

Z-Flow E TCEVZ 1200-31630



Cooling capacity: 171.9÷1.424.8 kW

√ **Efficient condenserless unit in R134a**

√ **33 sizes in standard and soundproofed versions**

√ **Wide range of standard equipment**

√ **Integrated MASTER/SLAVE control**



Web code: ZFC01

Cooling only condenserless units. Range with semi-hermetic screw compressors and R134a refrigerant gas.

Construction features

- Compressor: high energy efficiency semi-hermetic screw compressor, with star-delta or part-winding start up (depending on models) and 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 (evaporator): dry expansion shell and tube exchanger with counterflow heat exchange, complete with closed cell polyurethane foam rubber insulation, water flow differential pressure switch and Victaulic fittings.
- Control: microprocessor electronic control.
- Structure: made of galvanised and painted steel plate with polyester powder coating.
- The unit is also complete with:
 - clock board;
 - display of cooling circuit high/low pressure;
 - Master/Slave control up to 4 units in parallel.

Versions

- B -Standard version (TCEVBZ).
- I -Soundproofed version with soundproofing compressor lining (TCEVIZ).

Models

- TCEVBZ: unit designed for cooling only.
- TCEVIZ: soundproofed unit designed for cooling only.

Factory fitted accessories

- Power factor correction capacitors ($\cos\phi > 0.94$).
- Circuit breaker switches.
- Forced limit of power consumption.
- Soft starter.
- Inlet compressor shut-off valves
- Linear capacity control compressors (50-100 % for each compressor).
- Evaporator antifreeze heater.
- Digital input for double set-point
- Compressor oil level sensor.
- Control of min/max power supply voltage.
- 4-20 mA analogue signal for shifting set-point.
- Interfaces for serial communication with other devices.
- Spring anti-vibration mounts.
- Rubber anti-vibration mounts.

Separately supplied accessories

- Remote keypad with display.
- Rhoss supervisors for unit monitoring and remote management.
- Rhoss sequencer for integrated management of multiple chillers.

Technical Data

TCEVBZ-TCEVIZ MODEL		1200	1230	1280	1310	1350	1410	1460	1530
❶ Nominal cooling capacity	kW	171,9	190,8	238,1	260,4	300,6	346,2	399,7	446,4
❷ E.E.R.		3,4	3,28	3,3	3,3	3,41	3,3	3,3	3,3
❸ Absorbed power	kW	50,5	58,1	72,2	79,0	88,1	104,0	122,2	135,3
❹ Sound power	dB(A)	94	94	97	97	97	97	97	98
❺ Sound power	dB(A)	92	92	95	95	95	95	95	96
Screw/step compressor	no.	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3
Circuits	no.	1	1	1	1	1	1	1	1
Electrical supply	V-ph-Hz	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50
TCEVBZ DIMENSIONS AND WEIGHTS		1200	1230	1280	1310	1350	1410	1460	1530
L - Width	mm	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46
H - Height	mm	1.58	1.58	1.58	1.58	1.66	1.66	1.66	1.76
P - Depth	mm	1	1	1	1	1	1	1	1
❶ TCEVBZ Weight	kg	1.078	1.093	1.41	1.414	1.557	2.032	2.038	2.252
❷ TCEVIZ Weight	kg	1.333	1.348	1.665	1.669	1.812	2.287	2.293	2.507

TCEVBZ-TCEVIZ MODEL		1590	2400	2420	2440	2510	2560	2600	2630
❶ Nominal cooling capacity	kW	508,9	335,8	356,6	372,1	431,9	473,4	506,4	529,3
❷ E.E.R.		3,4	3,33	3,29	3,22	3,31	3,28	3,34	3,34
❸ Absorbed power	kW	149,7	100,7	108,3	115,7	130,6	144,4	151,5	158,4
❹ Sound power	dB(A)	98	97	97	97	99	99	99	99
❺ Sound power	dB(A)	96	95	95	95	97	97	97	97
Screw/step compressor	no.	1/3	2/6	2/6	2/6	2/6	2/6	2/6	2/6
Circuits	no.	1	2	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	400-3-50	400-3-50
TCEVBZ DIMENSIONS AND WEIGHTS		1590	2400	2420	2440	2510	2560	2600	2630
L - Width	mm	3.46	3.78	3.88	3.88	4.04	4.04	4.04	4.04
H - Height	mm	1.76	1.42	1.42	1.42	1.61	1.61	1.61	1.61
P - Depth	mm	1	1.3	1.3	1.3	1.3	1.3	1.3	1.3
❶ TCEVBZ Weight	kg	2.281	1.797	1.811	1.819	2.311	2.629	2.637	2.638
❷ TCEVIZ Weight	kg	2.536	2.227	2.241	2.249	2.741	3.059	3.067	3.068

TCEVBZ-TCEVIZ MODEL		2680	2710	2750	2790	2880	2930	21030	21110
❶ Nominal cooling capacity	kW	581,4	614,1	647,8	681,6	753,9	801,4	896,1	959,4
❷ E.E.R.		3,46	3,48	3,37	3,28	3,33	3,28	3,47	3,54
❸ Absorbed power	kW	168,0	176,6	192,1	207,6	226,5	244,4	257,9	271,0
❹ Sound power	dB(A)	99	99	99	99	99	99	99	99
❺ Sound power	dB(A)	97	97	97	97	97	97	97	97
Screw/step compressor	no.	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6
Circuits	no.	2	2	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	400-3-50	400-3-50
TCEVBZ DIMENSIONS AND WEIGHTS		2680	2710	2750	2790	2880	2930	21030	21110
L - Width	mm	4.04	4.04	4.12	4	4	4	4	4
H - Height	mm	1.61	1.61	1.61	1.48	1.56	1.56	1.6	1.6
P - Depth	mm	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
❶ TCEVBZ Weight	kg	2.698	2.733	3.176	3.631	3.844	3.859	3.936	3.993
❷ TCEVIZ Weight	kg	3.128	3.163	3.606	4.061	4.272	4.289	4.366	4.423

TCEVBZ-TCEVIZ MODEL		21180	21260	31300	31350	31390	31460	31520	31590
❶ Nominal cooling capacity	kW	1.027,8	1.101,5	1.129,6	1.178,3	1.227,0	1.287,5	1.340,1	1.388,5
❷ E.E.R.		3,6	3,68	3,6	3,55	3,51	3,51	3,52	3,53
❸ Absorbed power	kW	285,5	299,4	314,1	331,8	349,5	367,1	380,4	393,4
❹ Sound power	dB(A)	99	99	101	101	101	102	102	102
❺ Sound power	dB(A)	97	97	99	99	99	100	100	100
Screw/step compressor	no.	2/6	2/6	3/9	3/9	3/9	3/9	3/9	3/9
Circuits	no.	2	2	3	3	3	3	3	3
Electrical supply	V-ph-Hz	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50
TCEVBZ DIMENSIONS AND WEIGHTS		21180	21260	31300	31350	31390	31460	31520	31590
L - Width	mm	4	4	4.94	4.94	4.94	4.94	4.94	4.94
H - Height	mm	1.6	1.6	1.58	1.58	1.58	1.58	1.62	1.62
P - Depth	mm	1.3	1.3	2.1	2.1	2.1	2.1	2.1	2.1
❶ TCEVBZ Weight	kg	4.024	4.044	5.555	5.57	5.585	5.6	5.678	5.71
❷ TCEVIZ Weight	kg	4.454	4.474	6.155	6.17	6.185	6.2	6.278	6.31

TCEVBZ-TCEVIZ MODEL		31630	
❶ Nominal cooling capacity	kW	1.424,8	
❷ E.E.R.		3,51	
❸ Absorbed power	kW	406,4	
❹ Sound power	dB(A)	102	

● Sound power	dB(A)	100
Screw/step compressor	no.	3/9
Circuits	no.	3
Electrical supply	V-ph-Hz	400-3-50
TCEVBZ DIMENSIONS AND WEIGHTS		31630
L - Width	mm	4.94
H - Height	mm	1.62
P - Depth	mm	2.1
● TCEVBZ Weight	kg	5.79
● TCEVIZ Weight	kg	6.39

Data at the following conditions:

- Chilled water: 12/7°C - Condensing temperature: 50°C (dew point).
- Total sound power level in dB(A) based on measurements carried out in accordance with regulation UNI EN-ISO 9614.
- Weight without load refers to fully accessorised unit.
- TCEVIZ soundproofed version.



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