

SABROE ComPAC™ chillers

Packaged ammonia chillers based on screw compressors, with a 200–2200 kW capacity range

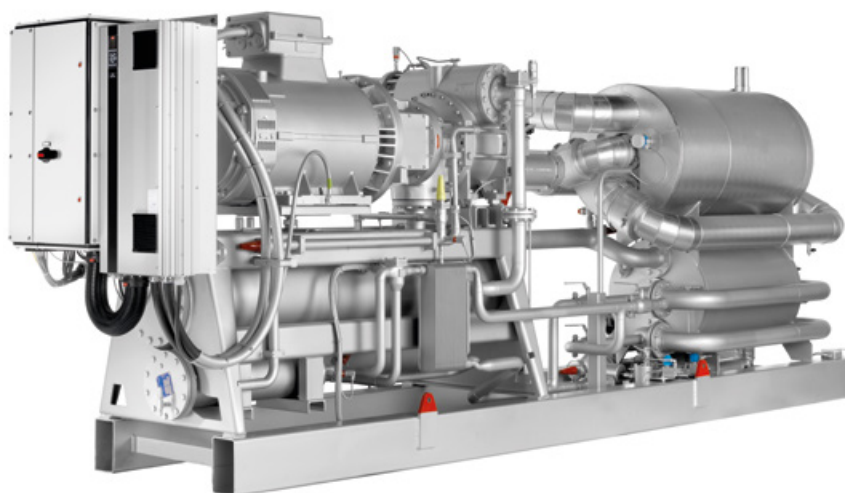
SABROE ComPAC ammonia chillers based on plate-and-shell heat exchangers and the comprehensive SABROE screw compressor programme (SAB 120-151 to SAB 193-233 and SABflex) are distinctive for their compactness. Frequency converter and panel solutions are supplied as standard.

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

Advantages

Factory-assembled, pre-tested packaged units based on renowned SABROE screw compressors

Compact design with a very small footprint compared with bespoke chiller designs

Indirect cooling and uncomplicated flooded evaporating system, using natural ammonia (R717) only

Exceptional COP and outstanding part-load performance

Small refrigerant charge, smaller than conventional chiller charges due to the special condenser/evaporator design

Benefits

Easy pre-commissioning makes installation and running-in both faster and cheaper. Factory acceptance tests (FAT) available (as an option)

Lower unit cost and lower installation costs

Major savings on both weight and space. Much less need for expensive separate machinery rooms

Greater safety and outstanding reliability

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 outdoors mounting
- External condenser
- Control panel mounted separately
- Economiser option for low-temperature brine
- Factory acceptance tests (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)	SEPR
					L	W	H		
ComPAC 120 S-A	195	55	21	3600	5500	1200	2200	85	6.75
ComPAC 120 M-A	317	78	26	3800	5500	1200	2200	86	7.30
ComPAC 120 L-A	402	97	29	4000	5500	1200	2200	87	7.63 **
ComPAC 120 E-A	541	142	36	4200	5500	1200	2200	89	7.70
ComPAC 151 S-A	616	142	38	5500	5500	1200	2200	91	8.44
ComPAC 151 M-A	740	172	44	5800	5500	1200	2200	92	8.38
ComPAC 151 L-A	933	217	51	5900	5500	1200	2200	92	8.48
ComPAC Flex-A	986	260	54	5700	5500	1200	2200	89	7.93
ComPAC 151 E-A	1120	279	59	6300	5500	1200	2200	93	8.43
ComPAC 193 S-A	1072	222	57	7100	6500	1500	2200	85	8.96
ComPAC 193 L-A	1431	315	71	7400	6500	1500	2200	85	8.89 **
ComPAC 233 S-A	1856	399	75	12000	7000	1500	2500	86	9.12
ComPAC 233 L-A	2280	536	78	13000	7000	1500	2500	86	8.88

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)	SEPR
					L	W	H		
ComPAC 120 S-C	109	45	21	3653	5500	1200	2200	85	3.95
ComPAC 120 M-C	177	78	24	3818	5500	1200	2200	86	4.28
ComPAC 120 L-C	225	93	27	3997	5500	1200	2200	87	4.42
ComPAC 120 E-C	299	114	31	4428	5500	1200	2200	89	4.48 **
ComPAC 151 S-C	345	140	34	5304	5500	1200	2200	91	4.68
ComPAC 151 M-C	411	175	37	5584	5500	1200	2200	92	4.68
ComPAC 151 L-C	519	217	44	5833	5500	1200	2200	92	4.74
ComPAC Flex-C	544	213	47	5667	5500	1200	2200	89	4.77
ComPAC 151 E-C	624	269	51	5824	5500	1200	2200	93	4.82
ComPAC 193 S-C	599	217	48	6836	6500	1500	2200	85	4.94
ComPAC 193 L-C	809	279	64	7165	6500	1500	2200	85	4.92
ComPAC 233 S-C	1046	410	67	11100	7000	1500	2500	86	5.00
ComPAC 233 L-C	1275	444	78	11900	7000	1500	2500	86	5.09

Condenser: Water inlet 30°C, outlet 35°C.
 All data and nominal capacities kW at 3600 rpm
 SABflex at 6000 rpm
 ComPAC 120S at 1470 rpm
 ** Unit used for letter of compliance for ECO-design

Sound pressure levels in free field, over reflecting plane and one metre distance from the unit.
 SEPR = Seasonal Energy Performance Ratio
 Available with high-pressure compressors as HeatPAC.

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.

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All information is subject to change without notice

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