

ITEM NR.		ITEM NAME		UNIT		TYPE		NUMBER OF ITEMS FITTED		ORIGINAL EQUIPMENT MANUFACTURER DATA				SELLER DATA										REMARKS	
										REFERENCE NUMBER (Part Number)	NAME OF MANUFACTURER	NCAGE	MTBF	REFERENCE NUMBER	EXPLODED VIEW OR CROSS SECTION DRAWING NR.	ITEM NR.	ON BOARD (90 days)	ON SHORE (3 years)	INCO (Installation and Check out)	N.S.N. (Nato Stock Number)	LOE	RC	DC (In Weeks)		SLC (In Weeks)
		<b>LCRS</b> (LIST OF CODED RECOMMENDED SPARES)		SHIP:		KSA-AVANTE2200		EQUIPMENT P.O.:		4Q20000141		SELLER:		FRIZONIA REFRIGERACION CLIMATIZACION SL				MAIN EQUIPMENT DESCRIPTION:				CHILLER WATER UNIT			
		CONST. NR.				NR. INSTALLED MAIN EQUIPMENTS:		3		NCAGE:		9161B		PART NUMBER:		CWP-CHW00001/2/3				N.S.N. (Nato Stock Number)		DATE:		2019-07-31	
		Reliability Data for Main Equipment				MTBF :		18000H		MTTR :		20H													
01		Compressor	EA	S	2	CSW -8573-90Y-44P	BITZER KUEHLMASCHINENBAU GMBH	D1013	35000H	CSW -8573-90Y-44P	D-MO5462-016	1	0	2	HOLD		7	G	12	0	1		850	HOLD	
01.1		External frequency inverter	EA	S	2	FJU+145	BITZER KUEHLMASCHINENBAU GMBH	D1013	35000H	FJU+145	-	-	0	2	HOLD		7	N	4	240	1		42.8	HOLD	
01.2		Temperature sensor	EA	S	1	347041-01	BITZER KUEHLMASCHINENBAU GMBH	D1013	45000 H	347041-01	-	-	0	2	HOLD		7	N	4	240	1		HOLD	HOLD	
01.3		Oil level control OLC-D1	EA	S	2	34794904	BITZER KUEHLMASCHINENBAU GMBH	D1013	45000H	34794904	D-MO5462-016	-	0	2	HOLD		7	N	4	240	1		HOLD	HOLD	
01.4		Capacity control valves (valve body + coil)	EA	S	4	PENDING	BITZER KUEHLMASCHINENBAU GMBH	D1013	20000H	PENDING	D-MO5462-016	2	0	2	HOLD		6	N	4	Non deterioration	1		HOLD	HOLD	
01.5		Suction shut off valve 4"	EA	S	1	36133923	BITZER KUEHLMASCHINENBAU GMBH	D1013	45000H	36133923	D-MO5462-016	4	0	2	HOLD		7	N	4	240	1		25	Ø105	
01.6		Discharge shut off valve 3"	EA	S	1	36133817	BITZER KUEHLMASCHINENBAU GMBH	D1013	45000H	36133817	D-MO5462-016	3	0	2	HOLD		7	N	4	240	1		HOLD	HOLD	
02		Condenser	EA	S	1	CON326-2P-2C-10-20-19CN-96	TERMOJET	-	35000H	CON326-2P-2C-10-20-19CN-96	D-MO5462-016	9	0	2	HOLD		7	G	12	Non deterioration	1		462	Ø406 x 2230	
15		Condenser Inlet Shut off valve	EA	S	2	ATA 2-1/2"	CAEN SL	0271B	25000H	ATA 2-1/2"	D-MO5462-016	10	0	2	HOLD		7	N	4	240	1		HOLD	HOLD	
16		Condenser Outlet Shut off valve	EA	S	2	ATA 1-1/2"	CAEN SL	0271B	25000H	ATA 1-1/2"	D-MO5462-016	11	0	2	HOLD		7	N	4	240	1		HOLD	HOLD	
03		Expansion valve	EA	S	2	E5V-A2	CAREL		45000H	E5V-A2	D-MO5462-016	21	1	2	HOLD		7	N	4	240	1		HOLD	HOLD	
04		Refrigerant R-134-A (1 bottle of 60kg contains 53kg of refrigerant)	LI	S	110	R-134-A	DU PONT	-	-	R-134-A	-	-	2 bottles of 60 kg	3 bottles of 60 kg	HOLD	Provide data sheet	7	N	4	48	1		60	Ø 375 x 1300	POL and Techno-Chemical Products Proposal Product available internationally: R-134A Product not supplied by Frizonia. The indicated price is only for information purposes with a validity of only 1 month due to the price fluctuations of refrigerant in the market. Taxes excluded.
05		Evaporator	EA	S	1	DH2-403H / STD	BITZER KUEHLMASCHINENBAU GMBH	D1013	35000H	DH2-403H / STD	D-MO5462-016	23	0	2	HOLD		7	G	12	Non deterioration	1		HOLD	HOLD	
06		Control valve 1/4 NPT x 1/4 SAE	EA	S	10	6110/22	CASTEL SRL	A4591	45000H	6110/22	D-MO5462-016	6	0	2	HOLD		7	N	4	240	1		HOLD	HOLD	
07		Check valve	EA	S	2	BV21D	GMC REFRIGERAZIONE SRL	-	45000H	BV21D	D-MO5462-016	8	0	2	HOLD		7	N	4	240	1		2.1	DN65, D=118, L=46	
08		Leakage detector	EA	S	1	6700-0220	BACHARACH, INC.	O5083	45000H	6700-0220	D-MO5462-016	13	0	2	HOLD		6	N	4	240	1		HOLD	HOLD	
09		Leakage sensor	EA	S	2	6108-2101	BACHARACH, INC.	O5083	45000H	6108-2101	D-MO5462-016	14	0	2	HOLD		6	N	4	240	1		HOLD	HOLD	
10		Safety valves	EA	S	4	3060/45C205	CASTEL SRL	A4591	45000H	3060/45C205	D-MO5462-016	12	1	2	HOLD		8	N	4	Non deterioration	1		HOLD	HOLD	
11		Dryer filters	EA	S	2	CSR48	GMC REFRIGERAZIONE SRL	-	20000H	CSR48	D-MO5462-016	17	0	3	HOLD		7	N	4	240	1		0.57	Ø 96 x 140	
12		Sight glass 1-5/8"	EA	S	2	3770/13	CASTEL SRL	A4591	45000H	3770/13	D-MO5462-016	18	0	2	HOLD		7	N	4	240	1		HOLD	HOLD	
13		Solenoid valve 1-5/8"	EA	S	2	1079/13A6	CASTEL SRL	A4591	45000H	1079/13A6	D-MO5462-016	19	0	2	HOLD		7	N	4	Non deterioration	1		HOLD	HOLD	

14	NTC Probe	EA	S	1	NTC030WF00	CAREL	A5921	45000H	NTC030WF00	D-MO5462-016	26	0	2	HOLD		7	N	4	240	1		0,20	Ø 4 x 70	
15	Low pressure gauge (d=100mm, Scale -1 / 17 Bar)	EA	S	2	213.53.100	WIKA INSTRUMENTS	F3664	90000H	213.53.100	D-MO5462-016	28	0	3	HOLD		7	N	4	240	1		HOLD	HOLD	
16	High pressure gauge (d=100mm, Scale 0 / 34 Bar)	EA	S	2	213.53.100	WIKA INSTRUMENTS	F3664	90000H	213.53.100	D-MO5462-016	31	0	3	HOLD		7	N	4	240	1		HOLD	HOLD	
17	Low pressure switch KP-1 (Manual reset)	EA	S	2	060-110-366	DANFOSS A/S	R1292	9000H	060-110-366	D-MO5462-016	30	0	3	HOLD		7	N	4	240	1		HOLD	HOLD	
18	High pressure switch KP-5 (Manual reset)	EA	S	2	060-117-366	DANFOSS A/S	R1292	9000H	060-117-366	D-MO5462-016	29	0	3	HOLD		7	N	4	240	1		HOLD	HOLD	
19	Shut off valve 1/4" SAE x 1/4" SAE	EA	S	8	6410/2	CASTEL SRL	A4591	45000H	6410/2	D-MO5462-016	32	0	2	HOLD		7	N	4	240	1		HOLD	HOLD	
20	Fresh Water pump (vertical)	EA	S	1	LN-50-200	BOMBAS AZCUE SA	1740B	-	LN-50-200	-	-	1	2	HOLD		7	G	4	48	1		449,00	500x450x1071	
21	Sea Water pump (vertical)	EA	S	1	LN-50-125	BOMBAS AZCUE SA	1740B	-	LN-50-125	-	-	1	2	HOLD		7	G	4	48	1		259	360x350x876	
22	Compressor Oil	LI	S	40	BSE170	BITZER KUEHLMASCHINENBAU GMBH	D1013	-	BSE170	-	-	7 containers	7 contain ers	HOLD		7	N	4	48	1		HOLD	HOLD	
23	VACUUM PUMP	EA	T	1	ROAIRVAC 3,0	ROTHENBERGER	1446B	90000 H	ROAIRVAC 3,0	-	-	1	2	1		6	N	4	240	1		10,7	335x150x265	S&TE recommendation
24	CLAMP-ON-METER	EA	T	1	AC750	CPS PRODUCTS NV	B3024	45000 H	AC750	-	-	1	2	1		6	N	4	240	1		0,5	200X70X40	S&TE recommendation

Note: Prices for ILS purposes only. Should these items be ordered, they will have to be quoted by Frizonia's Sales Dptm.