

**Water chiller**  
Air cooled  
Outdoor installation  
**Capacity from 436 to 1439 kW**

## SCREWLine<sup>2</sup>

HYDRONIC

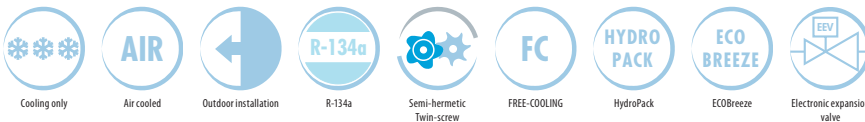


WDAT-SL2 is a liquid chiller fitted with screw compressors with R-134a refrigerant.

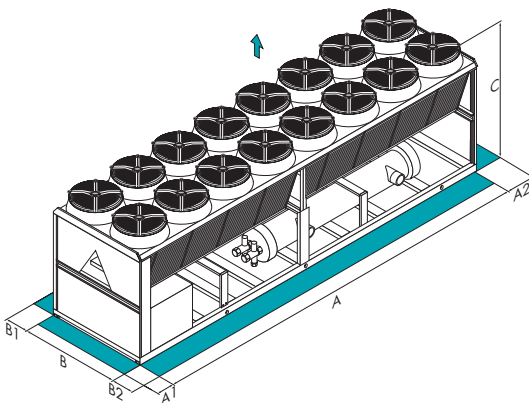
- ▶ The **EXCELLENCE ST/SC** version stands out for its extremely high efficiency levels both with operation at partial and full loads, which makes it a class A unit based on Eurovent's efficiency rating and allows for considerable savings on running costs while preserving the environment. This is possible thanks to the economizer circuit on the compressors, the electronic expansion valves, the tube bundle evaporator and the electronic control fans supplied as standard.
- ▶ Moreover, the **ongoing capacity adjustment** allows for a quick adjustment of the system's load and therefore an accurate control of the chilled water temperature with a wide operating range.

Therefore WDAT-SL2 is the ideal solution for all civil and industrial applications that require high performance levels, operating continuity and lower running and maintenance costs.

### functions and features



### dimensions and clearances



Size – WDAT-SL2		2.160	2.180	2.190	2.200	2.240	2.280	2.300	2.320	2.340	2.360	2.440	2.480	2.540	2.600
ST-EXC A - Length	mm	5704	5704	5704	5704	6654	6654	6654	6654	7612	7612	9512	9512	11414	11414
ST-EXC B - Width	mm	2239	2239	2239	2239	2239	2239	2239	2239	2239	2239	2239	2239	2239	2239
ST-EXC C - Height	mm	2288	2288	2288	2288	2440	2440	2440	2440	2440	2440	2440	2440	2440	2440
ST-EXC A1	mm	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690
ST-EXC A2	mm	700	700	700	700	700	700	700	700	700	700	700	700	700	700
ST-EXC B1	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
ST-EXC B2	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
SC-EXC A - Length	mm	5704	5704	5704	5704	6654	6654	6654	6654	7612	7612	9512	9512	11414	11414
SC-EXC B - Width	mm	2239	2239	2239	2239	2239	2239	2239	2239	2239	2239	2239	2239	2239	2239
SC-EXC C - Height	mm	2288	2288	2288	2288	2440	2440	2440	2440	2440	2440	2440	2440	2440	2440
SC-EXC A1	mm	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690
SC-EXC A2	mm	700	700	700	700	700	700	700	700	700	700	700	700	700	700
SC-EXC B1	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
SC-EXC B2	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100

The above mentioned data are referred to standard units for the constructive configurations indicated. For all the other configurations, refer to the relative Technical Bulletin.

ST-EXC Standard (ST)-Excellence  
SC-EXC Compressors soundproofing (SC)-Excellence

CAUTION! For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.

## versions and configurations

### LOW TEMPERATURE:

- ▶ - Low temperature: not required (Standard)
- ▶ **B** Water low temperature

### VERSION:

- ▶ **EXC** Excellence (Standard)

### ENERGY RECOVERY:

- ▶ - Energy recovery: not required (Standard)
- ▶ **D** Partial energy recovery
- ▶ **R** Total energy recovery

### FREE-COOLING:

- ▶ - FREE-COOLING: not required (Standard)
- ▶ **FCD** Direct FREE-COOLING

### ACOUSTIC CONFIGURATION:

- ▶ **ST** Standard acoustic configuration (Standard)
- ▶ **SC** Acoustic configuration with compressor soundproofing
- ▶ **LN** Low noise acoustic configuration
- ▶ **EN** Extremely low noise acoustic configuration

## technical data

Size – WDAT-SL2		2.160	2.180	2.190	2.200	2.240	2.280	2.300	2.320	2.340	2.360	2.440	2.480	2.540	2.600	
ST/SC-EXC	▶ Cooling capacity (EN14511:2011) (1)	kW	436	466	522	566	645	733	793	847	907	951	1063	1186	1323	1439
ST/SC-EXC	Total power input (EN14511:2011) (1)	kW	141	150	168	182	205	235	255	273	292	305	339	381	424	464
ST/SC-EXC	EER (EN 14511:2011) (1)	-	3,10	3,10	3,10	3,10	3,15	3,12	3,11	3,10	3,11	3,12	3,13	3,11	3,12	3,10
ST/SC-EXC	Refrigerant circuits	Nr	2	2	2	2	2	2	2	2	2	2	2	2	2	2
ST/SC-EXC	No. of compressors	Nr	2	2	2	2	2	2	2	2	2	2	2	2	2	2
ST/SC-EXC	Type of compressors	-	DSW	DSW	DSW	DSW	DSW	DSW	DSW	DSW	DSW	DSW	DSW	DSW	DSW	DSW
ST/SC-EXC	Standard power supply	V	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50
ST-EXC	Sound pressure level (2)	dB(A)	77	77	78	78	78	79	79	80	80	80	81	81	82	82
SC-EXC	Sound pressure level (2)	dB(A)	74	74	74	74	75	76	76	76	77	77	78	78	79	79

### Notes

- (1) Data calculated in compliance with Standard EN 14511:2011 referred to the following conditions: Internal exchanger water = 12/7°C; External exchanger air return 35°C
- (2) The sound levels refer to the unit at full load, in the rated test conditions. The sound pressure level refers to a distance of 1m from the external surface of the units operating in an open field. Measures according to UNI EN ISO 9614-2 regulations, with

respect to the EUROVENT 8/1 certification. Data referred to the following conditions: Internal exchanger water = 12/7°C; Ambient temperature = 35 °C;

ST Standard (ST)-Excellence

SC-EXC Compressors insulation (SC)-Excellence

## accessories

- ▶ **CREFP** Device for consumption reduction of the external section at variable speed (phase-cutting)
- ▶ **2PM** Hydropack with 2 pumps
- ▶ **3PM** Hydropack with 3 pumps
- ▶ **CCCA** Copper / aluminium condenser coil with acrylic lining
- ▶ **CCCA1** Copper / aluminium condenser coil with Energy Guard DCC Aluminium
- ▶ **AMMX** Spring antivibration mounts
- ▶ **PGCC** Condenser coil and compressor compartment protection grill
- ▶ **MF2** Multi-function phase monitor
- ▶ **CONTA2** Energy meter
- ▶ **RCMRX** Remote control via microprocessor control
- ▶ **PSX** Mains power supply
- ▶ **CMSC9** Serial communication module to MODBUS supervisor
- ▶ **CMSC10** Serial communication module to LonWorks supervisor
- ▶ **CMSC11** Serial communication module for BACnet-IP supervisor
- ▶ **SCP4** Compensation of set point with signal 0-10 V
- ▶ **SPC2** Set point compensation with outside temperature probe
- ▶ **ECS** ECOSHARE function for the automatic management of a group of units
- ▶ **PFPC** Power factor correction capacitors (cosφ > 0.9)

- ▶ **CBS** Overload circuit breakers
- ▶ **SFSTR2** Device for compressor gradual start-up
- ▶ **RE-20** Electrical panel antifreeze protection for min. outdoor temperature down to -20°C
- ▶ **RE-25** Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
- ▶ **RE-30** Electrical panel antifreeze protection for min. outdoor temperature down to -30°C
- ▶ **RE-35** Electrical panel antifreeze protection for min. outdoor temperature down to -35°C
- ▶ **RE-39** Electrical panel antifreeze protection for min. outdoor temperature down to -39°C
- ▶ **FANQE** Electrical panel ventilation
- ▶ **AEG1** Antifreeze protection with 10% ethylene glycol
- ▶ **AEG2** Antifreeze protection with 20% ethylene glycol
- ▶ **AEG3** Antifreeze protection with 30% ethylene glycol
- ▶ **AEG4** Antifreeze protection with 40% ethylene glycol
- ▶ **AEG5** Antifreeze protection with 50% ethylene glycol
- ▶ **DSP** Double set point

### Key to symbols and notes

- Accessories supplied separately.

For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.