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CARRASCO, Uruguay

WMO#: **865800**

Lat: **34.83S** Long: **56.00W** Elev: **32** StdP: **100.94** Time Zone: **-3.00 (SAU)** 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)	7	1.2	2.8	-2.0	3.2	6.4	-0.8	3.6	6.5	13.7	10.8	12.3	10.7	2.5	320	(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)	1	9.4	31.4	21.6	29.9	21.4	28.2	20.9	24.1	28.1	23.2	26.8	22.5	25.9	5.8	330	(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)	23.0	17.8	25.8	22.1	16.9	24.8	21.4	16.1	24.1	72.7	28.2	69.3	26.6	66.6	25.8	1415	(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)	12.8	10.8	9.7	28.8	-1.2	35.6	1.6	1.5	-2.4	36.7	-3.3	37.6	-4.2	38.5	-5.4	39.6	(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		16.3	22.3	21.9	20.5	17.1	13.6	11.0	10.3	11.8	12.7	15.6	18.1	20.7	(5)
(6)		Sd			2.79	2.62	2.63	2.89	3.27	3.27	3.69	3.74	3.29	3.05	3.16	2.89	(6)
(7)		HDD10.0		100	0	0	0	0	6	23	41	21	9	1	0	0	(7)
(8)		HDD18.3		1221	3	3	10	57	149	220	251	208	172	96	42	11	(8)
(9)		CDD10.0		2390	382	332	326	213	118	55	49	76	91	174	243	331	(9)
(10)		CDD18.3		468	126	102	77	19	4	2	2	4	3	11	35	83	(10)
(11)		CDH23.3		2821	846	566	352	84	21	4	8	31	27	86	252	546	(11)
(12)		CDH26.7		749	259	146	71	12	2	0	1	6	6	17	67	163	(12)
(13)	Precipitation	PrecAvg		1099	92	92	106	87	90	79	89	92	93	107	94	78	(13)
(14)		PrecMax		1501	388	207	293	319	189	180	188	233	233	256	217	286	(14)
(15)		PrecMin		680	3	17	23	7	15	10	19	12	25	13	17	7	(15)
(16)		PrecSD		180.9	92.9	59.6	72.9	74.2	49.3	49.2	47.5	66.5	63.0	55.2	54.9	66.6	(16)
(17)	Monthly Design Dry Bulb and Mean Coincident Wet Bulb Temperatures	0.4%	DB		34.9	33.1	31.0	28.2	26.1	23.2	24.2	27.0	27.0	29.0	31.1	32.9	(17)
(18)			MCWB		22.6	22.4	22.3	19.9	20.2	18.6	18.4	19.4	20.1	20.1	20.6	21.8	(18)
(19)		2%	DB		31.8	30.1	28.8	25.6	22.8	19.9	20.3	22.9	23.0	25.8	28.7	30.2	(19)
(20)			MCWB		21.7	22.1	21.4	19.3	18.2	16.4	16.2	17.1	17.0	18.4	19.7	20.9	(20)
(21)		5%	DB		29.5	28.2	26.9	23.9	20.2	17.9	18.0	20.0	20.6	23.1	26.2	28.3	(21)
(22)			MCWB		21.3	21.7	21.0	18.5	16.7	15.1	14.9	15.3	15.2	16.7	19.0	20.3	(22)
(23)		10%	DB		27.6	26.8	25.1	22.0	18.7	16.1	15.9	17.8	18.1	21.1	24.0	26.2	(23)
(24)			MCWB		21.2	21.1	20.8	18.3	16.1	13.7	13.4	14.2	14.4	16.4	18.4	19.8	(24)
(25)	Monthly Design Wet Bulb and Mean Coincident Dry Bulb Temperatures	0.4%	WB		25.1	25.2	24.9	22.5	21.1	19.9	18.9	19.7	20.7	21.6	22.8	24.0	(25)
(26)			MCDB		30.3	29.4	28.1	25.5	24.7	22.2	23.2	25.6	25.2	26.8	27.6	29.5	(26)
(27)		2%	WB		23.9	24.0	23.3	21.0	19.0	17.6	17.0	18.0	18.1	19.6	21.2	22.7	(27)
(28)			MCDB		28.1	27.3	26.3	23.5	21.4	19.1	19.7	21.8	21.7	23.3	25.4	27.1	(28)
(29)		5%	WB		23.1	23.0	22.4	20.0	17.8	15.8	15.5	16.4	16.4	18.5	20.2	21.9	(29)
(30)			MCDB		26.8	25.9	25.0	22.0	19.5	17.1	17.2	19.1	19.0	21.5	24.1	25.7	(30)
(31)		10%	WB		22.4	22.2	21.6	19.1	16.7	14.4	13.9	14.8	15.0	17.4	19.2	21.1	(31)
(32)			MCDB		25.8	25.2	24.0	21.1	18.2	15.6	15.6	17.0	17.5	20.2	22.8	24.6	(32)
(33)	Mean Daily Temperature Range		MDBR		9.4	8.6	8.4	8.6	8.3	8.2	8.1	8.8	8.5	8.7	9.2	9.6	(33)
(34)		5% DB	MCDBR		12.9	11.7	11.4	11.4	10.7	9.9	10.8	12.7	12.7	13.2	13.5	13.6	(34)
(35)			MCWBR		6.2	5.8	5.9	6.4	6.5	6.7	6.8	7.4	7.2	7.3	6.9	6.5	(35)
(36)		5% WB	MCDBR		9.8	9.0	8.6	8.4	8.2	7.6	9.0	10.8	10.1	10.2	10.7	10.3	(36)
(37)			MCWBR		5.7	5.3	5.3	5.6	5.7	6.1	6.5	7.1	6.8	6.6	6.4	5.8	(37)
(38)	Clear Sky Solar Irradiance	taub			0.380	0.370	0.340	0.309	0.288	0.291	0.288	0.333	0.357	0.387	0.374	0.376	(38)
(39)		taud			2.621	2.622	2.657	2.670	2.623	2.524	2.535	2.418	2.436	2.437	2.585	2.635	(39)
(40)		Ebn,noon			957	945	939	916	883	844	870	868	903	916	956	965	(40)
(41)		Edh,noon			101	97	87	76	70	72	75	96	107	116	104	100	(41)

Nomenclature: See separate page