LARGE EVO FC

Liquid chiller with FREE-COOLING

Air cooled

Outdoor installation

Capacity from 115 to 233 kW







- ✓ Full inverter technology with scroll or rotary compressors
- ✓ Solution for cold climates, versatile applications with modular concept
- ✓ Refrigerant R32 GWP = 675
- √ Operation down to -25°C outdoor air temperature, low water temperature down to -8°C
- ✓ Direct Free cooling active at air temperatures above 0°C
- ✓ Two acoustic levels: standard and super-silenced
- ✓ Modular operation management, up to 8 units in cascade
- ✓ Integrated hydronic assembly and system tank

functions and features









installation







rotary





inverter



FREE-COOLING



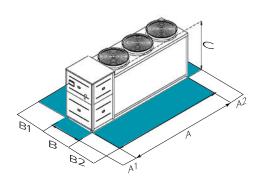


valve





dimensions and clearances



Size	▶ ►WiSAT-YEE1 FC	45.4	50.4	55.4	60.4	65.4	70.4	75.4	80.4	85.4	90.4
A - Length	mm	3310	3310	3310	4300	4300	4300	4300	4300	4300	4300
B - Width	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
C - Height	mm	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
A1	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
A2	mm	800	800	800	800	800	800	800	800	800	800
B1	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
B2	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
Operating we	eight kg	1337	1337	1337	1826	1826	1826	1886	1886	1886	1886

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.

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



versions and configurations

TYPE OF FANS:

VENDC DC high efficiency fan (Standard)

FREE-COOLING:

FCD Direct FREE-COOLING

ACOUSTIC CONFIGURATION:

SC Acoustic configuration with compressor soundproofing (Standard)

ΕN Super-silenced acoustic configuration

ENERGY RECOVERY:

Energy recovery: not required (Standard)

D Partial energy recovery

technical data

Size	▶▶ WiSAT-YEE	1 FC	45.4	50.4	55.4	60.4	65.4	70.4	75.4	80.4	85.4	90.4	
Free-Cooling Off													
Cooling capacity	(1)	kW	112	124	139	151	165	183	198	210	227	244	
Total power input	(1)	kW	30,5	34,4	39,8	38,4	43,0	51,4	51,4	56,4	63,5	72,2	
EER at full load	(1)	-	3,67	3,59	3,49	3,93	3,84	3,56	3,85	3,73	3,58	3,38	
SEER	(4)	-	4,72	4,71	4,71	4,94	4,93	4,88	4,93	4,91	4,83	4,81	
η _{s,c}	(4)	%	186	185	185	195	194	192	194	193	190	189	
Direct Free-cooling on													
Cooling capacity - EXC / PRM	(2)	kW	112	124	139	151	165	183	198	210	227	244	
ZET - EXC		°C	1,2	0,4	-0,6	2,1	1,4	0,5	-0,2	-0,8	-1,7	-2,5	
ZET - PRM		°C	0,6	-0,2	-1,4	1,1	0,2	-0,9	-1,8	-2,6	-3,5	-4,7	
Refrigeration circuits		Nr						2					
No. of compressors		Nr					4						
Type of compressors		-	ROTARY INVERTER				SCROLL INVERTER						
Refrigerant		-					R-	32					
Standard airflow		I/s	14500	14500	14500	21750	21750	21750	21750	21750	21750	21750	
Standard power supply		V	400/3∼/50										
Sound pressure level (SC)	(3)	dB(A)	84	84	84	87	87	88	89	89	89	89	
Sound pressure level (EN)	(3)	dB(A)	78	78	78	81	81	82	84	84	84	84	

⁽¹⁾ Data referred to the following conditions: internal exchanger water = 16/10°C; glycol 30%; entering external exchanger air temperature 30°C

(4) Data calculated according to the EN 14825:2018 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

1PM

1PMV	Hydropack user side with nr.1 inverter pump
1PMH	Hydropack with nr.1 high static pressure pump
1PMVH	Hydropack user side with nr.1 high static pressure inverter pump
1P1SB	Hydropack user side with 1+1 on-off pump
1PAP+S	1 high head pump + 1 stand-by pump
1P1SBV	Hydropack on user side with one inverter pump and one stand-by pump
	with dedicated inverter
1PAPSV	Hydropack on user side with one high head inverter pump and one stand-
	by pump with dedicated inverter
ACC	Storage tank
IFWX	Steel mesh strainer on the water side

Serial communication module for Modbus TCP/IP, BACnet IP, BACnet CMSC13 MSTP superviso REMAU Additional board for advanced function management **RPR** Refrigerant leak detector **AVIBX** Anti-vibration mount support AMMSX Anti-seismic spring antivibration mounts **PGFC** Finned coil protection grill **PGFCX** Finned coil protection grill **PGCCH** Anti-hail protection grilles **PGCCHX** Anti-hail protection grilles IOTX loT industrial module for cloud based interoperability & services **CCME**

Microchannel coil

Accessories whose code ends with "X" are supplied separately

Hydropack with 1 pump

⁽²⁾ Free-Cooling only data (compressors OFF) referred to the following conditions: internal exchanger water temperature = $16/10^{\circ}$ C; entering external exchanger air temperature = ZET; glycol 30% (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.