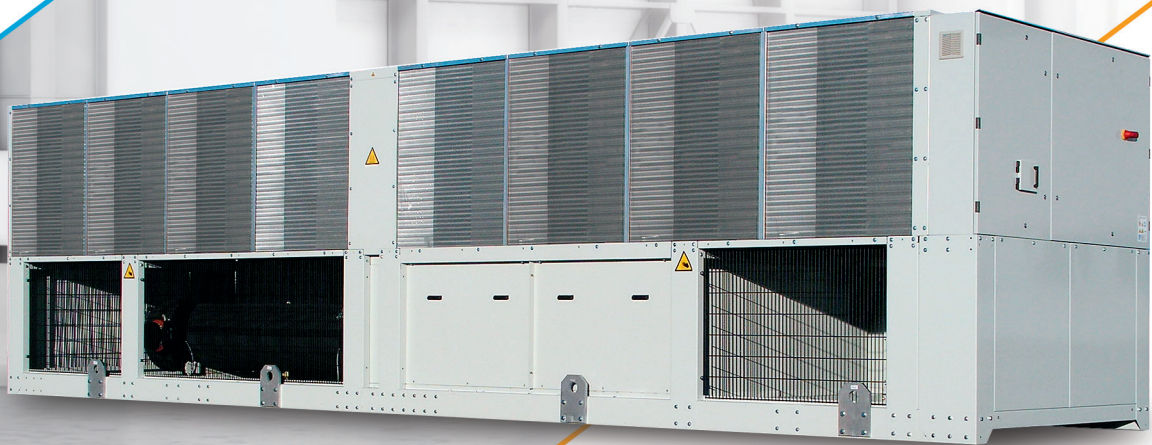


Air Cooled Chillers & Heat Pumps

Z-Power HE


TCAVZ 2770-21290

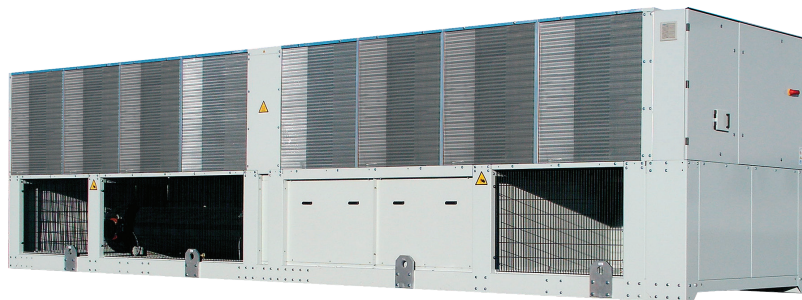


ÜNTES[®]
52
years

Z-POWER HE

TCAVZ 2770-21290

 Cooling capacity: 721,7-1.277,7 kW



- Efficient range in CLASS A with EER>3.2 and ESEER up to 4.45
- Working limits up to 55°C (HT set up)
- Standard electronic expansion valve
- Built-in MASTER/SLAVE management



Packaged air-cooled water chillers with axial fans. Range with semi-hermetic screw compressors and R134a refrigerant gas.

Construction features

- Compressor: high energy efficiency semi-hermetic screw compressor, with star-delta limited start, complete with integral protection, casing heater and refrigerant gas outlet piping shut-off valve.
- Electronic expansion valve: as standard on all models.
- Water side heat exchanger: dry expansion shell and tube exchanger, complete with closed cell polyurethane rubber foam insulation, water flow differential pressure switch and Victaulic fittings.
- Air side heat exchanger: finned coil with copper pipes and aluminium fins.
- Fan: electric helical fans with external rotor, equipped with internal thermal protection, accident protection grilles and proportional electronic device for continuous fan rotation speed regulation (S version only).
- Control: microprocessor electronic control.
- Structure: made of galvanised and painted steel plate with polyester powder coating.
- The unit is also complete with:
 - display of cooling circuit high/low pressure;
 - Master/Slave control up to 4 units in parallel;
 - clock board.

Versions

- B - Standard version (TCAVBZ).
- S - Silenced version with lower speed fans and soundproofed compressor cover (TCAVSZ).
- I - Soundproofed version with soundproofed compressor cover (TCAVIZ).

Models

- TCAVBZ: unit designed for cooling only.
- TCAVSZ: silenced unit designed for cooling only.
- TCAVIZ: soundproofed unit designed for cooling only.

Factory fitted accessories

- PUMP with single or double electric pump, including an automatic pump in standby. The pumps are available in the low or high head versions.
- VPF management.
- Desuperheater.
- 100% Heat recovery unit
- Thermostat with display for heat recovery unit/desuperheater.
- -10°C condensing control (as per standard in S version).
- -15°C condensing control with fans with EC motor.
- Power factor correction capacitors ($\cos\phi > 0.94$).
- Fan and compressor circuit breaker switches.
- Forced limit of power consumption.
- Inlet compressor shut-off valves.
- Low and high pressure gauges for each cooling circuit.
- Bottom compartment protection nets.
- Coil protection nets.
- Linear capacity control compressor.
- Evaporator antifreeze heater and heat recovery exchangers if present.
- Digital input for double set-point
- Compressor oil level sensor.
- Control of min/max power supply voltage.
- 4-20 mA analogue input for shifting set-point.
- Low temperature water production.
- Pre-painted copper/aluminium or copper/copper coils.
- Interfaces for serial communication with other devices.
- Spring anti-vibration mounts.

Separately supplied accessories

- Remote keyboard with display.
- Untes supervisors for unit monitoring and remote management.
- Untes sequencer for integrated management of several water chillers.

TCAVBZ-TCAVSZ-TCAVIZ-TCAVQZ MODEL		2770	2830	2890	2960	21010	21040	
①	Nominal cooling capacity	kW	762,1	828,2	884,0	953,9	1.006,1	1.033,0
①	Nominal cooling capacity	kW	743,7	808,1	861,8	921,3	970,2	1.000,2
①	Nominal cooling capacity	kW	721,7	784,9	841,5	894,3	946,9	972,6
①	E.E.R.		3,31	3,26	3,20	3,32	3,30	3,29
①	E.E.R.		3,19	3,12	3,04	3,12	3,08	3,11
①	E.E.R.		3,07	3,01	2,95	2,99	2,98	3,00
●	E.S.E.E.R.		4,32	4,21	4,17	4,35	4,29	4,27
●	E.S.E.E.R.		4,18	4,05	3,96	4,07	3,99	4,04
●	E.S.E.E.R.		4,41	4,34	4,26	4,38	4,34	4,38
②	IPLV		4,63	4,57	4,51	4,66	4,65	4,63
②	IPLV		4,48	4,39	4,28	4,37	4,33	4,37
②	IPLV		4,65	4,57	4,48	4,61	4,58	4,59
①	Absorbed power	kW	230,24	254,05	276,25	287,32	304,88	313,98
①	Absorbed power	kW	233,13	259,01	283,49	295,29	315,0	321,61
①	Absorbed power	kW	235,08	260,76	285,25	299,10	317,75	324,20
TCAVBZ-TCAVSZ-TCAVQZ MODEL		2770	2830	2890	2960	21010	21040	
③	Sound pressure	dB(A)	67	67	67	68	68	68
③	Sound pressure	dB(A)	61	61	61	62	62	62
③	Sound pressure	dB(A)	57	58	58	59	59	59
④	Sound power	dB(A)	100	100	100	101	101	101
④	Sound power	dB(A)	94	94	94	95	95	95
④	Sound power	dB(A)	90	91	91	92	92	92
	Screw/step compressor	no.	2/6	2/6	2/6	2/6	2/6	2/6
	Circuits	no.	2	2	2	2	2	2
	Electrical supply	V-ph-Hz	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50
DIMENSIONS AND WEIGHTS		2770	2830	2890	2960	21010	21040	
	L - Width	mm	7.680	7.680	7.680	8.980	9.980	
	H - Height	mm	2.430	2.430	2.430	2.430	2.430	
	P - Depth	mm	2.260	2.260	2.260	2.260	2.260	
⑤	TCAVBZ weight	kg	6.070	6.690	7.190	7.820	8.350	
⑤	TCAVIZ-TCAVSZ weight	kg	6.390	7.040	7.540	8.170	8.700	
⑤	TCAVQZ weight	kg	6.598	7.280	7.780	8.410	8.940	

TCAVBZ-TCAVSZ-TCAVIZ-TCAVQZ MODEL		21080	21130	21150	21220	21290	
①	Nominal cooling capacity	kW	1.076,7	1.122,4	1.148,6	1.213,3	1.277,7
①	Nominal cooling capacity	kW	1.048,1	1.096,6	1.112,8	1.173,9	1.235,1
①	Nominal cooling capacity	kW	1.016,9	1.069,8	1.079,7	1.139,4	1.206,0
①	E.E.R.		3,32	3,18	3,38	3,35	3,32
①	E.E.R.		3,19	3,04	3,17	3,09	3,03
①	E.E.R.		3,05	2,94	3,04	2,97	2,93
●	E.S.E.E.R.		4,35	4,16	4,39	4,35	4,33
●	E.S.E.E.R.		4,16	3,98	4,14	3,99	3,94
●	E.S.E.E.R.		4,42	4,23	4,45	4,37	4,33
②	IPLV		4,66	4,46	4,75	4,71	4,69
②	IPLV		4,47	4,26	4,44	4,33	4,26
②	IPLV		4,65	4,45	4,69	4,61	4,56
①	Absorbed power	kW	324,31	352,96	339,82	362,18	384,85
①	Absorbed power	kW	328,56	360,72	351,04	379,90	407,62
①	Absorbed power	kW	333,41	363,88	355,16	383,63	411,60
TCAVBZ-TCAVSZ-TCAVQZ MODEL		21080	21130	21150	21220	21290	
③	Sound pressure	dB(A)	69	69	69	69	69
③	Sound pressure	dB(A)	63	63	63	63	63
③	Sound pressure	dB(A)	59	59	59	60	60
④	Sound power	dB(A)	102	102	102	102	102
④	Sound power	dB(A)	96	96	96	96	96
④	Sound power	dB(A)	92	92	92	93	93
	Screw/step compressor	no.	2/6	2/6	2/6	2/6	2/6
	Circuits	no.	2	2	2	2	2
	Electrical supply	V-ph-Hz	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50
DIMENSIONS AND WEIGHTS		21080	21130	21150	21220	21290	
	L - Width	mm	10.980	10.980	10.980	10.980	10.980
	H - Height	mm	2.430	2.430	2.430	2.430	2.430
	P - Depth	mm	2.260	2.260	2.260	2.260	2.260
⑤	TCAVBZ weight	kg	8.670	8.670	8.690	9.020	9.050
⑤	TCAVIZ-TCAVSZ weight	kg	9.020	9.020	9.310	9.370	9.400
⑤	TCAVQZ weight	kg	9.260	9.260	9.550	9.610	9.640

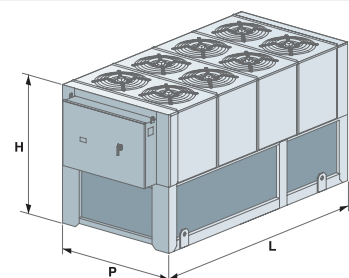
Data at the following conditions:

- ① Air: 35°C - Water: 12/7°C.
- ② IPLV (Itegrated Part Load Value) - ARI standard 550/590.
- ③ In open field (Q = 2) at 10 m from the unit.
- ④ Total sound power level in dB(A) based on measurements carried out in accordance with regulation UNI EN-ISO 9614.
- ⑤ Weight refers to the accessorised unit with RPE - KRP when empty.
- ESEER = (European seasonal EER) - Average European seasonal efficiency.

■ TCAVSZ silenced versions.

■ TCAVQZ super-silenced versions.

Performance according to EN 14511:2013



ÜNTEŞ®

52
years

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