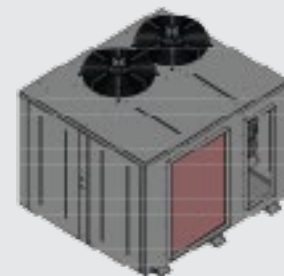
- 316L stainless steel cabinet, unpainted
- 316L stainless steel external fasteners
- Outdoor coil(s) copper / copper
- Indoor coil(s) copper / copper

## Handing options

### Left hand air supply (standard)



### Right hand air supply (optional)



# Global Side-By-Side Horizontal Packaged Unit (Cool Only) 12-23kW

Model Number (Cooling Only)	Packaged Unit	P012AHC3SA-L-S2061001 P012AHC3SA-R-S2061001	P015AHC3SA-L-S2061001 P015AHC3SA-R-S2061001	P018AHC3SA-L-S2061001 P018AHC3SA-R-S2061001	P020AHC3SA-L-S2061001 P020AHC3SA-R-S2061001	P023AHC3SA-L-S2061001 P023AHC3SA-R-S2061001
Rated Cooling	Total Capacity (kW) <sup>3</sup>	12.57	15.54	17.43	20.53	22.89
	Sensible <sup>3</sup>	9.70	12.09	13.58	15.99	18.20
	EER (kW/ikW) <sup>3</sup>	3.59	3.70	3.49	3.60	3.32
AHRI Compliant	AHRI 210/240	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	+10				
Capacity Steps	%	0/100				
Compressor	Type	Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	1				
Outdoor Fan	Type	Axial				
	Speed Control	2 Speed Via Capacitor				
	Qty	2				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	3.95	5.30	5.70	7.30	6.80
	No of Circuits	1				
Indoor Fan	Type	EC Plug				
	Speed Control	Potentiometer				
	Qty	1				
Airflow Indoor (L/s)	Nominal	625	800	890	1040	1190
	Maximum	781	1000	1113	1300	1488
	Minimum	469	600	668	780	893
Available External Static Pressure	Pa	High Static Capability (See Fan Performance Curves)				
IP Rating		IP44 (Optional IP55)				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps <sup>4</sup>	Total	6.8	8.1	9.8	10.4	11.4
Full Load Amps <sup>5</sup>	Total	12.3	14.6	16.1	20.0	20.0
Dimensions (mm)	Height	1091				
	Width	1352				
	Length	1276				
Nominal Weight <sup>2</sup>	kg	228.0	244.0	251.0	307.0	307.0
Rated Sound Power	db(A)	61.7			66.6	

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

Date	Document #	Approved By	Revision
16/8/2023	TDT001694	CM	A

NOTE: Due to continuous improvement Rinnai reserve the right to change details without notice.



# Global Side-By-Side Horizontal Packaged Unit (Reverse Cycle) 12-23kW

Model Number (Reverse Cycle)	Packaged Unit	P012AHR3SA-L-S2061001 P012AHR3SA-R-S2061001	P015AHR3SA-L-S2061001 P015AHR3SA-R-S2061001	P018AHR3SA-L-S2061001 P018AHR3SA-R-S2061001	P020AHR3SA-L-S2061001 P020AHR3SA-R-S2061001	P023AHR3SA-L-S2061001 P023AHR3SA-R-S2061001
Rated Cooling	Total Capacity (kW)3	12.57	15.54	17.43	20.53	22.89
	Sensible 3	9.70	12.09	13.58	15.99	18.20
	EER (kW/ikW)3	3.59	3.70	3.49	3.60	3.32
Rated Heating1	Total Capacity (kW)	11.90	14.70	16.70	20.60	22.50
	COP	3.66	3.87	3.71	3.81	3.63
AHRI Compliant	AHRI 210/240	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	-10				
Capacity Steps	%	0/100				
Compressor	Type	Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	1				
Outdoor Fan	Type	Axial				
	Speed Control	2 Speed Via Capacitor				
	Qty	2				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	3.95	5.30	5.70	7.30	6.80
	No of Circuits	1				
Indoor Fan	Type	EC Plug				
	Speed Control	Potentiometer				
	Qty	1				
Airflow Indoor (L/s)	Nominal	625	800	890	1040	1190
	Maximum	781	1000	1113	1300	1488
	Minimum	469	600	668	780	893
Available External Static Pressure	Pa	High Static Capability (See Fan Performance Curves)				
IP Rating		IP44				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps4	Total	6.8	8.1	9.8	10.4	11.4
Full Load Amps5	Total	12.3	14.6	16.1	20.0	20.0
Dimensions (mm)	Height	1091				
	Width	1352				
	Length	1276				
Nominal Weight2.	kg	228.0	244.0	251.0	307.0	308.0
Rated Sound Power	db(A)	61.7			66.6	

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

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11/5/2023	TDT000504	CM	B

NOTE: Due to continuous improvement Rinnai reserve the right to change details without notice.

# Global Side-By-Side Horizontal Packaged Unit (Cool Only) 27-46kW

Model Number (Cooling Only)	Packaged Unit	P027AHC3SA-L/R-S2061001	P032AHC3SA-L/R-S2061001	P036AHC3SA-L/R-S2061001	P042AHC3SA-L/R-S2061001	P046AHC3SA-L/R-S2061001
Rated Cooling	Total Capacity (kW)3	28.65	33.25	38.27	41.70	46.93
	Sensible3	21.60	25.88	29.35	32.16	36.01
	EER (kW/ikW)3	3.34	3.22	3.50	3.30	3.07
AHRI Compliant	AHRI 340/360	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	+10				
Capacity Steps	%	0/100				
Compressor	Type	Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	1				
Outdoor Fan	Type	AC Axial				
	Speed Control	2 Speed via Capacitor				
	Qty	2				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	5.75	6.75	9.5	11	10.8
	No of Circuits	1				
Indoor Fan	Type	EC Plug				
	Speed Control	Potentiometer				
	Qty	1				
Airflow Indoor (L/s)	Nominal	1450	1775	1875	2200	2470
	Maximum	1813	2219	2344	2750	3088
	Minimum	1088	1331	1406	1650	1853
Available External Static Pressure	Pa	High Static Capability (See Performance Curves)				
IP Rating		IP44 (Optional IP55)				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps4.	Total	18.4	21.5	21.3	24.1	30.7
Full Load Amps5.	Total	28.6	27.3	30.7	39.8	42.8
Total Dimensions (mm)	Height	1440	1643		1846	
	Width	1797				
	Length	1682				
Nominal Weight2.	Total kg	392	423	488	534	534
Rated Sound Power	db(A)	67.1	67.5	66.9	67.2	67.2

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

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16/8/2023	TDT001695	CM	A

NOTE: Due to continuous improvement Rinnai reserve the right to change details without notice.

# Global Side-By-Side Horizontal Packaged Unit (Reverse Cycle) 27-48kW

Model Number (Reverse Cycle)	Packaged Unit	P027AHR3SA-L/R-S2061001	P032AHR3SA-L/R-S2061001	P038AHR3SA-L/R-S2061001	P043AHR3SA-L/R-S2061001	P048AHR3SA-L/R-S2061001
Rated Cooling	Total Capacity (kW)3	28.65	33.25	39.42	45.97	47.18
	Sensible3	21.60	25.88	29.76	33.69	35.97
	EER (kW/ikW)3	3.34	3.22	3.23	3.23	3.04
Rated Heating1	Total Capacity (kW)	26.41	30.64	36.66	45.87	44.75
	COP	3.41	3.50	3.60	3.63	3.34
AHRI Compliant	AHRI 340/360	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	-10				
Capacity Steps	%	0/100		0/50/100		
Compressor	Type	Single Scroll		Tandem Scroll		
	Starter	D.O.L (Optional Soft Starter)				
	Qty	1				
Outdoor Fan	Type	AC Axial				
	Speed Control	2 Speed via Capacitor				
	Qty	2				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	5.75	6.75	9.5	11	10.8
	No of Circuits	1				
Indoor Fan	Type	EC Plug				
	Speed Control	Potentiometer				
	Qty	1				
Airflow Indoor (L/s)	Nominal	1450	1775	1875	2200	2470
	Maximum	1813	2219	2344	2750	3088
	Minimum	1088	1331	1406	1650	1853
Available External Static Pressure	Pa	High Static Capability (See Performance Curves)				
IP Rating		IP44				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps4.	Total	18.4	21.5	23.6	26.8	30.7
Full Load Amps5.	Total	28.6	27.3	35.7	38.8	41.2
Total Dimensions (mm)	Height	1440	1643		1846	
	Width	1797				
	Length	1682				
Nominal Weight2.	Total kg	392	423	510	537	539
Rated Sound Power	db(A)	67.1	67.5	66.9	67.2	67.2

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

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NOTE: Due to continuous improvement Rinnai reserve the right to change details without notice.

# Global Horizontal Packaged Unit (Cool Only) 54-92kW

Model Number (Cooling Only)	Packaged Unit	P054AHC3SA-L/R-S	P064AHC3SA-L/R-S	P072AHC3SA-L/R-S	P084AHC3SA-L/R-S	P092AHC3SA-L/R-S
Rated Cooling	Total Capacity (kW)3	58.48	64.33	75.22	85.69	96.39
	Sensible3	43.00	50.34	57.19	64.99	72.67
	EER (kW/ikW)3	3.20	3.13	3.42	3.38	3.14
AHRI Compliant	AHRI 340/360	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	+10				
Capacity Steps	%	0/50/100				
Compressor	Type	Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	2				
Outdoor Fan	Type	AC Axial				
	Speed Control	2 Speed via Capacitor				
	Qty	4				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	5.75	6.75	9.5	11	10.8
	No of Circuits	2				
Indoor Fan	Type	EC Plug				
	Speed Control	Potentiometer				
	Qty	1	2			
Airflow Indoor (L/s)	Nominal	2880	3550	3750	4400	4930
	Maximum	3600	4438	4688	5500	6163
	Minimum	2160	2663	2813	3300	3698
Available External Static Pressure	Pa	High Static Capability (See Performance Curves)				
IP Rating		IP44 (Optional IP55)				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps4.	Total	36.5	41.8	42.8	47.1	59.8
Full Load Amps5.	Total	54.3	55.3	61.3	79.5	85.5
Total Dimensions (mm)	Height	1400	1603		1806	
	Width	2300				
	Length	2300				
Nominal Weight2.	Total kg	713	815	859	994	994
Rated Sound Power	db(A)	66.8	70.3	69.5	70.0	70.0

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

Date	Document #	Approved By	Revision
16/8/2023	TDT001696	CM	A

NOTE: Due to continuous improvement Rinnai reserve the right to change details without notice.



# Global Horizontal Packaged Unit (Reverse Cycle) 55-95kW

Model Number (Reverse Cycle)	Packaged Unit	P055AHR3SA-L/R-S2061001	P065AHR3SA-L/R-S2061001	P075AHR3SA-L/R-S2061001	P085AHR3SA-L/R-S2061001	P095AHR3SA-L/R-S2061001
Rated Cooling	Total Capacity (kW)3	58.48	64.33	75.22	85.69	96.39
	Sensible3	43.00	50.34	57.19	64.99	72.67
	EER (kW/ikW)3	3.20	3.13	3.42	3.38	3.14
Rated Heating1	Total Capacity (kW)	53.44	61.83	71.08	79.39	90.33
	COP	3.19	3.34	3.63	3.58	3.42
AHRI Compliant	AHRI 340/360	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	-10				
Capacity Steps	%	0/50/100				
Compressor	Type	Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	2				
Outdoor Fan	Type	AC Axial				
	Speed Control	2 Speed via Capacitor				
	Qty	4				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	5.75	6.75	9.5	11	10.8
	No of Circuits	2				
Indoor Fan	Type	EC Plug				
	Speed Control	Potentiometer				
	Qty	1	2			
Airflow Indoor (L/s)	Nominal	2880	3550	3750	4400	4930
	Maximum	3600	4438	4688	5500	6163
	Minimum	2160	2663	2813	3300	3698
Available External Static Pressure	Pa	High Static Capability (See Performance Curves)				
IP Rating		IP44				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps4.	Total	36.5	41.8	42.8	47.1	59.8
Full Load Amps5.	Total	54.3	55.3	61.3	79.5	85.5
Total Dimensions (mm)	Height	1400	1603		1806	
	Width	2300				
	Length	2300				
Nominal Weight2.	Total kg	713	815	859	994	994
Rated Sound Power	db(A)	66.8	70.3	69.5	70.0	70.0

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes i kW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

Date	Document #	Approved By	Revision
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NOTE: Due to continuous improvement Rinnai reserve the right to change details without notice.

# Global Split Ducted Unit (Low Profile)

## Features

- Galvanised type steel cabinet painted inside & out
- Scroll type compressor
- EC blower type indoor fan with speed control (012-023kW)
- EC plug type indoor fan with high static capability (027-046kW)
- External rotor motor type outdoor fan(s)
- TXV refrigerant control
- Removable outdoor coil guards
- 1000hrs Epoxy coated outdoor coils
- Robust controls
- PE type closed cell insulation
- Safety protection circuit
- Phase fail relay
- Fire relay

## Factory options - Customised to order (CTO)

### Outdoor

- Compressor soft start
- High static outdoor fans
- Capacity modulation control
- Outdoor coil(s) with anti-corrosion post treatment
- Discharge & suction isolation valves
- Liquid isolation valves
- Compressor sound jackets
- IP55 Rating
- Modbus high level interface

### Indoor

- Double layered insulation to indoor section (50mm)
- Indoor coil(s) with anti-corrosion post treatment

## Factory options – Engineered to order (ETO)

### Outdoor

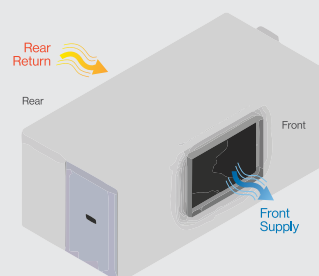
- 316L stainless steel cabinet, unpainted
- 316L stainless steel external fasteners
- Outdoor coil(s) copper / copper
- Indoor coil(s) copper / copper
- R22/R407C application

### Indoor

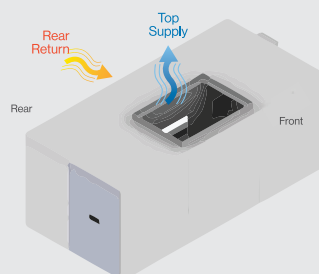
- 316L stainless steel cabinet, unpainted
- 316L stainless steel external fasteners
- Indoor coil(s) copper / copper
- R22/R407C application
- Supplied SKD (Semi-knockdown)

## Handing options (indoor)

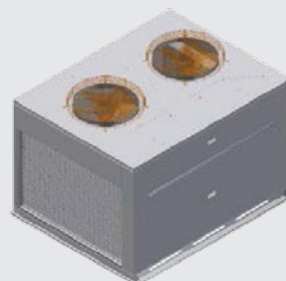
### Front supply / Rear return



### Top supply / Rear return



## Handing (outdoor)



# Global Low Profile Split Ducted Unit (Cool Only) 12-23kW

Model Number (Cooling Only)	Indoor Unit	S012ILC1SA-F-S2061001	S015ILC1SA-F-S2061001	S018ILC1SA-F-S2061001	S020ILC1SA-F-S2061001	S023ILC1SA-F-S2061001
	Outdoor Unit	S012OVC3SA-L-S2061001	S015OVC3SA-L-S2061001	S018OVC3SA-L-S2061001	S020OVC3SA-L-S2061001	S023OVC3SA-L-S2061001
Rated Cooling	Total Capacity (kW) <sup>3</sup>	12.57	15.54	17.43	20.53	22.89
	Sensible <sup>3</sup>	9.70	12.13	13.45	15.88	18.17
	EER (kW/ikW) <sup>3</sup>	3.50	3.70	3.49	3.60	3.32
AHRI Compliant	AHRI 210/240	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	+10				
Capacity Steps	%	0/100				
Compressor	Type	Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	1				
Outdoor Fan	Type	Axial				
	Speed Control	2 Speed Via Capacitor				
	Qty	2				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	3.95	5.30	5.70	7.30	6.80
	No of Circuits	1				
Indoor Fan	Type	Twin Deck Blower				
	Speed Control	Variable Speed				
	Qty	1				
Airflow Indoor (L/s)	Nominal	625	835	875	990	1120
	Maximum	781	1044	1094	1238	1400
	Minimum	469	626	656	743	840
Available External Static Pressure	Pa	+200 Pa				
IP Rating	Outdoor/Indoor	IP44 (Optional IP55) / 20				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps <sup>4</sup>	Outdoor/Indoor/ Total	6.5 / 2.1 / 8.6	7.5 / 2.8 / 11.3	9.1 / 4.0 / 13.1	9.4 / 4.2 / 13.6	10.3 / 5.8 / 15.1
Full Load Amps <sup>5</sup>	Outdoor/Indoor/ Total	9.7 / 4.4 / 14.1	12 / 4.4 / 16.4	13.5 / 4.4 / 17.9	17.4 / 5.9 / 23.3	
Outdoor Dimensions (mm)	Height	1091			1191	
	Width	1352			1527	
	Length	680			780	
Indoor Dimensions (mm)	Height	444			455	
	Width	1227			1502	
	Length	691			741	
Indoor and Outdoor Pipe Connection Diameter	Liquid mm (inch)	9.5 (3/8") x 1			9.5 (3/8") x 1	
	Gas mm (inch)	19.1 (3/4") x 1			22.2 (7/8") x 1	
Nominal Weight 2.	Outdoor kg	147	159	166	191	191
Nominal Weight 2.	Indoor kg	44	48	48	65	65
Rated Sound Power	db(A)	61.7			66.6	

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

# Global Low Profile Split Ducted Unit (Reverse Cycle) 12-23kW

Model Number (Reverse Cycle)	Indoor Unit	S012ILR1SA-F-S2061001	S015ILR1SA-F-S2061001	S018ILR1SA-F-S2061001	S020ILR1SA-F-S2061001	S023ILR1SA-F-S2061001
	Outdoor Unit	S012OVR3SA-L-S2061001	S015OVR3SA-L-S2061001	S018OVR3SA-L-S2061001	S020OVR3SA-L-S2061001	S023OVR3SA-L-S2061001
Rated Cooling	Total Capacity (kW)3	12.57	15.54	17.43	20.53	22.89
	Sensible3	9.70	12.13	13.45	15.88	18.17
	EER (kW/ikW)3	3.50	3.70	3.49	3.60	3.32
Rated Heating1	Total Capacity (kW)	11.90	14.70	16.70	20.60	22.50
	COP	3.66	3.87	3.71	3.81	3.63
AHRI Compliant	AHRI 210/240	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	-10				
Capacity Steps	%	0/100				
Compressor	Type	Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	1				
Outdoor Fan	Type	Axial				
	Speed Control	2 Speed Via Capacitor				
	Qty	2				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	3.95	5.30	5.70	7.30	6.80
	No of Circuits	1				
Indoor Fan	Type	Twin Deck Blower				
	Speed Control	Variable Speed				
	Qty	1				
Airflow Indoor (L/s)	Nominal	625	835	875	990	1120
	Maximum	781	1044	1094	1238	1400
	Minimum	469	626	656	743	840
Available External Static Pressure	Pa	+200 Pa				
IP Rating	Outdoor/Indoor	IP44 / 20				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps4	Outdoor/Indoor/ Total	6.5 / 2.1 / 8.6	7.5 / 2.8 / 11.3	9.1 / 4.0 / 13.1	9.4 / 4.2 / 13.6	10.3 / 5.8 / 15.1
Full Load Amps5	Outdoor/Indoor/ Total	9.7 / 4.4 / 14.1	12 / 4.4 / 16.4	13.5 / 4.4 / 17.9	17.4 / 5.9 / 23.3	
Outdoor Dimensions (mm)	Height	1091			1191	
	Width	1352			1527	
	Length	680			780	
Indoor Dimensions (mm)	Height	444			455	
	Width	1227			1502	
	Length	691			741	
Indoor and Outdoor Pipe Connection Diameter	Liquid mm (inch)	9.5 (3/8") x 1			9.5 (3/8") x 1	
	Gas mm (inch)	19.1 (3/4") x 1			22.2 (7/8") x 1	
Nominal Weight 2.	Outdoor kg	147	159	166	191	191
Nominal Weight 2.	Indoor kg	44	48	48	65	65
Rated Sound Power	dB(A)	61.7			66.6	



# Global Low Profile Split Ducted Unit (Cool Only) 27-46kW

Model Number (Cooling Only)	Indoor Unit	S027ILC3SA-F-S2061001	S032ILC3SA-F-S2061001	S036ILC3SA-F-S2061001	S042ILC3SA-F-S2061001	S046ILC3SA-F-S2061001
	Outdoor Unit	S027OVC3SA-L-S2061001	S032OVC3SA-L-S2061001	S036OVC3SA-L-S2061001	S042OVC3SA-L-S2061001	S046OVC3SA-L-S2061001
Rated Cooling	Total Capacity (kW)3	28.65	33.25	38.27	41.70	46.93
	Sensible3	21.60	25.88	29.35	32.16	36.01
	EER (kW/ikW)3	3.34	3.22	3.50	3.30	3.07
AHRI Compliant	AHRI 340/360	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	+10				
Capacity Steps	%	0/100				
Compressor	Type	Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	1				
Outdoor Fan	Type	Axial				
	Speed Control	2 Speed Via Capacitor				
	Qty	2				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	5.75	6.75	9.50	11.00	10.80
	No of Circuits	1				
Indoor Fan	Type	EC Plug				
	Speed Control	Potentiometer				
	Qty	1				
Airflow Indoor (L/s)	Nominal	1450	1775	1875	2200	2470
	Maximum	1813	2219	2344	2750	3088
	Minimum	1088	1331	1406	1650	1853
Available External Static Pressure	Pa	High Static Capability (See Fan Performance Curves)				
IP Rating	Outdoor/Indoor	IP44 (Optional IP55) / 20				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps4	Outdoor/Indoor/ Total	17.4 / 1.0 / 18.4	20.2 / 1.4 / 21.5	19.9 / 1.5 / 21.3	22.2 / 1.9 / 24.1	28.3 / 2.4 / 30.7
Full Load Amps5	Outdoor/Indoor/ Total	26.5 / 2.1 / 28.6	25.2 / 2.1 / 27.3	28.6 / 2.1 / 30.7	34.6 / 5.2 / 39.8	37.6 / 5.2 / 42.8
Outdoor Dimensions (mm)	Height	1440	1643		1846	
	Width	1897				
	Length	900				
Indoor Dimensions (mm)	Height	711				
	Width	1413	1594		2292	
	Length	902				
Indoor and Outdoor Pipe Connection Diameter	Liquid mm (inch)	12.7 (1/2") x 1			15.9 (5/8") x 1	
	Gas mm (inch)	28.6 (1-1/8") x 1			28.6 (1-1/8") x 1	
Nominal Weight 2.	Outdoor kg	238	256	282	314	316
Nominal Weight 2.	Indoor kg	117	133	133	160	160
Rated Sound Power	db(A)	67.1	67.5	66.9	67.2	67.2

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

# Global Low Profile Split Ducted Unit (Reverse Cycle) 27-48kW

Model Number (Reverse Cycle)	Indoor Unit	S027ILR3SA-F-S2061001	S032ILR3SA-F-S2061001	S038ILR3SA-F-S2061001	S043ILR3SA-F-S2061001	S048ILR3SA-F-S2061001
	Outdoor Unit	S027OVR3SA-L-S2061001	S032OVR3SA-L-S2061001	S038OVR3SA-L-S2061001	S043OVR3SA-L-S2061001	S048OVR3SA-L-S2061001
Rated Cooling	Total Capacity (kW)3	28.65	33.25	39.42	45.97	47.18
	Sensible3	21.60	25.88	29.76	33.69	35.97
	EER (kW/i kW)3	3.34	3.22	3.23	3.23	3.04
Rated Heating1	Total Capacity (kW)	26.41	30.64	36.66	45.87	44.75
	COP	3.41	3.50	3.60	3.63	3.34
AHRI Compliant	AHRI 340/360	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	-10				
Capacity Steps	%	0/100		0/50/100		
Compressor	Type	Single Scroll		Tandem Scroll		
	Starter	D.O.L (Optional Soft Starter)				
	Qty	1				
Outdoor Fan	Type	Axial				
	Speed Control	2 Speed Via Capacitor				
	Qty	2				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	5.75	6.75	9.50	11.00	10.80
	No of Circuits	1				
Indoor Fan	Type	EC Plug				
	Speed Control	Potentiometer				
	Qty	1				
Airflow Indoor (L/s)	Nominal	1450	1775	1875	2200	2470
	Maximum	1813	2219	2344	2750	3088
	Minimum	1088	1331	1406	1650	1853
Available External Static Pressure	Pa	+200 Pa				
IP Rating	Outdoor/Indoor	IP44 / 20				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps4	Outdoor/Indoor/ Total	17.4 / 1.0 / 18.4	20.2 / 1.4 / 21.5	22.1 / 1.5 / 23.6	24.9 / 1.9 / 26.8	28.3 / 2.4 / 30.7
Full Load Amps5	Outdoor/Indoor/ Total	26.5 / 2.1 / 28.6	25.2 / 2.1 / 27.3	33.6 / 2.1 / 35.7	33.6 / 5.2 / 38.8	36.0 / 5.2 / 41.2
Outdoor Dimensions (mm)	Height	1440	1643		1846	
	Width	1897				
	Length	900				
Indoor Dimensions (mm)	Height	711				
	Width	1413	1594		2292	
	Length	902				
Indoor and Outdoor Pipe Connection Diameter	Liquid mm (inch)	12.7 (1/2") x 1			15.9 (5/8") x 1	
	Gas mm (inch)	28.6 (1-1/8") x 1			28.6 (1-1/8") x 1	
Nominal Weight 2.	Outdoor kg	238	256	307	314	316
Nominal Weight 2.	Indoor kg	118	125	132	160	160

# Global Split Ducted Unit (Horizontal)

## Features

- Galvanised type steel cabinet painted inside & out
- Scroll type compressor
- EC plug type indoor fan with high static capability
- External rotor motor type outdoor fan(s)
- TXV refrigerant control
- Removable outdoor coil guards
- 1000hrs Epoxy coated outdoor coils
- Robust controls
- PE type closed cell insulation
- Safety protection circuit
- Phase fail relay
- Fire relay

## Factory options – Customised to order (CTO)

### Outdoor

- Compressor soft start
- High static outdoor fans
- Capacity modulation control
- Outdoor coil(s) with anti-corrosion post treatment
- Discharge & suction isolation valves
- Liquid isolation valves
- Compressor sound jackets
- IP55 Rating
- Modbus high level interface

### Indoor

- Double layered insulation to indoor section (50mm)
- Indoor coil(s) with anti-corrosion post treatment

## Factory options – Engineered to order (ETO)

### Outdoor

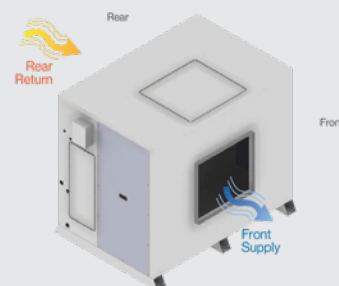
- 316L stainless steel cabinet, unpainted
- 316L stainless steel external fasteners
- Outdoor coil(s) copper / copper
- Indoor coil(s) copper / copper
- R22/R407C application

### Indoor

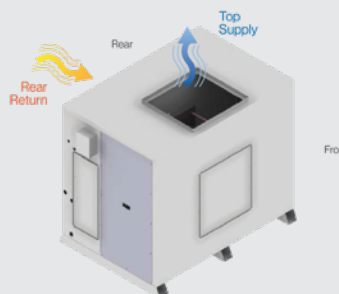
- 316L stainless steel cabinet, unpainted
- 316L stainless steel external fasteners
- Indoor coil(s) copper / copper
- R22/R407C application
- Supplied SKD (Semi-knockdown)

## Handing options (Indoor)

### Front supply / Rear return (Standard)



### Top supply / Rear return (Field configurable)



## Handing (Outdoor)



# Global Horizontal Split Ducted Unit (Cool Only) 54-92kW

Model Number (Cooling Only)	Indoor Unit	S054IHC3SA-F-S2061001	S064IHC3SA-F-S2061001	S072IHC3SA-F-S2061001	S084IHC3SA-F-S2061001	S092IHC3SA-F-S2061001
	Outdoor Unit	S054OVC3SA-L-S2061001	S064OVC3SA-L-S2061001	S072OVC3SA-L-S2061001	S084OVC3SA-L-S2061001	S092OVC3SA-L-S2061001
Rated Cooling	Total Capacity (kW)3	58.48	64.33	75.22	85.69	96.39
	Sensible3	43.00	50.34	57.19	64.99	72.67
	EER (kW/i kW)3	3.20	3.13	3.42	3.38	3.14
AHRI Compliant	AHRI 340/360	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	+10				
Capacity Steps	%	0/50/100				
Compressor	Type	Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	2				
Outdoor Fan	Type	Axial				
	Speed Control	2 Speed Via Capacitor				
	Qty	4				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	5.75	6.75	9.50	11.00	10.80
	No of Circuits	2				
Indoor Fan	Type	EC Plug				
	Speed Control	Potentiometer				
	Qty	1	2			
Airflow Indoor (L/s)	Nominal	2880	3550	3750	4400	4930
	Maximum	3600	4438	4688	5500	6163
	Minimum	2160	2663	2813	3300	3698
Available External Static Pressure	Pa	High Static Capability (See Fan Performance Curves)				
IP Rating	Outdoor/Indoor	IP44 (Optional IP55) / 20				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps4	Outdoor/Indoor/ Total	34.1 / 2.4 / 36.5	39.9 / 1.9 / 41.8	41.0 / 1.86 / 42.8	44.7 / 2.5 / 47.1	56.8 / 3.1 / 59.8
Full Load Amps5	Outdoor/Indoor/ Total	49.1 / 5.2 / 54.3	51.1 / 4.2 / 55.3	57.1 / 4.2 / 61.3	69.1 / 10.4 / 79.5	75.1 / 10.4 / 85.5
Outdoor Dimensions (mm)	Height	1400	1603		1806	
	Width	2300				
	Length	1425				
Indoor Dimensions (mm)	Height	1400	1605		1805	
	Width	1600			1850	
	Length	1100				
Indoor and Outdoor Pipe Connection Diameter	Liquid mm (inch)	12.7 (1/2") x 1			15.9 (5/8") x 1	
	Gas mm (inch)	28.6 (1-1/8") x 1				
Nominal Weight 2.	Outdoor kg	527	612	647	738	740
Nominal Weight 2.	Indoor kg	290	340	340	461	461
Rated Sound Power	db(A)	66.8	70.3	69.5	70.0	70.0

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes ikW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)



# Global Horizontal Split Ducted Unit (Reverse Cycle) 55-95kW

Model Number (Reverse Cycle)	Indoor Unit	S055IHR3SA-F-S2061001	S065IHR3SA-F-S2061001	S075IHR3SA-F-S2061001	S085IHR3SA-F-S2061001	S095IHR3SA-F-S2061001
	Outdoor Unit	S055OVR3SA-L-S2061001	S065OVR3SA-L-S2061001	S075OVR3SA-L-S2061001	S085OVR3SA-L-S2061001	S095OVR3SA-L-S2061001
Rated Cooling	Total Capacity (kW)3	58.48	64.33	75.22	85.69	96.39
	Sensible3	43.00	50.34	57.19	64.99	72.67
	EER (kW/ikW)3	3.20	3.13	3.42	3.38	3.14
Rated Heating1	Total Capacity (kW)	53.44	61.83	71.08	79.39	90.33
	COP	3.19	3.34	3.63	3.58	3.42
AHRI Compliant	AHRI 340/360	Yes				
Operating Range	Maximum °C	+52				
	Minimum °C	-10				
Capacity Steps	%	0/50/100				
Compressor	Type	Scroll				
	Starter	D.O.L (Optional Soft Starter)				
	Qty	2				
Outdoor Fan	Type	Axial				
	Speed Control	2 Speed Via Capacitor				
	Qty	4				
Refrigerant System	Type	R410A				
	Charge Per Circuit kg	5.75	6.75	9.50	11.00	10.80
	No of Circuits	2				
Indoor Fan	Type	EC Plug				
	Speed Control	Potentiometer				
	Qty	1	2			
Airflow Indoor (L/s)	Nominal	2880	3550	3750	4400	4930
	Maximum	3600	4438	4688	5500	6163
	Minimum	2160	2663	2813	3300	3698
Available External Static Pressure	Pa	+200 Pa				
IP Rating	Outdoor/Indoor	IP44 / 20				
Power Supply	(Volt/Phase/Hz)	400-415V / 3Ph + N / 50Hz				
Rated Load Amps4	Outdoor/Indoor/ Total	34.1 / 2.4 / 36.5	39.9 / 1.9 / 41.8	41.0 / 1.86 / 42.8	44.7 / 2.5 / 47.1	56.8 / 3.1 / 59.8
Full Load Amps5	Outdoor/Indoor/ Total	49.1 / 5.2 / 54.3	51.1 / 4.2 / 55.3	57.1 / 4.2 / 61.3	69.1 / 10.4 / 79.5	75.1 / 10.4 / 85.5
Outdoor Dimensions (mm)	Height	1400	1603		1806	
	Width	2300				
	Length	1425				
Indoor Dimensions (mm)	Height	1400	1605		1805	
	Width	1600			1850	
	Length	1100				
Indoor and Outdoor Pipe Connection Diameter	Liquid mm (inch)	12.7 (1/2") x 1			15.9 (5/8") x 1	
	Gas mm (inch)	28.6 (1-1/8") x 1				
Nominal Weight 2.	Outdoor kg	527	612	647	738	740
Nominal Weight 2.	Indoor kg	290	340	340	461	461
Rated Sound Power	db(A)	66.8	70.3	69.5	70.0	70.0

1. For reverse cycle model only 2. For base model only. Factory options will vary 3. Performance excludes i kW of evaporator fan motor 4. R.L.A - Run Load Amps are based on current drawn at nominal conditions 5. F.L.A - Full Load Amps are based on the overload settings [max current] of all compressor and fan motor(s)

Date	Document #	Approved By	Revision
11/5/2023	TDT001272	CM	B

# Customised Solutions

## Bespoke HVAC when you need it most

Depending on your needs we can customise or engineer-to-order several components and configurations to deliver the best results. Over the lifespan of a customised HVAC appliance, a system that strongly performs even in the harshest of environments offers long-term cost savings due to lower operation costs.

In most cases we can custom design to your brief, assemble and factory test prior to shipment.



### Commercial

- Corrosion Protection
- Diverse Electrical Options
- High Static Fan Options



### Industrial / Mining

- Corrosion Protection
- Special Electrical Specification
- Ingress Protection



### Marine & Off - Store

- Stainless Steel Cabinets
- Copper / Copper Coils
- Special Electrical Specification

## Examples of customisation include:

### Customised To Order (CTO)

- Compressor soft start
- High static outdoor fans
- Double layered insulation to indoor section (50mm)
- Capacity modulation control
- Outdoor coil(s) with anti-corrosion post treatment
- Indoor coil(s) with anti-corrosion post treatment
- Discharge & suction isolation valves
- Liquid isolation valves
- Compressor sound jackets
- IP55 Rating
- Modbus high level interface

### Engineered To Order (ETO)

- 316L stainless steel cabinet, unpainted
- 316L stainless steel external fasteners
- Outdoor coil(s) copper / copper
- Indoor coil(s) copper / copper

















For further information visit  
**apacair.com.au**  
or call 1300 274 847

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