

# 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

- VPF control.
- 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
① Nominal cooling capacity	kW	171,9	190,8	238,1	260,4	300,6	346,2	399,7	446,4
① E.E.R.		3,4	3,28	3,3	3,3	3,41	3,3	3,3	3,3
① Absorbed power	kW	50,5	58,1	72,2	79	88,1	104	122,2	135,3
② Sound power	dB(A)	94	94	97	97	97	97	97	98
② Sound power	dB(A)	92	92	95	95	95	95	95	96
Screw/step compressor	n.	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3
Circuits	n.	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	3470	3450	3450	3450	3500	3500	3480	3490
H - Height	mm	1580	1580	1580	1580	1660	1660	1660	1760
P - Depth	mm	1000	1000	1000	1000	1000	1000	1000	1000
① TCEVBZ Weight	kg	1078	1093	1410	1414	1557	2032	2038	2252
② TCEVIZ Weight	kg	1333	1348	1665	1669	1812	2287	2293	2507

TCEVBZ-TCEVIZ MODEL		1590	2400	2420	2440	2510	2560	2600	2630
① Nominal cooling capacity	kW	508,9	335,8	356,6	372,1	431,9	473,4	506,4	529,3
① E.E.R.		3,4	3,33	3,29	3,22	3,31	3,28	3,34	3,34
① Absorbed power	kW	149,7	100,7	108,3	115,7	130,6	144,4	151,5	158,4
② Sound power	dB(A)	98	97	97	97	99	99	99	99
② Sound power	dB(A)	96	95	95	95	97	97	97	97
Screw/step compressor	n.	1/3	2/6	2/6	2/6	2/6	2/6	2/6	2/6
Circuits	n.	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	3500	3780	3830	3850	4040	4040	4040	4040
H - Height	mm	1760	1420	1420	1420	1610	1610	1610	1610
P - Depth	mm	1000	1300	1300	1300	1300	1300	1300	1300
① TCEVBZ Weight	kg	2281	1797	1811	1819	2311	2629	2637	2638
② TCEVIZ Weight	kg	2536	2227	2241	2249	2741	3059	3067	3068

TCEVBZ-TCEVIZ MODEL		2680	2710	2750	2790	2880	2930	21030	21110
① Nominal cooling capacity	kW	581,4	614,1	647,8	681,6	753,9	801,4	896,1	959,4
① E.E.R.		3,46	3,48	3,37	3,28	3,33	3,28	3,47	3,54
① Absorbed power	kW	168	176,6	192,1	207,6	226,5	244,4	257,9	271
② Sound power	dB(A)	99	99	99	99	99	99	99	99
② Sound power	dB(A)	97	97	97	97	97	97	97	97
Screw/step compressor	n.	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6
Circuits	n.	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	4040	4040	4120	4000	4000	4000	4000	4000
H - Height	mm	1610	1610	1610	1480	1560	1560	1600	1600
P - Depth	mm	1300	1300	1300	1300	1300	1300	1300	1300
① TCEVBZ Weight	kg	2698	2733	3176	3631	3844	3859	3936	3993
② TCEVIZ Weight	kg	3128	3163	3606	4061	4272	4289	4366	4423

TCEVBZ-TCEVIZ MODEL		21180	21260	31300	31350	31390	31460	31520	31590
① Nominal cooling capacity	kW	1.027,80	1.101,50	1.129,60	1.178,30	1.227,00	1.287,50	1.340,10	1.388,50
① E.E.R.		3,6	3,68	3,6	3,55	3,51	3,51	3,52	3,53
① Absorbed power	kW	285,5	299,4	314,1	331,8	349,5	367,1	380,4	393,4
② Sound power	dB(A)	99	99	101	101	101	102	102	102
② Sound power	dB(A)	97	97	99	99	99	100	100	100
Screw/step compressor	n.	2/6	2/6	3/9	3/9	3/9	3/9	3/9	3/9
Circuits	n.	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	4000	4000	4940	4940	4940	4940	4940	4940
H - Height	mm	1600	1600	1580	1580	1580	1580	1620	1620
P - Depth	mm	1300	1300	2100	2100	2100	2100	2100	2100
① TCEVBZ Weight	kg	4024	4044	5555	5570	5585	5600	5678	5710
② TCEVIZ Weight	kg	4454	4474	6155	6170	6185	6200	6278	6310

TCEVBZ-TCEVIZ MODEL									31630
① Nominal cooling capacity	kW								1.424,80
① E.E.R.									3,51
① Absorbed power	kW								406,4
② Sound power	dB(A)								102
② Sound power	dB(A)								100
Screw/step compressor	n.								3/9
Circuits	n.								3
Electrical supply	V-ph-Hz								400-3-50
TCEVBZ DIMENSIONS AND WEIGHTS									31630
L - Width	mm								4940
H - Height	mm								1620
P - Depth	mm								2100
① TCEVBZ Weight	kg								5790
② TCEVIZ Weight	kg								6390

Data at the following conditions:

- ① Chilled water: 12/7°C - Condensing temperature: 50°C (dew point).
- ② 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.

RHOSS S.P.A. declines all responsibility for possible mistakes in this document and reserves the right to alter the features of their products without notice.

Rhoss S.p.A.  
Via Oltre Ferrovia, 32  
33033 Codroipo (UD) - italy  
tel. +39 0432 911611 - rhoss@rhoss.it  
www.rhoss.it www.rhoss.com



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