

Заказчик Ilya Nikolaev (Rusklimat)

Дата 25.06.2021

Ссылка:

ПОДБОР

Серия	Z-Flow E
	TCEVBZ 1200-31630
Модель	TCEVBZ 21030
Webcode	ZFC01



Изображения носят исключительно индикативный характер и могут не представлять в точности модель и компоновку объекта данного документа.

ОПИСАНИЕ КОНСТРУКЦИИ

Cooling only condenserless unit. Range with semi-hermetic screw compressors and R134a refrigerant gas.
B - Standard version

POWER SUPPLY: 400V/3PH/50HZ

ANTIVIBRATIONS MOUNTINGS: SAM1 - SPRING ANTIVIBR. MOUNT

BMS CONNECTION: SS-RS485 SERIAL INTERFACE MODB

PACKAGING TYPE: PROTECTIVE PACKAGING

- Support structure made of galvanised sheet steel with polyester powder coating.
- Semi-hermetic high efficiency screw compressors, specifically developed to operate with R134a coolant gas. Part-winding or star-delta compressor start-up (depending on the models - see technical specifications tab.) with reduced starting current by means of an equaliser valve and load partialisation, complete with integral protection and crankcase heater. The compressors are also equipped with cut-off valves on the refrigerant discharge pipe.
- Partialisation of cooling capacity of the chiller.
- Utility side pipe unit exchanger (evaporator) with dry heat expansion in countercurrent type plates. It is made of carbon steel with copper pipes and internal helical scoring, complete with differential pressure switch, air vent valve, water drain valve, Victaulic water connections and closed-cell polyurethane foam insulation with protection film against U.V.A. rays.
- Cooling circuit made with annealed copper pipe and welded with valuable alloys or A106 steel pipes, complete with: cartridge dryer filter, load connections, high pressure switch with manual reset, gas passage and humidity presence indicator, electronic expansion valve, valve on the liquid line, safety valves on the high/low pressure sections, intake line insulation made of closed-cell polyurethane foam with protective film against UVA rays, cooling connections (flange type with shut-off valve or solder type) for connection to a remote condenser.
- Ecological R134A refrigerant fluid load.
- Units are pre-filled with nitrogen (N2) to protect the cooling circuit. The installer must add R134a coolant and POE oil according to length of the cooling lines.

ЭЛЕКТРИЧЕСКАЯ ПАНЕЛЬ

- Electric control board (IP54) in compliance with EN 60204-1/IEC 60204-1 Standards, in waterproof casing complete with:
 - electrical wiring arranged for power supply 400V-3ph-50Hz;
 - numbered electric cables;
 - transformer for auxiliary circuit;
 - 230V-1ph-50Hz auxiliary power supplies;
 - compressor protection phase monitor;
 - power contactors;
 - remote controls: remote on/off (SCR), remote summer/winter (SEI in HPH version), forced unit discharge (FDL), compressor block light (LBG 1-2-3) and compressor operation lights (LFC1-2-3);
 - manoeuvre isolator switch, with door interlocking isolator;
 - automatic protection switch on auxiliary circuit;
 - protection fuses for each compressor (optional is the version with circuit breaker switches protecting each compressor).
- Programmable electronic board with microprocessor, controlled from the keyboard inserted in the machine, remote controllable up to 50 metres (KTR accessory).
- The electronic board performs the following functions:
 - adjusts and controls the temperature settings of the water exiting the machine;
 - safety timers control; of the operating hour meter of every compressor; of the automatic inversion of the compressor intervention sequence; of the circulation pump or utility service (both on the evaporator side and the condenser side); of the electronic anti-freeze protection; of the capacity steps, of the functions that adjust the intervention mode of the individual components of the machine;
 - management of the electronic expansion valve (EEV) with possibility of reading and displaying the intake temperature, the evaporation pressure,

overheating and open state of the valve;

- management of condensation via 0-10V signal operated by external devices (variable speed pump or water flow regulation valve);
- display of the operating status of the individual cooling circuit;
- high and low pressure;
- opening status of the electronic thermostatic valve (EEV);
- superheating value;
- value of the valve regulation analogue signal or inverter pump on condenser side (condensation regulation);
- circuit status (ON, OFF, ALARM, SUMMER, WINTER);
- compressor status (ON, OFF, ALARM, timing phase);
- compressor regulation status (active partialisation level).

○ Multi-language management of displays.

○ Management of alarms log. In particular, for every alarm, the following are memorised:

- date and time of intervention;
- alarm code and description;
- inlet/outlet water temperatures values when the alarm intervened;
- the condensation/evaporation pressure values at the time of the alarm;
- status of the compressors and electronic thermostatic valve (EEV) at the time of the alarm.

○ Advanced functions:

- evaporator pump control KPE. For the unit to operate properly, activation of the recovery pump, by the installer, must be controlled by means of a specific discrete output provided in the board on the unit;
- set-up for serial connection (SS/KRS485, FTT10/KFTT10, BE/KBE, BM/KBM, KUSB accessory);
- possibility to have a digital input for remote management of double setpoint (DSP, not active in presence of CS accessory);
- possibility to have an analogue input for the shifting set-point via a 4-20mA remote signal (CS, not active in presence of DSP accessory);
- management of time bands and operation parameters with the possibility of daily/weekly functioning programs;
- check-up and monitoring of scheduled maintenance status;
- computer-assisted unit testing;
- self-diagnosis with continuous monitoring of the unit functioning status;
- MASTER/SLAVE management logic integrated in single systems (SIR - Sequenziatore Integrato Rhoss - Rhoss Integrated Sequencer) -Refer to the specific section for more details.

ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ - TCEVBZ 21030

Заданные параметры

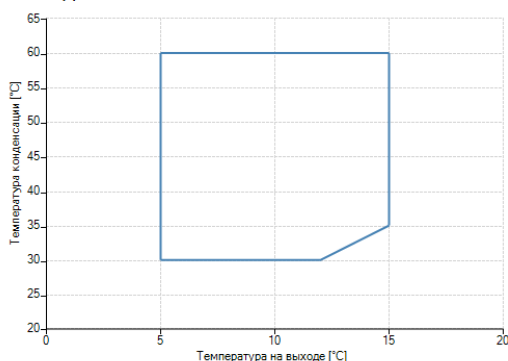
Охлаждение		
Температура на входе в теплообменник на стороне потребителя	[°C]	12
Температура на выходе из теплообменника на стороне потребителя	[°C]	7
Температура конденсации	[°C]	54
Флюид в основном теплообменнике		Вода
Коэффициент загрязнения	[m ² °C/kW]	0

Характеристики

Согласно условиям проекта:		
Охлаждение		
Производительность (gross)	[kW]	851,9
Потребляемая мощность (gross)	[kW]	277,2
Source side power (gross)	[kW]	1120,8
EER (gross)		3,07
Производительность (UNI EN 14511/2018)	[kW]	850,3
EER (UNI EN 14511/2018)		3,05

Предельные условия эксплуатации

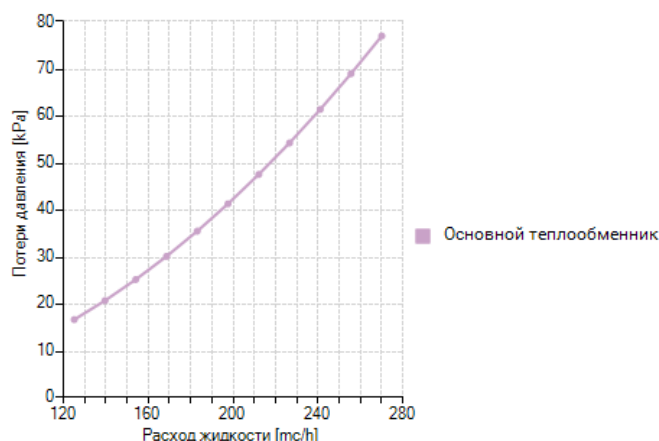
Охлаждение



Основной теплообменник

Расход жидкости	[m ³ /h]	146,5
Потери давления	[kPa]	23

Потери давления



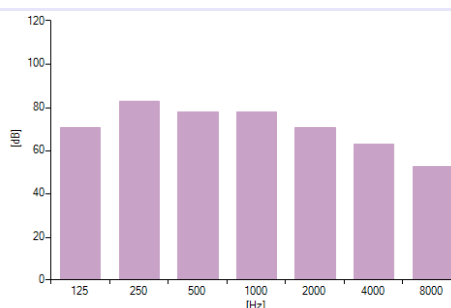
Конфигурация агрегата

Хладагент (5)	R134a
Global Warming Potential (GWP)	1450
Компрессоры	Винтовой
Количество масла	[kg] 2x35
Кол-во компрессоров	2
Кол-во холодильных контуров	2
Кол-во ступеней производительности	6

Шумовые характеристики

Звуковая мощность (1)	[dBA] 99
Звуковое давление (1m) (2)	[dBA] 81

[Hz]	[dB]
125	71
250	83
500	78
1000	78
2000	71
4000	63
8000	53



Параметры тока

Полная потребляемая мощность (3)	[kW] 277,2
Мощность питания	[V-ph-Hz] 400-3-50
Дополнительное питание	[V-ph-Hz] 230-1-50
Номинальный ток (4)	[A] 423
Максимальный ток	[A] 580
Пусковой ток	[A] 857
Пусковой ток SFS	[A] 1383

Размеры и масса

Ширина	[mm] 4000
Высота	[mm] 1600
Глубина	[mm] 1300
Пустой вес (6)	[kg] 3936

RHOSS reserves the right to make the changes it deems necessary to improve / update the data at any time and without prior notice.

Note

- | | |
|-----|--|
| (1) | Соответствующая норма UNI EN-ISO 9614 |
| (2) | Соответствующая норма UNI EN-ISO 3744 |
| (3) | Тотальная потребляемая мощность (компрессоры, вентиляторы и насос, если выбран) |
| (4) | Соответствует номинальным условиям: Tc: 50°C Twe:12/7°C |
| (5) | Регулируемый транспорт ADR UN 2857 |
| (6) | Указанный вес является ориентировочным и может меняться в зависимости от выбранных опций |