



AQUAFORCE™

30KA Air-Cooled Liquid Chiller

Nominal cooling capacity: 336~1484kW





Carrier is a leading global provider of innovative HVAC, refrigeration, fire, security and building automation technologies. Supported by the iconic Carrier name, the company's portfolio includes industry-leading brands such as Carrier, Kidde, Edwards, LenelS2 and Automated Logic. Carrier's businesses enable modern life, delivering efficiency, safety, security, comfort, productivity and sustainability across a wide

range of residential, commercial and industrial applications.

In 1998, Time magazine named Dr. Carrier one of its 20 most influential builders and titans of the 20th century.



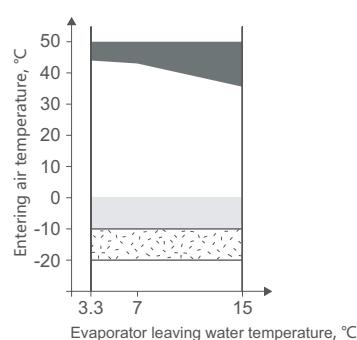
Nomenclature

| | | | |
|----------|---|---------------|---|
| 30KA1050 | A | PT002B | |
| | | | PT001 Cu/Cu coil |
| | | | PT002B Blygold PoluAL |
| | | | PT003A Pretreated golden fins |
| | | | PT012 High Static Fan |
| | | | PT015A low noise (single layer sound jacket) |
| | | | PT015S low noise (dual layer sound jacket) |
| | | | PT020A IP54 control box |
| | | | PT028 Winter operation |
| | | | PT041A evaporator frost protection |
| | | | PT041B Evap.and hydr. frost protection must be selected with PT116B or PT116C |
| | | | PT071 high efficiency |
| | | | PT093A compressor discharge valve |
| | | | PT104 1.6Mpa evaporator |
| | | | PT107 1300/1350/1400/1500 not available |
| | | | PT116B 350/450/500 351/451/501 |
| | | | PT116C 350/450/500 351/451/501 |
| | | | PT148B CCN to J-Bus gateway |
| | | | PT148C CCN to BACnet MSTP gateway |
| | | | PT148D CCN to LonTalk gateway |
| | | | PT156 Energy Management Module |
| | | | PT158A 7" Carrier® SmartVu™ touch screen |
| | | | PT275 remote controller |
| | | | PT281 Evaporator Aluminum Jacket |
| | | | PT299 38mm Evaporator insulation |
| | | | PT301 lead/lag control |
| | | | PT303 anti-corrosion option bule fine |
| | | | PT305A Spring Isolator |
| | | | PT309 Isolate valve for safety valve |
| | | | PT309D Isolate valve for safety valve (dual safety valve) |
| | | | PT312 Australian Code |
| | | | PT842 AMSE Code |
| | | Design Series | |
| | | Unit Model | Air-cooled Screw chiller 30KA0550-1350 |

Operating Range

| Evaporator | Min. temperature | Max. temperature |
|---|------------------|------------------|
| Entering water temperature (at start) °C | - | 45 |
| Entering water temperature (operating) °C | 6.8 | 21 |
| Leaving water temperature (operating) °C | 3.3 | 15 |
| Condenser | Min. temperature | Max. temperature |
| Outdoor air temperature °C | -10* | 50 |

* With PT028 "winter operation", outdoor air temperature may down to -20°C. A glycol/water solution or evaporator antifreeze.



- Operating range, unit equipped with option PT028 (winter operation).
- Below 0°C air temperature the unit must either be equipped with the evaporator frost protection option (PT041A), or the water loop must be protected against frost by using a frost protection solution (by the installer).
- Part load average.

Features

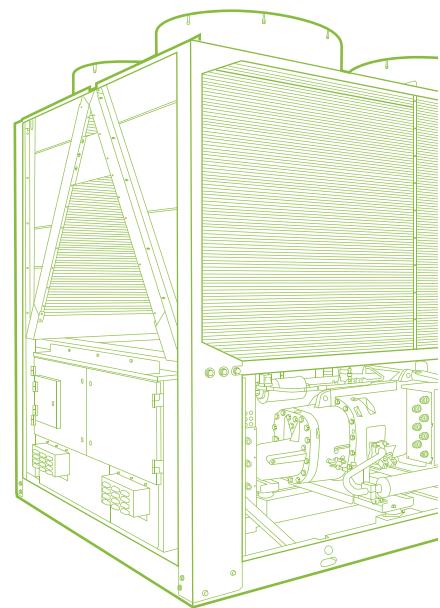
- 30KA the premium solution for industrial and commercial applications where installers, consultants and building owners require optimal performances and maximum quality.

Benefits

- Extremely high full load and part load energy efficiency leads to extremely low operation cost, customer even select high efficiency option(PT071) to achieve higher performance and more energy saving.
- Low operating sound with no intrusive low-frequency noise, creates a better working/living environment.
- Environmentally sound refrigerant HFC-134a of zero ozone depletion potential.
- Easy and fast installation to reduce on-site installation time.
- Exceptional endurance tests ensure superior reliability to minimize chiller down-time.

Economical operation

- Extremely high full load and part load energy efficiency:
 - Twin-rotor screw compressor equipped with a high efficiency motor and a variable capacity valve that permits exact matching of the cooling capacity to the load.
 - Flooded multi-pipe evaporator to increase the heat exchange efficiency, configured with aluminium cladding (standard) to improve thermal insulation and prevent energy loss.
 - Electronic expansion device allows operation at a lower condensing pressure and improved utilization of the evaporator heat exchange surface (superheat control).
 - Economizer system with electronic expansion device permits a considerable increase in cooling capacity and contributes to optimised energy efficiency of the chiller installation.
 - 30KA AHRI certificate



Quiet operation

Compressors

- Discharge dampers integrated in the oil separator.
- Acoustic compressor and oil separator enclosures (option) reduce the radiated noise.

Condenser section

- Condenser coils in W-shape with an open angle, allows quieter air flow across the coil.
- VI Low-noise Flying Bird fans enjoy quieter operation and never generate intrusive low-frequency noise.



Twin screw CARRIER compressor



Environmental Friendly

HFC-134a refrigerant

Refrigerant of the HFC group with zero ozone depletion potential.

Leak-tight refrigerant circuit

Reduction of leaks as no capillary tubes and flare connections are used. Verification of pressure transducers and temperature sensors without transferring refrigerant charge.



Absolute reliability

Screw compressors

- Industrial-type screw compressors with oversized bearings and motor cooled by suction gas.
- All compressor components are easily accessible on site minimizing down-time.
- Electronic motor protection against overloads and power supply faults (loss of phase, phase reversal).

Evaporator

- Thermal insulation with aluminium cladding for perfect resistance against outside aggression (mechanical and UV protection).

Exceptional endurance tests:

- Partnerships with specialised laboratories and use of limit simulation tools (finite element calculation) for the design of critical components.
- Transport simulation test equivalent to 2000 km by truck under harsh conditions.
- Salt mist corrosion resistance test in the laboratory for increased corrosion resistance.

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and 551/591

General Features

New innovative smart control features:

- An intuitive and user-friendly, 4.3" colored interface (7" as option).
- Screen-shots with concise and clear information in local languages.
- Complete menu, customized for different users (end user, service personnel and Carrier-factory technicians).
- Easy access to the controller box with touch screen mounting to ensure legibility under any lighting conditions.
- Safe operation and unit setting: password protection ensures that unauthorized people cannot modify any advanced parameters.
- Simple and "smart" intelligence uses data collection from the constant monitoring of all machine parameters to optimise unit operation.
- Night-mode: Cooling capacity management for reduced noise level.



Economical operation

Energy management:

- Internal time schedule clock controls chiller on/off times and operation at a second set-point.
- The DCT (Data Collection Tool) records the alarms history to simplify and facilitate service operations.

Large colored

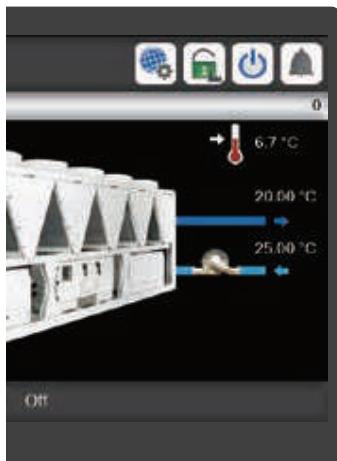
Remote Management (Standard)

- Units with Carrier® SmartVu™ control can be easily accessed from the internet, using a PC with an Ethernet connection. This makes remote control quick and easy and offers significant advantages for service operations.
- Equipped with an RS485 serial port that offers multiple remote control, monitoring and diagnostic possibilities. When networked with other Carrier equipment through the CCN (Carrier Comfort Network - proprietary protocol), all components form a HVAC system fully-integrated and balanced through one of the Carrier's network system products, like the Chiller System Manager or the Plant System Manager (optional).

Carrier® SmartVu™ control panel supports CCN, BACnet IP, Modbus TCP/IP and Modbus RTU protocols, with which chiller can seamlessly connect with the BMS or the i-Vu®/WebCTRL control network. Moreover, Lon walk, J-Bus and BACnet MSTP is also supported with optional gateway.

Quiet operation

- The following commands/visualizations are possible from remote
 - Start/Stop of the machine.
 - Dual set-point management: Through a dedicated contact is possible to activate a second set-point (example: unoccupied mode).
 - Demand limit setting: To limit the maximum chiller capacity to a predefined value.
 - Water pump control: These outputs control the contactors of one/two evaporator water pumps.
 - Operation visualization: Indication if the unit is operating or if it's in stand-by (no cooling load).
 - Alarm visualization.



touch display

Absolute reliability

- The Energy Management Module (EMM) offers extended remote control possibilities:
 - Room temperature: Permits set-point reset based on the building indoor air temperature (if Carrier thermostat are installed).
 - Set-point reset: Ensures reset of the cooling set-point based on a 4-20 mA or 0-10 V signal.
 - Demand limit: Permits limitation of the maximum chiller power or current based on 0-10 V signal.
 - Demand limit 1 and 2: Closing of these contacts limits the maximum chiller power or current to two predefined values.
 - User safety: This contact can be used for any customer safety loop; opening the contact generates a specific alarm.
 - Ice storage end: When ice storage has finished, this input permits return to the second set-point (unoccupied mode).
 - Time schedule override: Closing of this contact cancels the time schedule effects.
 - Out of service: This signal indicates that the chiller is completely out of service.
 - Chiller capacity: This analogue output (0-10 V) gives an immediate indication of the chiller capacity.
 - Alert indication: This volt-free contact indicates the necessity to carry out a maintenance operation or the presence of a minor fault.
 - Compressors running status : Set of outputs (as many as the compressors number) indicating which compressors are running.

Performance data

| Model | 30KA | 0350A | 0450A | 0500A | 0550A | 0700A | 0750A | 0800A | 0900A | 1000A | 1050A | 1100A |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| Nominal cooling capacity* | kW | 336.0 | 426.0 | 500.0 | 560.0 | 668.1 | 722.0 | 774.0 | 890.0 | 990.0 | 1076 | 1120 |
| Compressor power input | kW | 99.4 | 125.7 | 151.7 | 171.2 | 192.8 | 220.6 | 238.3 | 269.6 | 297.0 | 331.4 | 349.3 |
| Total power input | kW | 105.6 | 134.7 | 160.7 | 183.0 | 207.4 | 235.2 | 252.9 | 287.0 | 317.2 | 351.6 | 369.5 |
| Nominal COP | kW/kW | 3.182 | 3.162 | 3.111 | 3.060 | 3.221 | 3.070 | 3.060 | 3.101 | 3.121 | 3.060 | 3.032 |
| IPLV.IP** | kW/kW | 4.500 | 4.495 | 4.502 | 4.439 | 4.615 | 4.603 | 4.449 | 4.418 | 4.447 | 4.471 | 4.424 |
| Compressor | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| CircuitA | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| CircuitB | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Minimum capacity | % | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 15% |
| Refrigerant | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| CircuitA | kg | 64 | 85 | 85 | 85 | 100 | 114 | 114 | 110 | 140 | 175 | 175 |
| CircuitB | kg | 64 | 70 | 80 | 80 | 95 | 97 | 100 | 110 | 129 | 107 | 111 |
| Control | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Condenser | | | | | | | | | | | | |
| Fans | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Quantity | | 4 | 6 | 6 | 8 | 10 | 10 | 10 | 12 | 14 | 14 | 14 |
| Total air flow | l/s | 20042 | 30063 | 30063 | 40084 | 50105 | 50105 | 50105 | 60127 | 70148 | 70148 | 70148 |
| Fan speed | rpm | | | | | | | | | | | |
| Evaporator | | | | | | | | | | | | |
| Water content | l | 54 | 63 | 69 | 78 | 93 | 99 | 117 | 127 | 157 | 174 | 174 |
| Nominal water flow | l/s | 16.02 | 20.31 | 23.83 | 26.69 | 31.85 | 34.41 | 36.89 | 42.42 | 47.19 | 51.29 | 53.39 |
| Nominal water pressure drop | kPa | 19.5 | 37.8 | 40.0 | 55.1 | 45.7 | 45.6 | 45.6 | 48.4 | 44.6 | 47.8 | 51.4 |
| Max. water-side pressure (without hydronic module) | kPa | | | | | | | | | | | |
| Integrated hydronic module (option) | | | | | | | | | | | | |
| Water pump | | | | | | | | | | | | |
| Water head external to chiller (single pump at nominal water flow rate) | kPa | 169.6 | 253.2 | 201.5 | - | - | - | - | - | - | - | - |
| Expansion tank | l | 80 | 80 | 80 | - | - | - | - | - | - | - | - |
| Max. water-side pressure (with hydronic module) | kPa | 400 | 400 | 400 | - | - | - | - | - | - | - | - |
| Water connection | | | | | | | | | | | | |
| Nominal Diameter | DN | 125 | 125 | 125 | 125 | 150 | 150 | 150 | 150 | 200 | 200 | 200 |
| Electrical data | | | | | | | | | | | | |
| Nominal power supply | | | | | | | | | | | | |
| Control power supply | | | | | | | | | | | | |
| Start-up method | | | | | | | | | | | | |
| Fan and control power | kW | 6.2 | 9.0 | 9.0 | 11.8 | 14.6 | 14.6 | 14.6 | 17.4 | 20.2 | 20.2 | 20.2 |
| Nominal unit current draw, | A | 177.2 | 226.1 | 269.8 | 307.0 | 348.0 | 395.0 | 425.0 | 483.0 | 533.0 | 590.0 | 620.0 |
| Maximum uint current draw | A | 225.7 | 295.4 | 324.2 | 365.0 | 429.0 | 482.0 | 511.0 | 600.0 | 695.0 | 719.0 | 763.0 |
| Maximum start-up current | A | 295.4 | 513.4 | 513.4 | 591.0 | 627.0 | 790.0 | 822.0 | 920.0 | 973.0 | 1053.0 | 1053.0 |
| Max operation power | kW | 138 | 180 | 198 | 223 | 262 | 294 | 312 | 366 | 424 | 438 | 465 |
| Unit length | mm | 3715 | 4801 | 4801 | 4801 | 6126 | 6298 | 6298 | 7410 | 8410 | 8410 | 8410 |
| Unit width | mm | | | | | | | | | | | |
| Unit height | mm | | | | | | | | | | | |
| Shipping weight | kg | 3556 | 4562 | 4641 | 4696 | 5388 | 5731 | 5828 | 6473 | 7088 | 7627 | 7991 |
| Operating weight (Standard) | kg | 3410 | 4425 | 4510 | 4595 | 5224 | 5561 | 5658 | 6298 | 6927 | 7466 | 7830 |

Notes:

* Nominal conditons - evaporator entering/leaving water temperature=12/7°C, outdoor air temperature = 35°C

Evaporator fouling factor = 0.018m2K/kW

** IPLV Calculations according to standard performances (in accordance with AHRI 550-590)

Performance data

| Model | 30KA | 1250A | 1300A | 1350A | 1400A | 1500A | 0351A | 0451A | 0501A | 0651A | 0701A | 0751A |
|---|-------|--------|--------|--------|--------|--------|---|-------|-------|-------|-------|-------|
| Nominal cooling capacity* | kW | 1227 | 1317 | 1393 | 1435 | 1484 | 340.0 | 442.0 | 487.0 | 617.0 | 679.0 | 751.0 |
| Compressor power input | kW | 377.9 | 400.4 | 419.0 | 429.5 | 452.5 | 92.7 | 133.4 | 150.1 | 194.3 | 199.1 | 231.5 |
| Total power input | kW | 400.9 | 423.4 | 444.8 | 455.3 | 478.3 | 101.7 | 142.4 | 159.1 | 206.1 | 213.7 | 246.1 |
| Nominal COP | kW/kW | 3.060 | 3.111 | 3.132 | 3.152 | 3.103 | 3.342 | 3.103 | 3.061 | 2.993 | 3.177 | 3.051 |
| IPLV.IP** | kW/kW | 4.505 | 4.495 | 4.565 | 4.494 | 4.483 | 4.486 | 4.477 | 4.406 | 4.406 | 4.458 | 4.415 |
| Compressor | | | | | | | | | | | | |
| CircuitA | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| CircuitB | | 1 | 1 | 1 | 1 | 1 | - | - | - | - | - | - |
| Minimum capacity | % | 15% | 15% | 15% | 15% | 15% | 30% | 30% | 30% | 30% | 30% | 30% |
| Refrigerant | | | | | | | R134a | | | | | |
| CircuitA | kg | 190 | 180 | 195 | 190 | 190 | 100 | 110 | 115 | 175 | 180 | 190 |
| CircuitB | kg | 111 | 175 | 170 | 180 | 190 | - | - | - | - | - | - |
| Control | | | | | | | Carrier® SmartVu™ | | | | | |
| Condenser | | | | | | | Cu/AI heat exchanger | | | | | |
| Fans | | | | | | | VI generation FlyingBird axial fan | | | | | |
| Quantity | | 16 | 16 | 18 | 18 | 18 | 6 | 6 | 6 | 8 | 10 | 10 |
| Total air flow | l/s | 80169 | 80169 | 90190 | 90190 | 90190 | 30063 | 30063 | 30063 | 40084 | 50105 | 50105 |
| Fan speed | rpm | | | | | | 950 | | | | | |
| Evaporator | | | | | | | Flooded multi-pipe | | | | | |
| Water content | l | 174 | 202 | 202 | 208 | 208 | 44 | 84 | 84 | 101 | 101 | 101 |
| Nominal water flow | l/s | 58.49 | 62.79 | 66.41 | 68.41 | 70.75 | 16.21 | 21.07 | 23.21 | 29.41 | 32.37 | 35.80 |
| Nominal water pressure drop | kPa | 60.7 | 40.5 | 44.9 | 47.4 | 50.4 | 32.6 | 35.1 | 42.7 | 41.8 | 50.2 | 60.9 |
| Max. water-side pressure (without hydronic module) | kPa | | | | | | 1000 | | | | | |
| Integrated hydronic module (option) | | | | | | | Pump, safety valve, expansion tank etc. | | | | | |
| Water pump | | | | | | | Centrifugal pump | | | | | |
| Water head external to chiller (single pump at nominal water flow rate) | kPa | - | - | - | - | - | 154.4 | 247.0 | 207.6 | - | - | - |
| Expansion tank | l | - | - | - | - | - | 80 | 80 | 80 | - | - | - |
| Max. water-side pressure (with hydronic module) | kPa | - | - | - | - | - | 400 | 400 | 400 | - | - | - |
| Water connection | | | | | | | Victaulic | | | | | |
| Nominal Diameter | DN | 200 | 150 | 150 | 150 | 150 | 125 | 125 | 125 | 150 | 150 | 150 |
| Electrical data | | | | | | | | | | | | |
| Nominal power supply | | | | | | | 400V-3Ph-50Hz | | | | | |
| Control power supply | | | | | | | Star-delta start | | | | | |
| Start-up method | | | | | | | 24V via internal transformer | | | | | |
| Fan and control power | kW | 23.0 | 23.0 | 25.8 | 25.8 | 25.8 | 9.0 | 9.0 | 9.0 | 11.8 | 14.6 | 14.6 |
| Nominal unit current draw, | A | 672.0 | 710.5 | 743.0 | 764.1 | 802.7 | 170.8 | 239.1 | 267.0 | 346.0 | 358.7 | 413.1 |
| Maximum uint current draw | A | 822.0 | 864.2 | 897.0 | 923.0 | 949.1 | 218.0 | 317.9 | 344.0 | 419.0 | 451.8 | 477.9 |
| Maximum start-up current | A | 1118.0 | 1124.0 | 1160.0 | 1160.0 | 1160.0 | 388.0 | 587.0 | 587.0 | 629.0 | 629.0 | 629.0 |
| Max operation power | kW | 501 | 527 | 547 | 563 | 579 | 133 | 194 | 210 | 255 | 275 | 291 |
| Unit length | mm | 9509 | 9486 | 10584 | 10584 | 10584 | 3668 | 3668 | 3668 | 4751 | 5831 | 5831 |
| Unit width | mm | | | | | | 2253 | | | | | |
| Unit height | mm | | | | | | 2379 | | | | | |
| Shipping weight | kg | 8121 | 9489 | 9345 | 9893 | 9912 | 3268 | 3784 | 3794 | 4907 | 5348 | 5358 |
| Operating weight (Standard) | kg | 7925 | 9293 | 9117 | 9699 | 9718 | 3112 | 3668 | 3678 | 4808 | 5186 | 5196 |

Notes:

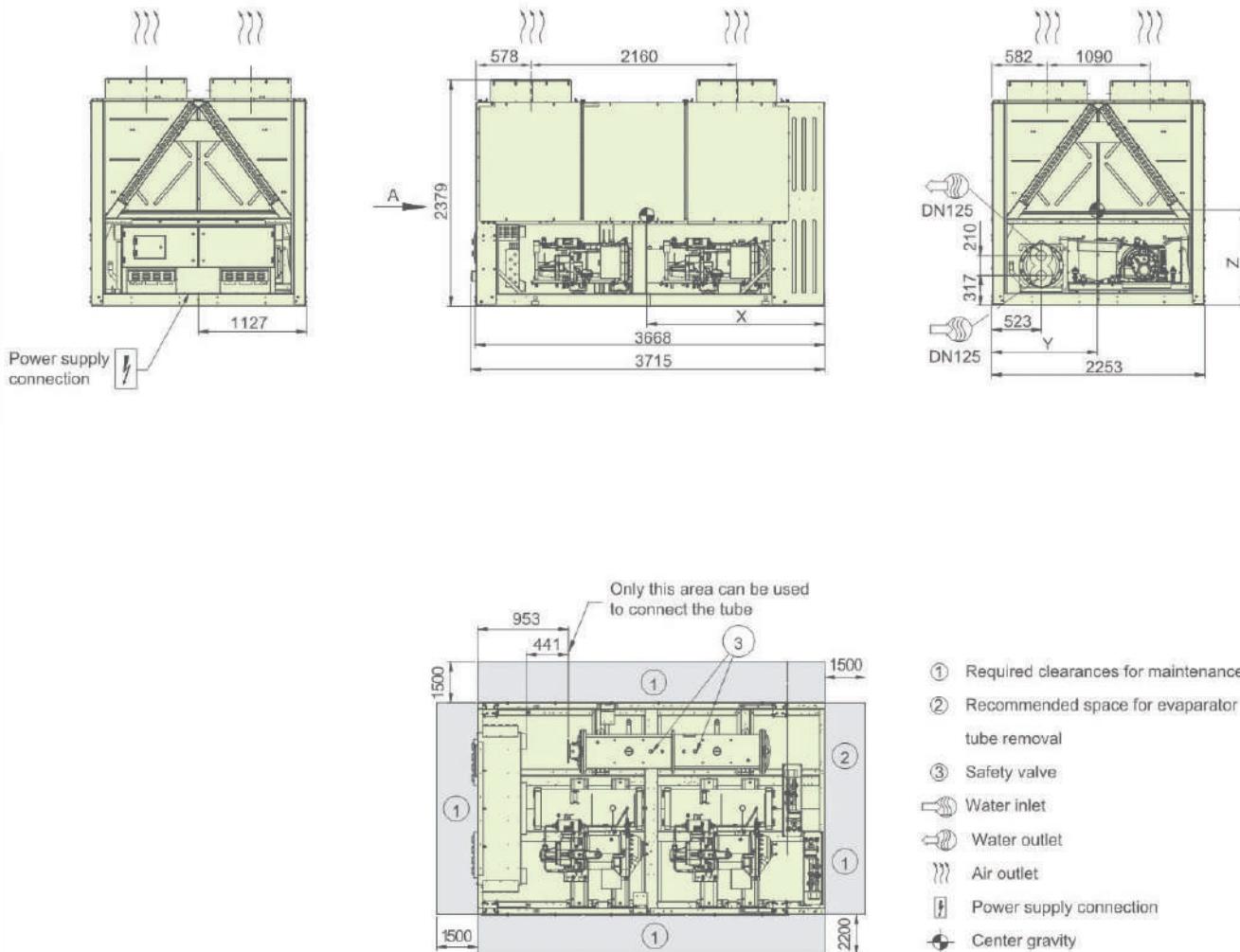
* Nominal conditons - evaporator entering/leaving water temperature=12/7°C, outdoor air temperature = 35°C

Evaporator fouling factor = 0.018m2K/kW

** IPLV Calculations according to standard performances (in accordance with AHRI 550-590)

Dimension Drawing

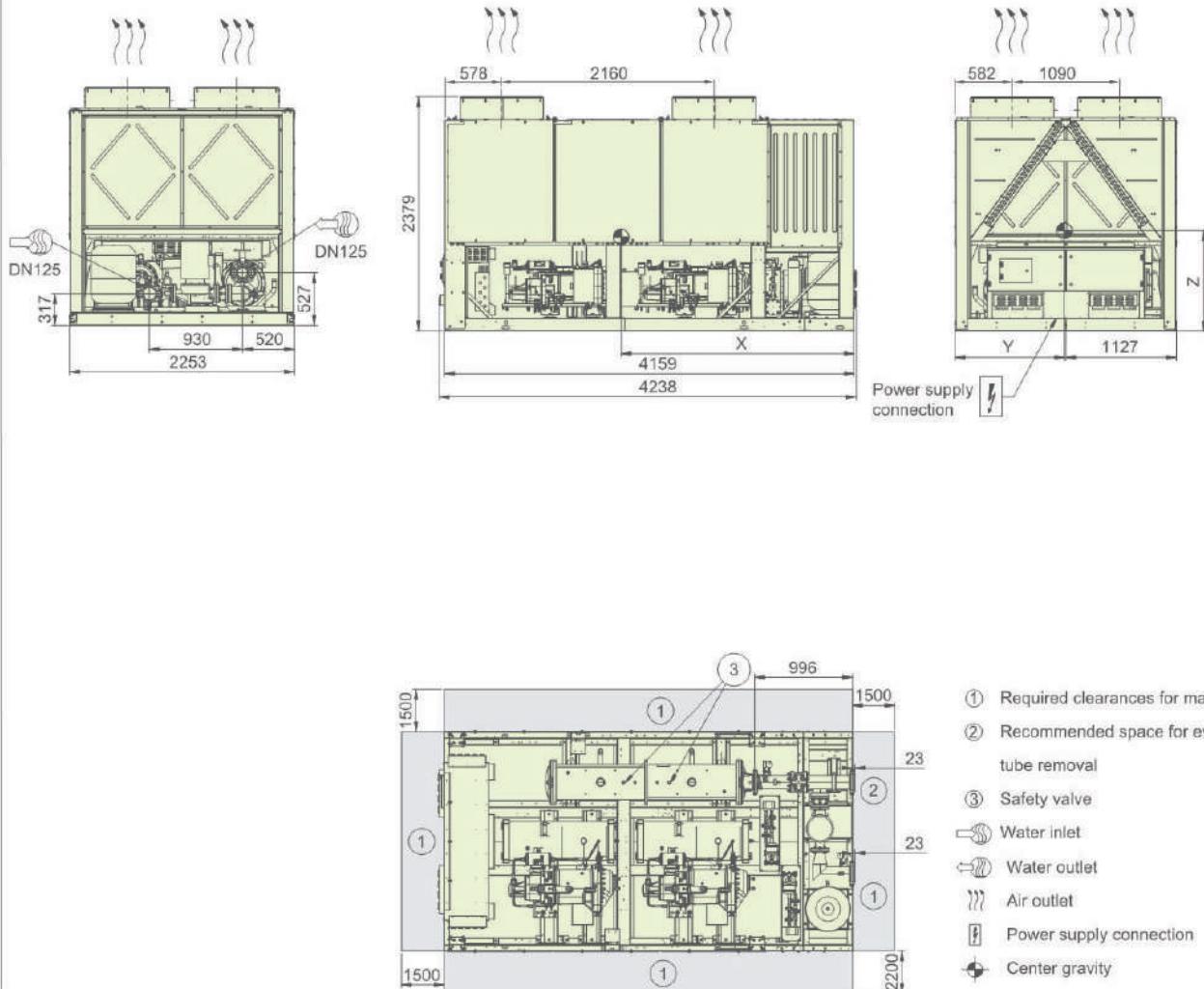
30KA0350A



| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|-----------|-----------|-----------|
| 30KA0350A | - | 1815 | 1226 | 869 |
| 30KA0350A | 107 | 1815 | 1226 | 869 |
| 30KA0350A | 012 | 1841 | 1226 | 927 |

Dimension Drawing

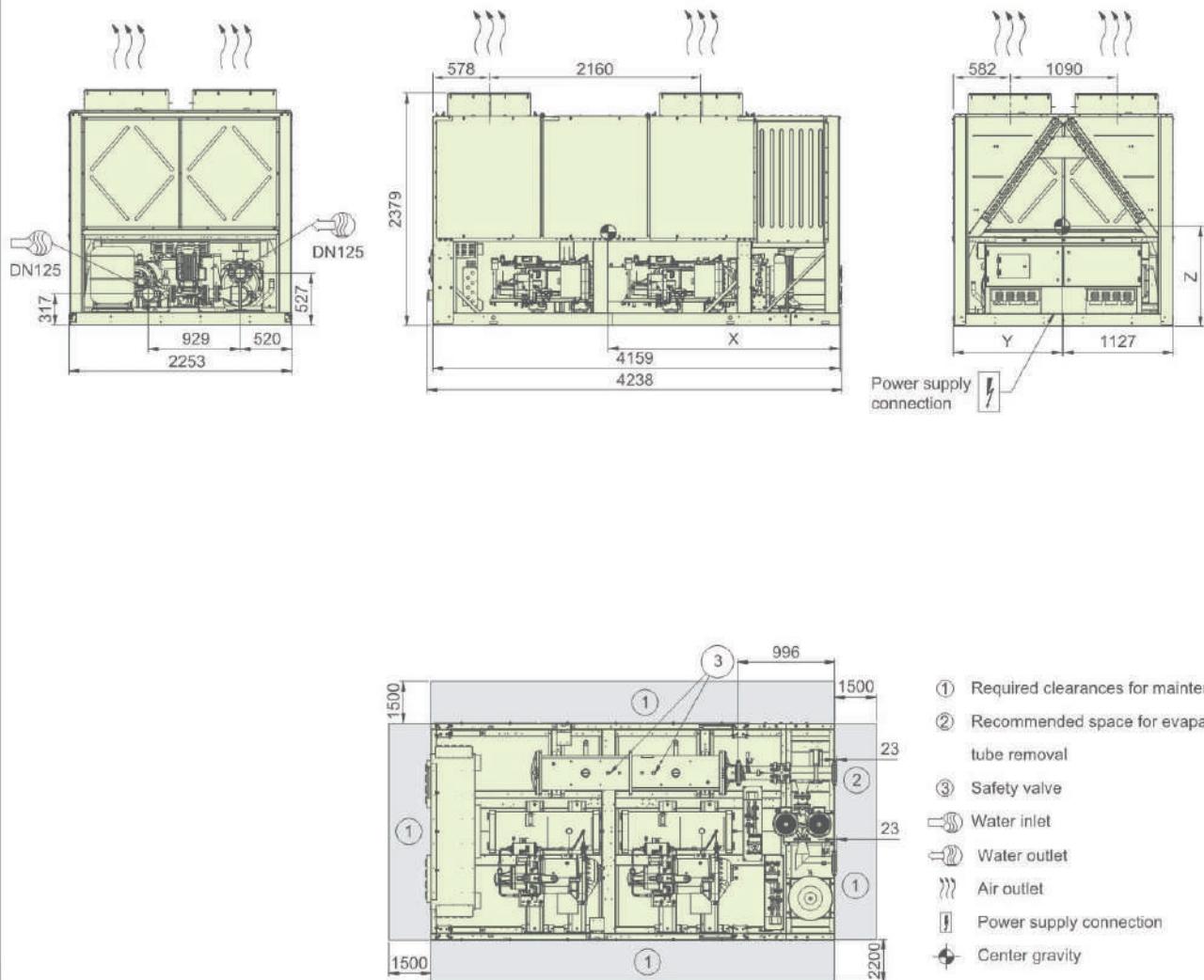
30KA0350APT116B



| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|-----------|-----------|-----------|
| 30KA0350A | 116B | 2132 | 1181 | 836 |

Dimension Drawing

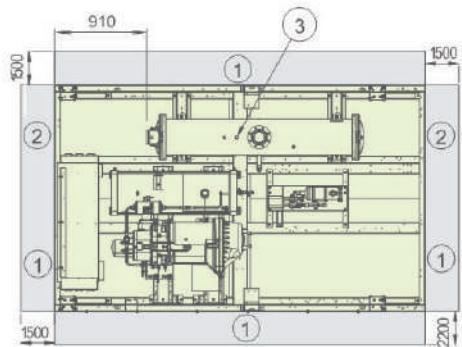
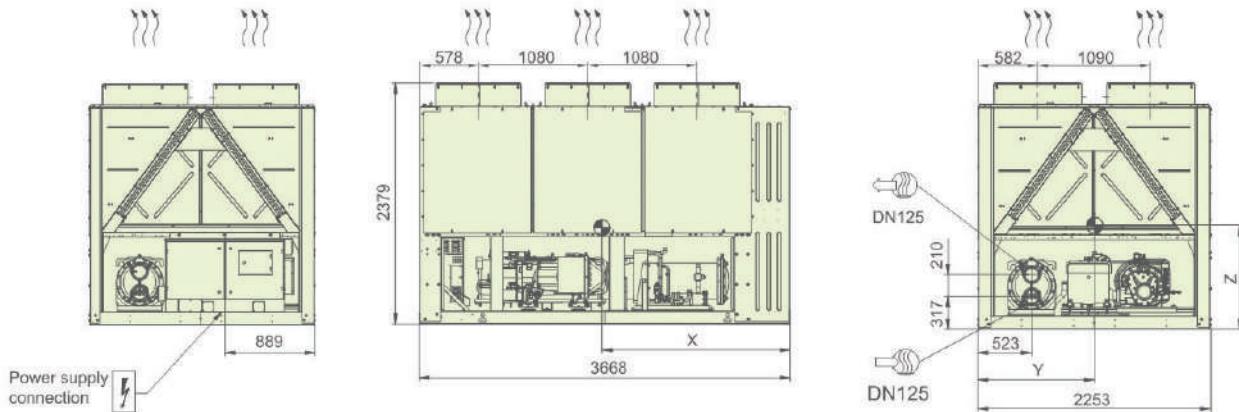
30KA0350APT116C



| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|-----------|-----------|-----------|
| 30KA0350A | 116C | 2116 | 1183 | 828 |

Dimension Drawing

30KA0351A

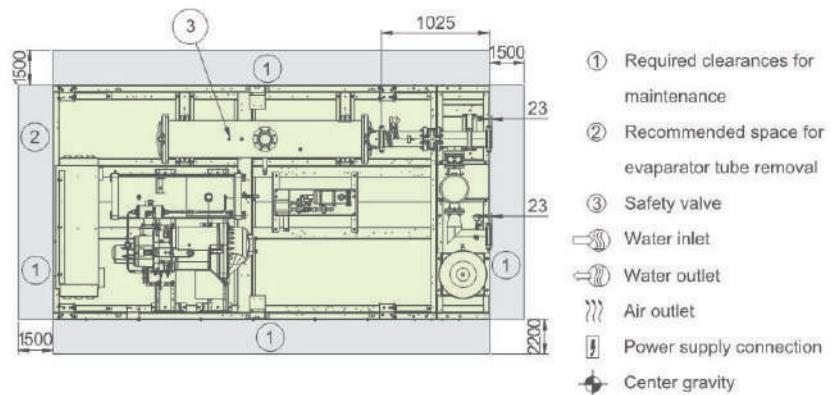
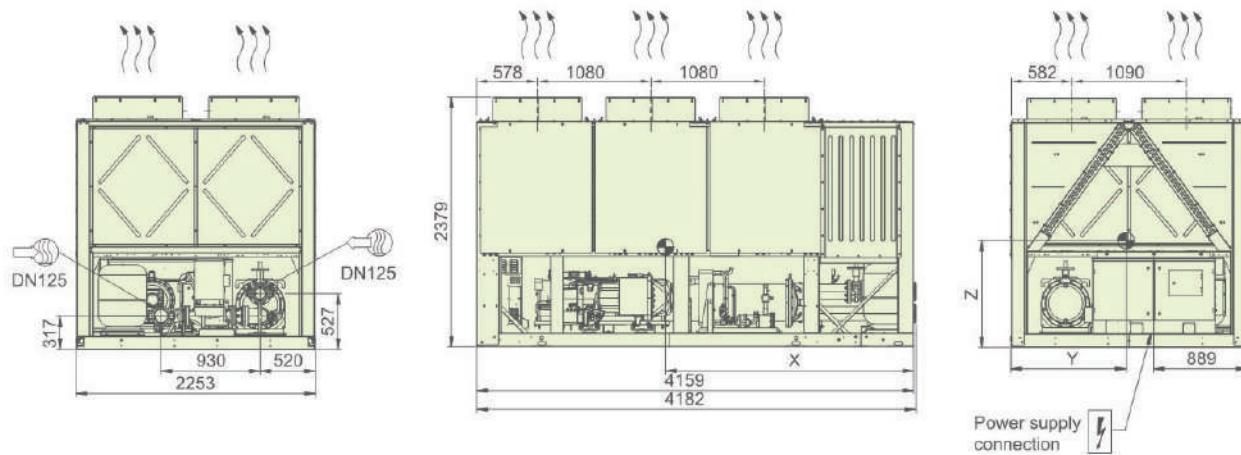


- ① Required clearances for maintenance
- ② Recommended space for evaporator tube removal
- ③ Safety valve
- Water inlet
- Water outlet
- Air outlet
- Power supply connection
- Center gravity

| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|-----------|-----------|-----------|
| 30KA0351A | - | 2053 | 1160 | 931 |
| 30KA0351A | 107 | 2053 | 1160 | 931 |
| 30KA0351A | 012 | 2074 | 1160 | 986 |

Dimension Drawing

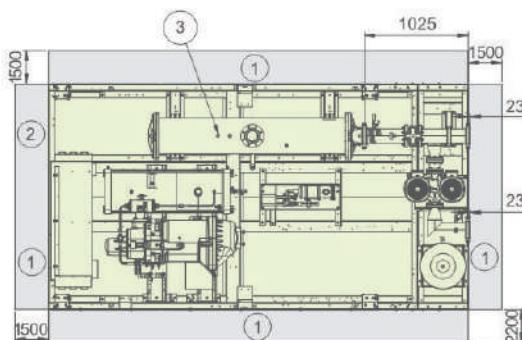
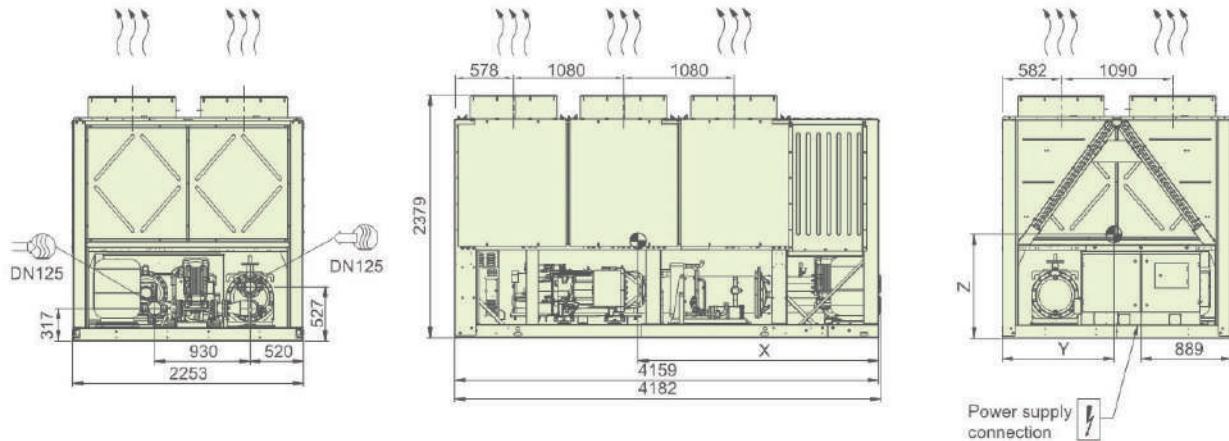
30KA0351APT116B



| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|-----------|-----------|-----------|
| 30KA0351A | 116B | 2318 | 1117 | 886 |

Dimension Drawing

30KA0351APT116C

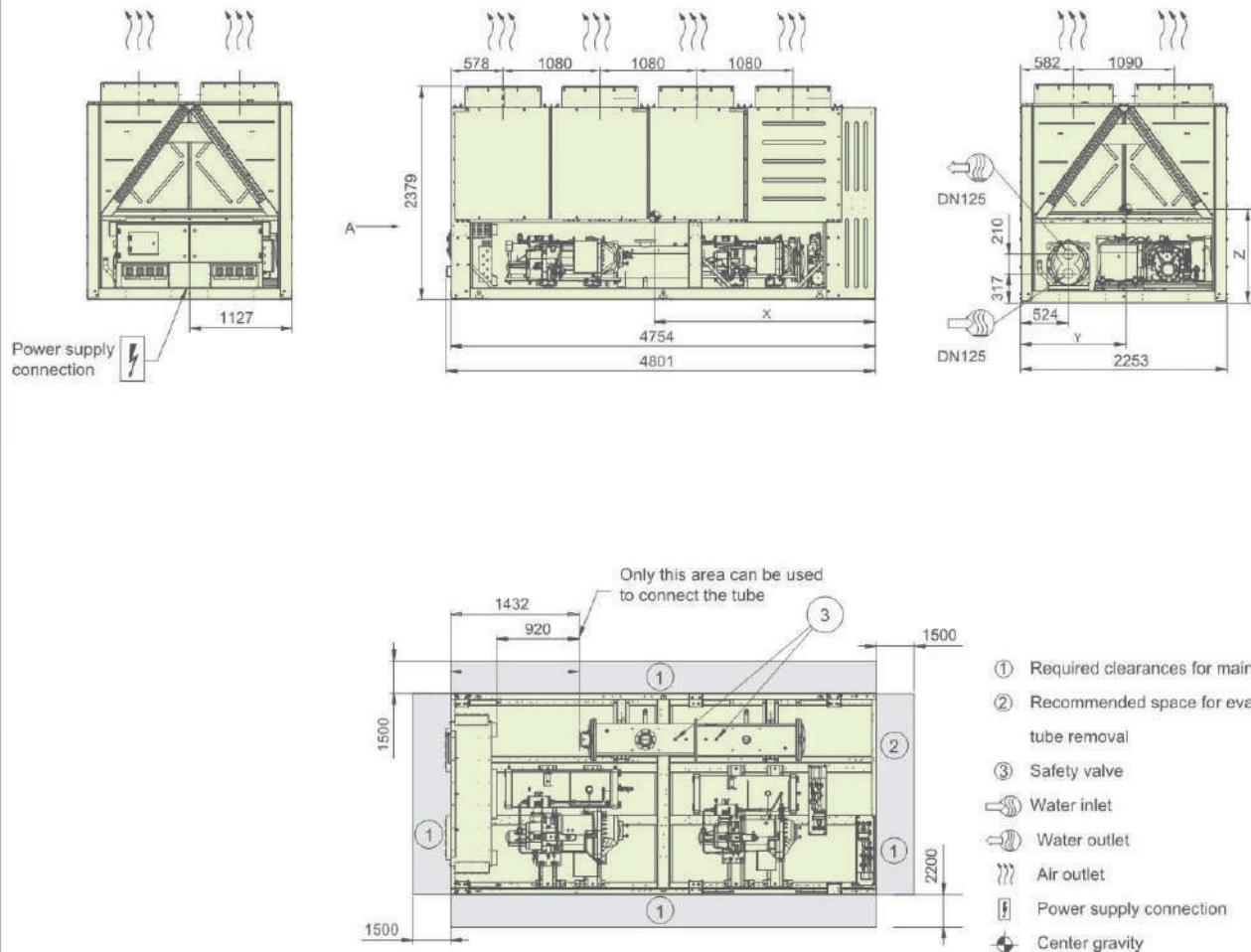


- ① Required clearances for maintenance
- ② Recommended space for evaporator tube removal
- ③ Safety valve
- Water inlet
- Water outlet
- Air outlet
- Power supply connection
- Center gravity

| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|-----------|-----------|-----------|
| 30KA0351A | 116C | 2299 | 1119 | 877 |

Dimension Drawing

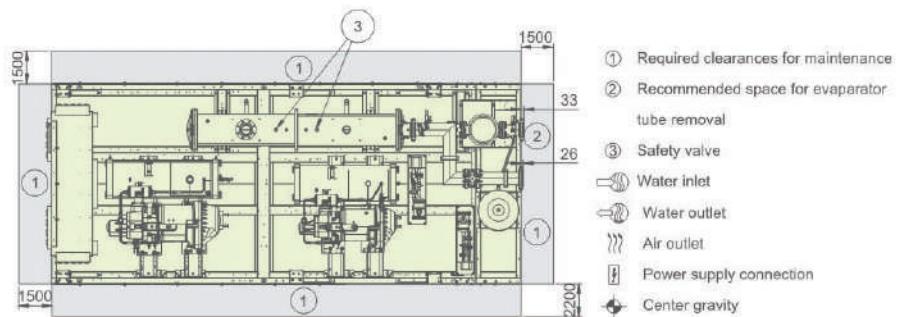
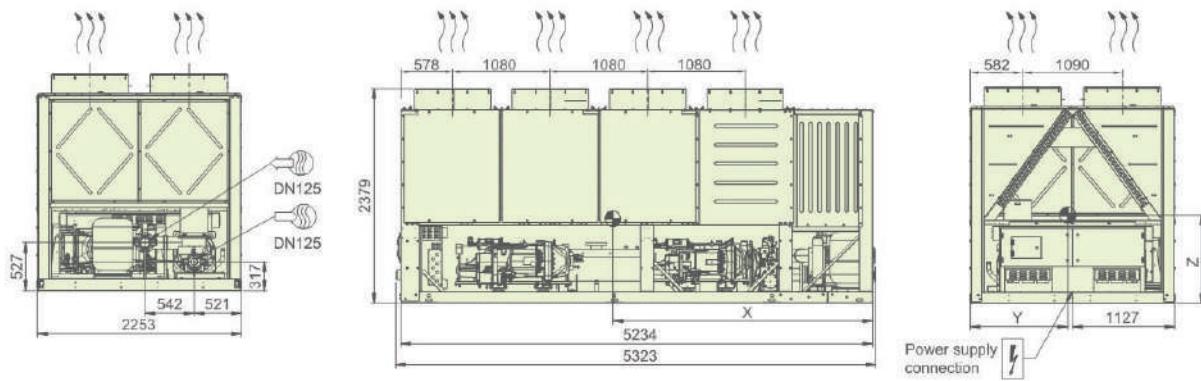
30KA0450A-0500A



| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------------|--------|-----------|-----------|-----------|
| 30KA0450A-0500A | - | 2464 | 1220 | 957 |
| 30KA0450A-0500A | 107 | 2464 | 1220 | 957 |
| 30KA0450A-0500A | 012 | 2493 | 1220 | 1003 |

Dimension Drawing

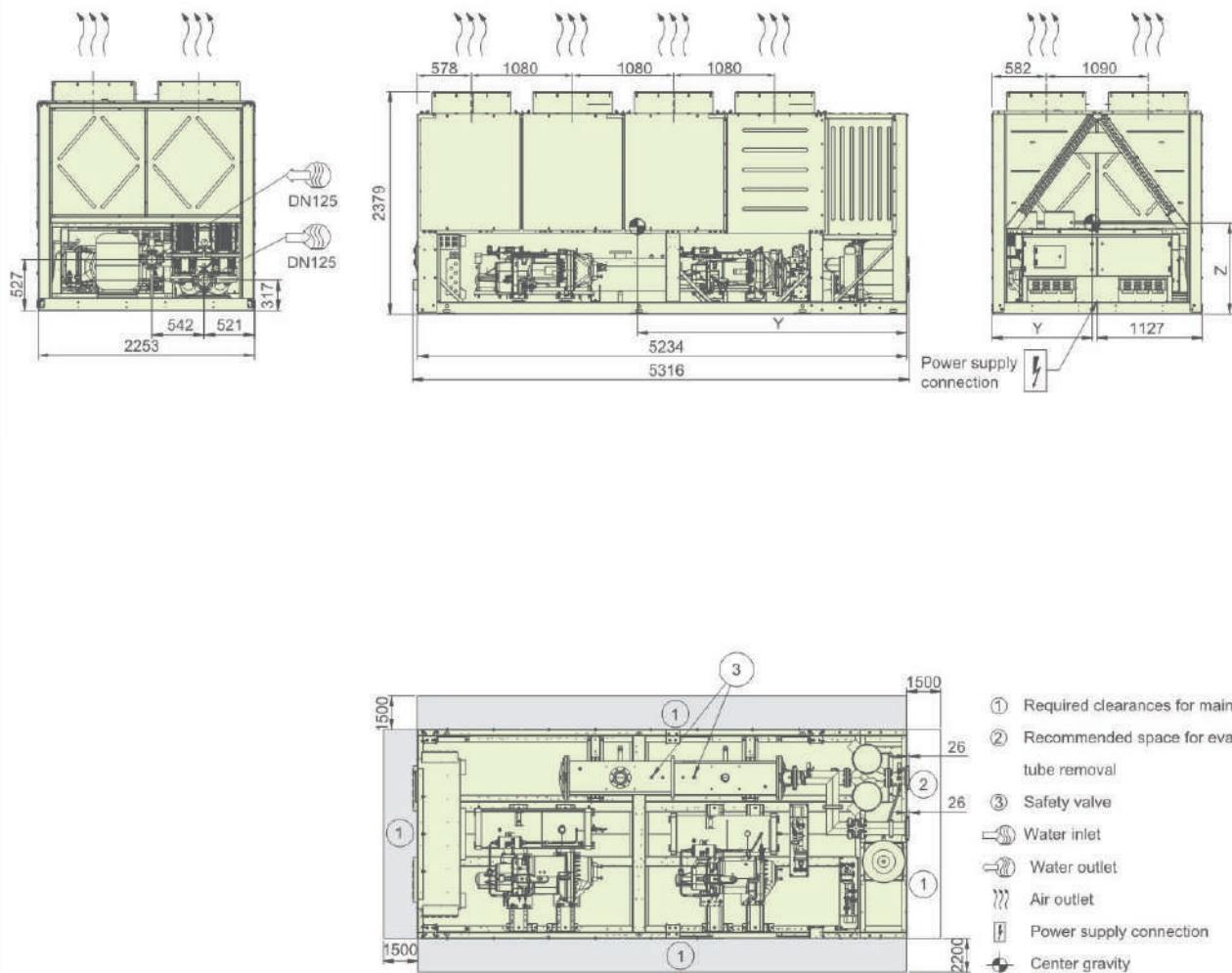
30KA0450A-0500APT116B



| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------------|--------|-----------|-----------|-----------|
| 30KA0450A-0500A | 116B | 2738 | 1215 | 906 |

Dimension Drawing

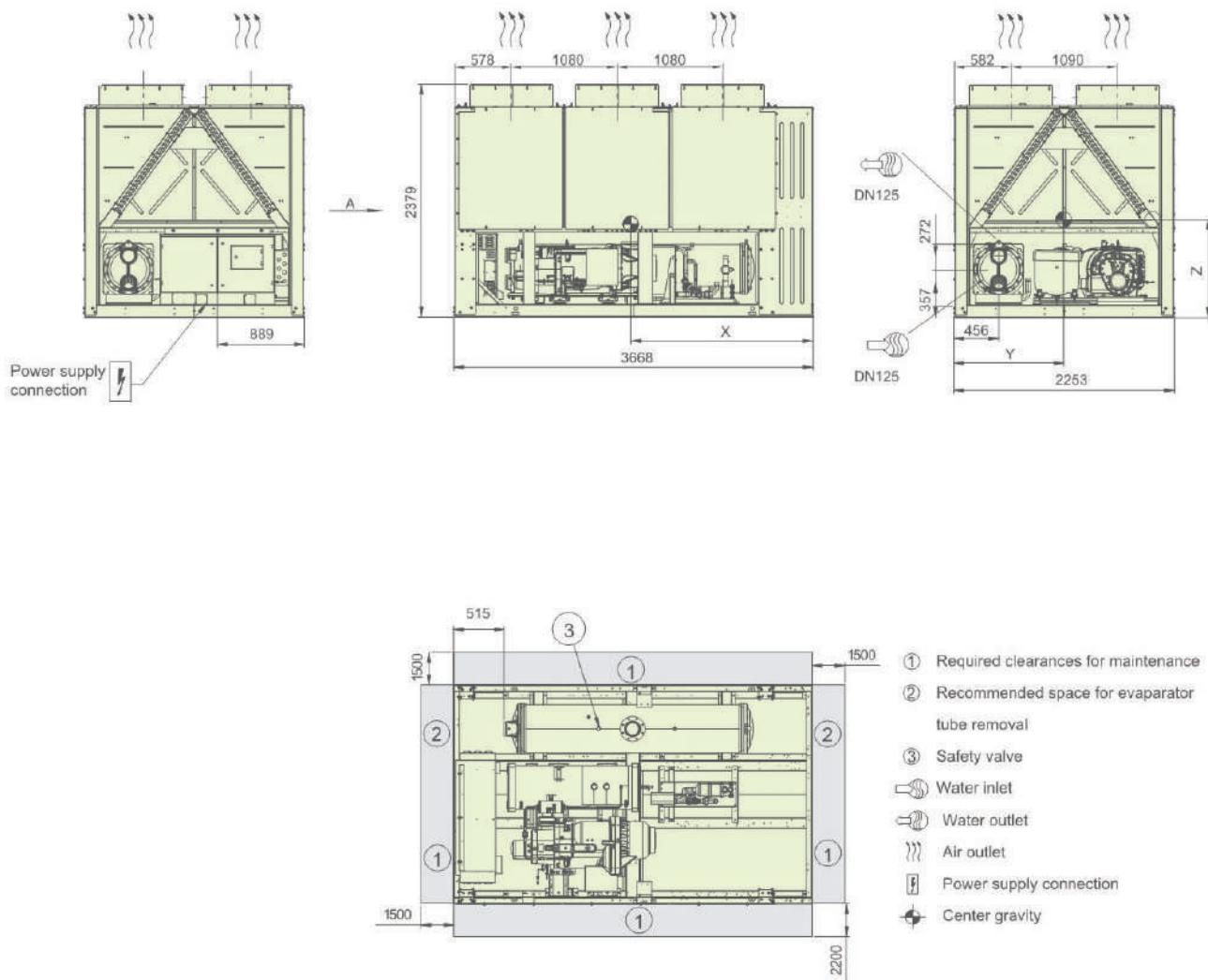
30KA0450A-0500APT116C



| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------------|--------|-----------|-----------|-----------|
| 30KA0450A-0500A | 116C | 2689 | 1210 | 906 |

Dimension Drawing

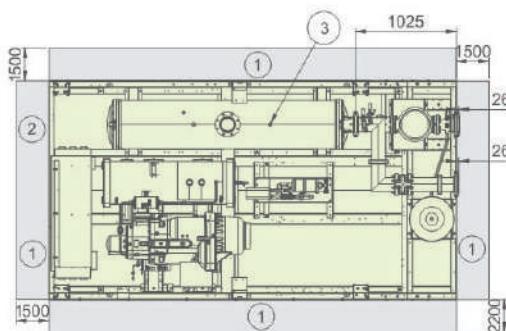
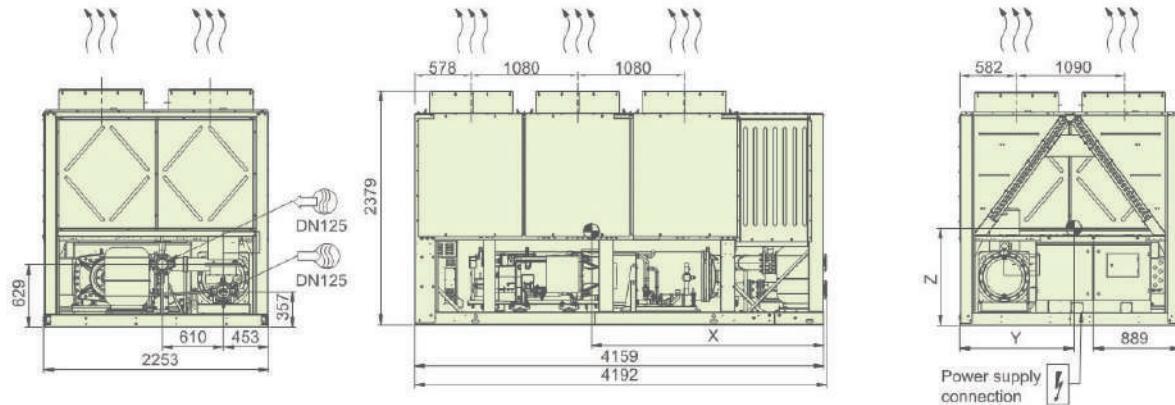
30KA0451A-0501A



| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------------|--------|--------|--------|--------|
| 30KA0451A-0501A | - | 2055 | 1236 | 852 |
| 30KA0451A-0501A | 107 | 2055 | 1236 | 852 |
| 30KA0451A-0501A | 012 | 2064 | 1231 | 900 |

Dimension Drawing

30KA0451A-0501APT116B

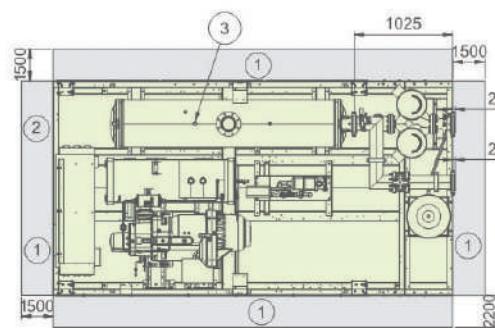
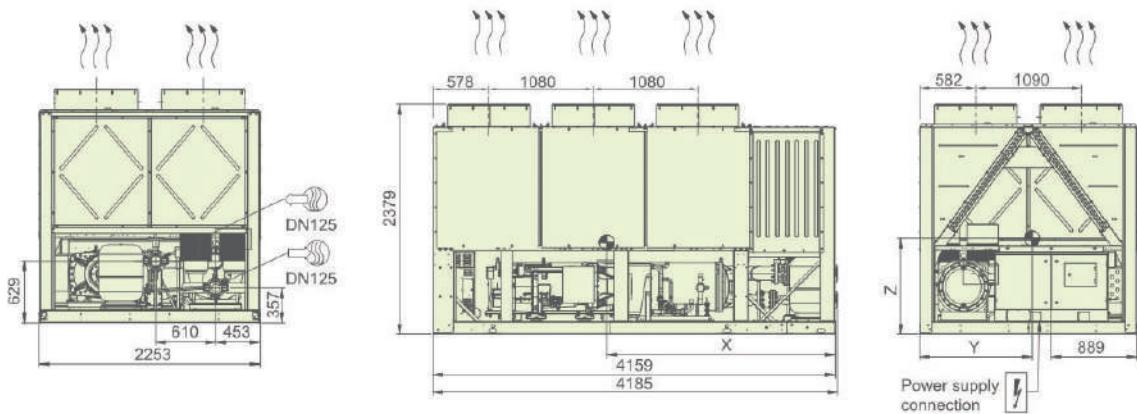


- ① Required clearances for maintenance
- ② Recommended space for evaporator tube removal
- ③ Safety valve
- Water inlet
- Water outlet
- Air outlet
- Power supply connection
- Center gravity

| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------------|--------|-----------|-----------|-----------|
| 30KA0451A-0501A | 116B | 2313 | 1213 | 828 |

Dimension Drawing

30KA0451A-0501APT116C

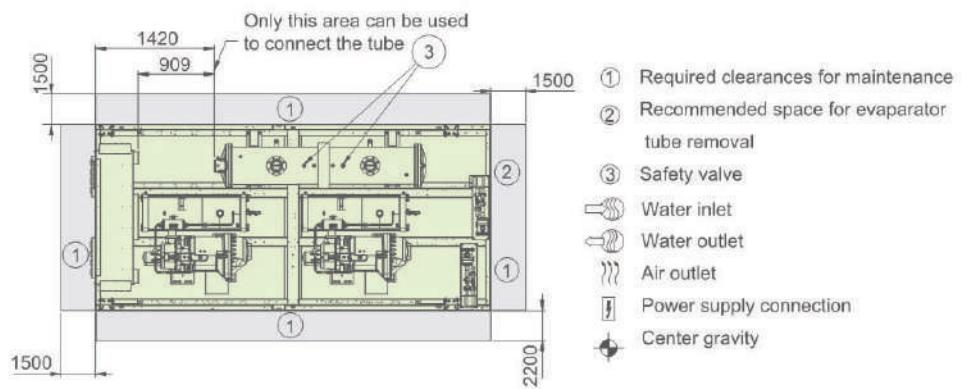
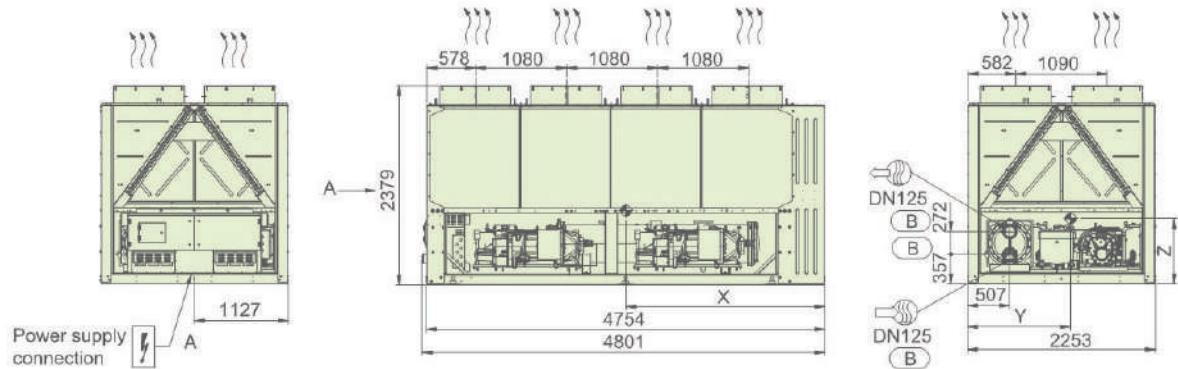


- ① Required clearances for maintenance
- ② Recommended space for evaporator tube removal
- ③ Safety valve
- Water inlet
- Water outlet
- Air outlet
- Power supply connection
- Center gravity

| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------------|--------|-----------|-----------|-----------|
| 30KA0451A-0501A | 116C | 2265 | 1208 | 828 |

Dimension Drawing

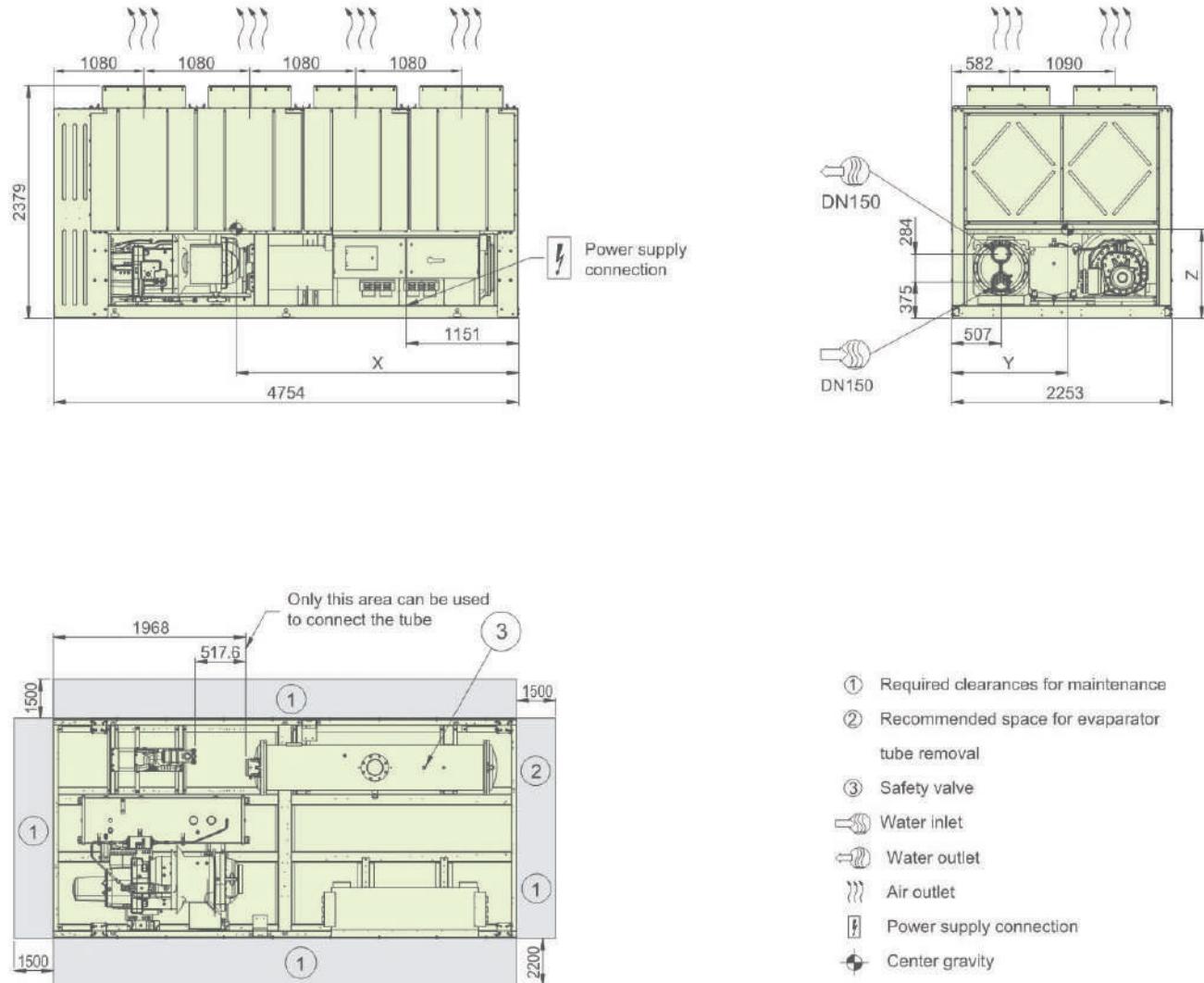
30KA0550A



| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|--------|--------|--------|
| 30KA0550A | - | 2363 | 1237 | 787 |
| 30KA0550A | 107 | 2363 | 1237 | 787 |
| 30KA0550A | 012 | 2458 | 1237 | 740 |

Dimension Drawing

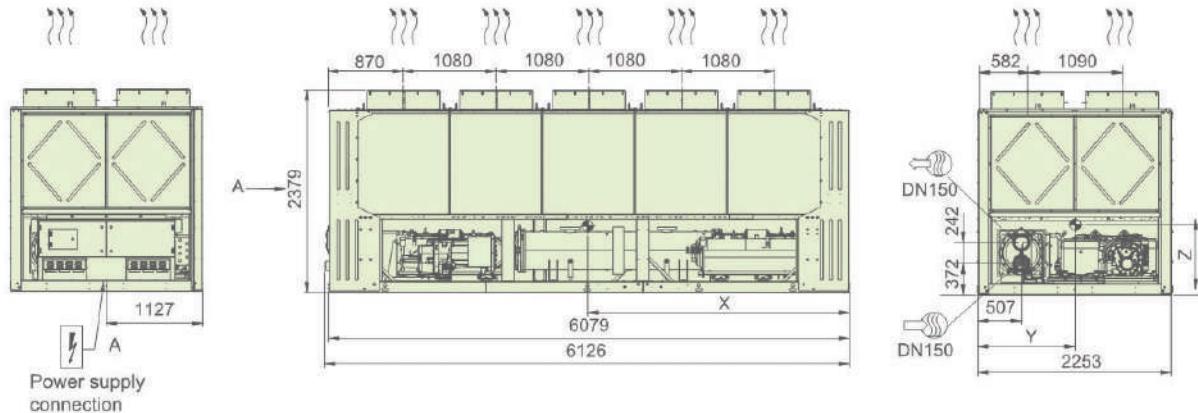
30KA0651A



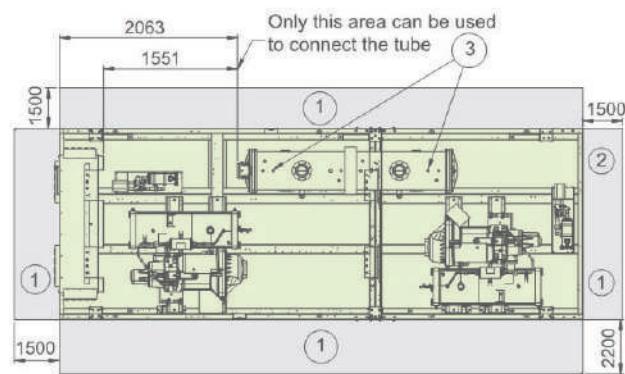
| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|-----------|-----------|-----------|
| 30KA0651A | - | 2836 | 1132 | 910 |
| 30KA0651A | 107 | 2836 | 1132 | 910 |
| 30KA0651A | 012 | 2740 | 1129 | 921 |

Dimension Drawing

30KA0700A



Power supply connection

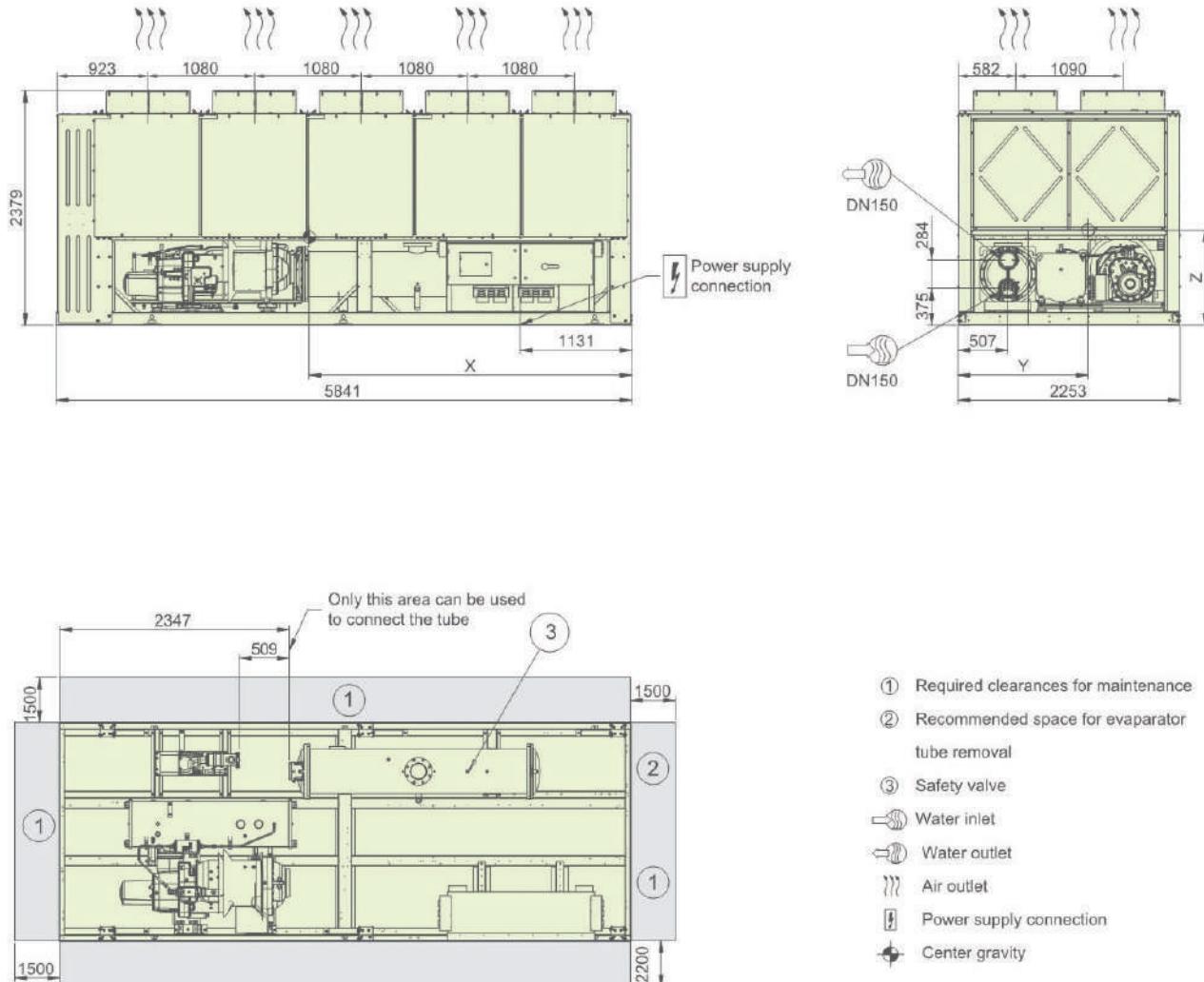


- ① Required clearances for maintenance
- ② Recommended space for evaporator tube removal
- ③ Safety valve
- Water inlet
- Water outlet
- Air outlet
- Power supply connection
- Center gravity

| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|--------|--------|--------|
| 30KA0700A | - | 3078 | 1181 | 844 |
| 30KA0700A | 107 | 3078 | 1181 | 844 |
| 30KA0700A | 012 | 3265 | 1248 | 773 |

Dimension Drawing

30KA0701A-0751A

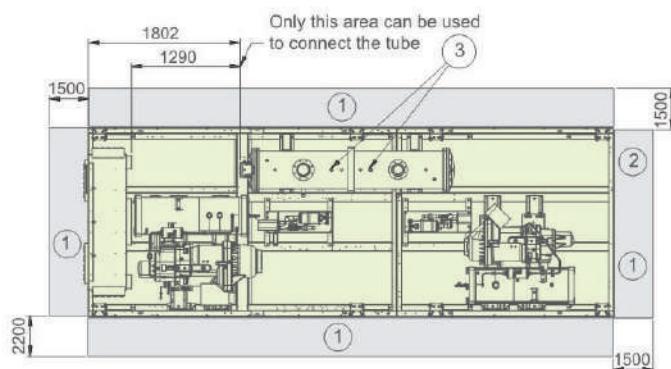
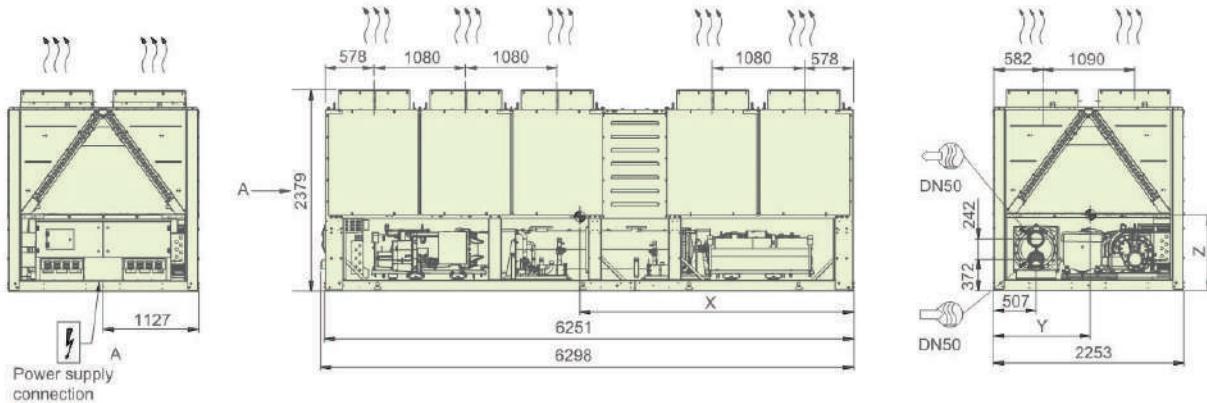


- ① Required clearances for maintenance
- ② Recommended space for evaporator tube removal
- ③ Safety valve
- Water inlet
- Water outlet
- Air outlet
- Power supply connection
- Center gravity

| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------------|--------|-----------|-----------|-----------|
| 30KA0701A-0751A | - | 3432 | 1134 | 952 |
| 30KA0701A-0751A | 107 | 3432 | 1134 | 952 |
| 30KA0701A-0751A | 012 | 3468 | 1130 | 959 |

Dimension Drawing

30KA0750A

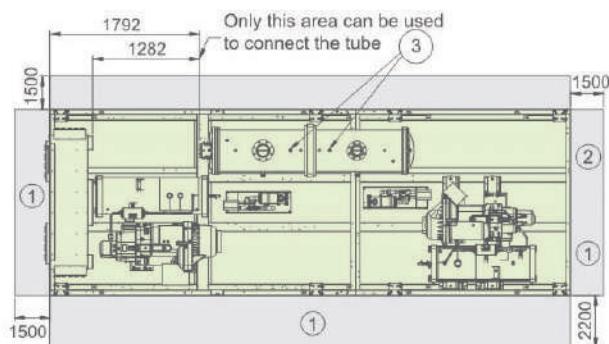
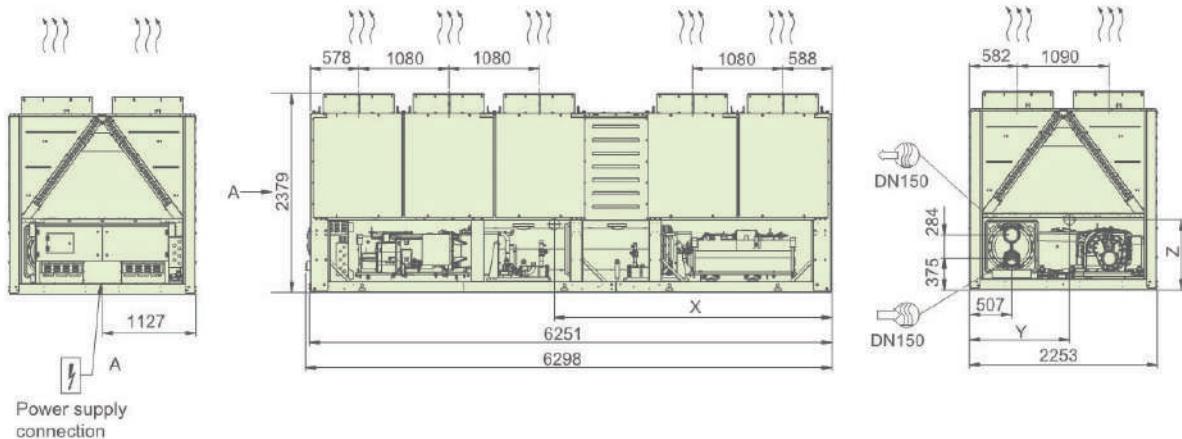


- ① Required clearances for maintenance
- ② Recommended space for evaporator tube removal
- ③ Safety valve
- Water inlet
- Water outlet
- Air outlet
- Power supply connection
- Center gravity

| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|--------|--------|--------|
| 30KA0750A | - | 3269 | 1166 | 746 |
| 30KA0750A | 107 | 3269 | 1166 | 746 |
| 30KA0750A | 012 | 3394 | 1200 | 675 |

Dimension Drawing

30KA0800A

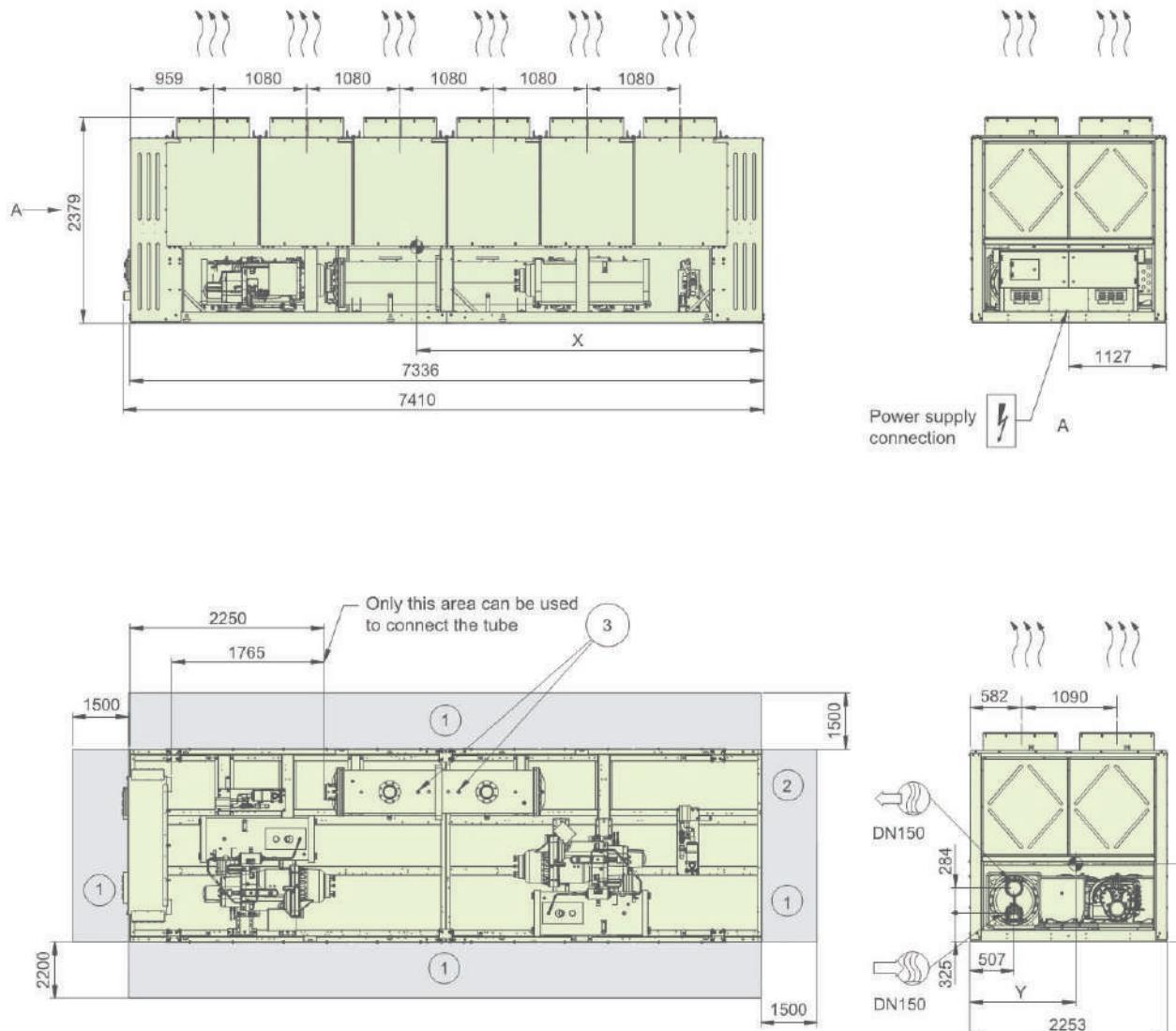


- ① Required clearances for maintenance
- ② Recommended space for evaporator tube removal
- ③ Safety valve
- Water inlet
- Water outlet
- Air outlet
- Power supply connection
- Center gravity

| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|-----------|-----------|-----------|
| 30KA0800A | - | 3274 | 1210 | 841 |
| 30KA0800A | 107 | 3274 | 1210 | 841 |
| 30KA0800A | 012 | 3461 | 1277 | 770 |

Dimension Drawing

30KA0900A



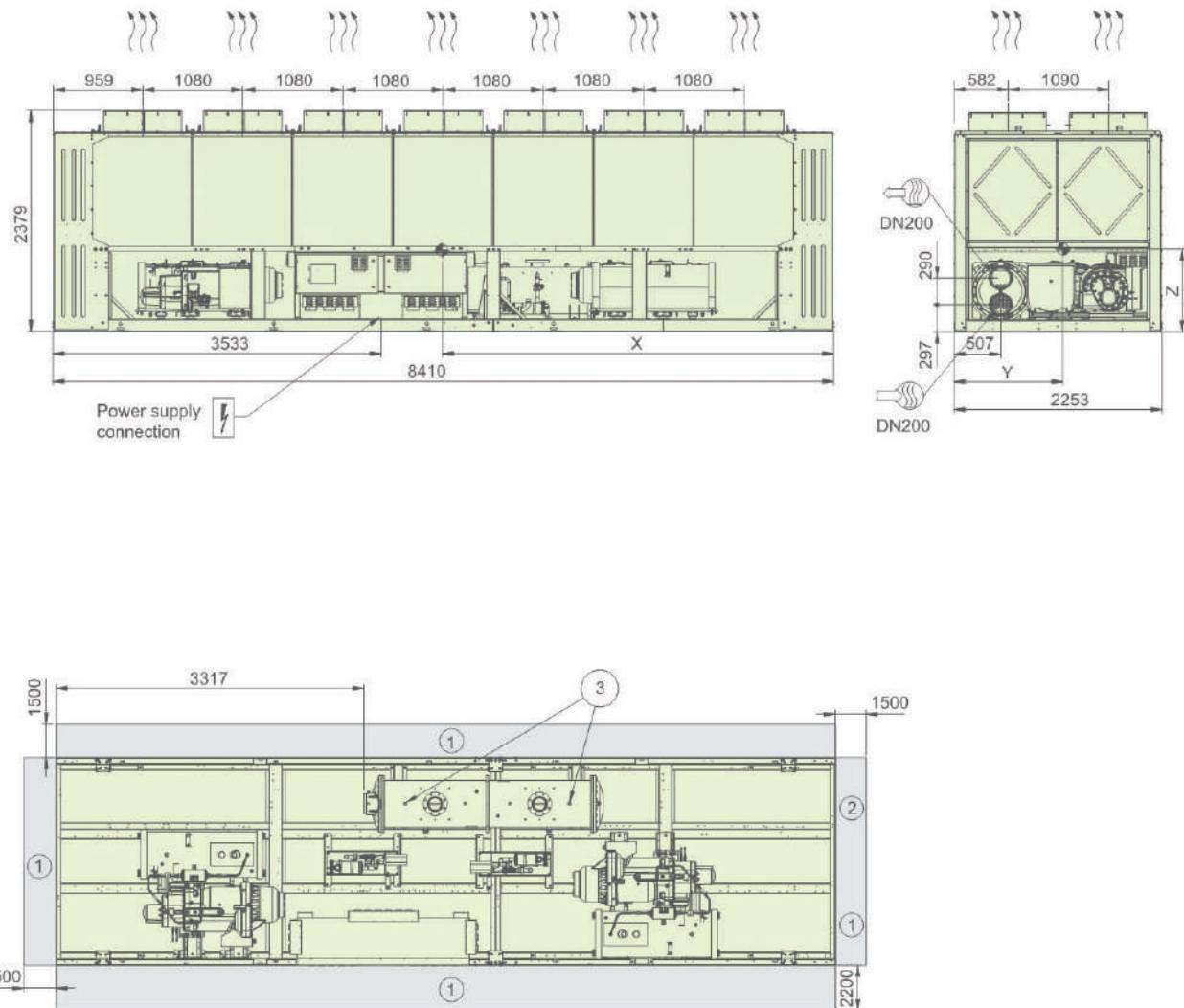
- ① Required clearances for maintenance
- ② Recommended space for evaporator tube removal
- ③ Safety valve

- Water inlet
- Water outlet
- Air outlet
- Power supply connection
- Center gravity

| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|--------|--------|--------|
| 30KA0900A | - | 3935 | 1138 | 739 |
| 30KA0900A | 107 | 3935 | 1138 | 739 |
| 30KA0900A | 012 | 3790 | 1168 | 668 |

Dimension Drawing

30KA1000A



① Required clearances for maintenance

② Recommended space for evaporator tube removal

③ Safety valve

Water inlet

Water outlet

Air outlet

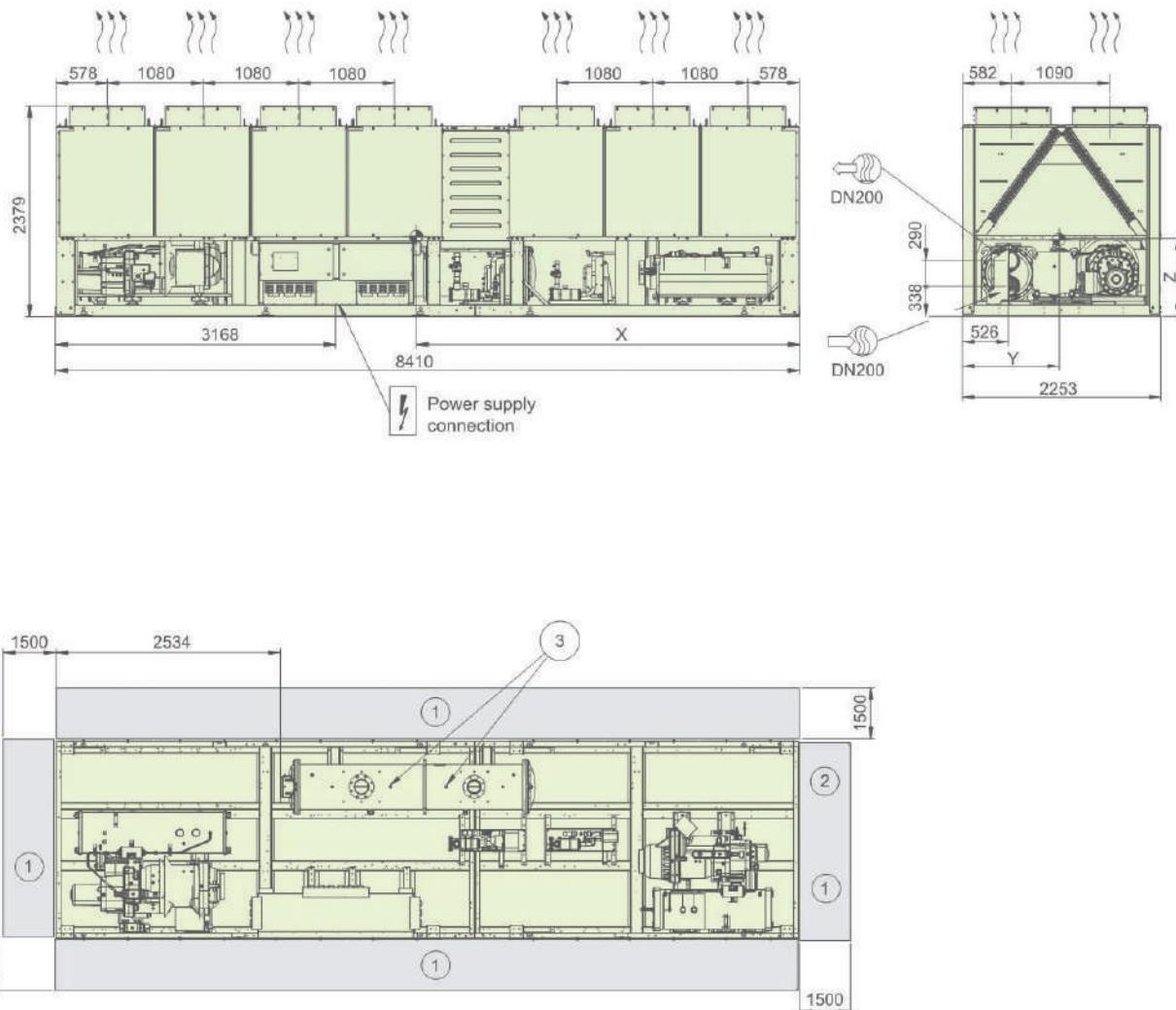
Power supply connection

Center gravity

| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|--------|--------|--------|
| 30KA1000A | - | 4223 | 1199 | 921 |
| 30KA1000A | 107 | 4223 | 1199 | 921 |
| 30KA1000A | 012 | 4233 | 1199 | 850 |

Dimension Drawing

30KA1050A-1100A



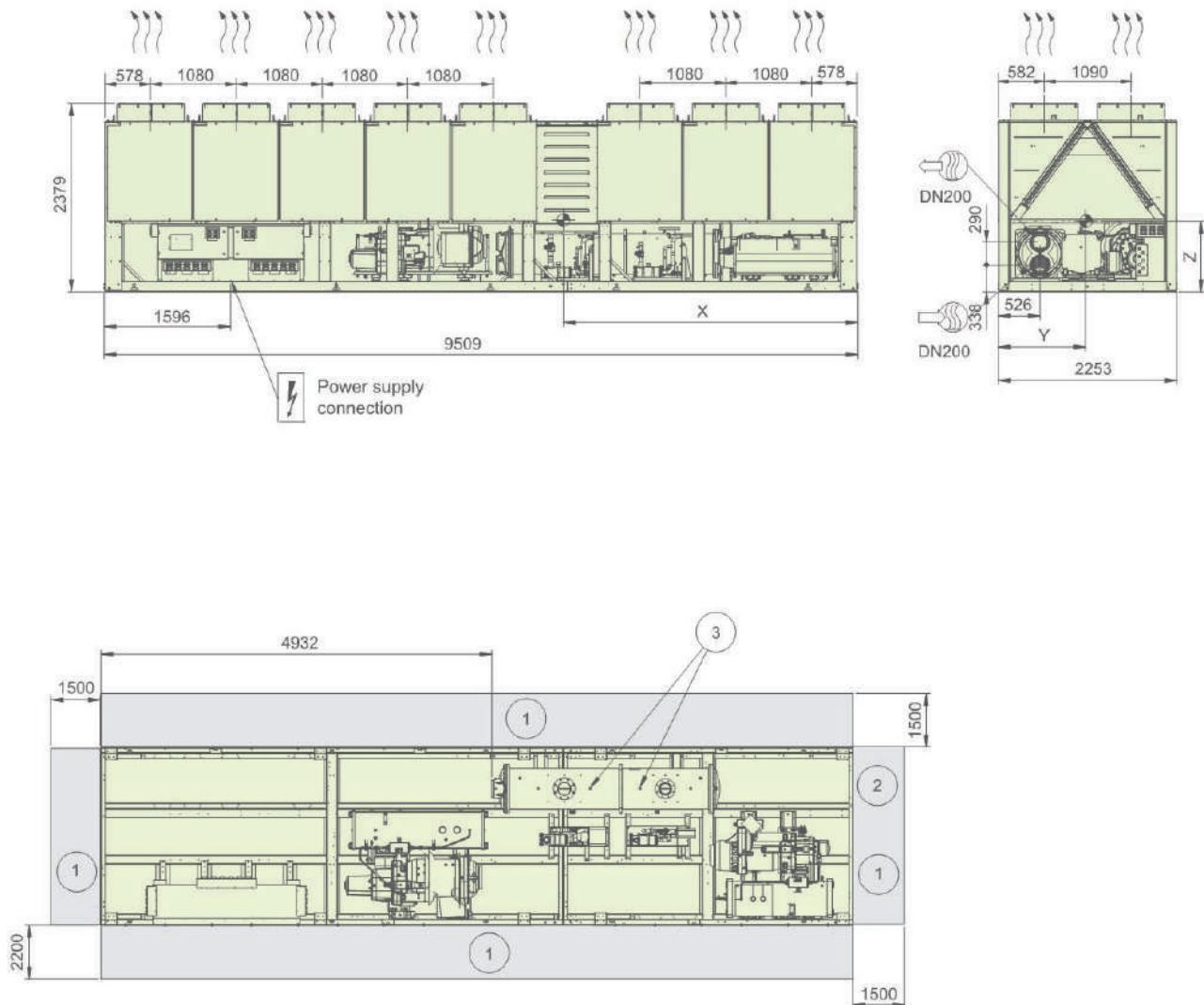
- ① Required clearances for maintenance
- ② Recommended space for evaporator tube removal
- ③ Safety valve
- Water inlet

- Water outlet
- Air outlet
- Power supply connection
- Center gravity

| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------------|--------|--------|--------|--------|
| 30KA1050A-1100A | - | 4343 | 1191 | 895 |
| 30KA1050A-1100A | 107 | 4343 | 1191 | 895 |
| 30KA1050A-1100A | 012 | 4511 | 1146 | 847 |

Dimension Drawing

30KA1250A



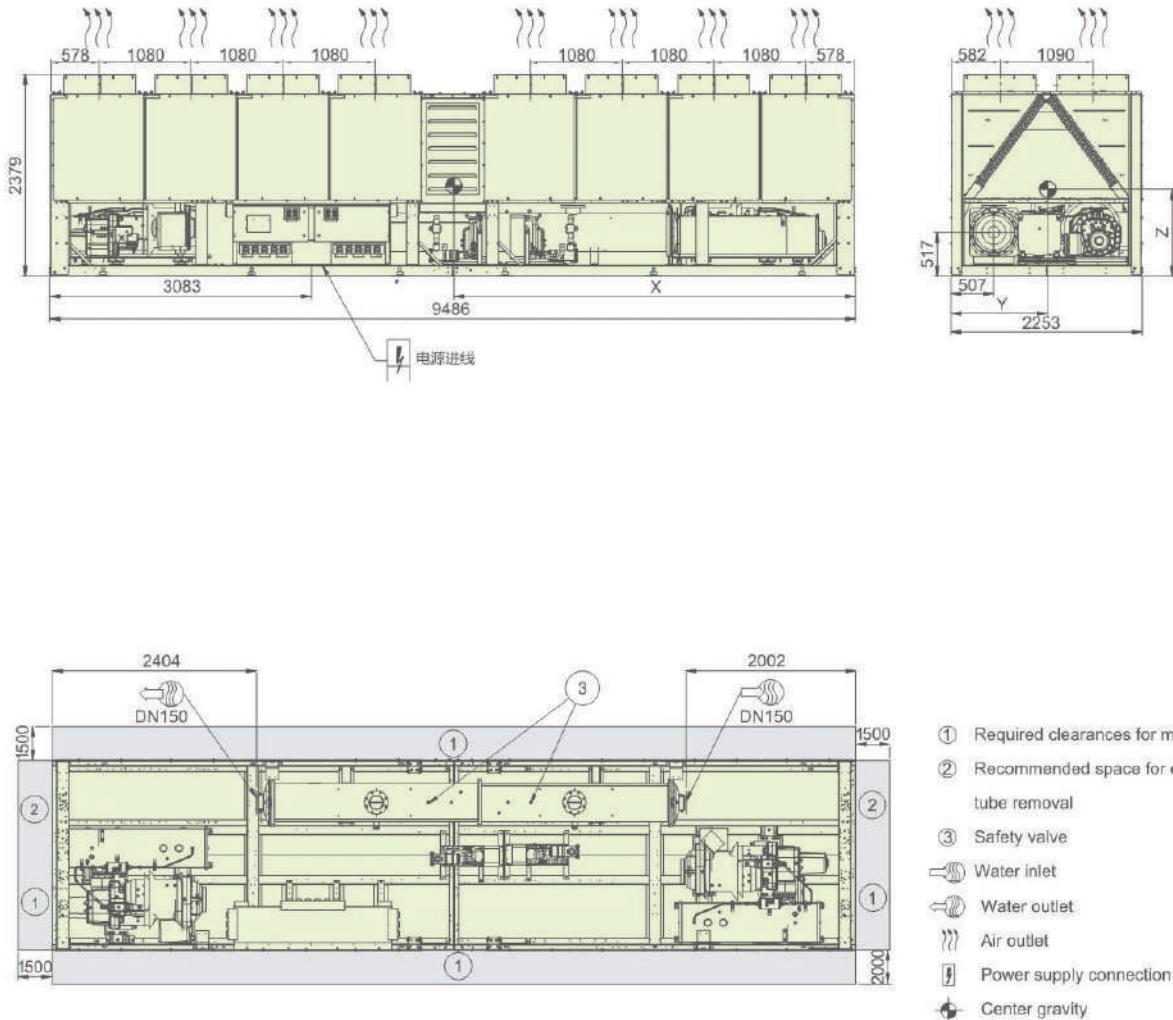
- ① Required clearances for maintenance
- ② Recommended space for evaporator tube removal
- ③ Safety valve
- Water inlet

- Water outlet
- Air outlet
- Power supply connection
- Center gravity

| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|--------|--------|--------|
| 30KA1250A | - | 4047 | 1182 | 884 |
| 30KA1250A | 107 | 4047 | 1182 | 884 |
| 30KA1250A | 012 | 4237 | 1137 | 837 |

Dimension Drawing

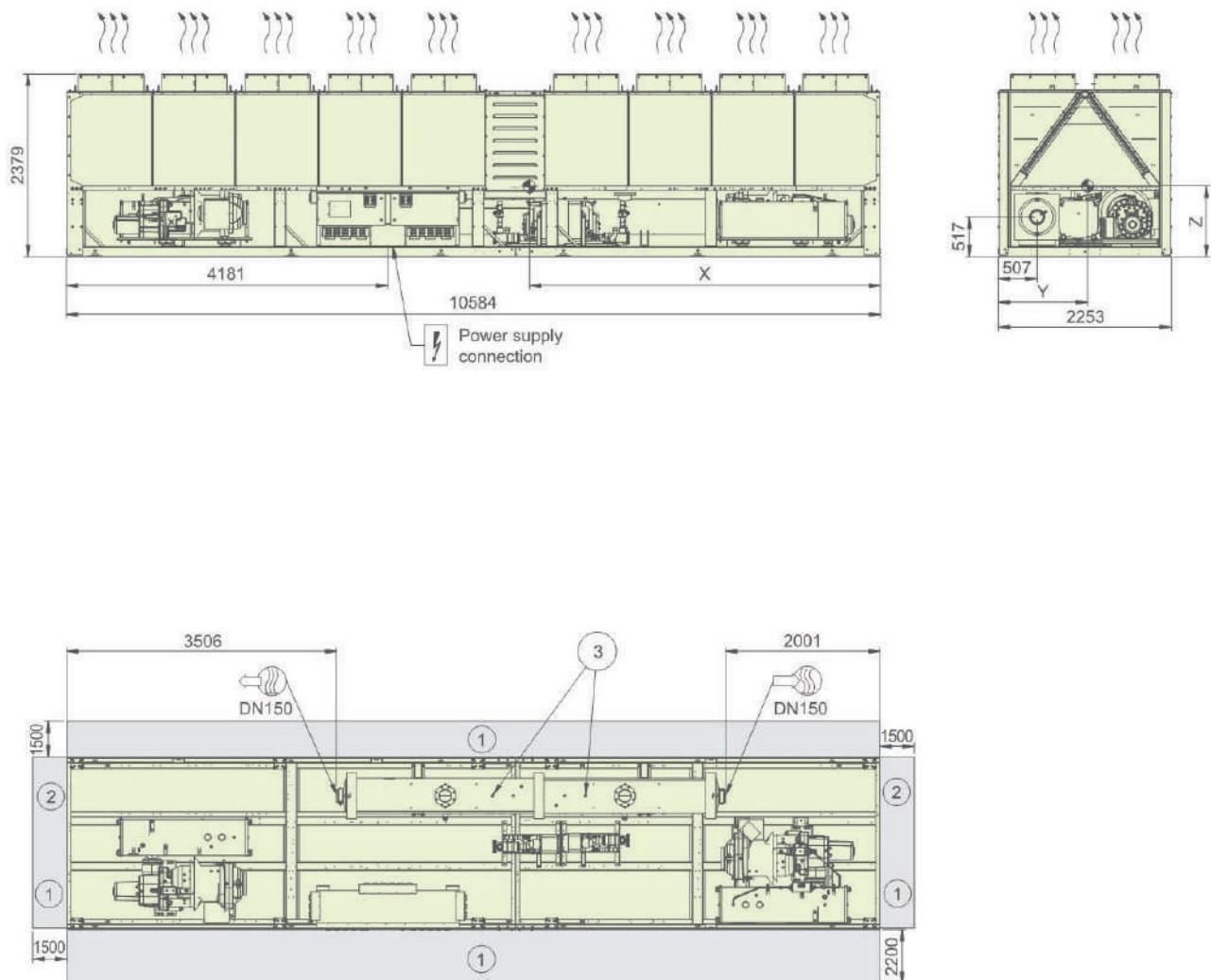
30KA1300A



| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------|--------|--------|--------|--------|
| 30KA1300A | - | 4817 | 1191 | 970 |
| 30KA1300A | 012 | 4916 | 1152 | 970 |

Dimension Drawing

30KA1350A



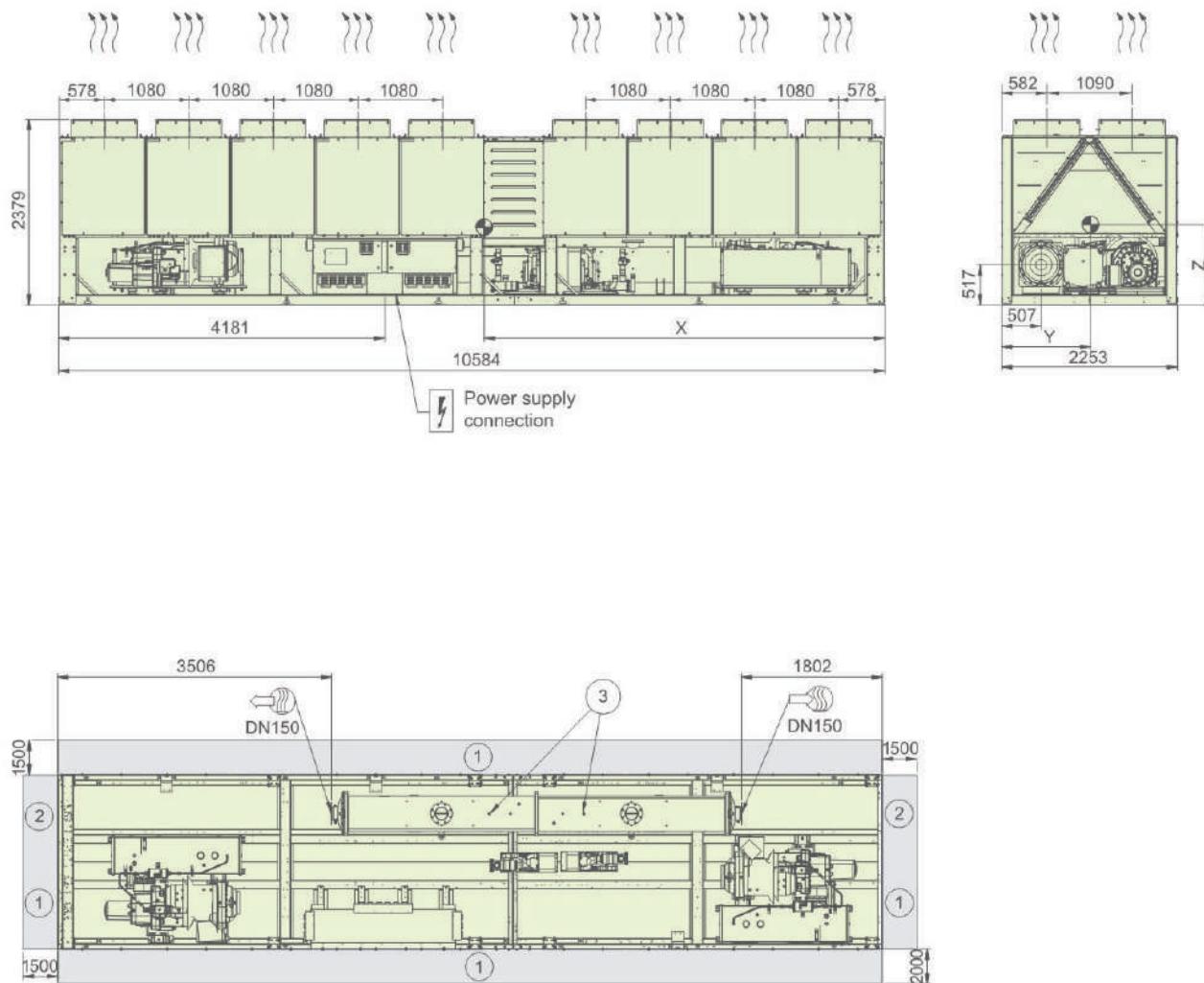
| Unit model | Option | X (mm) | Y (mm) | Z (mm) |
|------------|--------|--------|--------|--------|
| 30KA1350A | - | 4980 | 1202 | 886 |
| 30KA1350A | 012 | 5255 | 1143 | 863 |

- ① Required clearances for maintenance
- ② Recommended space for evaporator tube removal
- ③ Safety valve
- Water inlet

- Water outlet
- Air outlet
- Power supply connection
- Center gravity

Dimension Drawing

30KA1400A-1500A

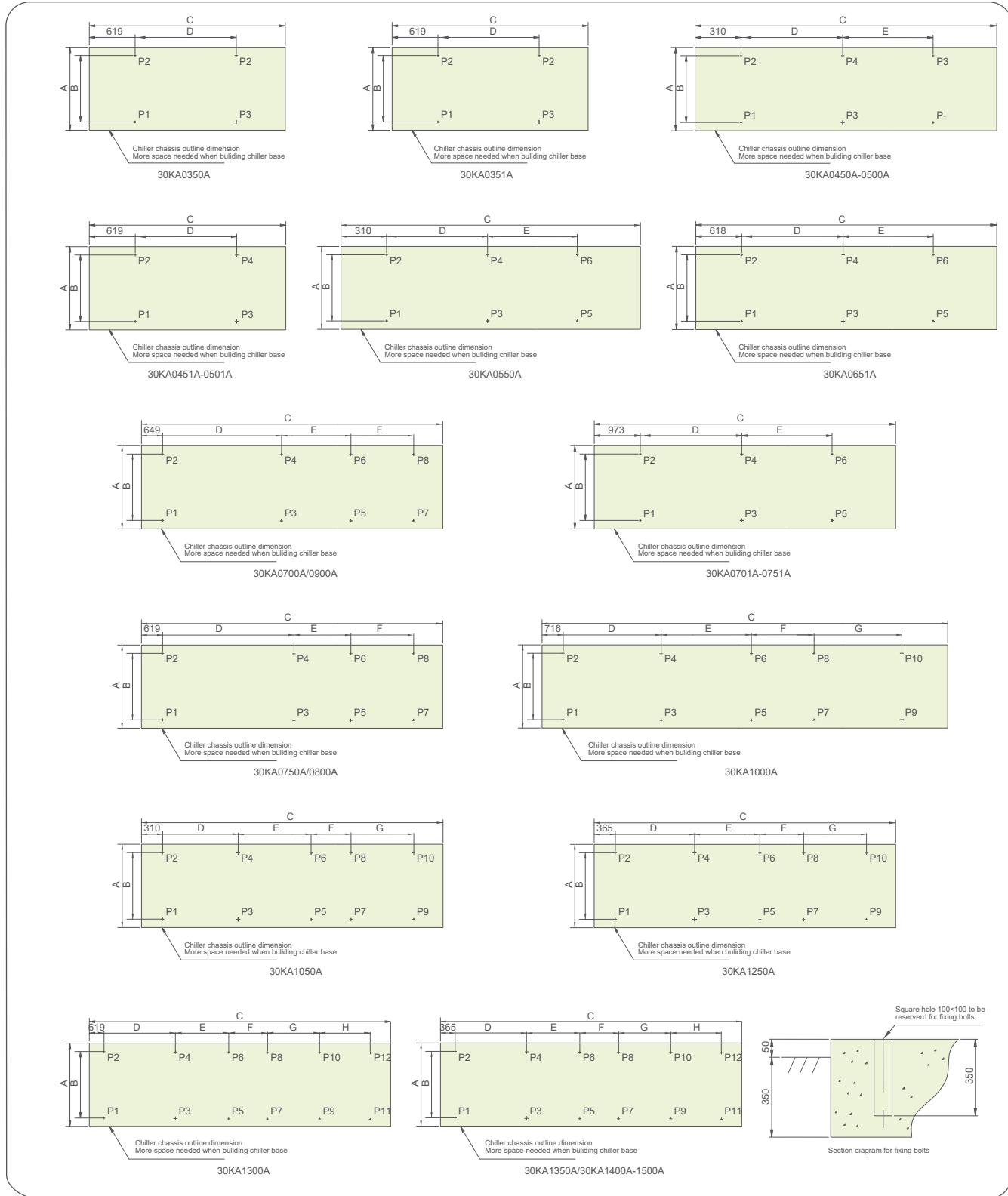


- ① Required clearances for maintenance
- ② Recommended space for evaporator tube removal
- ③ Safety valve
- Water inlet

- Water outlet
- Air outlet
- Power supply connection
- Center gravity

| Unit type | Option | X (mm) | Y (mm) | Z (mm) |
|-----------------|--------|--------|--------|--------|
| 30KA1400A-1500A | - | 5020 | 1191 | 980 |
| 30KA1400A-1500A | 012 | 5140 | 1160 | 991 |

Basement Drawing



Notes:

1. Anchor bolt specification: M20×300.
2. Anchor bolts located in P1, P2, P3...as shown in the drawing.
3. Single power connection point, and arrive from the bottom.
4. Reserve 120mm height space below the unit for power supply connection (unit aerial installation or cable slot arrangement in unit base)
5. Unit placement is the same as top view in outline drawing.
6. suggest to use spring isolator.
7. If need data for PT116B, PT116C, please contact local Carrier sales office.

Weight Distribution

| Models | Dimensions, mm | | | | | | | | | | | | Weight Distribution, kg | | | | | | | | | | | | Operating Weight, kg |
|-----------|----------------|------|-------|------|------|------|------|------|------|------|-----|-----|-------------------------|------|-----|-----|-----|-----|-----|-----|--|--|--|--|----------------------|
| | A | B | C | D | E | F | G | H | P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 | P9 | P10 | P11 | P12 | | | | | |
| 30KA0350A | 2231 | 2139 | 3657 | 2420 | | | | | 927 | 757 | 950 | 776 | | | | | | | | | | | | | 3410 |
| 30KA0351A | 2231 | 2139 | 3657 | 2420 | | | | | 955 | 881 | 664 | 612 | | | | | | | | | | | | | 3312 |
| 30KA0450A | 2231 | 2139 | 4732 | 2056 | 1748 | | | | 851 | 702 | 806 | 665 | 768 | 633 | | | | | | | | | | | 4425 |
| 30KA0451A | 2231 | 2139 | 3657 | 2420 | | | | | 1203 | 964 | 832 | 669 | | | | | | | | | | | | | 3668 |
| 30KA0500A | 2231 | 2139 | 4732 | 2056 | 1748 | | | | 866 | 726 | 820 | 679 | 782 | 647 | | | | | | | | | | | 4510 |
| 30KA0501A | 2231 | 2139 | 3657 | 2420 | | | | | 1205 | 967 | 835 | 671 | | | | | | | | | | | | | 3678 |
| 30KA0550A | 2231 | 2139 | 4732 | 2056 | 1747 | | | | 838 | 682 | 845 | 687 | 851 | 692 | | | | | | | | | | | 4595 |
| 30KA0651A | 2231 | 2139 | 4732 | 1748 | 1748 | | | | 1018 | 1007 | 806 | 797 | 593 | 587 | | | | | | | | | | | 4808 |
| 30KA0700A | 2231 | 2139 | 6057 | 2360 | 1300 | 1096 | | | 698 | 631 | 688 | 621 | 682 | 616 | 677 | 611 | | | | | | | | | 5224 |
| 30KA0701A | 2231 | 2139 | 5830 | 1942 | 2550 | | | | 661 | 684 | 832 | 861 | 1056 | 1092 | | | | | | | | | | | 5186 |
| 30KA0750A | 2231 | 2139 | 6229 | 2420 | 1256 | 1296 | 0 | 0 | 767 | 716 | 727 | 675 | 705 | 655 | 684 | 635 | | | | | | | | | 5561 |
| 30KA0751A | 2231 | 2139 | 5830 | 1942 | 2550 | | | | 1094 | 1058 | 863 | 834 | 685 | 662 | | | | | | | | | | | 5196 |
| 30KA0800A | 2231 | 2139 | 6229 | 2420 | 1256 | 1296 | 0 | 0 | 812 | 696 | 769 | 658 | 746 | 638 | 722 | 617 | 0 | 0 | 0 | 0 | | | | | 5658 |
| 30KA0900A | 2231 | 2139 | 7314 | 2360 | 1296 | 2360 | 0 | 0 | 866 | 848 | 811 | 794 | 780 | 764 | 725 | 710 | 0 | 0 | 0 | 0 | | | | | 6298 |
| 30KA1000A | 2231 | 2139 | 8389 | 1650 | 1650 | 1365 | 2360 | 0 | 744 | 649 | 741 | 647 | 740 | 646 | 738 | 644 | 736 | 642 | 0 | 0 | | | | | 6927 |
| 30KA1050A | 2231 | 2139 | 8389 | 2056 | 1748 | 1237 | 2420 | 0 | 820 | 727 | 804 | 713 | 790 | 701 | 781 | 692 | 762 | 676 | 0 | 0 | | | | | 7466 |
| 30KA1250A | 2231 | 2139 | 9487 | 2550 | 1942 | 1592 | 2420 | 0 | 692 | 625 | 776 | 700 | 839 | 757 | 890 | 803 | 969 | 874 | 0 | 0 | | | | | 7925 |
| 30KA1300A | 2231 | 2139 | 9464 | 1748 | 1748 | 1237 | 1748 | 1748 | 847 | 736 | 838 | 728 | 831 | 722 | 826 | 718 | 819 | 711 | 812 | 705 | | | | | 9293 |
| 30KA1350A | 2231 | 2139 | 10562 | 2550 | 1942 | 1592 | 1748 | 1748 | 815 | 709 | 840 | 731 | 859 | 747 | 875 | 761 | 891 | 774 | 908 | 789 | | | | | 9117 |
| 30KA1400A | 2231 | 2139 | 10562 | 2550 | 1942 | 1592 | 1748 | 1748 | 815 | 709 | 840 | 731 | 859 | 747 | 875 | 761 | 891 | 774 | 908 | 789 | | | | | 9699 |
| 30KA1500A | 2231 | 2139 | 10562 | 2550 | 1942 | 1592 | 1748 | 1748 | 818 | 711 | 841 | 732 | 860 | 748 | 876 | 762 | 893 | 776 | 910 | 791 | | | | | 9748 |

Notes:

- 1.Anchor bolt specification: M20×300.
- 2.Anchor bolts located in P1,P2,P3...as shown in the drawing.
- 3.Single power connection point, and arrive from the bottom.
- 4.Reserve 120mm height space below the unit for power supply connection (unit aerial installation or cable slot arrangement in unit base)
- 5.Unit placement is the same as top view in outline drawing.
- 6.suggest to use spring isolator.



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|-----------------|--------------------|
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| Supersede: | CAT_30KA_E-2104-11 |
| Effective date: | Jun, 2021 |