

WATER CHILLERS
WITH AIR COOLED CONDENSER



POWERCIAT

ENERGY EFFICIENCY REACHES NEW LEVELS





POWERCAT: THE HIGHLY ENERGY EFFICIENT SOLUTION FOR VERSATILE COOLING

Dedicated to reducing its environmental impact, the new **POWERCAT** range complies with the latest ecodesign regulations, offering increased performance to better meet customer needs. Choose between the POWERCAT Standard, High Efficiency and Premium versions and four acoustic levels for noise-sensitive applications.

5 REASONS TO CHOOSE POWERCAT



HIGH ENERGY EFFICIENCY



ENERGY SAVINGS



TAILORED SOUND LEVELS



SIMPLICITY AS STANDARD



ADVANCED SYSTEM MANAGEMENT



POWERCAT: THE SOLUTION FOR EVERY MARKET NEED



OFFICES



ADMINISTRATION



HEALTHCARE



SHOPPING CENTRES



HOTELS



INDUSTRY







DELIVERING EXCELLENT ENERGY EFFICIENCY

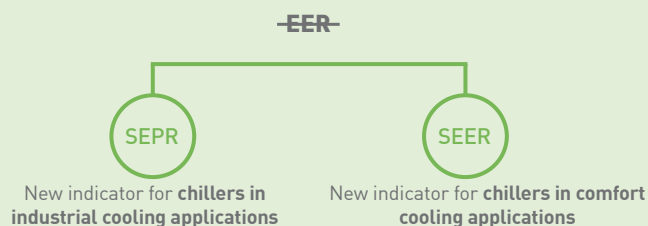
POWERCIAT offers two efficiency versions: High Efficiency and Premium. Available in 18 sizes from 270 to 1500 kW, the range offers air conditioning solutions for all markets and industrial processes and meets the requirements of the new European ecodesign regulation.



 <p>High Efficiency version</p> <p>SEER up to 4.62 SEPR up to 5.83</p> <p>Equipped with a fixed speed screw compressor and variable speed AC fans. An economical solution which enhances seasonal energy efficiency while meeting the new 2021 ecodesign regulation for industrial cooling and comfort cooling applications.</p>	 <p>Premium Version</p> <p>SEER up to 4.77 SEPR up to 6.18</p> <p>Equipped with a fixed speed screw compressor and EC fan technology as standard. This version provides highly economical operation and meets the new 2021 ecodesign regulation for industrial cooling and comfort cooling applications.</p>
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NEW SEASONAL PERFORMANCE INDICATORS

From January 2021, new energy efficiency requirements came into force with the introduction of the latest European ecodesign regulation for chillers. EER full-load efficiency belongs to the past. Now, and in the future, the focus is on seasonal efficiency. The Seasonal Energy Performance Ratio (SEPR) and the Seasonal Energy Efficiency Ratio (SEER) ensure precise evaluations of actual operations throughout the year, including seasonal variations in their measurements.





ENERGY SAVINGS

We know that, today, our customers are using their installations for a range of different purposes. This is why POWERCIAT offers total heat recovery for sizes 808 to 3028, covering numerous applications and enabling our products to deliver substantial energy savings all year round.

With total heat recovery, heat can be reclaimed by the unit for use in hot water production, rather than dissipated through the condenser. Customers see a reduction in the energy consumption of their buildings, lowering their environmental footprint and reducing the need for a separate water heater.

The recovery of the total heating capacity supplied by the chiller enables the unit to produce free additional hot water up to 60°C. This option can be particularly beneficial for applications requiring a large quantity of heat recovery, such as:

- Hotels and leisure centres requiring large quantities of heating even in the summer, for use as domestic hot water, and in kitchens, laundries, etc.
- Industrial applications requiring simultaneous heating and cooling.



TAILORED SOUND LEVELS

Thanks to the noise-reduction technologies used in the new POWERCIAT range, you can guarantee a low noise level and no vibrations.

The range is equipped as standard with the latest generation of low noise fans. Available as standard on the High Efficiency and Premium versions, variable speed fans adapt the air flow of the unit and eliminate start-stop noise during part-load operation. For more acoustic comfort, three additional solutions can be offered for noise sensitive environments:

LOW NOISE



-4 to -6 dB(A)

thanks to the compressor enclosure.

XTRA LOW NOISE



-7 to -10 dB(A)

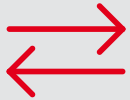
thanks to the compressor enclosure and low-speed fans.

SUPER LOW NOISE



-9 to -12 dB(A)

thanks to the compressor enclosure, low-speed fans, and improved sound insulation for the main sources of noise.



SIMPLICITY RIGHT FROM THE START

The POWERCIAT range puts flexibility and simplicity at the forefront.

Designed to meet all technical requirements

The POWERCIAT range provides an all-in-one solution thanks to its built-in hydraulic module which contains all the water circuit components needed for the system to operate correctly. The hydraulic modules are available in sizes 808 to 1528 and can be equipped with a large choice of pumps:

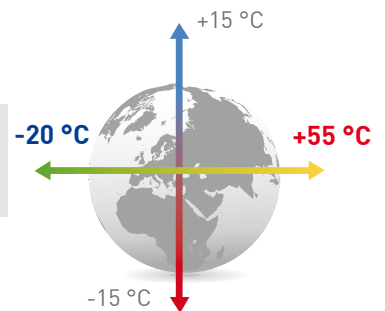
- Single or dual with automatic changeover to the emergency pump,
- Fixed speed high or low pressure.



Designed for a broad range of applications

With an **extended outdoor temperature operating range from -20°C to 55°C**, POWERCIAT adapts perfectly to all climates, in all seasons.

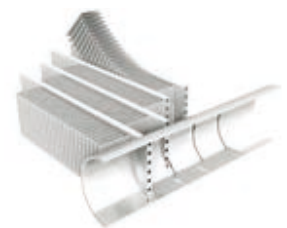
POWERCIAT meets the needs of the tertiary and industrial sectors, providing an **extensive chilled water outlet temperature range of -15 °C (with the brine option) to 15 °C**.



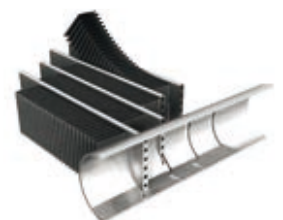
Suitable for use across Europe, Africa and the Middle East, it can be adapted to all environments: the latest generation of micro-channel heat exchanger offers **greater corrosion resistance** when compared with the traditional copper/aluminium coil thanks to the all-aluminium design that eliminates galvanic couples in the coil.

In addition, with two dedicated coating options for aggressive and corrosive environments, POWERCIAT operates smoothly even in the harshest conditions:

- Protect2 treatment is the ideal solution for moderately-corrosive urban environments, doubling resistance to corrosion. The coil is immersed in a bath to ensure 100% coverage and protection, as the aluminium surface undergoes a chemical change by a nano scale conversion process.
- For highly corrosive industrial and marine environments, the Protect4 treatment increases resistance to corrosion fourfold. The coil is e-coated in polymer epoxy and a top layer of anti-UV protection is applied.



PROTECT2
CORROSION RESISTANCE X2



PROTECT4
CORROSION RESISTANCE X4

HIGH ENERGY EFFICIENCY

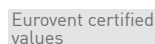
With the new generation POWERCIAT, three efficiency versions are available: POWERCIAT Standard, High Efficiency and Premium. Available in 18 sizes from 270 to 1500 kW, the range offers cooling solutions for all markets and industrial processes.



POWERCIAT LX HE		0808	0908	1008	1108	1358	1528	1858	2008	2158
STANDARD UNIT										
RATED COOLING CAPACITY *	KW	277	300	322	392	444	494	623	676	730
EER*	KW/KW	3,15	3,12	3,08	3,18	3,11	3,08	3,22	3,28	3,10
SEER 12/7 °C COMFORT LOW TEMP.	KWH/KWH	4,47	4,46	4,40	4,33	4,56	4,55	4,55	4,62	4,56
DS COOL 12/7°C	%	176	175	173	170	179	179	179	182	179
SEPR 12/7 °C PROCESS HIGH TEMP.	KWH/KWH	5,70	5,69	5,65	5,78	5,72	5,74	5,68	5,79	5,63
LX HE WITH XTRA & SUPER LOW NOISE OPTION										
RATED COOLING CAPACITY *	KW	271	293	313	384	432	478	607	659	709
EER*	KW/KW	3,13	3,08	3,00	3,16	3,03	2,93	3,13	3,20	2,97
SEER 12/7 °C COMFORT LOW TEMP.	KWH/KWH	4,49	4,48	4,41	4,33	4,56	4,57	4,56	4,62	4,56
DS COOL 12/7°C	%	176	176	173	170	179	180	179	182	179
SEPR 12/7 °C PROCESS HIGH TEMP.	KWH/KWH	5,82	5,88	5,79	5,57	5,70	5,79	5,92	5,93	5,79
LX HE WITH MEDIUM-TEMPERATURE BRINE SOLUTION OPTION										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	2,72	3,02	3,18	2,81	3,51	3,56	3,65	3,67	3,44
LX HE WITH VARIABLE WATER FLOW CONTROL OPTION										
SEER 12/7 °C COMFORT LOW TEMP.	KWH/KWH	4,47	4,47	4,43	4,49	-	-	-	-	-
DS COOL 12/7°C	%	176	176	174	177	-	-	-	-	-
SEPR 12/7 °C PROCESS HIGH TEMP.	KWH/KWH	5,72	5,71	5,68	5,83	-	-	-	-	-
LX HE WITH LOW-TEMPERATURE BRINE SOLUTION OPTION										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	3,29	3,46	3,52	3,26	3,42	3,50	3,50	3,62	3,38
LX HE WITH MEDIUM-TEMPERATURE BRINE SOLUTION, XTRA & SUPER LOW NOISE OPTIONS										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	2,75	3,10	3,29	2,83	3,54	3,67	3,79	3,82	3,55
LX HE WITH VARIABLE WATER FLOW CONTROL & XTRA & SUPER LOW NOISE OPTIONS										
SEER 12/7 °C COMFORT LOW TEMP.	KWH/KWH	4,47	4,47	4,42	4,47	-	-	-	-	-
DS COOL 12/7°C	%	176	176	174	176	-	-	-	-	-
SEPR 12/7 °C PROCESS HIGH TEMP.	KWH/KWH	5,84	5,91	5,82	5,61	-	-	-	-	-
LX HE WITH LOW-TEMPERATURE BRINE SOLUTION, XTRA & SUPER LOW NOISE OPTIONS										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	3,35	3,58	3,71	3,38	3,64	3,61	3,63	3,78	3,50
SOUND POWER LEVELS **										
LX HE	dB(A)	99	99	99	99	101	99	101	99	103
LX HE + LOW NOISE OPTION	dB(A)	93	93	94	95	95	95	97	96	97
LX HE + XTRA LOW NOISE OPTION	dB(A)	87	87	87	90	91	91	93	92	94
LX HE + SUPER LOW NOISE OPTION	dB(A)	-	-	-	-	89	89	91	90	91
STANDARD UNIT										
LENGTH - WIDTH - HEIGHT	mm	3604 2253 2322	3604 2253 2322	3604 2253 2322	4798 2253 2322	4798 2253 2322	4798 2253 2322	7186 2253 2322	7186 2253 2322	7186 2253 2322
REFRIGERANT		R134a								

* In accordance with standard EN 14511-3:2013.

** In dB ref=10⁻¹² W, weighted (A). Declared dual-number noise emission values in accordance with ISO 4871 (with uncertainty of ±3 dB(A)). Measured in accordance with ISO 9614-1 and certified by Eurovent.



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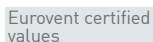


POWERCIAT LX HE

		2308	2528	2628	3028	3428	3828	4008	4408	4608
STANDARD UNIT										
RATED COOLING CAPACITY *	KW	782	825	899	983	1143	1262	1330	1441	1512
EER*	KW/KW	3,10	3,08	3,12	3,17	3,22	3,19	3,16	3,05	3,07
SEER 12/7 °C COMFORT LOW TEMP.	KWH/KWH	4,55	4,56	4,56	4,60	4,58	4,61	4,55	4,55	4,55
DS COOL 12/7°C	%	179	179	179	181	180	181	179	179	179
SEPR 12/7 °C PROCESS HIGH TEMP.	KWH/KWH	NA	5,55	5,54	5,83	5,76	5,71	5,68	5,56	NA
LX HE WITH XTRA & SUPER LOW NOISE OPTION										
RATED COOLING CAPACITY *	KW	757	795	878	969	1113	1226	1290	1392	1464
EER*	KW/KW	2,93	2,89	2,99	3,03	3,11	3,05	2,98	2,82	2,89
SEER 12/7 °C COMFORT LOW TEMP.	KWH/KWH	4,58	4,56	4,57	4,56	4,60	4,62	4,59	4,56	4,55
DS COOL 12/7°C	%	180	179	180	179	181	182	181	179	179
SEPR 12/7 °C PROCESS HIGH TEMP.	KWH/KWH	5,72	5,80	5,76	5,88	5,90	5,81	5,71	5,68	5,52
LX HE WITH MEDIUM-TEMPERATURE BRINE SOLUTION OPTION										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	3,35	3,53	3,44	3,55	3,52	3,47	3,60	3,63	NA
LX HE WITH LOW-TEMPERATURE BRINE SOLUTION OPTION										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	3,34	3,47	3,39	3,47	3,29	2,63	3,45	3,53	NA
LX HE WITH MEDIUM-TEMPERATURE BRINE SOLUTION, XTRA & SUPER LOW NOISE OPTIONS										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	3,57	3,66	3,55	3,78	3,61	3,31	3,22	3,27	3,28
LX HE WITH LOW-TEMPERATURE BRINE SOLUTION, XTRA & SUPER LOW NOISE OPTIONS										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	3,55	3,59	3,47	3,70	3,58	3,44	3,67	3,67	3,45
SOUND POWER LEVELS **										
LX HE	dB(A)	103	101	104	102	103	102	104	104	104
LX HE + LOW NOISE OPTION	dB(A)	98	97	99	98	98	98	100	99	99
LX HE + XTRA LOW NOISE OPTION	dB(A)	94	94	95	94	94	94	99	95	96
LX HE + SUPER LOW NOISE OPTION	dB(A)	92	91	93	92	93	93	97	94	95
STANDARD UNIT										
LENGTH - WIDTH - HEIGHT	mm	7186 2253 2322	7186 2253 2322	8380 2253 2322	9574 2253 2322	11962 2253 2322	11962 2253 2322	11962 2253 2322	11962 2253 2322	11962 2253 2322
REFRIGERANT		R134a								

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HIGH ENERGY EFFICIENCY

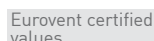


POWERCIAŁ LX XE

		0808	0908	1008	1108	1358	1528	1858	2008	2158
STANDARD UNIT										
RATED COOLING CAPACITY *	KW	277	301	323	392	445	500	623	677	730
EER*	KW/KW	3,21	3,18	3,14	3,23	3,16	3,23	3,27	3,34	3,14
SEER 12/7 °C COMFORT LOW TEMP.	KWH/KWH	4,66	4,64	4,55	4,50	4,62	4,67	4,66	4,77	4,61
IDS COOL 12/7°C	%	183	183	179	177	182	184	183	188	181
SEPR 12/7 °C PROCESS HIGH TEMP.	KWH/KWH	6,12	6,16	6,11	6,06	6,01	6,13	NA	6,18	5,81
LX XE WITH XTRA LOW NOISE OPTION										
RATED COOLING CAPACITY *	KW	271	293	313	384	432	486	607	659	709
EER*	KW/KW	3,17	3,11	3,03	3,20	3,05	3,13	3,16	3,23	2,99
SEER 12/7 °C COMFORT LOW TEMP.	KWH/KWH	4,67	4,67	4,56	4,49	4,59	4,64	4,65	4,78	4,60
IDS COOL 12/7°C	%	184	184	179	176	181	183	183	188	181
SEPR 12/7 °C PROCESS HIGH TEMP.	KWH/KWH	6,09	6,18	6,08	5,88	5,90	6,11	6,07	6,23	5,85
LX XE WITH MEDIUM-TEMPERATURE BRINE SOLUTION OPTION										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	2,86	3,26	3,39	2,97	3,67	3,80	3,84	4,02	3,61
LX XE WITH VARIABLE WATER FLOW CONTROL OPTION										
SEER 12/7 °C COMFORT LOW TEMP.	KWH/KWH	4,59	4,57	4,52	4,61	-	-	-	-	-
IDS COOL 12/7°C	%	180	180	178	181	-	-	-	-	-
SEPR 12/7 °C PROCESS HIGH TEMP.	KWH/KWH	6,13	6,18	6,15	6,10	-	-	-	-	-
LX XE WITH LOW-TEMPERATURE BRINE SOLUTION OPTION										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	3,51	3,72	3,78	3,64	3,62	3,72	3,68	3,96	3,55
LX XE WITH MEDIUM-TEMPERATURE BRINE SOLUTION AND XTRA LOW NOISE OPTIONS										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	2,85	3,25	3,42	2,94	3,64	3,70	3,93	3,97	3,64
LX XE WITH VARIABLE WATER FLOW CONTROL, AND XTRA LOW NOISE OPTIONS										
SEER 12/7 °C COMFORT LOW TEMP.	KWH/KWH	4,59	4,59	4,51	4,58	-	-	-	-	-
IDS COOL 12/7°C	%	181	181	177	180	-	-	-	-	-
SEPR 12/7 °C PROCESS HIGH TEMP.	KWH/KWH	6,11	6,20	6,11	5,91	-	-	-	-	-
LX XE WITH LOW -TEMPERATURE BRINE SOLUTION AND XTRA LOW NOISE OPTIONS										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	3,47	3,74	3,89	3,52	3,75	3,79	3,77	3,93	3,59
SOUND POWER LEVELS **										
LX XE	dB(A)	99	99	99	99	101	99	101	99	103
LX XE + LOW NOISE OPTION	dB(A)	93	93	94	95	95	95	97	96	97
LX XE + XTRA LOW NOISE OPTION	dB(A)	87	87	87	90	91	91	93	92	94
LX HE + SUPER LOW NOISE OPTION	dB(A)	-	-	-	-	89	89	91	90	91
STANDARD UNIT										
LENGTH - WIDTH - HEIGHT	mm	3604 2253 2322	3604 2253 2322	3604 2253 2322	4798 2253 2322	4798 2253 2322	5992 2253 2322	7186 2253 2322	7186 2253 2322	7186 2253 2322
REFRIGERANT										
R134a										

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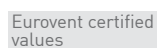


POWER LX XE

		2308	2528	2628	3028	3428	3828	4008	4408	4608
STANDARD UNIT										
RATED COOLING CAPACITY *	KW	782	837	899	982	1143	1262	1330	1441	1512
EER*	KW/KW	3,13	3,27	3,15	3,21	3,28	3,24	3,20	3,08	3,11
SEER 12/7 °C COMFORT LOW TEMP.	KWH/KWH	4,58	4,68	4,61	4,69	4,70	4,72	4,62	4,63	4,62
DS COOL 12/7°C	%	180	184	181	185	185	186	182	182	182
SEPR 12/7 °C PROCESS HIGH TEMP.	KWH/KWH	5,69	5,96	5,84	5,83	5,90	5,87	5,99	5,65	6,16
LX XE WITH XTRA LOW NOISE OPTION										
RATED COOLING CAPACITY *	KW	757	813	872	969	1113	1227	1290	1391	1466
EER*	KW/KW	2,95	3,13	2,98	3,06	3,16	3,06	3,01	2,84	2,91
SEER 12/7 °C COMFORT LOW TEMP.	KWH/KWH	4,57	4,66	4,58	4,67	4,68	4,70	4,57	4,56	4,56
DS COOL 12/7°C	%	180	183	180	184	184	185	180	179	179
SEPR 12/7 °C PROCESS HIGH TEMP.	KWH/KWH	5,85	5,97	5,87	5,91	6,17	6,12	5,98	5,77	5,98
LX XE WITH MEDIUM-TEMPERATURE BRINE SOLUTION OPTION										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	3,63	3,83	3,67	3,66	3,77	3,66	3,70	3,72	3,24
LX XE WITH LOW-TEMPERATURE BRINE SOLUTION OPTION										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	3,61	3,75	3,64	3,58	3,45	3,73	3,59	3,69	3,42
LX XE WITH MEDIUM-TEMPERATURE BRINE SOLUTION AND XTRA LOW NOISE OPTIONS										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	3,68	3,75	3,65	3,72	3,55	3,49	3,41	3,45	3,46
LX XE WITH LOW -TEMPERATURE BRINE SOLUTION AND XTRA LOW NOISE OPTIONS										
SEPR -2/-8°C PROCESS MEDIUM TEMP.	KWH/KWH	3,67	3,69	3,64	3,65	3,69	3,70	3,93	3,87	3,50
SOUND POWER LEVELS **										
LX XE	dB(A)	103	101	104	102	103	102	104	104	104
LX XE + LOW NOISE OPTION	dB(A)	98	97	99	98	98	98	100	99	99
LX XE + XTRA LOW NOISE OPTION	dB(A)	94	94	95	94	94	94	99	95	96
LX HE + SUPER LOW NOISE OPTION	dB(A)	92	91	93	92	93	93	97	94	95
STANDARD UNIT										
LENGTH - WIDTH - HEIGHT	mm	7186 2253 2322	8380 2253 2322	8380 2253 2322	9574 2253 2322	11962 2253 2322	11962 2253 2322	11962 2253 2322	11962 2253 2322	13157 2253 2322
REFRIGERANT		R134a								

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OUR PLATFORM OF **BLUEDGE** **SERVICES** DESIGNED TO MEET YOUR NEEDS

At CIAT, our objective is to develop partnerships with you and provide a high quality service throughout the lifecycle of your HVAC system. We understand your changing needs, and are developing smart services and energy solutions that optimise energy performance and enable savings.

We provide all the support you need to get the most out of your solution:

- Preventive and corrective maintenance
- On-site inspection by experts close at hand
- Online parts shop
- Dedicated hotline for off-site technical support

We also offer you a comprehensive range of smart services:

- Consulting on energy performance upgrades.
- Advanced monitoring and system management solutions
- Modernisation of equipment and systems

PRESENT IN
OVER **50**
countries

over
88
years
OF EXPERIENCE



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