Sabroe ChillPAC chillers

Extremely compact packaged ammonia chillers based on reciprocating compressors, with a 100–1400 kW capacity range

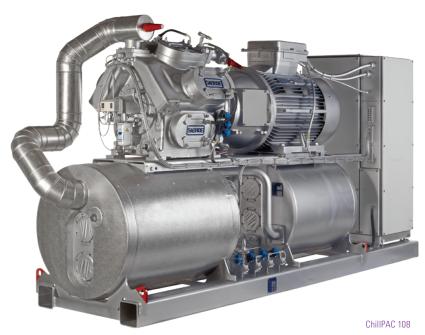
ChillPAC ammonia-based chillers are designed from the outset to achieve an ultracompact format, so narrow that it can even pass through a normal doorway.

The fully integrated design, with an extra-compact shell-and-plate evaporator/ condenser, oil separator and control system all built in, means ChillPAC units provide exceptional refrigeration capacity while only taking up a minimum of space and taking full advantage of the many different models of ultra-reliable Sabroe reciprocating compressors.

ChillPAC chillers are ideal in installations where there is only limited space, and where there are restrictions on the refrigerant charge used.

Range

There are 15 different models in the standard ChillPAC range, with capacities ranging from 100 kW to 1400 kW.



| Advantages | Benefits | | |
|--|---|--|--|
| Factory-assembled, pre-tested packaged units | Easy pre-commissioning makes installation and running-in both faster and cheaper. Factory acceptance tests (FAT) available as an option | | |
| Exceptionally compact design and fully integrated configuration results in less than half the footprint of bespoke chiller designs | Major savings on both weight and space, resulting in lower installation costs. Much less need for expensive separate machinery rooms | | |
| Indirect cooling and uncomplicated flooded evaporating system, using natural ammonia (R717) only | Greater safety and outstanding reliability | | |
| Exceptional COP and outstanding part-load performance | Greater cooling effect from a smaller refrigerant charge | | |
| Refrigerant charge 50% smaller than with conventional chillers, because of special condenser/evaporator design | Higher output per unit kW/kg refrigerant, lower unit cost and lower installation costs | | |

Optional equipment

- Variable-speed drive
- Soft-starter or Y/D starter
- De-superheater
- Sub-cooler
- External condenser
- Control panel mounted separately



| Water chillers (Water: inlet 12°C, outlet 7°C) | | | | | | | | | |
|--|------------------|---------|-------------|------------|------------------|------|------|----------------|--|
| Туре | Cooling capacity | E-motor | R717 charge | Dry weight | Dimensions in mm | | | Sound level | |
| | kW | kW | kg | kg | L | W | Н | dB(A) | |
| CPAC 104 S-A | 233 | 45 | 14 | 2301 | 2900 | 1000 | 2000 | 78 | |
| CPAC 104 L-A | 294 | 55 | 15 | 2410 | 2900 | 1000 | 2000 | 79 | |
| CPAC 106 S-A | 346 | 75 | 17 | 2727 | 2900 | 1000 | 2000 | 79 | |
| CPAC 104 E-A | 357 | 75 | 17 | 2652 | 2900 | 1000 | 2000 | 79 | |
| CPAC 106 L-A | 440 | 90 | 21 | 2950 | 2900 | 1000 | 2000 | 80 | |
| CPAC 108 S-A | 464 | 90 | 22 | 3060 | 2900 | 1000 | 2000 | 80 | |
| CPAC 106 E-A | 536 | 110 | 24 | 3225 | 3100 | 1000 | 2000 | 81 | |
| CPAC 108 L-A | 588 | 110 | 26 | 3526 | 3100 | 1000 | 2000 | 82 | |
| CPAC 112 S-A | 690 | 132 | 29 | 4315 | 4000 | 1000 | 2200 | 82 | |
| CPAC 108 E-A | 715 | 132 | 30 | 3880 | 3300 | 1000 | 2000 | 82 | |
| CPAC 112 L-A | 878 | 160 | 36 | 4738 | 4500 | 1000 | 2200 | 83 | |
| CPAC 116 S-A | 921 | 200 | 37 | 5044 | 4500 | 1000 | 2200 | 83 | |
| CPAC 112 E-A | 1066 | 200 | 41 | 5196 | 4600 | 1000 | 2200 | 83 | |
| CPAC 116 L-A | 1167 | 250 | 45 | 5556 | 4700 | 1000 | 2200 | 83 | |
| CPAC 116 E-A | 1398 | 315 | 49 | 5878 | 5000 | 1000 | 2200 | 84 | |

| Brine chillers (Ethylene glycol 30%: inlet -4°C, outlet -8°C) | | | | | | | | |
|---|----------|---------|-------------|------------|------------------|---------|------|-------|
| Туре | Cooling | E-motor | R717 charge | Dry weight | Dimensions in mm | | | Sound |
| | capacity | | | | | THAT IT | | level |
| | kW | kW | kg | kg | L | W M | Н | dB(A) |
| CPAC 104 S-C | 116 | 37 | 13 | 2253 | 2700 | 1000 | 2000 | 78 |
| CPAC 104 L-C | 150 | 55 | 15 | 2378 | 2900 | 1000 | 2000 | 79 |
| CPAC 106 S-C | 172 | 55 | 15 | 2505 | 2900 | 1000 | 2000 | 79 |
| CPAC 104 E-C | 185 | 75 | 17 | 2586 | 2900 | 1000 | 2000 | 79 |
| CPAC 106 L-C | 222 | 75 | 18 | 2701 | 2900 | 1000 | 2000 | 80 |
| CPAC 108 S-C | 227 | 75 | 18 | 2766 | 2900 | 1000 | 2000 | 80 |
| CPAC 106 E-C | 272 | 90 | 20 | 2866 | 2900 | 1000 | 2000 | 80 |
| CPAC 108 L-C | 295 | 110 | 22 | 3091 | 3100 | 1000 | 2000 | 82 |
| CPAC 112 S-C | 339 | 110 | 24 | 3696 | 3800 | 1000 | 2200 | 82 |
| CPAC 108 E-C | 363 | 132 | 25 | 3523 | 3300 | 1000 | 2000 | 82 . |
| CPAC 112 L-C | 440 | 160 | 29 | 4290 | 4200 | 1000 | 2200 | 83 |
| CPAC 116 S-C | 450 | 160 | 29 | 4390 | 4200 | 1000 | 2200 | 83 |
| CPAC 112 E-C | 544 | 200 | 35 | 4733 | 4300 | 1000 | 2200 | 83 |
| CPAC 116 L-C | 586 | 200 | 37 | 4898 | 4300 | 1000 | 2200 | 83 |
| CPAC 116 E-C | 718 | 250 | 43 | 5322 | 4300 | 1000 | 2200 | 83 |

Condenser: water inlet 30°C, outlet 35°C

Motor: 3 x 400V, 50 Hz, 1460 rpm
The above data are only valid for the stated

The above data are only valid for the stated temperatures and operating conditions.

Capacities are nominal.

Sound pressure levels in free field. All sound measuring has been carried out according to ISO 9614-2 at a distance of 1 m.

Compliance

All Sabroe chiller units are fully compliant with appropriate major international design codes and the specifications laid down by the most common classification societies.

Approval in accordance with other technical requirements, specific national legislation or other classification societies' requirements is available on request.

