



# MAIN DATA SHEET

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HITEMA SRL  
Via Mons. G. Babolin 14, Z.I. San Gabriele  
35024 Bovolenta - Padova (ITALY)  
Tel. 049 5386344 R.a. 12 linee  
Fax. 049 5386300  
[info@hitema.it](mailto:info@hitema.it) [www.hitema.it](http://www.hitema.it)



# HITEMA PRODUCT RANGE AND MAIN CONFIGURATION

## Cooling Plus Energy® - SPC (Super Process Chiller)

Model	Compressors	Evaporator	Free cooling	In/out water temperature	Ambient temperature	Condensation	Cooling capacity	Refrigerant
<b>ENR</b>	Scroll	Coaxial/ Shell & Tube	N.A.	12 / 7 °C	35 °C	Air / Axial fans	005-480 kw 001-004 kw	<b>R410A</b> <b>R407C</b>
<b>ENRF</b>	Scroll	Coaxial/ Shell & Tube	Yes	12 / 7 °C	35 °C	Air / Axial fans	22-370 kw	<b>R410A</b>
<b>CSE</b>	Scroll	Coaxial/ Shell & Tube	N.A.	12 / 7 °C	35 °C	Air / centrif. fans	22-360 kw	<b>R407C</b>

## Cooling Plus Energy® - SBS (Super Big Scroll)

Model	Compressors	Evaporator	Free cooling	In/out water temperature	Ambient temperature	Condensation	Cooling capacity	Refrigerant
<b>SBS</b>	Scroll	Shell & Tube	N.A.	12 / 7 °C	35 °C	Air / Axial fans	235-6 90	<b>R410A</b>

## Cooling Plus Energy® - SCC (Super Comfort Chiller)

Model	Compressors	Evaporator	Free cooling	In/out water temperature	Ambient temperature	Condensation	Cooling capacity	Refrigerant
<b>CFT</b>	Scroll	Plate	N.A.	12 / 7 °C	35 °C	Air / Axial fans	12-480	<b>R410A</b>
<b>HFT</b>	Scroll	Plate	N.A.	12 / 7 - 40 / 45 °C	35 - 7 °C	Air / Axial fans	12-480	<b>R410A</b>

## BIG Evolution® - (Big Chiller)

Model	Compressors	Evaporator	Free cooling	In/out water temperature	Ambient temperature	Condensation	Cooling capacity	Refrigerant
<b>ECS</b>	Screw	Shell & Tube	N.A.	12 / 7 °C	35 °C	Air / Axial fans	230-14 50	<b>R407C</b>
<b>ECF</b>	Screw	Shell & Tube	Yes	12 / 7 °C	35 °C	Air / Axial fans	230-14 50	<b>R407C</b>
<b>EET</b>	Screw	Shell & Tube	N.A.	12 / 7 °C	35 °C	Air / Axial fans	230-15 00	<b>R134a</b>
<b>EEF</b>	Screw	Shell & Tube	Yes	12 / 7 °C	35 °C	Air / Axial fans	230-13 50	<b>R134a</b>
<b>EHET</b>	Screw	Shell & Tube	N.A.	12 / 7 °C	35 °C	Air / Axial fans	235-13 30	<b>R134a</b> <b>Class A</b>
<b>EHEF</b>	Screw	Shell & Tube	Yes	12 / 7 °C	35 °C	Air / Axial fans	235-13 30	<b>R134a</b> <b>Class A</b>
<b>ITC</b>	Screw inverter	Shell & Tube	N.A.	12 / 7 °C	35 °C	Air / Axial fans	250-1370	<b>R134a</b> <b>Class A</b>
<b>ITF</b>	Screw inverter	Shell & Tube	Yes	12 / 7 °C	35 °C	Air / Axial fans	250-1370	<b>R134a</b> <b>Class A</b>

## WCC (Water Cooled Chiller)

Model	Compressors	Evaporator	Free cooling	In/out water temperature	Ambient temperature	Condensation	Cooling capacity	Refrigerant
<b>SWC</b>	Scroll	Coaxial/ Shell & Tube	N.A.	12 / 7 °C	30 / 35 °C	Shell & Tube (plate/shell&tu be)	5-480	<b>R410A</b>
<b>ECWB</b>	Screw	Shell & Tube	N.A.	12 / 7 °C	30 / 35 °C	Water / Shell & Tube	260-1700	<b>R407C</b>



## OPTIONAL *Cooling Plus Energy*<sup>®</sup> series - SPC range (Super Process Chiller) Models ENR – ENRF - CSE – ESE - ECFS

### 1.0 MECHANICAL CONFIGURATION

- 1,01 LNJ low noise version (compressors jacket, fan speed regulator)
- 1,02 GPC condenser coil protection, STANDARD in SPC range
- 1,03 CF condenser aluminium filter
- 1,04 CV epoxy coated aluminium fin coils (care of Hitema)
- 1,05 CC copper / copper condensing coil
- 1,06 CG fin guard silver treatment at condenser
- 1,07 GALV1 galvanized mainframe RAL7035 orange-pel. Available in other RAL colors
- 1,08 GALV2 galvanized panels RAL7035 orange-pel. Available in other RAL colors
- 1,09 ATS spring type antivibrant mounting (installed)
- 1,10 C Dixell XR30CX cover for external installation (suggested for model 005-008-010-012-016-018-022).  
Standard with RV optional from model 005 to model 022

### 2.0 HYDRIC CIRCUIT CONFIGURATION

- 2,01 BPA automatic by pass. On request BPM manual by pass
- 2,02 SS.B-ES.T.WP stainless steel hydraulic circuit and plate evaporator, with pump and tank  
CS.B-ES.T.WP carbon steel hydraulic circuit and plate evaporator, with pump and tank
- 2,03 NT.NP without tank and without pump
- 2,04 NT.WP without tank and with pump
- 2,05 DP double pump with contacts and overload. Available from model 018
- 2,06 PH pump 50 mca available with contacts and overload (on request bigger pump available up to 80 mca)
- 2,07 DPH double pump 50 mca available with contacts and overload (on request double bigger pump available up to 80 mca)
- 2,08 AT pump management (weekly automatic change or in case of default)
- 2,09 VTP manual valve between tank and pump
- 2,10 RAGT antifreeze heater inertial tank (included RAGE when coaxial evaporator)
- 2,11 RAGE antifreeze heater evaporator (included in RAGT optional with coaxial evaporator)
- 2,12 RAGP antifreeze heater pump
- 2,13 LLA electric float low level alarm
- 2,14 FL flow switch installed (standard from model 030 to model 480)  
ST shell&tube evaporator (standard from model 130 to model 480)  
PE external pump supplied from Hitema. Electric board (get ready) for external pump

### 3.0 REFRIGERANT CIRCUIT CONFIGURATION

- 3,01 CSV compressor suction & discharge valve
- 3,02 HP high pressure gauge (STANDARD from model 061 to model 480)
- 3,03 LP low pressure gauge (STANDARD from model 030 to model 480)
- 3,04 PDS partial heat recovery with plate desuperheater
- 3,05 TDS total heat recovery with plate desuperheater
- 3,06 PMC precision leaving temperature +/-1°C (  $\Delta t \leq 1^\circ\text{C}$  )
- 3,07 LW low water / glycol temperature (outlet until -15°C)  
included fan speed regulator, crank heater, thermic double insulation, R404A refrigerant if necessary
- 3,08 LT low ambient temperature (until -25°C), included fan speed regulator, crank heater, electric board heater

### 4.0 ELECTRIC CIRCUIT CONFIGURATION

- 4,01 RV fan speed regulator (standard from model 230 to model 480)  
PI on request = individual fan pressure switch
- 4,02 RVG general voltmetrical relay
- 4,03 CSF 3 phases sequences relay
- 4,04 OFC on-off compressors signal
- 4,05 SF soft start
- 4,06 SN without neutral (standard from model 030 to model 480)  
Remote connections arrangement
- 4,07 RS485 serial card for carel/modbus(RS485)
- 4,08 OFR remote control (on/off)
- 4,09 OFRC remote display control with on/off remote + alarm management

### 5.0 PACKING

- 5,01 WCA wooden cage packing ISPM15
- 5,02 NCC nylon +cartoon corners + coil protection packing (standard)
- 5,03 ANS rubber pad antivibrating (shipment)
- 5,04 PLT pallet / pallet ISPM15



## OPTIONAL *Cooling Plus Energy*<sup>®</sup> series - SPC range (Super Process Chiller) Models SBS

### 1.0 MECHANICAL CONFIGURATION

1,01 LNJ	low noise version (compressors jacket, fan speed regulator)
1,02 GPC	condenser coil protection
1,03 CF	condenser aluminium filter
1,04 CV	epoxy coated aluminium fin coils (care of Hitema)
1,05 CFV	painted refrigerating circuit
1,05 CC	copper / copper condensing coil
1,06 CG	fin guard silver treatment at condenser
1,07 ATS	spring type antivibrant mounting (installed)

### 2.0 HYDRIC CIRCUIT CONFIGURATION

2,01 WP	pump with contacts and overload
2,02 DP	double pump with contacts, overload, double no-return water valves
2,03 PH	pump 50 mca available with contacts and overload
2,04 DPH	double pump 50 mca available with contacts and overload
2,05 AT	pump management
2,06 T	tank carbon steel included safety valve and air vent nipple
2,07 VTP	manual valve between tank and pump
2,08 VTPD	
2,09 RAGT	antifreeze heater inertial tank
2,10 RAGE	evaporator antifreeze heater
2,11 RAGP	antifreeze heater pump
2,12 LLA	electric float low level alarm
2,13 FL	flow switch (installed with flanges or separate supplied with hydraulic connections)

### 3.0 REFRIGERANT CIRCUIT CONFIGURATION

3,01 CSV	compressor suction/discharge valve
3,02 HP	high pressure gauges
3,03 LP	low pressure gauges
3,04 PDS	partial heat recovery with plate desuperheater
3,05 TDS	total heat recovery with plate desuperheater

### 4.0 ELECTRIC CIRCUIT CONFIGURATION

4,01 RV	fan speed regulator
4,02 RVG	general voltmetrical relay
4,03 CSF	3 phases sequences relay
4,04 OFC	on-off compressors signal
4,05 SF	soft start
4,06 SN	without neutral
4,07 RS485	serial card for modbus RS485
4,08 OFR	remote control (on/off)
4,09 OFRC	remote control display with on/off remote + alarm management

### 5.0 PACKING

5,01 WCA	wooden cage packing ISPM15
5,02 NCC	nylon +cartoon corners + coil protection packing (standard)
5,03 ANS	rubber pad antivibrating (shipment)
5,04 PLT	pallet / pallet ISPM15



OPTIONAL *Cooling Plus Energy*<sup>®</sup> series - SPC range (Super Comfort Chiller)  
Models CFT – HFT

**1.0 MECHANICAL CONFIGURATION**

- 1,01 LNJ low noise version (compressors jacket, fan speed regulator)
- 1,02 GPC condenser coil protection
- 1,03 CF condenser aluminium filter
- 1,04 CV epoxy coated aluminium fin coils (care of Hitema)
- 1,05 CC copper / copper condensing coil
- 1,06 CG fin guard silver treatment at condenser
- 1,07 ATS spring type antivibrant mounting (installed)

**2.0 HYDRIC CIRCUIT CONFIGURATION**

- 2,01 WP pump with contacts and overload
- 2,02 DP double pump with contacts and overload, double no return valve
- 2,03 AT pump management (weekly automatic change or in case of default)
- 2,04 T carbon steel tank included safety valve and air vent nipple
- 2,05 VTP manual valve between tank and pump
- 2,06 RAGT antifreeze heater inertial tank
- 2,07 RAGE evaporator antifreeze heater
- 2,08 RAGP antifreeze heater pump
- 2,09 LLA electric float low level alarm
- 2,10 FL flow switch (separately supplied for version unit without pump and without tank)

**3.0 REFRIGERANT CIRCUIT CONFIGURATION**

- 3,01 CSV compressor suction & discharge valve
- 3,02 HP high pressure gauge
- 3,03 LP low pressure gauge
- 3,04 PDS partial heat recovery with plate desuperheater
- 3,05 TDS total heat recovery with plate desuperheater

**4.0 ELECTRIC CIRCUIT CONFIGURATION**

- 4,01 RV fan speed regulator (standard from model 230 to model 480)
- 4,02 RVG general voltmetrical relay
- 4,03 CSF 3 phases sequences relay
- 4,04 OFC on-off compressors signal
- 4,05 SF soft start
- 4,06 SN without neutral (standard from model 030 to model 480)
- Remote connections arrangement
- 4,07 RS485 serial card for carel/modbus(RS485)
- 4,08 OFR remote control (on/off)
- 4,09 OFRC remote display control with on/off remote + alarm management

**5.0 PACKING**

- 5,01 WCA wooden cage packing ISPM15
- 5,02 NCC nylon +cartoon corners + coil protection packing (standard)
- 5,03 ANS rubber pad antivibrating (shipment)
- 5,04 PLT pallet/ISPM15 pallet

### 1.0 MECHANICAL CONFIGURATION

1,01 LN	low noise version with jacket compressors (LNJ) or box compressors coated with sound absorbing mat
1,02 SLN	super low noise version with jacket compressors (LNJ) or box compressors coated with sound absorbing mat. bigger mainframe
1,03 GPRC	refrigerant circuit protection
1,04 GPC	condenser coil protection
1,05 CF	condenser aluminium filter
1,06 ATS	spring type antivibrant mounting
Condensing coil	
1,07 CV	epoxy coated aluminium fin coils
1,08 CG	fin guard silver treatment coils
1,09 CC	copper/ Copper condenser
1,10 CHCP	humidifying and cooling pads

### 2.0 HYDRIC CIRCUIT CONFIGURATION

2,01 WP	single pump 2 poles with contacts and overload
2,02 VTP	manual valve between tank and pump
2,03 RAGP	antifreeze heater pump
2,04 SLNP	one pump box (super low noise version)
2,05 IRP	one inverter pump
Double pump	
2,06 DP	double pump 2 poles with contacts and overloads
2,07 AT	pump management
2,08 VTPD	double manual valve between tank and double pump
2,09 RAGDP	antifreeze heater double pump
2,10 SLNPD	double pump box (super low noise version)
2,11 IRPD	double inverter for double pump
Tank	
2,12 T	tank carbon steel incl. safety valve and air vent nipple
2,13 RAGT	antifreeze heater inertial tank
2,14 LLA	electric float low level alarm
Connections	
2,15 EVF	insulated evaporator flanges + counter flanges
2,16 RAGEV	antifreeze heater flanges connections
2,17 RAGE	antifreeze heater evaporator
2,18 FY	Y mechanical filter (supplied outside the unit)
2,19 FL	flow switch (separately supplied for version unit without tank, without pump, with In/Out Victaulic connections)

### 3.0 REFRIGERANT CIRCUIT CONFIGURATION

3,01 CSV	compressor suction and discharge valve (standard)
3,02 DRV	dual relief valves "maintenable dual pressure relief valves assembly"
3,03 PCN	compressor liquid injection, included dehydrating filter and solenoid valve
3,04 PDF	oil differential pressure
3,05 HP/LP	high and low pressure gauges for each circuit (standard)
3,06 LPT	low pressure transducers
3,07 DS	heat recovery at 20% with plate desuperheater
3,08 HRS	total heat recovery in series
3,09 HRP	total heat recovery in parallel
3,10 LT	low ambient temperature until -25°C

### 4.0 ELECTRIC CIRCUIT CONFIGURATION

4,01 RV	fan speed regulator (phase cut)
4,02 EC	EC fans
4,03 IR	remote inverters fans incl. inductances & sinusoidal filter
4,04 ES	secondary thermo regulated electric board
4,05 IFO	individual fan overload
4,06 RVG	general voltmetrical relay
4,07 CSF	3 phases sequences relay
Remote connections arrangement	
4,08 OFC	on-off compressors signal (free contact)
4,09 RS485	serial card for carel/modbus(RS485)
4,10 LON	serial card for echelon
4,11 BAC	serial card for BACNET
4,12 PLW	plantwatchPRO
4,13 PLV	plantvisor

### 5.0 PACKING

5,01 WCA	wooden cage packing ISPM15
5,02 NCC	nylon +cartoon corners + coil protection packing
5,03 ANS	Rubber pad antivibrating (shipment by truck)

## OPTIONAL WCC RANGE

### Models SWC

#### 1.0 MECHANICAL CONFIGURATION

- 1,01 LNJ low noise version (compressors jacket)
- 1,02 GALV1 galvanized mainframe RAL7035 orange-pel. Available in other RAL colors
- 1,03 GALV2 galvanized panels RAL7035 orange-pel. Available in other RAL colors
- 1,04 ATS spring type antivibrant mounting

#### 2.0 HYDRIC CIRCUIT CONFIGURATION

- 2,01 BPA automatic by pass
- 2,02 CS.B-ES.T.WP carbon steel hydraulic circuit and plate evaporator, with pump and tank
- 2,03 SS.B-ES.T.WP stainless steel hydraulic circuit and plate evaporator, with pump and tank
- 2,04 NT.NP without tank and without pump
- 2,05 NT without tank
- 2,06 DP double pump 2 poles with contacts and overloads
- 2,07 PH pump 50 mca available with contacts and overload
- 2,08 DPH double pump 50 mca available with contacts and overload
- 2,09 AT pump management
- 2,10 VTP manual valve between tank and pump
- 2,11 RAGT antifreeze heater inertial tank
- 2,12 RAGE antifreeze heater evaporator
- 2,13 RAGP antifreeze heater pump
- 2,14 LLA electric float low level alarm

#### 3.0 REFRIGERANT CIRCUIT CONFIGURATION

- 3,01 CSV compressor suction and discharge valve
- 3,02 HP high pressure gauge (standard from model 061 to model 480)
- 3,03 DS heat recovery with plate desuperheater
- 3,04 PMC precision leaving temperature +/-1°C ( $\Delta t \leq 1^\circ\text{C}$ )
- 3,05 LW low water/glycol outlet temperature until -15°C

#### 4.0 ELECTRIC CIRCUIT CONFIGURATION

- 4,01 RVG general voltmetrical relay
- 4,02 CSF 3 phases sequences relay
- 4,03 OFC on-off compressors signal (free contact)
- 4,04 SF soft start
- 4,05 SN without neutral
- Remote connections arrangement
- 4,06 RS485 serial card for carel/modbus(RS485)
- 4,07 OFR remote control (on/off)
- 4,08 OFRC remote display control with on/off remote + alarm management

#### 5.0 PACKING

- 5,01 WCA wooden cage packing ISPM15
- 5,02 NCC nylon +cartoon corners + coil protection packing
- 5,03 ANS rubber pad antivibrating (shipment by truck)
- 5,04 PLT pallet / pallet ISPM15

### 1.0 MECHANICAL CONFIGURATION

- 1,01 LN low noise version with jacket compressors (LNJ) or box compressors coated with sound absorbing mat
- 1,02 ATS spring type antivibrant mounting

### 2.0 HYDRIC CIRCUIT CONFIGURATION

- 2,01 WP single pump 2 poles with contacts and overload
- 2,02 VTP manual valve between tank and pump
- 2,03 RAGP antifreeze heater pump
- 2,04 SLNP one pump box (super low noise version)
- 2,05 IRP one inverter pump
- Double pump
  - 2,06 DP double pump 2 poles with contacts and overloads
  - 2,07 AT management pumps
  - 2,08 VTPD double manual valve between tank and double pump
  - 2,09 RAGDP antifreeze heater double pump
  - 2,10 SLNPD double pump box (super low noise version)
  - 2,11 IRPD double inverter for double pump
- Tank
  - 2,12 T tank carbon steel incl. safety valve and air vent nipple
  - 2,13 RAGT antifreeze heater inertial tank
  - 2,14 LLA electric float low level alarm
- Connections
  - 2,15 EVF insulated evaporator flanges + counter flanges
  - 2,16 RAGEV antifreeze heater flanges connections
  - 2,17 RAGE antifreeze heater evaporator
  - 2,18 FY Y mechanical filter (supplied outside the unit)
  - 2,19 FL flow switch (separately supplied for version unit without tank, without pump, with In/Out Victaulic connections)

### 3.0 REFRIGERANT CIRCUIT CONFIGURATION

- 3,01 CSV compressor suction and discharge valve (standard)
- 3,02 DRV dual relief valves "maintenable dual pressure relief valves assembly"
- 3,03 PCN compressor liquid injection, included dehydrating filter and solenoid valve
- 3,04 PDF oil differential pressure
- 3,05 HP/LP high and low pressure gauges for each circuit (standard)
- 3,06 LPT low pressure transducers
- 3,07 DS heat recovery at 20% with plate desuperheater
- 3,08 HRS total heat recovery in series
- 3,09 HRP total heat recovery in parallel

### 4.0 ELECTRIC CIRCUIT CONFIGURATION

- 4,01 RVG general voltmetrical relay
- 4,02 CSF 3 phases sequences relay
- Remote connections
  - 4,03 OFC on-off compressors signal (free contact)
  - 4,04 RS485 serial card for carel/modbus(RS485)
  - 4,05 LON serial card for Echelon
  - 4,06 BAC serial card for Bacnet
  - 4,07 PLW plantwatchPRO
  - 4,08 PLV plantvisor

### 5.0 PACKING

- 5,01 WCA wooden cage packing ISPM15
- 5,02 NCC nylon +cartoon corners + coil protection packing
- 5,03 ANS rubber pad antivibrating (shipment by truck)





**Aircooled liquid chillers ESE/ENR series, scroll compressors, coaxial evaporator, condenser with copper tubes, aluminium finned core and axial fans**

		ESE in R407C				ENR in R410A							
<b>SPC (Super Process Chiller) Cooling Plus Energy® Series</b>	<b>Model</b>	<b>001</b>	<b>002</b>	<b>003</b>	<b>004</b>	<b>005</b>	<b>008</b>	<b>010</b>	<b>012</b>	<b>016</b>	<b>018</b>	<b>022</b>	
NOMINAL COOLING CAPACITY (1)	kW	1,3	2,2	3,4	4,6	5,3	7,9	10,2	12,2	15,8	18	22,5	
NOMINAL COOLING CAPACITY (1)	Frig/h	1118	1892	2924	3956	4558	6794	8772	10492	13588	15480	19350	
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)	kW	0,5	0,8	1,3	1,7	1,7	2,6	3,4	3,9	5,2	5,8	6,7	
COP	W/W	2,77	2,68	2,62	2,71	3,12	3,04	3,00	3,13	3,04	3,10	3,36	
EER	W/W	2,4	2,4	2,5	2,6	2,9	2,8	2,8	2,7	2,7	2,8	3,0	
ESEER		3,4	3,4	3,3	3,4	3,3	3,3	3,6	3,8	3,9	3,9	3,8	
IPLV		3,9	3,9	3,8	3,9	4,1	4,1	4,1	4,3	4,3	4,3	4,5	
COMPRESSORS	nr.	1	1	1	1	1	1	1	1	1	1	1	
REFRIGERATING CIRCUITS	nr.	1	1	1	1	1	1	1	1	1	1	1	
PARTION STEP	nr.	1	1	1	1	1	1	1	1	1	1	1	
REFRIGERANT	R	407C				R410A							
<b>HYDRAULIC SECTION</b>													
NOMINAL WATER FLOW	m3/h	0,2	0,4	0,6	0,8	0,9	1,4	1,8	2,1	2,7	3,1	3,9	
TYPE OF EVAPORATOR		Self - cleaning coaxial evaporator											
EVAPORATOR PRESSURE DROP	kPa	20	22	22	23	23	26	25	27	28	28	31	
AVAILABLE PRESSURE	mca	37	13	13	13	22	24	26	25	24	24	25	
PUMP ABSORBED POWER	kW	0,37	0,25	0,25	0,25	0,37	0,88	0,98	0,98	0,98	0,98	1,28	
PUMP ABSORBED CURRENT	A	2,6	1,9	1,9	1,9	3,2	1,7	1,8	1,8	1,8	1,8	2,4	
HYDRULIC CONNECTIONS	BSP/DN	3/8"	1/2"	1/2"	1/2"	3/4"	1"	1"	1"	1"	1"	1"	
TANK VOLUME	dm3	20	40	40	40	40	50	50	50	50	110	110	
<b>FAN SECTION</b>													
CONDENSER COIL	nr.	1	1	1	1	1	1	1	1	1	1	1	
TOTAL AIR FLOW	m3/h	700	1400	1300	1500	1000	4500	4200	5800	5500	7000	8200	
FANS	nr.	1	1	1	1	1	1	1	1	1	1	1	
FANS ABSORBED POWER	kW	0,07	0,10	0,10	0,10	0,10	0,25	0,25	0,49	0,49	0,68	0,81	
FANS ABSORBED CURRENT	A	0,4	0,4	0,4	0,5	0,5	1,1	1,1	2,4	2,4	3,0	1,5	
<b>TOTAL ELECTRIC DATA</b>													
NOMINAL ABSORBED POWER	kW	0,9	1,2	1,6	2,1	2,2	3,7	4,6	5,6	6,9	7,5	8,8	
MAXIMUM ABSORBED CURRENT (F.L.A.)	A	6,2	8,7	10,0	10,4	12,5	10,1	10,5	14	14,6	18,8	19,8	
MAXIMUM PEAK CURRENT (L.R.A.)	A	21	31	36	35	46	48	48	71	71	75	104	
ELECTRIC FEED	V/Ph/Hz	230/1/50					400/3/50/N						
<b>NOISE DATA</b>													
SOUND PRESSURE (2)	dB(A)	51	51	51	51	51	51	51	52	52	52	52,5	
<b>DIMENSIONS AND WEIGHT</b>													
LENGTH	mm	400	600	600	600	600	820	820	820	820	1010	1010	
WIDTH	mm	355	655	655	655	655	615	615	615	615	720	720	
HEIGHT	mm	785	1035	1035	1035	1035	1360	1360	1360	1360	1580	1580	
WEIGHT EMPTY	kg	33	85	85	90	102	175	180	185	190	230	260	
WEIGHT OPERATING	kg	58	125	125	130	145	225	230	235	240	360	390	

The manufacturer reserves the right to modify specifications without notice

updated on 07/10/2013

Data referred to:

- (1) Inlet/Outlet water temperature = +12/+7 °C - Co ndenser air temperature = +35°C; fouling factor = 0.000043 m²K/W
- (2) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface



**Aircooled liquid chillers ENR series, scroll compressors, condenser with copper tubes, aluminium finned core and axial fans**

<b>SPC (Super Process Chiller) Cooling Plus Energy® Series</b>	<b>Model</b>	<b>ENR</b>	<b>030</b>	<b>038</b>	<b>045</b>	<b>055</b>	<b>061</b>	<b>070</b>	<b>075</b>	<b>090</b>	<b>100</b>
NOMINAL COOLING CAPACITY (1)		kW	31,7	39	45	52	61	66	78	90	100
NOMINAL COOLING CAPACITY (1)		Frig/h	27262	33540	38700	44720	52460	56760	67080	77400	86000
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)		kW	8,9	11,5	12,9	17,0	17,8	20,5	23,0	25,9	30,7
COP		kW/kW	3,56	3,39	3,49	3,06	3,43	3,22	3,39	3,47	3,26
EER		kW/kW	3,07	2,97	3,14	2,79	3,00	2,70	2,90	3,02	2,89
ESEER			4,2	4,4	4,4	4,3	4,2	4,3	4,3	4,2	4,3
IPLV			4,9	5,1	5,1	5,1	5,0	5,1	5,1	5,1	5,1
COMPRESSORS		nr.	1	1	1	1	2	2	2	2	2
REFRIGERATING CIRCUITS		nr.	1	1	1	1	1	1	1	1	1
PARTION STEP		nr.	1	1	1	1	1/1	1/1	1/1	1/1	1/1
REFRIGERANT		R	410A								
<b>HYDRAULIC SECTION</b>											
NOMINAL WATER FLOW		m3/h	5,5	6,7	7,7	8,9	10,5	11,3	13,4	15,5	17,2
TYPE OF EVAPORATOR			Self-cleaning coaxial evaporator								
EVAPORATOR PRESSURE DROP		kPa	31	32	32	33	34	33	32	38	39
AVAILABLE PRESSURE		mca	28	31	30	33	32	31	29	28	27
PUMP ABSORBED POWER		kW	1,28	2,20	2,20	2,22	2,56	2,56	2,56	3,48	3,48
PUMP ABSORBED CURRENT		A	2,4	4,2	4,2	4,2	4,6	4,6	4,6	6,1	6,1
HYDRAULIC CONNECTIONS		BSP/DN	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2"
TANK VOLUME		dm3	270	270	270	270	410	410	410	410	410
<b>FAN SECTION (AXIAL)</b>											
CONDENSER COIL		nr.	1	1	1	1	1	1	1	1	1
TOTAL AIR FLOW		m3/h	15600	16800	14800	15000	24800	36000	36000	34000	37000
FANS		nr.	2	2	2	2	2	2	2	2	2
FANS ABSORBED POWER		kW	1,44	1,62	1,44	1,62	2,50	3,90	3,90	3,90	3,90
FANS ABSORBED CURRENT		A	2,8	3,1	2,8	3,1	5,0	7,8	7,8	7,8	7,8
<b>TOTAL ELECTRIC DATA</b>											
NOMINAL ABSORBED POWER		kW	11,6	14,4	16,5	21,2	22,9	27,0	29,5	33,3	38,1
MAXIMUM ABSORBED CURRENT(F.L.A.)		A	26,3	31,9	37,8	47,8	51,8	59,9	65,2	75,5	84,4
MAXIMUM PEAK CURRENT (L.R.A.)		A	144	160	201	220	173	192	197	242	259
ELECTRIC FEED		V/Ph/Hz	400/3/50								
<b>NOISE DATA</b>											
SOUND PRESSURE (2)		dB(A)	52,3	53,0	54,8	55,5	55,1	56,2	57,1	57,9	59,5
<b>DIMENSIONS AND WEIGHT</b>											
LENGTH		mm	1610	1610	1610	1610	2220	2220	2220	2220	2220
WIDTH		mm	860	860	860	860	1100	1100	1100	1100	1100
HEIGHT		mm	1540	1540	1540	1540	2100	2100	2100	2100	2100
WEIGHT EMPTY		kg	390	400	430	450	810	820	830	855	930
WEIGHT OPERATING		kg	690	700	730	750	1240	1250	1260	1285	1360

The manufacturer reserves the right to modify specifications without notice

updated on 07/10/2013

Data referred to:

(1) Inlet/Outlet water temperature = +12/+7 °C - Co ndenser air temperature = +35°C; fouling factor = 0 .000043 m²K/W

(2) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface



**Aircooled liquid chillers ENR series, scroll compressors, condenser with copper tubes and aluminium finned core and axial fans**

SPC (Super Process Chiller) <i>Cooling Plus Energy</i> ® Series	Model	ENR	RV "fan speed cut-phase regulator" included								
			130	160	185	230	280	340	370	430	480
NOMINAL COOLING CAPACITY (1)		kW	127	156	184	227	277	340	370	430	480
NOMINAL COOLING CAPACITY (1)		Frig/h	109220	134160	158240	195220	238220	292400	318200	369800	412800
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)		kW	35,7	46,0	51,8	70,1	77,6	96,0	106,9	127,8	149,5
COP		kW/kW	3,56	3,39	3,55	3,24	3,57	3,54	3,46	3,36	3,21
EER		kW/kW	3,21	3,01	3,19	2,84	3,17	3,22	3,12	3,08	2,98
ESEER			4,4	4,3	4,4	4,3	4,2	4,4	4,3	4,3	4,3
IPLV			5,2	5,2	5,1	5,1	5,0	5,0	5,1	5,1	5,0
COMPRESSORS		nr.	4	4	4	4	4	4	6	6	6
REFRIGERANT CIRCUITS		nr.	2	2	2	2	2	2	2	2	2
PARTION STEP		nr.	2/2	2/2	2/2	2/2	2/2	2/2	3/2	3/2	3/2
REFRIGERANT		R	410A								
<b>HYDRAULIC SECTION</b>											
NOMINAL WATER FLOW		m3/h	21,8	26,8	31,6	39,0	47,7	58,5	63,6	73,9	82,6
TYPE OF EVAPORATOR			Shell and tube evaporator								
EVAPORATOR PRESSURE DROP		kPa	39	39	38	36	40	40	43	43	49
AVAILABLE PRESSURE		mca	28	27	30	30	28	28	28	28	27
PUMP ABSORBED POWER		kW	4,57	4,57	6,26	6,26	8,61	8,61	10,17	10,17	12,22
PUMP ABSORBED CURRENT		A	7,8	7,8	10,4	10,4	14,3	14,3	16,7	16,7	20,3
HYDRAULIC CONNECTIONS		BSP/DN	DN65	DN65	DN65	DN125	DN125	DN125	DN150	DN150	DN200
TANK VOLUME		dm3	390	390	390	500	500	500	500	500	500
<b>FAN SECTION (AXIAL)</b>											
CONDENSER COIL		nr.	1 + 1	1 + 1	1 + 1	1 + 1	1 + 1	1 + 1	1 + 1	1 + 1	1 + 1
TOTAL AIR FLOW		m3/h	40000	57000	54000	90000	87500	85000	108000	105000	102000
FANS		nr.	2	3	3	5	5	5	6	6	6
FANS ABSORBED POWER		kW	3,90	5,82	5,82	9,70	9,70	9,70	11,64	11,64	11,64
FANS ABSORBED CURRENT		A	7,8	11,7	11,7	19,5	19,5	19,5	23,4	23,4	23,4
<b>TOTAL ELECTRIC DATA</b>											
NOMINAL ABSORBED POWER		kW	44,2	56,4	63,9	86,1	95,9	114,3	128,7	149,6	173,4
MAXIMUM ABSORBED CURRENT(F.L.A.)		A	100,0	125,1	145,3	190,3	232,2	279,8	299,3	337,7	388,9
MAXIMUM PEAK CURRENT (L.R.A.)		A	221	257	312	365	443	538	439	548	599
<b>ELECTRIC FEED</b>		V/Ph/Hz	400/3/50								
<b>NOISE DATA</b>											
SOUND PRESSURE (2)		dB(A)	56,4	59,3	59,7	62,2	62,6	64,9	65,5	66,5	67,1
<b>DIMENSIONS AND WEIGHT</b>											
LENGTH		mm	3350	3350	3350	5350	5350	5350	6350	6350	6350
WIDTH		mm	1100	1100	1100	1100	1100	1100	1100	1100	1100
HEIGHT		mm	2180	2180	2180	2180	2180	2180	2180	2180	2180
WEIGHT EMPTY		kg	1550	1590	1650	2210	2270	2730	2390	2560	2720
WEIGHT OPERATING		kg	2250	2290	2350	3060	3120	3570	3310	3480	3640

The manufacturer reserves the right to modify specifications without notice

updated on 07/10/2013

Data referred to:

(1) Inlet/Outlet water temperature = +12/+7 °C - Co condenser air temperature = +35°C; fouling factor = 0.000043 m²K/W

(2) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface

**Free cooling chillers ENRF series, scroll compressors R410A, coaxial/shell and tube evaporator, condenser with copper tubes and aluminium finned core and axial fans**

<b>SPC (Super Process Chiller)</b>	<b>Model</b>	<b>022</b>	<b>030</b>	<b>038</b>	<b>045</b>	<b>055</b>	<b>061</b>	<b>070</b>	<b>075</b>	<b>090</b>	<b>100</b>	<b>130</b>	<b>160</b>	<b>185</b>	<b>230</b>	<b>280</b>	<b>340</b>	<b>370</b>	
NOMINAL COOLING CAPACITY (1)	kW	23,2	31,7	39	45	52	61	66	78	90	100	127	156	184	227	277	340	370	
NOMINAL COOLING CAPACITY (1)	Frig/h	19952	27262	33540	38700	44720	52460	56760	67080	77400	86000	109220	134160	158240	195220	238220	292400	318200	
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)	kW	6,5	8,6	11,5	13,0	15,1	17,3	18,9	22,6	26,0	28,0	35,4	45,3	52,1	70,0	85,0	107,0	114,0	
COP	kW/kW	3,57	3,69	3,39	3,46	3,44	3,52	3,49	3,45	3,46	3,57	3,59	3,44	3,53	3,24	3,26	3,18	3,25	
EER	kW/kW	2,92	3,10	2,53	2,66	2,74	2,64	2,67	2,74	2,83	2,80	2,94	2,84	2,98	2,78	2,87	2,87	2,94	
ESEER		4	4,2	4,4	4,4	4,4	4,2	4,3	4,3	4,2	4,3	4,4	4,3	4,4	4,3	4,2	4,4	4,3	
IPLV		4,6	4,9	5,1	5,1	5,1	5,0	5,1	5,1	5,1	5,1	5,2	5,2	5,1	5,1	5,0	5,0	5,1	
AIR TEMPERATURE 100% FREE COOLING (2)	°C	0,0	-1,0	0,0	-1,5	0,0	1,0	0,0	1,5	1,0	0,0	0,0	-0,5	-1,0	-1,5	-3,5	-5,0	-7,0	
COMPRESSORS	nr.	1	1	1	1	2	2	2	2	2	2	4	4	4	4	4	4	6	
REFRIGERATING CIRCUITS	nr.	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	
PARTION STEP	nr.	1	1	1	1	1/1	1/1	1/1	1/1	1/1	1/1	2/2	2/2	2/2	2/2	2/2	2/2	3/2	
<b>HYDRAULIC SECTION</b>																			
NOMINAL WATER FLOW	m3/h	4,0	5,5	6,7	7,8	8,9	10,5	11,3	13,4	15,5	16,5	22,0	27,0	32,0	39,0	47,7	58,5	63,6	
EVAPORATOR PRESSURE DROP	kPa	31	31	32	32	33	34	33	32	38	39	39	39	38	36	38	40	40	
FREE COOLING PRESSURE DROP	kPa	43	66	66	70	72	64	69	70	74	63	73	86	95	101	134	149	163	
AVAILABLE PRESSURE	mca	25	23	24	25	25	26	25	25	24	23	24	22	26	25	23	23	23	
PUMP ABSORBED POWER	kW	1,28	1,28	1,28	2,20	2,57	2,56	2,56	2,56	3,48	3,48	4,57	4,57	6,26	6,26	8,61	8,61	10,17	
PUMP ABSORBED CURRENT	A	2,4	2,4	2,4	4,2	4,6	4,6	4,6	4,6	6,1	6,1	7,8	7,8	10,4	10,4	14,3	14,3	16,7	
HYDRAULIC CONNECTIONS	BSP/DN	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2"	2"	DN65	DN65	DN65	DN125	DN125	DN150	DN150	
TANK VOLUME	dm3	270	270	270	270	270	410	410	410	410	410	390	390	390	500	500	500	500	
<b>FAN SECTION (AXIAL)</b>																			
TOTAL AIR FLOW	m3/h	36000	36000	35000	34000	58000	57000	56000	56000	76000	75000	95000	95000	108000	106000	106000	103000	102000	
FANS	nr.	2	2	2	2	2	3	3	3	3	4	4	5	5	6	6	6	6	
FANS ABSORBED POWER	kW	1,44	1,62	3,90	3,90	3,90	5,82	5,82	5,82	5,82	7,76	7,76	9,70	9,70	11,64	11,64	11,64	11,64	
FANS ABSORBED CURRENT	A	2,82	3,1	7,8	7,8	7,8	11,7	11,7	11,7	11,7	15,6	15,6	19,5	19,5	23,4	23,4	23,4	23,4	
<b>TOTAL ELECTRIC DATA</b>																			
NOMINAL ABSORBED POWER	kW	9,2	14,1	16,7	19,0	25,4	26,2	28,9	31,4	37,1	41,9	49,9	60,2	69,7	88,0	97,9	116,3	128,7	
MAXIMUM ABSORBED CURRENT(F.L.A.)	A	21,1	26,6	36,6	42,8	56,4	58,5	63,8	69,1	79,4	92,2	107,8	133,0	153,1	194,2	236,1	283,7	299,3	
MAXIMUM PEAK CURRENT (L.R.A.)	A	104	144	160	201	220	179	195	201	246	267	229	261	319	369	447	542	439	
<b>ELECTRIC FEED</b>	V/Ph/Hz	400/3/50																	
<b>NOISE DATA</b>																			
SOUND PRESSURE (3)	dB(A)	53,4	53,4	54,5	54,8	55,0	55,1	55,5	57,1	57,9	58,2	58,0	59,3	59,7	62,2	62,6	64,9	64,9	
<b>DIMENSIONS AND WEIGHT</b>																			
LENGTH	mm	1610	1610	2220	2220	2220	3350	3350	3350	3350	4350	4350	5350	5350	6350	6350	6350	6350	
WIDTH	mm	860	860	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	
HEIGHT	mm	1510	1510	2180	2180	2180	2180	2180	2180	2180	2180	2180	2180	2180	2180	2180	2180	2180	
WEIGHT EMPTY	kg	690	710	740	780	1000	1100	1200	1300	1400	1500	1800	1900	1970	2070	2160	2300	2450	
WEIGHT OPERATIVE	kg	975	1005	1030	1070	1295	1530	1625	1725	1830	1925	2200	2305	2370	2585	2670	2810	2960	

The manufacturer reserves the right to modify specifications without notice.

Updated on 14/10/2013

Data referred to:

(1) Inlet/Outlet water temperature = +12/+7 °C - C condenser air temperature = +35°C; fouling factor = 0.000043 m²K/W

(2) Inlet/outlet water temperature = +12/+7 °C

(3) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface

**Aircooled liquid chillers SBS series, scroll compressors R410A, shell and tube evaporator, condenser with copper tubes and aluminium finned core and axial fans**

<b>SBS (Super Big Scroll) Cooling Plus Energy® Series</b>	<b>Model</b>	<b>SBS</b>	<b>235</b>	<b>290</b>	<b>350</b>	<b>410</b>	<b>460</b>	<b>500</b>	<b>580</b>	<b>690</b>
NOMINAL COOLING CAPACITY (1)	kW		235	290	350	410	460	500	580	690
NOMINAL COOLING CAPACITY (1)	Frig/h		202100	249400	301000	352600	395600	430000	498800	593400
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)	kW		66,8	81,6	102,8	116,4	130,0	143,6	167,8	195,0
COP	kW/kW		3,52	3,55	3,40	3,52	3,54	3,48	3,46	3,54
EER	kW/kW		2,97	3,14	3,06	3,18	3,22	3,15	3,13	3,28
ESEER			4,67	4,75	4,40	4,51	4,62	4,48	4,45	4,62
IPLV			5,51	5,57	5,12	5,32	5,52	5,26	5,25	5,51
COMPRESSORS	nr.		4	4	4	4	4	6	6	6
CIRCUITS	nr.		2	2	2	2	2	3	3	3
PARTION STEP	nr.		4	4	4	4	4	6	6	6
<b>HYDRAULIC SECTION (OPTIONAL)</b>										
NOMINAL WATER FLOW	m3/h		40,4	50,1	60,1	70,5	79,1	86,0	99,7	118,7
EVAPORATOR PRESSURE DROP	kPa		45	55	40	50	50	40	55	60
AVAILABLE PRESSURE	mca		20	20	25	20	20	24	20	23
PUMP ABSORBED POWER	kW		4	5,5	7,5	7,5	9,2	11	11	15
PUMP ABSORBED CURRENT	A		7,4	9,2	12,3	12,3	17	20,3	20,3	26,2
HYDRAULIC CONNECTIONS (VICTAULIC)	DN		DN100	DN100	DN125	DN125	DN150	DN150	DN150	DN150
TANK VOLUME	dm3		500	500	500	500	500	500	500	500
<b>FAN SECTION (AXIAL) - RV "fan speed cut-phase regulator" included</b>										
TOTAL AIR FLOW	m3/h		72000	72000	70000	70000	108000	108000	105000	140000
FANS	nr.		4	4	4	4	6	6	6	8
FANS ABSORBED POWER	kW		7,76	7,76	7,76	7,76	11,60	11,60	11,60	15,50
FANS ABSORBED CURRENT	A		15,6	15,6	15,6	15,6	23,4	23,4	23,4	31,2
<b>TOTAL ELECTIC DATA</b>										
NOMINAL ABSORBED POWER (WITHOUT PUMP)	kW		74,9	89,5	114,4	126,2	141,8	159,1	183,3	210,9
MAXIMUM ABSORBED CURRENT(F.L.A.)	A		176,0	214,0	261,6	293,2	332,6	368,6	424,0	495,0
MAXIMUM PEAK CURRENT (L.R.A.)	A		351	424	520	629	668	627	760	831
<b>ELECTRIC FEED</b>	V/Ph/Hz		400/3/50							
<b>NOISE DATA</b>										
SOUND PRESSURE (2)	dB(A)		62,0	62,6	64,7	66,5	67,1	67,7	68,0	68,5
<b>DIMENSIONS AND WEIGHT</b>										
LENGTH	mm		2710	2710	2710	2710	3900	3900	3900	5110
WIDTH	mm		2200	2200	2200	2200	2200	2200	2200	2200
HEIGHT	mm		2450	2450	2450	2450	2450	2450	2450	2450
WEIGHT EMPTY	kg		1700	1900	2300	2500	2870	3250	3790	4100
WEIGHT OPERATING (NO TANK, NO PUMP)	kg		1860	2130	2490	2700	3060	3450	3940	4360

The manufacturer reserves the right to modify specifications without notice

updated on 09/07/2013

Data referred to:

(1) Inlet/Outlet water temperature = +12/+7 °C - Co ndenser air temperature = +35°C; fouling factor = 0 .000043 m²K/W

(2) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface

**Aircooled liquid chillers CFT series, scroll compressors R410A, plate evaporator, condenser with copper tubes, aluminium finned core and axial fans**

<b>SCC (Super Comfort Chiller) Cooling Plus Energy® Series</b>	<b>Model</b>	<b>CFT</b>	<b>012</b>	<b>016</b>	<b>018</b>	<b>022</b>	<b>030</b>	<b>038</b>	<b>045</b>	<b>055</b>	<b>061</b>	<b>070</b>	<b>075</b>	<b>090</b>	<b>100</b>
NOMINAL COOLING CAPACITY (1)		kW	12,2	15,8	18	22,5	31,7	39	45	52	61	66	78	90	100
NOMINAL COOLING CAPACITY (1)		Frig/h	10492	13588	15480	19350	27262	33540	38700	44720	52460	56760	67080	77400	86000
COMPRESSORS NOMINAL ABSORBED POWER (1)		kW	3,9	5,2	5,8	6,7	8,9	11,5	12,9	17,0	17,8	20,5	23,0	25,9	30,7
COP		kW/kW	3,13	3,04	3,10	3,36	3,56	3,39	3,49	3,06	3,43	3,22	3,39	3,47	3,26
EER		kW/kW	2,7	2,7	2,8	3,0	3,07	2,97	3,14	2,79	3,00	2,70	2,90	3,02	2,89
ESEER			3,8	3,9	3,9	3,8	4,2	4,4	4,4	4,3	4,2	4,3	4,3	4,2	4,3
IPLV			4,3	4,3	4,3	4,5	4,9	5,1	5,1	5,1	5,0	5,1	5,1	5,1	5,1
COMPRESSORS		nr.	1	1	1	1	1	1	1	1	2	2	2	2	2
CIRCUITS		nr.	1	1	1	1	1	1	1	1	1	1	1	1	1
PARTION STEP		nr.	1	1	1	1	1	1	1	1	1/1	1/1	1/1	1/1	1/1
<b>HYDRAULIC SECTION (OPTIONAL)</b>															
NOMINAL WATER FLOW		m3/h	2,1	2,7	3,1	3,9	5,5	6,7	7,7	8,9	10,5	11,3	13,4	15,5	16,5
EVAPORATOR PRESSURE DROP		kPa	28	30	30	31	35	30	31	33	36	35	35	38	40
AVAILABLE PRESSURE		mca	20	20	20	20	19	20	20	19	19	24	21	19	25
PUMP ABSORBED POWER		kW	0,7	0,7	0,8	0,9	0,9	0,9	1,5	1,5	1,5	1,5	2,2	2,2	3
PUMP ABSORBED CURRENT		A	1,5	1,5	1,7	2,3	2,3	2,3	3	3	3	5	5	5	6
HYDRAULIC CONNECTIONS		BSP/DN	1"	1"	1"	1 1/4"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2"
TANK VOLUME		dm3	50	50	110	110	270	270	270	270	410	410	410	410	410
<b>FAN SECTION (AXIAL)</b>															
TOTAL AIR FLOW		m3/h	5900	5700	5700	9100	15600	16800	14800	15600	24800	36000	36000	34000	34000
FANS		nr.	1	1	1	1	2	2	2	2	2	2	2	2	2
FANS ABSORBED POWER		kW	0,68	0,68	0,68	0,81	1,44	1,62	1,44	1,62	2,50	3,90	3,90	3,90	3,90
FANS ABSORBED CURRENT		A	3,0	3,0	3,0	1,5	2,8	3,0	2,8	3,1	5,0	7,8	7,8	7,8	7,8
<b>TOTAL ELECTIC DATA</b>															
NOMINAL ABSORBED POWER (WITHOUT PUMP)		kW	4,6	5,9	6,6	7,5	10,3	12,9	14,3	18,5	20,3	23,0	25,5	28,1	34,5
MAXIMUM ABSORBED CURRENT(F.L.A.)		A	12,2	12,8	17,0	17,4	23,9	29,5	33,6	43,2	47,2	55,3	60,6	69,4	78,7
MAXIMUM PEAK CURRENT (L.R.A.)		A	67	67	71	102	142	160	197	215	168	184	189	236	254
<b>ELECTRIC FEED</b>		V/Ph/Hz	400/3/50 N				400/3/50								
<b>NOISE DATA</b>															
SOUND PRESSURE (2)		dB(A)	50	50,3	50,9	51,6	51,0	53,5	54,0	55,1	55,5	56,0	57,5	58,5	59,5
<b>DIMENSIONS AND WEIGHT</b>															
LENGTH		mm	820	820	1008	1008	1610	1610	1610	1610	2220	2220	2220	2220	2220
WIDTH		mm	615	615	718	718	860	860	860	860	1100	1100	1100	1100	1100
HEIGHT		mm	1360	1360	1580	1580	1540	1540	1540	1540	2100	2100	2100	2100	2100
WEIGHT EMPTY		kg	185	190	230	260	390	400	430	450	810	820	830	855	930
WEIGHT OPERATING		kg	235	240	360	390	690	700	730	750	1240	1250	1260	1285	1360

The manufacturer reserves the right to modify specifications without notice

Data referred to:

(1) Inlet/Outlet water temperature = +12/+7 °C - Condenser air temperature = +35°C; fouling factor = 0.000043 m²K/W

(2) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface

**Aircooled liquid chillers CFT series, scroll compressors R410A, plate evaporator, condenser with copper tubes and aluminium finned core and axial fans**

SCC (Super Comfort Chiller) Cooling Plus Energy® Series	Model	CFT	RV "fan speed cut-phase regulator" included								
			130	160	185	230	280	340	370	430	480
NOMINAL COOLING CAPACITY (1)		kW	127	156	184	227	277	340	370	430	480
NOMINAL COOLING CAPACITY (1)		Frig/h	109220	134160	158240	195220	238220	292400	318200	369800	412800
COMPRESSORS NOMINAL ABSORBED POWER (1)		kW	35,7	46,0	51,8	70,1	77,6	96,0	106,9	127,8	149,5
COP		kW/kW	3,56	3,39	3,55	3,24	3,57	3,54	3,46	3,36	3,21
EER		kW/kW	3,21	3,01	3,19	2,84	3,17	3,22	3,12	3,08	2,98
ESEER			4,4	4,3	4,4	4,3	4,2	4,4	4,3	4,3	4,3
IPLV			5,2	5,2	5,1	5,1	5,0	5,0	5,1	5,1	5,0
COMPRESSORS		nr.	4	4	4	4	4	4	6	6	6
CIRCUITS		nr.	2	2	2	2	2	2	2	2	2
PARTION STEP		nr.	2/2	2/2	2/2	2/2	2/2	2/2	3/2	3/2	3/2
<b>HYDRAULIC SECTION (OPTIONAL)</b>											
NOMINAL WATER FLOW		m3/h	21,8	26,8	31,6	39,0	47,7	58,5	63,6	72,4	82,6
EVAPORATOR PRESSURE DROP		kPa	40	31	31	44	52	51	52	43	49
AVAILABLE PRESSURE		mca	20	19	23	19	20	25	24	22	20
PUMP ABSORBED POWER		kW	3	3	4	4	5,5	7,5	7,5	7,5	9,2
PUMP ABSORBED CURRENT		A	6	6	7,4	7,4	10,4	14,3	14,3	14,3	17
HYDRAULIC CONNECTIONS		BSP/DN	DN65	DN65	DN65	DN125	DN125	DN150	DN150	DN150	DN200
TANK VOLUME		dm3	390	390	390	500	500	500	500	500	500
<b>FAN SECTION (AXIAL)</b>											
TOTAL AIR FLOW		m3/h	38000	58000	54000	90000	87500	85000	108000	105000	102000
FANS		nr.	2	3	3	5	5	5	6	6	6
FANS ABSORBED POWER		kW	3,88	5,82	5,82	9,70	9,70	9,70	11,64	11,64	11,64
FANS ABSORBED CURRENT		A	7,8	11,7	11,7	19,5	19,5	19,5	23,4	23,4	23,4
<b>TOTAL ELECTIC DATA</b>											
NOMINAL ABSORBED POWER (WITHOUT PUMP)		kW	38,2	53,9	57,6	79,8	87,3	105,7	118,5	135,0	144,0
MAXIMUM ABSORBED CURRENT(F.L.A.)		A	92,2	117,3	134,9	179,9	219,5	265,5	285,0	323,4	369,4
MAXIMUM PEAK CURRENT (L.R.A.)		A	213	249	302	355	430	524	450	533	554
<b>ELECTRIC FEED</b>		V/Ph/Hz	400/3/50								
<b>NOISE DATA</b>											
SOUND PRESSURE (2)		dB(A)	56,4	59,3	59,7	62,2	62,6	64,9	65,5	66,5	67,1
<b>DIMENSIONS AND WEIGHT</b>											
LENGTH		mm	3350	3350	3350	5350	5350	5350	6350	6350	6350
WIDTH		mm	1100	1100	1100	1100	1100	1100	1100	1100	1100
HEIGHT		mm	2180	2180	2180	2180	2180	2180	2180	2180	2180
WEIGHT EMPTY		kg	1265	1440	1595	1915	2115	2160	2390	2560	2720
WEIGHT OPERATING		kg	1950	2155	2350	2695	3025	3080	3310	3480	3640

The manufacturer reserves the right to modify specifications without notice

updated on 24/06/2013

Data referred to:

(1) Inlet/Outlet water temperature = +12/+7 °C - Co ndenser air temperature = +35°C; fouling factor = 0 .000043 m²K/W

(2) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface

**Aircooled liquid heat pumps HFT series, scroll compressors R410A, plate evaporator, condenser with copper tubes, aluminium finned core and axial fans**

<b>SCC (Super Comfort Chiller) Cooling Plus Energy® Series</b>	<b>Model</b>	<b>HFT</b>	<b>012</b>	<b>016</b>	<b>018</b>	<b>022</b>	<b>030</b>	<b>038</b>	<b>045</b>	<b>055</b>	<b>061</b>	<b>070</b>	<b>075</b>	<b>090</b>	<b>100</b>	
<b>NOMINAL COOLING CAPACITY (1)</b>		kW	12,2	15,8	18	22,5	31,7	39	45	52	61	66	78	90	96	
COMPRESSORS NOMINAL ABSORBED POWER (1)		kW	3,9	5,2	5,8	6,7	8,9	11,5	12,9	17,0	17,8	20,5	23,0	25,9	30,7	
COP CHILLER		kW/kW	3,13	3,04	3,10	3,36	3,56	3,39	3,49	3,06	3,43	3,22	3,39	3,47	3,13	
EER CHILLER		kW/kW	2,70	2,70	2,80	3,00	3,07	2,97	3,14	2,79	3,00	2,70	2,90	3,02	2,77	
<b>NOMINAL HEATING CAPACITY (1)</b>		kW	14,3	18,2	20	26,3	36	43	51	57	67	73	86	100	106	
COMPRESSORS NOMINAL ABSORBED POWER (2)		kW	3,7	5,0	5,3	6,7	8,7	11,0	12,4	13,9	16,3	17,8	22,4	24,3	25,6	
COP HEAT PUMP		kW/kW	3,86	3,64	3,44	3,93	4,14	3,91	4,11	4,10	4,11	4,10	3,84	4,10	4,14	
COP HEAT PUMP		kW/kW	3,10	3,15	3,61	3,50	3,56	3,47	3,70	3,48	3,56	3,60	3,45	3,76	3,61	
MAXIMUM ABSORBED CURRENT (F.L.A.)		A	71	71	75	100	144	162	201	168	169	178	191	234	252	
MAXIMUM PEAK CURRENT (L.R.A.)		A	14	14,6	18,8	20	30	37	41	50	53	60	64	72	84	
REFRIGERANT CIRCUITS		nr.	1	1	1	1	1	1	1	1	1	1	1	1	1	
SCROLL COMPRESSORS		nr.	1	1	1	1	1	1	1	2	2	2	2	2	2	
PARTION STEP		nr.	1	1	1	1	1	1	1	1	1/1	1/1	1/1	1/1	1/1	
EVAPORATOR PRESSURE DROPS COOLING		kPa	30	30	30	31	52	55	32	33	48	35	48	38	49	
EVAPORATOR PRESSURE DROPS HEATING		kPa	57	56	59	57	57	59	46	47	50	47	52	43	51	
<b>HYDRAULIC SECTION (OPTIONAL)</b>																
NOMINAL WATER FLOW COOLING		m3/h	2,1	2,7	3,1	3,9	5,3	6,6	7,6	8,9	10,0	11,4	12,9	15,0	16,0	
COOLING AVAILABLE PRESSURE		mca	20	20	20	20	19	20	20	19	19	24	21	19	25	
NOMINAL WATER FLOW HEATING		m3/h	2,4	3,13	3,44	4,5	6,2	7,4	8,8	9,8	11,5	12,6	14,8	17,1	18,2	
HEATING AVAILABLE PRESSURE		mca	18	18	17	18	18	19	19	18	18	23	20	18	24	
PUMP ABSORBED POWER		kW	0,7	0,7	0,8	0,9	0,9	0,9	1,5	1,5	1,5	1,5	2,2	2,2	3	
PUMP ABSORBED CURRENT		A	1,5	1,5	1,7	2,3	2,3	2,3	3	3	3	5	5	5	6	
HYDRAULIC CONNECTIONS		BSP/DN	1"	1"	1"	1 1/4"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2"	2"	
TANK VOLUME		dm3	50	50	110	110	270	270	270	270	460	460	460	460	460	
<b>FAN SECTION (AXIAL)</b>																
TOTAL AIR FLOW		m3/h	5900	5700	5700	9100	15600	16800	14800	15600	24800	36000	36000	34000	34000	
FANS		nr.	1	1	1	1	2	2	2	2	2	2	2	2	2	
FANS ABSORBED POWER		kW	0,68	0,68	0,68	0,81	1,44	1,62	1,44	1,62	2,50	3,90	3,90	3,90	3,90	
FANS ABSORBED CURRENT		A	3,0	3,0	3,0	1,5	2,8	3,0	2,8	3,1	5,0	7,8	7,8	7,8	7,8	
<b>TOTAL ELECTIC DATA</b>																
NOMINAL ABSORBED POWER (WITHOUT PUMP)		kW	4,6	5,9	6,6	7,5	10,3	12,9	14,3	18,5	20,3	23,0	25,5	28,1	34,5	
MAXIMUM ABSORBED CURRENT(F.L.A.)		A	12,2	12,8	17,0	17,4	23,9	29,5	33,6	43,2	47,2	55,3	60,6	69,4	78,7	
MAXIMUM PEAK CURRENT (L.R.A.)		A	67	67	71	102	142	160	197	215	168	184	189	236	254	
<b>ELECTRIC FEED</b>		V/Ph/Hz	400/3/50 N				400/3/50									
<b>NOISE DATA</b>																
SOUND PRESSURE (3)		dB(A)	50	50,7	51,3	51,6	51,0	53,5	54,0	55,1	55,5	56,0	57,5	58,5	59,5	
<b>DIMENSIONS AND WEIGHT</b>																
LENGTH		mm	820	820	1008	1008	1610	1610	1610	1610	2220	2220	2220	2220	2220	
WIDTH		mm	615	615	718	718	860	860	860	860	1100	1100	1100	1100	1100	
HEIGHT		mm	1360	1360	1580	1580	1540	1540	1540	1540	2100	2100	2100	2100	2100	
WEIGHT EMPTY		kg	210	225	230	240	390	400	430	450	710	785	800	815	870	
WEIGHT OPERATING		kg	340	355	360	370	690	700	730	750	1125	1200	1215	1230	1290	

The manufacturer reserves the right to modify specifications without notice

updated on 27/05/2013

Data referred to:

(1) Inlet/Outlet water temperature = +12/+7 °C - Con denser air temperature = +35°C; fouling factor = 0.0 00043 m²K/W

(2) Heat pump outlet water temperature = +45°C; air t emperature = +7°C

(3) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface



**Aircooled liquid HFT series, scroll compressors R410A, plate evaporator, condenser with copper tubes and aluminium finned core and axial fans**

SCC (Super Comfort Chiller) Cooling Plus Energy® Series	Model	HFT	RV "fan speed cut-phase regulator" included								
			130	160	185	230	280	340	370	430	480
<b>NOMINAL COOLING CAPACITY (1)</b>		kW	127	156	184	227	277	340	370	430	480
COMPRESSORS NOMINAL ABSORBED POWER (1)		kW	35,7	46,0	51,8	70,1	77,6	96,0	106,9	127,8	149,5
COP CHILLER		kW/kW	3,56	3,39	3,55	3,24	3,57	3,54	3,46	3,36	3,21
EER CHILLER		kW/kW	3,32	2,89	3,19	2,84	3,17	3,22	3,12	3,08	2,98
<b>NOMINAL HEATING CAPACITY (1)</b>		kW	139	171	200	245	290	365	390	498	506
COMPRESSORS NOMINAL ABSORBED POWER (2)		kW	34,4	44,8	50,0	66,0	85,0	104,0	111,0	142,4	145,4
COP HEAT PUMP		kW/kW	4,04	3,82	4,00	3,71	3,41	3,51	3,51	3,50	3,48
EER HEAT PUMP		kW/kW	3,77	3,24	3,58	3,24	3,06	3,21	3,18	3,23	3,22
MAXIMUM ABSORBED CURRENT (F.L.A.)		A	92,2	117,3	134,9	179,9	219,5	265,5	285,0	323,4	369,4
MAXIMUM PEAK CURRENT (L.R.A.)		A	213	249	302	355	430	524	450	533	554
SCROLL COMPRESSORS		nr.	4	4	4	4	4	4	6	6	6
REFRIGERANT CIRCUITS		nr.	2	2	2	2	2	2	2	2	2
PARTION STEP		nr.	2/2	2/2	2/2	2/2	2/2	2/2	3/2	3/2	3/2
EVAPORATOR PRESSURE DROPS COOLING		kPa	30	31	35	36	43	41	52	52	49
EVAPORATOR PRESSURE DROPS HEATING		kPa	35	34	38	40	47	45	54	53	54
<b>HYDRAULIC SECTION (OPTIONAL)</b>											
NOMINAL WATER FLOW		m3/h	21,8	26,8	31,6	39,0	47,7	58,5	63,6	72,4	82,6
COOLING AVAILABLE PRESSURE		mca	20	19	23	19	20	25	24	22	20
NOMINAL WATER FLOW HEATING		m3/h	23,9	29,4	34,4	42,1	49,9	62,8	67,1	85,7	87,0
HEATING AVAILABLE PRESSURE		mca	19	18	22	18	19	23	23	21	19
PUMP ABSORBED POWER		kW	3	3	4	4	5,5	7,5	7,5	7,5	9,2
PUMP ABSORBED CURRENT		A	6	6	7,4	7,4	10,4	14,3	14,3	14,3	17
HYDRAULIC CONNECTIONS		BSP/DN	DN65	DN65	DN65	DN125	DN125	DN150	DN150	DN150	DN200
TANK VOLUME		dm3	390	390	390	500	500	500	500	500	500
<b>FAN SECTION (AXIAL)</b>											
TOTAL AIR FLOW		m3/h	38000	58000	54000	90000	87500	85000	108000	105000	102000
FANS		nr.	2	3	3	5	5	5	6	6	6
FANS ABSORBED POWER		kW	3,88	5,82	5,82	9,70	9,70	9,70	11,64	11,64	11,64
FANS ABSORBED CURRENT		A	7,8	11,7	11,7	19,5	19,5	19,5	23,4	23,4	23,4
<b>TOTAL ELECTIC DATA</b>											
NOMINAL ABSORBED POWER (WITHOUT PUMP)		kW	38,2	53,9	57,6	79,8	87,3	105,7	118,5	135,0	144,0
MAXIMUM ABSORBED CURRENT(F.L.A.)		A	92,2	117,3	134,9	179,9	219,5	265,5	285,0	323,4	369,4
MAXIMUM PEAK CURRENT (L.R.A.)		A	213	249	302	355	430	524	450	533	554
<b>ELECTRIC FEED</b>		V/Ph/Hz	400/3/50								
<b>NOISE DATA</b>											
SOUND PRESSURE (2)		dB(A)	56,4	59,3	59,7	62,2	62,6	64,9	65,5	66,5	67,1
<b>DIMENSIONS AND WEIGHT</b>											
LENGTH		mm	3350	3350	3350	5350	5350	5350	6350	6350	6350
WIDTH		mm	1100	1100	1100	1100	1100	1100	1100	1100	1100
HEIGHT		mm	2180	2180	2180	2180	2180	2180	2180	2180	2180
WEIGHT EMPTY		kg	1265	1440	1595	1915	2115	2160	2390	2560	2720
WEIGHT OPERATING		kg	1950	2155	2350	2695	3025	3080	3310	3480	3640

The manufacturer reserves the right to modify specifications without notice

updated on 09/05/2013

Data referred to:

(1) Inlet/Outlet water temperature = +12/+7 °C - Co ndenser air temperature = +35°C; fouling factor = 0 .000043 m²K/W

(2) Heat pump outlet water temperature = +45°C; air temperature = +7°C

(3) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface

### Aircooled liquid chillers ECS series, screw compressors R407C

<b>BIG (Big Chiller)</b>	<b>Model</b>	<b>230</b>	<b>320</b>	<b>370</b>	<b>425</b>	<b>545</b>	<b>630</b>	<b>750</b>	<b>840</b>	<b>930</b>	<b>1020</b>	<b>1250</b>	<b>1350</b>	<b>1450</b>
NOMINAL COOLING CAPACITY (1)	kW	230	318	370	425	545	630	750	840	930	1021	1250	1346	1446
COMPRESSOR NOMINAL ABSORBED POWER (1)	kW	38,2	47,3	54,8	71,6	85	98	111,5	130,5	154,7	171	219,8	233	267
COMPRESSOR NOMINAL ABSORBED CURRENT (1)	A	63,2	77,6	90,6	117,7	139,4	160,7	181,1	212,4	252,1	280,5	350,8	375	427
COP	W/W	3,01	3,36	3,38	2,97	3,21	3,21	3,36	3,22	3,01	2,99	2,84	2,89	2,71
EER	W/W	2,73	2,98	3,04	2,67	2,87	2,92	3,04	2,91	2,72	2,73	2,63	2,66	2,50
ESEER		3,77	3,96	4,30	3,81	4,28	4,35	4,27	4,18	4,00	3,86	3,80	3,82	3,79
IPLV		4,40	4,60	5,02	4,43	4,98	5,10	4,96	4,85	4,65	4,50	4,40	4,44	4,35
PW STARTING CURRENT	A	163-325	207-390	239-450	423-650	497-765	497-765	646-950	915-1345	996-1465	545-1635*	777-2330*	827-2480*	915-2745*
MAXIMUM WORKING CURRENT	A	87	112	122	163	183	196	254	294	319	369	473	508	589
REFRIGERANT CIRCUIT	nr	2	2	2	2	2	2	2	2	2	2	2	2	2
SCREW COMPRESSORS	nr	2	2	2	2	2	2	2	2	2	2	2	2	2
PARTION STEPS	%	33-66-100	0-25-50-75-100-75-50-0											
<b>HYDRAULIC SECTION (OPTIONAL)</b>														
NOMINAL WATER FLOW	m <sup>3</sup> /h	41,9	57,9	67,3	77,4	99,2	114,7	136,5	152,9	169,3	185,8	227,5	245,0	263,2
EVAPORATOR PRESSURE DROPS	KPa	28	48	63	36	56	37	51	47	57	36	51	46	53
HYDRAULIC CONNECTIONS	DN	125	150	150	200	200	200	200	200	200	200	200	200	200
PUMP ABSORBED POWER	KW	5,5	7,5	7,5	7,5	11	11	15	18,5	18,5	22	30	30	30
TANK VOLUME	dm <sup>3</sup>	600	600	600	600	600	800	800	800	800	800	800	1000	1000
PUMP AVAILABLE PRESSURE	kPa	230	265	235	220	245	225	215	260	245	220	285	260	230
<b>FAN SECTION</b>														
TOTAL AIR FLOW	m <sup>3</sup> /h	80000	114000	108000	144000	192500	190000	231000	266000	308000	304000	342000	360000	407000
FANS	nr	4	6	6	8	10	10	12	14	16	16	18	20	22
FANS ABSORBED POWER	KW	8	12	12	16	20	20	24	28	32	32	36	40	44
FANS ABSORBED CURRENT	A	16	24	24	32	40	40	48	56	64	64	72	80	88
<b>ELECTRIC FEED</b>														
POWER CIRCUIT	V/Ph/Hz	400/3/50												
<b>NOISE DATA</b>														
SOUND PRESSURE (2)	dB(A)	57,9	61,6	61,9	62,7	63,2	63,6	66,4	67,5	69,5	70	70,5	70,8	71,6
SOUND PRESSURE LOW NOISE (2)	dB(A)	54,3	56,8	57	57,9	58,5	58,8	61,2	62,2	64,1	64,5	65,1	65,3	66,1
SOUND PRESSURE SUPER LOW NOISE (2)	dB(A)	52,6	55,3	55,5	56,4	57	57,3	59,7	60,7	62,6	63	63,6	63,8	-
<b>DIMENSIONS AND WEIGHT</b>														
LENGTH	mm	3050	4000	4000	4950	5950	5950	6850	7800	8750	8750	9700	10650	11600
WIDTH	mm	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210
HEIGHT	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
WEIGHT EMPTY	kg	2700	3500	3600	4200	5200	5300	5800	6500	7500	7700	8600	9400	10300
WEIGHT OPERATING	kg	3350	4300	4400	5000	6000	6200	6600	7500	8500	8800	9800	10500	11500

The manufacturer reserves the right to modify specifications without notice.

Data referred to:  
 (1) Inlet/Outlet water temperature (20% ethylenic glycol) = +12/+7 °C - ambient air temperature = +35° C, fouling factor 0.000043 m<sup>2</sup>K/W  
 (2) Sound pressure referred to: free spherical field, 10 m from the unit battery side, 1m from support base, according to ISO3744  
 \* Star-delta starting

### Freecooling chillers ECF series, screw compressors R407C

BIG (Big Chiller)	Model	230	320	370	425	545	630	750	840	930	1020	1250	1350	1450
NOMINAL COOLING CAPACITY (1)	kW	230	318	370	425	545	630	750	840	930	1021	1250	1346	1446
COMPRESSOR NOMINAL ABSORBED POWER (1)	kW	38,2	47,3	54,8	71,6	85	98	111,5	130,5	154,7	171	219,8	233	267
COMPRESSOR NOMINAL ABSORBED CURRENT (1)	A	63,2	77,6	90,6	117,7	139,4	160,7	181,1	212,4	252,1	280,5	350,8	375	427
COP	W/W	3,01	3,36	3,38	2,97	3,21	3,21	3,36	3,22	3,01	2,99	2,84	2,89	2,71
EER	W/W	2,73	2,98	2,95	2,67	2,87	2,92	3,04	2,91	2,72	2,73	2,61	2,64	2,50
ESEER		3,77	3,96	4,30	3,81	4,28	4,35	4,27	4,18	4,00	3,86	3,80	3,82	3,79
IPLV		4,40	4,60	5,02	4,43	4,98	5,10	4,96	4,85	4,65	4,50	4,40	4,44	4,35
PW STARTING CURRENT	A	163-325	207-390	239-450	423-650	497-765	497-765	646-950	915-1345	996-1465	545-1635*	777-2330*	827-2480*	915-2745*
MAXIMUM WORKING CURRENT	A	87	112	122	163	183	196	254	294	319	369	473	508	589
REFRIGERANT CIRCUIT	nr	2	2	2	2	2	2	2	2	2	2	2	2	2
SCREW COMPRESSORS	nr	2	2	2	2	2	2	2	2	2	2	2	2	2
PARTION STEPS	%	33-66-100	0-25-50-75-100-75-50-0											
AIR TEMPERATURE 100% FREE COOLING (2)	°C	-4,6	-3,7	-2,6	-3,7	-4	-5,5	-6	-6,5	-7	-7,5	-7,5	-7,7	-8,9
<b>HYDRAULIC SECTION (OPTIONAL)</b>														
NOMINAL WATER FLOW	m <sup>3</sup> /h	41,9	57,9	67,3	77,4	99,2	114,7	136,5	152,9	169,3	185,8	227,5	245,0	263,2
EVAPORATOR PRESSURE DROPS **	KPa	38	60	75	50	72	53	67	65	77	55	72	71	79
FREE COOLING PRESSURE DROPS ***	KPa	81	90	110	91	125	127	135	150	165	165	175	190	205
HYDRAULIC CONNECTIONS	DN	125	150	150	200	200	200	200	200	200	200	200	200	200
TANK VOLUME	dm <sup>3</sup>	600	600	600	600	600	800	800	800	800	800	800	1000	1000
PUMP ABSORBED POWER	KW	5,5	7,5	7,5	11	11	15	18,5	18,5	22	30	30	37	37
PUMP AVAILABLE PRESSURE	kPa	205	235	180	215	175	210	205	180	185	265	205	220	170
<b>FAN SECTION</b>														
TOTAL AIR FLOW	m <sup>3</sup> /h	72000	102000	144000	136000	170000	168000	212000	236000	272000	268000	350000	385000	385000
FANS	nr	4	6	8	8	10	10	12	14	16	16	20	22	22
FANS ABSORBED POWER	KW	8	12	16	16	20	20	24	28	32	32	40	44	44
FANS ABSORBED CURRENT	A	16	24	32	32	40	40	48	56	64	64	80	88	88
<b>ELECTRIC FEED</b>														
POWER CIRCUIT	V/Ph/Hz	400/3/50												
<b>NOISE DATA</b>														
SOUND PRESSURE (3)	dBA	57,6	61,6	62	62,7	63,2	63,7	66,4	67,5	69,5	70,1	70,5	70,8	71,6
SOUND PRESSURE LOW NOISE (3)	dBA	53,4	56,8	57,4	57,9	58,5	59,1	61,2	62,2	64,1	64,7	65,2	65,3	66,1
SOUND PRESSURE SUPER LOW NOISE (3)	dBA	52,2	55,3	55,9	56,4	57	57,6	59,7	60,7	62,6	63,2	63,7	-	-
<b>DIMENSIONS AND WEIGHT</b>														
LENGTH	mm	3050	4000	4950	4950	5950	5950	6850	7800	8750	8750	10650	11600	11600
WIDTH	mm	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210
HEIGHT	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
WEIGHT EMPTY	kg	3200	3900	4500	4800	5500	5600	6500	7000	8500	9500	11000	11700	11800
WEIGHT OPERATING	kg	3900	4600	5300	5700	6350	6450	7800	8200	9800	10100	12000	13000	13100

The manufacturer reserves the right to modify specifications without notice.

Data referred to:

- (1) Inlet/Outlet water temperature (20% ethylenic glycol) = +12/+7 °C - ambient air temperature = +35° C, fouling factor 0.00043 m<sup>2</sup>K/W  
 (2) Sound pressure referred to: free spherical field, 10 m from the unit battery side, 1m from support base, according to ISO3744

\* Star-delta starting

\* Star-delta starting

\*\* Pressure drop: evaporator + valve + pipes

\*\*\* Pressure drop: evaporator + battery coils + valves + pipes

**Aircooled liquid chillers EET series, screw compressors R134a**

<b>BIG (Big Chiller)</b>	<b>Model</b>	<b>210</b>	<b>250</b>	<b>300</b>	<b>330</b>	<b>380</b>	<b>430</b>	<b>510</b>	<b>580</b>	<b>650</b>	<b>700</b>	<b>750</b>	<b>800</b>	<b>920</b>	<b>1000</b>	<b>1100</b>	<b>1210</b>	<b>1350</b>	<b>1500</b>	
NOMINAL COOLING CAPACITY (1)	kW	213	248	297	325	382	427	509	580	653	697	741	792	918	1002	1095	1212	1350	1489	
COMPRESSOR NOMINAL ABSORBED POWER (1)	kW	33,6	38,0	49,7	51,1	58,5	70,3	85,8	95,7	101,6	111,6	119,4	121,9	134,9	150,3	162,0	184,4	206,5	223,9	
COMPRESSOR NOMINAL ABSORBED CURRENT	A	53,6	60,7	79,4	81,6	93,4	112,2	137,0	152,8	165,0	178,2	190,6	194,6	215,4	240,0	258,7	294,4	329,7	357,5	
COP	W/W	3,16	3,27	2,99	3,18	3,26	3,04	2,96	3,03	3,21	3,12	3,10	3,25	3,40	3,33	3,38	3,29	3,27	3,33	
EER	W/W	2,83	2,96	2,67	2,84	2,96	2,73	2,71	2,80	2,93	2,87	2,86	2,96	3,04	3,01	3,06	2,99	2,96	3,03	
ESEER		4,08	4,25	4,28	4,25	4,25	4,37	4,23	4,26	4,35	4,25	4,27	4,47	4,45	4,30	4,38	4,30	4,29	4,32	
IPLV		4,69	4,80	4,82	4,80	4,82	5,00	4,82	4,86	4,86	4,82	4,87	5,13	5,07	4,86	5,00	4,86	4,84	4,89	
PW STARTING CURRENT	A	207-390	239-450	329-530	423-650	497-785	640-985	646-950	915-1345	996-1465	996-1465	996-1465	527-1580*	693-2080*	777-2330*	827-2480*	915-2745*	935-2805*	1085-3255*	
MAXIMUM WORKING CURRENT	A	112	122	146	163	183	209	254	294	319	319	358	374	430	473	508	589	580	635	
REFRIGERANT CIRCUIT	NR	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
SCREW COMPRESSORS	NR	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
PARTITION STEPS	%	3-66-100-66-3										0-25-50-75-100-75-50-0								
<b>HYDRAULIC SECTION (OPTIONAL)</b>																				
NOMINAL WATER FLOW (1)	m³/h	39,8	46,5	55,6	60,7	71,4	79,9	95,2	108,6	118,0	130,5	138,6	148,3	171,8	187,5	204,9	226,8	252,6	278,6	
EVAPORATOR PRESSURE DROPS	KPa	60,0	40,0	56,0	65,0	35,0	45,0	38,0	55,0	63,0	58,0	65,0	40,0	50,0	56,0	58,0	63,0	61,0	57,0	
HYDRAULIC CONNECTIONS	DN	125	125	125	125	125	150	150	150	150	150	200	200	200	200	200	200	200	200	
TANK VOLUME	dm³	600	600	600	600	600	600	600	600	600	600	800	800	800	800	800	1000	1000	1000	
PUMP MOTOR POWER	kW	5,5	5,5	7,5	7,5	7,5	11,0	11,0	15,0	15,0	18,5	18,5	18,5	22,0	22,0	30,0	30,0	30,0	30,0	
PUMP AVAILABLE PRESSURE	KPa	225	225	265	225	225	260	230	225	235	265	268	250	270	260	280	260	235	210	
<b>FAN SECTION</b>																				
TOTAL AIR FLOW	m³/h	76000	72000	126000	111000	108000	168000	156000	152000	180000	185000	183000	222000	308000	304000	296000	333000	360000	396000	
FANS	nr.	4	4	6	6	6	8	8	8	10	10	10	12	16	16	16	18	20	22	
FANS ABSORBED POWER	KW	8,0	8,0	12,0	12,0	12,0	16,0	16,0	16,0	20,0	20,0	20,0	24,0	32,0	32,0	32,0	36,0	40,0	44,0	
FANS ABSORBED CURRENT	A	16,0	16,0	24,0	24,0	24,0	32,0	32,0	32,0	40,0	40,0	40,0	48,0	64,0	64,0	64,0	72,0	80,0	88,0	
<b>ELECTRIC FEED</b>																				
POWER CIRCUIT	V/Ph/Hz											400/3/50								
<b>NOISE DATA</b>																				
SOUND PRESSURE (2)	dB(A)	62,7	62,9	62,2	62,5	63,0	63,8	66,3	68,3	68,6	69,5	69,7	70,0	70,2	70,8	71,6	72,0	73,2	73,4	
LOW NOISE SOUND PRESSURE (2)	dB(A)	57,9	58,0	57,2	57,7	58,0	58,5	60,9	62,8	63,5	64,0	64,2	64,6	65,0	65,3	66,1	66,5	67,5	67,7	
SUPER LOW NOISE SOUND PRESSURE (2)	dB(A)	56,4	56,4	55,6	56,1	56,5	56,9	59,4	61,2	62,0	62,5	62,6	63,1	63,5	63,8	64,6	65,0	66,0	-	
<b>DIMENSIONS AND WEIGHT</b>																				
LENGTH	mm	3050	3050	4000	4000	4000	4950	4950	4950	5950	5950	5950	6850	8750	8750	8750	9700	10650	11600	
WIDTH	mm	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	
HEIGHT	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	
EMPTY WEIGHT	kg	3000	3150	3900	4200	4300	4600	4700	4900	5300	5850	6000	6500	8300	8400	8500	9400	10400	11300	
OPERATING WEIGHT	kg	3600	3800	4500	5000	5200	5500	5600	5800	6150	6800	7000	7400	9200	9400	9500	10300	11400	12400	

The manufacturer reserves the right to modify specifications without notice.

Table 10

Data referred to:

(1) Inlet - outlet water (30% eth. glycole temperature) +12/+7 °C, with fouling factor 0.000043 (m²K)/W - Ambient air temperature = +35 °C

(2) Average sound pressure level at distance of 10 m, referred to free field on reflecting surface. This value is calculated according to ISO3744

(\*) Star-delta start

### Free cooling chillers EEF series, screw compressors R134a

BIG (Big Chiller)	Model	210	250	300	330	380	430	510	580	650	700	750	800	920	1000	1100	1210	1350
NOMINAL COOLING CAPACITY (1)	kW	213	248	297	325	382	427	509	580	653	697	741	792	918	1002	1095	1212	1350
COMPRESSOR NOMINAL ABSORBED POWER (1)	kW	33,6	38,0	49,7	51,1	58,5	70,3	85,8	95,7	101,6	111,6	119,4	121,9	134,9	150,3	162,0	184,4	206,5
COMPRESSOR NOMINAL ABSORBED CURRENT	A	53,6	60,7	79,4	81,6	93,4	112,2	137,0	152,8	165,0	178,2	190,6	194,6	215,4	240,0	258,7	294,4	329,7
COP	W/W	3,16	3,27	2,99	3,18	3,26	3,04	2,96	3,03	3,21	3,12	3,10	3,25	3,40	3,33	3,38	3,29	3,27
EER	W/W	2,68	2,82	2,67	2,84	2,87	2,73	2,71	2,75	2,87	2,82	2,82	2,91	3,04	3,01	3,04	2,96	2,95
ESEER		4,08	4,25	4,28	4,25	4,25	4,37	4,23	4,26	4,35	4,25	4,27	4,47	4,45	4,30	4,38	4,30	4,29
IPLV		4,69	4,80	4,82	4,80	4,82	5,00	4,82	4,86	4,86	4,82	4,87	5,13	5,07	4,86	5,00	4,86	4,84
PW STARTING CURRENT	A	207-390	239-450	329-530	423-650	497-765	640-985	646-950	915-1345	996-1465	996-1465	996-1465	527-1580*	693-2080*	777-2330*	827-2480*	915-2745*	935-2805*
MAXIMUM WORKING CURRENT	A	112	122	146	163	183	209	254	294	319	319	358	374	430	473	508	589	580
REFRIGERANT CIRCUIT	NR	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
SCREW COMPRESSORS	NR	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
PARTITION STEPS	%	13-66-100-66-3			0-25-50-75-100-75-50-0													
AIR AMBIENT TEMPERATURE 100% FREE COOLING (2)	°C	-0,4	-2,8	-3,5	-3,8	-3,3	-3,7	-4,0	-3,1	-4,5	-4,5	-4,7	-4,5	-6,1	-6,5	-7,0	-7,5	-6,9
<b>HYDRAULIC SECTION (OPTIONAL)</b>																		
NOMINAL WATER FLOW (1)	m³/h	39,8	46,5	55,6	60,7	71,4	79,9	95,2	108,6	118,0	130,5	138,6	148,3	171,8	187,5	204,9	226,8	252,6
EVAPORATOR PRESSURE DROPS **	KPa	68,0	48,0	67,0	81,0	46,0	61,0	55,0	75,0	78,0	76,0	90,0	62,0	72,0	77,0	78,0	83,0	75,0
FREE-COOLING PRESSURE DROPS ***	KPa	85,0	81,0	90,0	114,0	88,0	113,0	126,0	123,0	140,0	140,0	150,0	157,0	175,0	180,0	190,0	195,0	185,0
HYDRAULIC CONNECTIONS	DN	125	125	125	125	125	150	150	150	150	150	200	200	200	200	200	200	200
TANK VOLUME	dm³	600	600	600	600	600	600	600	800	800	800	800	800	800	800	800	1000	1000
PUMP MOTOR POWER	kW	7,5	7,5	7,5	11,0	11,0	15,0	15,0	18,5	18,5	22,0	22,0	30,0	30,0	30,0	37,0	37,0	45,0
PUMP AVAILABLE PRESSURE	KPa	230	200	200	265	260	221	200	240	200	205	240	290	240	195,0	210	195,0	230
<b>FAN SECTION</b>																		
TOTAL AIR FLOW	m³/h	108000	102000	102000	102000	136000	134000	134000	170000	196000	216000	212000	236000	272000	272000	315000	350000	396000
FANS	nr.	6	6	6	6	8	8	8	10	12	12	12	14	16	16	18	20	22
FANS ABSORBED POWER	KW	12,0	12,0	12,0	12,0	16,0	16,0	16,0	20,0	24,0	24,0	24,0	28,0	32,0	32,0	36,0	40,0	44,0
FANS ABSORBED CURRENT	A	24,0	24,0	24,0	24,0	32,0	32,0	32,0	40	48,0	48	48,0	56	64,0	64	72,0	80	88,0
<b>ELECTRIC FEED</b>																		
POWER CIRCUIT	V/Ph/Hz	400/3/50																
<b>NOISE DATA</b>																		
SOUND PRESSURE (3)	dB(A)	61,6	61,9	62,2	62,7	63,1	63,9	66,4	68,4	68,6	69,5	69,8	70,1	70,3	70,8	71,6	72,0	73,2
LOW NOISE SOUND PRESSURE (3)	dB(A)	56,9	57,1	57,3	58,0	58,3	59,2	61,3	63,1	63,5	64,0	64,3	64,7	64,9	65,3	66,1	66,5	67,6
SUPER LOW NOISE SOUND PRESSURE (3)	dB(A)	56,4	56,4	55,6	56,1	56,5	56,9	59,4	61,2	62,0	62,5	62,6	63,1	63,5	63,8	64,6	65,0	-
<b>DIMENSIONS AND WEIGHT</b>																		
LENGTH	mm	4000	4000	4000	4000	4950	4950	4950	5950	6850	6850	6850	7800	8750	8750	9700	10650	11600
WIDTH	mm	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210
HEIGHT	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
EMPTY WEIGHT	kg	3100	3800	4000	4100	4900	5000	5200	6100	6800	7000	7100	7900	8650	8750	9600	10500	11500
OPERATING WEIGHT	kg	4000	4600	4700	4800	5800	6000	6200	6950	7700	7900	8000	8900	9950	10100	10700	11600	12700

The manufacturer reserves the right to modify specifications without notice.

Data referred to:

(1) Inlet - outlet water (30% eth. glycole temperature) +12/+7 °C, with fouling factor 0.000043 (m²K)/W - Ambient air temperature = +35°C

(2) Inlet - outlet water (30% eth. glycole) temperature = +12/+7 °C, with fouling factor 0.000043 (m²K)/W

(3) Average sound pressure level at distance of 10 m, referred to free field on reflecting surface. This value is calculated according to ISO3744

(\*) Star-delta start

(\*\*) Pressure drop: evaporator + valve + pipes

(\*\*\*) Pressure drop: evaporator + battery coils + valves + pipes

**Aircooled liquid chillers EHET series, screw compressors with economizer - High efficiency Class AR134a**

<b>BIG (Big chillers)</b>	<b>Model</b>	<b>230</b>	<b>290</b>	<b>340</b>	<b>370</b>	<b>440</b>	<b>510</b>	<b>600</b>	<b>650</b>	<b>750</b>	<b>820</b>	<b>880</b>	<b>920</b>	<b>1070</b>	<b>1160</b>	<b>1330</b>	
NOMINAL COOLING CAPACITY (1)	kW	235	284	342	376	442	507	601	646	744	814	877	923	1066	1158	1330	
COMPRESSOR NOMINAL ABSORBED POWER (1)	kW	34,9	40,0	49,8	52,6	61,0	69,9	87,7	90,4	108,6	117,2	123,3	127,5	149,3	169,3	191,1	
COMPRESSOR NOMINAL ABSORBED CURRENT	A	55,7	63,8	79,4	83,9	97,3	111,5	140,0	146,2	173,3	187,0	196,9	203,5	238,4	270,4	305,1	
COP	W/W	3,37	3,55	3,44	3,58	3,63	3,63	3,43	3,57	3,43	3,48	3,55	3,62	3,57	3,42	3,48	
EER	W/W	3,10	3,10	3,15	3,30	3,30	3,34	3,16	3,30	3,20	3,23	3,28	3,31	3,27	3,14	3,20	
ESEER		4,35	4,70	4,78	4,70	4,90	4,86	4,76	4,91	4,80	4,89	4,95	4,91	4,95	4,75	4,88	
IPLV		4,97	5,29	5,36	5,29	5,50	5,52	5,41	5,61	5,44	5,48	5,62	5,60	5,62	5,45	5,61	
PW STARTING CURRENT	A	207-390	239-450	329-530	423-650	497-765	640-985	646-950	915-1345	996-1465	996-1465	996-1465	527-1580*	693-2080*	827-2480*	915-2745*	
MAXIMUM WORKING CURRENT	A	112	122	146	163	183	209	254	294	319	319	358	374	430	508	589	
REFRIGERANT CIRCUIT	NR	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
SCREW COMPRESSORS	NR	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
PARTITION STEPS	%	0-33-66-100-66-33-0			0-25-50-75-100-75-50-0												
<b>HYDRAULIC SECTION (OPTIONAL)</b>																	
NOMINAL WATER FLOW (1)	m³/h	44,0	53,1	64,0	70,4	82,8	94,9	112,5	120,4	139,2	152,4	164,1	172,7	199,5	216,8	248,9	
EVAPORATOR PRESSURE DROPS	KPa	64,0	44,0	60,0	71,0	39,0	51,0	44,0	60,0	61,0	69,0	42,0	50,0	59,0	52,0	64,0	
HYDRAULIC CONNECTIONS	DN	125	125	125	125	150	150	150	200	200	200	200	200	200	200	200	
TANK VOLUME	dm³	600	600	600	600	600	600	600	800	800	800	800	800	800	1000	1000	
PUMP MOTOR POWER	kW	5,5	5,5	7,5	7,5	7,5	11,0	11,0	15,0	15,0	18,5	18,5	18,5	22,0	30,0	30,0	
PUMP AVAILBLE PRESSURE	KPa	220	220	260	220	220	250	220	220	215	240	245	230	200	280	200	
<b>FAN SECTION</b>																	
TOTAL AIR FLOW	m³/h	76000	114000	114000	111000	156000	148000	192500	160000	185000	231000	273000	304000	324000	380000	407000	
FANS	nr.	4	6	6	6	8	8	10	10	10	12	14	16,0	18	20	22	
FANS ABSORBED POWER	KW	6,0	11,7	9,0	9,0	12,0	12,0	15,0	15	15,0	18	21,0	24	27,0	30	33,0	
FANS ABSORBED CURRENT	A	12,0	23,4	18,0	18,0	24,0	24,0	30,0	30	30,0	36	42,0	48	54,0	60	66,0	
<b>ELECTRIC FEED</b>																	
POWER CIRCUIT	V/Ph/Hz									400/3/50							
<b>NOISE DATA</b>																	
SOUND PRESSURE (2)	dB(A)	62,7	62,9	62,2	62,5	63,0	63,8	66,3	67,3	68,3	69,5	69,7	70,0	70,3	70,8	71,6	
LOW NOISE SOUND PRESSURE (2)	dB(A)	57,9	58,0	57,2	57,7	58,0	58,5	60,9	61,6	62,8	64,0	64,2	64,6	64,9	65,3	66,1	
SUPER LOW NOISE SOUND PRESSURE (2)	dB(A)	56,4	56,4	55,6	56,1	56,5	56,9	59,4	60,0	61,2	62,5	62,6	63,1	63,5	63,8	-	
<b>DIMENSIONS AND WEIGHT</b>																	
LENGTH	mm	3050	4000	4000	4000	4950	4950	5950	5950	5950	6850	7800	8750	9700	10650	11600	
WIDTH	mm	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	
HEIGHT	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	
EMPTY WEIGHT	kg	3000	3200	3900	4200	4400	4500	5300	5400	5500	6000	7000	8300	9100	10000	10900	
OPERATING WEIGHT	kg	3600	4000	4500	5000	5200	5400	6200	6300	6400	6800	8200	9500	10300	11300	12200	

The manufacturer reserves the right to modify specifications without notice.

Data referred to:

(1) Inlet- outlet water (30% eth. glycolic temperature) +12/+7 °C, with fouling factor 0,000043 (m²K)/W - Ambient air temperature = +35°C

(2) Average sound pressure level at distance of 10 m, referred to free field on reflecting surface. This value is calculated according to ISO3744

(\*) Star-della start

### Free cooling liquid chillers EHEF series, screw compressors with economizer - High efficiency Class AR134a

BIG (Big chillers)	Model	230	290	340	370	440	510	600	650	750	820	880	920	1070	1160	1330
NOMINAL COOLING CAPACITY (1)	kW	235	284	342	376	442	507	601	646	744	814	877	923	1066	1158	1330
COMPRESSOR NOMINAL ABSORBED POWER (1)	kW	33,4	40,1	49,8	52,6	61,0	69,9	87,7	90,4	108,6	117,2	123,3	127,5	149,3	166,4	191,1
COMPRESSOR NOMINAL ABSORBED CURRENT (1)	A	53,3	64,0	79,4	83,9	97,3	111,5	140,0	146,2	173,3	187,0	196,9	203,5	238,4	265,7	305,1
COP	W/W	3,52	3,54	3,44	3,58	3,63	3,63	3,43	3,57	3,43	3,48	3,55	3,62	3,57	3,48	3,48
EER	W/W	3,10	3,18	3,15	3,21	3,30	3,28	3,16	3,25	3,16	3,19	3,24	3,27	3,24	3,17	3,20
ESEER		4,35	4,70	4,78	4,70	4,90	4,86	4,76	4,91	4,80	4,89	4,95	4,91	4,95	4,75	4,88
IPLV		4,97	5,29	5,36	5,29	5,50	5,52	5,41	5,61	5,44	5,48	5,62	5,60	5,62	5,45	5,61
PW STARTING CURRENT	A	207-390	239-450	329-530	423-650	497-765	640-985	646-950	915-1345	996-1465	996-1465	996-1465	527-1580*	693-2080*	827-2480*	915-2745*
MAXIMUM WORKING CURRENT	A	112	122	146	163	183	209	254	294	319	319	358	374	430	508	589
REFRIGERANT CIRCUIT	NR	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
SCREW COMPRESSORS	NR	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
PARTITION STEPS	%	0.33-65-100-65-0		0-25-50-75-100-75-50-0												
AIR AMBIENT TEMPERATURE 100% FREE COOLING (2)	°C	0,0	-3,4	-4,0	-1,4	-3,9	-2,8	-2,8	-4,5	-3,6	-4,8	-4,0	-6,0	-6,2	-6,3	-7,1
<b>HYDRAULIC SECTION (OPTIONAL)</b>																
NOMINAL WATER FLOW (1)	m³/h	44,0	53,1	64,0	70,4	82,8	94,9	112,5	120,4	139,2	152,4	164,1	172,7	199,5	216,8	248,9
EVAPORATOR PRESSURE DROPS **	KPa	70,0	51,0	73,0	88,0	53,0	68,0	60,0	80,0	82,0	84,0	98,0	66,0	79,0	72,0	80,0
FREE-COOLING PRESSURE DROPS ***	KPa	80,0	81,0	96,0	120,0	97,0	125,0	135,0	140,0	130,0	150,0	160,0	165,0	180,0	177,0	195,0
HYDRAULIC CONNECTIONS	DN	125	125	125	125	150	150	150	200	150	200	200	200	200	200	200
TANK VOLUME	dm³	600	600	600	600	600	600	600	800	800	800	800	800	800	1000	1000
PUMP MOTOR POWER	kW	7,5	7,5	11,0	11,0	15,0	15,0	18,5	18,5	22,0	30,0	30,0	30,0	37,0	37,0	45,0
PUMP AVAILABLE PRESSURE	KPa	200	200	250	200	240	200	225	210	200	200	170	180	200	200	215
<b>FAN SECTION</b>																
TOTAL AIR FLOW	m³/h	108000	102000	102000	144000	136000	170000	200000	216000	244000	236000	272000	315000	350000	385000	378000
FANS	nr.	6	6	6	8	8	10	10	12	12	14	16	18	20	22	22
FANS ABSORBED POWER	KW	9,0	9,0	9,0	12,0	12,0	15,0	15,0	18,0	18,0	21,0	24,0	27,0	30,0	33,0	33,0
FANS ABSORBED CURRENT	A	18,0	18,0	18,0	24,0	24,0	30,0	30,0	36,0	36	42,0	48	54,0	60	66,0	66
<b>ELECTRIC FEED</b>																
POWER CIRCUIT	V/Ph/Hz	400/3/50														
<b>NOISE DATA</b>																
SOUND PRESSURE (3)	dB(A)	61,6	61,9	62,2	62,7	63,1	63,9	66,4	67,3	68,4	69,5	69,8	70,1	70,3	70,8	71,6
LOW NOISE SOUND PRESSURE (3)	dB(A)	56,9	57,1	57,3	58,0	58,3	59,2	61,3	61,7	63,1	64,0	64,3	64,7	64,9	65,3	66,1
SUPER LOW NOISE SOUND PRESSURE (3)	dB(A)	56,4	56,4	55,6	56,1	56,5	56,9	59,4	59,7	61,2	62,5	62,6	63,1	63,5	-	-
<b>DIMENSIONS AND WEIGHT</b>																
LENGTH	mm	4000	4000	4000	4950	4950	5950	5950	6850	6850	7800	8750	9700	10650	11600	11600
WIDTH	mm	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210
HEIGHT	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
EMPTY WEIGHT	kg	3100	3800	4000	4600	4900	5600	5800	6400	6650	7150	8650	9600	10500	11500	11600
OPERATING WEIGHT	kg	4000	4600	4700	5400	5800	6450	6800	7700	7950	8350	9950	11000	12000	12900	13000

The manufacturer reserves the right to modify specifications without notice.

Data referred to:

(1) Inlet - outlet water (30% eth. glycole temperature) +12/+7 °C, with fouling factor 0.000043 (m²K)/W - Ambient air temperature = +35°C

(2) Inlet - outlet water (30% eth. glycole) temperature = +12/+7 °C, with fouling factor 0.000043 (m²K)/W

(3) Average sound pressure level at distance of 10 m, referred to free field on reflecting surface. This value is calculated according to ISO3744

(\*) Star-delta start

(\*\*) Pressure drop: evaporator + valve + pipes

(\*\*\*) Pressure drop: evaporator + battery coils + valves + pipes

**Aircooled liquid chillers ITC series, inverter driven screw with economizer - High efficiency CLASS A at 50Hz R134a**

<b>BIG (Big chillers)</b>	<b>Model</b>	<b>250</b>	<b>300</b>	<b>360</b>	<b>440</b>	<b>500</b>	<b>560</b>	<b>600</b>	<b>730</b>	<b>820</b>	<b>950</b>	<b>1100</b>	<b>1250</b>	<b>1370</b>
<b>NOMINAL COOLING CAPACITY 70Hz - 35°C AMBIENT TEMPERATURE (1)</b>	kW	<b>249</b>	<b>302</b>	<b>365</b>	<b>439</b>	<b>498</b>	<b>561</b>	<b>604</b>	<b>730</b>	<b>822</b>	<b>948</b>	<b>1103</b>	<b>1248</b>	<b>1368</b>
COMPRESSOR NOMINAL ABSORBED POWER (1)	kW	84.6	102.3	115.8	76.0	84.6	95.0	102.3	115.8	128.0	146.1	172.9	193.6	203
COMPRESSOR NOMINAL ABSORBED CURRENT	A	135.1	163.3	184.9	121.3	135.1	151.7	163.3	184.9	204.4	233.3	276.1	309.1	324.1
COP	W/W	2.95	2.95	3.15	2.89	2.94	2.95	2.95	3.15	3.21	3.24	3.19	3.22	3.37
EER	W/W	2.63	2.69	2.86	2.68	2.69	2.72	2.74	2.90	2.93	2.96	2.92	2.95	3.04
<b>80% LOAD COOLING CAPACITY 60Hz - 30°C AMBIENT TEMPERATURE</b>	kW	<b>227</b>	<b>275</b>	<b>326</b>	<b>401</b>	<b>454</b>	<b>511</b>	<b>550</b>	<b>653</b>	<b>735</b>	<b>847</b>	<b>986</b>	<b>1116</b>	<b>1222</b>
COMPRESSOR ABSORBED POWER	kW	65	78	88	58	65	73	78	88	97	110	131	146	155
COP		3.51	3.52	3.73	3.45	3.51	3.51	3.52	3.73	3.80	3.84	3.77	3.81	3.95
EER		3.12	3.19	3.36	3.18	3.19	3.23	3.25	3.42	3.46	3.48	3.44	3.47	3.55
<b>70% LOAD COOLING CAPACITY 50Hz - 25°C AMBIENT TEMPERATURE</b>	kW	<b>208</b>	<b>251</b>	<b>300</b>	<b>369</b>	<b>416</b>	<b>466</b>	<b>502</b>	<b>601</b>	<b>676</b>	<b>780</b>	<b>907</b>	<b>1027</b>	<b>1125</b>
COMPRESSOR ABSORBED POWER	kW	47	56	63	42	47	52	56	63	69	79	94	105	111
COP		4.46	4.47	4.79	4.39	4.46	4.46	4.47	4.79	4.88	4.93	4.85	4.90	5.07
EER		3.95	4.04	4.30	4.05	4.04	4.08	4.12	4.37	4.42	4.46	4.39	4.44	4.53
<b>60% LOAD COOLING CAPACITY 40Hz - 20°C AMBIENT TEMPERATURE</b>	kW	<b>183</b>	<b>221</b>	<b>260</b>	<b>324</b>	<b>366</b>	<b>410</b>	<b>442</b>	<b>520</b>	<b>585</b>	<b>674</b>	<b>785</b>	<b>888</b>	<b>973</b>
COMPRESSOR ABSORBED POWER	kW	33	40	44	30	33	37	40	44	49	56	66	74	78
COP		5.55	5.56	5.89	5.46	5.55	5.56	5.56	5.89	6.00	6.06	5.96	6.03	6.24
EER		4.82	4.94	5.19	4.96	4.95	5.01	5.05	5.29	5.35	5.39	5.32	5.37	5.47
<b>50% LOAD COOLING CAPACITY 30Hz - 15°C AMBIENT TEMPERATURE</b>	kW	<b>161</b>	<b>194</b>	<b>210</b>	<b>285</b>	<b>321</b>	<b>360</b>	<b>388</b>	<b>420</b>	<b>489</b>	<b>564</b>	<b>647</b>	<b>766</b>	<b>839</b>
COMPRESSOR ABSORBED POWER	kW	21	25	25	19	21	23	25	25	30	35	41	46	49
COP		7.72	7.75	8.42	7.61	7.72	7.73	7.75	8.42	8.10	8.08	7.97	8.40	8.58
EER		6.48	6.68	7.06	6.75	6.69	6.80	6.87	7.26	6.99	6.96	6.89	7.25	7.27
MAXIMUM WORKING CURRENT PER COMPRESSOR	A	165	196	226	142	165	182	196	226	250	285	338	350	350
REFRIGERANT CIRCUITS	nr	1	1	1	2	2	2	2	2	2	2	2	2	2
SCREW COMPRESSORS	nr	1	1	1	2	2	2	2	2	2	2	2	2	2
<b>HYDRAULIC SECTION</b>														
WATER FLOW (30% ETHYLENE GLYCOL)	m³/h	46.6	56.5	68.3	82.2	93.2	104.9	113.0	136.7	153.8	177.3	206.3	233.6	256.0
EVAPORATOR PRESSURE DROP	KPa	50	52	54	70	51	60	68	65	75	80	65	70	72
HYDRAULIC CONNECTIONS	DN	125	125	125	125	125	125	150	150	150	150	200	200	200
TANK VOLUME	dm³	550	550	550	600	600	600	600	800	800	800	800	1000	1000
PUMP MOTOR POWER	kW	7.5	7.5	9.2	11.0	11.0	11.0	15.0	15.0	18.5	22.0	22.0	30.0	30.0
PUMP AVAILBLE PRESSURE	KPa	200	170	160	210	205	220	240	230	225	220	220	230	215
<b>FANS SECTION</b>														
TOTAL AIR FLOW	m³/h	90000	90000	105000	108000	160000	156000	148000	195000	234000	269000	296000	324000	385000
FANS	nr	5	5	6	6	8	8	8	10	12	14	16	18	22
FANS ABSORBED POWER	KW	10	10	12	12	16	16	16	20	24	28	32	36	44
FANS ABSORBED CURRENT	A	20	20	24	24	32	32	32	40	48	56	64	72	88
<b>ELECTRIC FEED</b>														
POWER CIRCUIT	V/Ph/Hz	400/3/50												
<b>NOISE DATA</b>														
SOUND PRESSURE (2)	dB(A)	62	62	63	64	65	64	64	66	68	70	70	71	71
LOW NOISE SOUND PRESSURE (2) (*)	dB(A)	57	57	58	59	60	59	59	61	63	65	65	66	66
<b>DIMENSIONS AND WEIGHT</b>														
LENGTH	mm	5010	5010	6450	4000	4950	4950	4950	5950	6850	7800	8750	9700	11600
WIDTH	mm	1310	1310	1310	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210
HEIGHT	mm	2105	2105	2105	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
EMPTY WEIGHT	kg	2000	2200	2950	3680	4500	4700	4900	5800	6800	7700	8600	9450	11000
OPERATING WEIGHT	kg	2750	3100	4100	4320	5400	5600	5800	6800	7600	8600	9550	10500	12000

The manufacturer reserves the right to modify specifications without notice.

Data referred to:  
 (1) Inlet - outlet water (30% eth. glycole temperature) +12/+7 °C, with fouling factor 0.000043 (m²K)/W - Ambient air temperature = +35°C  
 (2) Average sound pressure level at distance of 10 m, referred to free field on reflecting surface. This value is calculated according to ISO3744.  
 (\*) For ITC 250 - 360 low noise with jacket. For ITC 440 - 1370 low noise with compressors cabinet.



### Free cooling chillers ITF series, inverter driven screw with economizer - High efficiency CLASS A at 50Hz R134a

<b>BIG (Big chillers)</b>	<b>Model</b>	<b>250</b>	<b>300</b>	<b>360</b>	<b>440</b>	<b>500</b>	<b>560</b>	<b>600</b>	<b>730</b>	<b>820</b>	<b>950</b>	<b>1100</b>	<b>1250</b>	<b>1370</b>
<b>NOMINAL COOLING CAPACITY 70Hz - 35°C AMBIENT TEMPERATURE (1)</b>	kW	249	302	365	439	498	561	604	730	822	948	1103	1248	1368
COMPRESSOR NOMINAL ABSORBED POWER (1)	kW	84.6	102.3	115.8	76.0	84.6	95.0	102.3	115.8	128.0	146.1	172.9	193.6	203.0
COMPRESSOR NOMINAL ABSORBED CURRENT	A	135.1	163.3	184.9	121.3	135.1	151.7	163.3	184.9	204.4	233.3	276.1	309.1	324.1
COP	W/W	2.95	2.95	3.15	2.89	2.94	2.95	2.95	3.15	3.21	3.24	3.19	3.22	3.37
EER	W/W	2.58	2.64	2.86	2.62	2.69	2.67	2.64	2.86	2.89	2.92	2.89	2.89	3.04
<b>80% LOAD COOLING CAPACITY 60Hz - 30°C AMBIENT TEMPERATURE</b>	kW	227	275	326	401	454	511	550	653	735	847	986	1116	1222
COMPRESSOR ABSORBED POWER	kW	65	78	88	58	65	73	78	88	97	110	131	146	155
COP		3.51	3.52	3.73	3.45	3.51	3.51	3.52	3.73	3.80	3.84	3.77	3.81	3.95
EER		3.05	3.13	3.36	3.11	3.19	3.17	3.13	3.36	3.41	3.44	3.40	3.40	3.55
<b>70% LOAD COOLING CAPACITY 50Hz - 25°C AMBIENT TEMPERATURE</b>	kW	208	251	300	369	416	466	502	601	676	780	907	1027	1125
COMPRESSOR ABSORBED POWER	kW	47	56	63	42	47	52	56	63	69	79	94	105	111
COP		4.46	4.47	4.79	4.39	4.46	4.46	4.47	4.79	4.88	4.93	4.85	4.90	5.07
EER		3.86	3.96	4.30	3.94	4.04	4.00	3.97	4.30	4.35	4.40	4.34	4.35	4.53
<b>60% LOAD COOLING CAPACITY 40Hz - 20°C AMBIENT TEMPERATURE</b>	kW	183	221	260	324	366	410	442	520	585	674	785	888	973
COMPRESSOR ABSORBED POWER	kW	33	40	44	30	33	37	40	44	49	56	66	74	78
COP		5.55	5.56	5.89	5.46	5.55	5.56	5.56	5.89	6.00	6.06	5.96	6.03	6.24
EER		4.69	4.83	5.19	4.81	4.95	4.89	4.83	5.19	5.25	5.30	5.24	5.24	5.47
<b>50% LOAD COOLING CAPACITY 30Hz - 15°C AMBIENT TEMPERATURE</b>	kW	161	194	210	285	321	360	388	420	489	564	647	766	839
COMPRESSOR ABSORBED POWER	kW	21	25	25	19	21	23	25	25	30	35	41	46	49
COP		7.72	7.75	8.42	7.61	7.72	7.73	7.75	8.42	8.10	8.08	7.97	8.40	8.58
EER		6.27	6.50	7.06	6.50	6.69	6.60	6.50	7.06	6.83	6.82	6.77	7.04	7.27
MAXIMUM WORKING CURRENT PER COMPRESSOR	A	165	196	226	142	165	182	196	226	250	285	338	350	350
REFRIGERANT CIRCUITS	nr	1	1	1	2	2	2	2	2	2	2	2	2	2
SCREW COMPRESSORS	nr	1	1	1	2	2	2	2	2	2	2	2	2	2
AIR AMBIENT TEMPERATURE WITH 100% FREE COOLING (2)	°C	-5.5	-6.5	-8.5	-4.7	-5.1	-5	-4.6	-5.5	-6.2	-6.2	-7	-7.5	-8
<b>HYDRAULIC SECTION</b>														
WATER FLOW (30% ETHYLENE GLYCOL)	m³/h	46.6	56.5	68.3	82.2	93.2	104.9	113.0	136.7	153.8	177.3	206.3	233.6	256.0
EVAPORATOR PRESSURE DROPS *	KPa	55	58	62	76	55	69	75	76	87	95	74	86	85
FREE COOLING PRESSURE DROPS **	KPa	157	170	160	140	133	143	159	176	156	195	156	176	185
HYDRAULIC CONNECTIONS	DN	125	125	125	125	125	125	150	150	150	150	200	200	200
TANK VOLUME	dm³	550	550	550	600	600	600	600	800	800	800	800	1000	1000
PUMP MOTOR POWER	kW	7.5	7.5	9.2	11.0	11.0	11.0	15.0	15.0	18.5	22.0	22.0	30.0	30.0
PUMP AVAILBLE PRESSURE	KPa	200	170	160	210	205	220	240	230	225	220	220	230	215
<b>FANS SECTION</b>														
TOTAL AIR FLOW	m³/h	108000	105000	102000	144000	136000	170000	200000	200000	244000	280000	315000	374000	364000
FANS	nr	6	6	6	8	8	10	12	12	14	16	18	22	22
FANS ABSORBED POWER	KW	12	12	12	16	16	20	24	24	28	32	36	44	44
FANS ABSORBED CURRENT	A	24	24	24	32	32	40	48	48	56	64	72	88	88
<b>ELECTRIC FEED</b>														
POWER CIRCUIT	V/Ph/Hz	400/3/50												
<b>NOISE DATA</b>														
SOUND PRESSURE (3)	dB(A)	62	62	63	63	65	64	64	66	68	70	70	71	71
LOW NOISE SOUND PRESSURE (3) ***	dB(A)	57	57	58	59	60	59	59	61	63	64	64	66	66
<b>DIMENSIONS AND WEIGHT</b>														
LENGTH	mm	6450	6450	6450	4950	4950	5950	6850	6850	7800	8750	9700	11600	11600
WIDTH	mm	1310	1310	1310	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210
HEIGHT	mm	2105	2105	2105	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
EMPTY WEIGHT	kg	2600	2750	3050	4600	4900	5500	5700	5800	6500	8650	9600	11150	11250
OPERATING WEIGHT	kg	3550	3700	4100	5400	5800	6350	6700	6800	7900	9950	11000	12150	12250

The manufacturer reserves the right to modify specifications without notice.

Data referred to:  
 (1) Inlet - outlet water (30% eth. glycole temperature) +12/+7 °C, with fouling factor 0.00043 (m²K)/W - Ambient air temperature = +35°C  
 (2) Inlet - outlet water (30% eth. glycole temperature) +12/+7 °C, with fouling factor 0.00043 (m²K)/W  
 (3) Average sound pressure level at distance of 10 m, referred to free field on reflecting surface. This value is calculated according to ISO3744. □  
 (\*) Pressure drop: evaporator + valve + pipes  
 (\*\*) ressure drop: evaporator + battey coils + valves + pipes  
 (\*\*\*) For ITF 250 - 360 low noise with jacket. For ITF 440 - 1330 low noise with compressors cabinet.

### Watercooled liquid chillers SWC series, scroll compressors R410A, coaxial evaporator and plate condenser

SWC (super water cooled chiller)	Model	SWC	005	008	010	012	016	018	022
NOMINAL COOLING CAPACITY (1)		kW	5.5	8.1	10.5	12.5	16.5	19	25.2
NOMINAL COOLING CAPACITY (1)		Frig/h	4730	6966	9030	10750	14190	16340	21672
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)		kW	1.7	2.4	3.4	3.9	5.1	5.9	6.6
COP		W/W	3.26	3.33	3.08	3.24	3.27	3.15	3.83
ESEER			4.84	4.61	4.41	4.71	4.56	4.57	5.81
IPLV			5.08	4.82	4.59	4.92	4.73	4.76	6.12
COMPRESSORS		nr.	1	1	1	1	1	1	1
CIRCUITS		nr.	1	1	1	1	1	1	1
PARTION STEP		nr.	1	1	1	1	1	1	1
<b>HYDRULIC SECTION</b>									
NOMINAL WATER FLOW		m3/h	0.9	1.4	1.8	2.2	2.8	3.1	4.3
EVAPORATOR PRESSURE DROP		Kpa	23	26	25	27	28	28	31
AVAILABLE PRESSURE		mca	25	26	26	25	24	28	25
PUMP ABSORBED POWER		kW	0.37	0.8	0.98	0.98	0.98	0.98	1.2
PUMP ABSORBED CURRENT		A	3.2	1.7	1.8	1.8	1.8	1.8	3.0
HYDRULIC CONNECTIONS		BSP/DN	3/4"	1"	1"	1"	1"	1"	1" 1/4
TANK VOLUME		dm3	40	45	45	110	110	110	110
<b>CONDENSING SECTION</b>									
TYPE OF CONDENSER - INCLUDED CONDENSING CONTROL						PLATE			
TOTAL CONDENSER FLOW (2)		m3/h	1.2	1.8	2.4	2.8	3.7	4.28	5.5
CONDENSER PRESSURE DROP (3)		Kpa	60	60	70	70	70	70	80
HYDRAULIC CONNECTIONS		BSP/DN	1"	1"	1"	1"	1"	1"	1"1/4
<b>TOTAL ELECTRIC DATA</b>									
NOMINAL ABSORBED POWER		kW	2.2	3.4	4.4	5.3	6.6	7.2	8.4
MAXIMUM ABSORBED CURRENT (F.L.A.)		A	12.5	10.5	10.5	14.3	14.6	18.8	19.8
MAXIMUM PEAK CURRENT (L.R.A.)		A	46	48	48	71	71	75	104
ELECTRIC FEED		V/Ph/Hz	230/1/50			400/3/50/N			
<b>NOISE DATA</b>									
SOUND PRESSURE (4)		dB(A)	50	47	46	47	47	48	50
<b>DIMENSIONS AND WEIGHT</b>									
LENGTH		mm	600	818	818	1008	1008	1008	1008
WIDTH		mm	650	613	613	718	718	718	718
HEIGHT		mm	1050	1360	1360	1580	1580	1580	1580
WEIGHT EMPTY		kg	110	175	180	210	225	230	240
WEIGHT OPERATING		kg	165	225	230	340	355	360	370

The manufacturer reserves the right to modify specifications without notice

updated on 08/05/2013

Data referred to:

(1) Inlet/Outlet water temperature = +12/+7 °C - fouling factor = 0.000043 m<sup>2</sup>K/W

(2) Condenser water inlet/outlet temperature = +30/+35 °C

(3) Included condensing control

(4) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface



**Watercooled liquid chillers SWC series, scroll compressors R410A, coaxial evaporator, plate/shell&tube condenser**

SWC (super water cooled chiller)	Model	SWC	030	038	045	051	061	070	075	085	095
NOMINAL COOLING CAPACITY (1)		kW	31.5	40.4	46.2	53	61.4	74	80	92	96
NOMINAL COOLING CAPACITY (1)		Frig/h	27090	34744	39732	45580	52804	66478	68800	79120	82560
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)		kW	8.2	10.5	12.1	16.4	16.9	19.4	20.9	24.0	25.0
COP		kW/kW	3.85	3.86	3.83	3.23	3.63	3.81	3.82	3.83	3.81
ESEER			6.04	5.8	5.75	4.71	5.82	5.73	5.82	5.75	5.88
IPLV			6.35	6.13	6.04	4.96	6.12	5.73	6.13	6.04	5.1
COMPRESSORS		nr.	1	1	1	1	2	2	2	2	2
CIRCUITS		nr.	1	1	1	1	1	1	1	1	1
PARTION STEP		nr.	1	1	1	1	1/1	1/1	1/1	1/1	1/1
<b>HYDRAULIC SECTION</b>											
NOMINAL WATER FLOW		m3/h	5.4	6.9	7.9	8.0	10.6	13.2	13.9	16.0	16.5
EVAPORATOR PRESSURE DROP		Kpa	31	32	32	33	34	33	32	38	39
AVAILABLE PRESSURE		mca	28	30	28	30	30	31	29	27	27
PUMP ABSORBED POWER		kW	1.28	1.28	2.3	2.57	2.56	2.56	2.7	3.5	3.5
PUMP ABSORBED CURRENT		A	2.4	2.4	4.2	4.6	4.6	4.6	4.6	6.1	6.1
HYDRAULIC CONNECTIONS		BSP/DN	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2"	2"
TANK VOLUME		dm3	270	270	270	270	390	390	390	390	390
<b>CONDENSING SECTION</b>											
TYPE OF CONDENSER - INCLUDED CONDENSING CONTROL			PLATE				SHELL&TUBE				
TOTAL CONDENSER FLOW (2)		m3/h	6.8	8.7	10	12	13.3	16	17	20	20.8
CONDENSER PRESSURE DROP (3)		Kpa	80	90	90	90	85	87	90	108	97
HYDRAULIC CONNECTIONS		BSP/DN	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2"	2"
<b>TOTAL ELECTRIC DATA</b>											
NOMINAL ABSORBED POWER		kW	9.3	12.8	14.4	18.9	18.6	21.96	23.6	27.7	28.5
MAXIMUM ABSORBED CURRENT(F.L.A.)		A	32.0	36.8	39.8	47.8	63.0	67.0	69.0	76.9	78.9
MAXIMUM PEAK CURRENT (L.R.A.)		A	130	145	175	220	130	137	145	175	320
<b>ELECTRIC FEED</b>		V/Ph/Hz	400/3/50								
<b>NOISE DATA</b>											
SOUND PRESSURE (4)		dB(A)	49.0	52.5	53.0	53.0	52.0	54.0	55.5	56.0	58.5
<b>DIMENSIONS AND WEIGHT</b>											
LENGTH		mm	1610	1610	1610	1610	2220	2220	2220	2220	2220
WIDTH		mm	860	860	860	860	1011	1011	1011	1011	1011
HEIGHT		mm	1540	1540	1540	1540	1990	1990	1990	1990	1990
WEIGHT EMPTY		kg	390	400	430	450	710	785	800	815	870
WEIGHT OPERATING		kg	690	700	730	750	1125	1200	1215	1230	1290

The manufacturer reserves the right to modify specifications without notice

updated on 03/06/2013

Data referred to:

(1) Evaporator inlet/Outlet clean water temperature = +12/+7 °C; fouling factor = 0.000043 m<sup>2</sup>K/W

(2) Condenser water inlet/outlet temperature = +30/+35 °C

(3) Included condensing control

(4) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface



**Watercooled liquid chillers SWC series, scroll compressors R410A, shell&tube evaporator and condenser**

<b>SWC (super water cooled condenser)</b>	<b>Model</b>	<b>SWC</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>220</b>	<b>270</b>	<b>330</b>	<b>360</b>	<b>430</b>	<b>480</b>
NOMINAL COOLING CAPACITY (1)		kW	129.1	162	185	241	295	365	396	470	504
NOMINAL COOLING CAPACITY (1)		Frig/h	111026	139320	159100	207260	253700	313900	340560	404200	433000
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)		kW	33.5	41.8	48.2	63.1	76.8	94.3	104.3	125.6	148.5
COP		kW/kW	3.85	3.86	3.83	3.81	3.84	3.87	3.80	3.74	3.40
ESEER			6.04	5.87	5.86	5.87	5.77	5.82	5.80	5.90	5.66
IPLV			6.35	6.19	6.16	6.18	6.07	6.11	6.10	6.07	6.02
COMPRESSORS		nr.	4	4	4	4	4	4	6	6	6
CIRCUITS		nr.	2	2	2	2	2	2	2	2	2
PARTION STEP		nr.	2/2	2/2	2/2	2/2	2/2	2/2	3/2	3/2	3/2
<b>HYDRAULIC SECTION</b>											
NOMINAL WATER FLOW		m3/h	22.2	27.8	31.8	41.4	51.0	62.8	68.0	80.0	86.6
EVAPORATOR PRESSURE DROP		Kpa	39	39	38	36	40	40	43	43	49
AVAILABLE PRESSURE		mca	30.0	30	27	26	29	28	28	28	27
PUMP ABSORBED POWER		kW	4.8	4.8	6.7	6.7	9.1	9.1	10.17	10.17	12.22
PUMP ABSORBED CURRENT		A	9.8	9.8	11.8	11.8	15	15	16.7	16.7	20.3
HYDRAULIC CONNECTIONS		BSP/DN	DN65	DN65	DN65	DN125	DN125	DN150	DN150	DN150	DN200
TANK VOLUME		dm3	390	390	390	500	500	500	500	500	500
<b>CONDENSING SECTION</b>											
TYPE OF CONDENSER - INCLUDED CONDENSING CONTROL							SHELL&TUBE				
TOTAL CONDENSER FLOW (2)		m3/h	28	35	40.1	52	64	79	86	102	112
CONDENSER PRESSURE DROP (3)		Kpa	96	87	93	100	100	120	130	130	130
HYDRAULIC CONNECTIONS		BSP/DN	2 x 2"	2 x 2"	2 x 2"	2 x 2"1/2	2 x 2"1/2	2 x 2"1/2	2 x DN 100	2 x DN 100	2 x DN100
<b>TOTAL ELECTRIC DATA</b>											
NOMINAL ABSORBED POWER		kW	38.3	46.6	54.9	69.8	85.9	103.4	114.2	135.7	160.6
MAXIMUM ABSORBED CURRENT (F.L.A.)		A	100.0	125.0	145.0	190.0	234.0	280.0	302.0	340.0	390.0
MAXIMUM PEAK CURRENT (L.R.A.)		A	221	257	312	365	444	538	467	550	600
<b>ELECTRIC FEED</b>		V/Ph/Hz	400/3/50								
<b>NOISE DATA</b>											
SOUND PRESSURE (4)		dB(A)	55.0	58.5	59.0	60.3	60.8	62.0	64.0	65.0	66.0
<b>DIMENSIONS AND WEIGHT</b>											
LENGTH		mm	3350	3350	3350	4350	5350	5350	6350	6350	6350
WIDTH		mm	1100	1100	1100	1100	1100	1100	1100	1100	1100
HEIGHT		mm	2180	2180	2180	2180	2180	2180	2180	2180	2180
WEIGHT EMPTY		kg	1265	1440	1595	1915	2115	2160	2390	2560	2720
WEIGHT OPERATING		kg	1950	2155	2350	2695	3025	3080	3310	3480	3640

The manufacturer reserves the right to modify specifications without notice

updated on 03/06/2013

Data referred to:

(1) Evaporator inlet/Outlet clean water temperature = +12/+7 °C; fouling factor = 0.000043 m²K/W

(2) Condenser water inlet/outlet temperature = +30/+35°C

(3) Included condensing control

(4) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface

### Water cooled chillers ECWB series, screw compressors R407C

<b>WCC (water cooled chiller)</b>	<b>Model</b>	<b>260</b>	<b>320</b>	<b>370</b>	<b>480</b>	<b>570</b>	<b>630</b>	<b>750</b>	<b>900</b>	<b>1000</b>	<b>1150</b>	<b>1500</b>	<b>1700</b>
NOMINAL COOLING CAPACITY (1)	kW	260	324	376	486	575	638	790	916	1050	1178	1525	1686
COMPRESSOR NOMINAL ABSORBED POWER (1)	kW	36	44	50	61	71	78	100	114	134	145	186	201
COMPRESSOR NOMINAL ABSORBED CURRENT (1)	A	57	70	80	97	113	124	159	182	214	231	297	321
COP / COP	W/W	3,61	3,68	3,76	3,98	4,05	4,09	3,95	4,02	3,92	4,06	4,10	4,19
ESEER		5,18	5,27	5,39	5,22	5,54	5,64	5,46	5,52	5,39	5,38	5,53	5,41
IPLV		5,78	5,90	6,04	5,84	6,20	6,31	6,11	6,18	6,04	6,03	6,20	6,21
STARTING CURRENT	A	163-325	207-390	239-450	423-650	497-765	497-765	646-950	915-1345	996-1465	545-1635*	777-2330*	827-2480*
MAXIMUM WORKING CURRENT	A	87	112	122	163	183	196	254	294	319	369	473	508
REFRIGERANT CIRCUIT	nr	2	2	2	2	2	2	2	2	2	2	2	2
SCREW COMPRESSORS	nr	2	2	2	2	2	2	2	2	2	2	2	2
PARTION STEPS	%	0-33-66-100					0-25-50-75-100-75-50-0						
<b>EVAPORATOR SECTION (SHELL &amp; TUBE)</b>													
NUMBER OF EVAPOARATORS	nr	1	1	1	1	1	1	1	1	1	1	1	1
WATER FLOW (1)	m3/h	45	56	65	84	99	110	136	158	181	203	262	290
EVAPORATOR PRESSURE DROP	KPa	54	53	56	55	61	55	54	56	65	73	50	70
HYDRAULIC CONNECTIONS	DN	125	125	125	150	150	200	200	200	200	200	200	200
<b>CONDENSING SECTION (SHELL &amp; TUBE)</b>													
NUMBER OF CONDENSERS	nr	2	2	2	2	2	2	2	2	2	2	2	2
WATER FLOW PER CONDENSER (2)	m3/h	29	35	41	52	62	68	85	98	113	126	163	180
CONDENSER PRESSURE DROP	KPa	37	48	37	51	47	46	64	65	55	100	85	88
HYDRAULIC CONNECTIONS	BSP	2 x 2" 1/2	2 x 2" 1/2	2 x 2" 1/2	2 x 3"	2 x 3"	2 x 3"	2 x 3"	2 x 4"	2 x 5"	2 x 5"	2 x 5"	2 x 5"
<b>ELECTRIC FEED</b>													
POWER CIRCUIT, AUXILIARY CIRCUIT	V/Ph/Hz	400/3/50											
<b>NOISE DATA</b>													
ECWB SOUND PRESSURE (3)	dB(A)	56,7	61,1	61,4	62,2	62,6	63,1	66,1	67,2	69,3	69,8	70,3	70,9
<b>DIMENSIONS AND WEIGHT</b>													
LENGTH	mm	2500	2500	3000	3000	3000	3500	3500	4000	4500	4500	5050	5550
WIDHT	mm	1200	1200	2000	2000	2000	2000	2000	2000	2000	2000	2400	2400
HEIGHT	mm	1800	1800	2150	2150	2150	2260	2260	2260	2260	2260	2600	2600
WEIGHT EMPTY	kg	1800	2200	2500	3000	3800	4200	4700	5300	6000	6700	7500	8200
WEIGHT OPERATING	kg	2200	3000	3300	4100	4900	5000	5600	6200	6900	7700	8500	9900

The manufacturer reserves the right to modify specifications without notice.

Data referred to:  
 (1) Evaporator Inlet/Outlet clean water (20%EG) temperature = +12/+7 °C - Condenser water inlet/outlet temperature = +30/+35°C  
 (2) Condenser water inlet/outlet temperature = +30/+35°C  
 (3) Sound pressure referred to: free spherical field, 10 m from the unit battery side, 1m from support base. This value is according to ISO3744  
 (\*) Star delta compressor start

