

AEI 1G140 EMX 3PH DATA SHEET

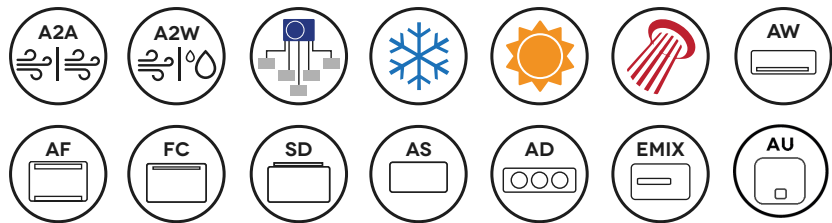


5 CONNECTIONS + DHW





The biggest size available today in the iSeries outdoor-unit range. It was designed to cater for applications that require outstanding performance levels and a higher number of connected indoor units (up to 5) so that air-air and air-water configurations of various types can be had. Ideal for small-sized restaurants, offices, bars, single family villas and large apartments. It allows for the connection of up to 5 indoor units of any type, such as air, water, radiant panels or low-temperature radiators, in a single, dual, triple, quadruple or quintuple configuration.

By using the EMIX port to connect the unit to an EMIX/EMIX TANK, mixed applications can be created to generate domestic hot water at the same time.

The G140 unit is available in a three-phase version.



POSSIBLE COMBINATIONS WITH INDOOR UNITS (SIZES)

|  |  /  |  |
|---|--|---|
| AUDH | AUCH+A+A+A • | A+D • |
| AUDH • | AUCH+A+A+B • | B+D |
| | AUCH+A+A+A+A • | B+C • |
| | AUCH+A+A+A+B • | C+C |
| | AUDH+A+B • | A+A+D |
| | AUDH+A+A+A • | A+A+C • |
| | | A+A+A+C |
| | | A+A+A+A • |
| | | A+A+A+B • |
| | | A+A+A+A+A • |
| | | A+A+A+A+B |

• The dot next to the combination indicates where EMIX or EMIX TANK are used.

• Mixed: air/water for heating and air/air for cooling, not in operation at the same time

| OUTDOOR UNIT | | | AEI 1G140 EMX3PH | | |
|--|---|--|-----------------------------|---|---------------------|
| Matchable units Domestic Hot Water (DHW) | | | EMIX TANK V2 200-300 liters | | |
| | | | EMIX V1 | | |
| Matchable air/air indoor units | | | External DHW tank | | |
| Matchable air/water indoor unit | | | see tables | | |
| | | | AUDH | | |
| AIR / WATER | | | | | |
| Performances according to EN 14511 | Air +35 °C - Water 23/18 °C Air + 7 °C - Water 30/35 °C | Nominal capacity | kW | Cooling | Heating |
| | | Power input | kW _{el} | 11,60 | 13,80 |
| | | EER/COP | | 3,20 | 3,44 |
| | Air +35 °C - Water 12/7 °C Air - 7 °C - Water 30/35 °C | Cooling/Heating capacity | kW | 3,63 | 4,01 |
| | | Power input | kW _{el} | 8,30 | 10,50 |
| | | EER/COP | | 3,79 | 4,10 |
| Performances according to ERP Ecodesign EN 14825 | LOW TEMPERATURE AVERAGE climate conditions | Rated heat output | kW | 12,00 | |
| | | Seasonal energy efficiency η _s | % | 167 | |
| | | SCOP | | 4,24 | |
| | MEDIUM TEMPERATURE AVERAGE climate conditions | Energy class | | A++ | |
| | | Rated heat output | kW | 10,00 | |
| | | Seasonal energy efficiency η _s | % | 110 | |
| AIR / AIR | | | | | |
| Performances according to EN 14511 | Outdoor air +35 °C - Indoor air 27 °C Outdoor air +7 °C - Indoor air 20 °C | Nominal capacity (min/max) | kW | Cooling | Heating |
| | | Power input | kW _{el} | 10,60 (2,60 / 13,70) | 12,00 (3,10 / 15,5) |
| | | EER/COP | | 3,12 | 2,60 |
| Performances according to ERP Ecodesign EN 14825 | AVERAGE climate conditions | P _{design,c} /P _{design,h} | kW | 3,40 | 5,50 |
| | | SEER/SCOP | | 13,60 | 11,50 |
| | | Energy class | | 5,11 | 4,13 |
| DOMESTIC HOT WATER | | | | | |
| Performances according to ERP Ecodesign EN 14825 | Tapping profile | | | XL | |
| | ERP class | | | A | |
| | COP | | | 2,12 | |
| | Efficiency | | % | 86 | |
| Functional data | Outdoor temperature range | | °C | -15 / +43 | -15 / +24 |
| | Indoor temperature range | | °C | +10 / +47 | +5 / +27 |
| | Power supply | | V/Ph/Hz | 230/50-60/1+T - 400/50/3+N+T | |
| | Maximum electric input | | kW/A | 5,2/10x3 | |
| | Sound pressure | | dB(A) | 45 | |
| | Sound power | | dB(A) | 65 | |
| Components & dimensions | Compressor type | | | Twin Rotary | |
| | Fan air flowrate | | m ³ /h | 3500 | |
| | Weight | | kg | 145 | |
| | Dimensions HxWxD | | mm | 1335x1270x450 | |
| Refrigerant connections | Diameter (liquid-gas) | | inch | 1/4"-3/8"(x3)+1/4"-1/2"(x2)+1/2"-1/2"(EMIX) | |
| | Total tube length (standard charge) | | m | multi 40 / single 30 | |
| | Total tube length (additional charge) | | m | multi 100 / single 50 | |
| | Tube length (standard charge) | | m | 30 | |
| | Tube length (additional charge) | | m | 30 | |
| | Maximum height difference between IU-OU | | m | 10 | |
| Refrigerant | Type & GWP | | | R410A / 2088 kg CO ₂ eq. | |
| | Quantities | | | 4,4 kg / 9,18 Tonn CO ₂ eq. | |

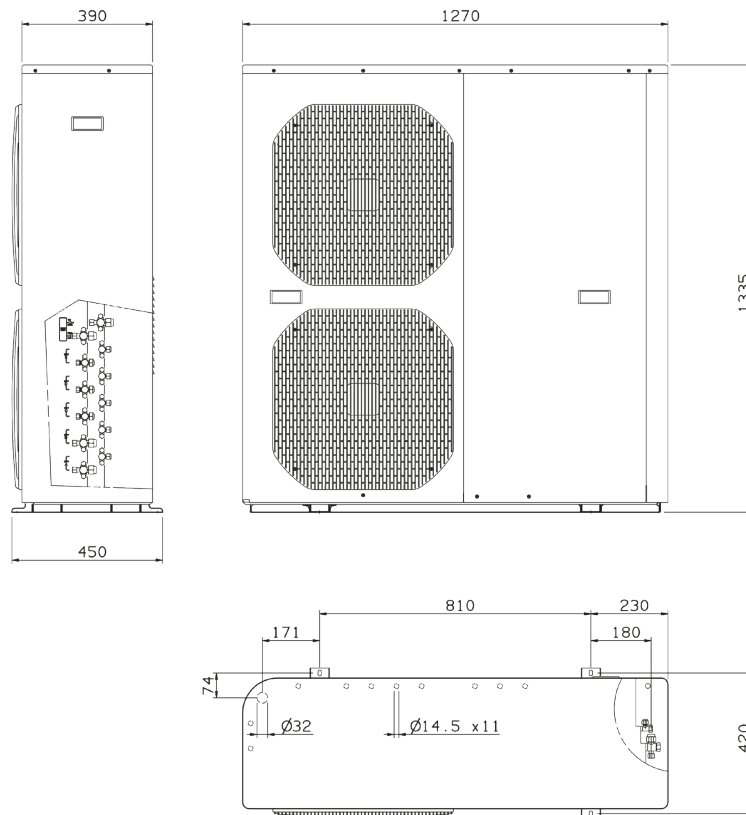
Notes

The equipment described in this catalogue contains HFC-410A-type fluorinated greenhouse gases. These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

PRELIMINARY data declared in accordance with REGULATION (EU) No 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

Argoclima reserves the right to amend the data presented in this catalogue at any time and without notice.

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DATA BASED ON THE UNI/TS 11300-4:2016 STANDARD

HEATING

| LAT [°C] | Outdoor air temperature D.B. (H.B.) °C | | | | | | | | | |
|-------------|--|------|------------|------|------------|------|------------|------|------------|------|
| | -10 (-11) | | -7 (-8) | | 2 (1) | | 7 (6) | | 12 (11) | |
| | Qh [kW] | COP | Qh [kW] | COP | Qh [kW] | COP | Qh [kW] | COP | Qh [kW] | COP |
| 20 | 8,20 | 2,29 | 10,10 | 2,76 | 10,90 | 2,46 | 15,50 | 3,10 | 16,30 | 3,51 |

LAT: Living air temperature
 Qh: Heat capacity
 COP: Coefficient of performance

COOLING

| LAT [°C] | Inlet outdoor air temperature °C | |
|-------------|----------------------------------|------|
| | 35 | |
| | Qc [kW] | EER |
| 27 (19) | 13,70 | 2,60 |

LAT: Living air temperature
 Qc: Cooling capacity
 EER: Energy efficiency ratio

DATA BASED ON THE EN 14511-3:2013 STANDARD

HEATING

| LWT [°C] | Outdoor air temperature D.B. (H.B.) °C | | | | | | | | | |
|-------------|--|------|------------|------|------------|------|------------|------|------------|------|
| | -7 (-8) | | -2 (-3) | | 2 (1) | | 7 (6) | | 12 (11) | |
| | Qh [kW] | COP | Qh [kW] | COP | Qh [kW] | COP | Qh [kW] | COP | Qh [kW] | COP |
| 35 | 10,50 | 2,56 | 10,14 | 2,78 | 11,20 | 3,21 | 13,80 | 4,01 | 14,65 | 4,62 |
| 45 | 9,50 | 1,96 | 10,20 | 2,22 | 11,05 | 2,58 | 13,40 | 3,00 | 14,15 | 3,28 |
| 55 | 8,30 | 1,48 | 7,73 | 1,90 | 8,65 | 2,00 | 9,20 | 2,16 | 11,15 | 2,38 |

LWT: Leaving water temperature
 Qh: Heat capacity
 COP: Coefficient of performance

Application data
 The difference in temperature of the water entering/leaving the condenser: 5K, 8K for LWT = 55°C
 Condenser fluid: water

COOLING

| LWT [°C] | Inlet outdoor air temperature °C | |
|-------------|----------------------------------|------|
| | 35 | |
| | Qc [kW] | EER |
| 7 | 8,30 | 2,19 |
| 18 | 11,60 | 3,63 |

LWT: Leaving water temperature
 Qc: Cooling capacity
 EER: Energy efficiency ratio

Application data
 The difference in temperature of the water entering/leaving the condenser: 5K
 Condenser fluid: water