Trane Rtab 214

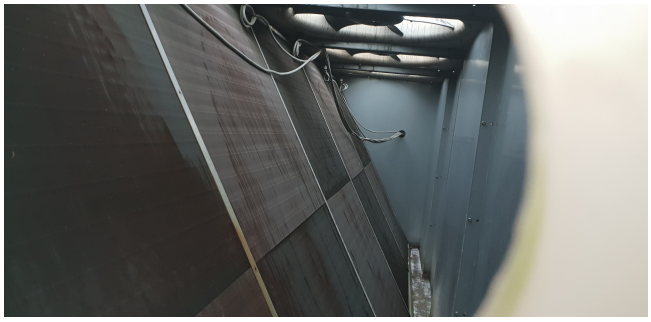
Specifications

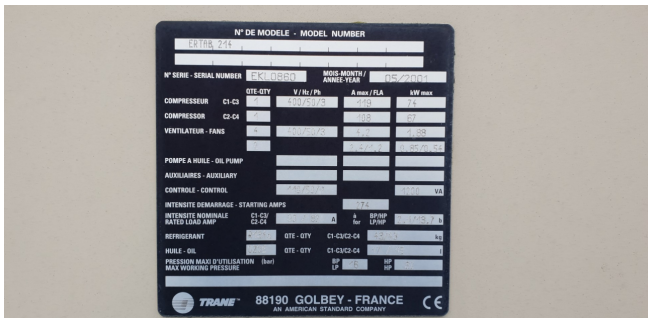
Brand	Trane
Type	Rtab 214
Product type	Air Cooled Chiller
Capacity kW	285
Capacity Tons	81
Refrigerant	Freon
Refrigerant Type	r134a
Weight in kg.	4700
Compressor(s) type & model	screw, 2pc, CHHB085DNL0N07a -
Remarks |	yob 2001
Stock	1

Description

Used Trane Rtab 214

Used, well maintained Trane Rtab 214 air-cooled water chiller // 2 pc. semi-hermetic direct-drive helical rotary compressors CHHB models // freon r134a // DN 150 water connection // 6 fans 915/730 RPM// Oil sump heater // Choosing HOSBV means buying with warranty. We perform a industrial cleaning and rust spots will be covered. Also, we can arrange your shipment.




N° DE MODELE - MODEL NUMBER
N° SERIE - SERIAL NUMBER
MOIS-MONTH / ANNEE-YEAR
COMPRESSEUR
COMPRESSOR
VENTILATEUR - FANS
POMPE A HUILE - OIL PUMP
AUXILIAIRES - AUXILIARY
CONTROLE - CONTROL
INTENSITE DEMARRAGE - STARTING AMPS
REFRIGERANT
HUILE - OIL
TRANE
88190 GOLBEY - FRANCE
AN AMERICAN STANDARD COMPANY


SERIAL NUMBER
YEAR
2001
MODEL NUMBER
ELECTRICAL POWER (kW)
R134A


TRANE
HELIROTOR™
COMPRESSOR
YEAR
2001
VOLTAGE RANGE
ELECTRICAL POWER (kW)
R134A

Table 1C : General data on units R134a (standard units)

Model RTAA		213	214	215	216	217	322	324	328	430	432	434
Nominal Cooling Capacity (1)	(kW)	287	320	331	378	406	428	482	537	603	649	717
Number of Circuit		2	2	2	2	2	2	2	2	2	2	2
Number of Compressor		1/1	1/1	1/1	1/1	1/1	2/1	2/1	2/1	2/2	2/2	2/2
Maximum FLA 400/50/3 (2)	(A)	234	245	256	283	309	303	413	460	513	565	616
Number of fans		8	8	8	9	10	12	14	16	16	18	20
Fan Motor Size (3)	(kW)	1,21/0,85	1,21/0,85	1,21/0,85	1,21/0,85	1,21/0,85	1,21/0,85	1,21/0,85	1,21/0,85	1,21/0,85	1,21/0,85	1,21/0,85
Fan Speed (3)	(rpm)	730/680	730/680	730/680	730/680	730/680	730/680	730/680	730/680	730/680	730/680	730/680
Oil sump heater	(W)	150/150	150/150	150/150	150/150	150/150	300/150	300/150	300/150	300/300	300/300	300/300
Evaporator Model		ES120	ES140	ES140	ES170	ES170	ES225	ES225	ES250	ES300	ES300	ES340
Evaporator Heater Cable	(W)	400	400	400	400	400	400	400	400	400	400	400
Evaporator Water Connection	(mm)	DN150	DN150	DN150	DN150	DN150	vic 6"	vic 6"	vic 6"	vic 6"	vic 6"	vic 6"
Evaporator Water Volume	(l)	106	270	270	222	222	442	442	415	665	665	610
Oil Charge	(l)	15/15	17/17	17/17	20/17	20/20	30/17	34/20	40/20	34/34	40/34	40/40
R134a Opearting Charge	(kg)52/52	62/62	62/62	64/64	64/64	104/59	129/59	132/61	128/128	128/128	132/132	

Model RTAB		108	109	110	207	209	210	211	212	213	214
Nominal Cooling Capacity (1)		137	153	180	118	146	165	180	215	261	285
Number of Circuit		1	1	1	2	2	2	2	2	2	2
Number of Compressor		1	1	1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Maximum FLA 400/50/3 (2)	(A)	119	133	159	121	137	150	164	196	239	250
Number of fans		4	5	6	4	4	5	6	6	6	6
Fan Motor Size (3)	(kW)	1,88/1,88	1,88/1,88	1,88/1,88	1,88/1,88	1,88/1,88	1,88/1,88	1,88/1,88	1,88/1,88	1,88/1,21	1,88/1,21
Fan Speed (3)	(rpm)	915/915	915/915	915/915	915/915	915/915	915/915	915/915	915/915	915/730	915/730
Oil sump heater	(W)	150	150	150	150/150	150/150	150/150	150/150	150/150	150/150	150/150
Evaporator Model		ES71	ES81	ES81	587-2	ES70	ES80	ES80	ES100	ES120	ES140
Evaporator Heater Cable	(W)	200	200	200	200	200	200	200	200	200	200
Evaporator Water Connection	(mm)	DN125	DN125	DN125	DN125	DN125	DN125	DN125	DN125	DN125	DN150
Evaporator Water Volume	(l)	145	134	118	95	145	134	134	118	106	270
Oil Charge	(l)	16	16	16	8/8	8/8	8/8	8/8	8/8	15/15	15/15
R134a Opearting Charge	(kg) 42	44	48	20/20	21/21	22/22	22/22	28/28	40/40	43/43	

Model RTAB		215	216	217	220	324	328	430	432	434
Nominal Cooling Capacity (1)		301	337	364	418	478	543	601	648	715
Number of Circuit		2	2	2	2	2	2	2	2	2
Number of Compressor		1/1	1/1	1/1	2/2	2/1	2/1	2/2	2/2	2/2
Maximum FLA 400/50/3 (2)	(A)	261	289	317	379	412	464	515	567	619
Number of fans		6	7	8	8	8	9	10	11	12
Fan Motor Size (3)	(kW)	1,88/1,21	1,88/1,21	1,88/1,21	1,88/1,21	1,88/1,21	1,88/1,21	1,88/1,21	1,88/1,21	1,88/1,21
Fan Speed (3)	(rpm)	915/730	915/730	915/730	915/730	915/730	915/730	915/730	915/730	915/730
Oil sump heater	(W)	150/150	150/150	150/150	300/300	300/150	300/150	300/300	300/300	300/300
Evaporator Model		ES140	ES170	ES170	ES200	ES225	ES250	ES300	ES300	ES340
Evaporator Heater Cable	(W)	200	200	200	200	200	200	200	200	200
Evaporator Water Connection	(mm)	DN150	DN150	DN150	DN150	vic 6"	vic 6"	vic 6"	vic 6"	vic 6"
Evaporator Water Volume	(l)	270	222	222	204	442	415	665	665	610
Oil Charge	(l)	17/17	17/20	20/20	16/16	34/20	40/20	34/34	40/34	40/40
R134a Opearting Charge	(kg)50/50	53/53	53/53	80/80	72/44	74/45	77/72	77/72	80/75	

Note :
(1) Operating conditions: chilled water 12/7°C, 35°C ambient, fouling factor = 0.044 m² K/kW
(2) To be used for sizing the power supply cables
(3) LN/SQ units (Except RTAB 213 to 434: Standard units/LN units)

Figure 11B - Typical CHHB compressor

Oil system operation

Overview

Oil that collects in the bottom of the oil separator is at condensing pressure during compressor operation ; therefose, oil is constantly moving to lowwer pressure areas.
As the oil leaves the separator, it passes through the oil cooler at the top of the condensing coils. It then goes through the service valve and filter. At this point, some of the oil is used to control the slide valve movement in the compressor, via the load/unload solenoids. The remaining oil passes through the oil master solenoid valve and performs the functions of compressor bearing lubrication and compressor oil injection. If the compressor stops for any reason, the master solenoid valve closes, isolating the oil charge in the separator and oil cooler during «off» periods.
To ensure proper lubrication and minimize refrigerant condensation in the compressor, a heater is mounted on the bottom of the compressor housing. A signal from the UCM energizes this heater during the compressor «Off» cycle to keep refrigerant from condensing in the compressor. The heater element is continiuously energized.

Oil separator

The mixture oil + refrigerant enters tangentially the oil separator and swirls around. Thus, the oil (which is denser) is thrown to the outside wall and flows to the bottom of the separator. It then goes to the cooling circuit. The gas exits out the middle part of the separator and is discharged into the condensing coils. (Figure 12).

Compressor bearing oil supply

Oil is injected into the bearing housings located at each end of both the male and female rotors. Each bearing housing is vented to compressor suction, so that oil leaving the bearings returns through the compressor rotors to the oil separator.

Compressor rotor oil supply

Oil flows through this circuit directly from the master solenoid valve, through the oil filter to the top of the compressor rotor housing. There, it is injected along the top of the rotors to seal clearance spaces between the rotors and the compressor housing and to lubricate the rotors.

Figure 12 - Oil separator