

TBG 1230-4310 F

Air-water chiller with free-cooling

Cooling capacity 238 ÷ 1110 kW



- HFO R1234ze refrigerant gas
- High efficiency also at partial loads
- Microchannel coil
- Low peak current (only 6 Amps!)
- Evaporator with low refrigerant charge



DESCRIPTION

Air-cooled chiller designed to meet air conditioning needs in residential / commercial complexes or industrial applications. These are outdoor units with oil free centrifugal compressor, axial fans, micro-channel coils, and shell and tube heat exchangers. The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

- A High efficiency
- E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 43°C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Units mono or dual-circuit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Oil free centrifugal compressor

Two-stage oil-free centrifugal compressor with magnetic levitation and inverter.

Compressor features:

- Operates without oil as bearings are magnetic levitation type
- Continuous load modulation by varying rpm (from 30% to 100%)
- Low peak currents (only 6 Amps!)

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode. Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:

da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430;

with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

CONTROL PCO⁵

Microprocessor adjustment, with 7" touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the adjustment includes complete management of the alarms and their log.

Further features:

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

CONFIGURATOR

| Field | Description |
|----------------|---|
| 1,2,3 | TBG |
| 4,5,6,7 | Size 1230, 1310, 2230, 2270, 2310, 3270, 3280, 3310, 4270, 4310 |
| 8 | Model |
| F | Free-cooling |
| P | Free-cooling plus (1) |
| 9 | Heat recovery |
| ° | Without heat recovery |
| 10 | Version |
| A | High efficiency |
| E | Silenced high efficiency |
| 11 | Coils / free-cooling coils |
| ° | Alluminium microchannel / Copper - aluminium |
| O | Painted alluminium microchannel / Copper painted aluminium |
| R | Copper-copper/Copper-copper |
| S | Copper-Tinned copper / Copper -Tinned copper |
| V | Copper-painted aluminium / Copper-painted aluminium |
| 12 | Fans |
| J | Inverter |
| 13 | Power supply |
| ° | 400V ~ 3 50Hz with magnet circuit breakers |
| 14,15 | Integrated hydronic kit |
| 00 | Without hydronic kit |
| | Kit with n° 1 pump |
| PA | Pump A |
| PB | Pump B |
| PC | Pump C |
| PD | Pump D |
| PE | Pump E |
| PF | Pump F |
| PG | Pump G |
| PH | Pump H |
| PI | Pump I |
| PJ | Pump J (2) |
| | Pump n° 1 pump + stand-by pump |
| DA | Pump A + stand-by pump |
| DB | Pump B + stand-by pump |
| DC | Pump C + stand-by pump |
| DD | Pump D + stand-by pump |
| DE | Pump E + stand-by pump |
| DF | Pump F + stand-by pump |

| Field | Description |
|-------|--|
| DG | Pump G + stand-by pump |
| DH | Pump H + stand-by pump |
| DI | Pump I + stand-by pump |
| DJ | Pump J + stand-by pump (2) |
| | Kit with inverter pump to fixed speed |
| IA | Pump A equipped with inverter device to work at fixed speed |
| IB | Pump B equipped with inverter device to work at fixed speed |
| IC | Pump C equipped with inverter device to work at fixed speed |
| ID | Pump D equipped with inverter device to work at fixed speed |
| IE | Pump E equipped with inverter device to work at fixed speed |
| IF | Pump F equipped with inverter device to work at fixed speed |
| IG | Pump G equipped with inverter device to work at fixed speed |
| IH | Pump H equipped with inverter device to work at fixed speed |
| II | Pump I equipped with inverter device to work at fixed speed |
| IJ | Pump J equipped with inverter device to work at fixed speed (2) |
| | Kit with n°1 pump + stand-by pump both equipped with inverter device to work at fixed speed |
| JA | Pump A+stand-by pump, both equipped with inverter to work at fixed speed |
| JB | Pump B+stand-by pump, both equipped with inverter to work at fixed speed |
| JC | Pump C+stand-by pump, both equipped with inverter to work at fixed speed |
| JD | Pump D+stand-by pump, both equipped with inverter to work at fixed speed |
| JE | Pump E+stand-by pump, both equipped with inverter to work at fixed speed |
| JF | Pump F+stand-by pump, both equipped with inverter to work at fixed speed |
| JG | Pump G+stand-by pump, both equipped with inverter to work at fixed speed |
| JH | Pump H+stand-by pump, both equipped with inverter to work at fixed speed |
| JI | Pump I+stand-by pump, both equipped with inverter to work at fixed speed |
| JJ | Pump J+stand-by pump, both equipped with inverter to work at fixed speed (2) |
| | Kit with double pump both equipped with inverter device to work at fixed speed |
| KF | Doble pump F with inverter device to work at fixed speed |
| KG | Doble pump G with inverter device to work at fixed speed |
| KH | Doble pump H with inverter device to work at fixed speed |
| KI | Doble pump I with inverter device to work at fixed speed |
| KJ | Doble pump J with inverter device to work at fixed speed (2) |
| | Kit with double pumps |
| TF | Double pump F |
| TG | Double pump G |
| TH | Double pump H |
| TI | Double pump I |
| TJ | Double pump J (2) |

(1) The Free-Cooling Plus "P" models are only compatible with "°" ed "0"

(2) For all configurations including pump J please contact the factory.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 2: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 3: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 4: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_T: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

| Model | Ver | 1230 | 1310 | 2230 | 2270 | 2310 | 3270 | 3280 | 3310 | 4270 | 4310 |
|---------------------|-----|------|------|------|------|------|------|------|------|------|------|
| AER485P1 | A,E | . | . | | | | | | | | |
| AER485P1 x n° 2 (1) | A,E | | | . | . | . | | | | | |
| AER485P1 x n° 3 (1) | A,E | | | | | | . | . | . | . | |
| AER485P1 x n° 4 (1) | A,E | | | | | | | | | | . |
| AERBACP | A,E | . | . | . | . | . | . | . | . | . | . |
| AERNET | A,E | . | . | . | . | . | . | . | . | . | . |

(1) x Indicates the quantity of accessories to match.

Antivibration

| Ver | 1230 | 1310 | 2230 | 2270 | 2310 | 3270 | 3280 | 3310 | 4270 | 4310 | |
|---|------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ | A,E | AVX591 | AVX (1) | AVX1187 | AVX (1) | AVX (1) | AVX (1) | AVX (1) | AVX (1) | AVX (1) | AVX (1) |

(1) Contact us.

Anti-intrusion grid

| Ver | 1230 | 1310 | 2230 | 2270 | 2310 | 3270 | 3280 | 3310 | 4270 | 4310 |
|-----|------|------|------|------|------|------|------|-------|-------|-------|
| A,E | GP3T | GP4T | GP5T | GP6T | GP7T | GP8T | GP9T | GP10T | GP11T | GP11T |

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

| Size | 1230 | 1310 | 2230 | 2270 | 2310 | 3270 | 3280 | 3310 | 4270 | 4310 |
|------|------|------|------|------|------|------|------|------|------|------|
|------|------|------|------|------|------|------|------|------|------|------|

Model: F

Cooling performance chiller operation (1)

| | | | | | | | | | | | | |
|-----------------------------|-----|-----|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| Cooling capacity | A,E | kW | 237,9 | 328,6 | 453,2 | 526,8 | 623,2 | 730,8 | 798,8 | 907,5 | 1019,7 | 1110,3 |
| Input power | A,E | kW | 68,6 | 95,3 | 130,6 | 153,1 | 181,1 | 211,4 | 231,7 | 260,0 | 294,0 | 328,1 |
| Cooling total input current | A,E | A | 112,5 | 158,3 | 214,2 | 255,0 | 300,8 | 346,7 | 387,5 | 433,3 | 489,2 | 549,2 |
| EER | A,E | W/W | 3,47 | 3,45 | 3,47 | 3,44 | 3,44 | 3,46 | 3,45 | 3,49 | 3,47 | 3,38 |
| Water flow rate system side | A,E | l/h | 40879 | 56452 | 77865 | 90518 | 107064 | 125557 | 137237 | 155924 | 175196 | 190769 |
| Pressure drop system side | A,E | kPa | 48 | 51 | 45 | 54 | 50 | 55 | 54 | 63 | 46 | 56 |

Cooling performances with free-cooling (2)

| | | | | | | | | | | | | |
|----------------------------------|-----|-----|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| Cooling capacity | A,E | kW | 275,5 | 371,6 | 478,0 | 568,6 | 665,9 | 766,4 | 855,5 | 956,3 | 1057,8 | 1079,5 |
| Input power | A,E | kW | 11,3 | 15,0 | 18,8 | 22,5 | 26,3 | 30,0 | 33,8 | 37,5 | 41,3 | 41,3 |
| Free cooling total input current | A,E | A | 17,5 | 23,3 | 29,2 | 35,0 | 40,8 | 46,7 | 52,5 | 58,3 | 64,2 | 64,2 |
| EER | A,E | W/W | 24,49 | 24,77 | 25,49 | 25,27 | 25,36 | 25,54 | 25,34 | 25,50 | 25,64 | 26,16 |
| Water flow rate system side | A,E | l/h | 40879 | 56452 | 77865 | 90518 | 107064 | 125557 | 137237 | 155924 | 175196 | 190769 |
| Pressure drop system side | A,E | kPa | 81 | 93 | 86 | 97 | 87 | 97 | 98 | 113 | 88 | 105 |

Model: P

Cooling performance chiller operation (1)

| | | | | | | | | | | | | |
|-----------------------------|-----|-----|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| Cooling capacity | A,E | kW | 237,9 | 328,6 | 453,2 | 526,8 | 623,1 | 730,8 | 798,8 | 907,5 | 1019,7 | 1110,3 |
| Input power | A,E | kW | 69,6 | 96,9 | 132,6 | 155,8 | 184,3 | 214,7 | 235,6 | 265,7 | 296,9 | 337,7 |
| Cooling total input current | A,E | A | 112,5 | 158,3 | 214,2 | 255,0 | 300,8 | 346,7 | 387,5 | 433,3 | 489,2 | 549,2 |
| EER | A,E | W/W | 3,42 | 3,39 | 3,42 | 3,38 | 3,38 | 3,40 | 3,39 | 3,42 | 3,43 | 3,29 |
| Water flow rate system side | A,E | l/h | 40879 | 56452 | 77865 | 90518 | 107064 | 125557 | 137237 | 155924 | 175196 | 190769 |
| Pressure drop system side | A,E | kPa | 48 | 51 | 45 | 54 | 50 | 55 | 54 | 63 | 46 | 56 |

Cooling performances with free-cooling (2)

| | | | | | | | | | | | | |
|----------------------------------|-----|-----|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| Cooling capacity | A,E | kW | 295,4 | 398,2 | 514,2 | 610,9 | 714,2 | 823,8 | 919,0 | 1029,7 | 1136,1 | 1160,9 |
| Input power | A,E | kW | 11,5 | 15,4 | 19,2 | 23,0 | 26,9 | 30,7 | 34,5 | 38,3 | 42,2 | 42,2 |
| Free cooling total input current | A,E | A | 17,5 | 23,3 | 29,2 | 35,0 | 40,8 | 46,7 | 52,5 | 58,3 | 64,2 | 64,2 |
| EER | A,E | W/W | 25,70 | 25,90 | 26,80 | 26,50 | 26,60 | 26,90 | 26,60 | 26,90 | 26,90 | 27,50 |
| Water flow rate system side | A,E | l/h | 40879 | 56452 | 77864 | 90517 | 107064 | 125557 | 137236 | 155924 | 175196 | 190768 |
| Pressure drop system side | A,E | kPa | 78 | 91 | 83 | 94 | 84 | 94 | 95 | 110 | 84 | 101 |

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 12 °C / °C; External air 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

| Size | | | 1230 | 1310 | 2230 | 2270 | 2310 | 3270 | 3280 | 3310 | 4270 | 4310 |
|---|-----|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Model: F | | | | | | | | | | | | |
| SEER - (EN14825:2018) 12/7 with inverter fans (1) | | | | | | | | | | | | |
| SEER | A,E | W/W | 5,40 | 5,47 | 5,72 | 5,35 | 5,72 | 5,53 | 5,64 | 5,67 | 5,66 | 5,49 |
| Seasonal efficiency | A,E | % | 213,1% | 215,7% | 225,9% | 210,9% | 225,8% | 218,0% | 222,6% | 223,7% | 223,4% | 216,4% |
| SEPR - (EN14825: 2018) High temperature with inverter fans (2) | | | | | | | | | | | | |
| SEPR | A,E | W/W | 9,45 | 9,36 | 9,37 | 8,49 | 9,15 | 9,31 | 9,45 | 9,50 | 9,47 | 9,13 |
| Model: P | | | | | | | | | | | | |
| SEER - (EN14825:2018) 12/7 with inverter fans (1) | | | | | | | | | | | | |
| SEER | A,E | W/W | 5,33 | 5,58 | 5,65 | 5,27 | 5,63 | 5,45 | 5,56 | 5,56 | 5,63 | 5,34 |
| Seasonal efficiency | A,E | % | 210,3% | 220,0% | 222,8% | 207,6% | 222,2% | 214,9% | 219,2% | 219,3% | 222,3% | 210,7% |
| SEPR - (EN14825: 2018) High temperature with inverter fans (2) | | | | | | | | | | | | |
| SEPR | A,E | W/W | 9,36 | 9,24 | 9,27 | 8,55 | 9,21 | 9,34 | 9,35 | 9,35 | 9,43 | 8,93 |

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

| Size | | | 1230 | 1310 | 2230 | 2270 | 2310 | 3270 | 3280 | 3310 | 4270 | 4310 |
|-----------------------|-----|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Electric data | | | | | | | | | | | | |
| Maximum current (FLA) | A,E | A | 125,0 | 189,0 | 239,0 | 304,0 | 368,0 | 418,0 | 538,0 | 547,0 | 597,0 | 707,0 |
| Peak current (LRA) | A,E | A | 36,0 | 45,0 | 161,0 | 230,0 | 239,0 | 355,0 | 424,0 | 433,0 | 549,0 | 608,0 |

GENERAL TECHNICAL DATA

| Size | | | 1230 | 1310 | 2230 | 2270 | 2310 | 3270 | 3280 | 3310 | 4270 | 4310 |
|--|-----|-------|------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Compressor | | | | | | | | | | | | |
| Type | A,E | type | | | | | | Centrifugal | | | | |
| Compressor regulation | A,E | Type | | | | | | Inverter | | | | |
| Number | A,E | no. | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 |
| Circuits | A,E | no. | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 |
| Refrigerant | A,E | type | | | | | | R1234ze | | | | |
| Refrigerant charge (1) | A,E | kg | 81,5 | 120,1 | 152,3 | 187,1 | 197,8 | 264,5 | 275,2 | 285,9 | 327,9 | 327,9 |
| System side heat exchanger | | | | | | | | | | | | |
| Type | A,E | type | | | | | | Shell and tube | | | | |
| Number | A,E | no. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Hydraulic connections | | | | | | | | | | | | |
| Connections (in/out) | A,E | Type | | | | | | Grooved joints | | | | |
| Size (in) | A,E | Ø | 3" | 3" | 4" | 4" | 5" | 5" | 5" | 5" | 6" | 6" |
| Size (out) | A,E | Ø | 3" | 3" | 4" | 4" | 5" | 5" | 5" | 5" | 6" | 6" |
| Sound data calculated in cooling mode (2) | | | | | | | | | | | | |
| Sound power level | A | dB(A) | 86,3 | 88,9 | 88,8 | 90,5 | 91,7 | 91,6 | 93,1 | 93,3 | 93,3 | 94,2 |
| | E | dB(A) | 83,3 | 85,9 | 85,8 | 87,5 | 88,7 | 88,6 | 90,1 | 90,3 | 90,3 | 91,2 |
| Sound pressure level (10 m) | A | dB(A) | 54,1 | 56,5 | 56,3 | 57,9 | 58,9 | 58,7 | 60,1 | 60,2 | 60,1 | 61,0 |
| | E | dB(A) | 51,1 | 53,5 | 53,3 | 54,9 | 55,9 | 55,7 | 57,1 | 57,2 | 57,1 | 58,0 |

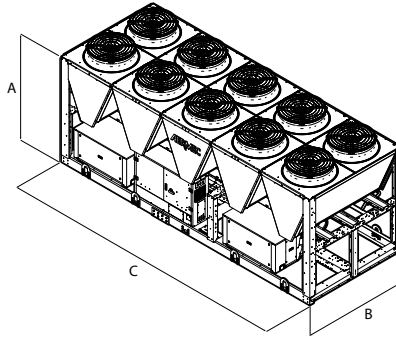
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

General data - fans

| Size | | | 1230 | 1310 | 2230 | 2270 | 2310 | 3270 | 3280 | 3310 | 4270 | 4310 |
|---------------------|-----|-------------------|-------|--------|--------|--------|--------|----------|--------|--------|--------|--------|
| Model: F | | | | | | | | | | | | |
| Inverter fan | | | | | | | | | | | | |
| Type | A,E | type | | | | | | Axial | | | | |
| Fan motor | A,E | type | | | | | | Inverter | | | | |
| Number | A,E | no. | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 22 |
| Air flow rate | A,E | m ³ /h | 93150 | 124200 | 155250 | 186300 | 217350 | 248400 | 279450 | 310500 | 341550 | 341550 |
| Model: P | | | | | | | | | | | | |
| Inverter fan | | | | | | | | | | | | |
| Type | A,E | type | | | | | | Axial | | | | |
| Fan motor | A,E | type | | | | | | Inverter | | | | |
| Number | A,E | no. | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 22 |
| Air flow rate | A,E | m ³ /h | 88800 | 118400 | 148000 | 177600 | 207200 | 236800 | 266400 | 296000 | 325600 | 325600 |

DIMENSIONS



| Size | | | 1230 | 1310 | 2230 | 2270 | 2310 | 3270 | 3280 | 3310 | 4270 | 4310 |
|--|-----|----|------|------|------|------|------|------|-------|-------|-------|-------|
| Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ | | | | | | | | | | | | |
| Dimensions and weights | | | | | | | | | | | | |
| A | A,E | mm | 2450 | 2450 | 2450 | 2450 | 2450 | 2450 | 2450 | 2450 | 2450 | 2450 |
| B | A,E | mm | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 |
| C | A,E | mm | 3570 | 4760 | 5950 | 7140 | 8330 | 9520 | 10710 | 11900 | 13090 | 13090 |

Model F

| Size | | | 1230 | 1310 | 2230 | 2270 | 2310 | 3270 | 3280 | 3310 | 4270 | 4310 |
|------------------------------------|---|----|------|------|------|------|------|------|------|-------|-------|-------|
| Integrated hydronic kit: 00 | | | | | | | | | | | | |
| Weights | | | | | | | | | | | | |
| Empty weight | A | kg | 3250 | 4110 | 5220 | 6180 | 6770 | 8130 | 8720 | 9400 | 10960 | 11220 |
| | E | kg | 3330 | 4220 | 5360 | 6350 | 6960 | 8350 | 8960 | 9670 | 11270 | 11520 |
| Weight functioning | A | kg | 3510 | 4450 | 5630 | 6700 | 7360 | 8820 | 9500 | 10250 | 11920 | 12190 |
| | E | kg | 3590 | 4560 | 5770 | 6870 | 7550 | 9040 | 9740 | 10520 | 12230 | 12490 |

Model P

| Size | | | 1230 | 1310 | 2230 | 2270 | 2310 | 3270 | 3280 | 3310 | 4270 | 4310 |
|------------------------------------|---|----|------|------|------|------|------|------|-------|-------|-------|-------|
| Integrated hydronic kit: 00 | | | | | | | | | | | | |
| Weights | | | | | | | | | | | | |
| Empty weight | A | kg | 3340 | 4240 | 5380 | 6370 | 6990 | 8380 | 9000 | 9710 | 11310 | 11570 |
| | E | kg | 3430 | 4350 | 5520 | 6540 | 7180 | 8600 | 9250 | 9990 | 11610 | 11870 |
| Weight functioning | A | kg | 3640 | 4640 | 5860 | 6970 | 7680 | 9180 | 9900 | 10700 | 12420 | 12690 |
| | E | kg | 3730 | 4750 | 6000 | 7140 | 7870 | 9400 | 10150 | 10980 | 12720 | 12990 |

Aermec reserves the right to make any modifications deemed necessary.
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