



SPLIT HEATING SYSTEMS



COMEX GROUP INDUSTRIAL HEATING SOLUTIONS

ABOUT US

...technological innovation since 1986



OUR MISSION

Founded in 1986 as a manufacturer of industrial ovens, the **Comex Group** has built its history on a fundamental value: technological innovation.

Many years of experience in the heating and air-conditioning sectors, combined with the continuous acquisition of know-how on new technologies and applications, enables the company to bring solutions always up-to-date with heat pump systems, solar cooling, heat recovery, thermal power stations and lately air sanitation.

Research and innovation have distinguished the company in the heating and air conditioning sector with important advantages for **Comex Group** customers in the areas of energy saving, safety and environmental protection.

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Summary



DUALTOP

The helical condensing split heating system

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LEADER

Wall-mounted axial fan heater

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CLIMAIR COND

Wall-mounted condensing boiler unit

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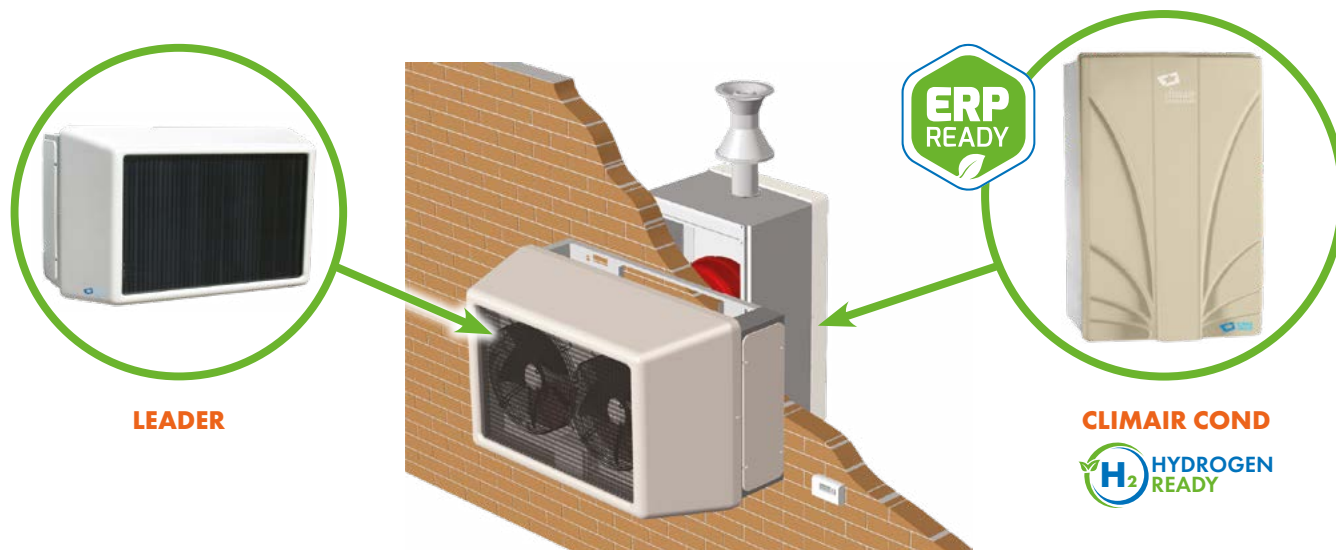


DUALTOP

The helical condensing split heating system

The **DUALTOP** system is designed for heating any industrial and commercial space. Its meticulous design allows it to be installed even in prestigious settings.

DUALTOP essentially consists of the combination of: **CLIMAIR COND** + **LEADER**



DUALTOP is available with the following heating outputs: **32 kW, 45 kW, 70 kW, 95 kW, 115 and 150 kW** offering high average seasonal efficiency.

The wall-mounted condensing boiler has an IPX5D protection rating, and the fan heater has an IP54 rating.

The load-bearing structure, with an ABS and steel casing for the fan heater and ABS and stainless steel for the external boiler, both ensure robustness and durability.

The condensing boiler is equipped with a Class 6 low-NOx premix burner. An electronic control unit manages automatic heat load modulation and variable-speed ventilation with high air flow rates.

Why is **DUALTOP** an ideal solution?

1 BECAUSE IT ENABLES WELL-BEING AND ENERGY SAVING

2 BECAUSE IT HEATS VERY QUICKLY

3 BECAUSE IT RESPECTS THE ENVIRONMENT AND REDUCES CO₂ EMISSIONS

DUALTOP - Main features



The DUALTOP split system consists of a high-efficiency "CLIMAIR COND" wall-mounted condensing boiler for outdoor installation, combined with one or more "LEADER" fan heaters to be installed in the room to be heated.

The package includes:

- Wall-mounted condensing boiler from the Climair Cond range
- On-site flue gas exhaust kit
- Internal fan heater(s) from the Leader range
- External sensor for climate compensation
- Room thermostat kit with dual speed

DUALTOP - Technical specifications

A wide range of configurations are possible with 6 types of boilers and 5 types of fan-coil units

The DUALTOP split system heats up quickly thanks to the low thermal inertia of the condensing boiler's heat exchanger

- Outdoor WALL-MOUNTED condensing boiler
- On-site flue gas discharge kit (standard)
- Room thermostat kit with dual-speed control (standard)
- Outdoor sensor (standard)
- Climair Cond casing in ABS and stainless steel
- High efficiency ★★★★★
- Fitted with I.N.A.I.L. devices (for models 45, 70, 100, 115, 150) excluding the V.I.C. valve
- Anti-freeze protection
- Climair Cond protection rating IPX5D
- Leader casing in ABS and galvanised steel
- Leader designed for wall or ceiling installation

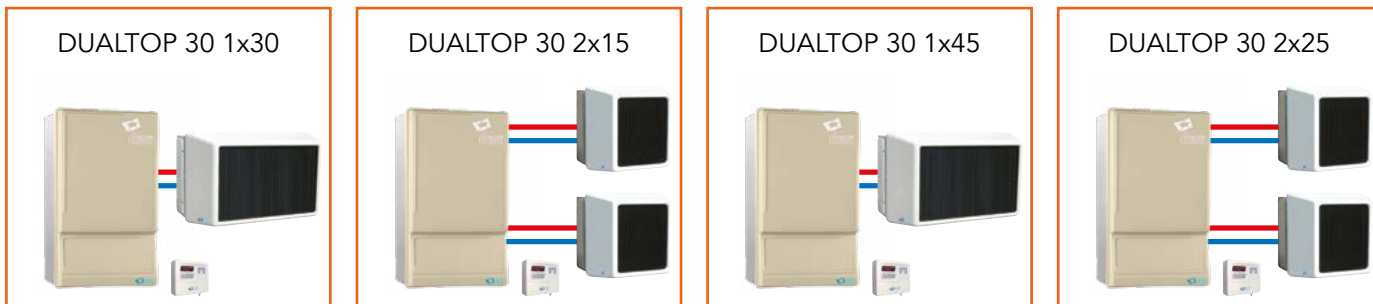
- Vertical airflow direction
- Two-speed fan with variable airflow at minimum speed
- Leader protection rating IP54

Optional extras

- Bidirectional airflow direction
- Filter for removing airborne dust
- Flexible connection kits for boiler-to-heating fan unit
- Electrical expansion panel for controlling multiple Leader units

For further information on usage, system design, etc., please contact the Comex Group technical department.

DUALTOP 30 - Range



DUALTOP 30 - Technical data

DUALTOP MODEL			30 1x30	30 2x15	30 1x45	30 2x25
RATED HEAT CAPACITY [Hi]	Max	kW	32,0	32,0	32,0	32,0
	Min	kW	3,4	3,4	3,4	3,4
TOTAL HEAT OUTPUT	Max speed	kW	31,1	31,1	31,1	31,1
	Min speed	kW	26,3	25	31,1	31,1
AIR FLOW	Max speed	m ³ /h	3.800	3.800	5.500	5.500
	Min speed	m ³ /h	1.900	1.900	4.300	4.300
AIR TEMPERATURE	In	°C	16	16	16	16
	Out	°C	40	39	33	33
AIR THROW	Max speed	m	16	16	20	20
	Min speed	m	12	12	17	17
HYDRAULIC CONNECTIONS						
CIRCULATION WATER FLOW RATE		l/h	1.200	1.200	1.200	1.200
PLANT AVAILABLE HEAD		m.w.c	3,2	2,5	2,1	2,5
CLIMAIR COND HYDRAULIC CONNECTIONS	Gas	"M	¾"	¾"	¾"	¾"
	In/Out	"M	¾"	¾"	¾"	¾"
LEADER HYDRAULIC CONNECTIONS	In/Out	"M	¾"	¾"	¾"	¾"
ELECTRICAL SPECIFICATIONS - DIMENSIONS						
SUPPLY VOLTAGE		V/Hz	230/50	230/50	230/50	230/50
ELECTRICAL POWER CONSUMPTION	Max	W	320	320	460	460
PROTECTION DEGREE	Climair	IP	IPX5D	IPX5D	IPX5D	IPX5D
	Leader	IP	IP44	IP44	IP44	IP44
CLIMAIR COND DIMENSIONS	WxHxD	mm	560x940x340	560x940x340	560x940x340	560x940x340
CLIMAIR COND WEIGHT		kg	40	40	40	40
LEADER DIMENSIONS	WxHxD	mm	1.148x736x618	748x736x618	1.148x736x618	748x736x618
LEADER WEIGHT		kg	64	40	64	54
NOISE LEVEL	Max speed	dB(A)	50	48	54	52
	Min speed	dB(A)	47	45	51	49

DUALTOP 50 - Range

DUALTOP 50 1x45



DUALTOP 50 2x25



DUALTOP 50 3x15



DUALTOP 50 - Technical data

DUALTOP MODEL			50 1x45	50 2x25	50 3x15
RATED HEAT CAPACITY [Hi]	Max	kW	45	45	45
	Min	kW	5	5	5
TOTAL HEAT OUTPUT	Max speed	kW	43,8	43,8	43,8
	Min speed	kW	43,8	41	36
AIR FLOW	Max speed	m ³ /h	5.500	5.500	5.700
	Min speed	m ³ /h	4.300	4.300	2.850
AIR TEMPERATURE	In	°C	16	16	16
	Out	°C	39	39	38
AIR THROW	Max speed	m	20	20	16
	Min speed	m	17	17	12
HYDRAULIC CONNECTIONS					
CIRCULATION WATER FLOW RATE		l/h	1900	1.900	1.900
PLANT AVAILABLE HEAD		m.w.c	2,3	3,1	3,2
CLIMAIR COND HYDRAULIC CONNECTIONS	Gas	"M	1.¼"	1.¼"	1.¼"
	In/Out	"M	1.¼"	1.¼"	1.¼"
LEADER HYDRAULIC CONNECTIONS	In/Out	"M	¾"	¾"	¾"
ELECTRICAL SPECIFICATIONS - DIMENSIONS					
SUPPLY VOLTAGE		V/Hz	230/50	230/50	230/50
ELECTRICAL POWER CONSUMPTION	Max	W	480	480	450
PROTECTION DEGREE	Climair	IP	IPX5D	IPX5D	IPX5D
	Leader	IP	IP44	IP44	IP44
CLIMAIR COND DIMENSIONS	WxHxD	mm	815x1.074x744	815x1.074x744	815x1.074x744
CLIMAIR COND WEIGHT		kg	80	80	80
LEADER DIMENSIONS	WxHxD	mm	1.148x736x618	748x736x618	748x736x618
LEADER WEIGHT		kg	64	40	40
NOISE LEVEL	Max speed	dB(A)	54	52	48
	Min speed	dB(A)	51	49	45

DUALTOP 70 - Range



DUALTOP 70 - Technical data

DUALTOP MODEL			70 1x70	70 2x45	70 2x35	70 3x25	70 4x15
RATED HEAT CAPACITY [Hi]	Max	kW	69,9	69,9	69,9	69,9	69,9
	Min	kW	7,7	7,7	7,7	7,7	7,7
TOTAL HEAT OUTPUT	Max speed	kW	68	68	68	66	68
	Min speed	kW	62,3	68	53	40	53
AIR FLOW	Max speed	m³/h	11.500	11.000	7.600	8.250	7.600
	Min speed	m³/h	8.500	8.600	3.800	6.450	3.800
AIR TEMPERATURE	In	°C	16	16	16	16	16
	Out	°C	34,8	35	42	39	42
AIR THROW	Max speed	m	25	20	16	20	16
	Min speed	m	17	17	12	17	12
HYDRAULIC CONNECTIONS							
CIRCULATION WATER FLOW RATE		l/h	2.500	2.500	2.500	2.500	2.500
PLANT AVAILABLE HEAD		m.w.c	2,2	2,3	2,3	2,6	2,7
CLIMAIR COND HYDRAULIC CON- NECTIONS	Gas	"M	1.¼"	1.¼"	1.¼"	1.¼"	1.¼"
	In/Out	"M	1.¼"	1.¼"	1.¼"	1.¼"	1.¼"
LEADER HYDRAULIC CONNECTIONS	In/Out	"M	1"	¾"	¾"	¾"	¾"
ELECTRICAL SPECIFICATIONS - DIMENSIONS							
SUPPLY VOLTAGE		V/Hz	230/50	230/50	230/50	230/50	230/50
ELECTRICAL POWER CONSUMPTION	Max	W	730	950	770	840	740
PROTECTION DEGREE	Climair	IP	IPX5D	IPX5D	IPX5D	IPX5D	IPX5D
	Leader	IP	IP54	IP44	IP44	IP44	IP44
CLIMAIR COND DIMENSIONS	WxHxD	mm	815x1.074x774	815x1.074x774	815x1.074x774	815x1.074x774	815x1.074x774
CLIMAIR COND WEIGHT		kg	90	90	90	90	90
LEADER DIMENSIONS	WxHxD	mm	1.650x820x700	1.148x736x618	1.148x736x618	748x736x618	748x736x618
LEADER WEIGHT		kg	93	64	64	40	40
NOISE LEVEL	Max speed	dB(A)	73	54	50	52	48
	Min speed	dB(A)	65	51	47	49	45

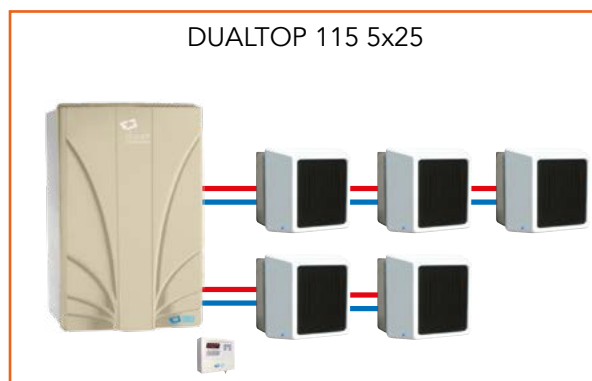
DUALTOP 100 - Range



DUALTOP 100 - Technical data

DUALTOP MODEL			100 2x45	100 3x35	100 4x25	100 5x15
RATED HEAT CAPACITY [Hi]	Max	kW	95	95	95	95
	Min	kW	10,5	10,5	10,5	10,5
TOTAL HEAT OUTPUT	Max speed	kW	92,9	92,9	92,9	92,9
	Min speed	kW	88,6	80,4	80	65
AIR FLOW	Max speed	m³/h	11.000	11.400	11.000	9.500
	Min speed	m³/h	8.600	5.700	8.600	4.750
AIR TEMPERATURE	In	°C	16	16	16	16
	Out	°C	40	39	40	44
AIR THROW	Max speed	m	20	16	20	16
	Min speed	m	17	12	17	12
HYDRAULIC CONNECTIONS						
CIRCULATION WATER FLOW RATE		l/h	4.000	4.000	4.000	4.000
PLANT AVAILABLE HEAD		m.w.c	1,3	2,3	2,4	2,8
CLIMAIR COND HYDRAULIC CONNECTIONS	Gas	"M	1.¼"	1.¼"	1.¼"	1.¼"
	In/Out	"M	1.¼"	1.¼"	1.¼"	1.¼"
LEADER HYDRAULIC CONNECTIONS	In/Out	"M	¾"	¾"	¾"	¾"
ELECTRICAL SPECIFICATIONS - DIMENSIONS						
SUPPLY VOLTAGE		V/Hz	230/50	230/50	230/50	230/50
ELECTRICAL POWER CONSUMPTION	Max	W	1.020	960	1.020	850
PROTECTION DEGREE	Climair	IP	IPX5D	IPX5D	IPX5D	IPX5D
	Leader	IP	IP44	IP44	IP44	IP44
CLIMAIR COND DIMENSIONS	WxHxD	mm	815x1.074x744	815x1.074x744	815x1.074x744	815x1.074x744
CLIMAIR COND WEIGHT		kg	105	105	105	105
LEADER DIMENSIONS	WxHxD	mm	1.148x736x618	1.148x736x618	748x736x618	748x736x618
LEADER WEIGHT		kg	64	64	40	40
NOISE LEVEL	Max speed	dB(A)	54	50	52	48
	Min speed	dB(A)	51	47	49	45

DUALTOP 115 - Range



DUALTOP 115 - Technical data

DUALTOP MODEL			115 3x45	115 4x35	115 5x25
RATED HEAT CAPACITY [Hi]	Max	kW	115	115	115
	Min	kW	20	20	20
TOTAL HEAT OUTPUT	Max speed	kW	112	112	112
	Min speed	kW	112	104	102,5
AIR FLOW	Max speed	m³/h	16.500	15.200	13.750
	Min speed	m³/h	12.900	7.600	10.750
AIR TEMPERATURE	In	°C	16	16	16
	Out	°C	35,7	37,6	40,3
AIR THROW	Max speed	m	20	16	20
	Min speed	m	17	12	17
HYDRAULIC CONNECTIONS					
CIRCULATION WATER FLOW RATE		l/h	4.800	4.800	4.800
PLANT AVAILABLE HEAD		m.c.a	6,8	7,1	7,4
CLIMAIR COND HYDRAULIC CONNECTIONS	Gas	"M	1.¼"	1.¼"	1.¼"
	In/Out	"M	1.¼"	1.¼"	1.¼"
LEADER HYDRAULIC CONNECTIONS	In/Out	"M	¾	¾	¾
ELECTRICAL SPECIFICATIONS - DIMENSIONS					
SUPPLY VOLTAGE		V/Hz	230/50	230/50	230/50
ELECTRICAL POWER CONSUMPTION		Max W	1.360	1.160	1.180
PROTECTION DEGREE	Climair	IP	IPX5D	IPX5D	IPX5D
	Leader	IP	IP44	IP44	IP44
CLIMAIR COND DIMENSIONS	WxHxD	mm	815x1.074x744	815x1.074x744	815x1.074x744
CLIMAIR COND WEIGHT		kg	125	125	125
LEADER DIMENSIONS	WxHxD	mm	1.148x736x618	1.148x736x618	748x736x618
LEADER WEIGHT		kg	64	64	40
NOISE LEVEL	Max speed	dB(A)	54	50	48
	Min speed	dB(A)	51	47	45

For applications involving DUALTOP 150, please contact the Comex Group technical department.

Some applications

DUALTOP INSTALLATIONS





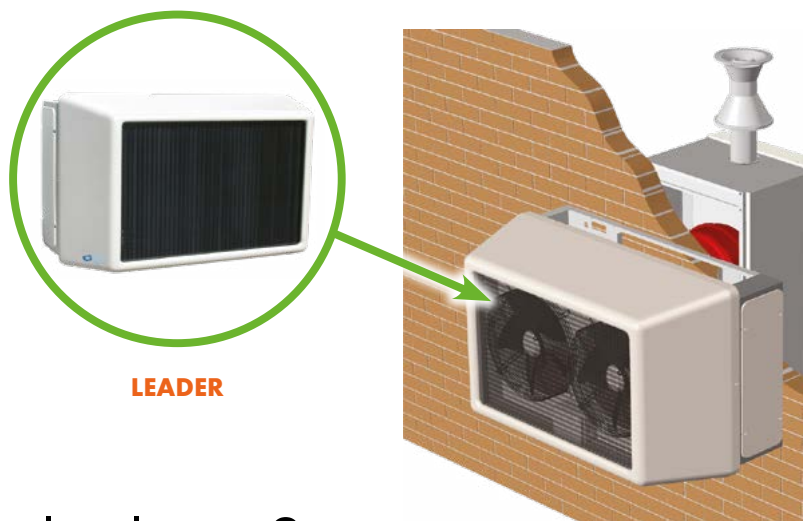
LEADER

The standard helical fan coil

The fan heater is designed for heating or air-conditioning any industrial or commercial environment, in fact, the careful design allows it to be inserted even in prestigious environments.

The LEADER has an electrical protection rating of IP 44, IP 54 and filter < 10 microns for purification from suspended dust, and is available in 10 models with different flow rates and air throw speeds.

This makes it possible to meet environmental compliance requirements for all kinds of activities.



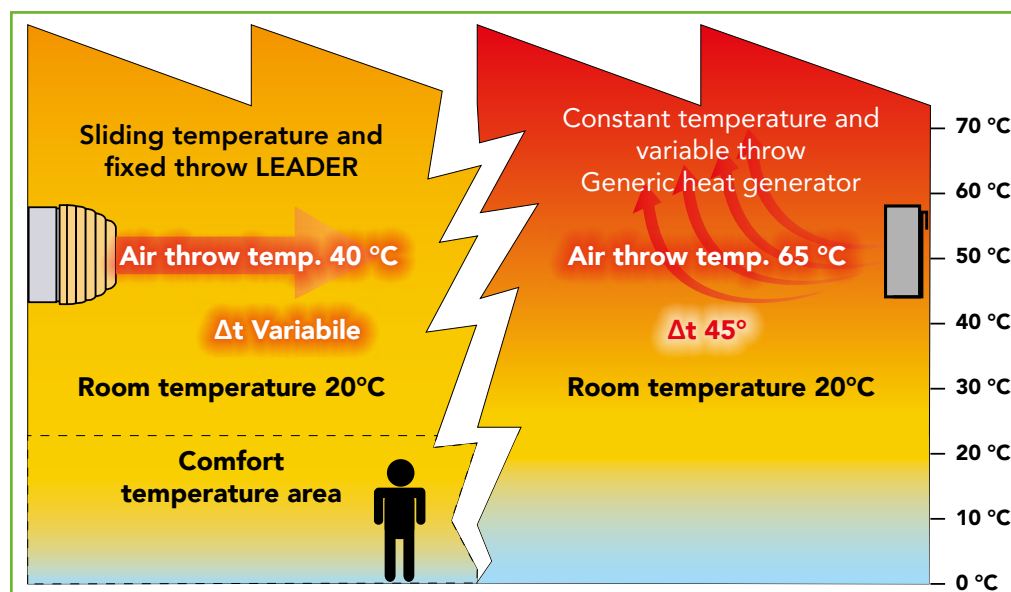
Why is LEADER an ideal solution?

1 BECAUSE IT ALLOWS WELL-BEING AND ENERGY SAVINGS

2 BECAUSE IT HEATS UP VERY QUICKLY

3 BECAUSE IT IS EASY TO INSTALL

Hot air rises to the top because it is less dense and lighter than cold air, which allows hot air balloons to rise off the ground. In very tall industrial buildings, this is a serious problem because in order to get the optimum temperature to human height, a large amount of warm air must first be allowed to rise to the ceiling, resulting in waste and lack of comfort.



The amount of rising air depends on the temperature difference (Δt) between the hot air produced by the system and the air in the room.

The greater the difference, the greater the amount of heat rising to the ceiling.

Manufacturers of hot air equipment maintain this difference, whatever the temperatures involved.

Room air 0°C, throw air 45°C, room air 20°C, throw air 65°C.

In this way, the stratification of hot air upwards gets worse by the hour because the hotter air

is less dense.

On the other hand, the LEADER combined with the CLIMAIR COND works at a flowing water temperature, (see illustration): Ambient air at 0°C and Launch air at 40°C, which in time becomes Ambient air at 20°C and Launch air always at 40°C.

The advantage obtained is evident, both in costs and in well-being, because the stratification of the hot air at the top improves hour by hour by decreasing the temperature difference between throw and room.

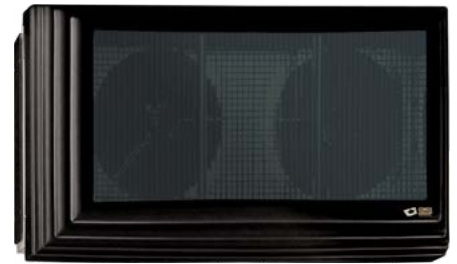
LEADER - Main characteristics



LEADER 15/25



LEADER 35/45



LEADER 70

The LEADER series of indoor fan coil units are designed for heating and air conditioning any industrial and commercial environment, in fact, the care taken in the design allows them to be inserted even in prestigious environments.

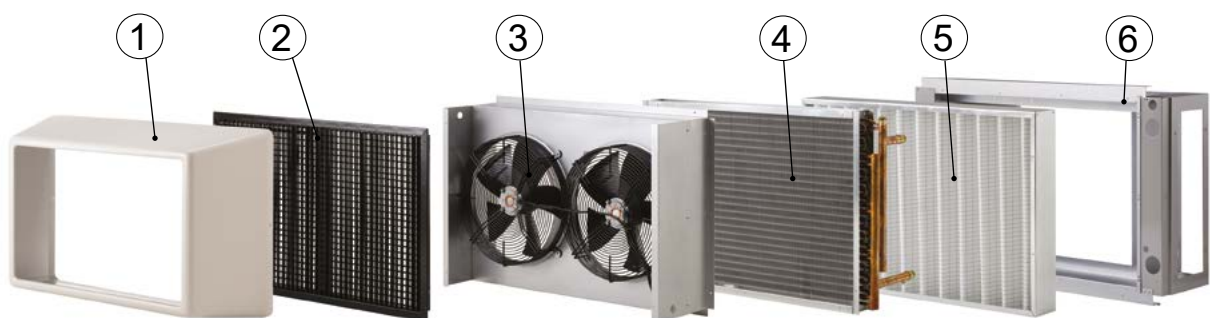
The LEADER with IP 44, IP 54 electrical protection rating and < 10 micron filter for purification from suspended dust, is available in 10 models with different flow rates and air throw speeds.

This makes it possible to meet environmental compliance requirements for all types of activities.

LEADER - Main characteristics

- Available in 5 models, they make it possible to proportion the throws, speed and volumes of treated air according to the specific needs of each individual plant
 - Combined with Climair heat generators with external probe and sliding temperature on the exchanger, they reduce the stratification coefficient inversely to the increase in internal temperature
 - LEADER units are designed for both wall and ceiling installation
 - They can be equipped with variable speed control to adjust plant set-up times or compensate for continuous extractions
 - Complete availability of control and management panels for every type of application
 - Leader casing in ABS and galvanised steel
 - Leader prepared for wall or ceiling installation
 - Vertical air outlet orientation
 - Dual speed fan with variable air flow at minimum speed
 - Leader degree of protection IP54
- Optional**
- Bi-directional orientation of outlet air
 - Filter for purification from suspended dust
 - Flexible boiler-thermal fan connection kit
 - Electrical expansion panel for controlling more than one Leader

LEADER - Technical characteristics



1. ABS LEADER casing
2. Vertical outlet air grille (standard) or bi-directional (optional)
3. Dual-speed fan with variable air flow at minimum speed
4. Copper and aluminium exchanger with very high efficiency and quality
5. Up to 6 micron efficiency filter for purification of suspended dust (optional)
6. Supporting structure made of galvanised steel and with quality materials and components

For further information on usage, system design, etc., please contact the Comex Group technical department.

LEADER - Technical Data

ΔT MAX. SPEED = 10°C - AMBIENT TEMPERATURE = 16°C

LEADER MODEL			15	25	35	45	70
TOTAL HEAT OUTPUT	Max speed	kW	22,7	28,2	46,8	58,64	80,4
	Min speed	kW	14,8	24,8	30,2	51,3	69,6
AIR FLOW	Max speed	m³/h	1.900	2.750	3.800	5.500	11.500
	Min speed	m³/h	950	2.150	1.900	4.300	8.500
AIR TEMPERATURE	Input	°C	16	16	16	16	16
	Max speed out	°C	50,8	46	52	47,3	36,5
	Min speed out	°C	61,7	49,8	62,7	51	40
AIR THROW	Max speed	m	16	20	16	20	25
	Min speed	m	12	17	12	17	17
AIR CIRCUIT PRESSURE DROP	Max speed	mbar	0,29	0,55	0,29	0,55	0,48
	Min speed	mbar	0,09	0,36	0,09	0,36	0,29
WATER CIRCULATION FLOW RATE		l/h	1.944	2.412	4.032	5.040	6.912
WATER TEMPERATURE	Input	°C	80	80	80	80	80
	Max speed out	°C	70	70	70	70	70
	Min speed out	°C	73,5	71,2	73,6	71,3	71,4
WATER CIRCUIT PRESSURE DROP		mbar	107	161	494	748	457
HYDRAULIC, ELECTRICAL CHARACTERISTICS - OVERALL DIMENSIONS							
HYDRAULIC CONNECTIONS	In/Out	"M	¾	¾	¾	¾	1
POWER SUPPLY VOLTAGE		V/Hz	230/50	230/50	230/50	230/50	230/50
ELECTRICAL POWER CONSUMPTION	Max	W	110	180	220	360	500
PROTECTION DEGREE		IP	IP44	IP44	IP44	IP44	IP54
DIMENSIONS	H	mm	736	736	736	736	820
	W	mm	748	748	1.148	1.148	1.650
	D	mm	618	618	618	618	700
WEIGHT		kg	40	40	64	64	93
NOISE LEVEL	Max speed	dB(A)	48	52	50	54	73
	Min speed	dB(A)	45	49	47	51	65

ΔT MAX. SPEED = 15°C - AMBIENT TEMPERATURE = 16°C

LEADER MODEL			15	25	35	45	70
TOTAL HEAT OUTPUT	Max speed	kW	20,9	26	44,2	55,1	75,4
	Min speed	kW	14,1	23,1	29,3	48,7	65,9
AIR FLOW	Max speed	m³/h	1.900	2.750	3.800	5.500	11.500
	Min speed	m³/h	950	2.150	1.900	4.300	8.500
AIR TEMPERATURE	Input	°C	16	16	16	16	16
	Max speed out	°C	48,3	43,7	50	45,4	35,3
	Min speed out	°C	59,7	47,5	61	49,3	38,8
AIR THROW	Max speed	m	16	20	16	20	25
	Min speed	m	12	17	12	17	17
AIR CIRCUIT PRESSURE DROP	Max speed	mbar	0,29	0,55	0,29	0,55	0,48
	Min speed	mbar	0,09	0,36	0,09	0,36	0,29
WATER CIRCULATION FLOW RATE		l/h	1.188	1.476	2.520	3.168	4.320
WATER TEMPERATURE	Input	°C	80	80	80	80	80
	Max speed out	°C	65	65	65	65	65
	Min speed out	°C	69,8	66,6	70	66,8	66,9
WATER CIRCUIT PRESSURE DROP		mbar	56	64	217	327	203
HYDRAULIC, ELECTRICAL CHARACTERISTICS - OVERALL DIMENSIONS							
HYDRAULIC CONNECTIONS	In/Out	"M	¾"	¾"	¾"	¾"	1"
POWER SUPPLY VOLTAGE		V/Hz	230/50	230/50	230/50	230/50	230/50
ELECTRICAL POWER CONSUMPTION	Max	W	110	180	220	360	500
PROTECTION DEGREE		IP	IP44	IP44	IP44	IP44	IP54
DIMENSIONS	H	mm	736	736	736	736	820
	W	mm	748	748	1.148	1.148	1.650
	D	mm	618	618	618	618	700
WEIGHT		kg	40	40	64	64	93
NOISE LEVEL	Max speed	dB(A)	48	52	50	54	73
	Min speed	dB(A)	45	49	47	51	65

LEADER - Technical Data

ΔT MAX. SPEED = 20°C - AMBIENT TEMPERATURE = 16°C

LEADER MODEL			15	25	35	45	70
TOTAL HEAT OUTPUT	Max speed	kW	19,2	23,7	41,5	51,6	70,4
	Min speed	kW	13,4	21,3	28,3	46,1	62,2
AIR FLOW	Max speed	m³/h	1.900	2.750	3.800	5.500	11.500
	Min speed	m³/h	950	2.150	1.900	4.300	8.500
AIR TEMPERATURE	Input	°C	16	16	16	16	16
	Max speed out	°C	45,7	41,4	48	43,5	34
	Min speed out	°C	57,7	45	59,7	47,4	37,5
AIR THROW	Max speed	m	16	20	16	20	25
	Min speed	m	12	17	12	17	17
AIR CIRCUIT PRESSURE DROP	Max speed	mbar	0,29	0,55	0,29	0,55	0,48
	Min speed	mbar	0,09	0,36	0,09	0,36	0,29
WATER CIRCULATION FLOW RATE		l/h	828	1.008	1.800	2.232	3.024
WATER TEMPERATURE	Input	°C	80	80	80	80	80
	Max speed out	°C	60	60	60	60	60
	Min speed out	°C	66	61,8	66,5	62,3	62,3
WATER CIRCUIT PRESSURE DROP		mbar	28	41	122	182	113
HYDRAULIC, ELECTRICAL CHARACTERISTICS - OVERALL DIMENSIONS							
HYDRAULIC CONNECTIONS	In/Out	"M	¾	¾	¾	¾	1
POWER SUPPLY VOLTAGE		V/Hz	230/50	230/50	230/50	230/50	230/50
ELECTRICAL POWER CONSUMPTION	Max	W	110	180	220	360	500
PROTECTION DEGREE		IP	IP44	IP44	IP44	IP44	IP54
DIMENSIONS	H	mm	736	736	736	736	820
	W	mm	748	748	1.148	1.148	1.650
	D	mm	618	618	618	618	700
WEIGHT		kg	40	40	64	64	93
NOISE LEVEL	Max speed	dB(A)	48	52	50	54	73
	Min speed	dB(A)	45	49	47	51	65

ΔT MAX. SPEED = 25°C - AMBIENT TEMPERATURE = 16°C

LEADER MODEL			15	25	35	45	70
TOTAL HEAT OUTPUT	Max speed	kW	17,4	21,4	38,74	47,8	65,2
	Min speed	kW	12,7	19,7	27,2	43,2	58,1
AIR FLOW	Max speed	m³/h	1.900	2.750	3.800	5.500	11.500
	Min speed	m³/h	950	2.150	1.900	4.300	8.500
AIR TEMPERATURE	Input	°C	16	16	16	16	16
	Max speed out	°C	43	38,9	45,9	41,5	33
	Min speed out	°C	55,5	42,9	58	45,5	36
AIR THROW	Max speed	m	16	20	16	20	25
	Min speed	m	12	17	12	17	17
AIR CIRCUIT PRESSURE DROP	Max speed	mbar	0,29	0,55	0,29	0,55	0,48
	Min speed	mbar	0,09	0,36	0,09	0,36	0,29
WATER CIRCULATION FLOW RATE		l/h	612	756	1.332	1.656	2.232
WATER TEMPERATURE	Input	°C	80	80	80	80	80
	Max speed out	°C	55	55	55	55	55
	Min speed out	°C	62,1	57,6	62,5	57,6	57,6
WATER CIRCUIT PRESSURE DROP		mbar	30	24	86	105	75
HYDRAULIC, ELECTRICAL CHARACTERISTICS - OVERALL DIMENSIONS							
HYDRAULIC CONNECTIONS	In/Out	"M	¾"	¾"	¾"	¾"	1"
POWER SUPPLY VOLTAGE		V/Hz	230/50	230/50	230/50	230/50	230/50
ELECTRICAL POWER CONSUMPTION	Max	W	110	180	220	360	500
PROTECTION DEGREE		IP	IP44	IP44	IP44	IP44	IP54
DIMENSIONS	H	mm	736	736	736	736	820
	W	mm	748	748	1.148	1.148	1.650
	D	mm	618	618	618	618	700
WEIGHT		kg	40	40	64	64	93
NOISE LEVEL	Max speed	dB(A)	48	52	50	54	73
	Min speed	dB(A)	45	49	47	51	65



CLIMAIR COND

The wall-mounted condensing boiler

CLIMAIR COND is a wall-mounted condensing boiler, equipped with a pre-mixed low NOx burner in class 6. The electronic control unit manages automatic modulation of the thermal load.

CLIMAIR COND is available with the following heat outputs: 32 kW, 45 kW, 70 kW, 95 kW, 115 kW and 150 kW **with efficiencies up to 107%.**

It has an IPX5D degree of protection and a supporting structure with a painted steel casing suitable for outdoor installation, guaranteeing robustness and solidity.



Climair Cond 35
Rated heating capacity (HI) 32 kW



Climair Cond 45-E
Rated heating capacity (HI) 45 kW

Climair Cond 70-E
Rated heating capacity (HI) 70 kW

Climair Cond 100
Rated heating capacity (HI) 95 kW

Climair Cond 115
Rated heating capacity (HI) 115 kW

Climair Cond 150
Rated heating capacity (HI) 150 kW



Why is CLIMAIR COND an ideal solution?

1 BECAUSE IT ALLOWS WELL-BEING AND ENERGY SAVINGS

2 BECAUSE IT HAS ACCESS TO THE THERMAL ACCOUNT AND TAX DEDUCTION *

3 BECAUSE IT RESPECTS THE ENVIRONMENT AND REDUCES CO₂ EMISSIONS



* Tax deductions are applicable depending on the local legislation and regulations of the country where the product is installed. The actions eligible for incentives are specified according to the type, efficiency and combination of appliances and installations used.

CLIMAIR COND - Main characteristics



CLIMAIR COND 35

- Wall-mounted condensing heating unit for outdoor/indoor use
- Stainless steel casing for outdoor use
- High performance ★★★★★
- Seasonal efficiency class A
- Class 6 NOx
- Small size and compact structure
- Control panel equipped with backlit display
- Primary exchanger in stainless steel and aluminum
- Total premix burner
- High modulation (1:10)
- NTC temperature probes on heating
- PWM modulating HE circulator with built-in deaerator
- 9-liter expansion vessel
- Integrated thermoregulation system via external probe (optional)
- IPX5D protection rating

* In abbinamento ad un dispositivo di termoregolazione in classe V o superiore.



CLIMAIR COND 45-E / 70-E / 100 / 115 / 150

- Wall-mounted condensing heating unit for outdoor/indoor use
- Stainless steel casing for outdoor use
- High performance ★★★★★
- Class 6 NOx
- Total premix burner with very low NOx and CO emissions
- Models from 45 to 150 kW
- Stainless steel exchanger
- User interface and backlit display
- High water side prevalence
- High modulation range (1:8)
- Efficiency at 30% load greater than 108%
- Management of 0 – 10 V modulating input (power or temperature)
- Equipped with safety devices
- IPX5D protection rating

* In combination with a class V or higher thermoregulation device.

For further information on usage, system design, etc., please contact the Comex Group technical department.

CLIMAIR 35 / 45-E / 70-E COND - Technical Data

CLIMAIR COND MODEL			35	45-E	70-E
APPLIANCE CATEGORY			II _{2H3P}	II _{2H3P}	I _{2H3P}
APPLIANCE TYPE			C13, C43, C53, C63	B23, B23P	B23, B23P
EFFICIENCY CLASS			★★★★	★★★★	★★★★
SEASONAL ENERGY EFFICIENCY HEATING		%	94,0	92,2	93
ENERGY EFFICIENCY CLASS			A	A	A
NOx CLASS			6	6	6
BOILER EFFICIENCY					
RATED HEAT CAPACITY [Hi]	max	kW	32	45	69,9
	min	kW	3,4	5	7,7
USEFUL HEAT OUTPUT [Hs] (50/30°C)	max	kW	35,1	46,4	74,5
	min	kW	3,5	5,3	8,1
USEFUL HEAT OUTPUT [Hi] (80/60°C)	max	kW	31,1	43,8	68
	min	kW	3,3	4,8	7,5
NOMINAL HEAT EFFICIENCY OUTPUT (50/30°C)	max	%	109,7	103,1	106,6
	min	%	103,5	106,7	105,8
NOMINAL HEAT EFFICIENCY OUTPUT (80/60°C)	max	%	97	97,3	97,3
	min	%	95,7	96,5	97,2
PERFORMANCE AT PARTIAL LOAD (tr = 30°C)		%	110,6	108,1	108,4
MAXIMUM OPERATING TEMPERATURE		°C	85	85	85
HYDRAULIC CONNECTIONS					
MAXIMUM OPERATING PRESSURE		bar	3	4,5	4,5
TOTAL WATER CONTENT		L	4	2,8	3,5
HYDRAULIC CONNECTIONS	Gas	“M	¾	1.14"	1.14"
	In/Out	“M	¾	1.14"	1.14"
EXPANSION TANK CAPACITY		l	9	7	7
FUME DISCHARGE		Coax. Ømm	80	100	100
ELECTRICAL CHARACTERISTICS - OVERALL DIMENSIONS					
SUPPLY VOLTAGE		V/Hz	230/50	230/50	230/50
ELECTRICAL POWER CONSUMPTION		max W	100	120	185
PROTECTION DEGREE	Outdoor	IP	IPX5D	IPX5D	IPX5D
	Indoor	IP	IPX4D	IPX4D	IPX4D
DIMENSIONS	H	mm	940	1.074	1.074
	W	mm	560	815	815
	D	mm	340	744	744
WEIGHT		kg	40	80	90

Some applications



CLIMAIR 100 / 115 / 150 COND - Technical Data

CLIMAIR COND MODEL			100	115	150
APPLIANCE CATEGORY			II _{2H3B/P}	II _{2H3P}	II _{2H3P}
APPLIANCE TYPE			B23, B23P	B23, B23P	B23, B23P
EFFICIENCY CLASS			★★★★	★★★★	★★★★
SEASONAL ENERGY EFFICIENCY HEATING	%		93	93	93
ENERGY EFFICIENCY CLASS			-	-	-
NOx CLASS			6	6	6
BOILER EFFICIENCY					
RATED HEAT CAPACITY [Hi]	max	kW	95	115	150
	min	kW	10,5	20	20
USEFUL HEAT OUTPUT [Hs] (50/30°C)	max	kW	101,2	121	154,5
	min	kW	11,2	21	20,7
USEFUL HEAT OUTPUT [Hi] (80/60°C)	max	kW	92,9	112	146,1
	min	kW	10,2	19	19,2
NOMINAL HEAT EFFICIENCY OUTPUT (50/30°C)	max	%	106,5	105,2	103
	min	%	106,9	105,2	103,4
NOMINAL HEAT EFFICIENCY OUTPUT (80/60°C)	max	%	97,8	97,4	97,4
	min	%	97,1	95,1	96,2
PERFORMANCE AT PARTIAL LOAD (tr = 30°C)		%	108,7	108,2	108,3
MAXIMUM OPERATING TEMPERATURE		°C	85	85	85
HYDRAULIC CONNECTIONS					
MAXIMUM OPERATING PRESSURE		bar	6	6	6
TOTAL WATER CONTENT		L	6,8	10,1	10,1
HYDRAULIC CONNECTIONS	Gas	"M	1.14"	1.14"	1.14"
	In/Out	"M	1.14"	1.14"	1.14"
EXPANSION TANK CAPACITY		l	7	7	7
FUME DISCHARGE	Coax.	Ømm	100	100	100
ELECTRICAL CHARACTERISTICS - OVERALL DIMENSIONS					
SUPPLY VOLTAGE		V/Hz	230/50	230/50	230/50
ELECTRICAL POWER CONSUMPTION	max	W	300	280	540
PROTECTION DEGREE	Outdoor	IP	IPX5D	IPX5D	IPX5D
	Indoor	IP	IPX4D	IPX4D	IPX4D
DIMENSIONS	H	mm	1.074	1.074	1.074
	W	mm	815	815	815
	D	mm	744	744	744
WEIGHT		kg	105	125	125

Some applications



FRIO: DIRECT EXPANSION HEAT PUMP SPLIT SYSTEMS



AEROTERMO LT fan coil ultra-low temperature



GENIUS: LITHIUM BROMIDE ABSORBERS



IESI: HEAT RECOVERY



INDUSTRIAL OVENS Standard – Electric – Hybrid



OUR MISSION

Founded in 1986 as a manufacturer of industrial ovens, the **Comex Group** has built its history on a fundamental value: technological innovation. Many years of experience in the heating and air-conditioning sectors, combined with the continuous acquisition of know-how on new technologies and applications, enables the company to bring solutions always up-to-date with heat pump systems, solar cooling, heat recovery, thermal power stations and lately air sanitation. Research and innovation have distinguished the company in the heating and air conditioning sector with important advantages for **Comex Group** customers in the areas of energy saving, safety and environmental protection.

The data in this brochure should be regarded as indicative and not binding. The Comex Group reserves the right to change them without prior notice.



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