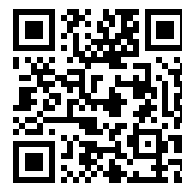




**COMEX
GROUP**

TUTTO UN ALTRO CLIMA



DUALSMART

THE LOW-TEMPERATURE CONDENSING SPLITED HEATING SYSTEM

ABOUT US ...technological innovation since 1986



OUR MISSION

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

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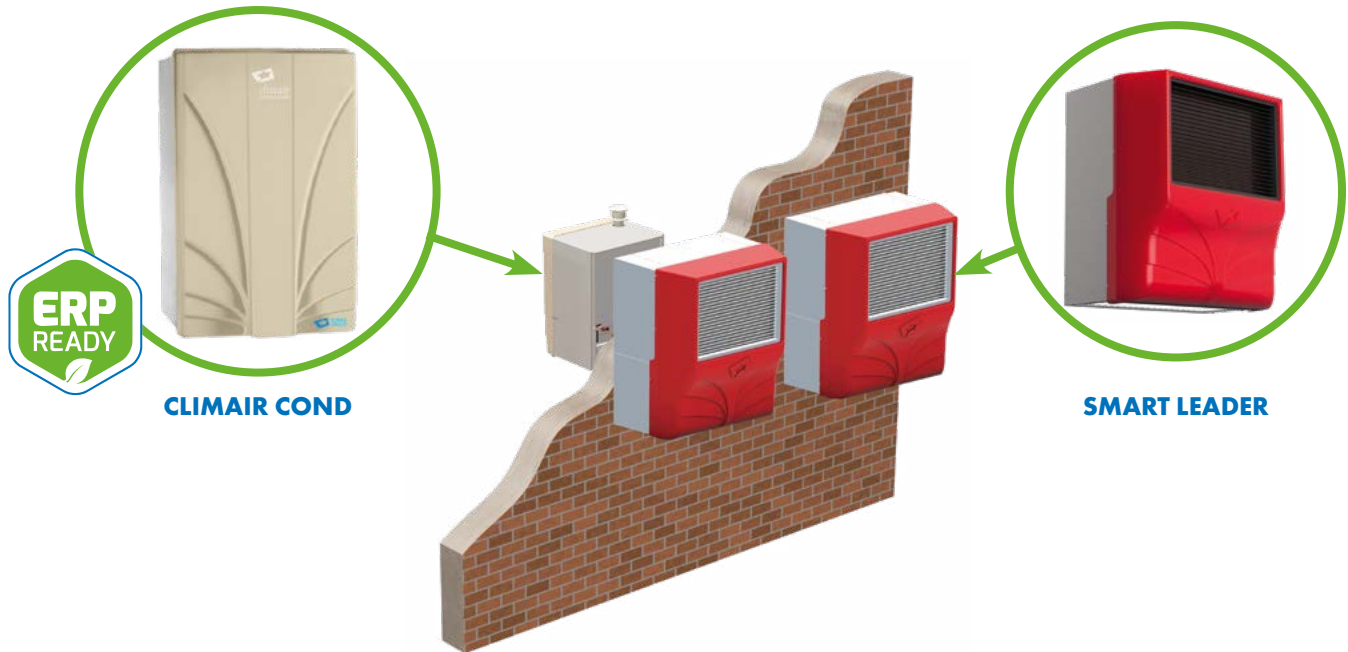
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DUALSMART

The low-temperature split heating system

DUALSMART permette il riscaldamento e l'ottimizzazione della condensazione con temperatura di mandata massimo 50°C

DUALSMART basically consists of the combination of: **CLIMAIR COND** + **SMART LEADER**



DUALSMART is particularly suitable for commercial and sporting premises, as well as for the commercial industrial sector. In fact, thanks to its special characteristics, it is ideal for heating large rooms with fire-risk activities, such as, for example, textile factories, carpentries, body shops, and all those public environments with an influx of people.

DUALSMART is available with the following heat outputs: **32 kW, 47 kW, 65 kW** with 2 fan heaters and offers an average seasonal efficiency of more than 102%.

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

The supporting structure with an ABS and painted steel shell for the fan heater, and ABS and painted INOX steel for the external boiler, both guarantee robustness and solidity.

The condensing boiler is equipped with a class 5 and 6 premixed low NO_x burner. An electronic control unit manages automatic modulation of the thermal load and variable speed ventilation with high air flow rates.

Why is **DUALSMART** an ideal solution?

1 BECAUSE IT ALLOWS WELL-BEING AND ENERGY SAVINGS

2 BECAUSE IT HEATS UP IN A VERY SHORT TIME

3 BECAUSE IT RESPECTS THE ENVIRONMENT AND REDUCES CO₂ EMISSIONS

DUALSMART - Main characteristics



The DUALSMART split system consists of a wall-hung "CLIMAIR COND" high-efficiency condensation boiler, for outdoor use, combined with one or more "SMART LEADER" low-temperature fan coils to be installed in the room to be heated.

In the "C" version, the system is designed to be combined with a cooling unit for summer cooling.

The package includes:

- CLIMAIR COND wall-hung condensing boiler
- On-site flue gas exhaust kit
- SMART LEADER indoor fan heater(s)
- External probe for climatic compensation
- Room thermostat kit w/triple speed

The DUALSMART split system is ideal for heating rooms where regulations prevent the installation of gas appliances inside rooms, and it is exempt from fire brigade practice even for systems greater than 116 kW, as the heat generator is installed outside the building and the capacities are therefore not added together.

DUALSMART - Technical characteristics

Various configurations possible with 5 types of boilers and 4 types of fan heaters

The DUALSMART split system heats quickly thanks to a low thermal inertia of the condensing boiler exchanger

Maximum flow temperature 50 °C with optimised condensation and average carrier fluid temperature <45 °C

- Outdoor MURAL condensing boiler
- On-site flue gas exhaust kit (standard)
- Room thermostat kit w/triple speed (standard)
- External probe (standard)
- Climair casing in ABS and painted steel (Mod. 45, 70) or INOX steel (Mod. 35,100, 115)
- High efficiency ★★★★★
- Equipped with safety devices
- Frost protection
- Climair IPX5D degree of protection

- SMART LEADER casing in ABS and galvanised steel
- SMART LEADER prepared for wall installation
- SMART LEADER also available in C version, with hydrophilic coil and condensate drip tray
- Vertical outlet air orientation (standard)
- Bi-directional orientation of outlet air (optional)
- Filter for removal of suspended dust (standard)
- Three-speed fan and variable air flow at minimum speed
- SMART LEADER fan heater allows the reduction of air stratification
- SMART LEADER prepared for air ducting
- SMART LEADER IP54 degree of protection

For further information on use, plant design, etc., please contact the Comex Group technical department.

DUALSMART - RANGE



DUALSMART 35



DUALSMART 55



DUALSMART 70 2x35



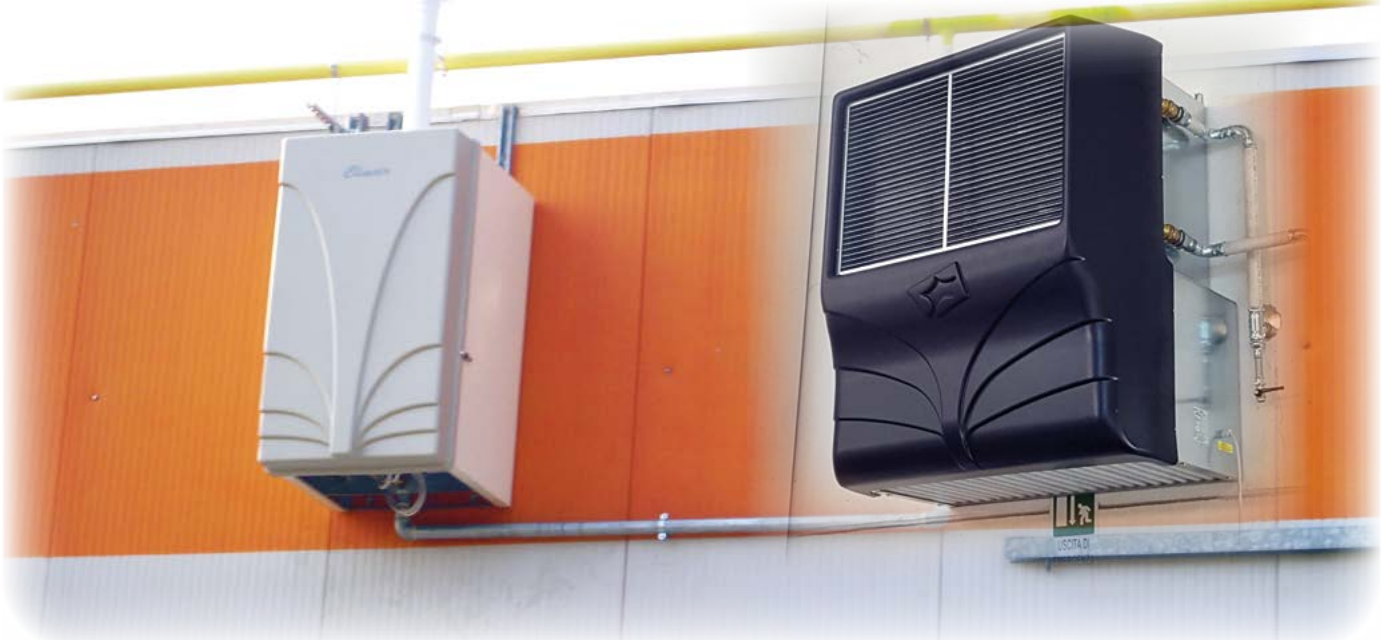
DUALSMART 45

DUALSMART - Technical Data

DUALSMART MODEL			35	45	55	70 2x35
RATED HEAT CAPACITY [Hi]	Max	kW	32,0	47,0	65,0	65,0
	Min	kW	3,4	8,5	55,0	56,0
TOTAL HEAT OUTPUT	Max speed	kW	33,2	44,2	55,3	66,6
	Medium speed	kW	31,4	41,5	50,6	41,5
	Min speed	kW	28,9	37,3	44,4	37,3
AIR FLOW	Max speed	m ³ /h	5.400	5.600	5.400	10.300
	Medium speed	m ³ /h	4.700	4.900	4.700	9.000
	Min speed	m ³ /h	4.000	4.100	4.000	7.600
AIR TEMPERATURE	Input / Output	°C	16 / 36,5	16 / 43	16 / 49	16 / 36,5
	Input	°C	50	56	60	50
AIR THROW	Max output speed	°C	25	31	40	25
	Med. output speed	°C	26	32	41	32
	Min output speed	°C	28	34	43	34
HYDRAULIC CONNECTIONS						
CIRCULATION WATER FLOW RATE		l/h	1.141	1.522	2.376	2.292
PLANT AVAILABLE HEAD		m.w.c.	1,7	3,2	2,6	2,6
CLIMAIR HYDRAULIC CONNECTIONS	Gas	"M	¾	¾	1	1
	In/Out	"M	¾	¾	1	1
SMARTLEDER HYDRAULIC CONNECTIONS	In/Out	"M	1 ¼	1 ¼	1 ¼	1 ¼
ELECTRICAL CHARACTERISTICS - OVERALL DIMENSIONS						
SUPPLY VOLTAGE		V/Hz	230/50	230/50	230/50	230/50
ELECTRICAL POWER CONSUMPTION	Max	W	1.302	1.420	1.500	2.700
PROTECTION DEGREE	Climair	IP	IPX5D	IPX5D	IPX5D	IPX5D
	Smart Leader	IP	IP54	IP54	IP54	IP54
CLIMAIR DIMENSIONS	WxHxD	mm	400x705x355	558x940x525	800x1074x664	800x1074x644
CLIMAIR WEIGHT		kg	50	50	135	150
SMART LEADER DIMENSIONS	WxHxD	mm	1.200x1.371x814	1.200x1.371x814	1.200x1.371x814	1.200x1.371x814
SMART LEADER WEIGHT		kg	150	150	150	150
NOISE LEVEL (at 10 m)	Max speed	dB(A)	74	74	74	74
	Medium speed	dB(A)	73	73	73	73
	Min speed	dB(A)	72	72	72	72

Some applications

DUALSMART INSTALLATIONS



Some applications

DUALSMART INSTALLATIONS



For further information on use, plant design, etc., please contact the Comex Group technical department.

HYBRID SYSTEMS



INDUSTRIAL OVENS



LITHIUM BROMIDE ABSORPTION CHILLER



ENERGY RECUPERATOR



CONDENSING THERMAL POWER STATIONS



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