Carrier®

turn to the experts℠

AQUASNAP®

Carrier

United Technologies

WC RANGE

	Available	NEW
		
WC CO/HP	30WG 20-90	30WG 110-190 Q4’16
WC HP	61WG 20-90	61WG 110-190 **TBD**
Condenserless	30WGA 20-90	30WGA 110-190 **Q1 17**

INTRODUCING WC

Water Cooled unit

- ✓ "Plug & Cool" concept with integrated options
- ✓ BMS connectivity ready
- ✓ Efficiency
- ✓ Compactness
- ✓ Adaptability
- ✓ Reliability
- ✓ Flexibility:
  Air conditioning Applications
  Geothermal Applications
  Industrial Applications
- ✓ Integrated variable water pump (VWF) in option
- ✓ Optimized for R410A Refrigerant

PRODUCT IN DETAILS

Items covered

Physical datas:
- Aesthetics
- Dimensions
- Casing architecture
- Operating map
- Performances
- Options

Electrical and controls:
- Electrical panel
- User interface
- Options

Piping and components:
- Internal
- Water connections
- Hydronic kit

61WG: **HEATING HT optimised**
30WG: **COOLING HEATING**
30WGA:**Condenserless**

**FIRST FEATURES IN COMMON,
THEN A FOCUS ON EACH PRODUCT LINE**

SUMMARY

- **Range overview**
- Product Features & Benefits
- Application range
- Performances
- Hydraulic
- Main options

30WG – 61 WG

Carrier

AQUASNAP P

NEW

30WG
- 17 Units
- Cooling

Cooling Capacity kW

	020	025	030	035	040	045	050	60	70	80	90	110	120	140	150	170	190
12/7 30/35°C	25	28	31	37	42	47	58	63	74	84	95	114	130	143	153	172	192
18/23 30/35°C	34	39	43	50	57	66	79	86	102	113	130	155	176	196	206	230	261

30WGA
- 11 units
- Condenserless

1 circuit			2 circuits
1 compressor	2 compressors	3 cps	4 cps
			

61WG
- 11 Units
- Heating

Heating Capacity kW

	020	025	030	035	040	045	050	60	70	80	90
10/7 30/35°C	29	34	38	44	50	57	68	78	88	100	117
10/7 40/45°C	28	33	37	43	49	55	66	75	84	95	110
10/7 55/65°C	26	31	34	40	43	49	60	70	76	85	97
0/-3 30/35°C	21	25	29	34	38	42	50	57	67	75	87
No. of control stages	1	1	1	1	1	1	2	2	2	2	2

In progress

A SOLUTION for ALL APPLICATIONS

30WG – 61 WG 20-90

Technical Features

PRODIALOG+ Control
Sizes 20-90

Migration Q2-17

Hydraulic module (option)
Evap. & Cond.
FS or VS pump

Scroll compressors

Brazed plate heat exchanger

Electronic expansion valve

30WG 110-190

Technical Features

NEW

Touch Pilot™ Control
Sizes 110-190

Hydraulic module
(option)
Evap. & Cond.
FS or VS pump

Brazed plate
heat exchanger

Scroll compressors

Electronic expansion valve

SUMMARY

- Range overview
- **Product Features & Benefits**
  - **Design, Architecture & dimension**
  - **Control**
- Application range
- Performances
- Hydraulic
- Main options

PRODUCT IN DETAILS

Common features: aesthetics

20-90

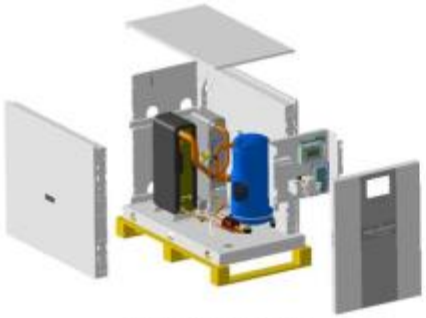
20-90
Hydraulic

110-190

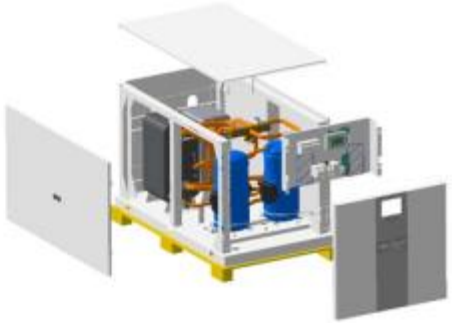
110-190
Hydraulic

HIGH PERCIEVED QUALITY & VALUE

Common features: casing architecture

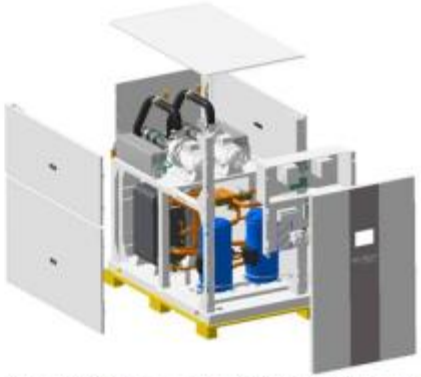


Segment 1 standard unit



Segment 2 standard unit

Segment 1 with Hydronic kit Variable Flow single pump on evaporator and condenser



Segment 2 with Hydronic kit Variable Flow single pump on evaporator and condenser

Segment 1&2:
Hydraulic on top

Option:
Standard

Description:
Four casing size depending on number of compressor.
Each size with 4 sides sliding panels.
One single screw size and type

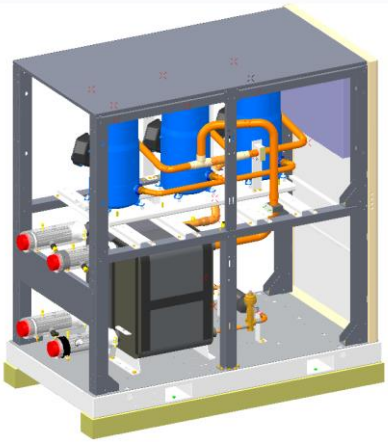
Advantage:
Cost containment and small foot print

Tips:
None

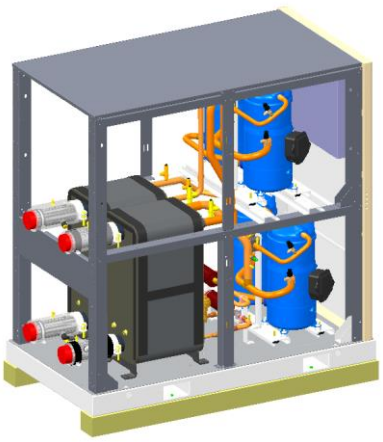
SAME CHASSIS FOR HEATING AND COOLING + SMALL FOOTPRINT

Common features: casing architecture

Standard frame

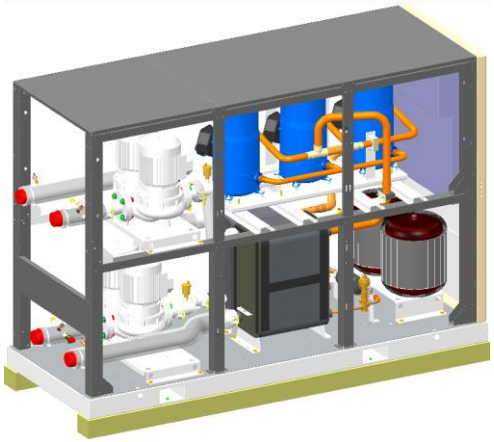


Segment 3
Sizes 110 to 140

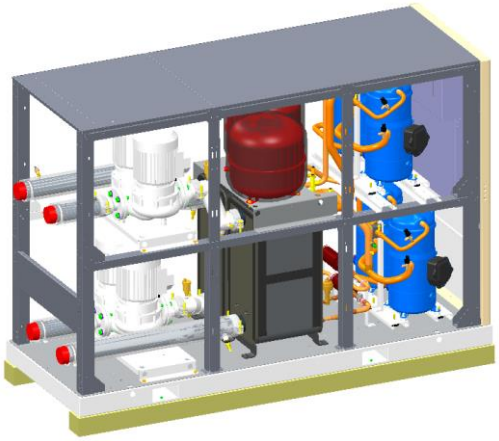


Segment 4
Sizes 150 to 190

Hydronic module frame



Segment 3
Sizes 110 to 140



Segment 4
Sizes 150 to 190

Segment 3 & 4 :
Hydraulic on back
(Top connexions on option)

SAME CHASSIS FOR HEATING AND COOLING
+ SMALL FOOTPRINT

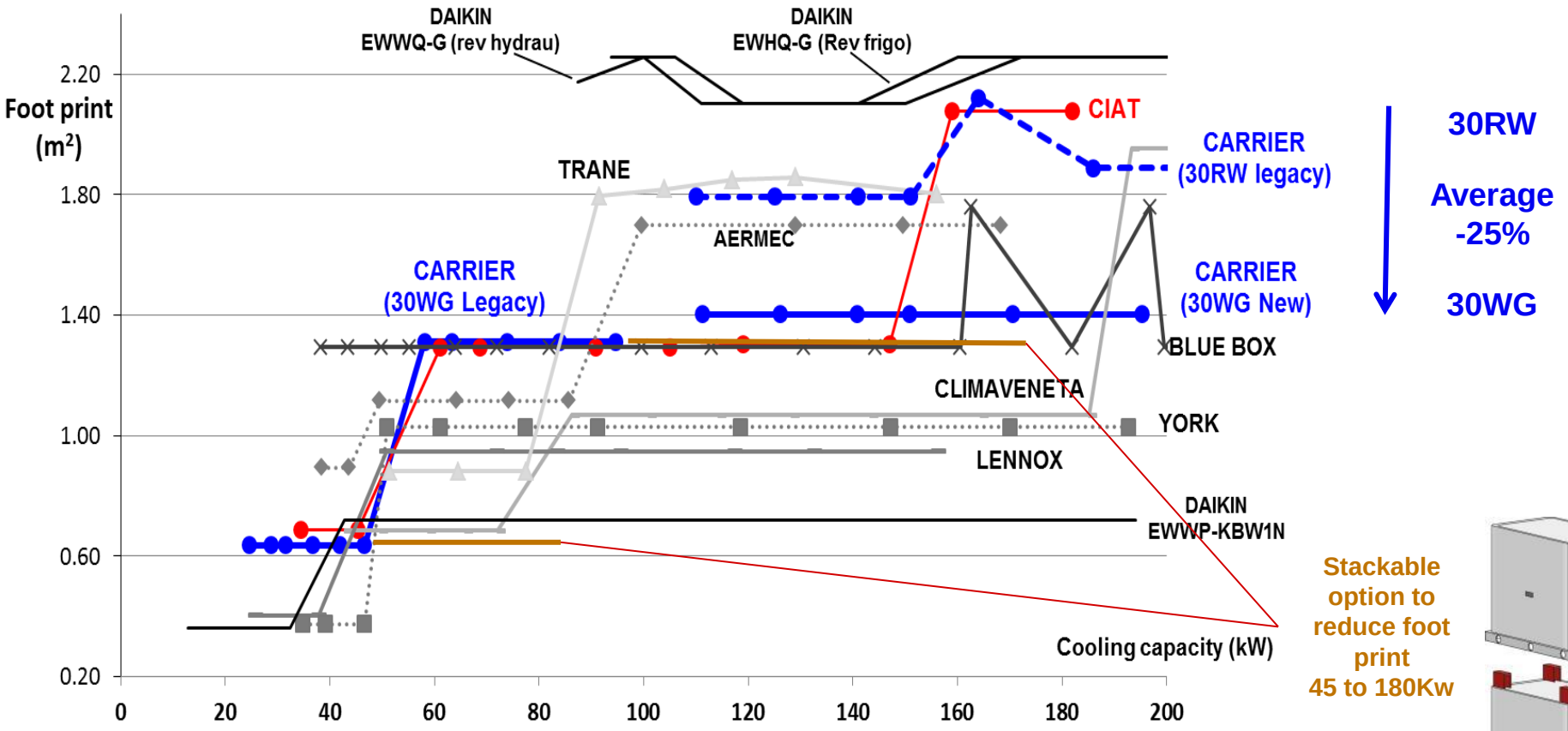
Common features: dimensions

30WG		020	025	030	035	040	045	050	060	070	080	090	110	120	140	150	170	190
61WG		020	025	030	035	040	045	050	060	070	080	090						
Operating weight	kg	186	195	195	203	208	215	375	382	394	405	431	762	787	814	909	944	975
Compressors		Hermetique Scroll 48,3 tr/s																
Circuit A/B		1/-	1/-	1/-	1/-	1/-	1/-	2/-	2/-	2/-	2/-	2/-	3/-	3/-	3/-	2/2	2/2	2/2
Number of capacity steps		1	1	1	1	1	1	2	2	2	2	2	3	3	3	4	4	4
Minimum capacity	%	100%	100%	100%	100%	100%	100%	50%	50%	50%	50%	50%	33%	33%	33%	25%	25%	25%
Dimensions																		
Weidth	mm	600	600	600	600	600	600	880	880	880	880	880	880	880	880	880	880	880
Lenght	mm	1044	1044	1044	1044	1044	1044	1477	1477	1477	1477	1477	1583	1583	1583	1583	1583	1583
Height	mm	901	901	901	901	901	901	901	901	901	901	901	1574	1574	1574	1574	1574	1574
Capacity control		PRO-DIALOG Plus (Migration TOUCH PILOT Q2'17)											TOUCH PILOT					
Evaporateur		Direct expension, plate heat exchanger																
Water volume	l	3,3	3,6	3,6	4,2	4,6	5,0	8,4	9,2	9,6	10,4	12,5	15.2	17.3	19.0	23.2	26.5	29.0
Water connexion	-	Victaulic																
In/out	pouce	1,5	1,5	1,5	1,5	1,5	1,5	2	2	2	2	2	2 1/2	2 1/2	2 1/2	3	3	3
Max water-side operating pressure w/o hydronic kit	kPa	1000																
Condenseur		Plate heat exchanger																
Water volume	l	3,3	3,6	3,6	4,2	4,6	5,0	8,4	9,2	9,6	10,4	12,5	15.2	17.3	19.0	23.2	26.5	29.0
Water connexion	-	Victaulic																
In/out	pouce	1,5	1,5	1,5	1,5	1,5	1,5	2	2	2	2	2	2 1/2	2 1/2	2 1/2	3	3	3
Max water-side operating pressure w/o hydronic kit	kPa	1000																

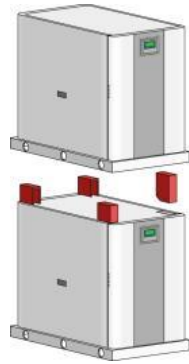
COMPACT WITH TWO COMPRESSORS FROM SIZE 50

Q4 16 NEW

Common features: Foot Print wo/ hydronic

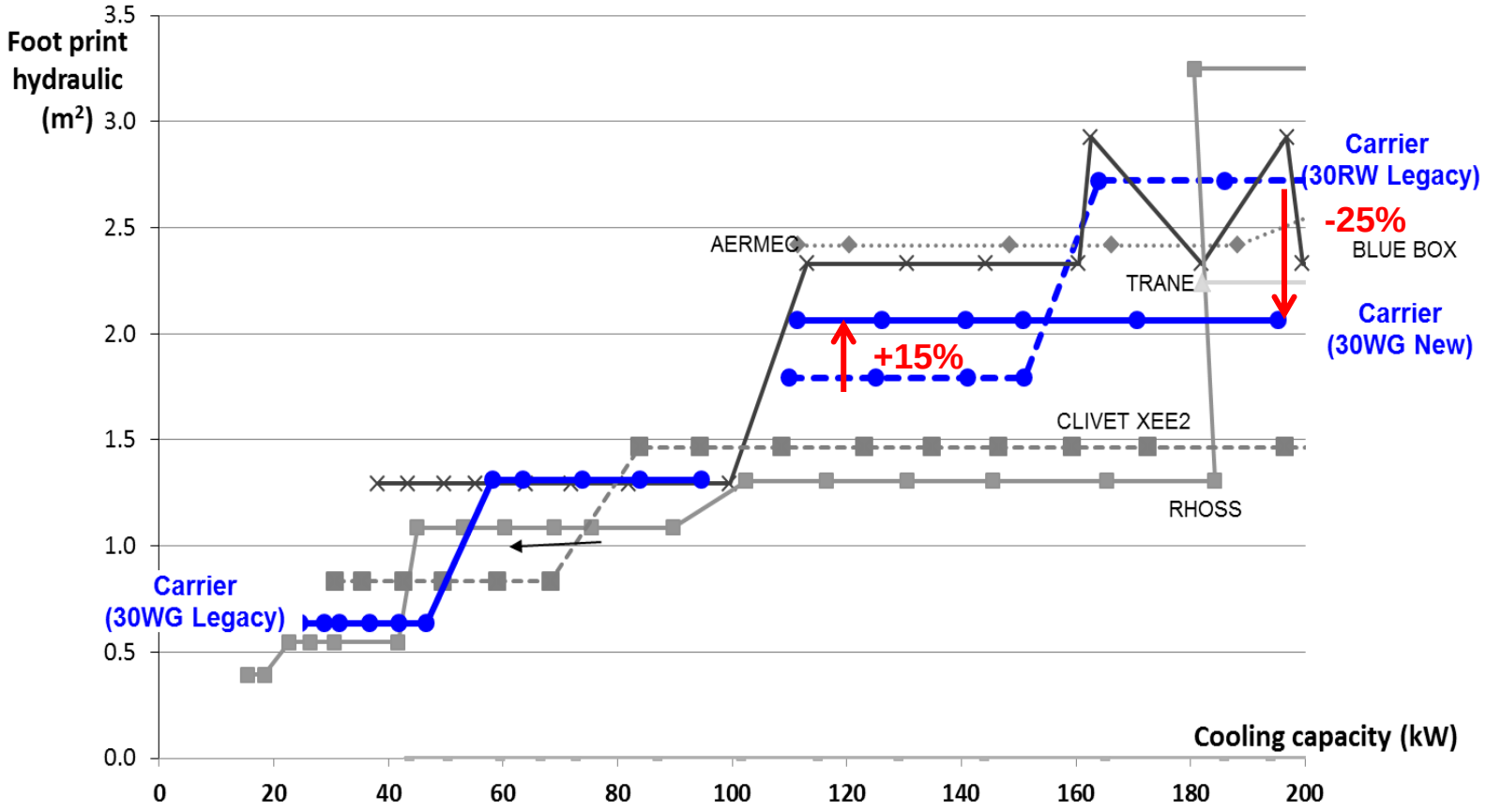


Stackable option to reduce foot print
45 to 180Kw



ON THE MARKET

Common features: Foot Print w/ hydronic



ON THE MARKET

Common features: casing architecture

Option:
Standard

Description:
Easy sliding panels.
One single screw size and type

Advantage:
Easy access to all components for commissioning and maintenance even if compact.
Remain true with hydraulic kit option.

Tips:
None

COMPACT BUT WITH EASY ACCESS TO ALL COMPONENTS

Common features: Electrical connections

Electrical cabinet open

Sizes170

Sizes170
Hydronic

Option:
Standard in front of the unit

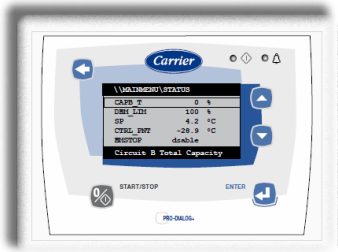
Description:
All Electrical components protected by panel and positioned in front side.
Power cabling holes on the back of the side of the unit.

Advantage:
Easy and safe access to electrical components even if unit is compact

Tips:
None

COMPACT UNIT BUT WITH EASY ACCESS TO ALL COMPONENTS AND SAFE

Common features: PRODIALOG+



Option:

Standard Prodialog+ On sizes 20-90

Migration to TouchPilot plan for Q2 2017

Description:

Human interface (HMI) with display in 9 languages (FR, DE, ES, IT, GB, +…)

Advantage:

User friendly with several items displayed at the same time

Direct acces

Tips:

None

Common features: TOUCHPILOT

**4.3”
Tactile
Color screen
interface**

NEW

Option:

Standard On sizes 110-190
Migration on 20-90 plan for Q2 2017

Description:

Human interface (HMI) with 4’3 color touch screen
display in 6 languages

Advantage:

User friendly
Direct acces
Web server integrate

Tips:

None

COMMON IHM WITH RBS, RQS UNITS

Common features: TOUCHPILOT

4.3” Tactile Color screen interface

- BIC Modern display
- **4”3 user-friendly touch screen**
- Multiple languages (6: F-GB-D-E-I-Free)
- Easy and secured access to unit parameters
- 3 acces level (User/maintenance/factory)
- Service & Commissioning
- Efficiency & Comfort
- **Direct display** of: Temperatures /Pressures /Run Time /Fault messages
- **Alarm (50) History function**
- Alarm notification through emails
- **2 weekly program**
- **WEB connectivity (IP) in standard**
- **Maintenance alert schedule**
- **F-Gaz leak detection alert**
- Lon Bacnet Modbus in option
- Twin Machine Control Lead/Lag (option)

COMMON IHM WITH RBS, RQS UNITS

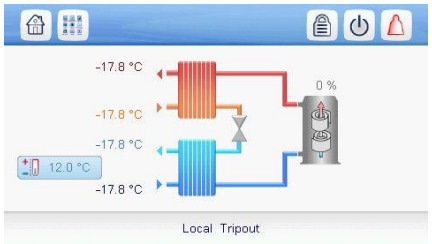
PRODUCT IN DETAILS

Technical Features: Display

NEW

Sizes
110-190

Welcome Screen



Synoptic

Schedule

Menu

Language

Parameter Table

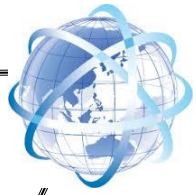
Alarm Table

4”3 Intuitive Tactile Color Screen

Communication

Integrate Web server

RJ Port



IP connectivity

IP adress

NEW

Option: Standard (On touch Pilot)

Description:

IHM available on any computer

Advantage:

Remote control on Standard
all IHM functionality on the PC

Tips:

Verify user authorisation to be connected on his ethernet network
If connected to user network- user authorisation needed for access

Service:

Easy acces for setting adjustment
Alert through email (2 adress)

A Simple & Modern Remote Control

Communication

Option:
J-Bus gateway Opt_148B
Lon gateway Opt_148D
Bacnet over IP gateway Opt_149

Description:
Gateway to main communication protocol

Advantage:
Connexion to main BMS

Tips:
Give protocol table (Available on HVAC EMEA Portail) to installers ASAP for integration preparation

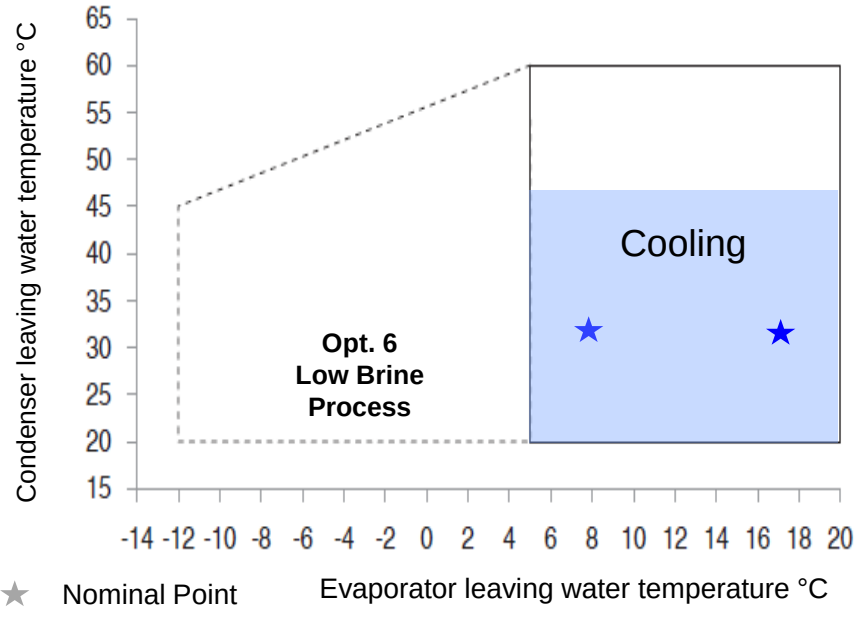
SUMMARY

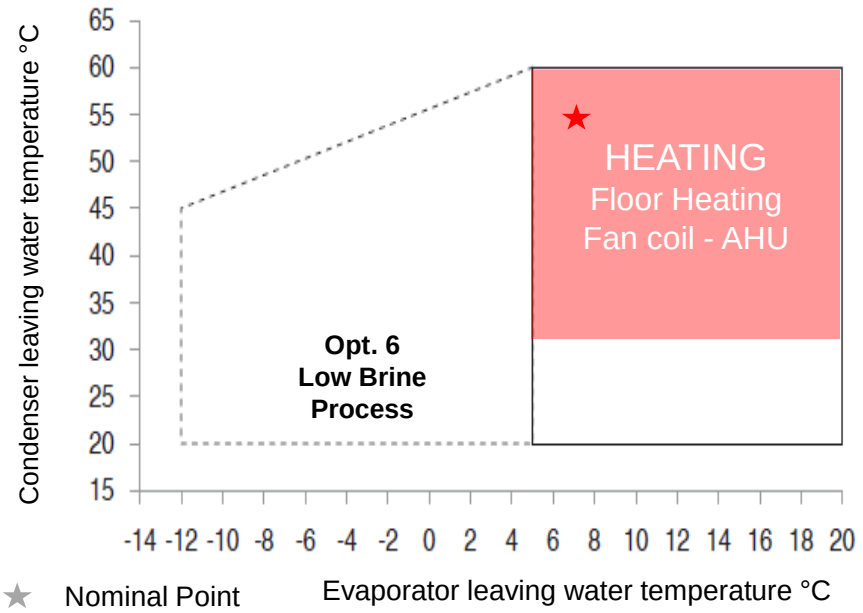
- Range overview
- Product Features & Benefits
- **Application range**
- Performances
- Hydraulic
- Main options

PRODUCT IN DETAILS

Common features: Operating maps

30WG
COOLING-HEATING





HVAC & PROCESS APPLICATION

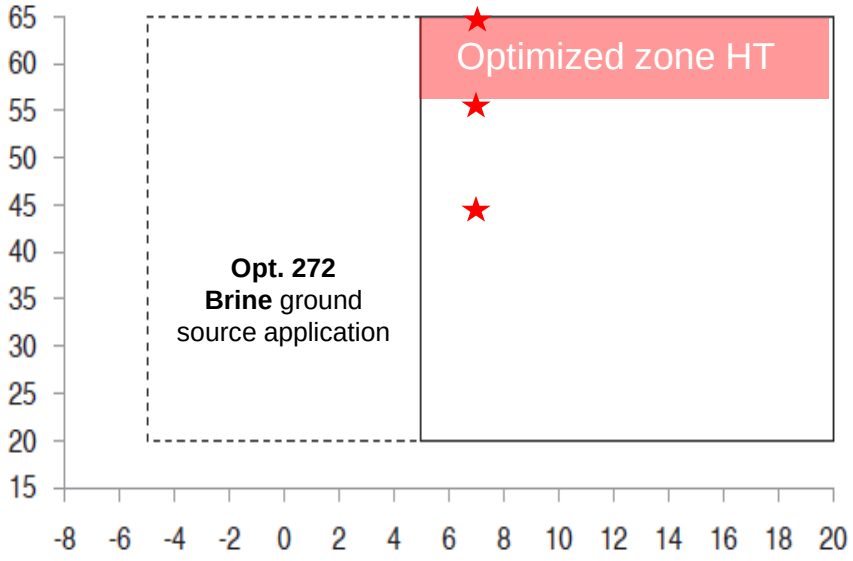
AMONGST WIDEST OPERATING MAP IN THE MARKET

PRODUCT IN DETAILS

Common features: Operating maps

61WG
HEATING

65° Haute température



HEATING
Optimised High Temp.
Renovation – Boiler replacement

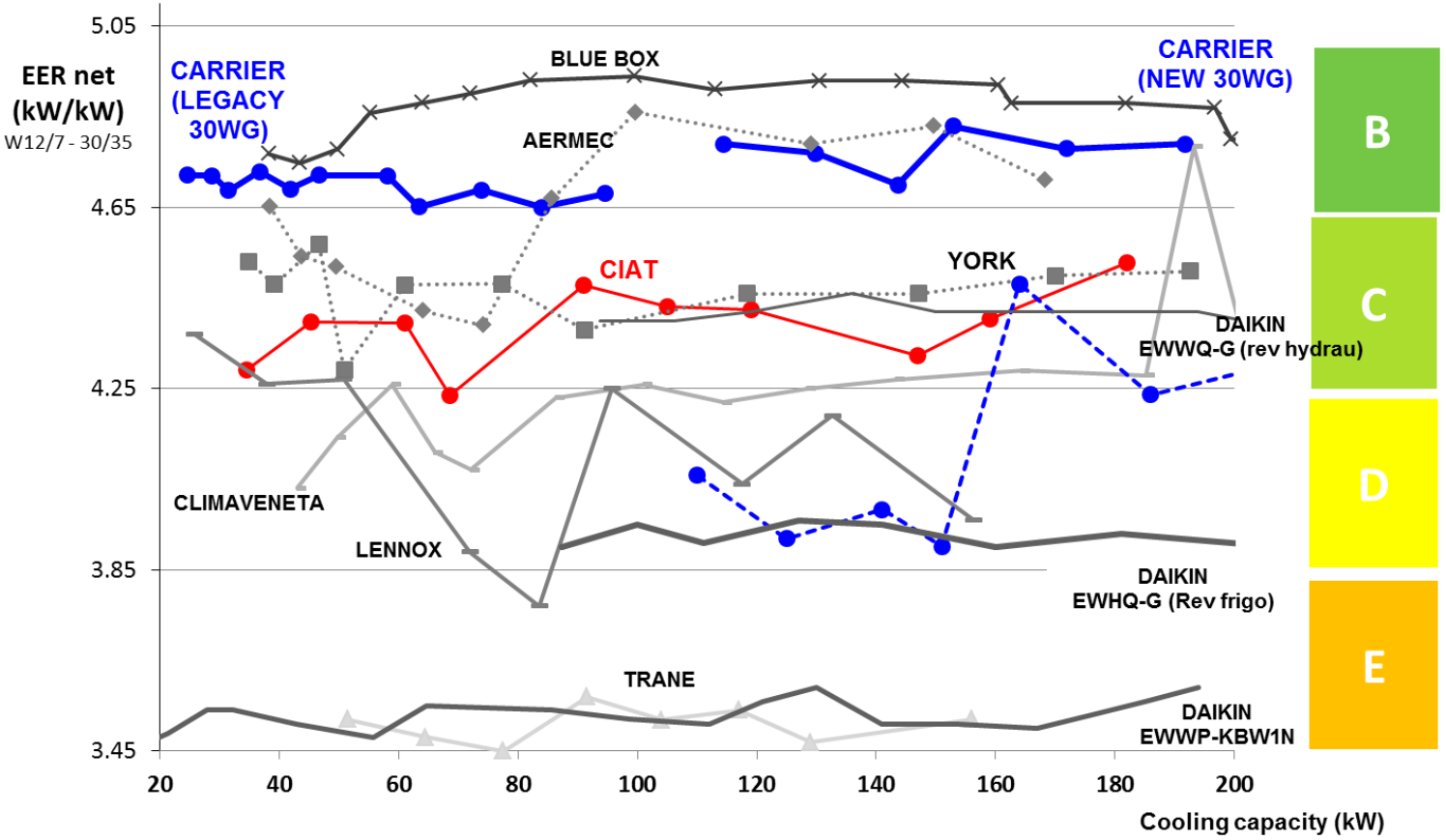
AMONGST WIDEST OPERATING MAP IN THE MARKET

SUMMARY

- Range overview
- Product Features & Benefits
- Application range
- **Performances**
  - **Cooling** EER **/ ESEER**
  - **Heating** COP / **SCOP**
  - **Acoustic**
- Hydraulic
- Main options

PRODUCT IN DETAILS

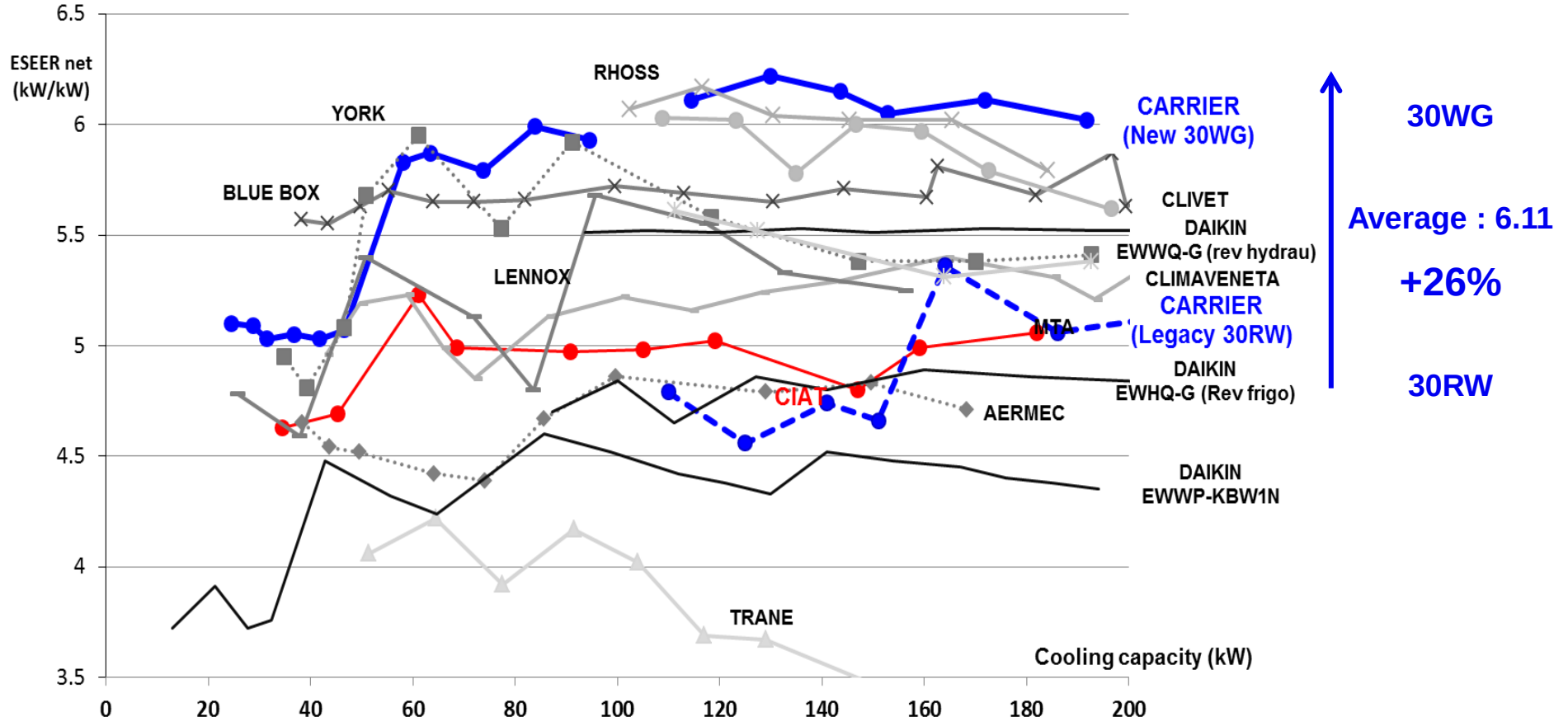
30WG Performances : EER



BEST IN CLASS UNIT AVAILABLE

PRODUCT IN DETAILS

30WG Performances: ESEER



BEST IN CLASS UNIT AVAILABLE

ECODESIGN REGULATION N° 813/2013
H/P < 400kW performance requirements

EFFICIENCY	Rating conditions		Tier 1, Sept 2015		Tier 2, Sept 2017	
	Outdoor	Indoor	ηs heat %	SCOP	ηs heat %	SCOP
Air to water	A7°(+6°wb)	W30/35° LT	115	2.95	125	3.20
		W47/55°	100	2.58	110	2.83
Water to water	W10°/7°	W30/35° LT	115	3.08	125	3.33
		W47/55°	100	2.70	110	2.95
Ground to water	W0°/-3°	W30/35° LT	115	3.08	125	3.33
		W47/55°	100	2.70	110	2.95

SOUND	≤ 6 kW		>6 kW ≤ 12 kW		>12 kW ≤ 30 kW		>30 kW ≤ 70 kW	
	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor
Sound power dBA	60	65	65	70	70	78	80	88

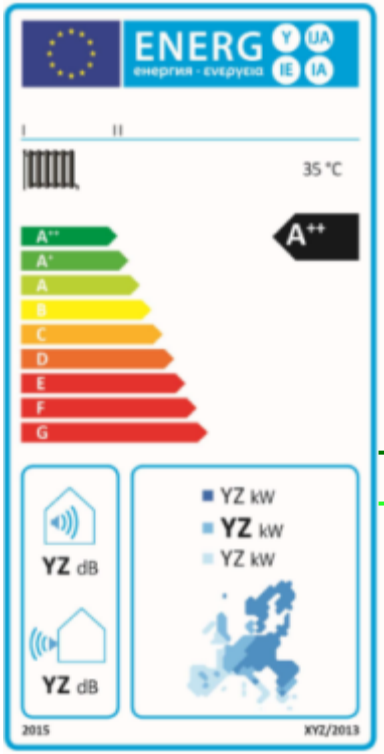
Medium temperature heat pumps shall operate at air -7°, water 52°
SCOP as per EN14825 under average climate (Strasbourg)
Sound requirements, kW = Prated heating capacity

Efficiency requirements based on seasonal efficiency ONLY

Full load COP is a thing of the past

ENERGY LABELLING REGULATION N° 811/2013
H/P < 70kW informations requirements

Basse température 35°C



61WG > 197

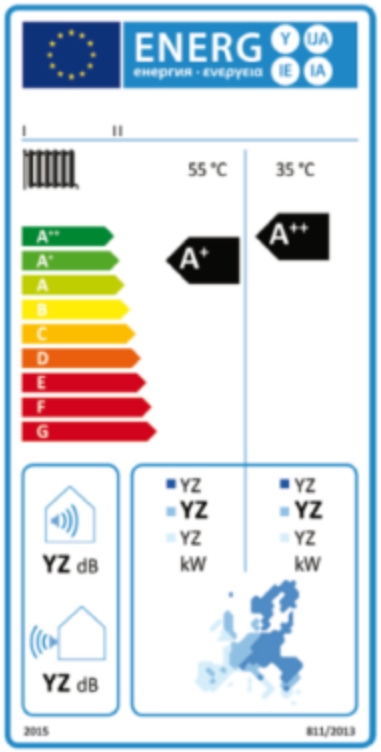
30WG > 206

ENERGY CLASS Low Temp heat pumps 30/35°	
A +++	η s ≥ 175
A ++	150 ≤ η s < 175
A +	123 ≤ η s < 150
A	115 ≤ η s < 123
B	107 ≤ η s < 115
C	100 ≤ η s < 107
D	61 ≤ η s < 100
E	59 ≤ η s < 61
F	55 ≤ η s < 59
G	η s < 55

ECODESIGN Tier1 26/09/15 **2.95 / η115**

ECODESIGN Tier2 26/09/17 **3.2 / η125**

Moyenne température 55°C



61WG > 160

30WG > 167

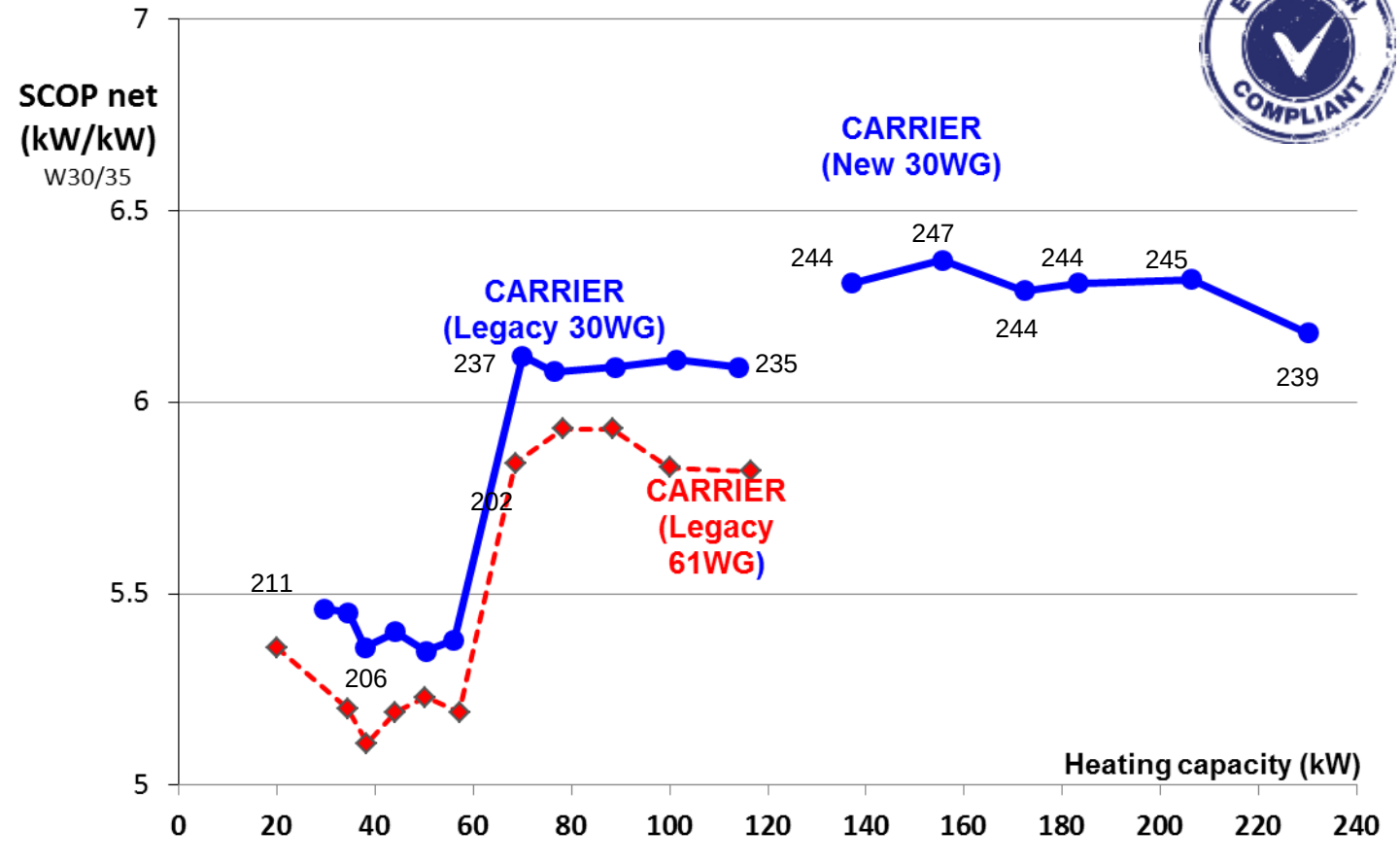
ENERGY CLASSE Mid Temp heat pumps 47/55°	
A +++	η s ≥ 150
A ++	125 ≤ η s < 150
A +	98 ≤ η s < 125
A	90 ≤ η s < 98
B	82 ≤ η s < 90
C	75 ≤ η s < 82
D	36 ≤ η s < 75
E	34 ≤ η s < 36
F	30 ≤ η s < 34
G	η s < 30

ECODESIGN Tier1 26/09/15 **2.58 / η100**

ECODESIGN Tier2 26/09/17 **2.83 / η110**

30 WG 61WG – WC

SCOP



Average
30WG 110-190:
SCOP 6.29
ηs 244

30WG 20-90:
SCOP 5.71
ηs 220

61WG 20-90:
SCOP 5.51
ηs 213

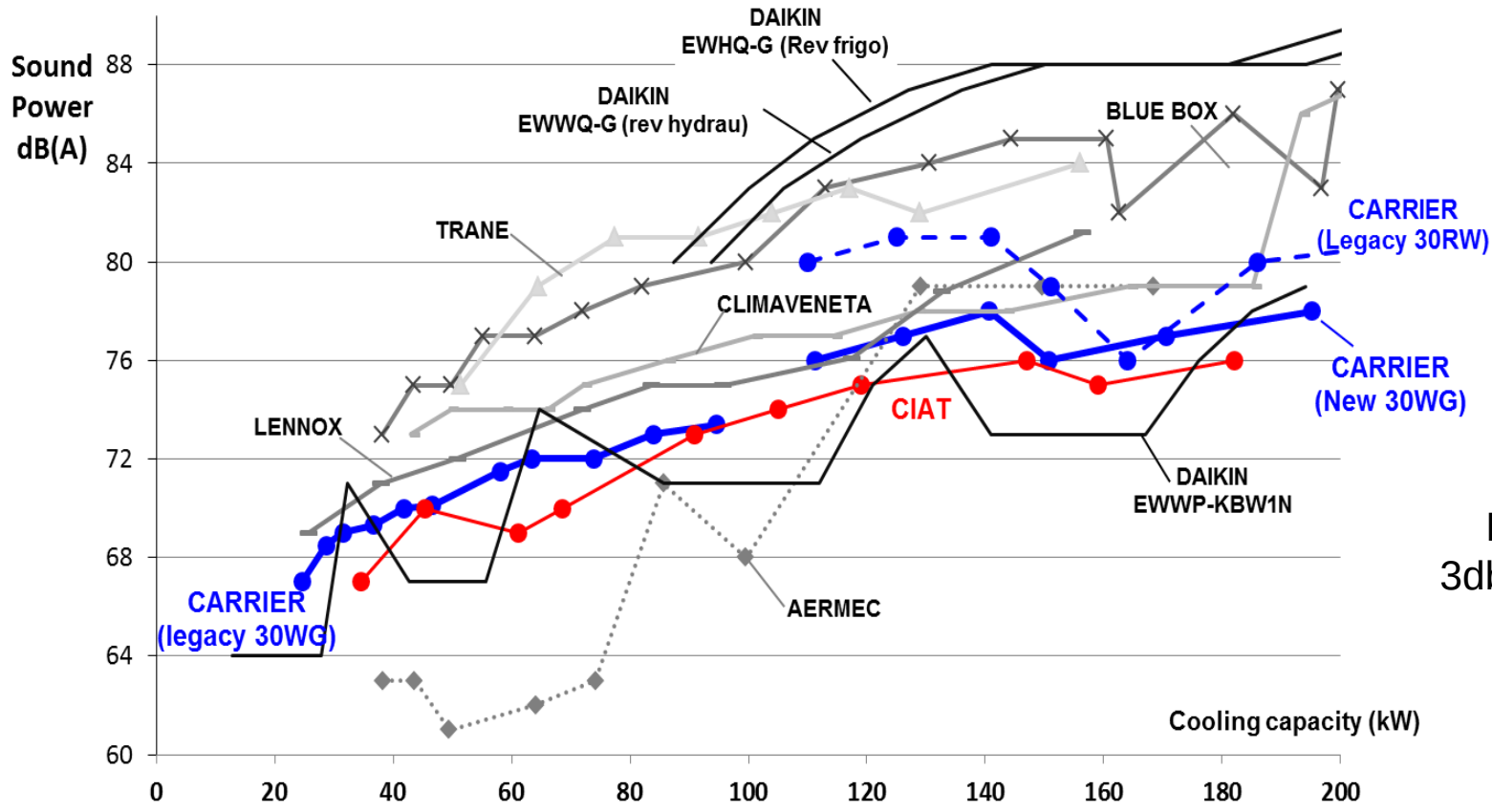
ECODESIGN
Tier2
26/09/17
3.2 /η125

ECODESIGN
Tier1
26/09/15
2.95 /η115

AquaSnap 61WG &30WG ranges are designed to meet **2017** regulation requirements.

PRODUCT IN DETAILS

Common features: Acoustic



30RW

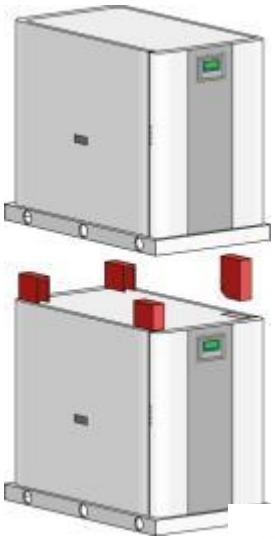
Up to -4db(A)

30WG

Keep in mind :
3db = Double noise

ON TOP 3

Common features: low noise level



NEW

Option 258
Size 20 to 90
Low noise level (-7dB(A))

Option: Opt_257
Low noise level (-3dB(A))

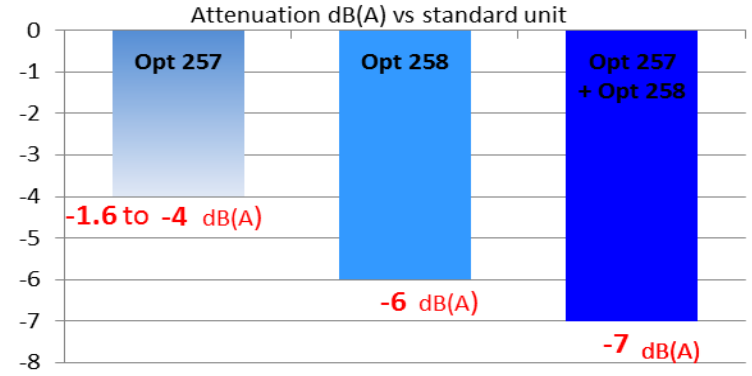
Description:
Insulation of compressor

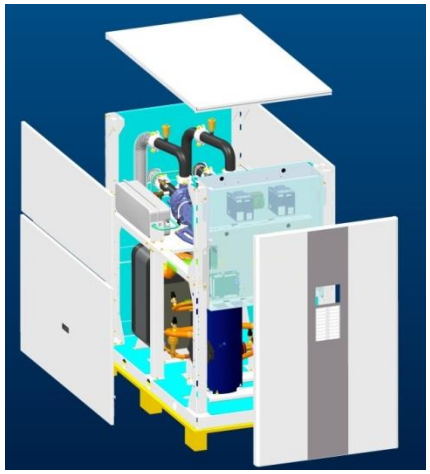
Advantage:
Reduce unit noise level

Tips:
Perfect with stackability and lead/lag
2 units with Opt257 = same noise of 1 unit standard
options to target retrofit market or extend accessible market

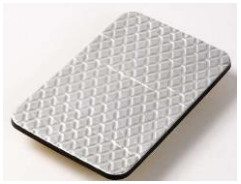
TWO UNITS FOR THE NOISE OF ONE

Common features: Very low noise level





Fiber (Laterals panels)



Heavy mass absorber
(chassis-Roof)

Materials classified **BD0S3** fire class (Euroclass 13-501).

Option: 258 (Sizes 20 to 90)

NEW

Very Low noise level
- 6dB(A)
- -up to -7dB(A) in association with Opt257)

Description:

Specific casing insulation

Advantage:

Reduce unit noise level

Tips:

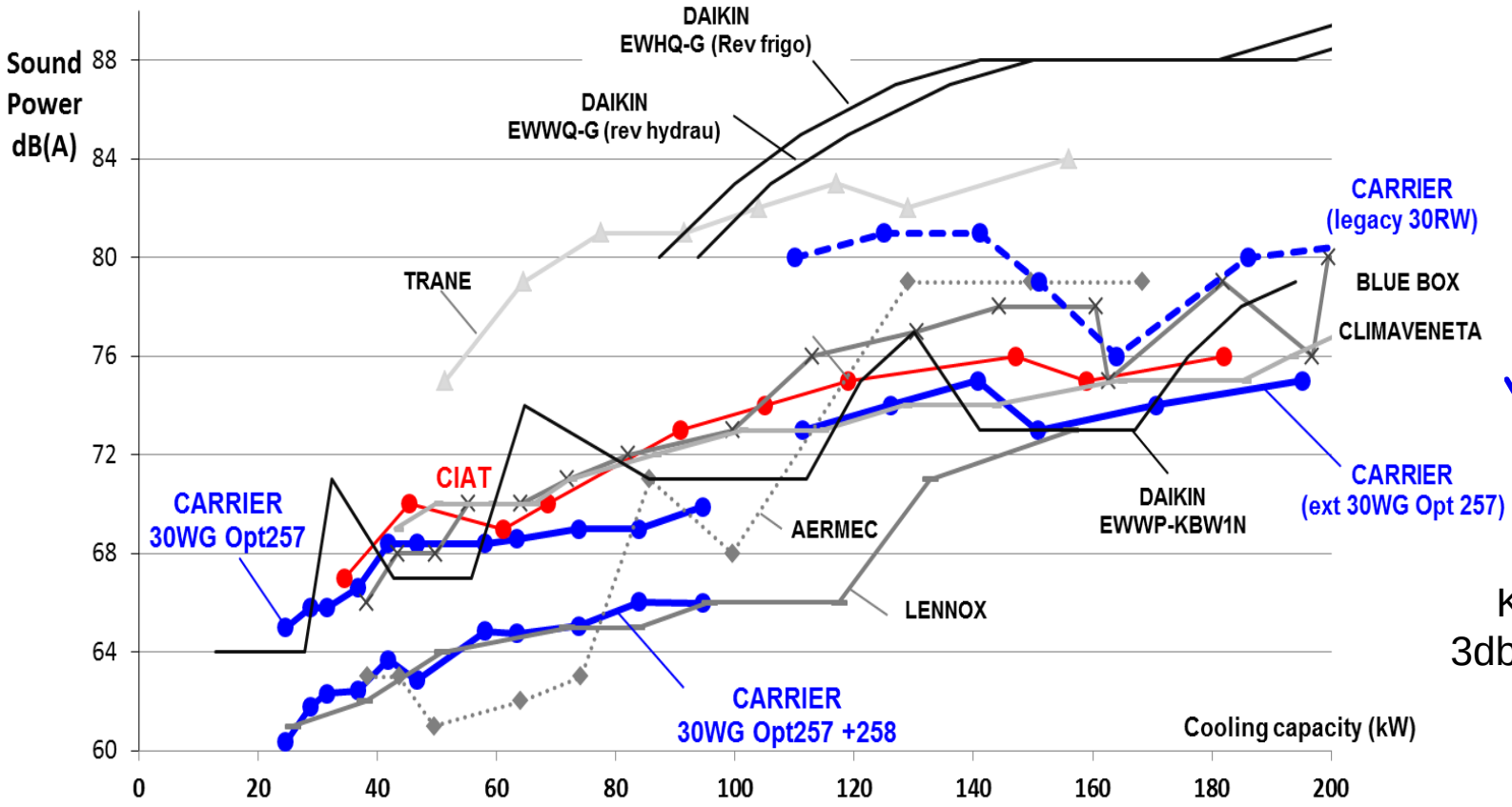
Perfect for residential market

Service:

For a unit already on site, it is possible to add the Very Low Noise as accessory (via ERCD)

PERFECT FOR RESIDENTIAL APPLICATION

Common features: Acoustic option 257



Keep in mind :
3db = Double noise

ALMOST BEST IN CLASS UNIT AVAILABLE

SUMMARY

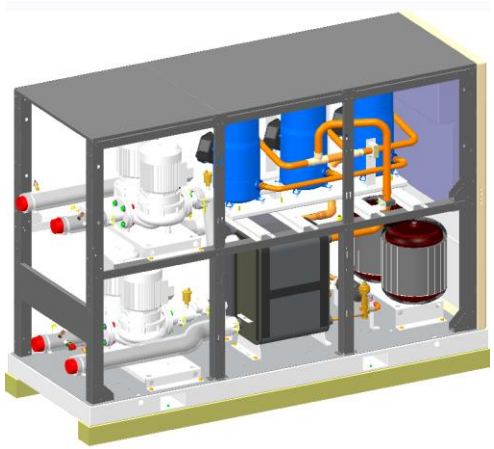
- Range overview
- Product Features & Benefits
- Application range
- Performances
- **Hydraulic**
- Main options

PRODUCT IN DETAILS

Common features: hydraulic kit

Sizes 20 to 90:
Hydraulic **on top** (option)

Sizes 110 to 190:
Hydraulic **on back**



Option: 116x, 270x
Hydraulic kit

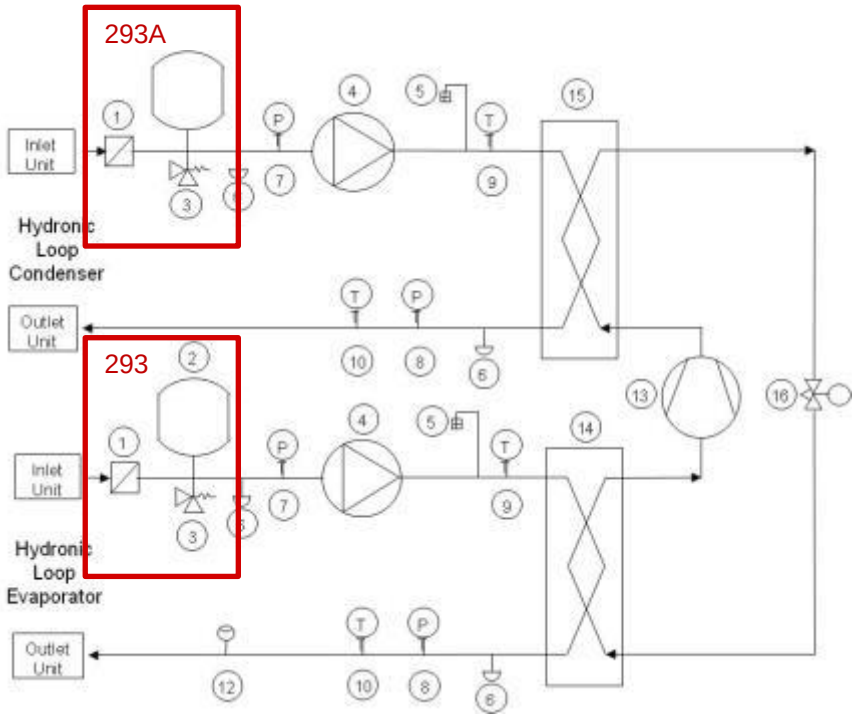
Description:
Top mountig on size 020 -090
Back mounting on size 110-190

Advantage:
Plug and play,
20-90 unit remains with small foot print given hydraulic kit position on top.

Tips:
Water connection can be on the back or top (Opt. 274)
Choice of connection, Victaulic on standard ,
Screwed connections (Opt.264/265)
Welded connections (Opt.266/267)

UNIT REMAINS WITH SMALL FOOT PRINT EVEN WITH HYDRAULIC KIT OPTION

Common features: Hydraulic principle



1	Victaulic screen filter (option 293)
2	Expansion Tank (option 293)
3	Safety valve (option 293)
4	Water pump : 1 if single pump, 2 if dual pump option
5	Air vent
6	Water drain valve
7 / 8	Pressure sensor inlet / outlet
9 / 10	Temperature sensor inlet / outlet
11	Check Valve (only if dual pump)
12	Flow switch

Option: 116x , 270x

Hydraulic kit,
fixed speed or **variable** water flow pump
with **high or low** available pressure

Description:

Hydraulic components as describe on schema against.
Safety device in option 293/293A

Advantage:

Plug and play
unit remains with small foot print (020 to 090)

Tips:

In renovation options 293 is often not needed

SAME ARCHITECTURE AS RBS/RQS

Common features: Pump

Evaporator / Condenser		Single Pump		Twin Pump	
		FS	VS	FS	VS
Low **P**ressure	20-90	116T 270T			
	110-190		116Y 270Y NEW		
High **P**ressure	20-90		116V 270V		
	110-190	116R 270R NEW			116W 270W NEW

Option:
Evap 116x,
Cond 270x

3 additional pump offer on 110-190 NEW

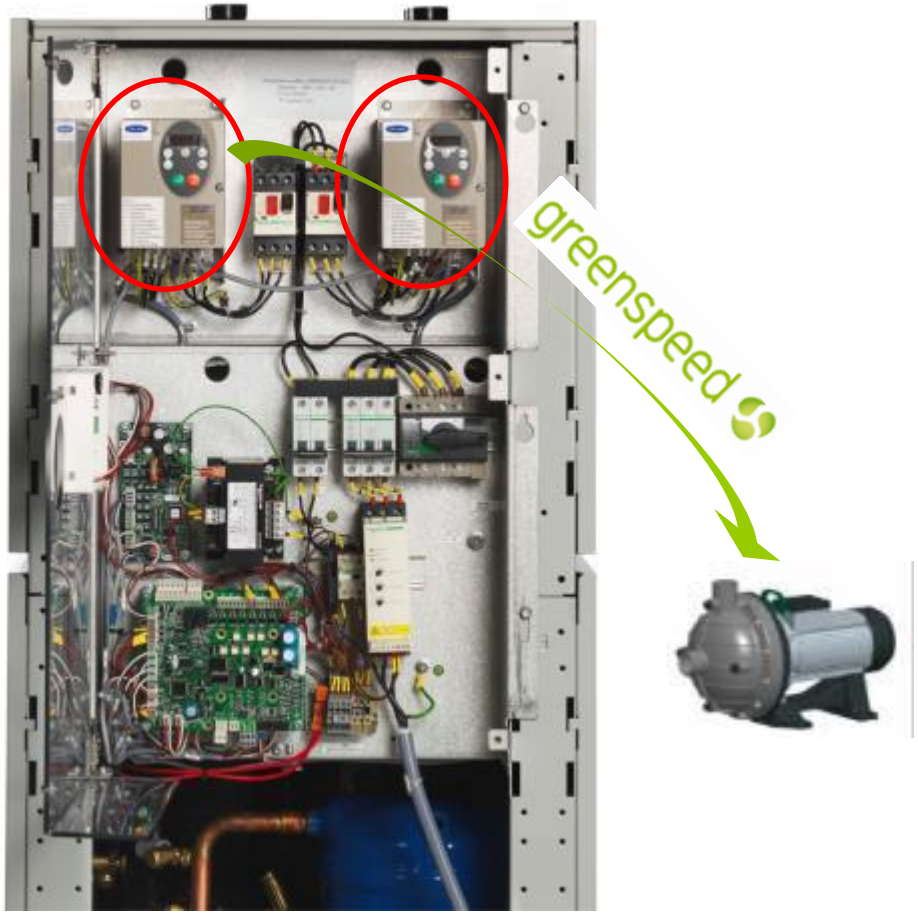
Description:
Above table

Advantage:
Adaptation to all application

Tips:
-In renovation option s 293 is often not needed
-VS reduce by 1/3 (CPF) to 2/3 (VPF) the pumping energy

ENLARGE PUMP OPTIONS

Common features: hydronic kit VWF



Option:

116 VW Y
270 VW Y
Variable Water Flow pump (Inverter)

Description:

Inverter drive pumps with high available pressure

Avantage:

Reduce system energy consumption

Tips:

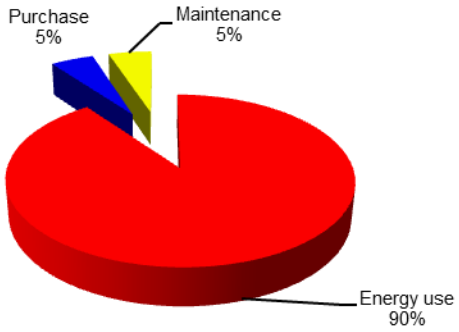
Can help to avoid the use of condensing pressure control 3 way valve when 30WG is installed with drycooler.

VWF FOR MORE ENERGY EFFICIENCY AND DRYCOOLER MODE WITH NO 3WV

PRODUCT IN DETAILS

Key Features: Variable Water Flow

TYPICAL PUMP LIFE CYCLE COSTS



Typical pump life cycle cost. Source: Hydraulic Institute
www.pumps.org

Energy Use Represents Around 90%
of Pump Life Cycle Cost
=
Energy Savings opportunities

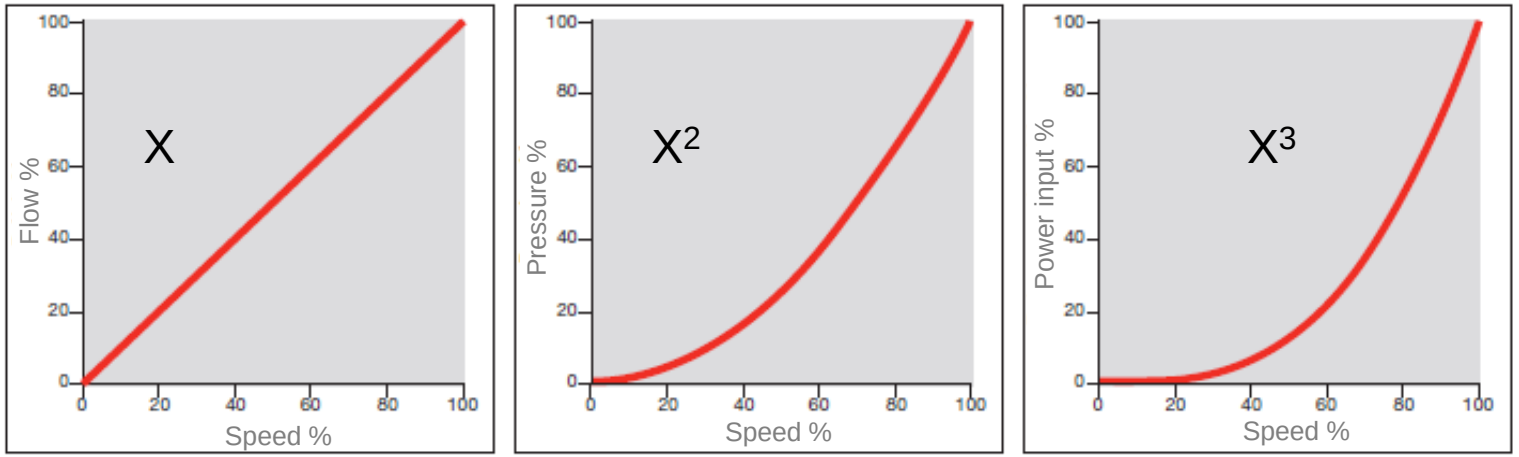
BUILDING LOAD PROFILES

Majority of HVAC installations are running
at partial-load.
There are significant saving opportunities
which are a direct result of good hydraulic
design and control logic.

PUMP is one of the main source of Energy consumption of an HVAC system

Key Features: Variable Water Flow

The relation between variables like pressure, flow, rotation speed and power consumption can be translated into affinity laws.



AFFINITY LAWS APPLIED TO PUMPS **Relation between Speed & Energy use**

Pump power input varies as the cube of the pump speed.
Pump speed is directly proportional to water flow

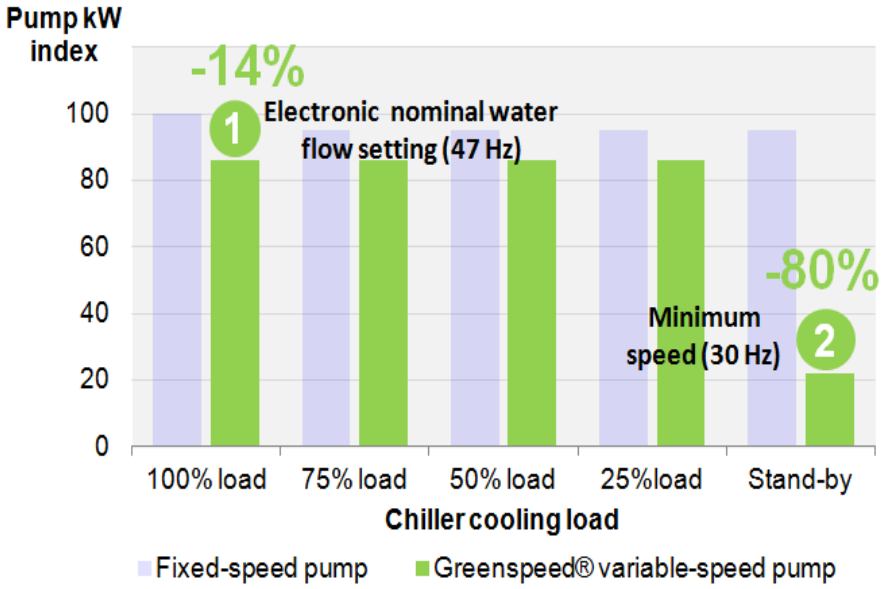
P1/P2 = (W1/W2)^3

20% water flow reduction => 50% energy reduction

40% water flow reduction => 80% energy reduction

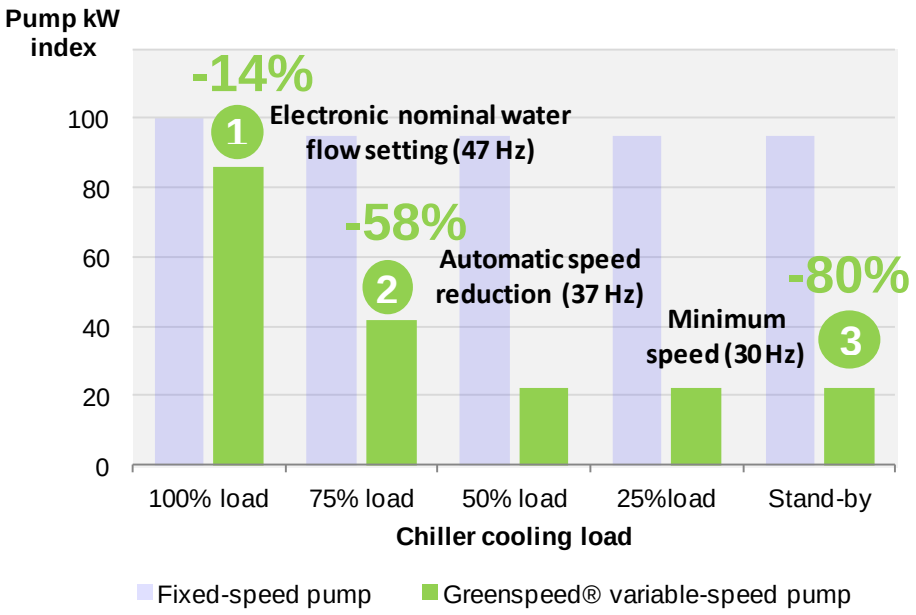
Key Features: Variable Water Flow

In **C**onstant **P**rimary **F**low (**CPF**) system



CPF Pumping Energy - 1/3

In Variable **P**rimary **F**low (**VPF**) system



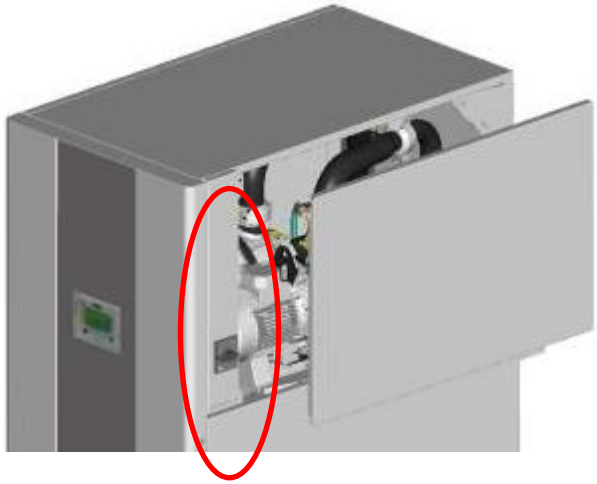
VPF Pumping Energy - 2/3

PUMPING Energy Savings

SUMMARY

- Range overview
- Product Features & Benefits
- Application range
- Performances
- Hydraulic
- **Main options**

Common features: External main switch



Option: Opt_70F

External main switch

Description:

External main switch for hard stop by power shut down

Advantage:

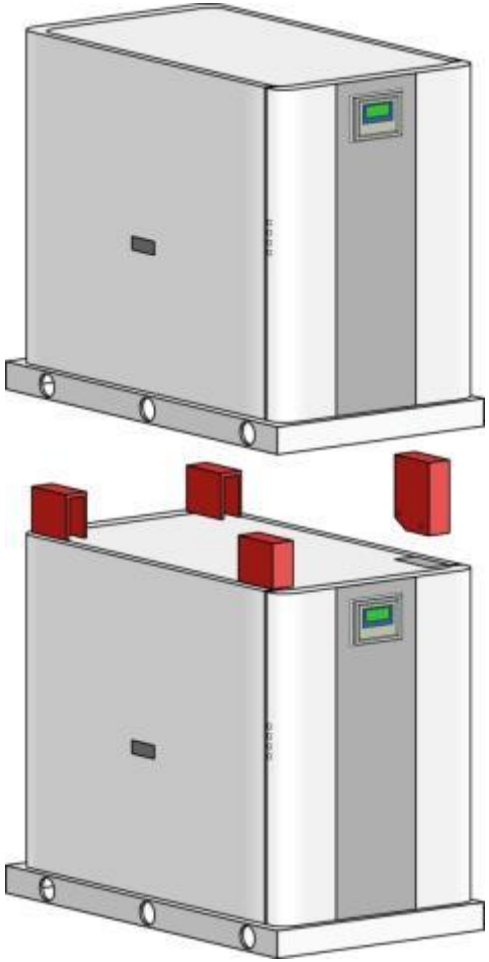
Compliance with some local legal constraints

Tips:

Even with external main switch sliding panels remains

EASY SLIDING PANELS AVAILABLE EVEN WITH EXTERNAL MAIN SWITCH

Common features: stackability



Option: Opt_272

Stackable unit **on sizes 20-90**

Description:

Reinforced roof with special design (holes) and coupling accessories

Advantage:

Perfect to **replace bigger capacity** units when having difficult access to plant or reduced technical room.

Tips:

-Only one unit of the two has to be ordered with this option.
-This option is not compatible with Top water connection.
-This option goes well with lead/lag control option (Opt. 58).
-Double the capacity with same noise level (associate with Opt_257)

PERFECT TO TARGET RETROFIT MARKET

Common features: Water connections

Standard water connection on rear

Optional water connection on top

Option: Opt_274

Top water connection, back is standard

Description:

Condenser and evaporator connection from the top

Advantage:

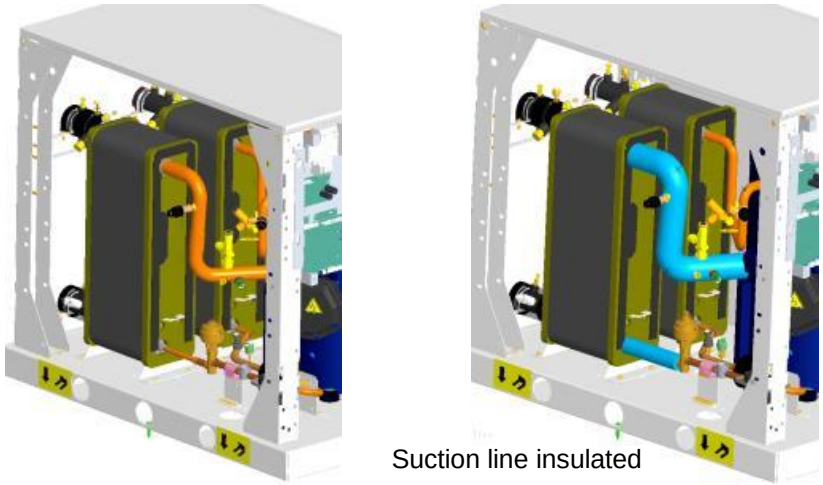
Unit **can be installed close to the wall** to fit plant room dimensional constraints

Tips:

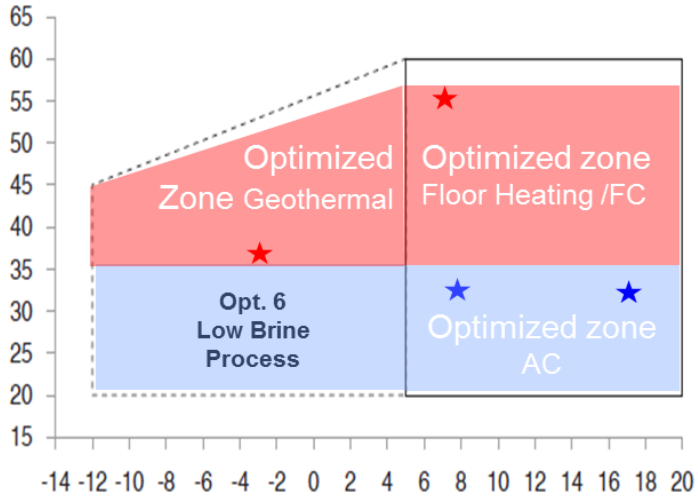
Top water connection is not compatible with stackable option but compatible with all hydraulic kit options

TOP or BACK Connection WITH or WITHOUT Hydraulic Kit
Adaptation to differents installations configuration

30WG specific features: Low brine



Suction line insulated



Option: Opt_6

Low brine LWT -12°C

Description:

Insulation of suction line and different refrigerant weight

Advantage:

Extend unit operating map **to process cooling applications** down to -12°C

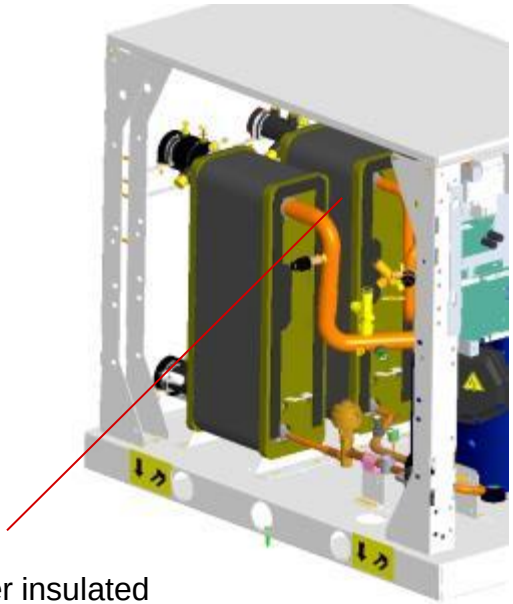
Tips:

None

Insulation	30WG		61WG	
Heat exchanger	Evaporator	Condenser	Evaporator	Condenser
Insulation	Standard	No	Standard	Option 86

OPERATING MAP EXTENSION FOR PROCESS COOLING

30WG specific features: Condenser insulation



Condenser insulated

Insulation	30WG		61WG	
Heat exchanger	Evaporator	Condenser	Evaporator	Condenser
Insulation	Standard	No	Standard	Option 86

Option: Opt_86

Condenser insulation

Description:

Insulation of condenser BPHE

Advantage:

Avoid loose of energy on condenser

Tips:

Recommanded on Heat Pump application

OPTIMIZED HEATING OPERATION

30WG specific features: Dry Cooler Controls

Option: Opt_154

free-Cooling managment

Description:

Soft & Len connexion for drycooler
aux board will be factory mounted on the drycooler 09PE Control box panel (option).

Advantage:

Plug and play control of Carrier 09PE dry cooler

Tips:

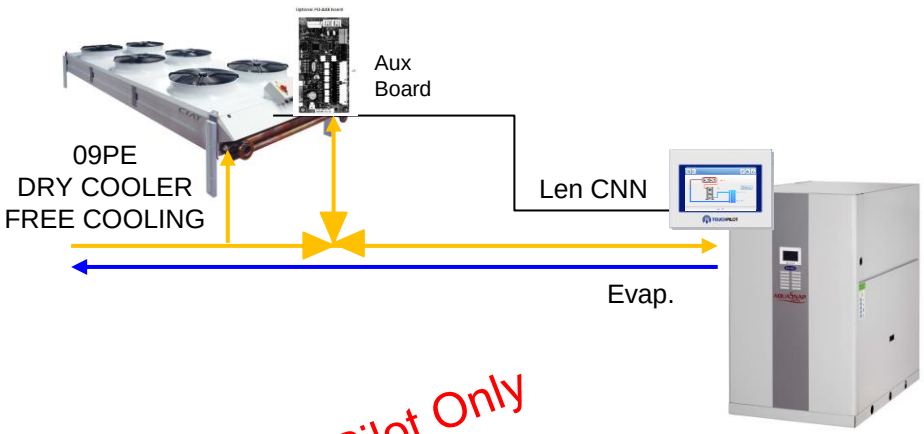
Complete system Chiller+Dry offer
Select right options on dry cooler

PLUG AND PLAY System ENERGY EFFICIENCY

30WG specific features: Free cooling

Dry Free-Cooling Managment

(CO 30WG units)



On TouchPilot Only
Sizes 110-190
NEW

Option: Opt_313

free-Cooling managment

Description:

-Management of 09PE Dry cooler for Free-Cooling application
-Aux board to be order on 09PE
-Simple Bus CNN connection
-3 Ways valves& OAT sensors in option on 09PE

Advantage:

-Energy saving
-System offer

Tips:

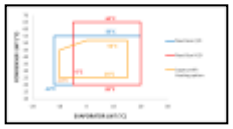
Select right options on dry cooler

SYSTEM OFFER

Sources: drawing courtesy of Walter Meier CH team

PRODUCT IN DETAILS

30WG Product wrap up



17 sizes using scroll compressors and R410A refrigerant

Designed for cooling with **-12°C as lowest** LWT

Heat / cool change over with **60°C as highest** LWT

Seasonal efficiency
in cooling **ESEER** above 5, average 5.63
In heating **SCOP** meet 2017 ecodesign requirements

Compact with small footprint and **stackable** option (sizes 20-90)

Versatile installation:
Connection from **top or back / Victaulic-Screwed-Welded**

Specific set of options for cooling such as dry cooler control interfacing and condensing pressure hydronic V3W control

kit available with **fixed** speed pump **or variable** water flow pump

Communication with all BMS via **Modbus, Lon, Bacnet** optionnal gateway

Lead/lag option

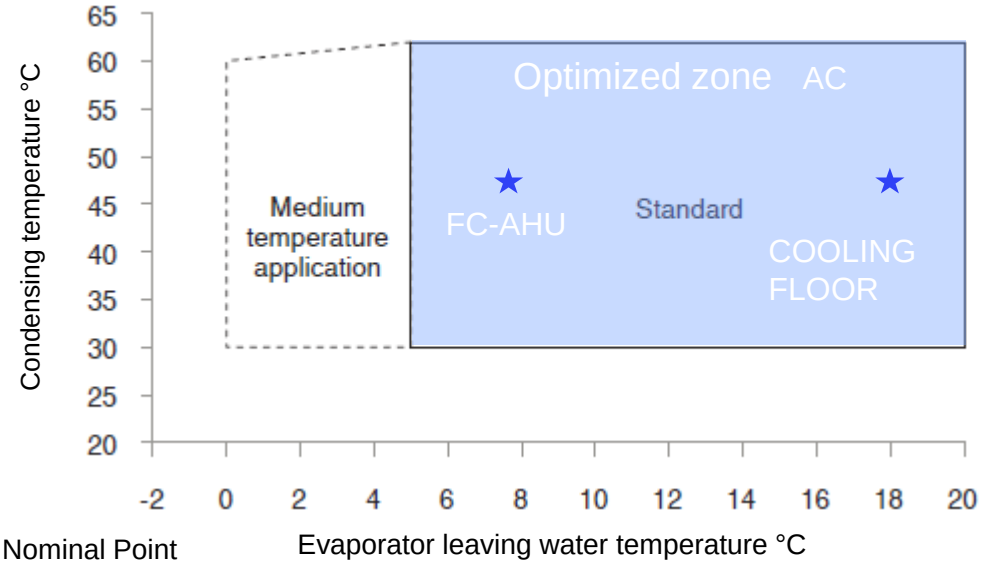
AQUASNAP

30WGA
Condenserless Version

Carrier
United Technologies

Common features: Operating maps

30WGA
COOLING



★ Nominal Point

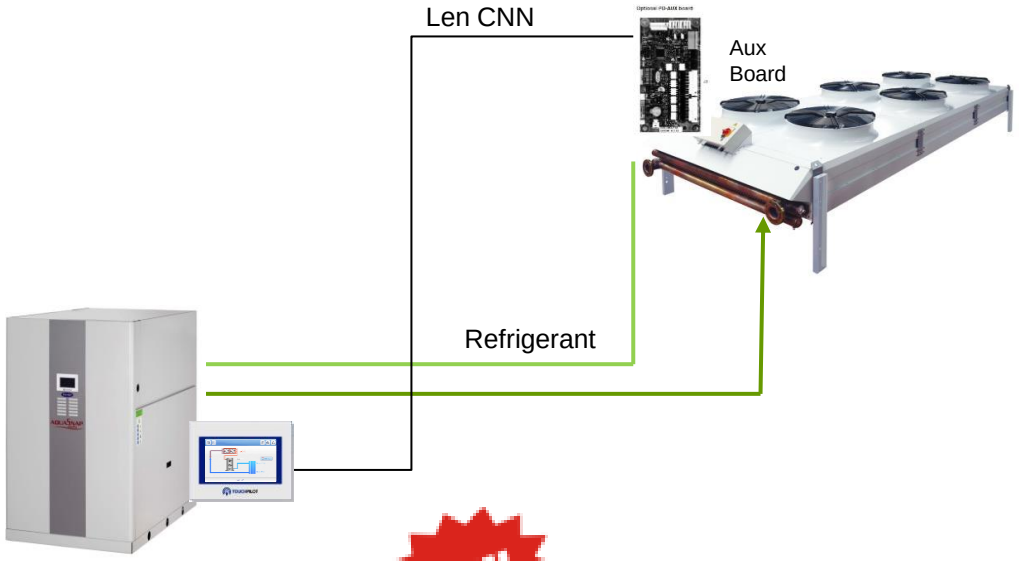
Standard : condenserless version

Description:
Unit without condenser to be connected to a separate air cooled remote dcondenser

Advantage:
Instalation without water loop outside, and freeze protection managment.
Vs AC unit : Condenser adapted to site constraints (Noise-dimmensions…)

Tips:
Complete system Chiller+Dry offer

30WGA specific features: Dry Cooler Controls



NEW

On Touch Pilot Only
20-90 = Q1 2017

Option: Opt_154

Aerocondenser managment

Description:

Soft & Len connexion for drycooler aux board will be factory mounted on the drycooler 09PE Control box panel (option).

Advantage:

Plug and play control of Carrier 09PE Air cooled Condenser

Tips:

Complete system Chiller+Dry offer
Select right options on dry cooler

PLUG AND PLAY System ENERGY EFFICIENCY

AQUASNAP

61WG
Heat Pump
High Temperature Version

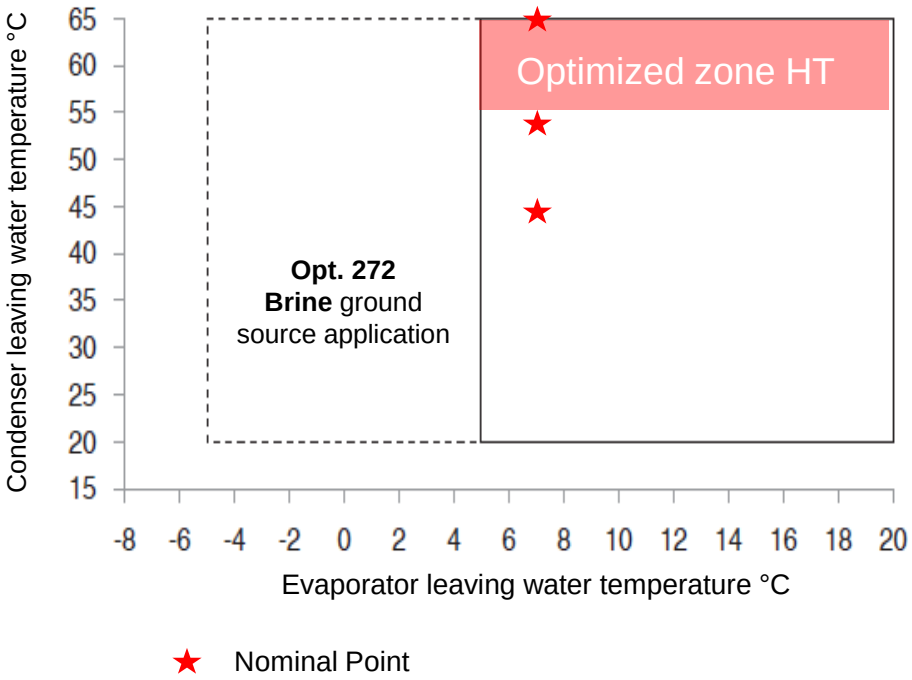
Carrier
United Technologies

PRODUCT IN DETAILS

Common features: Operating maps

61WG
HEATING

65° Haute température



Option: Standard

High temperature application

Description:

Component & control adapted for high temp.

Advantage:

Extended application Map

Tips:

Goes well with option 86: thermal insulation of condenser

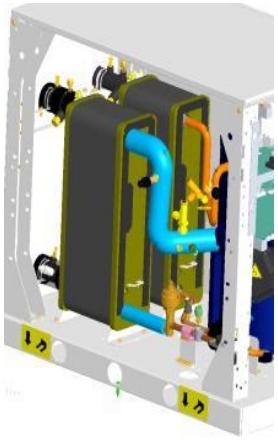
Adapt for renovation market

- Radiators terminal
- Boiler replacment

Optimized HIGH TEMP – RENOVATION

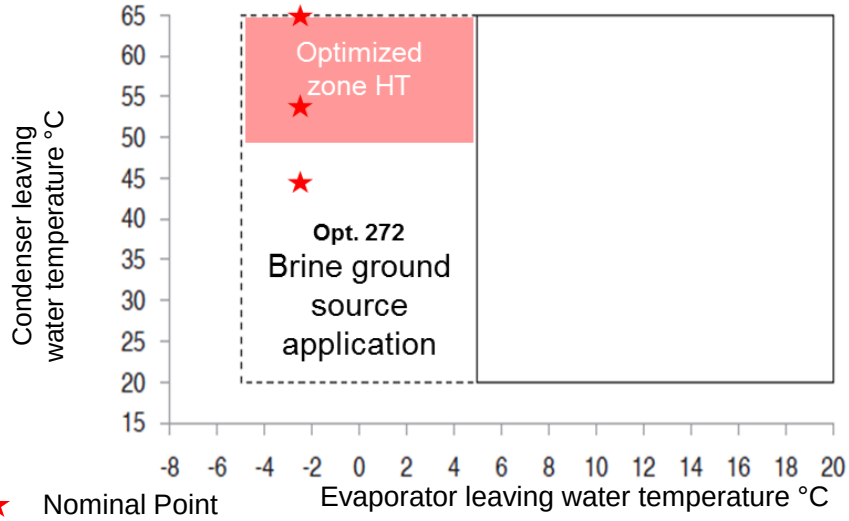
PRODUCT IN DETAILS

61WG specific features: Brine to water



Suction line insulated for Brine to water and Low Brine options

Geothermal application



★ Nominal Point

Option: Opt_272

Brine to water (ground source application) down to -5°C LWT

Description:

Component & control adapted for high temp. Insulation of suction line and different refrigerant weight

Advantage:

Extend unit operating map to particularly cold heat source

Tips:

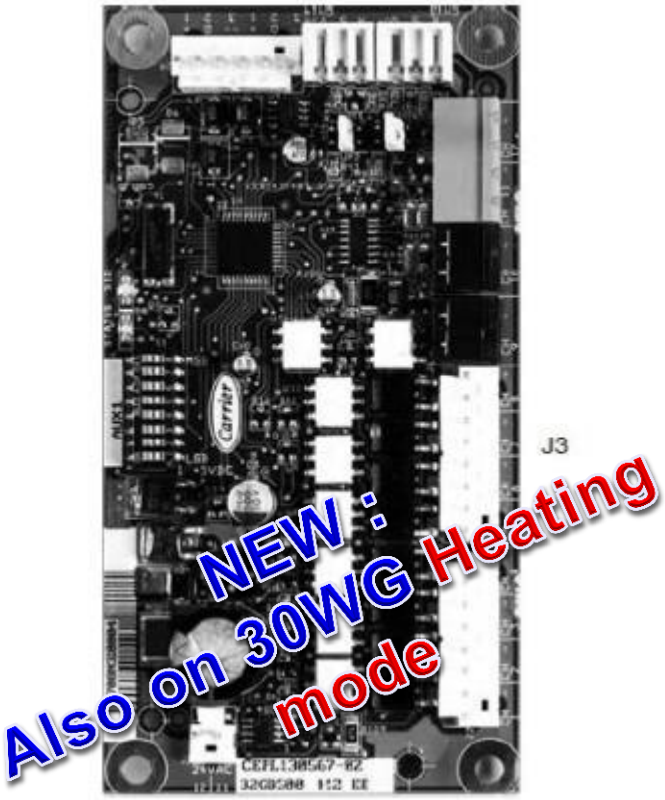
Goes well with option 86: thermal insulation of condenser

	30WG		61WG	
Heat exchanger	Evaporator	Condenser	Evaporator	Condenser
Insulation	Standard	No	Standard	Option 86

COMPATIBLE WITH GROUND SOURCE APPLICATIONS

30WG 61WG specific features: Controls

Optional PD-AUX board



Option: Opt_153

Heating control device

Description:

Factory mounted control board that manage basic heating system with

-weather compensation,
-back up,
-Staged (4) Electrical booster heater, Domestic
-Hot Water and even secondary loop circulating pump.

Advantage:

Energy efficiency made easy and affordable.

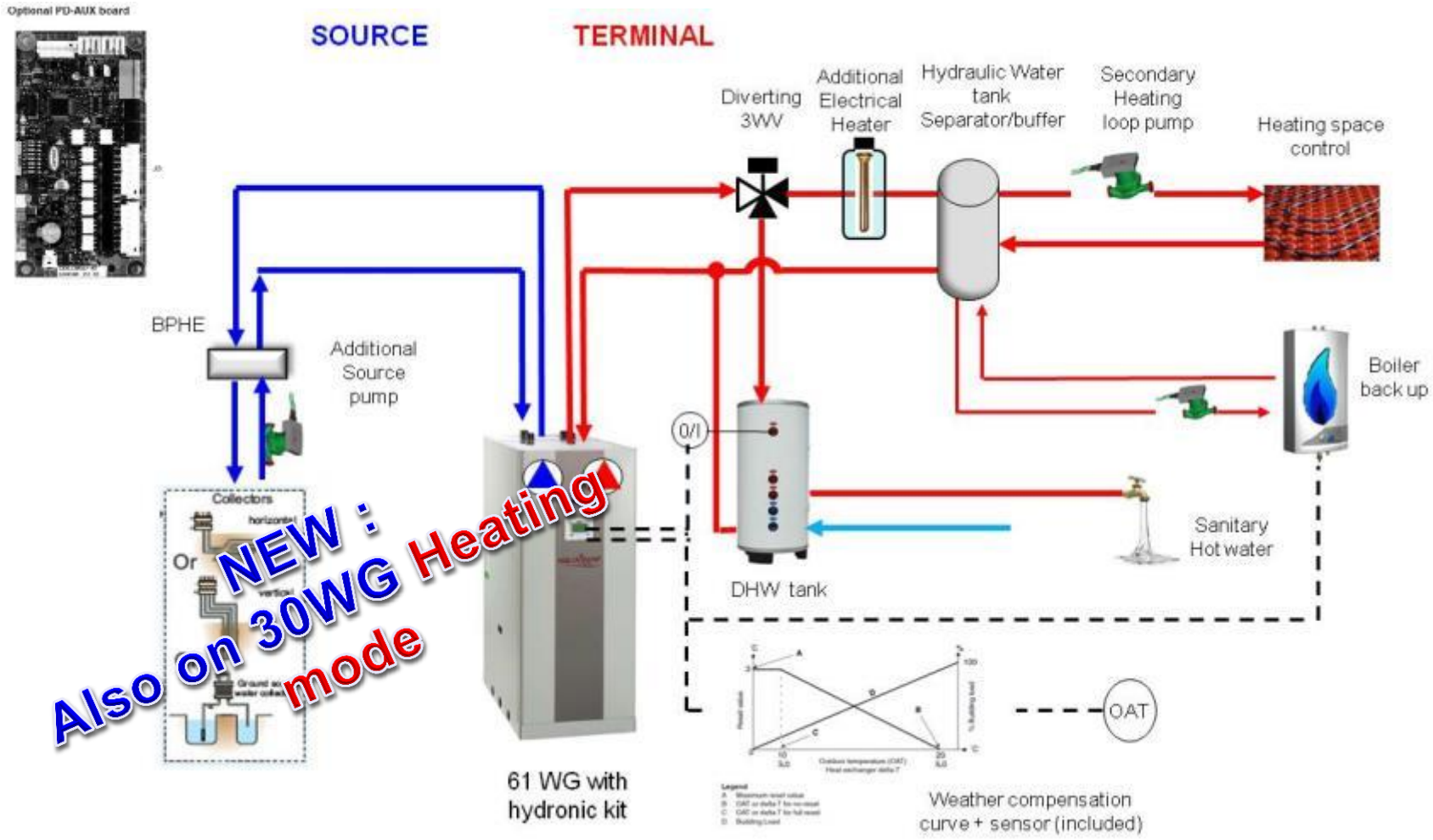
Tips:

Only one LWT control for space heating.
If multiple terminal unit type, go for **H**eating **S**ystem **M**anager Carrier.

COMPLETE CONTROL OF MONO LWT HEATING PLANT

PRODUCT IN DETAILS

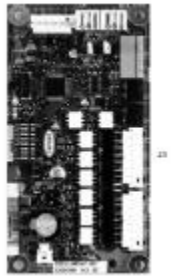
30WG 61WG specific features: Opt_153



COMPLETE CONTROL OF SINGLE LWT HEATING PLANT

30WG 61WG specific features: HSM

NEW :
Also on 30WG Heating mode



Option:
Heating **S**ystem **M**anager accessory

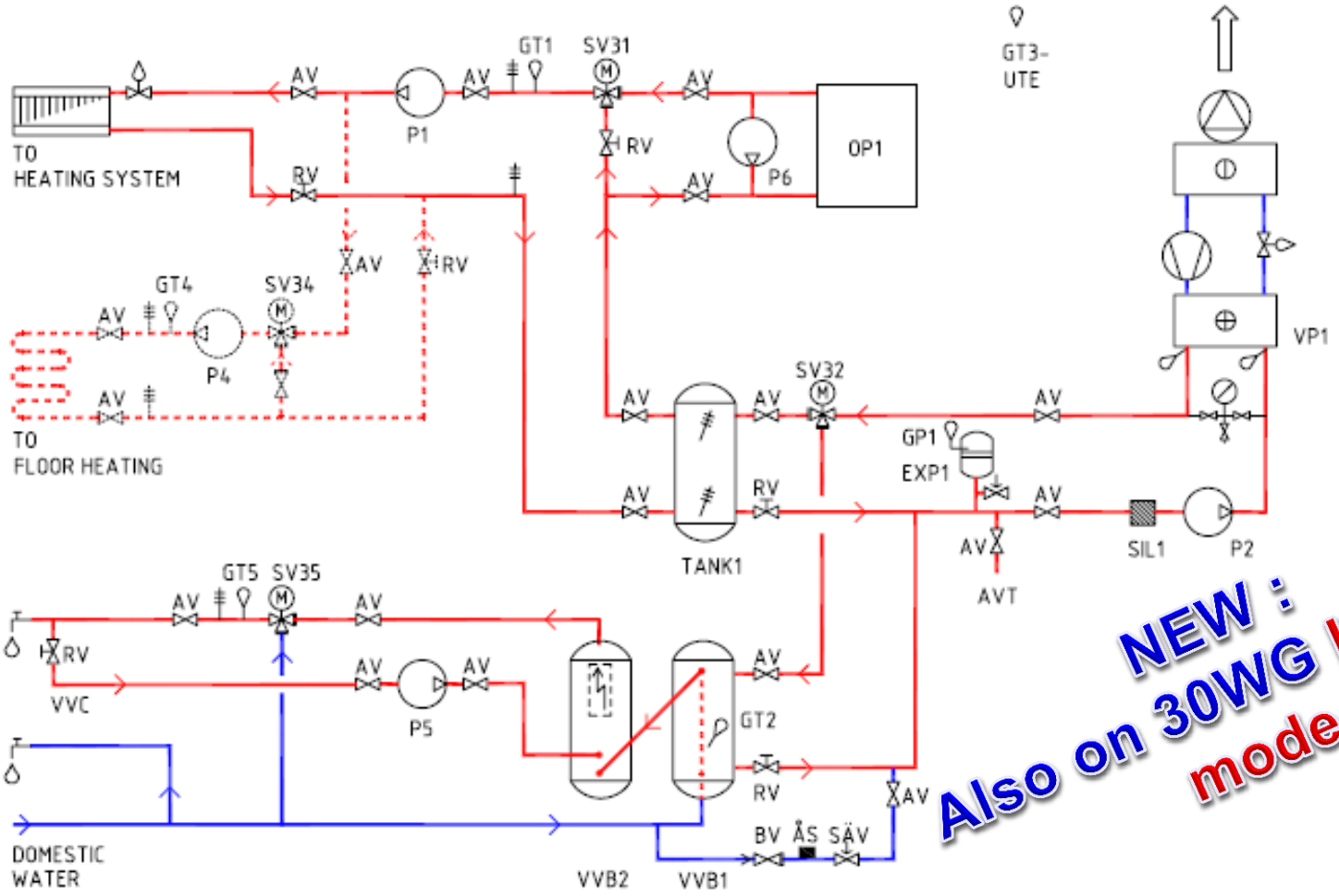
Description:
Control box with sensors

Advantage:
Helps to compete against northern Europe brands at efficient cost.

Tips:
This device drastically reduces setting time given all pre set of common heating systems configurations

COMPLEX HEATING SYSTEM CONTROL MADE EASY

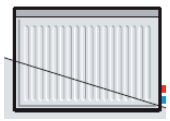
61WG specific features: HSM



NEW : Also on 30WG Heating mode

MULTI LWT HEATING SYSTEM CONTROL MADE EASY

61WG Product wrap up



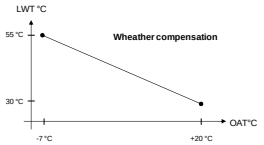
11 sizes using scroll compressors and R410A refrigerant

Designed for heating with **+65°C** as highest LWT

Heat / cool change over with -5°C as lowest LWT _ **Geothermal application**

COP above 5
SCOP meet 2017 ecodesign requirements

Compact with **small footprint and stackable option (20-90)**



Specific set of options for heating such as weather compensation control, domestic hot water diverting valve control or staged electrical heater back up control

Versatile installation:
Connection from **top or back / Victaulic-Screwed-Welded**

Large choice of hydronic kit available with **fixed or variable** speed water flow pump

Communication with all BMS via **Modbus, Lon, Bacnet** optionnal gateway

Lead/lag option

AQUASNAP WC

30WG / 61 WG / 30WGA

Cooling-Heating Heating High Temp. Condenserless