

**ERAS MC (VS)  
Kp**

- Chillers
- Air/Water Cooling Only
- EMICON



## Air cooled chillers on propane type ERAS MC (VS) Kp

Air-cooled propane chillers for the production of chilled water. The units are equipped with semi-hermetic reciprocating compressors. Inverter compressors on models 5210-10010. Axial 6-pole fans. Suitable for outdoor installation. Refrigerant R290 (GWP 3) (propane) These units are specially designed for cooling medium to large projects. Tandem technology offers multiple capacity stages and increases efficiency at part load. This also improves performance. Leak detector and ATEX certified fan in compartment with cooling circuit included as standard. Microchannel condenser coil. **Mandatory commissioning by CAIROX.**

**Brand**

- Emicon

**Application**

- Outdoor air/water chillers suitable for comfort and process cooling applications

**Characteristics**

- Cooling capacity: 54 to 353 kW

**Composition**

- Refrigerant gas R290 with a GWP of 3,3
- Semi-hermetic reciprocating compressors
- Power supply 400/3/50
- Microprocessor controller
- Leak detector included as standard
- ATEX certified fan in compartment with cooling circuit
- Microchannel condenser coil

**Options**

- P1 Pump group with 1 pump
- P2 Pump group with 2 pumps in parallel (1 running/1 standby)
- partial heat recovery
- Compressor Acoustic Enclosure
- PA Rubber Vibration Dampers
- PM Vibration dampers with springs
- A+V Ampere and Voltmeter

- BF Winter control down to -20°C
- BT Winter control down to -10°C
- CS Compressor inrush counter
- MF Phase monitor
- PQ Remote Control
- PW Part-Winding (Lower Startup Current / Soft Start)
- RF Improvement of cos phi >0.9
- RL Compressor overload relay
- EC EC fans
- ECP Anti-corrosion coating on the condenser coils (Electro coating)
- HRV2 High Pressure Double Safety Valve
- PCP Anti-corrosion coating on the condenser coils (Powder coating)
- RA Frost protection on evaporator (Electric heating with thermostat)
- VSC Inverter control compressors
- VSP Inverter control pump(s)
- TE Electronic expansion valve
- AXT Diffuser on the axial fans
- GP Protective grille condenser
- IH RS485 Serial Card
- IH BAC BACNET RS485 Serial Card
- IWG Interface => SNMP or TCP/IP or BACNET IP or MODBUS IP
- I1 Insulation for around Victaulic flanges from pump to hydraulic lines
- I2 Insulation for around Victaulic Flanges from Buffer Tank to Hydraulic Lines

### Versions

- ERAS.MC Kp
- Standard version with Microchannel condenser coil
- ERAS.MC VB Kp
- Low water temperature version

		General accessories										
ERAS MS(VS) Kp		5210	5910	7210	8710	10010	14020	17020	21020	24020	29020	34020
Cooling capacity	kW	54.3	61	74.7	92.9	107	156	183	216	252	289	353
Total power input	kW	16.4	19.2	23.3	29.2	34.2	47.5	56.4	68.3	76.98	96.7	114
SEER		4.17	4.12	4.24	4.17	4.14	4.152	4.147	4.12	4.26	4.13	4.24
Refrigerant		R290	R290	R290	R290	R290	R290	R290	R290	R290	R290	R290
Global warming potential refrigerant	GWP	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Precharged refrigerant charge	kg(CO2eq-kg)	4(13.2)	4(13.2)	7(23.1)	7(23.1)	8(26.4)	14(46.2)	14(46.2)	16(52.8)	16(52.8)	15(49.5)	20(66)
Water flow	m³/h	9.34	10.51	12.86	15.99	18.43	26.77	31.47	37.12	43.42	49.78	60.65
Water pressure drop	kPa	25.6	31.7	14.6	21.5	27.8	18.8	25.2	23	29.5	22.7	32.4
Sound pressure level	dB(A)	54	56	56	60	60	60	63	63	64	64	67

Cooling capacity: Outdoor temperature 35°C - chilled water temperature in/out 12/7°C  
 Sound pressure level calculated according to ISO 3744 at 10 m distance from the unit

### Order example

#### ERAS 5210 MC (VS) Kp

Explanation

**52** = Nominal cooling capacity (KW)

**1** = Number of cooling circuits

**MC** = Microchannel condenser coil

**VS** = Inverter on compressor

**Kp** = Propane Refrigerant

		Specifications										
ERAS MS(VS) Kp		5210	5910	7210	8710	10010	14020	17020	21020	24020	29020	34020
Cooling capacity	kW	54.3	61	74.7	92.9	107	156	183	216	252	289	353
Total power input	kW	16.4	19.2	23.3	29.2	34.2	47.5	56.4	68.3	76.98	96.7	114
SEER		4.17	4.12	4.24	4.17	4.14	4.152	4.147	4.12	4.26	4.13	4.24
Refrigerant (GWP)		R290 (3.3)										
Precharged refrigerant charge	kg(CO2eq-kg)	4(13.2)	4(13.2)	7(23.1)	7(23.1)	8(26.4)	14(46.2)	14(46.2)	16(52.8)	16(52.8)	15(49.5)	20(66)
Water flow	m³/h	9.34	10.51	12.86	15.99	18.43	26.77	31.47	37.12	43.42	49.78	60.65
Water pressure drop	kPa	25.6	31.7	14.6	21.5	27.8	18.8	25.2	23	29.5	22.7	32.4
Sound pressure level	dB(A)	54	56	56	60	60	60	63	63	64	64	67

Cooling capacity: Outdoor temperature 35°C - chilled water temperature in/out 12/7°C  
 Sound pressure level calculated according to ISO 3744 at 10 m distance from the unit

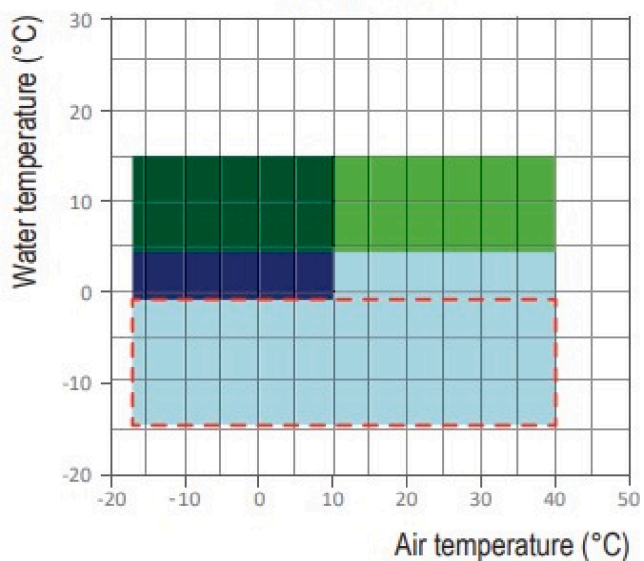
		Dimensions										
ERAS MC (VS) Kp		5210	5910	7210	8710	10010	14020	17020	21020	24020	29020Z	34020
L	[mm]	2590	2590	2590	2590	4740	4840	4840	4840	4840	4840	4430
W	[mm]	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370
H	[mm]	2570	2570	2570	2420	2570	2570	2570	2570	2570	2570	2480
Gewicht/Poids	[kg]	1094	1096	1206	1304	1310	2002	2098	2156	2522	2598	3100

### Prices

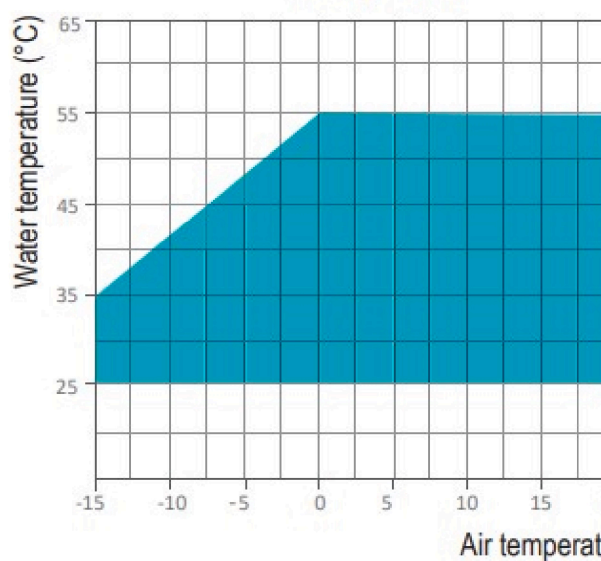
Detailed selection / quotation available on request



Cooling mode



Heating mode



- Standard unit, cooling mode with fan speed control
- Standard unit, cooling mode
- Standard unit, cooling mode with glycol and fan speed control
- Standard unit, cooling mode with glycol
- VB version, cooling mode