

Galletti company presentation



Galletti history

1906

Galletti **was founded** in Castelmaggiore (Bologna) by Ugo Galletti, Grandfather of the current owners Luca and Michele

1960

During this period, Galletti begins selling directly into the market with it's own brand, starting with **thermoconvectors** with finned pack heat exchangers and unit heaters for industrial heating applications

1970

During the 1970's Galletti starts the production of the famous **Polar Warm fan coil unit**, the first step into the air conditioning sector

1986

Begins 15 years collaboration with famous Japanese brand into the **residential air conditioning market** that focuses the company's attention and future in the air conditioning sector

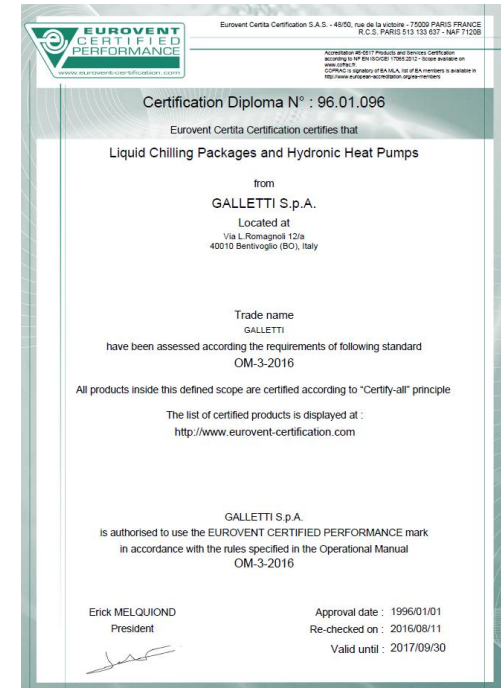
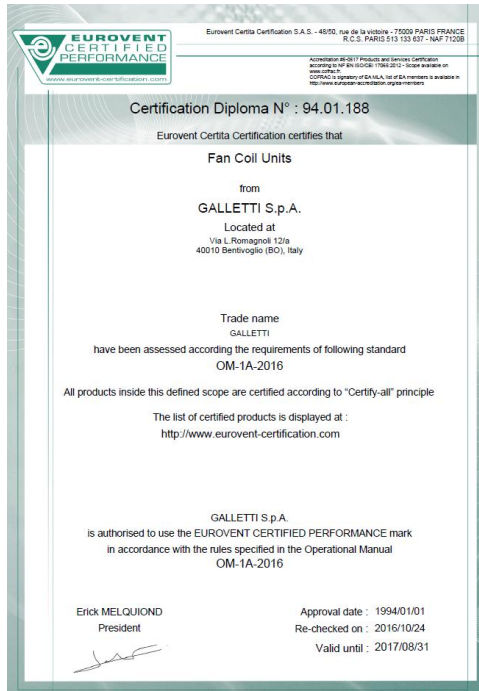
Galletti Family has over 100 years history



50 years history in the heating and air conditioning business

Galletti history

1994 One of the first companies to enter the **EUROVENT** certification Program



EUROVENT importance

With EUROVENT you must declare the **REAL capacities**... but sometimes companies forget to update catalogues!! – See GREE

BA & ZD SZÉRIA
KAZETTÁS ÉS LÉGCSATORNÁS

CATALOG

10 % difference !

- belső menetes réz hőcserélő cseppvizszivattyú
- beépített széles légtérrelés
- mosható szűrő
- csendes kialakítás
- 3 ventilátor-rokrozat
- kompakt design
- ön diagnosztika



Range : Concealed ceiling type
Diploma Nr. : 11.12.001
Mounting Base : Ceiling Suspended
MPS : 230-1-50

EUROVENT

	HŰTŐ TELJ.	FŰTŐ TELJ.	VÍZ-ÁRAM	ZAJ-SZINT
	kW	kW	l/s	(v)db
2 CSÖVES KIVITEL				
FP-51WAH-K	2,8	4,4	0,14	40
FP-85WAH-K	4,5	7,0	0,21	44
FP-136WAH-K	7,4	11,0	0,60	47

Model	Low speed (-)					Medium speed (-)					High speed (-)					Gener					
	Pc kW	Ps kW	Ph kW	Qv m	Lw dBA	Pec W	Pc kW	Ps kW	Ph kW	Qv m	Lw dBA	Pec W	Pc kW	Ps kW	Ph kW	Qv m	Lw dBA	Pec W	FCEER Class	FCCOP Class	FCEER
FP-34WA-K	0,79	0,60	0,83	-	46	22	1,22	0,90	1,37	-	50	35	1,56	1,11	1,77	-	53	42	E	E	37
FP-34WAF-R	0,70	0,50	1,02	-	56	46	1,14	0,82	1,86	-	58	51	1,44	1,11	2,29	-	60	54	E	E	19
FP-34WAH-K	0,78	0,59	0,83	-	46	30	1,27	0,91	1,52	-	50	33	1,55	1,10	1,77	-	49	50	E	E	31
FP-34WAS-R	1,00	0,72	1,92	-	51	38	1,56	1,12	2,55	-	56	45	1,95	1,41	2,05	-	60	55	E	E	31
FP-51WA-K	1,35	1,08	1,47	-	35	30	2,01	1,61	2,12	-	44	38	2,61	2,08	2,60	-	48	45	E	E	50
FP-51WAF-R	1,29	0,93	2,11	-	59	60	2,09	1,51	2,42	-	61	67	2,63	1,82	2,66	-	62	71	E	E	27
FP-51WAH-K	1,28	0,96	1,36	-	51	45	2,05	1,53	2,26	-	55	53	2,54	1,81	2,92	-	58	65	E	E	34
FP-51WAS-R	2,00	1,58	2,80	-	53	65	2,83	2,18	3,20	-	56	70	3,34	2,42	3,60	-	62	75	E	E	36
FP-68WA-K	1,65	1,17	1,73	-	51	53	2,44	1,74	2,54	-	55	58	3,03	2,17	3,45	-	58	68	E	E	36
FP-68WAF-R	1,83	1,31	2,34	-	61	83	2,96	2,14	3,22	-	64	93	3,72	2,88	3,81	-	66	100	E	E	27
FP-68WAH-K	1,65	1,17	1,82	-	58	50	2,44	1,74	2,73	-	62	60	3,03	2,16	3,44	-	65	75	E	E	37
FP-68WAS-R	2,07	1,50	2,98	-	56	60	3,21	2,32	3,30	-	61	70	4,02	2,92	4,33	-	64	78	E	E	40
FP-85WA-K	2,04	1,45	2,13	-	55	64	2,93	2,09	3,04	-	59	72	4,02	2,87	4,08	-	62	85	E	E	37
FP-85WAF-R	2,74	1,92	4,60	-	55	70	4,19	2,92	4,59	-	60	80	5,20	3,79	5,96	-	65	100	E	E	45
FP-85WAH-K	2,03	1,44	2,34	-	61	72	2,92	2,08	3,52	-	65	78	4,01	2,86	4,55	-	68	90	E	E	33

2,8 vs. 2,54

4,5 vs. 4,01

EUROVENT importance

GALLETTI is a serious company that delivers what promises!!

SelMac - Selected model details

SELECTION SOFTWARE

Selected model

LCX122CS

LCX122CS

Re-calculate

Selected model		LCX122CS
Cooling capacity	kW	113,2
Cooling capacity [UNI14511]	kW	112,8
Water Flow user side	l/h	19447
Water Pressure drops user side	kPa	34
Compressor power input	kW	37,7
Compressor absorbed current	A	60,42
Total Power input	kW	40,0
Total Power input [UNI14511]	kW	40,5
		69,22
		2,83
		2,79
		3,68

0 % difference !

Range : LCX
Diploma Nr. : 96.01.096

EUROVENT

Model	Acoustics (-)		Air Conditioning (-)					General (-)		
	LwO dB(A)	Lw dis (ducted only) dB(A)	Pc kW	Pec kW	EER	ESEER	Dpc Indoor kPa	Apc Indoor kPa	Class EER	MPS
LCX062CL	77	-	58,2	20,4	2,86	4,02	28,0	-	-	400-3-50
LCX072CL	77	-	66,6	23,0	2,90	4,02	29,0	-	-	400-3-50
LCX082CL	77	-	78,5	26,6	2,95	4,06	31,0	-	-	400-3-50
LCX092CS	83	-	88,6	32,2	2,75	3,61	32,0	-	-	400-3-50
LCX091CS	83	-	88,6	31,3	2,83	3,29	32,0	-	-	400-3-50
LCX092CL	78	-	88,6	31,1	2,85	4,03	32,0	-	-	400-3-50
LCX091CL	78	-	88,6	30,2	2,93	3,61	32,0	-	-	400-3-50
LCX094CL	77	-	90,3	31,5	2,87	3,86	32,0	-	-	400-3-50
LCX102CS	83	-	102	36,2	2,81	3,37	32,0	-	-	400-3-50
LCX101CS	83	-	102	36,2	2,81	3,72	32,0	-	-	400-3-50
LCX101CL	78	-	102	35,2	2,89	3,66	32,0	-	-	400-3-50
LCX102CL	78	-	102	35,2	2,89	4,09	32,0	-	-	400-3-50
LCX104CL	77	-	105	36,0	2,90	3,95	34,0	-	-	400-3-50
LCX122CS	83	-	113	40,6	2,78	3,68	34,0	-	-	400-3-50

CATALOG

LCX...CS	V-ph-Hz	121	122
Power supply			
Cooling capacity (1) (E)	kW	113	113
Power supply (1) (E)	kW	40,5	40,5
EER (1) (E)		2,79	2,78
ESEER (E)		3,36	3,68
Eurovent Efficiency Class		C	C
Water flow (1)	l/h	19449	19447
Water pressure drop (1) (E)	kPa	34	34
Standard pump available pressure head (1)	kPa	115	115
Maximum current absorption	A	119	119
Start up current	A	319	319
Start up current with softstarter kit	A	254	254
nr. of compressors / circuits		2 / 2	2 / 1
Water tank volume	dm³	340	340
Expansion vessel	dm³	12	12
Sound power level (2) (E)	dB(A)	83	83
Operating weight of base unit	kg	1010	1010
Operating weight of unit with pump and full tank	kg	1581	1581

(In 2013 CLINT was deleted from the EUROVENT program – added again only one year later)

Fan coils – 2014 Galletti market share

All capacity ranges	With casing	Without casing	Ducted	Cassette 1 way / 2 ways	Cassette 4 ways	Hi-wall	Total
2 pipes	43,8%	42,1%	28,8%	0,0%	8,6%	28,7%	37,9%
4 pipes	0,0%	0,0%	19,6%	0,0%	7,8%	0,0%	4,1%
Total	35,7%	29,6%	25,0%	0,0%	8,3%	28,7%	29,0%

Fan coils – 2015 Galletti market share

All capacity ranges	With casing	Without casing	Ducted	Cassette 1 way / 2 ways	Cassette 4 ways	Hi-wall	Total
2 pipes	54,0%	52,6%	17,0%	0,0%	13,7%	22,4%	45,8%
4 pipes	0,0%	0,0%	18,7%	0,0%	6,2%	0,0%	4,0%
Total	45,9%	36,8%	17,9%	0,0%	10,4%	22,4%	34,0%

Fan coils – 2016 Galletti market share

All capacity ranges	With casing	Without casing	Ducted	Cassette 1 way / 2 ways	Cassette 4 ways	Hi-wall	Total
2 pipes	52,3%	55,4%	19,4%	0,0%	20,0%	46,5%	44,4%
4 pipes	0,0%	0,0%	24,0%	0,0%	14,2%	0,0%	7,5%
Total	46,9%	42,6%	20,8%	0,0%	18,4%	46,5%	37,7%



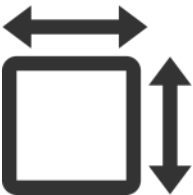
110 Mio € turnover (2016)



461 people



11 plants



42'700 m² productive areas



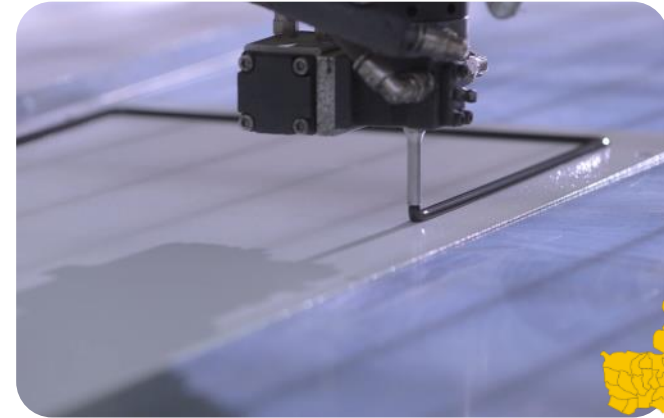
**THE NUMBERS
OF THE GROUP**

SEVEN COMPANIES, A SINGLE PARTNER IN HRVAC

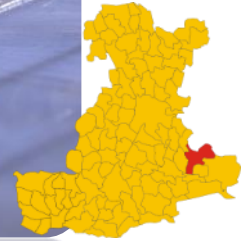


The semifinished product

Bentivoglio (BO)

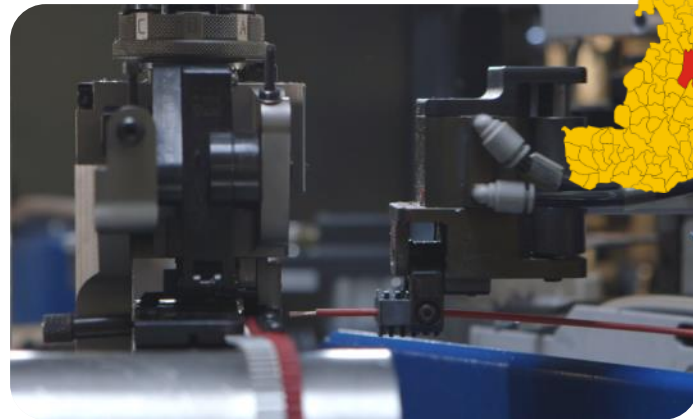


Pieve di Sacco (PD)



METAL SHEET WORKING PLANTS

Bovolone (VR)

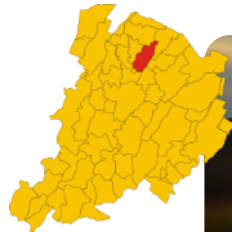


Padova

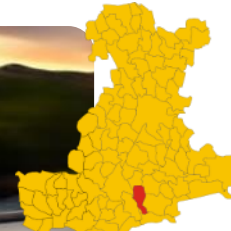


HEAT EXCHANGERS PRODUCTION PLANT

ELECTRIC BOX PRODUCTION PLANT



Bentivoglio (BO)



Tribano (PD)

AFTERSALES COMPANY



Residential application

COMFORT



RESIDENTIAL -
INDEPENDENT
PLANTS



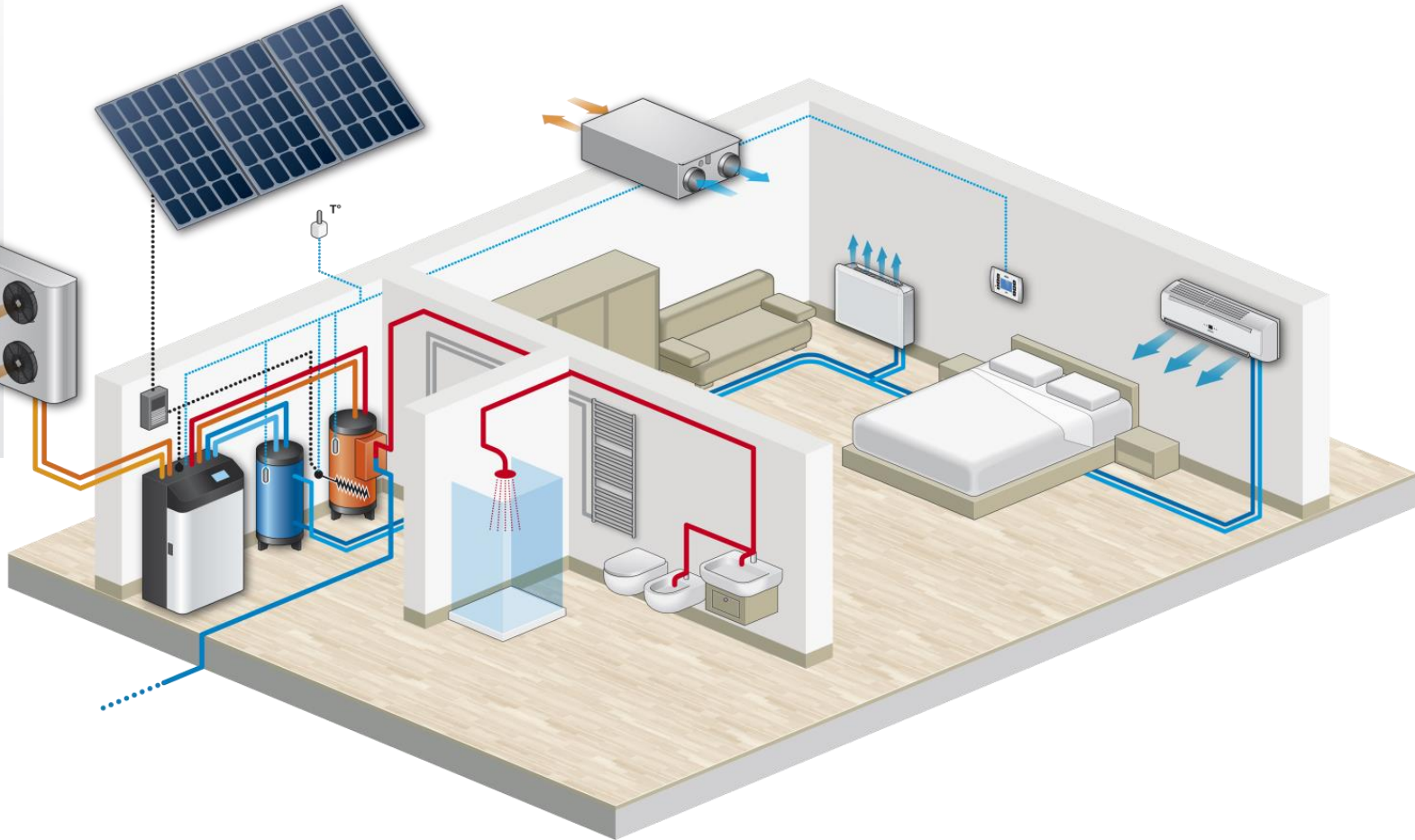
RESIDENTIAL -
CENTRALIZED
PLANTS



TERTIARY



RAILWAY
AND NAVAL



COMFORT



RESIDENTIAL -
INDEPENDENT
PLANTS



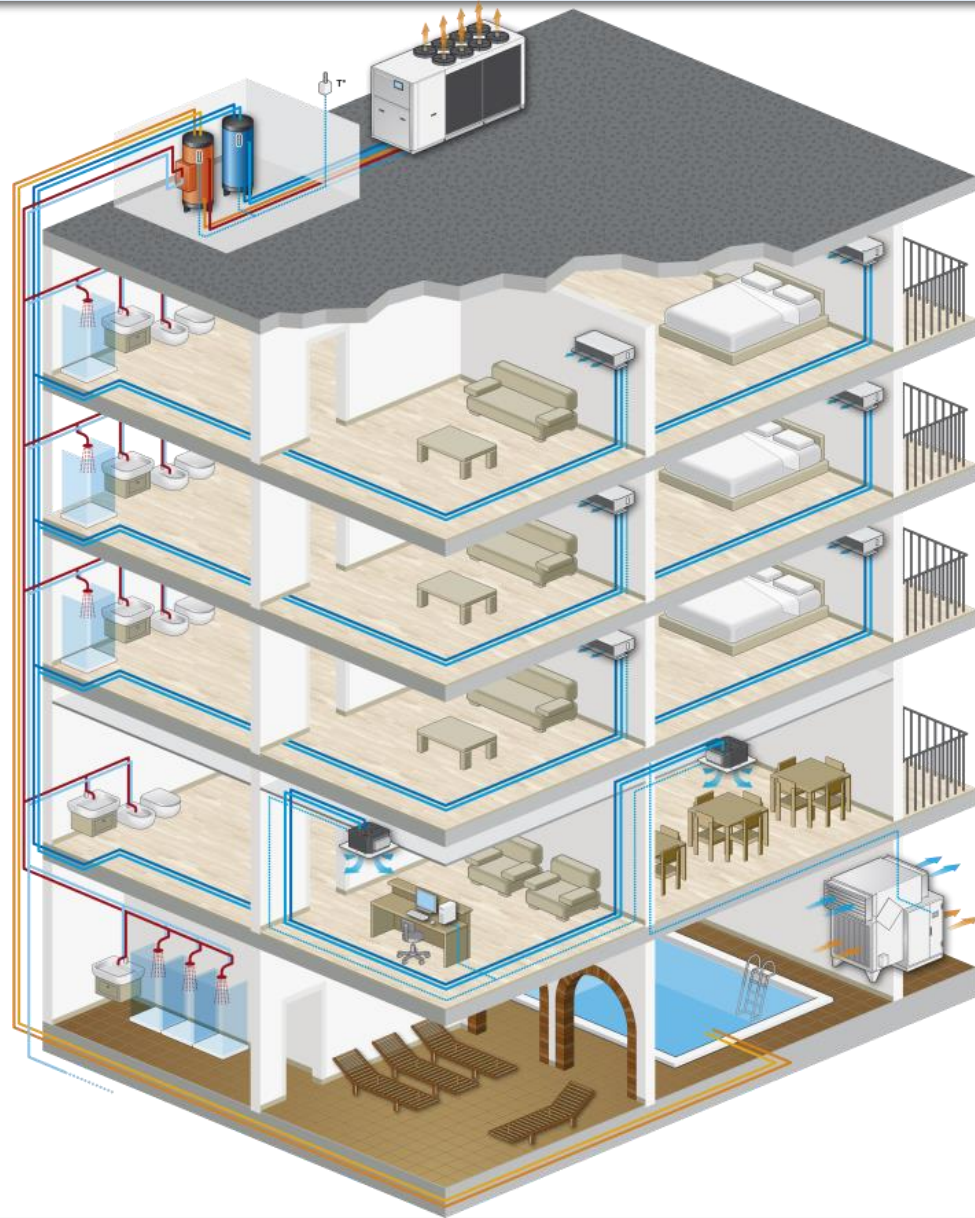
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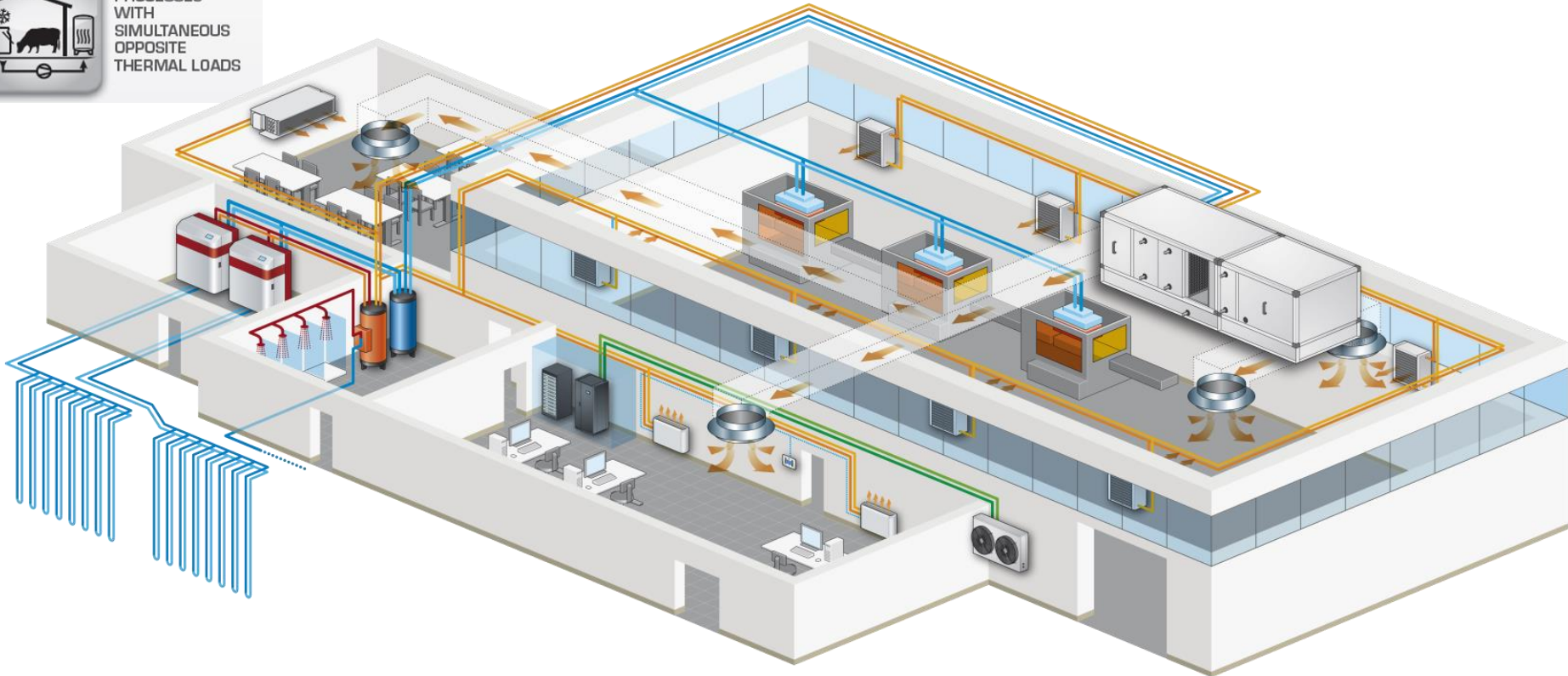
PROCESS



INDUSTRIAL
PROCESS
COOLING



PROCESSES
WITH
SIMULTANEOUS
OPPOSITE
THERMAL LOADS



Shopping Mall

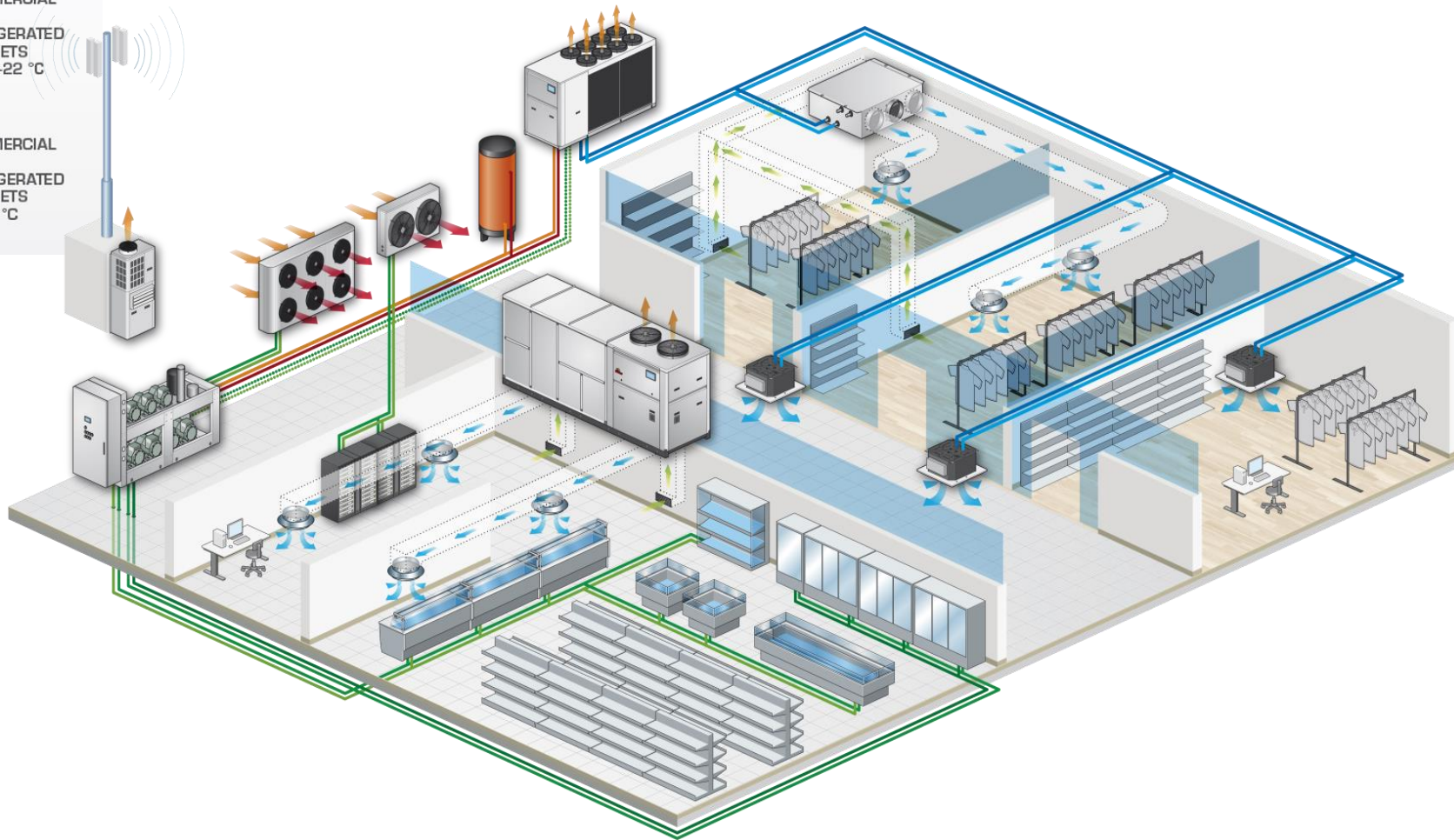
REFRIGERATION



COMMERCIAL FOR REFRIGERATED CABINETS
-18 | -22 °C



COMMERCIAL FOR REFRIGERATED CABINETS
0 | +6 °C



GALLETTI GROUP

MAIN REFERENCES

years 2011-2016

REFERENCES IN HUNGARY

Szeged - MTA - Biological Research Center, 2014-2016 laboratory cooling - heating

3 PCs LCE274CQ chiller 780 kW

360 PCs ESTRO F.U DF 4 pipe fan-coil



REFERENCES IN HUNGARY

Szolnok – T-Plasztik production plant

2016

3 PCs GALLETTI SCX 142 CS chiller

420 kW



REFERENCES IN HUNGARY

Tiszaalpár – MATIC production plant

2015

2 PCs GALLETTI SCX 324CS chiller

632 kW



REFERENCES IN HUNGARY

Budapest – HungaroControl control system cooling

2016

2 db

MPI023C inverter chiller

45 kW

 **HungaroControl**
Straight to the point



SPAIN

- **Hospital: S. J. de Deos, (E):** water chillers + fan coils



GERMANY

- **Ferrero (Nutella)(DE):** water chillers



UNITED KINGDOM

- **Dynex Semi conductor (UK):**
free cooling water chiller



PORTUGAL

- **Continental Head Q. (P):**
water chiller



SOUTH AFRICA

- **Le Clerk Head Quarters (SA):**
free cooling water chiller



- **RosBank Head Q (SA):**
free cooling water chiller





Comfort applications:

- Hydronic indoor units
- Chillers and heat pumps
- Software and hardware



Air to water chillers and heat pumps

Air / Water outdoor packaged units
4 - 1200 kW



Water to water chillers and heat pumps

Water / Water indoor packaged units 5 – 680 kW



Multipurpose UNITS

Air / Water
Outdoor packaged
4-350 kW



Air / Water “split” system
1-33 kW



Water / Water
Indoor packaged
40-420 kW





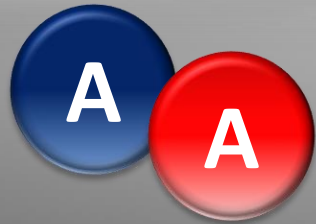
V-IPER

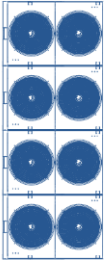
High efficiency chillers and heat pumps

- 20 models
- 50 – 360 kW
- Class A

V-IPER

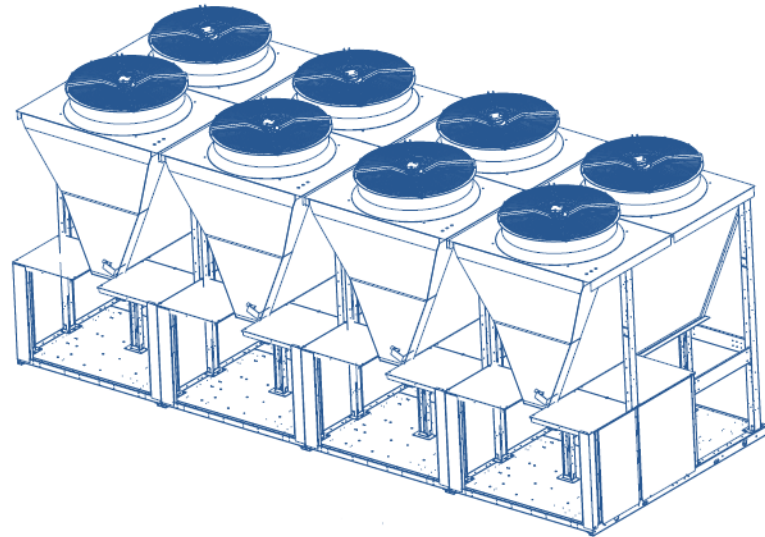
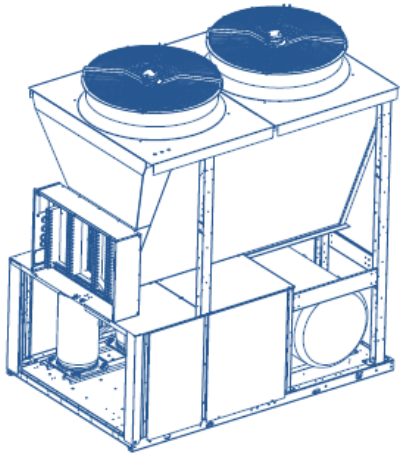
EXTREMELY accessible
 EXTREMELY ecological
 EXTREMELY quiet
 EXTREMELY efficient under all conditions





Modularity

- Replication of the Vcoil structure
- Expansion up to 360 kW



Components

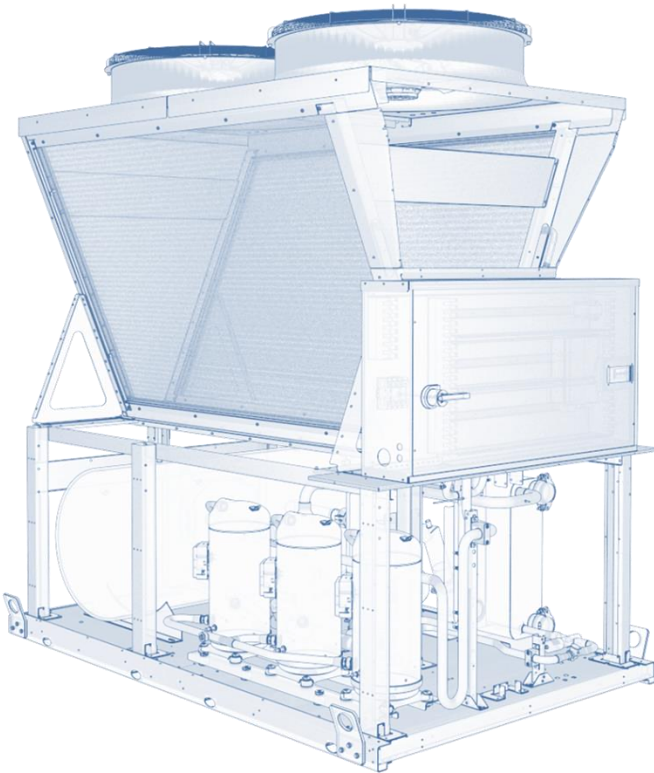


STANDARD MICRO-CHANNEL CONDENSING COILS

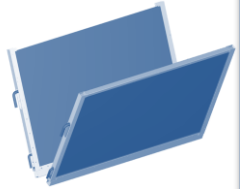
On the entire chiller range

- 40 % R410a

- Reduced environmental impact
- Cost savings



Standard treatments



- Epoxy
- Anti-UV
- 2400 h in salt spray*

Available

- Electrofin[®]
- Blygold[®]

Top of the line is our standard



- Solutions with multiple compressors
- Electronic expansion valve
- Solenoid valve on the liquid
- Condensation control
- Advanced control

ALL STANDARD



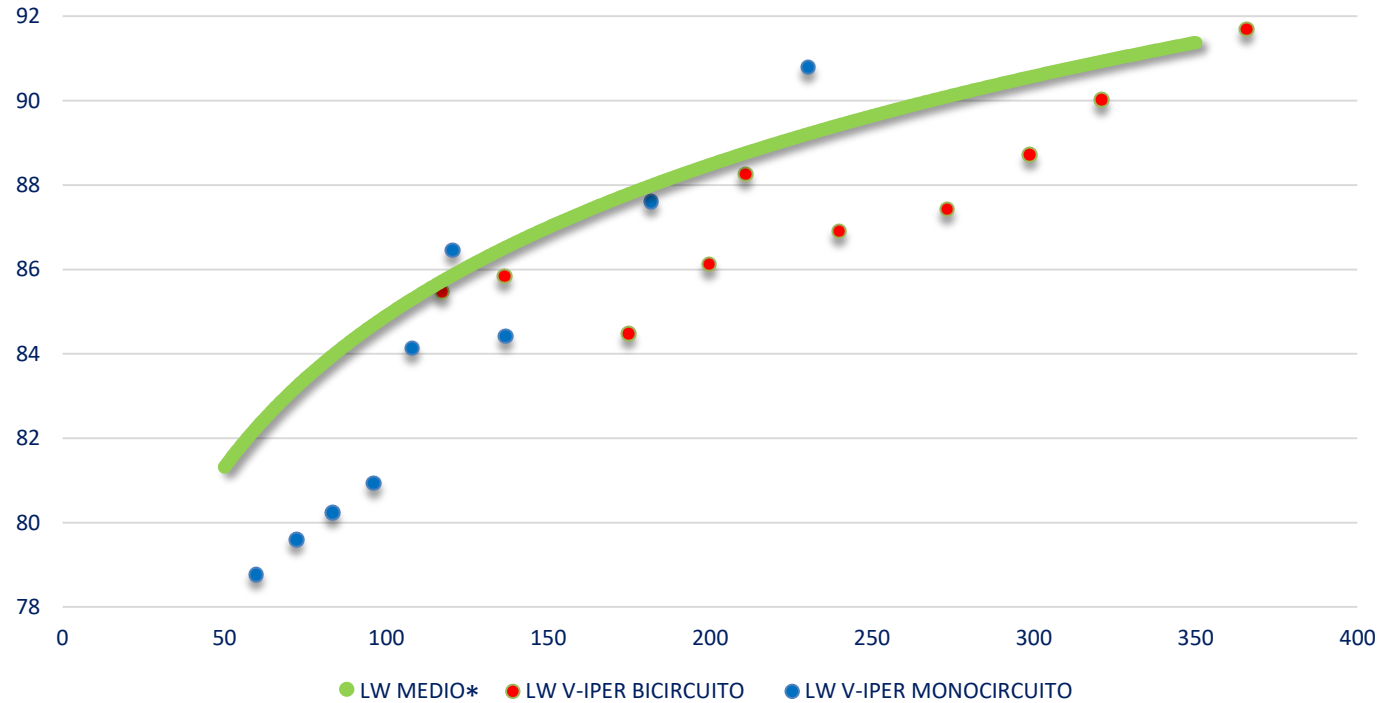
1 G85 SWAAT Test (Sea Water Acidified Test)



The standard version is already extremely quiet

Low Noise

LW [dB(A)]



* Aermec (NRB_A, NRB_U, NRL_A) / Bluebox (Tetris2_+, Tetris_A, ZetaEchos_A, Zrev_A) / Climaveneta (NX_CA) / Clivet (EXC_SC)



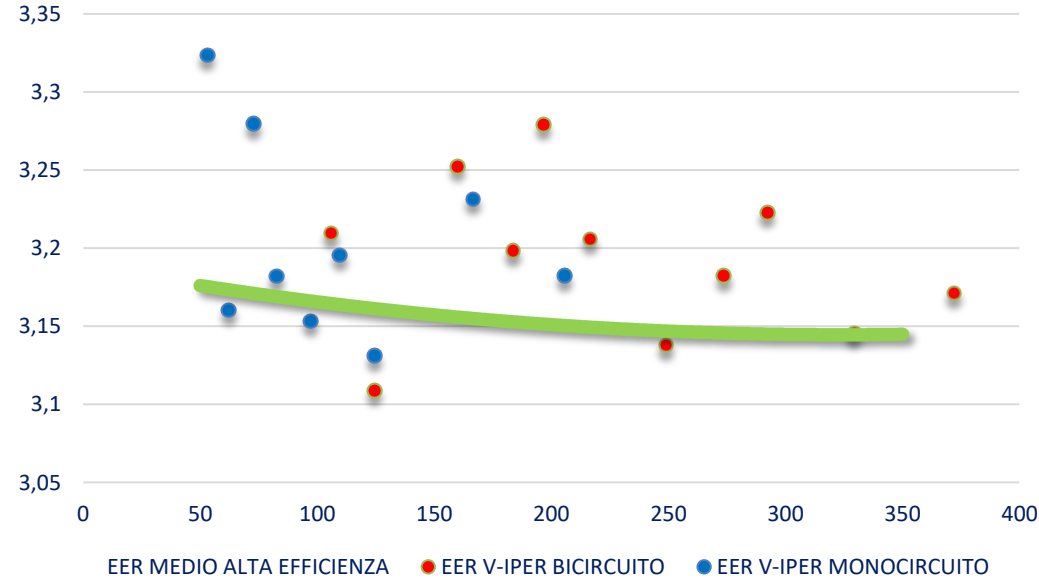
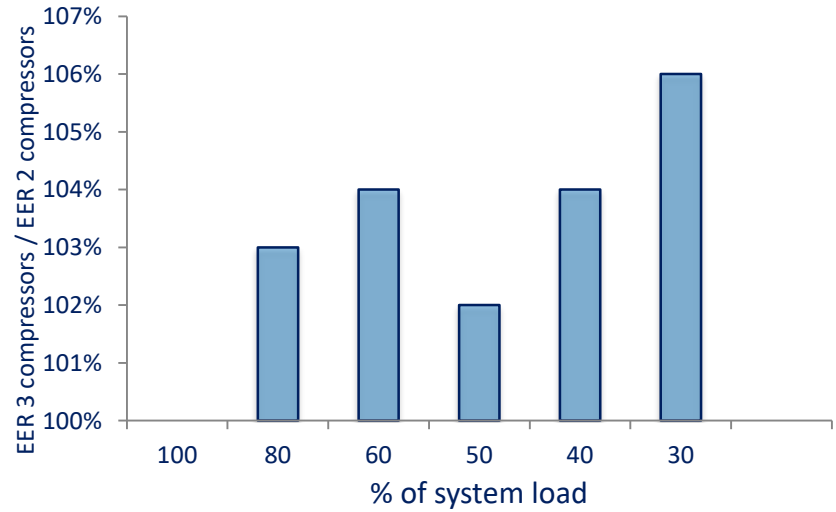
EER
at the top
of the market

High efficiency



EER (UNI 14511)

Why is 3 better than 2?

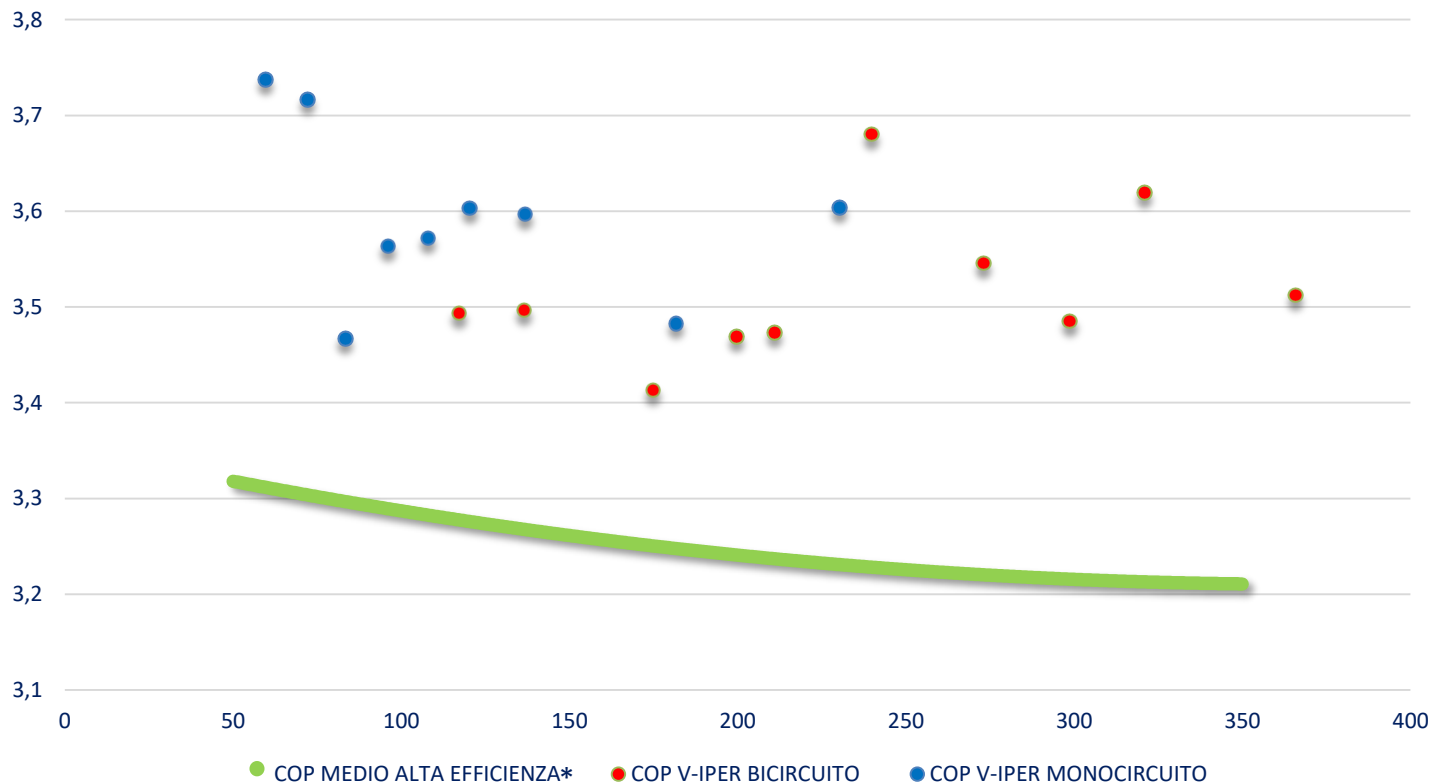




COP
at the top
of the market

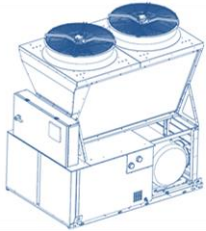
High efficiency

COP (UNI 14511)



* Aermec (NRB_A, NRL_A) / Bluebox (Tetris2_A+, Tetris_A, ZetaEchos_A, Zrev_A) / Climaveneta (NX_N-CA) / Clivet (EXC_SC)

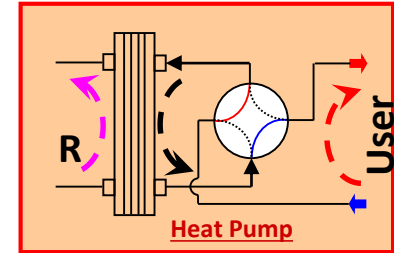
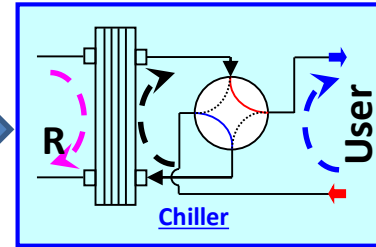
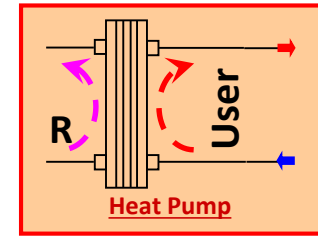
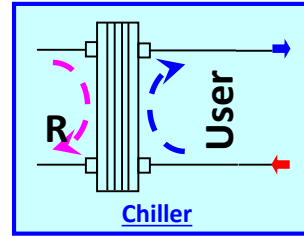
V-IPER COMPONENTS



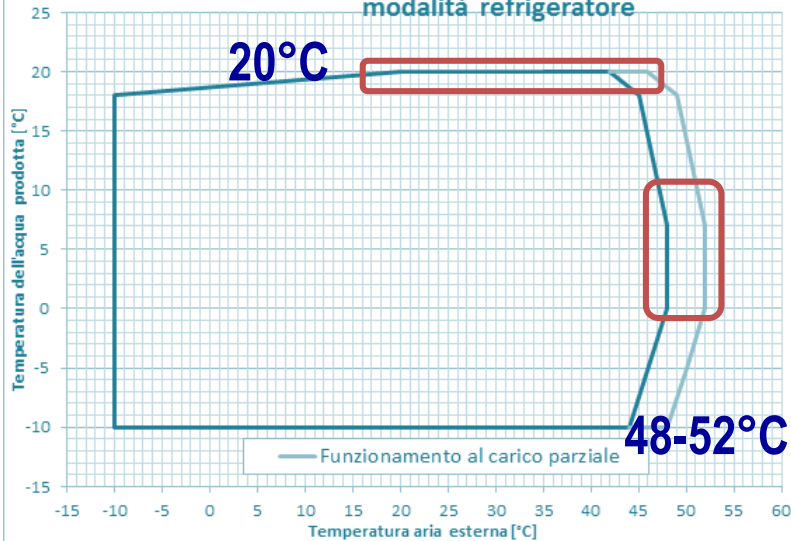
Expanded operating range



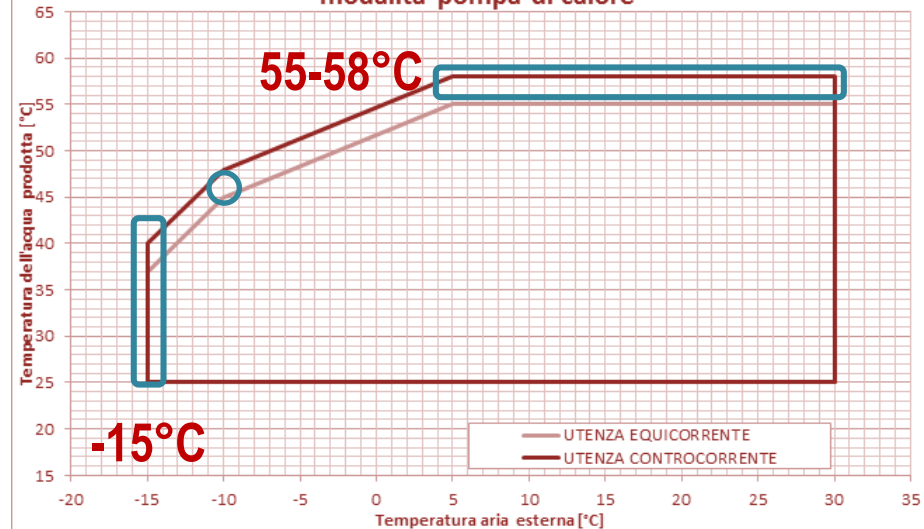
Heat exchange COUNTERFLOW



CAMPO DI LAVORO UNITA' AD ALTA EFFICIENZA V-IPER modalità refrigeratore



CAMPO DI LAVORO UNITA' ALTA EFFICIENZA V-IPER modalità pompa di calore



Thank you!

