

SABROE SABlight® air-cooled chillers

Compact air-cooled chillers for outdoor installation, based on a screw compressor, with a 174–430 kW capacity range

The SABlight air-cooled chiller is a particularly compact design that uses V-coil condensers to substantially reduce the overall footprint. The screw compressor and fully brazed plate heat exchanger are mounted underneath the V-coils, resulting in a height of 2.9 m and a width of only 1.3 m.

SABlight units provide a cost-effective alternative to traditional air conditioning, chilled rooms and industrial/process refrigeration. They are designed for quiet running and outdoor operation, and a special ultra-low-noise version is available.

SABlight uses a small propane refrigerant charge, providing an attractive, economical and environmentally responsible alternative to air-cooled chillers that use HFCs as refrigerant.

Range

There are 5 standard models in this range of air-cooled chillers, with capacities ranging from 165 kW to 404 kW.



SABlight air-cooled chiller

Advantages	Benefits
Compact design with small footprint	Easy to mount outdoors – no special machinery room required
Quiet while running Available in both low and ultra-low noise versions	Can be placed close to occupied buildings
Variable-speed drive fitted to both compressor and fans, providing very high coefficient of performance (COP), even under part-load conditions	Low power consumption, which means low operating costs
Designed for maximum safety, with very small natural refrigerant charge (propane R290)	No expenditure on special safety precautions
Easy to mount, install and connect up	Low installation costs and rapid commissioning
Straightforward, uncomplicated construction	Low maintenance costs



Standard equipment

- Control and monitoring system
- Variable-speed drive
- Hot-dip galvanised base frame
- Screw compressor
- Precharged with refrigerant.

Options

- External communication via network and industrial-standard bus systems
- Evaporator heating elements for frost-proofing
- Epoxy coating of condenser surface
- Oil cooler
- Models operating with inlet temperatures down to -10°C available on request
- Desuperheater
- Condenser with air fresh-water spray system
- AxiTop diffuser on condenser fans for additional noise reduction.

Compliance

All SABlight air-cooled chillers are fully compliant with PED (CE marked and PED approved).

Approval in accordance with other classification societies is available on request.



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Technical data											SEPR
Capacities are nominal and based on water temperature 12/7°C, ambient temperature 35°C.											
Type	Cooling capacity kW	Power consumption kW	COP ESEER	R290 charge kg	Dry weight kg	Unit dimensions in mm			Nominal load current A	Sound level dB(A)	SEPR
						L	W	H			
SABlight A140-1	168	57	4.7	24	2300	5260	1250	2835	110	55	5.16
SABlight A140-2	165	54	4.6	24	2300	5260	1250	2835	115	45	5.58
SABlight A200-1	221	75	4.8	24	2500	5260	1250	2835	155	55	5.32
SABlight A200-2	219	73	4.6	32	3000	6660	1250	2835	160	45	5.55
SABlight A260-1	276	91	4.6	32	3000	6660	1250	2835	190	55	5.32
SABlight A260-2	273	90	4.6	40	3300	8060	1250	2835	190	45	5.52
SABlight A340-1	337	108	4.7	40	3700	8060	1250	2835	215	55	5.33
SABlight A340-2	327	107	4.6	48	4200	9460	1250	2915	220	45	5.60
SABlight A400-1	404	123	4.8	48	4400	9460	1250	2915	250	55	5.60 **
SABlight A400-2	391	130	4.6	56	4800	10860	1250	2915	250	45	5.49

** Unit used for letter of compliance for ECO-design.

Sound pressure levels in free field. All sound measuring has been carried out according to ISO 9614-2 at a distance of 10 m.

ESEER = European Seasonal Energy Efficiency Ratio (Eurovent Institute, Europe).

SEPR = Seasonal Energy Performance Ratio Fans and VSD are included in the power consumption.

All information is subject to change without notice.

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