CRIO.V

NEW UNIT RANGE of PROPANE Medium Temperature CHILLERS

EUROKLIMAT
Cooling System Solutions

Agenda

1. EXISTING UNIT RANGE for Medium Temperature

2. MAIN ASPECTS of NEW CRIO.V

3. TECHNICAL DETAILS

4. CATALOGUE'S INFORMATION

Existing unit range for MT applications

Air-Cooled Liquid Chillers for Medium Temperature applications

CRIO

Refrigerant
R290 | GWP=3

Semi-hermetic
piston compressor

Axial EC fans

Brazed plate
heat exchanger

Nominal Cooling Capacity: **7 – 185 kW** (50Hz)

EUROKLIMAT Cooling System Solutions

Existing unit range for MT applications

NEW Extension for Air-Cooled Liquid Chillers for Medium Temperature applications

CRIO.V

Refrigerant
R290 | GWP=3

Eco Design Ready

Nominal Cooling Capacity: 218 – 860 kW (60Hz)

EUROKLIMAT Cooling System Solutions

Existing unit range for MT applications

NEW Extension for Air-Cooled Liquid Chillers for Medium Temperature applications

CRIO

(50Hz) 7 kW

CRIO.V

860 kW (60Hz)

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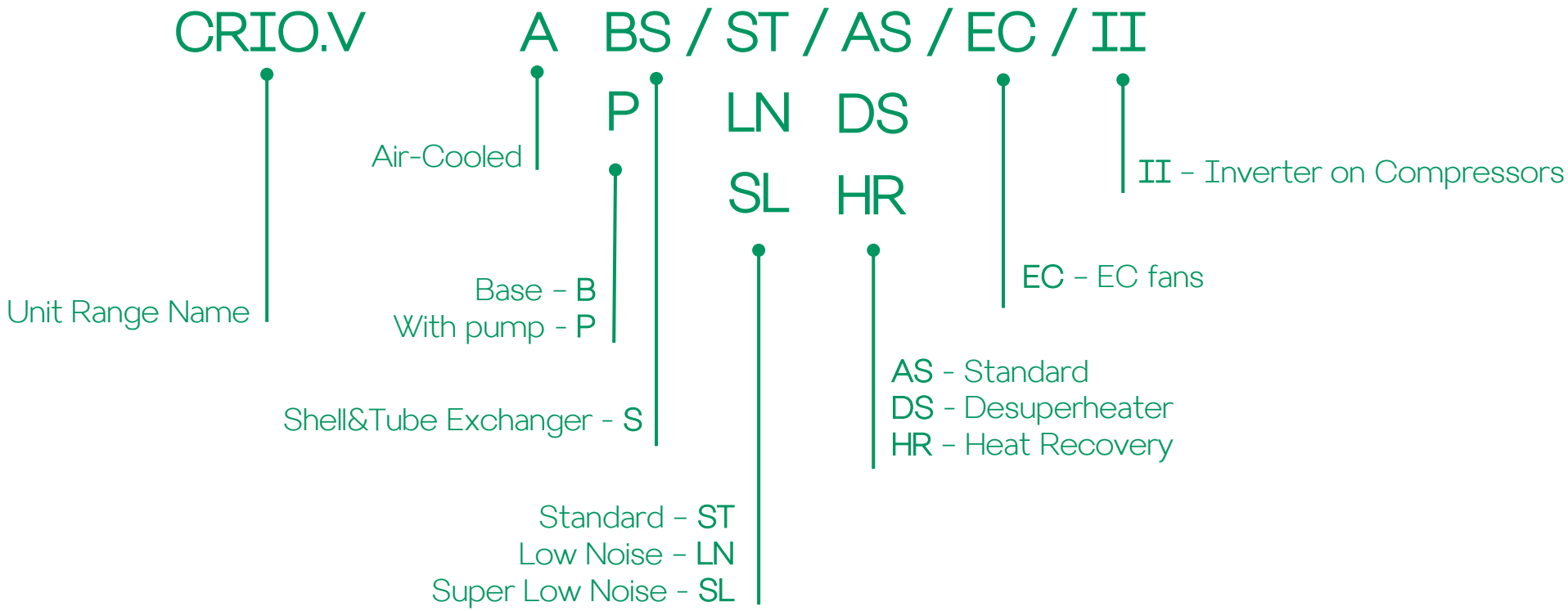
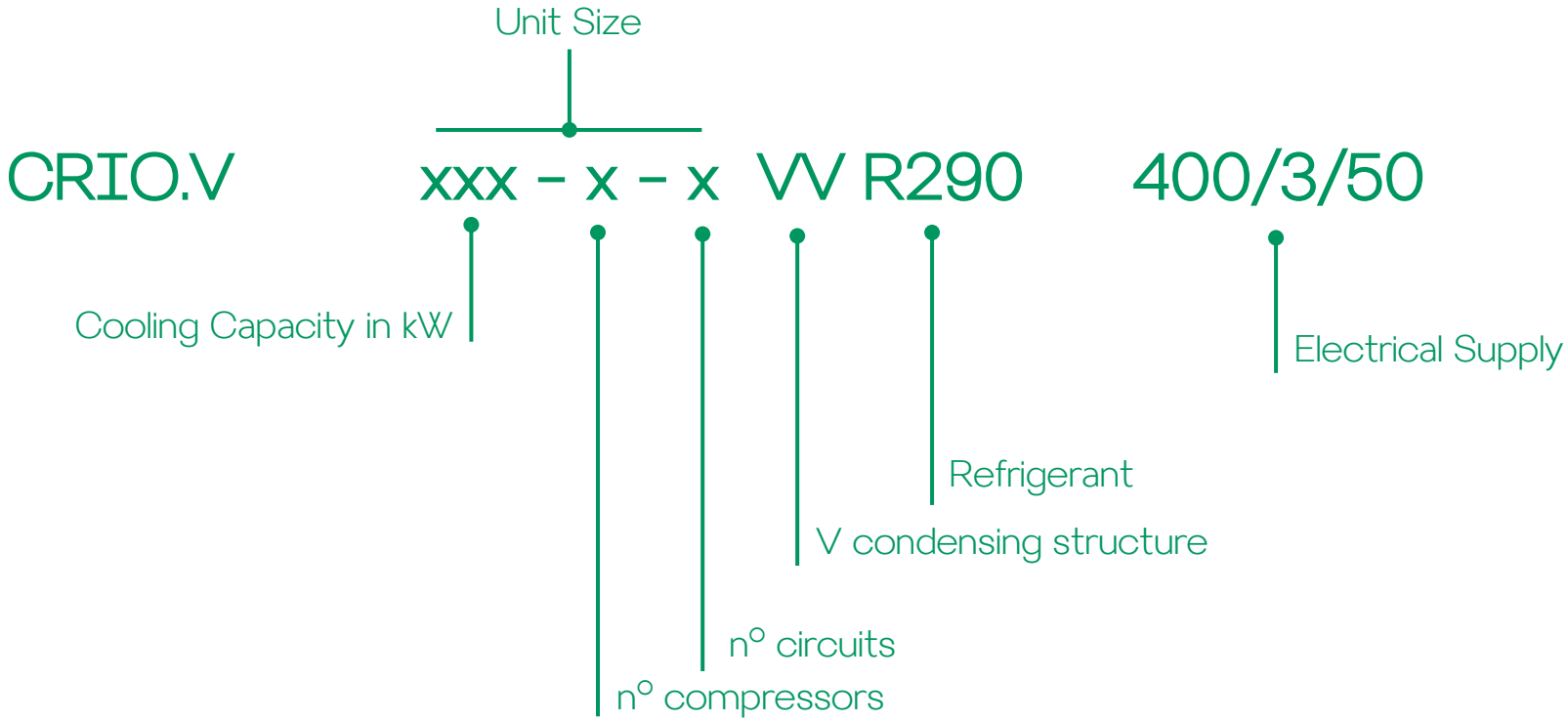
MAIN ASPECTS of NEW CRIO.V

Main combination of the CRIO.V



The above legend allows you to easily select the proper configuration of CRIO.V units

Main combination of the CRIO.V



The above legend allows you to easily select the proper configuration of CRIO.V units

Main combination of the CRIO.V

CRIO.V A BS / ST / AS / EC / II xxx - x - x VV R290 400/3/50

Complete Unit Codification

The above legend allows you to easily select the proper configuration of CRIO.V units

Main combination of the CRIO.V

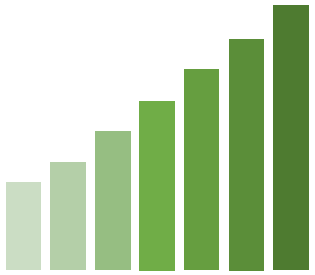
CRIO.V

CRIO.V / BS

BUSINESS Configuration

DT°_cond of **13K**

13 Sizes



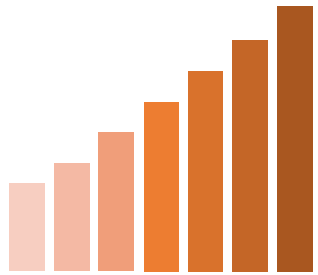
285 kW — 860 kW

CRIO.V / HE

HIGH EFFICIENCY Configuration

DT°_cond of **11K**

15 Sizes



218 kW — 750 kW

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TECHNICAL DETAILS of NEW CRIO.V

Technical details of the CRIO.V

CRIO.V

R290

Refrigerant
R290 | GWP=3

Eco Design Ready

S&T

Shell & Tube
exchanger

Inverter controlled

Screw
Compressors

Single Circuit

MCX

Microchannel
condensing coils

Axial EC fans

Double circuit

EUROKLIMAT
Cooling System Solutions

Technical details of the CRIO.V

High efficiency EC fans, electronically commutated, usefull to reduce energy power consumption

Axial EC fans

Inverter controlled

Improved system quality by maintaining a constant leaving water temperature
Increased power by increasing the speed of the variable speed compressor
Energy saving
Longer compressor lifetime
Better possibilities of providing monitoring, remote setting and diagnostics

MCX

Microchannel condensing coils

Microchannel technology increases the primary to secondary surface area ratio and reduces the tube´s air shadow to provide maximum heat exchange through our condensers.

Screw Compressors

Compressors configured for maximum efficiency with a high compression ratio and sophisticated three-stage oil separation system minimises oil dragging towards the system.

All extremely efficient with low refrigerant charge and very stable operating performance due to excellent refrigerant distribution, thermally insulated by vapour-proof closed cell.

Shell & Tube exchanger

Technical details of the CRIO.V

Eco Design Ready

SEPR (seasonal energy performance ratio) for chillers in industrial process applications.

European Directive
2009/125/EU - Ecodesign
Regulations for energy-related products

SEPR

ATEX certified gas detector installed inside the compressor's box, ensures the activation of the adequate safety measures in case of R290 leakage.

Extractor Fan

Gas Detector

R290

Thanks to the emergency fan, in case of leakages air is pushed into the compressor box, allowing the dilution of propane.

Technical details of the CRIO.V

CRIO.V A BS / ST / DS / EC / II

DS

DESUPERHEATER

Captures heat from superheated refrigerant, exploiting the hot discharge gas.

Only small quantity of heat is available since only superheat is removed from the refrigerant (depending on the temperature requirement for hot water is possible to recover up to 20% of the total condensing heat).

Hot water temperatures up to 55°C can be achieved

HR

TOTAL MODULATING **HEAT RECOVERY**

Captures heat from refrigerant condensing process.

A larger quantity of heat is available compared to desuperheater: if necessary, the full condensing process may be used to produce hot water.

CRIO.V A BS / ST / HR / EC / II

Technical details of the CRIO.V

BASIC CONFIGURATION WITHOUT **PUMP**

B

As interface to the plant, includes the water fittings of the evaporator only.

P

CONFIGURATION WITH **PUMPS** (OPTIONAL)

LP – 1,5 bar available pressure
MP – 3,0 bar available pressure
HP – 5,0 bar available pressure

The pump control equipment is fitted inside the electrical board of the unit and the microprocessor
control manages the pump starting, timing and all the safety devices of the whole system.

BASE-P — With or without pumps

LP / MP / HP — Pumps available pressure

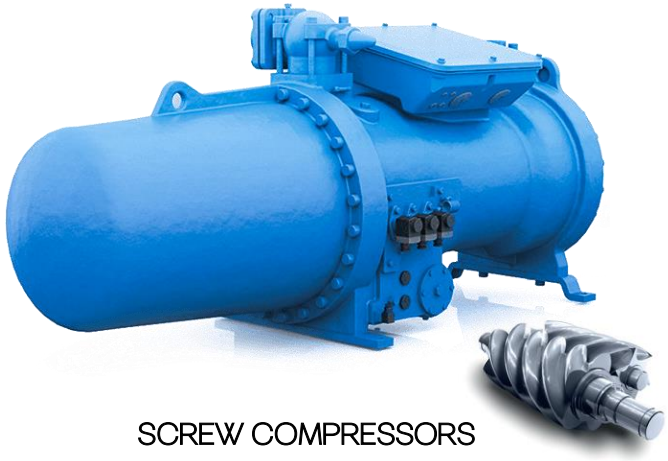
x-x — n° standby pumps / n° operative pumps

OO / II
OO – On-Off Control
II – Inverted Controlled

For the complete list of accessories please refer to the catalogue or your reference commercial

Technical details of the CRIO.V

PUMPS



SCREW COMPRESSORS

ELECTRONIC EXPANSION VALVE

SHELL & TUBE EXCHANGER

EC AXIAL FANS

PLATE-TYPE EXCHANGERS (DS & HR)

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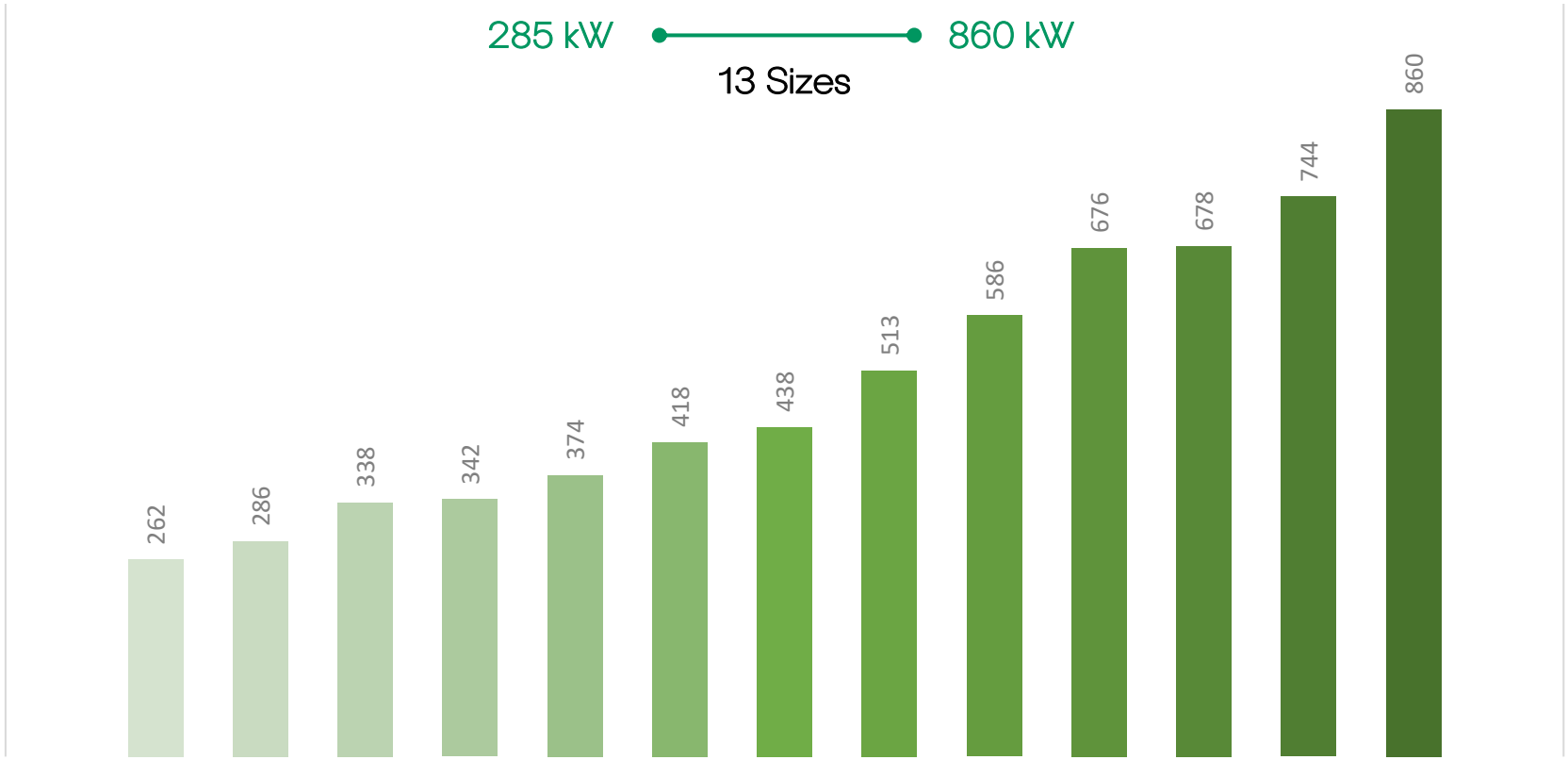
CATALOGUE'S INFORMATION of NEW CRIO.V

Catalogue's information of the CRIO.V

CRIO.V / BS

BUSINESS Configuration DT°_cond of 13K

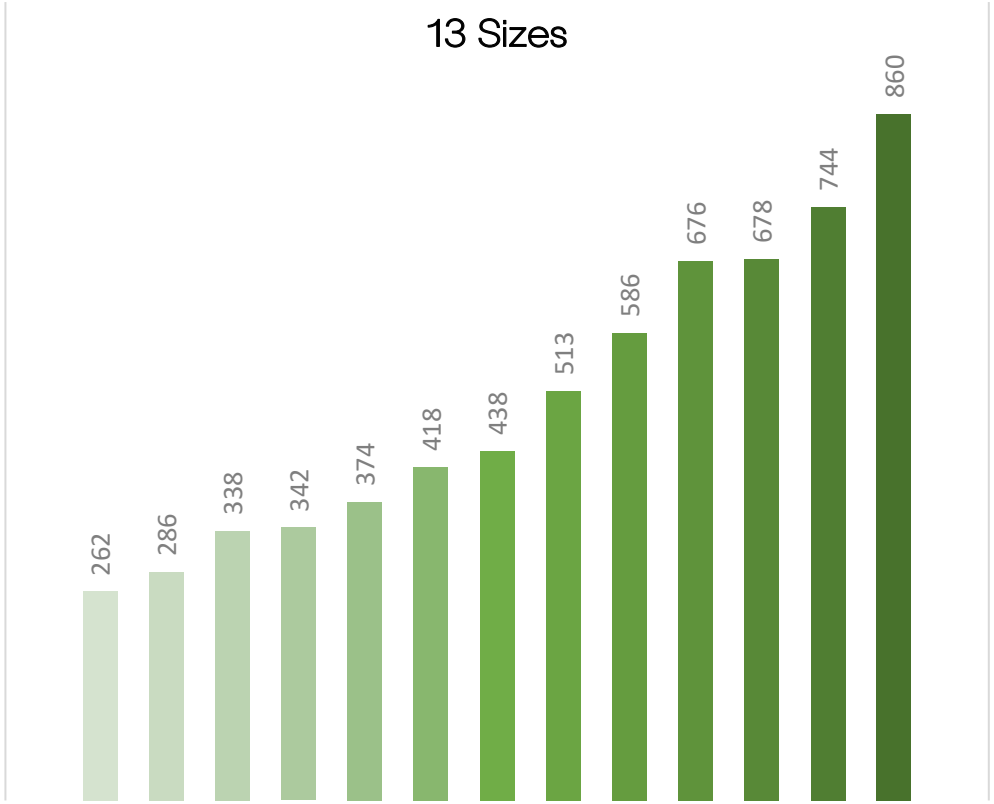


Catalogue's information of the CRIO.V

CRIO.V / BS

BUSINESS Configuration DT°_cond of **13K**

Cooling Capacity	285 kW	860 kW
Refrigerant Circuit number	1	4
Water flow range	59 m3/h	194 m3/h
GWP	3	
Power supply (main)	400/3/50	
DS capacity (optional)	73 kW	240 kW
HR capacity (optional)	xxx kW	xxx kW



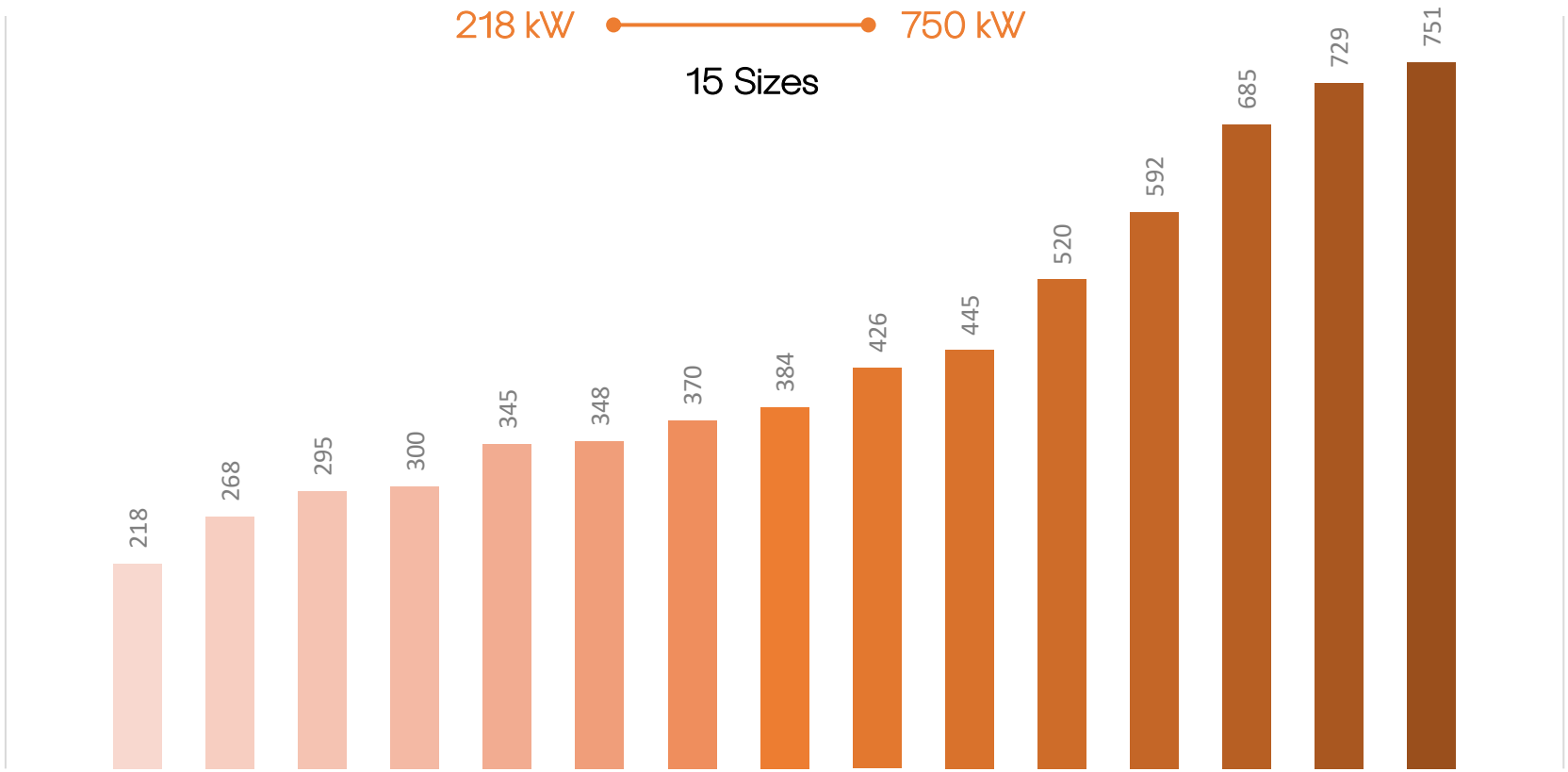
*All technical data are set with nominal condition design

(1) Outdoor air temperature = 35°C - Evaporator water temperature IN/OUT = -4/-8°C - Fluid: ethylene glycol 35%- Condensing coil: Microchannel
(2) Plate heat exchanger water temp. IN/OUT = 40/45°C - Condenser air intake temperature = 35°C -Evaporator water temperature IN/OUT = -4/-8°C - Fluid: Water - Condensing coil: Microchannel
(1) (2) The declared cooling capacity are not taking into account the pump motor power input (where provided).

Catalogue's information of the CRIO.V

CRIO.V / HE

HIGH EFFICIENCY Configuration DT°_cond of 11K

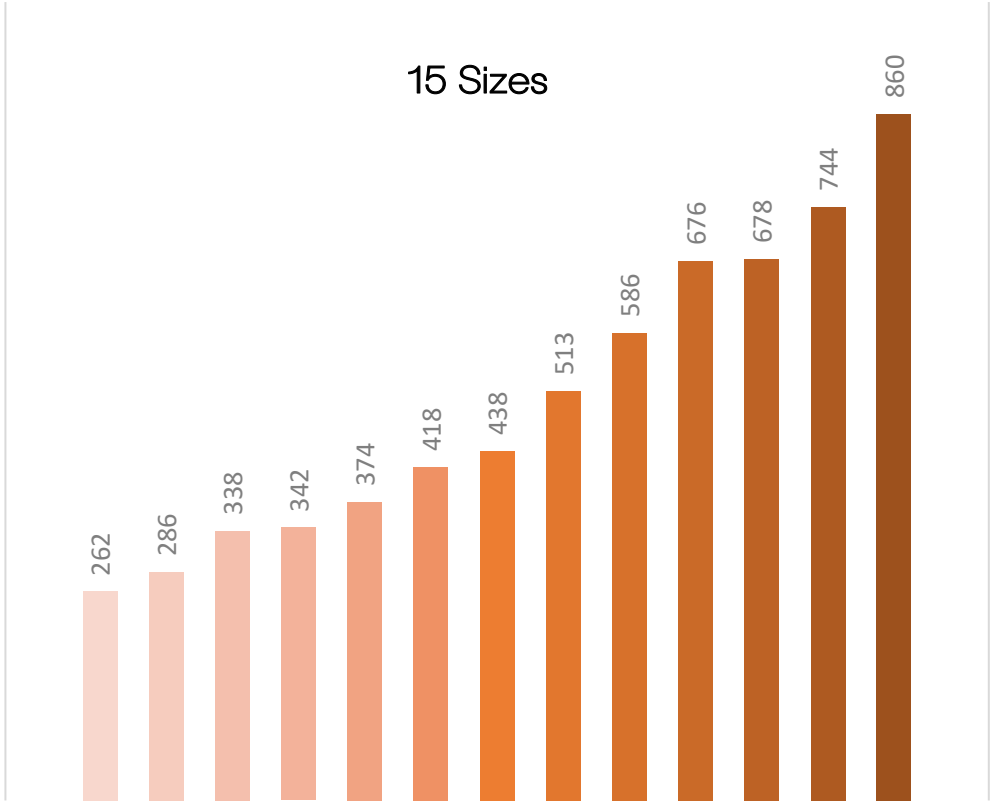


Catalogue's information of the CRIO.V

CRIO.V / HE

HIGH EFFICIENCY Configuration DT°_cond of **11K**

Cooling Capacity	218 kW	750 kW
Refrigerant Circuit number	1	4
Water flow range	48 m3/h	169 m3/h
GWP	3	
Power supply (main)	400/3/50	
DS capacity (optional)	65 kW	215 kW
HR capacity (optional)	xxx kW	xxx kW



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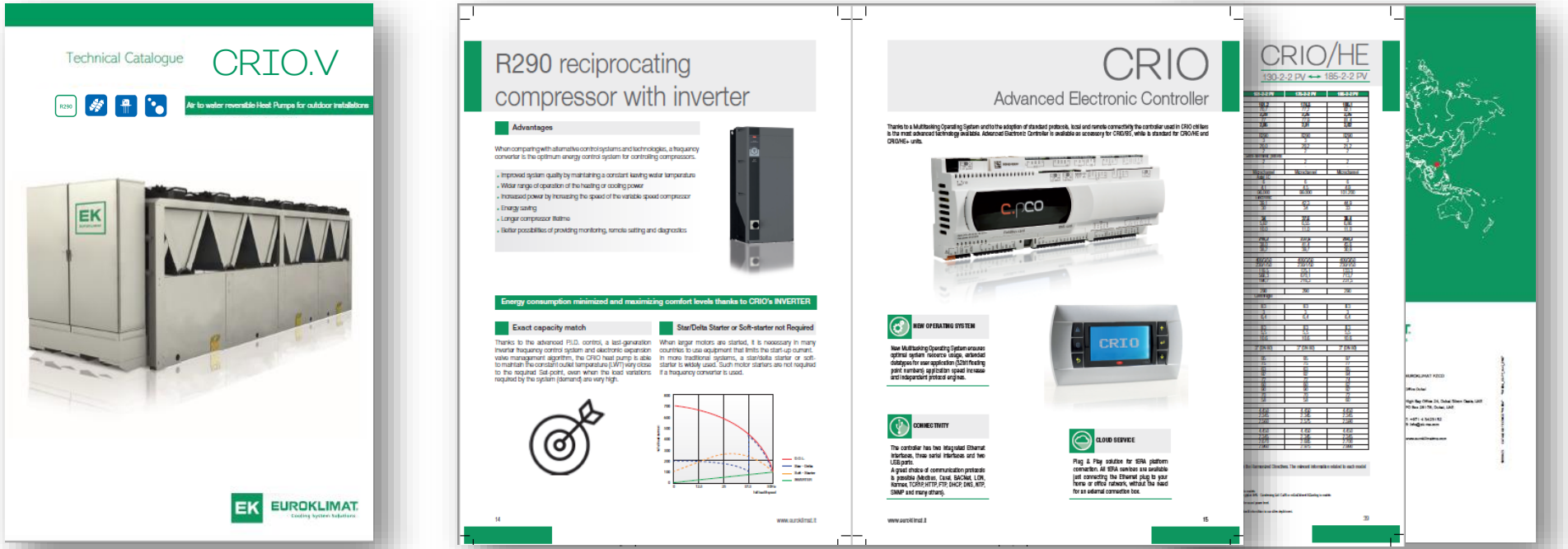

For all details don't hesitate to read the CRIO.V catalogue.
Ask to your reference commercial.

Also available on the online Selection Software **wEKool**