



# iCOOL™ SE

Inverter technology at the cost of on-off. Easy to install, with a simplified commissioning process. Inverter technology has never been this easy.



Designed for ambient temperature 43°C

## Time to go inverter

Save time and operation cost with our energy-efficient units based on inverter compressors.

## Key features

- Similar investment cost and significant energy savings vs on-off technology
- Full BLDC inverter technology
- PLC control
- Low noise operation
- Suitable for multi-evaporator applications
- Designed and manufactured in Europe

Comparison of energy consumption between a standard market on-off unit and our **iCOOL SE 6.5 MHP** condensing unit.

Technology	On-Off	iCOOL™ Inverter
SEPR	2,71	4,0
Annual consumption	16 444 kWh	10 109 kWh
Annual energy cost	6 578 EUR	4 044 EUR
<b>Annual energy savings with iCOOL™</b>		<b>2 534 EUR</b>

@ Cooling capacity ~6,5kW @ -10/32 °C; Prices: Q3 2023 (1kWh = 0,4 EUR)

The inverter solution is **recovered in less than one quarter!**







Save time and operation cost with our **energy-efficient** units based on inverter compressors.

Easy to install, with a **simplified commissioning** process.



# Time to go inverter

Save your time and cost with iCOOL™, inverter condensing units with large capacity modulation range and multi-refrigerant compliance.

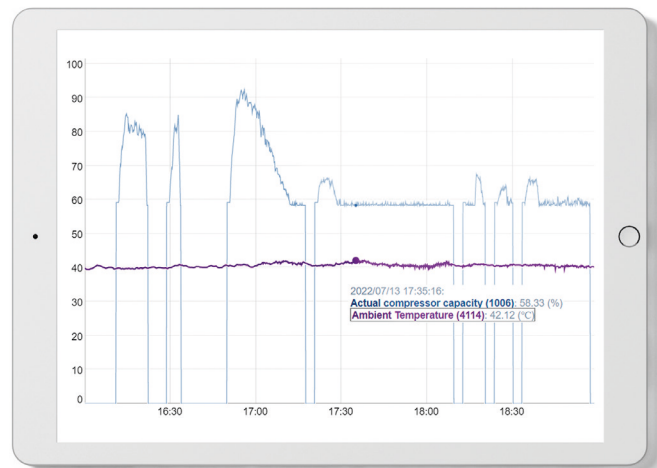
-  Easy online selection
-  Easy installation
-  Easy commissioning
-  Easy maintenance
-  Low noise
-  T<sub>amb.</sub> up to 43°C

## Energy Savings

Comparison of energy consumption between a standard on-off unit and the iCOOL™ condensing unit.

Technology	On-Off	iCOOL™ Inverter
SEPR	2,52	<b>3,54</b>
Annual consumption	25 700 kWh	<b>17 000 kWh</b>
Annual energy cost	10 300 EUR	<b>6 800 EUR</b>

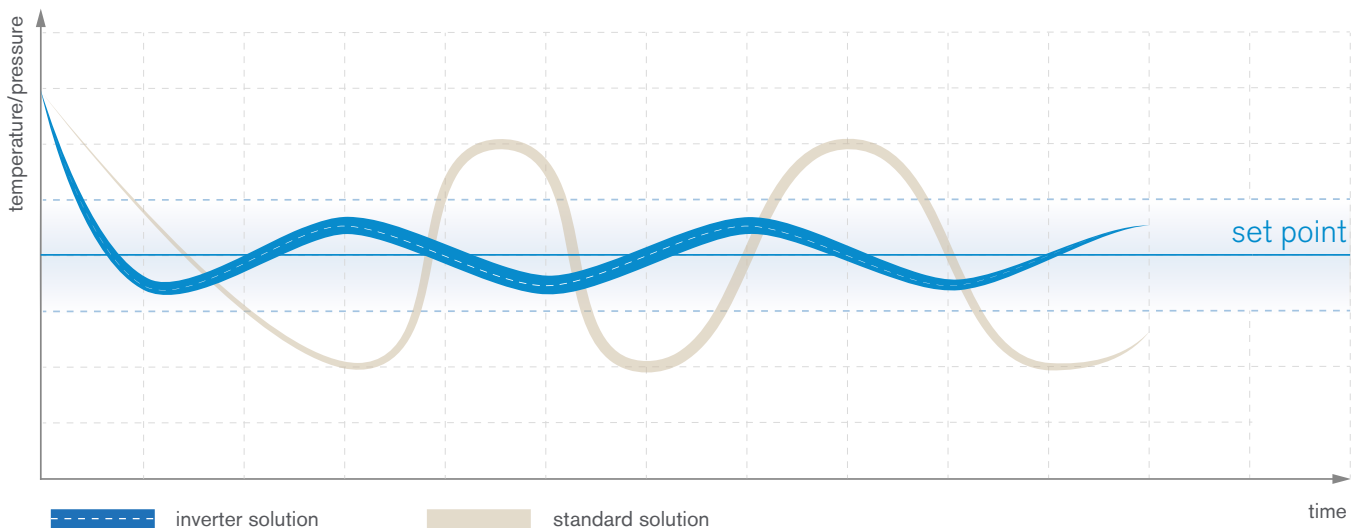
Cooling capacity ~10kW for tev. = - 10 °C and R449A;  
Prices: Q3 2023 (1kWh = 0,4 EUR)



Save more than 35 % vs. on-off technology with a payback time of **less than 1 year!**

The correctly sized integrated condenser/gas cooler ensures no need for an adiabatic ramp and water waste during the heat waves.

## Inverter technology - precise regulation





# Product range

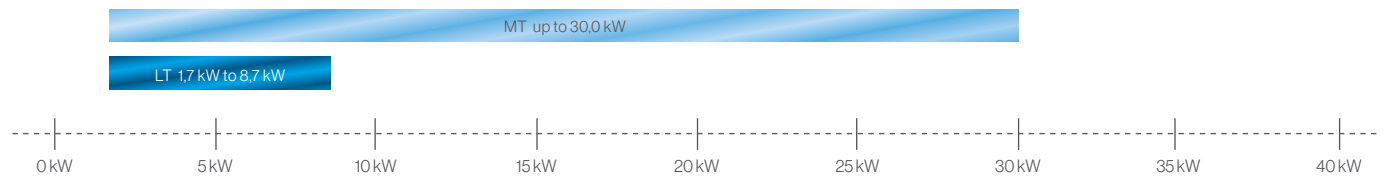
## Inverter driven condensing units

Designed to operate up to 43°C ambient temperature

iCOOL™  
Different by Nature

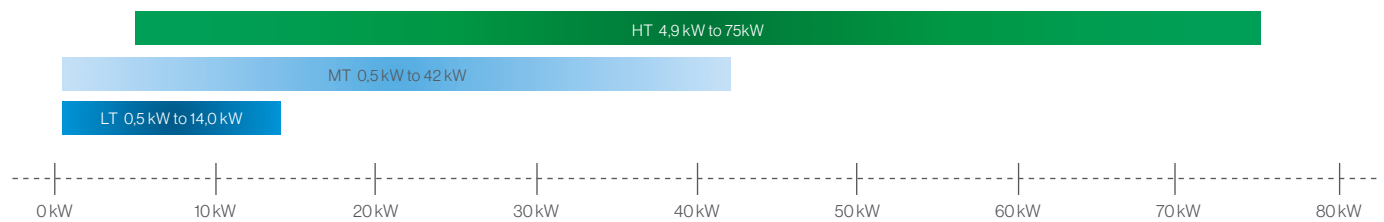
### iCOOL™ CO<sub>2</sub>

R744



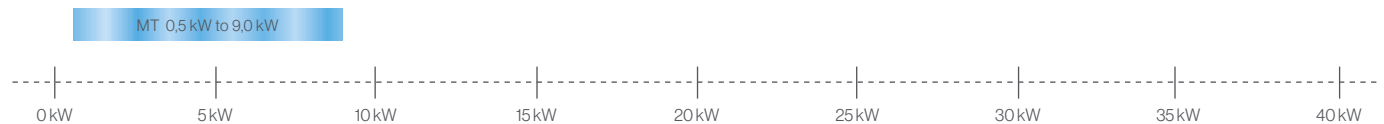
### iCOOL™ HFC/HFO

R449A R448A R513A R134a



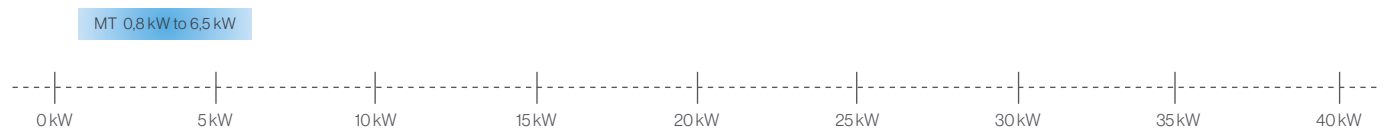
### iCOOL™ A2L

R454C R455A



### iCOOL™ SE

R449A R448A R513A R134a



**HT** High Temperature R410A / R407C ( T<sub>e</sub> +5°C / T<sub>amb</sub> 32°C )  
**MT** Medium Temperature R449A ( T<sub>e</sub> -10°C / T<sub>amb</sub> 32°C )  
**LT** Low Temperature R744 ( T<sub>e</sub> -30°C / T<sub>amb</sub> 32°C )

**MT** Medium Temperature R454C / R455A ( T<sub>e</sub> -10°C / T<sub>amb</sub> 32°C )  
**LT** Low Temperature R449A ( T<sub>e</sub> -30°C / T<sub>amb</sub> 32°C )  
**MT** Medium Temperature R744 ( T<sub>e</sub> -10°C / T<sub>amb</sub> 32°C )



# iCOOL™ SE Inverter Condensing Units

iCOOL™  
Different by Nature



High-Medium temperature



Model*	Dimensions (mm)			Weight (kg)	Voltage (V/ph/Hz)	MCC (A)	Connections		Receiver (dm³)	Number x diameter of fan (mm)	Refrigerant	Tamb (°C)	Cooling capacity (kW) at TE**					SEPR***			
	W.	L.	H.				Suction	Liquid					(-15°C) (-10°C) (-5°C) 0°C 5°C								
													Qmin	Qmin	Qmin	Qmin	Qmin				
iCOOL SE 2,5 MT (E1)	450	1000	605	70	220-240/1/50	8	1/2"	3/8"	3.9	1x450	R448A / R449A	27	0.73	0.88	1.04	1.21	-	-			
													32	0.68	0.82	0.97	1.14		-		
													38	0.63	0.76	0.91	1.07		-		
													43	0.59	0.71	0.85	1.00		-		
													Qmax	27	2.30	2.73	3.19		3.67	-	
														32	2.16	2.56	2.99		3.44	-	
														38	1.98	2.34	2.73		3.12	-	
														43	1.81	2.06	2.14		2.25	-	
													R134a / R513A	27	0.38	0.49	0.61		0.74	0.89	
															32	0.35	0.45		0.56	0.69	0.83
															38	0.32	0.41		0.52	0.63	0.77
															43	0.30	0.38		0.48	0.59	0.71
Qmax	27	1.27	1.59	1.96	2.35	2.79															
	32	1.18	1.48	1.82	2.20	2.61															
	38	1.07	1.35	1.66	2.01	2.40															
	43	0.99	1.24	1.53	1.87	2.24															
iCOOL SE 4,5 MT (E1)	450	1000	605	70	220-240/1/50	14	5/8"	3/8"	3.9	1x450	R448A / R449A	27			1.44	1.72	2.04	2.38	-	R448A=3.39 R404A=3.58	
															32	1.34	1.62	1.92	2.25		-
													38	1.24	1.50	1.78	2.10	-			
													43	1.16	1.40	1.67	1.96	-			
													Qmax	27	4.18	4.95	5.76	6.61	-		
														32	3.92	4.63	5.38	6.16	-		
														38	3.57	4.22	4.78	4.96	-		
														43	3.07	3.07	3.29	3.75	-		
													R134a / R513A	27	0.71	0.91	1.14	1.39	1.66		
															32	0.67	0.85	1.06	1.30		1.56
															38	0.61	0.78	0.97	1.19		1.44
															43	0.56	0.72	0.90	1.10		1.34
Qmax	27	2.35	2.95	3.62	4.36	5.16															
	32	2.19	2.74	3.37	4.07	4.83															
	38	1.99	2.50	3.07	3.72	4.44															
	43	1.83	2.30	2.84	3.45	4.13															
iCOOL SE 6,5 MT (E1)	450	1100	805	80	220-240/1/50	18	3/4"	3/8"	5.3	1x500	R448A / R449A	27			2.08	2.48	2.93	3.43	-	R448A=3.80 R404A=4.00	
															32	1.93	2.32	2.76	3.24		-
													38	1.78	2.15	2.57	3.02	-			
													43	1.67	2.02	2.40	2.83	-			
													Qmax	27	6.00	7.13	8.19	9.37	-		
														32	5.63	6.57	7.56	8.65	-		
														38	5.03	5.88	6.82	7.73	-		
														43	4.55	5.31	5.92	6.27	-		
													R134a / R513A	27	1.03	1.32	1.65	2.02	2.42		
															32	0.94	1.20	1.50	1.84		2.21
															38	0.86	1.10	1.37	1.69		2.04
															43	0.80	1.01	1.27	1.57		1.90
Qmax	27	3.31	4.17	5.13	6.18	7.33															
	32	3.08	3.88	4.77	5.77	6.87															
	38	2.81	3.53	4.36	5.29	6.33															
	43	2.59	3.25	4.02	4.91	5.89															

\*All units also work with R404A

\*\*Subcooling: 3 K, Superheat: 10 K

\*\*\*Calculated value obtained from data provided by suppliers of individual components