AIRSTAGE

Applied Products Overview August 2022



FUJITSU GENERAL (AUST.) PTY LIMITED

Product Range

The Fujitsu General AIRSTAGE™ product line up includes a comprehensive range of air cooled and water cooled liquid Chillers, as well as Roof Top Packaged Units, for residential, commercial, and industrial applications. Offering simple aesthetics and design flexibility, the Fujitsu General AIRSTAGE range provides the latest technology and product solutions to meet the needs of Australia's weather extremes.

Air Cooled & Water Cooled Liquid Chillers

Fujitsu General's AIRSTAGE Chillers range in capacity from 4kW to 4000kW, with options from small compact and energy efficient air cooled chillers, to large water cooled chillers. All feature Danfoss componentry with ultra low GWP HFO refrigerant options. With a variety of compressors available, including turbocor magnetic bearing, screw, rotary and scroll compressors, there is an option to suit a multitude of applications.

CompactLine

The CompactLine liquid Chillers and Heat Pumps range is the ideal solution for residential or small commercial areas. Compactness and low energy consumption are the key benefits of this range, achieving high energy efficiency with an integrated pump kit or with Inverter technology.



MidyLine

The Heat Pump range in the MidyLine series are dedicated to environment heating and domestic hot water production, providing hot water up to 60°C. Being reverse cycle, they are also capable in providing air conditioning during summertime. The range features high energy efficiency and AquaLogik technology with a built-in hydronic kit and variable speed circulating pumps, minimising the need to use smaller inertia tanks.



AquaPlus

The AquaPlus air cooled and water cooled liquid Chillers and Heat Pumps range is dedicated to small and medium areas in commercial or industrial buildings, up to 180kW. Compactness and easy installation are the key benefits of this range. Dedicated models can also feature the additional AquaLogik technology with a built-in hydronic kit and variable speed circulating pumps, minimising the need to use smaller inertia tanks. The AquaPlus range is available in several variants, with different technical solutions and performance levels: the models achieving high energy efficiency feature Inverter or Digital Scroll technology.



MultiPower

The air cooled and water cooled MultiPower liquid Chillers and Heat Pumps range is based on multi-Scroll technology. This ensures high efficiency at part loads, since the load is split among the different compressors based on the actual cooling capacity required. The family includes both air cooled and water cooled models with a wide capacity range up to 1250kW. The MultiPower range is available with different performance levels: the models achieving high energy efficiency feature Inverter technology.



EnergyPower

The air cooled Scroll/Screw Multifunctional Chillers included in the EnergyPower line are able to provide cooling and heating at the same time and with the same unit. Those Multifunctional units, with capacity up to 1150kW, are dedicated to 4-Pipe systems and are ideal for buildings where there is the need at the same time for ambient heating, cooling and domestic hot water production, such as hotels and multifunctional buildings with service and residential users.



MaxiPower

The MaxiPower air cooled and water cooled liquid Chillers with Screw compressors cover capacities up to 2490kW. Dedicated models feature Inverter technology on compressors, pumps and fans for higher efficiency even at part load. The MaxiPower range is available in several variants with different technical solutions and performance levels, achieving high energy efficiency with low energy consumption.



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TurboLine

The TurboLine air cooled and water cooled Chillers range, equipped with Turbocor Magnetic Levitation Oil-Free Frictionless Technology compressors, achieving ultra high energy efficiency with class leading full-load COP/EER and part-load IPLV/NPLV/ESEER performances, robust design for reliability and superior acousticly enhanced operation. The range includes air cooled and water cooled models with a wide capacity range up to 4000kW nominal cooling capacity whilst offering the optional availability of the new generation Low-GWP and Ultra-Low GWP HFO refrigerants technology to assist with GHG/Carbon Emission minimisation designs.



Roof Top Packaged Units

The AIRSTAGE range of Roof Top Packaged Units features 28 models ranging in capacity from 12kW to 252kW, all equipped with Danfoss componentry and includes options such as highly efficient and reliable EC Inverter Plug Fans with backward curved blades. The Economiser option enables high energy saving operation and Wheel Heat Recovery on the double skin products assists with the efficient heat transfer of air. This can also give the greatest humidity control.

Standard & Premium Single Skin

The AIRSTAGE Standard and Premium Single Skin range of Roof Top Packaged Units feature Danfoss Scroll Compressors and Direct Digital Controllers (DDC), G4 Filters, Black Epoxy Corrosion Protection Coating, Axial Condenser Fans and Automatic Circuit Breakers. The Premium model also features Acoustic Compressor Insulation for low noise operation, and EC Plug Fans (in lieu of the standard belt driven fan). The units are available in several configurations with additional Mixing Box and Free-Cooling sections.



Premium Double Skin

The AIRSTAGE Premium Double Skin range of Roof Top Packaged Units feature Danfoss Scroll Compressors and Direct Digital Controllers (DDC), G4 Filters, Black Epoxy Corrosion Protection Coating, Axial Condenser Fans, Automatic Circuit Breakers, Acoustic Compressor Insulation for low noise operation, and EC Plug Fans. The range also features Wheel Heat Recovery which assists with the efficient heat transfer of air. This can also give the greatest humidity control. The range is available in several configurations with an additional Mixing Box, Free-Cooling and Heat Recovery sections. The range has been improved with the new high efficiency models with an Inverter Scroll compressor, EC Inverter Plug Fans.



Air Handling Units

Fujitsu General's range of Airstage Air Handling units include 36 models across flat, squared, modular or vertical design options with every feature fully customisable to suit most project requirements and applications. The modular design features 5 models with pre-set configuration and the outer casing across the range is powder coated to withstand Australian weather extremes. The multitude of key options include: Eurovent Certification, Single-Wall/Double-Wall Panels, 50mm/75mm PU Insulations, Outdoor Installations with Unit-Roof and Intake/Weather Hoods, Multi-Dampers, Pre and Final Bag Filters, Cooling/Heating Coils, Humidifiers, UV Lights, EC Plug Fans, Multizone Configurations and more.



- Fully Customised 36 models
- Special Size Flat or Squared 23 models with reduced height, 24 models with reduced width
- Modular 5 models with preset configuration
- Compact Vertical 10 models with compact vertical design

1. AIRCOOLED LIQUID CHILLERS AND HEAT PUMPS FOR RESIDENTIAL AND LIGHT COMMERCIAL APPLICATION

CompactLine



| 1.1 (| Compact size liquid (| Chillers and Heat Pumps with | Rotary or Scr | oll compress | or and plate | exchanger | R410A |
|-------|-----------------------|---------------------------------|---------------|--------------|--------------|------------------|-------|
| CLASS | UNITS NAME | TECHNOLOGY | COOLING (kW) | HEATING (kW) | FEATURES | | |
| A | AAC/IK/WP 15÷61 | INVERTER ROTARY INVERTER SCROLL | 3,9-10 | 5,6-14 | | o 🕝 🤧 | |
| A | AAC/CLK 15÷81 | | 4,2-21 | 5,0-24 | | 0 0 | |

MidyLine



| 1.2 | Dedicated Heat Pumps with Scroll compressors and plate exchanger | | | | | | | | |
|-------|------------------------------------------------------------------|------------|--------------|--------------|----------|---|--|---|------------|
| CLASS | UNITS NAME | TECHNOLOGY | COOLING (kW) | HEATING (kW) | FEATURES | | | | |
| A | AAC/ML/ST 41÷71 | AQUALOGIK! | 7,3-16 | 11-23 | 9 | 务 | | # | (b) |
| A | AAC/ML/ST 91÷151 | AQUALOGIK | 20-37 | 31-53 | | 杂 | | # | (b) |
| A | AAC/ML/ST 182-P÷302-P | AQUALOGIK | 44-101 | 57-114 | | * | | # | |

2. AIRCOOLED LIQUID CHILLERS AND HEAT PUMPS FOR RESIDENTIAL AND INDUSTRIAL APPLICATION

AquaPlus



| 2.1 | Liquid Chillers and Heat P | umps with Scroll compre | ssors and plat | e or shell and | d tube exchanger | R410A |
|-------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|------------------|-------|
| CLASS | UNITS NAME | TECHNOLOGY | COOLING (kW) | HEATING (kW) | FEATURES | |
| A | AAC/IK/A/WP 91÷152 | INVERTER SCROLL≣ | 21-43 | 22-50 | ₩ * | |
| | AAC/K 91÷151 | | 25-42 | 31-55 | ◎ ★ | |
| | AAC/K/ST 91÷151 | AQUALOGIK | 25-42 | 31-55 | ◎ * | 1 6 |
| | AAC/K/FC 91÷151 | FREE COOLING | 28-43 | | ◎ * | FC |
| A | AAC/IK/A 172-P÷574-P | INVERTER SCROLL MICROCHANNEL MICROCHANNEL MICROCHANNEL MICROCHANNEL MICROCHANNEL MICROCHANNEL MICROCHANNEL MICROCHANNEL MICROCHANNEL MICROCHANNEL | 50-179 | | ₩ | |
| A | AAC/TK/A 182-P÷604-P | DIGITAL SCROLL® MICROCHANNEL® | 51-185 | | 多 | |
| A | AAC/K/A/WP 182-P÷604-P | | 48-161 | 56-197 | | į. |
| A | AAC/K/A/WP/ST 182-P÷604- | P <i>AQUALOGIK</i> | 48-161 | 56-197 | | |
| | AAC/K 182-P÷604-P | | 48-178 | 54-187 | ◎ * | |
| | AAC/K/ST 182-P÷604-P | AQUALOGIK | 48-178 | 54-187 | ◎ % | 1 4 |
| | AAC/K/FC 182-P÷604-P | FREE COOLINGAD | 53-174 | | ◎ % | FC |
| | AAC/K 182÷604 | | 49-179 | 56-188 | ◎ * | |
| | AAC/K/ST 182÷604 | AQUALOGIK | 49-179 | 56-188 | ◎ * | |
| | ARC/K 15÷131 | | 4,2-33 | 5,0-42 | 0 0 b | |
| | ARC/K 182-P÷604-P | | 48-178 | 54-187 | 6 6 | |
| | ARC/K/ST 182-P÷604-P | UALOGIK | 48-178 | 54-187 | 0 | |
| | ARC/K 182÷604 | | 49-179 | 56-188 | 6 | |
| | TRA/K/ST 182÷604 | AQUALOGIK | 49-179 | 56-188 | 0 0 | |

AIRSTAGE

*Option

MultiPower



2.2 Multi-Scroll liquid Chillers and Heat Pumps with plate or shell and tube exchanger

| | mana e e e e e e e e e e e e e e e e e e | onia i roat i anno miti pi | 0.00 01 011011 011 | 0 (0.00 0 0710110 | | | - |
|-------|------------------------------------------|-----------------------------------|--------------------|-------------------|----------|------------|-------|
| CLASS | UNITS NAME | TECHNOLOGY | COOLING (kW) | HEATING (kW) | FEATURES | | |
| A | AAC/IK/A 674-P÷2356-P | INVERTER SCROLL■ MICROCHANNEL□ | 196-668 | | | * | |
| A | AAC/K/A/WP 726-P÷24012-P | | 194-671 | 227-762 | | 8 % | |
| | AAC/K 726-P÷36012-P | | 199-1051 | 228-1210 | | 8 % | |
| | AAC/K/FC 726-P÷36012-P | FREE COOLING III | 208-1102 | | | 8 % | FC |
| | AAC/K 726÷36012 | | 200-1062 | 229-1222 | | 8 % | |

EnergyPower



| 2.3 | Multifunctional 4-Pipe uni | ts with Scroll or Screv | v compressors | and plate or | shell and tube ex | xchangers | R410A | R134a |
|-------|----------------------------|-------------------------|---------------|--------------|-------------------|-------------|-------|--------|
| CLASS | UNITS NAME | TECHNOLOGY | COOLING (kW) | HEATING (kW) | FEATURES | | | |
| | AAC/K/EP 182-P÷693-P | | 49-190 | 52-203 | ◎ * ! | + X | 4P | R410A |
| | AAC/K/EP 604-P÷2406-P | | 167-643 | 180-693 | ◎ ☆ [| | 4P | R410A |
| | AAC/IY/FP 1352÷4402 | INVERTER SCREW | 278-1133 | 283-1156 | 最 头 ≜ | <u></u> (¥) | 4P | P13//p |

MaxiPower



| 2.4 | Liquid Chillers and Heat I | Pumps with Screw co | mpressors a | nd shell and t | ube exchanger | | R134a | R407C |
|-------|----------------------------|------------------------------------|--------------|----------------|---------------|----|-------------------------------------------|-------|
| CLASS | UNITS NAME | TECHNOLOGY | COOLING (kW) | HEATING (kW) | FEATURES | | | |
| A | AAC/IY/WP 1352÷4402 | INVERTER SCREW | 278-1133 | 282-1148 | * | | (A) | R134a |
| A | AAC/Y/A 1302÷4802 | INVERTER SCREWS * MICROCHANNEL III | 263-1136 | | 職 № 分 | | $\overset{(\bullet,\bullet)}{\mathbb{A}}$ | R134a |
| | AAC/Y 1202-B÷6802-B | | 221-1597 | 225-1438 | ** ** | | $\overset{(\bullet,\bullet)}{\mathbb{A}}$ | R134a |
| | AAC/Y/FC 1202-B÷6002-B | FREE COOLINGIN | 217-1460 | | ** ** | FC | $\overset{(b,b)}{\mathbb{A}}$ | R134a |
| | AAC702-V÷5602-V | | 170-1500 | 190-1342 | ** * | = | $\overset{(b,b)}{\mathbb{A}}$ | R407C |
| | AAC/FC 702-V÷4602-V | FREE COOLINGIT | 177-1163 | | ******* | FC | $\overset{(\bullet,\bullet)}{\mathbb{A}}$ | R407C |

TurboLine



| 2.5 Liquid Chillers with Turbocor compressors and flooded shell and tube exchanger | | | | | | | | R134a |
|------------------------------------------------------------------------------------|--------------------------|-----------------|--------------|--------------|----------|----|-----|-------------|
| CLASS | UNITS NAME | TECHNOLOGY | COOLING (kW) | HEATING (kW) | FEATURES | | | |
| A | AAC/TTH 1301-1÷4904-2 | MICROCHANNEL®* | 262-1340 | | ※ 🛠 🛊 | | (A) | R1234 |
| | AAC/TTH/FC 1301-1÷4904-2 | FREE COOLINGIII | 279-1386 | | ※ 🛠 🛊 | FC | (A) | R1234 Ze |
| A | AAC/TTY 1301-1÷5004-2 | MICROCHANNEL®* | 248-1456 | | ※ 🛠 🕏 | 7 | (A) | R134a |
| | AAC/TTY/FC 1301-1÷5004-2 | FREE COOLING® | 246-1443 | | ※ 🛠 🛊 | FC | (A) | R134a |
| | | | | | | | | *Option |

LEGEND COMPRESSOR: SOLUTION: REFRIGERANT: Inverter Rotary EC Inverter Plug-Fan Free-Cooling Super silenced R410A Turbocor EXCHANGER: Rotary Centrifugal Domestic Hot Water Single Skin R134a Inverter Scroll FAN: Plate AquaLogik Double Skin R407C R1234ze Digital Scroll Axial Shell and Tube A CLASS Mixing Box Scroll Flooded Shell and Tube Web Monitoring Radial Economizer Economizer and Inverter Screw EC Inverter Radial Microchannel 4-Pipe system Cross-flow Heat Recovery Economizer and Screw EC Inverter Tangential Silenced Wheel Heat Recovery

3. WATER COOLED LIQUID CHILLERS AND HEAT PUMPS FOR COMMERCIAL AND INDUSTRIAL APPLICATION. REMOTE CONDENSERS

AquaPlus



3.1 Liquid Chillers and Heat Pumps with **Scroll compressors** and plate or shell and tube exchangers. Remote Condensers

| | *************************************** | | | | | | |
|-------|-----------------------------------------|------------|--------------|--------------|----------|---|-----|
| CLASS | UNITS NAME | TECHNOLOGY | COOLING (kW) | HEATING (kW) | FEATURES | | |
| | AWC/K 15÷151 | | 4,6-49 | 5,9-60 | 0 |) | |
| | AWC/K 182-P÷604-P | | 55-195 | 73-237 | 6 |) | |
| | AWC/K 182÷604 | | 57-196 | 75-238 | 6 | | |
| | AME/K 15÷151 | | 4,0-42 | 5,1-53 | 0 | 7 | |
| | AME/K 182-P÷604-P | | 51-176 | 60-194 | • | 7 | |
| | ARA/K 4111÷8222 | | | | | * | |
| | ARA/K/SL 4111÷8222 | | | | | * | SL |
| | ARA/K/SSL 5111÷8222 | | | | | 杂 | SSL |

MultiPower



| 3.2 Multi-Scroll liquid Chillers and Heat Pumps with plate or shell and tube exchangers | | | | | | | |
|-----------------------------------------------------------------------------------------|-------------------|------------|--------------|--------------|----------|----------|--|
| CLASS | UNITS NAME | TECHNOLOGY | COOLING (kW) | HEATING (kW) | FEATURES | | |
| | AWC/K 726-P÷360 | 12-P | 224-1242 | 290-1531 | | @ | |
| | \\\\C\K 726±36012 |) | 225 1254 | 201 1546 | | | |

MaxiPower



3.3 Liquid Chillers and Heat Pumps with **Screw** compressors and shell and tube exchangers.

| | Remote Condensers | | | | | R410A R134a |
|-------|---------------------|------------------|--------------|--------------|--------------|-------------|
| CLASS | S UNITS NAME | TECHNOLOGY | COOLING (kW) | HEATING (kW) | FEATURES | |
| A | AWC/K/A 901÷6202 | INVERTER SCREW■* | 320-2486 | | 编 林 會 | A R410A |
| | AWC/IY/WP 1352÷4402 | INVERTER SCREW | 319-1171 | 386-1439 | | R134a |
| A | AWC/Y/A 1302÷4802 | INVERTER SCREW■* | 280-1289 | | 韓 🚧 🔓 | R134a |
| | AWC/K 901÷5802 | | 281-1893 | | ** = | R410A |
| | AWC/Y 1302-B÷9003-B | | 267-2473 | | ** | R134a |
| | AME/Y 1302-B÷9003-B | | 235-2168 | | ** 🛊 | R134a |
| | ARA/Y 8141÷9282 | | | | | R134a |
| | ARA/Y/SL 8231÷9282 | | | | | SL R134a |
| | ARA/Y/SSL 8151÷9281 | | | | | SSL R134a |

*Option

TurboLine



| 3.4 | Liquid Chillers with | Turbocor compress | ors and flooded | shell and | tube exchangers |
|-----|----------------------|-------------------|-----------------|-----------|-----------------|
| | | | | | |

| 2.4 Elquid Offiliers with rurbocol compressors and nooded shell and tube exchangers | | | | | | | | | 11.0-10 |
|-------------------------------------------------------------------------------------|------------------------|------------|--------------|--------------|----------|---|---|------------------------------|-------------|
| CLASS | UNITS NAME | TECHNOLOGY | COOLING (kW) | HEATING (kW) | FEATURES | | | | |
| A | AWC/TTH 1701-1÷6606-1 | | 321-1922 | | | 尜 | 쿲 | $\langle \mathbf{A} \rangle$ | R1234 |
| A | AWC/TTH/DR 1701-1÷6606 | -1 | 301-1802 | | | 尜 | 計 | $\langle \mathbf{A} \rangle$ | R1234 Ze |
| A | AWC/TTY 1601-1÷14406-1 | | 319-3912 | | | 柴 | 쿲 | (A) | R134a |
| A | AWC/TTY/DR 1601-1÷6204 | -1 | 298-1584 | | | 祭 | 쿲 | A | R134a |



4. ROOF TOP PACKAGED UNITS

Premium Single Skin



| 4.1 | Single Skin | Roof Top Packaged Units with S | Scroll compressors and | d EC Inverter Pl | lug Fans | R410A |
|------|--------------|--------------------------------|------------------------|------------------|----------|----------|
| CLAS | S UNITS NAME | TECHNOLOGY | COOLING (kW) | HEATING (kW) | FEATURES | |
| | RAQ/K/WP | 182-R÷453-R | 12-90 | 14.2-98 | | % |
| | | | | | | |

Premium Double Skin



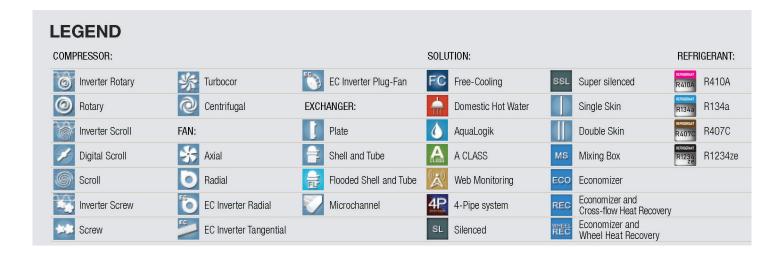
| 4 | 4.2 | .2 Double Skin Roof Top Packaged Units with Scroll compressors and radial fans or EC Inverter Plug F. | | | | | | |
|---|-------|-------------------------------------------------------------------------------------------------------|-----------------------|--------------|--------------|----------|-------|------------|
| | CLASS | UNITS NAME | TECHNOLOGY | COOLING (kW) | HEATING (kW) | FEATURES | | |
| | | RAQ/IK/EC 172÷724 | INVERTER SCROLL | 58-252 | 60-262 | MS ECO | REC N | H REC |
| | | RAQ/K 182÷804 | EC INVERTER PLUG FANS | * 58-252 | 60-262 | MS ECO | REC N | } |

*Option

WARRANTY

Fujitsu believes in the quality and reliability of every air conditioner we sell, providing up to 3 years warranty on selected Applied products and specifically, a 1 year parts and labour warranty on the AIRSTAGE Chillers range, a 1 year parts warranty on AIRSTAGE Air Handling Units (AHUs) and a 2 year parts and labour warranty plus an additional 1 year parts only warranty on the AIRSTAGE Roof Top Packaged Units (RTPUs).

Fujitsu General Australia strives to consistently provide high quality, energy efficient, reliable products. Fujitsu General trained technicians attend every commercial and industrial AIRSTAGE installation to assist with the controls commissioning of the units and ensure seamless operation.





Imported by

FUJITSU GENERAL (AUST.) PTY LIMITED

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