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GIMPO INTL AIRPORT, Korea, Republic of

WMO#: **471100**

Lat: **37.57N** Long: **126.78E** Elev: **17** StdP: **101.12** Time Zone: **9.00 (JPN)** Period: **86-10** WBAN: **99999**

Annual Heating and Humidification Design Conditions

	Coldest Month	Heating DB		Humidification DP/MCDB and HR						Coldest month WS/MCDB				MCWS/PCWD to 99.6% DB		
				99.6%			99%			0.4%		1%				
		99.6%	99%	DP	HR	MCDB	DP	HR	MCDB	WS	MCDB	WS	MCDB	MCWS	PCWD	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	
(1)	1	-13.1	-11.1	-21.9	0.5	-8.1	-19.1	0.7	-6.7	9.1	-3.4	8.0	-3.2	2.2	330	(1)

Annual Cooling, Dehumidification, and Enthalpy Design Conditions

	Hottest Month	Hottest Month DB Range	Cooling DB/MCWB						Evaporation WB/MCDB						MCWS/PCWD to 0.4% DB		
			0.4%		1%		2%		0.4%		1%		2%				
			DB	MCWB	DB	MCWB	DB	MCWB	WB	MCDB	WB	MCDB	WB	MCDB	MCWS	PCWD	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	
(2)	8	7.8	32.0	25.1	30.9	24.6	29.8	23.6	26.7	29.6	26.1	28.7	25.4	27.8	3.6	300	(2)

	Dehumidification DP/MCDB and HR									Enthalpy/MCDB						Hours 8 to 4 & 12.8/20.6	
	0.4%			1%			2%			0.4%		1%		2%			
	DP	HR	MCDB	DP	HR	MCDB	DP	HR	MCDB	Enth	MCDB	Enth	MCDB	Enth	MCDB		
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	
(3)	26.1	21.5	27.9	25.2	20.3	27.2	24.8	19.9	27.0	84.1	30.4	81.0	27.8	77.9	27.8	692	(3)

Extreme Annual Design Conditions

	Extreme Annual WS			Extreme Max WB	Extreme Annual DB				n-Year Return Period Values of Extreme DB								
					Mean		Standard deviation		n=5 years		n=10 years		n=20 years		n=50 years		
	1%	2.5%	5%		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	
(4)	8.2	7.1	6.2	29.1	-16.0	34.1	2.9	1.4	-18.1	35.1	-19.8	35.8	-21.4	36.6	-23.5	37.6	(4)

Monthly Climatic Design Conditions

				Annual (d)	Jan (e)	Feb (f)	Mar (g)	Apr (h)	May (i)	Jun (j)	Jul (k)	Aug (l)	Sep (m)	Oct (n)	Nov (o)	Dec (p)	
(5)	Temperatures, Degree-Days and Degree-Hours	Tavg		11.8	-3.4	-0.7	4.7	11.4	17.2	21.8	24.9	25.5	20.6	13.6	6.1	-0.5	(5)
(6)		Sd			4.21	4.15	3.33	3.50	2.47	2.12	2.06	2.23	2.89	3.63	4.28	4.19	(6)
(7)		HDD10.0		1373	415	300	166	24	0	0	0	0	0	12	129	326	(7)
(8)		HDD18.3		3004	673	533	423	209	52	2	0	0	12	148	368	584	(8)
(9)		CDD10.0		2040	0	0	2	66	223	353	461	482	317	125	12	0	(9)
(10)		CDD18.3		630	0	0	0	1	16	106	202	223	79	3	0	0	(10)
(11)		CDH23.3		4610	0	0	0	17	134	625	1453	1881	478	22	0	0	(11)
(12)		CDH26.7		1269	0	0	0	1	17	136	400	628	87	1	0	0	(12)
(13)	Precipitation	PrecAvg		1320	20	25	44	107	83	145	362	267	151	49	42	25	(13)
(14)		PrecMax		2035	63	108	113	338	255	384	898	882	461	153	125	55	(14)
(15)		PrecMin		885	1	1	7	8	12	24	177	96	27	3	8	5	(15)
(16)		PrecSD		311.6	18.1	26.1	29.1	91.2	66.4	119.1	178.0	171.3	118.4	35.6	31.2	13.8	(16)
(17)	Monthly Design Dry Bulb and Mean Coincident Wet Bulb Temperatures	0.4%	DB		9.2	13.9	17.9	25.8	28.9	31.2	33.8	34.0	30.2	25.8	19.2	12.8	(17)
(18)			MCWB		6.2	9.2	9.7	14.3	17.9	21.1	25.9	26.0	22.7	17.6	14.2	8.5	(18)
(19)		2%	DB		6.8	10.1	15.1	22.9	26.2	29.9	31.2	32.8	29.0	23.2	17.0	10.0	(19)
(20)			MCWB		3.6	5.9	8.3	14.2	17.0	20.8	25.5	25.6	22.0	16.3	12.6	7.2	(20)
(21)		5%	DB		4.9	8.0	13.1	20.8	24.9	28.1	30.1	31.2	27.2	22.0	15.2	8.1	(21)
(22)			MCWB		2.2	4.2	7.0	12.6	16.7	20.6	24.5	25.2	21.1	15.6	11.3	5.5	(22)
(23)		10%	DB		3.1	6.1	11.1	18.8	23.1	26.9	29.0	30.0	26.1	20.2	13.8	6.2	(23)
(24)			MCWB		0.9	3.0	6.4	11.7	16.0	20.3	24.0	24.4	20.2	14.6	10.4	3.9	(24)
(25)	Monthly Design Wet Bulb and Mean Coincident Dry Bulb Temperatures	0.4%	WB		6.6	10.6	12.7	18.0	20.9	24.9	27.6	27.8	26.0	19.8	16.0	10.0	(25)
(26)			MCDB		8.3	12.3	15.5	21.1	24.1	27.6	30.0	30.7	27.8	22.3	18.0	11.3	(26)
(27)		2%	WB		4.2	6.6	9.7	15.6	19.4	23.5	26.7	26.9	24.2	18.3	14.1	7.5	(27)
(28)			MCDB		5.6	8.8	12.9	19.5	23.1	26.0	29.3	30.2	26.5	21.3	15.8	9.2	(28)
(29)		5%	WB		2.6	4.8	8.2	14.1	18.3	22.5	26.0	26.2	22.9	17.2	12.3	5.8	(29)
(30)			MCDB		4.1	7.3	11.4	18.9	22.2	25.3	28.4	29.3	25.4	20.3	14.4	7.7	(30)
(31)		10%	WB		1.1	3.2	6.8	12.7	17.3	21.6	25.3	25.7	21.9	15.9	10.6	4.1	(31)
(32)			MCDB		2.8	5.4	10.0	16.7	21.2	24.7	27.4	28.5	24.4	19.0	12.9	6.0	(32)
(33)	Mean Daily Temperature Range		MDBR		9.7	10.4	10.7	11.8	10.6	9.2	6.9	7.8	10.0	11.8	10.5	9.5	(33)
(34)		5% DB	MCDBR		10.5	12.2	13.4	15.0	13.4	11.8	8.8	9.4	10.8	12.8	12.1	11.2	(34)
(35)			MCWBR		7.8	8.1	7.8	7.2	6.0	5.0	3.8	3.9	4.9	6.7	8.1	8.4	(35)
(36)		5% WB	MCDBR		9.1	10.5	11.5	12.0	10.6	8.9	6.9	7.9	8.6	11.0	10.3	10.2	(36)
(37)			MCWBR		7.6	7.9	7.8	7.0	6.1	5.2	3.8	3.8	5.1	6.8	8.1	8.4	(37)
(38)	Clear Sky Solar Irradiance	taub			0.401	0.471	0.533	0.559	0.601	0.618	0.543	0.464	0.432	0.452	0.419	0.394	(38)
(39)		taud			2.197	1.975	1.822	1.764	1.662	1.662	1.910	2.173	2.259	2.136	2.237	2.282	(39)
(40)		Ebn,noon			751	733	727	738	715	703	755	810	816	746	726	733	(40)
(41)		Edh,noon			109	153	196	219	247	247	192	144	125	129	104	94	(41)

Nomenclature: See separate page