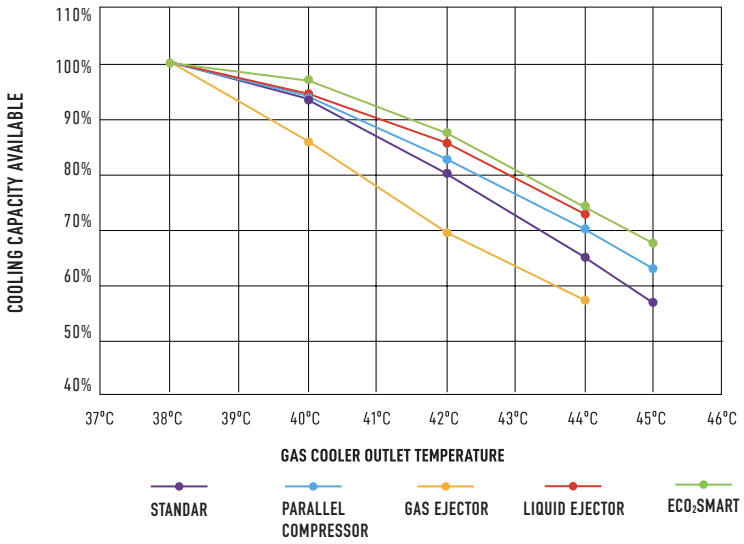
ECO$_2$SMART

EXCLUSIVE HIGH EFFICIENCY CO_2 SYSTEM by TEWIS

Tewis
a member of DAIKIN group

ECO$_2$SMART an exclusive system that improves the efficiency of our CO2 equipment by guaranteeing lower energy consumption, without the need for water or additional systems.

AVAILABLE COOLING CAPACITY AT TEMPERATURES ABOVE DESIGN CONDITIONS



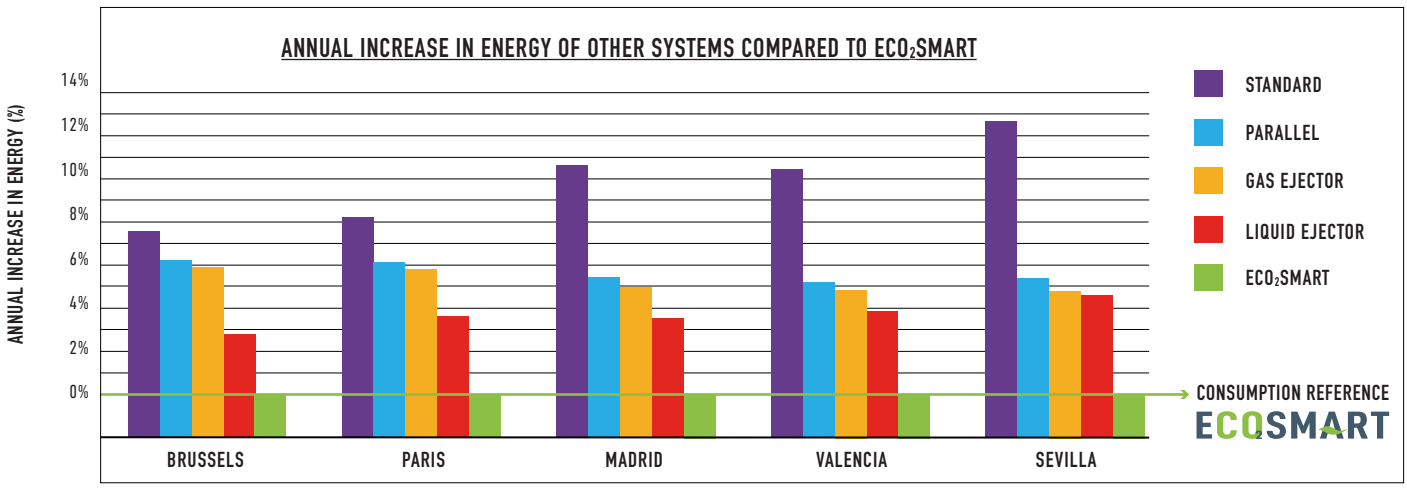
In addition to the **environmental problems** caused by climate change, we could add **rampant inflation**, the **energy crisis** and **the raw materials crisis**, among others. A scenario that directly affects our sector and which is reflected in efficiency problems, increased energy consumption, the need for new investments...

At Tewis we work to solve the problems that affect our customers, creating solutions that take care of their business and also of our environment.

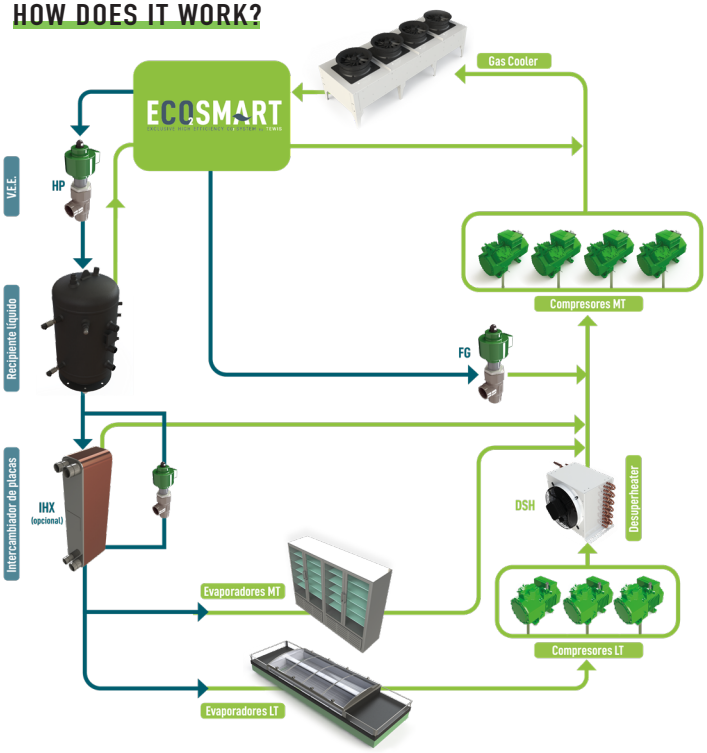
That is why we have developed **ECO$_2$SMART**, **an exclusive system that improves the performance of our CO2 equipment, without investing in other components, and that guarantees lower energy consumption without losing efficiency, even at extremely high temperatures.**

ECO$_2$SMART IS available in our SMART RACK, SMART DUPLEX and INDUSTRIAL ranges

ANNUAL INCREASE IN ENERGY OF OTHER SYSTEMS COMPARED TO ECO$_2$SMART

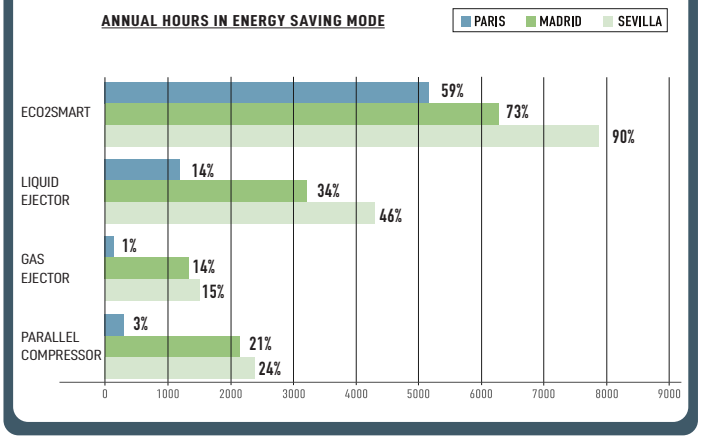


HOW DOES IT WORK?



ENERGY EFFICIENCY AND SAVINGS ENSURED

The ECO2SMART system starts working from an ambient temperature of 10 °C, which is lower than any other solution on the market. In this way, the ECO2SMART system optimises the operation of the refrigeration production for a longer period of time than any other system: it saves energy for more hours per year.



INCREASED EFFICIENCY USING ONLY CO2

ECO_2SMART reduces gas cooler pressure and increases energy efficiency... How? It uses a dedicated compressor that replaces the parallel compressor, acts as a mechanical subcooler and adjusts its suction pressure according to the Gas Cooler output, **using only CO2**.

EFFICIENCY IN EXTREMLY HIGH TEMPERATURES

ECO_2SMART achieves a higher COP in comparison with other alternatives at high temperatures (>40°C). It also maintains better cooling capacity in these conditions.

MECHANICAL SUBCOOLING FROM 10ºC ONWARDS

ECO_2SMART can work as mechanical subcooling in our compressor rack from 10ºC temperature, while other mechanical subcooling systems are only efficient from 25°C. Its design and control allows it to adapt to the widest temperature range on the market.

ECO2 SMART RACK RANGE

BASE CODE	APPLIC.	CAPAC. KW MT* 70 HZ	CAPAC. KW LT* 70 HZ	MT COMPRESSORS	ECO2SMART COMPR.	LT COMPRESSORS	COP	COP IMPROVEMENT (PARALLEL COMP.)
GSR2FJT093YBX	MT	95,39	–	1x 4JTE-15K (V.F.) + 2x 4JTE-15K	1x 4MTE-10K	–	2,34	10,7%
GSR2FJT041YBX	MT	114,67	–	1x 4HTE-20K (V.F.) + 1x 4FTE-20K	1x 4JTE-15K	–	2,61	13,9%
TSR2FJT089YBX	MT+LT	81,48	6,48	1x 4HTE-20K (V.F.) + 1x 4HTE-20K	1x 4MTE-10K	1x 2KSL-1K	2,17	9,3%
TSR2FJT090YBX	MT+LT	68,39	12,7	1x 4JTE-15K (V.F.) + 1x 4HTE-20K	1x 4MTE-10K	1x 2GSL-3K	2,17	12,5%
TSR2FJT490YBX	MT+LT	62,01	14,16	1x 4JTE-15K (V.F.) + 1x 4JTE-15K	1x 4MTE-10K	2x 2JSL-2K	2,04	13,1%
TSR2FJT489YBX	MT+LT	73,76	14,16	1x 4HTE-20K (V.F.) + 1x 4HTE-20K	1x 4MTE-10K	2x 2JSL-2K	2,04	9,4%

ECO2 SMART DUPLEX RANGE

BASE CODE	APPLIC.	CAPAC. KW MT* 70 HZ	CAPAC. KW LT* 70 HZ	MT COMPRESSORS	ECO2SMART COMPR.	LT COMPRESSORS	COP	COP IMPROVEMENT (PARALLEL COMP.)
TSD3JJ_036ZBX	MT+LT	59,53	21,77	1 x 4JTE-15K (V.F. @70 Hz) + 1 x 4HTE-20K	1 x 4MTE-10K (V.F. @70 Hz)	1 x 2GSL-3K (V.F. @70 Hz) + 1 x 2GSL-3K	2,01	12,0%
TSD3KJ_037ZBX	MT+LT	89,65	30,84	1 x 4JTE-15K (V.F. @70 Hz) + 2 x 4HTE-20K	1 x 4JTE-15K (V.F. @70 Hz)	1 x 2GSL-3K (V.F. @70 Hz) + 2 x 2GSL-3K	2,02	11,7%
TSD3KJ_039ZBX	MT+LT	110,54	26,4	1 x 4HTE-20K (V.F. @70 Hz) + 2 x 4HTE-20K	1 x 4HTE-20K (V.F. @70 Hz)	1 x 2JSL-2K (V.F. @70 Hz) + 2 x 2GSL-3K	2,06	12,9%
TSD3KJ_042ZBX	MT+LT	125,31	14,16	1 x 4HTE-20K (V.F. @70 Hz) + 2 x 4HTE-20K	1 x 4HTE-20K (V.F. @70 Hz)	1 x 2JSL-2K (V.F. @70 Hz) + 1 x 2JSL-2K	2,19	13,4%
TSD3KJ_040ZBX	MT+LT	123,13	30,6	1 x 4JTE-15K (V.F. @70 Hz) + 2 x 4FTE-30K	1 x 4HTE-20K (V.F. @70 Hz)	1 x 2FSL-4K (V.F. @70 Hz) + 1 x 2ESL-4K	2,17	11,3%
TSD3KJ_044ZBX	MT+LT	129,46	24,29	1 x 4JTE-15K (V.F. @70 Hz) + 2 x 4FTE-30K	1 x 4HTE-20K (V.F. @70 Hz)	1 x 2GSL-3K (V.F. @70 Hz) + 1 x 2FSL-4K	2,24	11,5%
TSD3MJ_041ZBX	MT+LT	123,82	35,88	1 x 4HTE-20K (V.F. @70 Hz) + 3 x 4HTE-20K	1 x 4HTE-20K (V.F. @70 Hz)	1 x 2GSL-3K (V.F. @70 Hz) + 2 x 2FSL-4K	2,12	10,6%
TSD3KJ_045ZBX	MT+LT	129,88	30,84	1 x 4HTE-20K (V.F. @70 Hz) + 2 x 4FTE-30K	1 x 4HTE-20K (V.F. @70 Hz)	1 x 2GSL-3K (V.F. @70 Hz) + 2 x 2GSL-3K	2,19	10,8%
TSD3MJ_046ZBX	MT+LT	179,88	44,96	1 x 4HTE-20K (V.F. @70 Hz) + 3 x 4FTE-30K	1 x 4FTE-30K (V.F. @70 Hz)	1 x 2FSL-4K (V.F. @70 Hz) + 2 x 2ESL-4K	2,17	11,8%
TSD3MJ_047ZBX	MT+LT	188,97	35,88	1 x 4HTE-20K (V.F. @70 Hz) + 3 x 4FTE-30K	1 x 4FTE-30K (V.F. @70 Hz)	1 x 2GSL-3K (V.F. @70 Hz) + 2 x 2FSL-4K	2,23	12,0%

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