

Sabroe ComPAC chillers

Packaged ammonia chillers based on screw compressors, with a 100–2300 kW capacity range

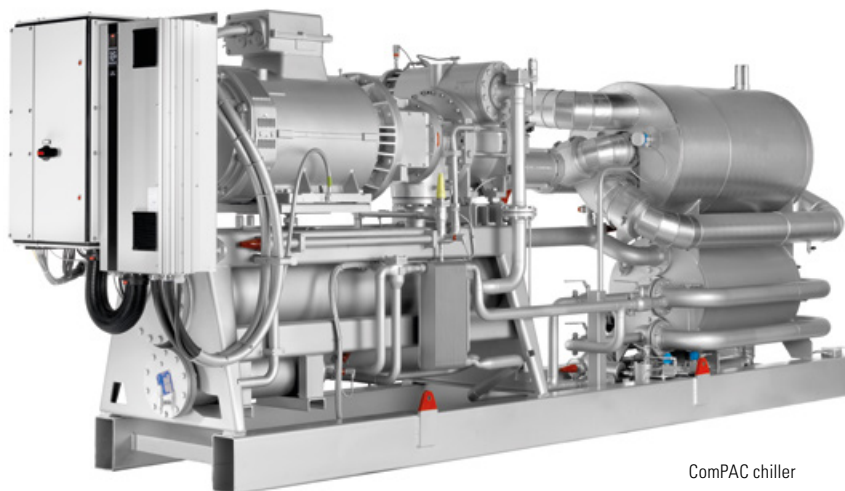
Sabroe ComPAC ammonia chillers based on plate-and-shell heat exchangers and the comprehensive Sabroe screw compressor programme (SAB 120-151 to SAB 193-233) are distinctive for their compactness. Frequency converter and panel solutions are supplied as standard.

As standard, ComPAC chillers use ultra-compact and extremely low-charge Sabroe-patented plate-and-shell heat exchangers.

Range

There are 13 different standard models in this range of ComPAC chillers – both high- and low-temperature versions.

A comprehensive range of equipment options are available to ensure the best possible performance and application versatility.



ComPAC chiller
with VSD panel and
UniSAB as standard

Advantages	Benefits
Factory-assembled, pre-tested packaged units based on renowned Sabroe screw compressors	Easy pre-commissioning makes installation and running-in both faster and cheaper. Factory acceptance test (FAT) available (as an option)
Compact design with a very small footprint compared with bespoke chiller designs	Lower unit cost and lower installation costs
Indirect cooling and uncomplicated flooded evaporating system, using natural ammonia (R717) only	Major savings on both weight and space. Much less need for expensive separate machinery rooms
Exceptional COP and outstanding part-load performance	Greater safety and outstanding reliability
Small refrigerant charge, smaller than conventional chiller charges due to the special condenser/evaporator design	Greater cooling effect from a smaller refrigerant charge, and optimum load structure over the entire capacity range

Options

- Variable-speed drive (VSD)
- Soft-starter or Y/D starter
- Sound enclosure for outdoor mounting
- External condenser
- Control panel mounted separately
- Economiser option for low-temperature brine
- Factory acceptance test (FAT), customer-witnessed
- Heater package for low-temperature operation
- Shunt solution for high-temperature difference.

Water: inlet 12°C, outlet 7°C

Type	Cooling capacity kW	E-motor kW	R717 charge kg	Dry weight kg	Unit dimensions in mm			Sound level dB(A)	COP shaft cooling
					L	W	H		
ComPAC 120 S-A	185	55	21	3600	4600	1200	2300	85	4.4
ComPAC 120 M-A	316	78	26	3800	4700	1200	2300	86	4.8
ComPAC 120 L-A	400	93	29	4000	4800	1200	2300	87	4.9
ComPAC 120 E-A	541	140	36	5200	5000	1200	2300	89	4.9
ComPAC 151 S-A	614	140	38	5500	5000	1200	2300	91	5.0
ComPAC 151 M-A	735	175	44	5800	5100	1200	2300	92	5.0
ComPAC 151 L-A	929	217	51	5900	5300	1200	2300	92	5.1
ComPAC 151 E-A	1111	269	59	6300	5600	1200	2300	93	5.0
ComPAC 193 S-A	1063	269	57	7100	5600	1500	2400	85	5.2
ComPAC 193 L-A	1447	327	159	7400	6100	1500	2400	85	5.4
ComPAC 233 S-A	1933	410	238	13000	7000	1500	2400	86	5.5
ComPAC 233 L-A	2314	536	297	15000	7100	1500	2400	86	5.2

Ethylene glycol 30%: inlet -2°C, outlet -8°C

Type	Cooling capacity kW	E-motor kW	R717 charge kg	Dry weight kg	Unit dimensions in mm			Sound level dB(A)	COP shaft cooling
					L	W	H		
ComPAC 120 S-C	108	55	21	3600	4500	1200	2300	85	2.7
ComPAC 120 M-C	177	78	26	3800	4600	1200	2300	86	2.9
ComPAC 120 L-C	224	93	29	4000	4700	1200	2300	87	2.9
ComPAC 120 E-C	297	114	36	5200	4900	1200	2300	89	2.9
ComPAC 151 S-C	344	140	38	5500	4900	1200	2300	91	3.1
ComPAC 151 M-C	408	175	44	5800	5000	1200	2300	92	3.1
ComPAC 151 L-C	515	217	51	5900	5200	1200	2300	92	3.1
ComPAC 151 E-C	617	269	59	6300	5500	1200	2300	93	3.1
ComPAC 193 S-C	594	217	57	7100	5500	1500	2400	85	3.2
ComPAC 193 L-C	795	327	71	7400	6000	1500	2400	85	3.2
ComPAC 233 S-C	1052	410	75	13000	6900	1500	2400	86	3.4
ComPAC 233 L-C	1361	536	225	15000	7000	1500	2400	86	3.4

Condenser: Water inlet 30°C, outlet 35°C.

All data and nominal capacities kW at 3600 rpm, except for:
ComPAC 120 S at 1470 rpm.Sound pressure levels measured in free field, over reflecting
plane and one metre distance from the unit.

Available with high-pressure compressors as HeatPAC.

Our products within the scope of eco-design, implemented according to regulation No 2015/1095 for low (-25°C) and medium (-8°C) temperatures and No 2016/2281 for high temperatures (+7°C), are in compliance. The harmonised standards EN 14511 series and EN 14825 have been used for testing and calculation. Value tolerances for selection tools comply with EN 12900.