GROUND EVO

Water-cooled liquid chiller for indoor installation
Capacity from 43 to 374 kW



Cooling only | Heating only | Water circuit change-over | Water cooled | Indoor installation | R-32 | Ermetic Scroll | Electronic expansion valve | INTELLIPLANT | ErP compliant

- ✓R32 refrigerant (GWP = 675)
- ✓High seasonal efficiency: optimised performance for air conditioning applications, with a SEER of up to 7.66 (size 65.2) in accordance with EN 14825:2022, ensuring optimised management of cooling energy consumption.
- ✓Refrigerant circuit architecture: single-circuit configuration with 2 compressors, dual-circuit configuration with 4 compressors
- ✓Simplified installation: compact dimensions, facilitating integration into technical rooms with limited space.
- ✓Application flexibility: compatibility with various heat sources, including groundwater, geothermal systems, and dry coolers, to meet the requirements of different system configurations.
- ✓Operating versatility: capability to configure the unit in cooling only (OCO), heating only (OHO), and water circuit change-over (OHI) modes, with leaving water temperatures up to 60°C on the hot side and down to -8°C on the cold side.
- ✓System modularity: capability to manage up to 7 units in a cascade configuration via integrated control logic, adapting the installed capacity to the system's requirements

Versions and configurations

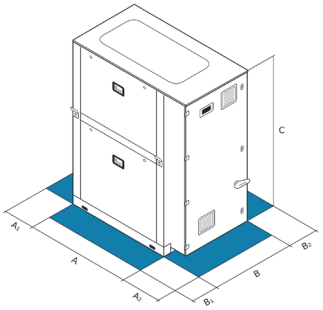
OPERATION

OCO	Cooling-only operation (Standard)
OHO	Heating-only operation
OHI	Operation with water circuit change-over

Dimensions and connections

Size	WSH-YEE	16,2	19,2	22,2	24,2	28,2	35,2	38,2	42,2	55,2	65,2	75,4	85,4	100,4	110,4	120,4	130,4
A - Length	mm	1528	1528	1528	1528	1528	1528	1528	1528	1528	1528	2536	2536	2536	2536	2536	2536
B - Width	mm	804	804	804	804	804	804	804	804	804	804	886	886	886	886	886	886
C - Height	mm	1851	1851	1851	1851	1851	1851	1851	1851	1851	1851	1851	1851	1851	1851	1851	1851
A1	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
A2	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
B1	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
B2	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

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.



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

Technical data

Size		WSH-YEE	16,2	19,2	22,2	24,2	28,2	35,2	38,2	42,2	55,2	65,2	75,4	85,4	100,4	110,4	120,4	130,4
Cooling capacity (EN 14511:2022)	(1)	kW	43,4	52,4	61,5	69,0	84,9	96,7	110	125	155	192	221	246	283	307	350	374
Total power input (EN 14511:2022)	(1)	kW	10,3	12,1	13,6	15,4	18,6	21,2	24,7	27,7	33,7	41,0	49,4	55,0	63,0	68,9	74,5	82,9
EER (EN 14511:2022)	(1)	-	4,21	4,32	4,51	4,47	4,56	4,55	4,44	4,50	4,61	4,69	4,48	4,47	4,49	4,46	4,69	4,52
SEER	(4)	-	6,51	6,79	7,19	6,95	7,15	7,32	6,73	6,91	7,00	7,66	7,14	7,13	7,56	7,38	7,55	7,63
$\eta_{s,c}$	(4)	%	257,3	268,4	284,5	275,0	282,8	289,7	266,2	273,4	277,2	303,5	282,7	282,1	299,4	292,1	299,1	302,1
Heating capacity (EN 14511:2022)	(2)	kW	49,1	58,9	68,3	76,6	94,1	107	123	138	171	212	246	274	314	341	405	444
Total power input (EN 14511:2022)	(2)	kW	13,3	15,6	17,5	19,7	23,8	26,8	31,4	35,0	42,2	51,4	62,4	69,7	79,3	86,6	95,2	104
COP (EN 14511:2022)	(2)	-	3,69	3,78	3,90	3,89	3,96	3,99	3,92	3,95	4,06	4,12	3,94	3,94	3,96	3,94	4,25	4,28
Refrigeration circuits		Nr	1													2		
No. of compressors		Nr	2													4		
Type of compressors		-	SCROLL															
Refrigerant		-	R-32															
Standard power supply		V	400V / 3~ / 50Hz															
Sound power level	(3)	dB(A)	64	67	67	69	71	75	75	74	75	80	78	77	79	78	81	83

(1) Data calculated according to EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; External exchanger water temperature = 30/35°C
(2) Data calculated according to EN 14511:2022 referred to the following conditions Water to internal exchanger = 40/45°C; Water temperature to external exchanger = 10/7°C
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
Sound power level are not Eurovent certified.

(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

HYGC1V	Cold side hydronic assembly with 1 inverter pump
1P1SBC	Cold side hydronic assembly with 1+1 inverter pump
HYGC1	Cold side hydronic assembly with 1 on/off pump
1P1SBCO	Cold side hydronic assembly with 1+1 on/off pump
HYGH1V	Hot side hydronic assembly with 1 inverter pump
1P1SBH	Hot side hydronic assembly with 1+ inverter pump
HYGH1	Hot side hydronic assembly with 1 on/off pump
1P1SBHO	Hot side hydronic assembly with 1+1 on/off pump
MOBMAG	Oversized cabinet
QRCD	Residual Current Device
SFSTR	Disposal for inrush current reduction
CONTA3	M-bus total electricity meter
CONTA4	Total electricity meters and m-bus pump group
CMSC11	Serial communication module for BACnet/IP supervisor
CMSC12	Serial communication module for BACnet MS/TP supervisor
CMSC15	Modbus TCP-IP
CMSC9	Serial communication module for Modbus supervisor
PFCP	Power factor correction capacitors (cosfi > 0.9)
IOTI	IoT industrial module for cloud based interoperability & services
IFWX	Steel mesh strainer on the water side
VACSX	DHW switching valve
AMRX	Anti-vibration mount support
RCMRX	Remote control via microprocessor control
METX	Thermal energy meter supplied separately
SPCX	Set-point compensation with outdoor air temperature probe
VS2MCX	Cold side 2-way modulating valve
VS2MHX	Hot side 2-way modulating valve
VS3MCX	Cold side 3-way modulating valve
VS3MHX	Hot side 3-way modulating valve

Accessories whose code ends with "X" are supplied separately

REF. SP26M027GB-00

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