

NEXT DW: Direct expansion close control air conditioners with built-in water cooled condenser equipped with scroll compressors and Plug-fans.
Cooling Capacity: **6,9 ÷ 108,0 kW**



rcgroupairconditioning



MAIN FEATURES

- Precision air conditioner.
- 44 models available, 2 versions for a wide selection opportunity.
- EER up to 4,89.
- On/off scroll compressors.
- Single and double refrigerant circuit.
- Built in water cooled condenser.
- R410A Refrigerant charge.
- EC plug-fans (size H0, H1, H2, H3).
- AC plug-fans (size H4, H5, H6, H7).
- OVER and UNDER versions.
- Suitable for indoor installation.

MAIN BENEFITS

- Units with single and double refrigerant circuits.
- High EER.
- High efficiency at partial load.
- Availability of electric heater.
- Availability of steam humidifier.
- Availability of hot water heating coil.
- Availability of extra circuit heating coil.
- Availability of indirect Free Cooling system.
- Complete set of optional accessories: filters, plenum, panels, stand.
- Easily of maintenance.

INDOOR INSTALLATION

The machines are designed for indoor installation.

WORKING LIMITS

Room air temperature:

- 14°C minimum temperature with wet bulb.
- 24°C maximum temperature with wet bulb.
- 35°C maximum temperature with dry bulb.

Room air humidity:

- 20%RH minimum relative humidity.
- 75%RH maximum relative humidity.

Water cooled condenser:

- Water temperature:
- 30/50°C Outlet temperature range.



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fiftycoolyears

MAIN COMPONENTS**FRAMEWORK**

- Base in aluminium extrusion, painted with epoxy powders.
- Inner frame and upper frame in aluminium profile, painted with epoxy powders. The inner frame is provided with seals to ensure air tight with the panels.
- Galvanized steel sheet panels externally coated with PVC film and internally insulated with noise absorption material. The panels are fixed to the frame with non visible mounting system.
- Electric board in separate technical compartment on the machine front (Size H0, H1, H2, H3).
- Separate technical compartment on machine front for electric board, refrigerant and hydraulic connections and control and regulation devices (size H4, H5, H6, H7)
- Colour: RAL 9005 for base and frame
Similar to RAL7015 for panels, with hammered finish
- OVER version
 - Air intake from the front through honeycomb type grille and air delivery from the top.
 - Washable air pre-filters with G2 efficiency, with cells in synthetic fibre (size H0 excluded).
- UNDER version
Machine size H0
 - Air intake from the front through honeycomb type grille and air delivery from the bottom.
 Machine size H1, H2, H3, H4, H5, H6, H7
 - Air intake from the top and air delivery from the bottom.

COMPRESSORS

- Orbiting spiral (SCROLL) hermetic compressors with spiral profile optimized for R410A refrigerant.
- ON / OFF capacity control (0 / 100% each compressor).
- 2-pole 3-phase electric motor with direct on line starting.
- Crankcase heater.
- Electric motor thermal protection via internal winding temperature sensors.
- Terminal box with IP54 enclosure class.
- Rubber supports.

FILTER SECTION

- Size H0
Washable air filters with G3 efficiency, with cells in synthetic fibre and metallic frame (EN 779-2002).
- Size H1, H2, H3, H4, H5, H6, H7
Washable air filters with G4 efficiency, with cells in synthetic fibre and metallic frame (EN 779-2002).

EVAPORATING SECTION

- Heat exchanger coil with internally corrugated copper tubes and high efficiency aluminium fins, specifically developed to provide high heat transfer and lower pressure drops.
 - With single refrigerant circuit for S version machines.
 - With double refrigerant circuit for DC version machines.
- Frame in galvanized steel.
- Condensate tray in peraluman with PVC flexible discharge pipe.

CONDENSING SECTION

- Copper brazed plate type with cover plates, plates and connections in AISI 316 stainless steel.
- 0÷10V proportional signal to manage the condensing control system of the 2-way motorized valve. The valve is an optional accessory.

FANS SECTION

- Centrifugal fans with backward curved blades, single suction and without scroll housings (Plug-fans), directly coupled to external rotor electric motor.
 - Size H0, H1, H2, H3:
Brushless type synchronous EC motor with integrated electronic commutated system and continuous variation of the rotation speed. The motor rotation control is obtained with the EC system (Electronic Commutation) that manage the motor according to the 0÷10V proportional signal coming from the microprocessor control.
 - Size H4, H5, H6, H7:
Fans fed through an autotransformer that allows the manual selection of 7 rotation speed.
- Temperature sensors on air intake.
- Fan guard with rubber support (UNDER version)

REFRIGERANT CIRCUIT

Components for each refrigerant circuit:

- Thermostatic expansion valve.
- Sight glass.
- Filter dryer on liquid line.
- Pressure transducers with indication, control and protection functions, on low and high refrigerant pressure.
- High pressure safety switch with manual reset.
- Liquid receiver with accessories.
- Refrigerant circuit with copper tubing with anticondensate insulation of the suction line.
- Plastic capillary hoses for pressure sensors connection.
- R410A refrigerant charge.

ELECTRICAL PANEL

In accordance with EN60204-1 norms complete with:

- Main switch with door lock safety.
- Magnetothermic switch for each compressor.
- Magnetothermic switches for fans.
- Contactors for each load.
The supply fans equipped with EC electric motor are not supplied with contactors.
- Transformer for auxiliary circuit and microprocessor supply.
- Panel with machine controls.
- Power supply:
 - 230/1/50 for model 006 P1 S H0.
 - 400/3/50 for the other models.

CONTROL SYSTEM

- MP.COM microprocessor system with graphic display for control and monitor of operating and alarms status. The system includes:
 - Voltage free contact for remote general alarm.
 - Main components hour-meter.
 - Nonvolatile "Flash" memory for data storage.
 - Menu with protection password.
 - LAN connection.

COMMON OPTIONAL ACCESSORIES

SIZE	H0	H1	H2	H3	H4	H5	H5	H5	H5	H6	H6	H7	H7
VERSION	S	S	S	S	S	S	S	S	DC	S	DC	S	DC
TEAM MATE remote condenser	●	●	●	●	●	●	●	●	●	●	●	●	●
TEAM MATE PF remote condenser	●	●	●	●	●	●	●	●	●	●	●	●	●
213 - TEAM MATE electrical power supply by internal unit	●	●	●	●	●	●	●	●	●	●	●	●	●
101 - EC fan	-	-	-	-	-	●	●	●	●	●	●	●	●
220 - Electronic expansion valve	●	●	●	●	●	●	●	●	●	●	●	●	●
260 - Liquid solenoid valve	●	●	●	●	●	●	●	●	●	●	●	●	●
321 - Steam humidifier	●	●	●	●	●	●	●	●	●	●	●	●	●
322 - Dehumidification system	●	●	●	●	●	●	●	●	●	●	●	●	●
405 - Extra-Circuit system	-	●	●	●	●	●	●	●	●	●	●	●	●
409 - FC Free Cooling system	-	●	●	●	●	●	●	●	●	●	●	●	●
310 - Electric heater	●	●	●	●	●	●	●	●	●	●	●	●	●
505 - ON-OFF Hot gas reh.system	-	●	●	●	●	●	●	●	●	●	●	●	●
509 - Hot water heating coil + 3 way valve	●	●	●	●	●	●	●	●	●	●	●	●	●
211 - Capacity control	●	●	●	●	●	●	●	●	●	-	●	-	●
606 - Compr. power factor capacitor - 0,9	-	●	●	●	●	●	●	●	●	●	●	●	●
865 - Phase control relay	-	●	●	●	●	●	●	●	●	●	●	●	●
610 - Noise deading cup on compressor	●	●	●	●	●	●	●	●	●	●	●	●	●
512 - Water regulating valve	●	●	●	●	●	●	●	●	●	●	●	●	●
215 - Disposal F5 efficiency air filter	-	●	●	●	●	●	●	●	●	●	●	●	●
810 - Floor stand Hmax=350 mm	●	●	●	●	●	●	●	●	●	●	●	●	●
811 - Floor stand Hmax=450 mm	●	●	●	●	●	●	●	●	●	●	●	●	●
812 - Floor stand Hmax=510 mm	-	●	●	●	●	●	●	●	●	●	●	●	●
849 - Condensate discharge system	-	-	-	-	●	●	●	●	●	●	●	●	●
848 - Condensate discharge system (kit)	●	●	●	●	-	-	-	-	-	-	-	-	-
808 - Sandwich panels	-	●	●	●	●	●	●	●	●	●	●	●	●
909 - Clogged filters alarm	●	●	●	●	●	●	●	●	●	●	●	●	●
910 - Air flow loss alarm	-	-	-	-	●	●	●	●	●	●	●	●	●
912 - Air flow loss alarm EC Fan	●	●	●	●	●	●	●	●	●	●	●	●	●
911 - Water presence alarm	●	●	●	●	●	●	●	●	●	●	●	●	●
913 - Additional water sensor (kit)	●	●	●	●	●	●	●	●	●	●	●	●	●
904 - Temperature/Humidity sensor on delivery	●	●	●	●	●	●	●	●	●	●	●	●	●
906 - Outlet air temperature indication	●	●	●	●	●	●	●	●	●	●	●	●	●
843 - Motorized damper with frame	-	●	●	●	●	●	●	●	●	●	●	●	●
832 - Air supply plenum with F6 filters	-	●	●	●	●	●	●	●	●	●	●	●	●
833 - Air supply plenum with F7 filters	-	●	●	●	●	●	●	●	●	●	●	●	●
835 - Air supply plenum with F9 filters	-	●	●	●	●	●	●	●	●	●	●	●	●
836 - Air supply plenum with sound absorber	-	●	●	●	●	●	●	●	●	●	●	●	●
945 - Air return plenum with Free Cooling damper	-	●	●	●	●	●	●	●	●	●	●	●	●
919 - Clock card	●	●	●	●	●	●	●	●	●	●	●	●	●
907 - Current indication	●	●	●	●	●	●	●	●	●	●	●	●	●
908 - Voltage indication	●	●	●	●	●	●	●	●	●	●	●	●	●
923 - RC-Com MBUS/JBUS Serial board	●	●	●	●	●	●	●	●	●	●	●	●	●
926 - LON Serial board	●	●	●	●	●	●	●	●	●	●	●	●	●
931 - BACnet Ethernet - SNMP - TCP/IP Serial board	●	●	●	●	●	●	●	●	●	●	●	●	●
932 - BACnet MS/TP Serial board	●	●	●	●	●	●	●	●	●	●	●	●	●
942 - Serial card for GSM Modem	●	●	●	●	●	●	●	●	●	●	●	●	●
934 - MP.COM expansion card	●	●	●	●	●	●	●	●	●	●	●	●	●
943 - Data Logger	●	●	●	●	●	●	●	●	●	●	●	●	●
922 - Driver card	●	●	●	●	●	●	●	●	●	●	●	●	●
962 - Kit modem GSM	●	●	●	●	●	●	●	●	●	●	●	●	●
957 - Plantwatch without modem	●	●	●	●	●	●	●	●	●	●	●	●	●
930 - Remote graphic terminal kit	●	●	●	●	●	●	●	●	●	●	●	●	●

OPTIONAL ACCESSORIES - OVER VERSION ONLY

SIZE	H0	H1	H2	H3	H4	H5	H5	H5	H5	H6	H6	H7	H7
VERSION	S	S	S	S	S	S	S	S	DC	S	DC	S	DC
807 - Blind frontal panel	-	●	●	●	●	●	●	●	●	●	●	●	●
805 - Bottom panel	-	●	●	●	●	●	●	●	●	●	●	●	●
830 - Air discharge plenum with grilles	●	●	●	●	●	●	●	●	●	●	●	●	●
831 - Plenum with frontal grille and sound absorber	-	●	●	●	●	●	●	●	●	●	●	●	●

● available accessory; - not available accessory

TECHNICAL DATA

MODEL		006.P1	008.P1	010.P1	007.P1	009.P1	011.P1	013.P1	014.P1	015.P1	017.P1	019.P1
SIZE		S H0	S H0	S H0	S H1	S H1	S H1	S H1	S H2	S H2	S H2	S H3
COOLING CAPACITY (1)												
Total	kW	6,9	8,2	9,9	7,6	9,0	10,6	12,0	13,1	15,8	18,4	18,4
Sensible	kW	5,8	6,7	7,7	7,2	8,6	9,4	10,0	12,5	14,0	15,3	17,4
SHR	kW/kW	0,85	0,81	0,79	0,96	0,96	0,89	0,83	0,95	0,88	0,83	0,95
Unit power input	kW	1,5	1,8	2,2	1,6	1,9	2,3	2,6	2,7	3,3	3,8	4,3
Condenser water flow rate	m ³ /h	1,2	1,4	1,7	1,3	1,5	1,8	2,1	2,2	2,7	3,1	3,2
Condenser pressure drop	kPa	13	17	14	15	20	16	21	18	26	34	8
Supply fans	n.	1	1	1	1	1	1	1	1	1	1	1
Air flow	m ³ /h	1580	1800	2000	2273	2653	2653	2653	3955	3955	3955	5460
Nominal external static pressure	Pa	30	30	30	50	50	50	50	50	50	50	50
Fans max external static pressure	Pa	186	110	32	215	118	118	118	282	282	282	600
Compressors												
Quantity	n.	1	1	1	1	1	1	1	1	1	1	1
Capacity steps	n.	1	1	1	1	1	1	1	1	1	1	1
Air filters	n.	1	1	1	1	1	1	1	1	1	1	2
Efficiency		G3	G3	G3	G4	G4	G4	G4	G4	G4	G4	G4
Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (2)	kg	2,6	2,6	2,6	4,8	4,8	4,8	4,8	5,9	5,9	5,9	7,5
Gas circuits	n.	1	1	1	1	1	1	1	1	1	1	1
Power supply		230/11/50	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N
Max operating current (FLA)	A	14,1	7,3	8,3	6,9	8,2	9,2	10,2	9,9	12,2	13,7	16,1
Unit starting current (LRA)	A	61,3	39,3	47,3	30,2	40,2	48,2	45,2	44,9	53,9	65,9	68,3
Energy efficiency indexes (1)												
EER	kW/kW	4,49	4,60	4,49	4,89	4,65	4,57	4,56	4,85	4,77	4,83	4,30
Sound pressure level - ISO 3744 (3)												
On air delivery Under/Over	dB(A)	55,7	58,3	60,4	56,7	59,7	59,7	64,7	64,7	64,7	64,7	65,2
On air intake Over	dB(A)	50,7	52,5	54,6	49,7	50,6	51,9	51,9	53,9	53,9	55,5	55,7
Irradiated Over	dB(A)	39,5	41,5	43,6	39,7	41,9	42,4	42,4	46,6	46,6	46,8	47,2
On air intake Under	dB(A)	50,7	52,5	54,6	49,7	51,9	51,9	52,4	56,5	56,5	56,9	57,3
On front side Under	dB(A)	50,7	52,5	54,6	40,4	42,6	42,6	43,1	47,1	47,1	47,6	48
Net weight Over	kg	161	161	161	187	190	191	192	245	247	248	304
Net weight Under	kg	161	161	161	193	197	198	199	255	257	259	315
Connections - ISO 228/1 G												
Condenser water inlet/outlet	M Ø	1"	1"	1"	1"	1"	1"	1"	1+1/2"	1+1/2"	1+1/2"	1+1/2"

MODEL		021.P1	023.P1	025.P1	029.P1	033.P1	038.P1	040.P1	045.P1	049.P1	026.P2	028.P2
SIZE		S H3	S H3	S H4	S H4	S H4	S H5	S H5	S H5	S H5	DC H5	DC H5
COOLING CAPACITY (1)												
Total	kW	20,1	22,4	27,2	30,7	35,9	37,7	41,4	45,1	52,5	25,7	32,7
Sensible	kW	18,7	19,6	24,9	26,7	29,4	35,5	37,0	38,4	40,5	23,8	31,1
SHR	kW/kW	0,93	0,88	0,93	0,89	0,84	0,94	0,89	0,85	0,77	0,92	0,95
Unit power input	kW	5,2	5,9	6,2	6,8	7,7	8,5	9,4	10,5	12,2	5,7	7,9
Condenser water flow rate	m ³ /h	3,5	4,0	4,5	5,1	5,9	6,3	7,0	7,7	9,0	4,4	5,5
Condenser pressure drop	kPa	9	11	8	9	12	16	19	23	21	11	17
Supply fans	n.	1	1	1	1	1	1	1	1	1	1	1
Air flow	m ³ /h	5460	5460	7160	7440	7440	10440	10440	10440	10440	7110	10440
Nominal external static pressure	Pa	50	50	50	50	50	50	50	50	50	50	50
Fans max external static pressure	Pa	600	600	95	50	50	136	136	136	136	172	136
Compressors												
Quantity	n.	1	1	1	1	1	1	1	1	1	2	2
Capacity steps	n.	1	1	1	1	1	1	1	1	1	2	2
Air filters	n.	2	2	2	2	2	2	2	2	2	2	2
Efficiency		G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4
Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (2)	kg	7,5	7,5	9,3	9,3	9,3	15,3	15,4	15,5	15,9	9,9	10,2
Gas circuits	n.	1	1	1	1	1	1	1	1	1	2	2
Power supply		400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N
Max operating current (FLA)	A	19,3	19,3	18,6	23,5	24,5	26,2	29,2	35,2	38,2	18,6	24,8
Unit starting current (LRA)	A	79,3	105,3	97,6	113,5	120,5	122,2	122,2	144,2	178,2	53,6	66,2
Energy efficiency indexes (1)												
EER	kW/kW	3,90	3,82	4,37	4,49	4,67	4,41	4,39	4,31	4,31	4,52	4,14
Sound pressure level - ISO 3744 (3)												
On air delivery Under/Over	dB(A)	65,2	65,2	69,2	72,2	72,2	74,9	74,9	74,9	74,9	69,1	74,9
On air intake Over	dB(A)	58,4	56,3	58,1	60,7	60,7	62,6	62,9	63,2	63,5	57,7	62,6
Irradiated Over	dB(A)	48,2	47,4	51,1	54,1	54,1	56,8	56,8	56,8	56,8	51	56,8
On air intake Under	dB(A)	58,2	57,5	61	62,6	62,6	66,4	66,5	66,5	67,2	61,1	66,5
On front side Under	dB(A)	49	48,2	51,6	53,3	53,3	57	57,1	57,2	57,8	51,8	57
Net weight Over	kg	307	308	422	422	423	478	478	478	486	456	458
Net weight Under	kg	318	319	442	45	443	494	494	494	502	472	474
Connections - ISO 228/1 G												
Condenser water inlet/outlet	M Ø	1+1/2"	1+1/2"	1+1/2"	1+1/2"	1+1/2"	2"	2"	2"	2"	1+1/2"	1+1/2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 24°C-50%RH; water to the condenser 30-36°C
2. Unit refrigerant charge optional excluded.
3. Noise level at 1 meter in free field (external static pressure 50 Pa)
4. Characteristics referred to entering air at 24°C 50%RH with chiller water at 7/12,5 °C and 0% glycol
5. Characteristics referred to entering air at 20°C with hot water at 75/60°C

TECHNICAL DATA

MODEL		032.P2	032.P2	036.P2	036.P2	042.P2	042.P2	048.P2	048.P2	052.P2	052.P2	060.P2
SIZE		S	DC	S	DC	S	DC	S	DC	S	DC	S
COOLING CAPACITY (1)		H5	H5	H5	H5	H6	H6	H6	H6	H6	H6	H6
Total	kW	35,7	35,7	41,6	41,7	44,7	44,9	50,0	50,2	54,7	55,0	62,6
Sensible	kW	33,5	33,5	37,1	37,1	40,9	40,9	42,9	43,0	48,8	48,9	53,8
SHR	kW/kW	0,93	0,94	0,89	0,88	0,91	0,91	0,86	0,86	0,90	0,90	0,87
Unit power input	kW	8,9	8,9	10,3	10,2	10,0	9,9	11,2	11,1	12,7	12,6	13,9
Condenser water flow rate	m ³ /h	6,1	6,1	7,1	7,2	7,6	7,6	8,5	8,5	9,3	9,3	10,5
Condenser pressure drop	kPa	26	21	35	29	23	18	28	22	33	26	27
Supply fans	n.	1	1	1	1	2	2	2	2	2	2	2
Air flow	m ³ /h	10440	10440	10440	10440	11310	11310	11310	11310	13480	13480	14500
Nominal external static pressure	Pa	50	50	50	50	50	50	50	50	50	50	50
Fans max external static pressure	Pa	136	136	136	136	313	313	313	313	170	170	94
Compressors												
Quantity	n.	2	2	2	2	2	2	2	2	2	2	2
Capacity steps	n.	2	2	2	2	2	2	2	2	2	2	2
Air filters	n.	2	2	2	2	3	3	3	3	3	3	3
Efficiency	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4
Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (2)	kg	10,6	10,7	10,8	10,9	19,7	19,9	19,7	19,9	20,2	20,4	20,8
Gas circuits	n.	1	2	1	2	1	2	1	2	1	2	1
Power supply		400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N
Max operating current (FLA)	A	27,8	27,8	34,2	34,2	35,2	35,2	35,2	35,2	37,2	37,2	47,2
Unit starting current (LRA)	A	80,2	80,2	94,2	94,2	95,2	95,2	121,2	121,2	116,2	116,2	137,2
Energy efficiency indexes (1)												
EER	kW/kW	4,00	4,01	4,05	4,07	4,48	4,54	4,47	4,52	4,31	4,37	4,50
Sound pressure level - ISO 3744 (3)												
On air delivery Under/Over	dB(A)	74,9	74,9	74,9	74,9	67,3	67,3	67,3	67,3	70,8	70,8	72,5
On air intake Over	dB(A)	62,6	62,6	64	64	61,3	61,3	59	59	60,3	60,3	62,2
Irradiated Over	dB(A)	56,8	56,8	57	57	52,4	52,4	50,7	50,7	53	53	54,8
On air intake Under	dB(A)	66,6	66,6	67,1	67,1	62	62	60,6	60,6	63,1	63,1	66,6
On front side Under	dB(A)	57,2	57,2	57,8	57,8	53	53	51,5	51,5	53,9	53,9	57,3
Net weight Over	kg	458	458	461	461	565	565	567	567	670	670	670
Net weight Under	kg	474	474	477	477	591	591	593	593	696	696	696
Connections - ISO 228/1 G												
Condenser water inlet/outlet	M Ø	1+1/2"	1+1/2"	1+1/2"	1+1/2"	2"	2"	2"	2"	2"	2"	2"

MODEL		060.P2	064.P2	064.P2	072.P2	072.P2	082.P2	082.P2	092.P2	092.P2	100.P2	100.P2
SIZE		DC	S	DC	S	DC	S	DC	S	DC	S	DC
COOLING CAPACITY (1)		H6	H6	H6	H7	H7	H7	H7	H7	H7	H7	H7
Total	kW	62,7	64,4	65,2	76,6	76,8	86,9	87,3	95,9	96,1	108,0	108,0
Sensible	kW	53,8	59,3	58,9	67,3	67,3	77,7	77,8	83,4	83,5	84,6	84,7
SHR	kW/kW	0,87	0,91	0,91	0,88	0,88	0,90	0,89	0,87	0,88	0,80	0,80
Unit power input	kW	13,9	14,0	13,9	16,6	16,5	19,1	18,9	21,0	21,0	24,7	24,5
Condenser water flow rate	m ³ /h	10,5	10,9	10,9	12,9	12,9	14,5	14,6	16,1	16,1	18,2	18,2
Condenser pressure drop	kPa	24	29	26	40	36	35	20	25	24	32	31
Supply fans	n.	2	2	2	2	2	2	2	2	2	2	2
Air flow	m ³ /h	14500	16000	16000	17610	17610	20870	20870	22040	22040	22040	22040
Nominal external static pressure	Pa	50	50	50	50	50	50	50	50	50	50	50
Fans max external static pressure	Pa	94	50	50	346	346	136	136	50	50	50	50
Compressors												
Quantity	n.	2	2	2	2	2	2	2	2	2	2	2
Capacity steps	n.	2	2	2	2	2	2	2	2	2	2	2
Air filters	n.	3	3	3	4	4	4	4	4	4	4	4
Efficiency	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4
Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (2)	kg	20,9	21,4	21,5	27,7	27,8	28	28,7	28,6	28,7	28,8	28,9
Gas circuits	n.	2	1	2	1	2	1	2	1	2	1	2
Power supply		400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N
Max operating current (FLA)	A	47,2	47,2	47,2	52,4	52,4	58,4	58,4	70,4	70,4	76,4	76,4
Unit starting current (LRA)	A	137,2	137,2	137,2	148,4	148,4	151,4	151,4	179,4	179,4	216,4	216,4
Energy efficiency indexes (1)												
EER	kW/kW	4,50	4,59	4,68	4,62	4,66	4,55	4,62	4,56	4,57	4,38	4,40
Sound pressure level - ISO 3744 (3)												
On air delivery Under/Over	dB(A)	72,5	75,4	75,4	73,1	73,1	77,9	77,9	79,7	79,7	79,7	79,7
On air intake Over	dB(A)	62,2	63,8	63,8	62,5	62,5	65,9	65,9	67,5	67,5	67,7	67,7
Irradiated Over	dB(A)	54,8	57,3	57,3	55,3	55,3	59,8	59,8	61,6	61,6	61,6	61,6
On air intake Under	dB(A)	66,6	67,3	67,3	65,4	65,4	69,7	69,7	71,4	71,4	71,5	71,5
On front side Under	dB(A)	57,3	58	58	56,1	56,1	60,3	60,3	62	62	62,1	62,1
Net weight Over	kg	670	685	685	772	772	778	779	786	786	815	815
Net weight Under	kg	696	711	711	805	805	812	813	819	819	848	848
Connections - ISO 228/1 G												
Condenser water inlet/outlet	M Ø	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. Characteristics referred to entering air at 24°C-50%RH; water to the condenser 30-36°C
2. Unit refrigerant charge optional excluded.
3. Noise level at 1 meter in free field (external static pressure 50 Pa)
4. Characteristics referred to entering air at 24°C 50%RH with chiller water at 7/12,5 °C and 0% glycol
5. Characteristics referred to entering air at 20°C with hot water at 75/60°C

TECHNICAL DATA - OPTIONAL ACCESSORIES

NEXT DW		006.P1	008.P1	010.P1	007.P1	009.P1	011.P1	013.P1	014.P1	015.P1	017.P1	019.P1	021.P1	023.P1	025.P1	029.P1
SIZE		S H0	S H0	S H0	S H1	S H1	S H1	S H1	S H2	S H2	S H2	S H3	S H3	S H3	S H4	S H4
Hot gas reheating system		-	-	-	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF
Heating capacity	kW	-	-	-	5,4	6,6	8,3	9,9	9,6	12,6	14,4	14	16,5	19,7	20,8	24,3
Electric heater																
Capacity	kW	2,6	2,6	2,6	5,1	5,1	5,1	5,1	5,1	5,1	5,1	5,1	5,1	5,1	9	9
Capacity steps	n.	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
Humidifier																
Steam capacity	kg/h	2	2	2	3	3	3	3	3	3	3	3	3	3	8	8
Power input	kW	1,4	1,4	1,4	2,3	2,3	2,3	2,3	2,3	2,3	2,3	2,3	2,3	2,3	6,0	6,0
Extra circuit coil (1)																
Total cooling capacity	kW	-	-	-	9,4	10,6	10,6	10,6	15,0	15,0	15,0	22,8	22,8	22,8	29,2	30,0
Sensible cooling capacity	kW	-	-	-	8,3	9,2	9,2	9,2	13,1	13,1	13,1	20,1	20,1	20,1	25,5	26,2
Heating coil (2)																
Heating capacity	kW	10,3	11,1	11,9	16,6	18,3	18,3	18,3	25,1	25,1	26,9	39,1	39,1	39,1	49,5	50,7

NEXT DW		033.P1	038.P1	040.P1	045.P1	049.P1	026.P2	028.P2	032.P2	032.P2	036.P2	036.P2	042.P2	042.P2	048.P2	048.P2
SIZE		S H4	S H5	S H5	S H5	S H5	DC H5	DC H5	S H5	DC H5	S H5	DC H5	S H6	DC H6	S H6	DC H6
Hot gas reheating system		ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF
Heating capacity	kW	28,2	28,0	32,0	36,1	42,1	14,5	14,5	14,5	14,5	16,5	16,5	16,3	16,3	18,8	18,8
Electric heater																
Capacity	kW	9,0	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5
Capacity steps	n.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Humidifier																
Steam capacity	kg/h	8	8	8	8	8	8	8	8	8	8	8	15	15	15	15
Power input	kW	6	6	6	6	6	6	6	6	6	6	6	11,3	11,3	11,3	11,3
Extra circuit coil (1)																
Total cooling capacity	kW	30,0	40,4	40,4	40,4	40,4	30,5	40,4	40,4	40,4	40,4	40,4	48,9	48,9	49,2	49,2
Sensible cooling capacity	kW	26,2	35,3	35,3	35,3	35,3	26,8	35,3	35,3	35,3	35,3	35,3	42,8	42,8	43,0	43,0
Heating coil (2)																
Heating capacity	kW	50,7	72,3	72,3	72,3	72,3	56,2	72,1	72,3	72,3	72,3	72,3	91,0	91,0	91,4	91,4

NEXT DW		052.P2	052.P2	060.P2	060.P2	064.P2	064.P2	072.P2	072.P2	082.P2	082.P2	092.P2	092.P2	100.P2	100.P2
SIZE		S H6	DC H6	S H6	DC H6	S H6	DC H6	S H7	DC H7	S H7	DC H7	S H7	DC H7	S H7	DC H7
Hot gas reheating system		ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF
Heating capacity	kW	20,7	20,7	24,3	24,3	23,8	23,8	27,7	27,7	31,3	31,3	35,5	35,5	42,2	42,2
Electric heater															
Capacity	kW	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5
Capacity steps	n.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Humidifier															
Steam capacity	kg/h	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Power input	kW	11,3	11,3	11,3	11,3	11,3	11,3	11,3	11,3	11,3	11,3	11,3	11,3	11,3	11,3
Extra circuit coil (1)															
Total cooling capacity	kW	55,7	55,7	58,7	58,7	62,9	62,9	80,4	80,4	90,9	90,9	94,4	94,4	94,4	94,4
Sensible cooling capacity	kW	48,6	48,6	51,3	51,3	55,0	55,0	69,0	69,0	79,3	79,3	82,8	82,8	82,8	82,8
Heating coil (2)															
Heating capacity	kW	102,0	102,0	107,0	107,0	114,0	114,0	131,0	131,0	146,0	146,0	152,0	152,0	152,0	152,0

- Characteristics referred to entering air at 24°C 50%RH with chiller water at 7/12,5 °C and 0% glycol
- Characteristics referred to entering air at 20°C with hot water at 75/60°C

NEXT DW DIMENSIONS (mm)

SIZE	a	b	c
H0	655	420	1680
H1	650	650	1925
H2	785	650	1925
H3	1085	750	1925
H4	1320	860	1980
H5	1620	860	1980
H6	2155	860	1980
H7	2690	860	1980

