

FX-Z

1502 - 7223

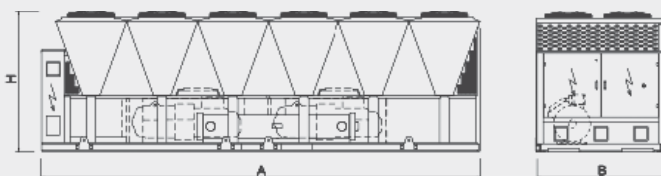
Chiller, air source for outdoor installation, from 289 to 1710 kW.



FR-Z /K		1502	1702	1902	1922	2202	2602	2652	2702	2722
Power 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	400/3/50
PERFORMANCE										
COOLING ONLY (GROSS VALUE)										
Cooling capacity	(1) kW	300	326	383	432	481	533	559	601	658
Total power input	(1) kW	101	117	131	143	169	185	194	204	235
EER	(1) kW/kW	2,98	2,78	2,93	3,01	2,84	2,88	2,88	2,95	2,80
COOLING ONLY (EN14511 VALUE)										
Cooling capacity	(1)(2) kW	299	325	382	430	479	532	557	599	656
EER	(1)(2) kW/kW	2,95	2,76	2,90	2,97	2,81	2,85	2,85	2,91	2,77
Cooling energy class		B	C	B	B	C	C	C	B	C
SEPR HT	(3)(4)	5,23	5,46	5,34	5,24	5,43	5,39	5,36	5,33	5,19
COOLING ONLY										
16°C/10°C										
Cooling capacity	(5) kW	328	356	418	470	525	583	611	658	716
Total power input	(5) kW	105	122	136	149	177	193	203	213	246
EER	(5) kW/kW	3,13	2,91	3,06	3,15	2,96	3,01	3,01	3,09	2,91
23°C/15°C										
Cooling capacity	(6) kW	376	406	475	533	597	665	699	753	763
Total power input	(6) kW	112	131	145	158	190	207	218	228	229
EER	(6) kW/kW	3,36	3,10	3,27	3,36	3,14	3,21	3,21	3,31	3,33
EXCHANGERS										
HEAT EXCHANGER USER SIDE IN REFRIGERATION										
Water flow	(1) l/s	14,33	15,58	18,32	20,66	22,98	25,51	26,72	28,73	31,48
Pressure drop	(1)(2) kPa	23,9	28,3	33,6	42,7	32,3	39,8	34,9	40,3	38,5
REFRIGERANT CIRCUIT										
Compressors nr.	N°	2	2	2	2	2	2	2	2	2
No. Circuits	N°	2	2	2	2	2	2	2	2	2
Refrigerant charge	kg	44,0	47,0	55,0	63,0	69,0	76,0	80,0	88,0	94,0
NOISE LEVEL										
Sound Pressure	(7) dB(A)	67	67	67	68	68	68	68	68	70
Sound power level in cooling	(8)(9) dB(A)	99	99	99	100	100	100	100	100	102
SIZE AND WEIGHT										
A	(10) mm	2750	2750	4000	4000	4000	5250	5250	5250	5250
B	(10) mm	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(10) mm	2500	2500	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10) kg	3160	3170	3720	3810	4610	5060	5060	5130	5520

Accessories:

- ▶ Noise reducer (only on not silenced versions)
- ▶ EC fans with electronic DC brushless motor
- ▶ Microchannel coils with e-coating protection
- ▶ Traditional coils with copper tubes and aluminium fins, also available with prepainted fins or Fin Guard Silver protective treatment.
- ▶ Compressor enclosure (standard on silenced versions)
- ▶ Leak detector
- ▶ Kit HT to increase the unit operating conditions range
- ▶ Compressor power factor correction
- ▶ Soft start
- ▶ Fast restart
- ▶ Double power supply with automatic changeover (ATS) or motorized changeover
- ▶ Hydronic group
- ▶ VPF (Variable Primary Flow) system
- ▶ Set-up for remote connectivity with ModBus, Echelon, Bacnet, Bacnet over-IP.
- ▶ Remote control keyboard (distance to 200m and to 500m)



FR-Z /K			3152	3602	3902	4202	4502	4802	4812	4822	5412
Power 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	400/3/50
PERFORMANCE											
COOLING ONLY (GROSS VALUE)											
Cooling capacity	(1)	kW	725	803	872	926	982	1021	1059	1146	1176
Total power input	(1)	kW	250	267	290	310	337	363	348	389	415
EER	(1)	kW/kW	2,90	3,00	3,01	2,99	2,92	2,82	3,04	2,95	2,83
COOLING ONLY (EN14511 VALUE)											
Cooling capacity	(1)(2)	kW	723	800	869	923	979	1018	1055	1142	1172
EER	(1)(2)	kW/kW	2,86	2,97	2,97	2,95	2,88	2,78	3,00	2,90	2,80
Cooling energy class			C	B	B	B	C	C	B	B	C
SEPR HT	(3)(4)		5,30	5,40	5,39	5,37	5,39	5,39	5,40	5,32	5,40
COOLING ONLY											
16°C/10°C											
Cooling capacity	(5)	kW	790	875	952	1013	1073	1114	1158	1247	1282
Total power input	(5)	kW	261	279	302	323	352	379	362	406	434
EER	(5)	kW/kW	3,03	3,14	3,15	3,14	3,05	2,94	3,20	3,07	2,95
23°C/15°C											
Cooling capacity	(6)	kW	896	995	1087	1157	1225	1269	1324	1353	1428
Total power input	(6)	kW	278	296	322	344	376	406	386	390	442
EER	(6)	kW/kW	3,22	3,36	3,38	3,36	3,26	3,13	3,43	3,47	3,23
EXCHANGERS											
HEAT EXCHANGER USER SIDE IN REFRIGERATION											
Water flow	(1)	l/s	34,69	38,39	41,70	44,31	46,98	48,82	50,65	54,81	56,25
Pressure drop	(1)(2)	kPa	46,8	40,9	42,6	48,1	41,8	45,1	48,5	53,3	42,2
REFRIGERANT CIRCUIT											
Compressors nr.		N°	2	2	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2	2	2
Refrigerant charge		kg	104	117	127	135	140	146	151	164	168
NOISE LEVEL											
Sound Pressure	(7)	dB(A)	69	69	70	70	71	71	71	71	72
Sound power level in cooling	(8)(9)	dB(A)	102	102	103	103	104	104	104	104	105
SIZE AND WEIGHT											
A	(10)	mm	6500	6500	7750	7750	7750	7750	9000	9000	9150
B	(10)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10)	kg	6450	6940	7440	7560	7790	7820	8250	8370	8660

FR-Z /K			6002	6022	6303	6903	7203	7213	7223
Power 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
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1)	kW	1239	1303	1401	1481	1547	1654	1710
Total power input	(1)	kW	426	466	466	514	547	570	594
EER	(1)	kW/kW	2,91	2,80	3,00	2,88	2,83	2,90	2,88
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2)	kW	1235	1298	1397	1476	1543	1649	1704
EER	(1)(2)	kW/kW	2,87	2,76	2,97	2,85	2,80	2,87	2,84
Cooling energy class			C	C	B	C	C	C	C
SEPR HT	(3)(4)		5,43	5,31	5,34	5,37	5,42	5,29	5,29
COOLING ONLY									
16°C/10°C									
Cooling capacity	(5)	kW	1355	1417	1532	1616	1689	1801	1860
Total power input	(5)	kW	444	487	486	536	572	595	622
EER	(5)	kW/kW	3,05	2,91	3,15	3,01	2,95	3,03	2,99
23°C/15°C									
Cooling capacity	(6)	kW	1550	1550	1752	1843	1925	1985	2015
Total power input	(6)	kW	474	474	518	573	613	591	595
EER	(6)	kW/kW	3,27	3,27	3,38	3,22	3,14	3,36	3,38
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	59,26	62,29	67,01	70,81	74,00	79,11	81,79
Pressure drop	(1)(2)	kPa	46,9	51,8	45,4	50,7	39,0	44,6	51,2
REFRIGERANT CIRCUIT									
Compressors nr.		N°	2	2	3	3	3	3	3
No. Circuits		N°	2	2	3	3	3	3	3
Refrigerant charge		kg	181	186	205	212	221	237	250
NOISE LEVEL									
Sound Pressure	(7)	dB(A)	73	73	73	73	73	73	73
Sound power level in cooling	(8)(9)	dB(A)	106	106	106	106	106	106	106
SIZE AND WEIGHT									
A	(10)	mm	10400	10400	11650	11650	11650	12900	12900
B	(10)	mm	2260	2260	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10)	kg	9200	9310	11880	11940	11950	12490	12570

Notes:

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- Values in compliance with EN14511-3:2013.
- Seasonal space heating energy index
- Seasonal energy efficiency of high temperature process cooling [REGULATION (EU) N. 2016/2281]
- Plant (side) cooling exchanger water (in/out) 16°C/ 10°C; Source (side) heat exchanger air (in) 35°C.
- Acqua scambiatore freddo lato utenza (in/out) 23°C/15°C; Aria scambiatore lato sorgente (in) 35°C.

- Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
 - Sound power on the basis of measurements made in compliance with ISO 9614.
 - Sound power level in cooling, outdoors.
 - Unit in standard configuration/execution, without optional accessories.
- The units highlighted in this publication contain HFC R134a [GWP₁₀₀ 1430] fluorinated greenhouse gases.**

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**FX-Z 1502 - 7223**

Chiller, air source for outdoor installation,
from 289 to 1710 kW.

FR-Z /SL-K		1502	1702	1902	1922	2202	2602	2652	2702	2722	
Power supply		V/ph/Hz 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50									
PERFORMANCE											
COOLING ONLY (GROSS VALUE)											
Cooling capacity	(1)	kW	289	333	382	419	476	519	556	578	663
Total power input	(1)	kW	101	113	126	146	161	175	192	207	223
EER	(1)	kW/kW	2,85	2,95	3,03	2,87	2,95	2,97	2,90	2,79	2,98
COOLING ONLY (EN14511 VALUE)											
Cooling capacity	(1)(2)	kW	288	332	380	417	475	517	554	577	661
EER	(1)(2)	kW/kW	2,82	2,92	3,00	2,83	2,92	2,93	2,87	2,76	2,94
Cooling energy class			C	B	B	C	B	B	C	C	B
SEPR HT	(3)(4)		5,23	5,32	5,45	5,27	5,25	5,20	5,27	5,33	5,27
COOLING ONLY											
16°C/10°C											
Cooling capacity	(5)	kW	316	365	418	455	520	568	609	632	722
Total power input	(5)	kW	106	118	131	152	168	182	201	217	232
EER	(5)	kW/kW	2,98	3,09	3,19	2,98	3,08	3,11	3,03	2,91	3,11
23°C/15°C											
Cooling capacity	(6)	kW	361	418	480	514	593	651	697	739	821
Total power input	(6)	kW	113	126	140	162	180	195	215	230	248
EER	(6)	kW/kW	3,19	3,32	3,43	3,17	3,30	3,34	3,24	3,22	3,32
EXCHANGERS											
HEAT EXCHANGER USER SIDE IN REFRIGERATION											
Water flow	(1)	l/s	13,80	15,94	18,25	20,02	22,76	24,80	26,59	27,66	31,72
Pressure drop	(1)(2)	kPa	22,2	29,6	33,3	40,1	31,7	37,6	34,5	37,4	39,1
REFRIGERANT CIRCUIT											
Compressors nr.		N°	2	2	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2	2	2
Refrigerant charge		kg	44,0	51,0	58,0	63,0	72,0	79,0	84,0	88,0	101
NOISE LEVEL											
Sound Pressure	(7)	dB(A)	55	55	56	56	57	57	57	57	57
Sound power level in cooling	(8)(9)	dB(A)	87	87	88	88	89	89	89	89	90
SIZE AND WEIGHT											
A	(10)	mm	2750	4000	4000	4000	5250	5250	5250	5250	6500
B	(10)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10)	kg	3420	4160	4230	4230	5200	5560	5580	5620	6610

FR-Z /SL-K		3152	3602	3902	4202	4502	4802	4812	4822	5412	
Power supply		V/ph/Hz 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50									
PERFORMANCE											
COOLING ONLY (GROSS VALUE)											
Cooling capacity	(1)	kW	717	771	839	893	965	1021	1052	1137	1169
Total power input	(1)	kW	247	272	295	315	335	353	341	381	407
EER	(1)	kW/kW	2,90	2,84	2,85	2,83	2,88	2,89	3,09	2,99	2,87
COOLING ONLY (EN14511 VALUE)											
Cooling capacity	(1)(2)	kW	714	769	836	890	962	1018	1048	1133	1166
EER	(1)(2)	kW/kW	2,87	2,81	2,82	2,80	2,84	2,85	3,04	2,94	2,84
Cooling energy class			C	C	C	C	C	C	B	B	C
SEPR HT	(3)(4)		5,32	5,41	5,42	5,40	5,39	5,38	5,36	5,30	5,35
COOLING ONLY											
16°C/10°C											
Cooling capacity	(5)	kW	781	839	915	975	1054	1116	1151	1238	1275
Total power input	(5)	kW	258	284	308	329	351	369	355	397	425
EER	(5)	kW/kW	3,03	2,96	2,97	2,96	3,01	3,02	3,24	3,12	3,00
23°C/15°C											
Cooling capacity	(6)	kW	886	977	1067	1136	1229	1300	1317	1405	1452
Total power input	(6)	kW	275	299	325	347	370	389	377	423	429
EER	(6)	kW/kW	3,22	3,27	3,29	3,27	3,32	3,34	3,49	3,32	3,39
EXCHANGERS											
HEAT EXCHANGER USER SIDE IN REFRIGERATION											
Water flow	(1)	l/s	34,27	36,86	40,11	42,70	46,14	48,85	50,30	54,38	55,91
Pressure drop	(1)(2)	kPa	45,7	37,7	39,4	44,7	40,3	45,2	47,9	52,5	41,7
REFRIGERANT CIRCUIT											
Compressors nr.		N°	2	2	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2	2	2
Refrigerant charge		kg	109	117	127	135	146	155	159	172	177
NOISE LEVEL											
Sound Pressure	(7)	dB(A)	58	58	59	59	60	60	61	61	61
Sound power level in cooling	(8)(9)	dB(A)	91	91	92	92	93	93	94	94	94
SIZE AND WEIGHT											
A	(10)	mm	6500	6500	7750	7750	9000	9000	10250	10250	10400
B	(10)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10)	kg	7080	7550	8090	8200	9000	8870	9360	9470	9780



FR-Z /SL-K			6002	6022	6303	6903	7203	7213	7223
Power 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
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1)	kW	1194	1289	1350	1463	1530	1595	1649
Total power input	(1)	kW	433	459	474	510	540	583	609
EER	(1)	kW/kW	2,76	2,81	2,85	2,87	2,83	2,74	2,71
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2)	kW	1190	1285	1346	1458	1526	1590	1644
EER	(1)(2)	kW/kW	2,73	2,77	2,81	2,83	2,80	2,71	2,67
Cooling energy class			C	C	C	C	C	C	D
SEPR HT	(3)(4)		5,43	5,36	5,38	5,37	5,40	5,34	5,31
COOLING ONLY									
16°C/10°C									
Cooling capacity	(5)	kW	1305	1403	1474	1598	1671	1735	1729
Total power input	(5)	kW	452	480	496	533	565	610	563
EER	(5)	kW/kW	2,89	2,93	2,97	3,00	2,96	2,84	3,07
23°C/15°C									
Cooling capacity	(6)	kW	1522	1593	1720	1861	1949	1949	1978
Total power input	(6)	kW	479	513	523	562	596	596	601
EER	(6)	kW/kW	3,18	3,10	3,29	3,31	3,27	3,27	3,29
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	57,11	61,64	64,56	69,97	73,16	76,27	78,86
Pressure drop	(1)(2)	kPa	43,5	50,7	42,1	49,5	38,2	41,5	47,6
REFRIGERANT CIRCUIT									
Compressors nr.		N°	2	2	3	3	3	3	3
No. Circuits		N°	2	2	3	3	3	3	3
Refrigerant charge		kg	181	195	205	222	232	242	250
NOISE LEVEL									
Sound Pressure	(7)	dB(A)	61	61	61	61	61	61	62
Sound power level in cooling	(8)(9)	dB(A)	94	94	94	94	94	94	95
SIZE AND WEIGHT									
A	(10)	mm	10400	11650	11650	12900	12900	12900	12900
B	(10)	mm	2260	2260	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10)	kg	9860	10420	12810	13340	13340	13420	13500

FR-Z /CA			1502	1702	1902	1922	2202	2602	2652
Power 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
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1)	kW	302	350	395	462	513	551	591
Total power input	(1)	kW	95,4	109	125	144	160	175	184
EER	(1)	kW/kW	3,17	3,22	3,16	3,21	3,21	3,15	3,20
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2)	kW	302	349	394	460	512	550	589
EER	(1)(2)	kW/kW	3,14	3,18	3,12	3,17	3,17	3,12	3,16
Cooling energy class			A	A	A	A	A	A	A
SEPR HT	(3)(4)		5,42	5,52	5,56	5,56	5,53	5,38	5,42
COOLING ONLY									
16°C/10°C									
Cooling capacity	(5)	kW	333	384	433	507	563	605	648
Total power input	(5)	kW	99,2	113	130	150	166	182	192
EER	(5)	kW/kW	3,35	3,41	3,33	3,38	3,39	3,32	3,38
23°C/15°C									
Cooling capacity	(6)	kW	384	443	498	584	647	696	746
Total power input	(6)	kW	105	119	138	159	177	194	204
EER	(6)	kW/kW	3,65	3,71	3,61	3,66	3,67	3,59	3,66
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	14,46	16,72	18,89	22,08	24,54	26,37	28,25
Pressure drop	(1)(2)	kPa	24,4	32,6	35,7	29,8	36,8	34,0	39,0
REFRIGERANT CIRCUIT									
Compressors nr.		N°	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2
Refrigerant charge		kg	48,0	54,0	58,0	68,0	79,0	81,0	87,0
NOISE LEVEL									
Sound Pressure	(7)	dB(A)	66	66	67	67	68	68	68
Sound power level in cooling	(8)(9)	dB(A)	98	98	99	99	100	100	101
SIZE AND WEIGHT									
A	(10)	mm	4000	4000	4000	5250	5250	5250	6500
B	(10)	mm	2260	2260	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10)	kg	3660	3720	3760	4660	5040	5090	5830

1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.

2 Values in compliance with EN14511-3:2013.

3 Seasonal space heating energy index

4 Seasonal energy efficiency of high temperature process cooling [REGULATION (EU) N. 2016/2281]

5 Plant (side) cooling exchanger water (in/out) 16°C/ 10°C; Source (side) heat exchanger air (in) 35°C.

6 Acqua scambiatore freddo lato utenza (in/out) 23°C/15°C; Aria scambiatore lato sorgente (in) 35°C.

7 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

8 Sound power on the basis of measurements made in compliance with ISO 9614.

9 Sound power level in cooling, outdoors.

10 Unit in standard configuration/execution, without optional accessories.

The units highlighted in this publication contain HFC R134a [GWP₁₀₀ 1430] fluorinated greenhouse gases.

Certified data in EUROVENT

**FX-Z 1502 - 7223**

Chiller, air source for outdoor installation,
from 289 to 1710 kW.

FR-Z /CA			2702	2722	3152	3602	3902	4202	4502
Power 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
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1)	kW	629	684	766	838	905	956	1031
Total power input	(1)	kW	196	218	242	260	280	299	320
EER	(1)	kW/kW	3,21	3,14	3,17	3,22	3,24	3,19	3,22
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2)	kW	627	682	764	835	902	952	1028
EER	(1)(2)	kW/kW	3,16	3,10	3,13	3,18	3,19	3,14	3,18
Cooling energy class			A	A	A	A	A	A	A
SEPR HT	(3)(4)		5,43	5,34	5,42	5,49	5,48	5,46	5,47
COOLING ONLY									
16°C/10°C									
Cooling capacity	(5)	kW	690	745	838	917	991	1047	1129
Total power input	(5)	kW	204	226	251	270	290	311	332
EER	(5)	kW/kW	3,39	3,29	3,34	3,39	3,41	3,37	3,40
23°C/15°C									
Cooling capacity	(6)	kW	794	848	957	1051	1136	1200	1295
Total power input	(6)	kW	216	240	266	286	308	329	352
EER	(6)	kW/kW	3,67	3,53	3,59	3,67	3,69	3,64	3,68
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	30,07	32,70	36,64	40,06	43,26	45,72	49,29
Pressure drop	(1)(2)	kPa	44,2	41,6	37,2	44,5	45,8	51,2	46,0
REFRIGERANT CIRCUIT									
Compressors nr.		N°	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2
Refrigerant charge		kg	92,0	100	113	123	133	141	151
NOISE LEVEL									
Sound Pressure	(7)	dB(A)	68	68	68	69	69	70	70
Sound power level in cooling	(8)(9)	dB(A)	101	101	101	102	102	103	103
SIZE AND WEIGHT									
A	(10)	mm	6500	6500	7750	7750	9000	9000	10400
B	(10)	mm	2260	2260	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10)	kg	5690	6110	6970	7440	7890	8000	8700

FR-Z /CA			4802	4822	5412	5703	6303	6603	
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1)	kW	1098	1177	1236	1342	1460	1521	
Total power input	(1)	kW	339	375	391	414	459	485	
EER	(1)	kW/kW	3,23	3,14	3,16	3,24	3,18	3,14	
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2)	kW	1094	1173	1232	1338	1456	1517	
EER	(1)(2)	kW/kW	3,19	3,10	3,12	3,20	3,15	3,10	
Cooling energy class			A	A	A	A	A	A	
SEPR HT	(3)(4)		5,48	5,46	5,49	5,47	5,46	5,47	
COOLING ONLY									
16°C/10°C									
Cooling capacity	(5)	kW	1203	1283	1352	1471	1600	1666	
Total power input	(5)	kW	353	390	406	431	478	505	
EER	(5)	kW/kW	3,41	3,29	3,33	3,41	3,35	3,30	
23°C/15°C									
Cooling capacity	(6)	kW	1381	1458	1545	1687	1836	1911	
Total power input	(6)	kW	374	413	431	457	507	538	
EER	(6)	kW/kW	3,70	3,53	3,59	3,69	3,62	3,55	
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	52,53	56,31	59,13	64,17	69,81	72,73	
Pressure drop	(1)(2)	kPa	50,1	42,3	46,7	41,6	34,7	37,7	
REFRIGERANT CIRCUIT									
Compressors nr.		N°	2	2	2	3	3	3	
No. Circuits		N°	2	2	2	3	3	3	
Refrigerant charge		kg	161	173	182	197	226	224	
NOISE LEVEL									
Sound Pressure	(7)	dB(A)	70	70	71	71	71	71	
Sound power level in cooling	(8)(9)	dB(A)	103	103	104	104	104	104	
SIZE AND WEIGHT									
A	(10)	mm	10400	10400	11650	12900	12900	12900	
B	(10)	mm	2260	2260	2260	2260	2260	2260	
H	(10)	mm	2500	2500	2500	2500	2500	2500	
Operating weight	(10)	kg	8780	9040	10120	12160	12330	12640	



FR-Z /SL-CA			1502	1702	1902	1922	2202	2602	2652
Power 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
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1)	kW	304	345	394	450	501	561	583
Total power input	(1)	kW	94,7	108	122	144	159	178	182
EER	(1)	kW/kW	3,21	3,20	3,24	3,13	3,14	3,14	3,21
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2)	kW	303	344	393	449	499	559	581
EER	(1)(2)	kW/kW	3,18	3,16	3,20	3,10	3,10	3,11	3,17
Cooling energy class			A	A	A	A	A	A	A
SEPR HT	(3)(4)		5,51	5,58	5,52	5,58	5,53	5,49	5,41
COOLING ONLY									
16°C/10°C									
Cooling capacity	(5)	kW	334	379	432	494	549	615	640
Total power input	(5)	kW	98,7	112	127	150	166	186	189
EER	(5)	kW/kW	3,39	3,38	3,41	3,29	3,30	3,31	3,38
23°C/15°C									
Cooling capacity	(6)	kW	385	436	494	567	629	707	737
Total power input	(6)	kW	105	119	134	160	177	198	201
EER	(6)	kW/kW	3,67	3,66	3,69	3,55	3,55	3,56	3,66
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	14,55	16,49	18,85	21,53	23,94	26,81	27,87
Pressure drop	(1)(2)	kPa	24,7	31,7	35,6	28,3	35,1	35,1	38,0
REFRIGERANT CIRCUIT									
Compressors nr.		N°	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2
Refrigerant charge		kg	48,0	54,0	62,0	71,0	79,0	88,0	92,0
NOISE LEVEL									
Sound Pressure	(7)	dB(A)	55	56	56	57	57	57	58
Sound power level in cooling	(8)(9)	dB(A)	87	88	88	89	89	90	91
SIZE AND WEIGHT									
A	(10)	mm	4000	4000	5250	5250	5250	6500	6500
B	(10)	mm	2260	2260	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10)	kg	4130	4190	4680	5140	5520	6140	6390

FR-Z /SL-CA			2702	2722	3152	3602	3902	4202	4502
Power 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
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1)	kW	616	681	754	819	899	948	1020
Total power input	(1)	kW	196	212	237	252	274	294	314
EER	(1)	kW/kW	3,14	3,21	3,18	3,25	3,28	3,23	3,25
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2)	kW	614	678	752	817	896	944	1017
EER	(1)(2)	kW/kW	3,10	3,16	3,15	3,21	3,24	3,18	3,20
Cooling energy class			A	A	A	A	A	A	A
SEPR HT	(3)(4)		5,45	5,34	5,40	5,50	5,50	5,46	5,47
COOLING ONLY									
16°C/10°C									
Cooling capacity	(5)	kW	676	743	825	898	986	1038	1118
Total power input	(5)	kW	205	220	246	262	284	305	326
EER	(5)	kW/kW	3,30	3,37	3,35	3,43	3,47	3,41	3,43
23°C/15°C									
Cooling capacity	(6)	kW	777	846	943	1031	1132	1191	1284
Total power input	(6)	kW	218	233	262	277	301	322	345
EER	(6)	kW/kW	3,56	3,63	3,60	3,72	3,76	3,69	3,72
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	29,44	32,55	36,06	39,18	43,00	45,33	48,80
Pressure drop	(1)(2)	kPa	33,7	41,2	36,1	42,6	45,3	50,3	45,1
REFRIGERANT CIRCUIT									
Compressors nr.		N°	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2
Refrigerant charge		kg	97,0	107	118	129	141	149	160
NOISE LEVEL									
Sound Pressure	(7)	dB(A)	58	59	59	59	59	60	60
Sound power level in cooling	(8)(9)	dB(A)	91	92	92	92	92	93	93
SIZE AND WEIGHT									
A	(10)	mm	6500	7750	7750	9000	10250	10250	11650
B	(10)	mm	2260	2260	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10)	kg	6520	7150	7610	8500	8990	9280	9810

1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.

2 Values in compliance with EN14511-3:2013.

3 Seasonal space heating energy index

4 Seasonal energy efficiency of high temperature process cooling [REGULATION (EU) N. 2016/2281]

5 Plant (side) cooling exchanger water (in/out) 16°C/ 10°C; Source (side) heat exchanger air (in) 35°C.

6 Acqua scambiatore freddo lato utenza (in/out) 23°C/15°C; Aria scambiatore lato sorgente (in) 35°C.

7 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

8 Sound power on the basis of measurements made in compliance with ISO 9614.

9 Sound power level in cooling, outdoors.

10 Unit in standard configuration/execution, without optional accessories.

The units highlighted in this publication contain HFC R134a [GWP₁₀₀ 1430] fluorinated greenhouse gases.

Certified data in EUROVENT



just cool IT

**FX-Z 1502 - 7223**

Chiller, air source for outdoor installation,
from 289 to 1710 kW.

FR-Z /SL-CA			4802	4822	5412	5703	6303
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE							
COOLING ONLY (GROSS VALUE)							
Cooling capacity	(1)	kW	1086	1163	1219	1310	1442
Total power input	(1)	kW	334	369	385	410	460
EER	(1)	kW/kW	3,25	3,15	3,16	3,20	3,13
COOLING ONLY (EN14511 VALUE)							
Cooling capacity	(1)(2)	kW	1082	1160	1215	1306	1439
EER	(1)(2)	kW/kW	3,21	3,11	3,12	3,16	3,10
Cooling energy class			A	A	A	A	A
SEPR HT	(3)(4)		5,50	5,47	5,50	5,48	5,52
COOLING ONLY							
16°C/10°C							
Cooling capacity	(5)	kW	1190	1268	1333	1435	1579
Total power input	(5)	kW	347	384	400	426	480
EER	(5)	kW/kW	3,43	3,30	3,33	3,37	3,29
23°C/15°C							
Cooling capacity	(6)	kW	1367	1442	1525	1645	1809
Total power input	(6)	kW	367	407	425	453	512
EER	(6)	kW/kW	3,72	3,55	3,59	3,63	3,53
EXCHANGERS							
HEAT EXCHANGER USER SIDE IN REFRIGERATION							
Water flow	(1)	l/s	51,94	55,63	58,31	62,64	68,95
Pressure drop	(1)(2)	kPa	48,9	41,3	45,4	39,7	33,9
REFRIGERANT CIRCUIT							
Compressors nr.		N°	2	2	2	3	3
No. Circuits		N°	2	2	2	3	3
Refrigerant charge		kg	171	183	191	206	226
NOISE LEVEL							
Sound Pressure	(7)	dB(A)	60	60	62	62	62
Sound power level in cooling	(8)(9)	dB(A)	93	93	95	95	95
SIZE AND WEIGHT							
A	(10)	mm	11650	11650	12900	12900	12900
B	(10)	mm	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500
Operating weight	(10)	kg	9890	10230	10760	13130	13260

FR-Z /E			1502	1702	1902	1922	2202	2602	2652	2702	2722
Power 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	400/3/50
PERFORMANCE											
COOLING ONLY (GROSS VALUE)											
Cooling capacity	(1)	kW	317	363	414	451	531	576	613	650	703
Total power input	(1)	kW	94,6	108	123	137	156	171	181	192	213
EER	(1)	kW/kW	3,35	3,35	3,36	3,30	3,39	3,37	3,38	3,38	3,30
COOLING ONLY (EN14511 VALUE)											
Cooling capacity	(1)(2)	kW	316	362	413	450	529	574	611	648	702
EER	(1)(2)	kW/kW	3,31	3,31	3,33	3,26	3,35	3,34	3,34	3,34	3,26
Cooling energy class			A	A	A	A	A	A	A	A	A
SEPR HT	(3)(4)		5,45	5,55	5,57	5,59	5,55	5,41	5,44	5,45	5,42
COOLING ONLY											
16°C/10°C											
Cooling capacity	(5)	kW	349	400	456	493	584	634	675	715	768
Total power input	(5)	kW	98,2	112	128	142	162	177	188	199	221
EER	(5)	kW/kW	3,55	3,57	3,57	3,48	3,61	3,58	3,59	3,59	3,48
23°C/15°C											
Cooling capacity	(6)	kW	404	464	529	564	676	733	780	826	877
Total power input	(6)	kW	104	118	135	149	171	188	199	210	233
EER	(6)	kW/kW	3,88	3,93	3,92	3,78	3,95	3,90	3,92	3,93	3,77
EXCHANGERS											
HEAT EXCHANGER USER SIDE IN REFRIGERATION											
Water flow	(1)	l/s	15,14	17,34	19,79	21,58	25,37	27,54	29,31	31,07	33,63
Pressure drop	(1)(2)	kPa	22,9	30,1	24,0	28,5	35,8	29,5	33,4	37,5	31,4
REFRIGERANT CIRCUIT											
Compressors nr.		N°	2	2	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2	2	2
Refrigerant charge		kg	49,0	56,0	64,0	71,0	82,0	89,0	95,0	101	109
NOISE LEVEL											
Sound Pressure	(7)	dB(A)	66	67	67	67	67	67	68	68	68
Sound power level in cooling	(8)(9)	dB(A)	98	99	99	99	100	100	101	101	101
SIZE AND WEIGHT											
A	(10)	mm	4000	5250	5250	5250	6500	6500	7750	7750	7750
B	(10)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10)	kg	3720	4240	4360	4420	5590	5920	6400	6490	6600



FR-Z /E			3152	3602	3902	4202	4502	4802	4822	5412
Power 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
PERFORMANCE										
COOLING ONLY (GROSS VALUE)										
Cooling capacity	(1)	kW	786	854	931	987	1054	1123	1219	1277
Total power input	(1)	kW	236	256	277	298	317	337	373	391
EER	(1)	kW/kW	3,33	3,33	3,36	3,32	3,32	3,33	3,27	3,26
COOLING ONLY (EN14511 VALUE)										
Cooling capacity	(1)(2)	kW	784	851	928	984	1051	1119	1216	1274
EER	(1)(2)	kW/kW	3,29	3,29	3,31	3,27	3,28	3,28	3,23	3,22
Cooling energy class			A	A	A	A	A	A	A	A
SEPR HT	(3)(4)		5,47	5,51	5,50	5,49	5,52	5,52	5,51	5,53
COOLING ONLY										
16°C/10°C										
Cooling capacity	(5)	kW	862	938	1023	1083	1156	1232	1332	1399
Total power input	(5)	kW	245	265	287	308	329	350	387	406
EER	(5)	kW/kW	3,52	3,54	3,56	3,51	3,51	3,52	3,44	3,44
23°C/15°C										
Cooling capacity	(6)	kW	990	1081	1178	1246	1330	1418	1519	1606
Total power input	(6)	kW	258	280	303	325	347	369	409	430
EER	(6)	kW/kW	3,83	3,86	3,89	3,83	3,83	3,84	3,71	3,73
EXCHANGERS										
HEAT EXCHANGER USER SIDE IN REFRIGERATION										
Water flow	(1)	l/s	37,58	40,84	44,54	47,18	50,39	53,70	58,31	61,05
Pressure drop	(1)(2)	kPa	34,6	40,9	53,0	42,1	46,1	51,2	34,4	37,7
REFRIGERANT CIRCUIT										
Compressors nr.		N°	2	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2	2
Refrigerant charge		kg	122	132	144	153	163	174	189	198
NOISE LEVEL										
Sound Pressure	(7)	dB(A)	68	69	69	70	70	70	70	71
Sound power level in cooling	(8)(9)	dB(A)	101	102	102	103	103	103	103	104
SIZE AND WEIGHT										
A	(10)	mm	9000	9000	10250	10250	11650	11650	11650	12900
B	(10)	mm	2260	2260	2260	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10)	kg	7400	7880	8420	8660	9190	9270	10330	11170

FR-Z /SL-E			1502	1702	1902	1922	2202	2602	2652	2702	2722
Power 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	400/3/50
PERFORMANCE											
COOLING ONLY (GROSS VALUE)											
Cooling capacity	(1)	kW	313	359	409	447	524	568	605	642	697
Total power input	(1)	kW	93,2	106	121	136	154	169	179	190	212
EER	(1)	kW/kW	3,36	3,39	3,37	3,29	3,40	3,36	3,38	3,39	3,28
COOLING ONLY (EN14511 VALUE)											
Cooling capacity	(1)(2)	kW	312	358	408	446	523	567	604	640	695
EER	(1)(2)	kW/kW	3,32	3,35	3,34	3,26	3,36	3,33	3,34	3,34	3,25
Cooling energy class			A	A	A	A	A	A	A	A	A
SEPR HT	(3)(4)		5,56	5,66	5,67	5,68	5,62	5,50	5,55	5,56	5,55
COOLING ONLY											
16°C/10°C											
Cooling capacity	(5)	kW	344	396	451	489	577	625	666	706	761
Total power input	(5)	kW	97,0	110	126	141	160	176	186	197	220
EER	(5)	kW/kW	3,55	3,60	3,58	3,47	3,60	3,55	3,57	3,59	3,45
23°C/15°C											
Cooling capacity	(6)	kW	398	459	522	558	666	722	768	815	867
Total power input	(6)	kW	103	116	134	149	170	187	198	209	233
EER	(6)	kW/kW	3,87	3,95	3,91	3,75	3,92	3,86	3,88	3,90	3,72
EXCHANGERS											
HEAT EXCHANGER USER SIDE IN REFRIGERATION											
Water flow	(1)	l/s	14,96	17,17	19,56	21,39	25,06	27,18	28,94	30,70	33,31
Pressure drop	(1)(2)	kPa	22,4	29,5	23,4	28,0	34,9	28,7	32,6	36,6	30,8
REFRIGERANT CIRCUIT											
Compressors nr.		N°	2	2	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2	2	2
Refrigerant charge		kg	49,0	56,0	64,0	71,0	82,0	89,0	95,0	101	109
NOISE LEVEL											
Sound Pressure	(7)	dB(A)	56	57	57	57	57	58	58	59	59
Sound power level in cooling	(8)(9)	dB(A)	88	89	89	89	90	91	91	92	92
SIZE AND WEIGHT											
A	(10)	mm	4000	5250	5250	5250	6500	6500	7750	7750	7750
B	(10)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10)	kg	3960	4460	4620	4680	6120	6460	6940	7040	7140

1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
 2 Values in compliance with EN14511-3:2013.
 3 Seasonal space heating energy index
 4 Seasonal energy efficiency of high temperature process cooling [REGULATION (EU) N. 2016/2281]
 5 Plant (side) cooling exchanger water (in/out) 16°C/ 10°C; Source (side) heat exchanger air (in) 35°C.
 6 Acqua scambiatore freddo lato utenza (in/out) 23°C/15°C; Aria scambiatore lato sorgente (in) 35°C.
 7 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

8 Sound power on the basis of measurements made in compliance with ISO 9614.
 9 Sound power level in cooling, outdoors.
 10 Unit in standard configuration/execution, without optional accessories.
The units highlighted in this publication contain HFC R134a [GWP₁₀₀ 1430] fluorinated greenhouse gases.

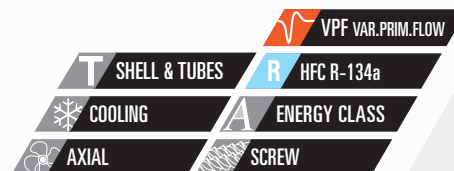
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just cool IT

**FX-Z 1502 - 7223**

Chiller, air source for outdoor installation, from 289 to 1710 kW.



FR-Z /SL-E			3152	3602	3902	4202	4502	4802	4822	5412
Power 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
PERFORMANCE										
COOLING ONLY (GROSS VALUE)										
Cooling capacity	(1)	kW	776	842	918	973	1040	1108	1205	1260
Total power input	(1)	kW	234	254	275	296	315	335	373	390
EER	(1)	kW/kW	3,31	3,32	3,34	3,29	3,30	3,31	3,23	3,23
COOLING ONLY (EN14511 VALUE)										
Cooling capacity	(1)(2)	kW	774	839	915	971	1037	1104	1202	1257
EER	(1)(2)	kW/kW	3,27	3,28	3,29	3,25	3,25	3,26	3,19	3,20
Cooling energy class			A	A	A	A	A	A	A	A
SEPR HT	(3)(4)		5,56	5,56	5,56	5,56	5,60	5,59	5,58	5,60
COOLING ONLY										
16°C/10°C										
Cooling capacity	(5)	kW	850	924	1008	1067	1140	1215	1315	1380
Total power input	(5)	kW	244	264	286	307	328	348	388	406
EER	(5)	kW/kW	3,49	3,50	3,53	3,47	3,48	3,49	3,39	3,40
23°C/15°C										
Cooling capacity	(6)	kW	975	1062	1158	1227	1310	1396	1499	1582
Total power input	(6)	kW	258	279	303	325	347	369	412	431
EER	(6)	kW/kW	3,78	3,80	3,83	3,77	3,78	3,78	3,64	3,67
EXCHANGERS										
HEAT EXCHANGER USER SIDE IN REFRIGERATION										
Water flow	(1)	l/s	37,11	40,26	43,92	46,55	49,72	52,98	57,62	60,28
Pressure drop	(1)(2)	kPa	33,7	39,7	51,5	41,0	44,9	49,8	33,6	36,7
REFRIGERANT CIRCUIT										
Compressors nr.		N°	2	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2	2
Refrigerant charge		kg	122	132	144	153	163	174	189	198
NOISE LEVEL										
Sound Pressure	(7)	dB(A)	59	59	59	60	60	60	60	62
Sound power level in cooling	(8)(9)	dB(A)	92	92	92	93	93	93	93	95
SIZE AND WEIGHT										
A	(10)	mm	9000	9000	10250	10250	11650	11650	11650	12900
B	(10)	mm	2260	2260	2260	2260	2260	2260	2260	2260
H	(10)	mm	2500	2500	2500	2500	2500	2500	2500	2500
Operating weight	(10)	kg	7990	8500	8990	9290	9830	9910	10900	11530

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2 Values in compliance with EN14511-3:2013.

3 Seasonal space heating energy index

4 Seasonal energy efficiency of high temperature process cooling [REGULATION (EU) N. 2016/2281]

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