

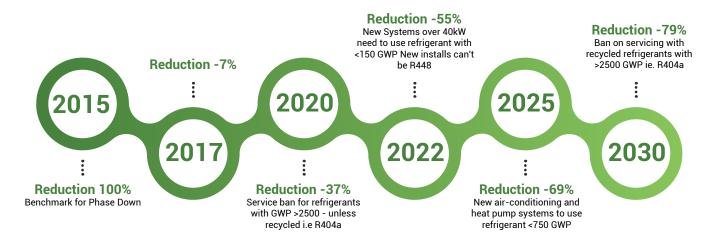
# CATALONIA.



COSE CONTROL UNIVI



# **REFRIGERANT PHASE DOWN**



# **VARIOUS REFRIGERANT COMPARISON**

REFRIGERANT FLUIDS								
CHARACTERISTICS	R12	R22	R134a	R404A	R290	R600a	NH <sub>3</sub>	CO <sub>2</sub> (R744)
	×	×	×	×	~	~	~	~
Classification ■	CFC	HCFC	HFC	HFC	НС	НС	Inorganic	Inorganic
ODP (Ozone Depletion Potential)	0.82	0.055	0	0	0	0	0	0
GWP (Global Warming Potential)	8.100	1.500	1.300	3.922	3	3	<1	1
<b>&amp;</b> Flamable	×	×	×	×	<b>~</b>	~	~	×
<b>₩</b> Toxic	×	×	×	×	×	×	~	×
8° Critical temperature (°C)	112	96.2	101.2	72.1	96.7	134.7	132.3	31.1
O Critical pressure (Bar)	41.4	49.9	40.6	37.3	42.5	36.4	112.7	73.8

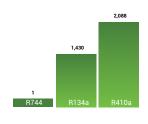




# CO<sub>2</sub> THE NATURAL REFRIGERANT FOR TOMORROW

Since 1850,  $CO_2$  has proven to be one of the most reliable, efficient, and environmentally friendly refrigerants. Now,  $CO_2$  is being used worldwide to provide a sustainable and cost-effective refrigerant solution - one that is compliant with the increased environmental requirements of today and tomorrow.

# VARIOUS REFRIGERANT COMPARISON



**Low GWP** 



**Ozone Friendly** 



Non-Flammable



**High Water Temperature** 



High Efficiency (Patented CO<sub>2</sub> System)



High Pressure Refrigerant



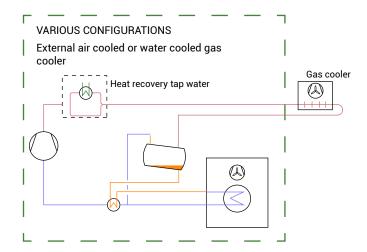
High Density Gas



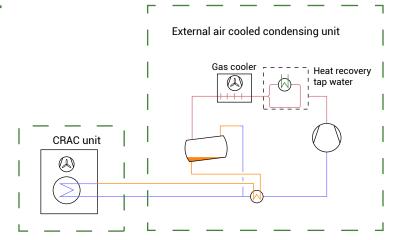




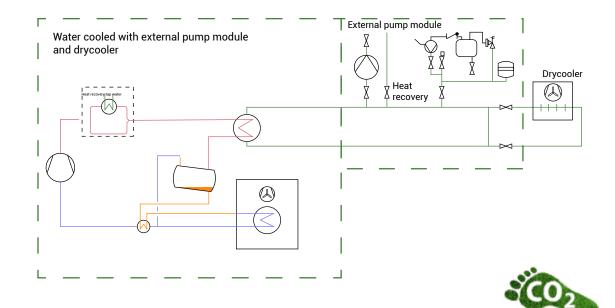
# **TYPE - 1**



# **TYPE - 2**



# **TYPE - 3**





# **AIR DISCHARGE**

Top air discharge and front intake

Bottom air discharge and upper intake

## **VERSIONS**

Cooling only

Cooling and heating

Cooling and humidification

Cooling, heating, humidification and dehumidification

### STANDARD CONFIGURATION

Single or double skin galvanised casing

Fixed speed semi hermetic compressor

Internal sound insulated compressor cabinet

EC controlled fans

Copper coil with Aluminium fins

Eu 5 air filter

Supply voltage 230/400-3-50

304L internal tubing & piping

Reftronix Controller

PED certificate

Pressure class 80/120bar



## **OPTIONS**

Air cooled outdoor condensing unit

Inverter semi hermetic compressor

**External gas cooler water or air cooled** 

Water cooled version

**EU** 7 filter

Modbus comunication for BMS

Heat recovery to building or tap water

Pump-module for heat recovery

Pump-module for drycooler

Drycooler

Epoxy fin gas-cooler

Dirty filter alarm

High ESP fans

Hot water coil

Electric heating coil

Humidifier

Unit Silencer

Scheduler

Web monitoring

Fire sensor

Smoke sensor

Condensate drain pump

Remote control panel

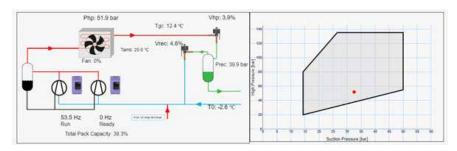
Adjustable base frame



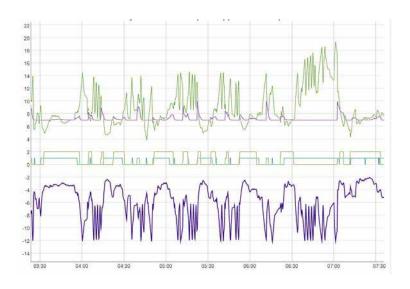


# **CONTROLS**

#### **VISUAL DISPLAY TOUCH WITH LIVE DATA**



#### LIVE LOGGING SYSTEM OF ALL OPERATING DATA

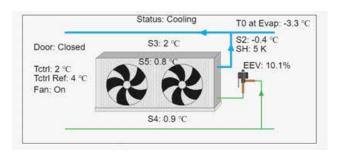


# UNIT COMES WITH A STANDARD KEYPAD DISPLAY



# AS OPTION IT IS POSSIBLE TO HAVE TOUCH DISPLAY WITH DIFFERENT LIVE VIEW OF OPERATING STATUS









# **TECHNICAL PARAMETERS**

	**	*	*	<b>©</b>	4	
Model	Max kW +24C/+28°c	Max kW +24C/+28°c	Max kW +24C/+35°c	Reg	M3/h max	Pa max
CR15-380	6.6	15.1	12.5	INV 30-70hz	4 500	
CR24-700	9.6	23.5	19.7	INV 30-75hz	7 000	
CR31-1000	10.5	31.0	25.9	INV 25-75hz	8 500	
CR38-1200	13.1	38.4	32.1	INV 25-75hz	10 200	250
CR50-1300	16.9	49.6	41.5	INV 25-75hz	14 300	250
CR56-1500	19.3	56.9	47.6	INV 25-75hz	15 100	
CR65-1900	22.1	64.9	54.3	INV 25-75hz	17 200	
CR76-2400	25.9	76.0	63.7	INV 25-75hz	20 100	

		KG		
Model	Depth	Width	Height	Operating weight Type 2 indoor
CR15-380	250	1200		770
CR24-700		1400		810
CR31-1000		1800	1980	950
CR38-1200				1080
CR50-1300		2400		1150
CR56-1500		2800		1280
CR65-1900		3200		1320
CR76-2400		3200		1350





# **OFFSHORE OPTIONS**

Halogen free cables and insulation

316L chassis

M-501 Panting

Air cooled inverter ATEX gas cooler

Seawater cooled gas cooler

Certified lifting lugs RUD

Special voltage

High ambient temperature version

■ FAT

Offshore commissioning

IKM HVAC has produced more than 600 special adapted  $\mathrm{CO}_2$  systems since 2008. The systems are project-adapted for cooling, freezing and climate applications. For commercial, industry, agriculture, fishing -industry and specialized systems

for offshore and marine



CO<sub>2</sub> Condensing unit



Computer room AC





#### IKM HVAC – Sola(Norway)

Ljosheimvegen 12, 4051 Sola, Norway T:+47 921 15 888 E: quote.hvac@ikm.com

#### IKM HVAC – Elblag (Poland)

IKM HVAC Production Sp.z.o.o. ul. Sulimy 1, 82-300 Elblag, Poland E: quote.hvac@ikm.com

#### IKM HVAC Middle East DMCC(UAE)

24th Floor, Reef Tower, Cluster O, Jumeirah Lake Towers, Dubai, UAE

T: +971 527 694 444 E: quote.hvac@ikm.com

#### IKM HVAC - Aberdeen(UK)

Peregrine Road, Westhill, Aberdeenshire, AB32 6JL, UK E: quote.hvac@ikm.com

#### IKM HVAC – Panden (Singapore)

22 Pandan Road, 2nd floor, Singapore 609724 E: quote.hvac@ikm.com

#### IKM HVAC - Perth (Australia)

33 Kewdale Road Welshpool WA 6106, Australia

E: quote.hvac@ikm.com

#### IKM HVAC - Port Hartcourt (Nigeria)

E: quote.hvac@ikm.com

www.ikm.com/ikm-hvac/