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POLTAVA, Ukraine

WMO#: **335060**

Lat: **49.60N** Long: **34.55E** Elev: **160** StdP: **99.42** Time Zone: **2.00 (EUE)** 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	-19.2	-16.0	-22.4	0.5	-18.4	-19.6	0.7	-15.3	12.0	-3.3	10.3	-5.4	2.5	50	(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)	7	9.6	31.5	20.2	29.6	19.5	27.8	18.9	21.7	28.4	20.8	27.2	19.9	26.0	2.8	90	(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)	19.4	14.4	24.7	18.6	13.7	23.8	17.7	12.9	22.9	63.9	28.5	60.6	27.4	57.7	25.9	737	(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)	9.6	8.1	6.9	26.7	-22.0	33.6	4.0	2.3	-24.8	35.3	-27.1	36.6	-29.4	37.9	-32.2	39.5	(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	8.3	-4.5	-3.6	1.4	9.3	15.1	19.0	21.2	20.3	14.4	8.2	1.4	-3.3	(5)
(6)			Sd		6.01	5.61	4.94	4.22	4.18	3.51	3.13	3.57	3.79	4.55	5.13	5.34	(6)
(7)			HDD10.0	1934	448	381	267	62	7	0	0	0	7	88	260	413	(7)
(8)			HDD18.3	3918	707	614	524	272	118	34	9	19	126	315	508	671	(8)
(9)			CDD10.0	1313	0	0	1	41	164	269	346	318	140	32	2	0	(9)
(10)			CDD18.3	255	0	0	0	0	17	53	97	79	8	1	0	0	(10)
(11)			CDH23.3	2122	0	0	0	2	154	409	786	697	69	6	0	0	(11)
(12)			CDH26.7	648	0	0	0	0	40	101	249	246	12	1	0	0	(12)
(13)	Precipitation		PrecAvg	566	44	34	37	40	52	59	66	45	47	47	47	46	(13)
(14)			PrecMax	863	137	79	96	99	110	204	222	103	166	198	119	126	(14)
(15)			PrecMin	337	6	1	5	11	12	6	14	5	2	0	7	3	(15)
(16)			PrecSD	126.9	27.8	18.0	21.3	23.4	26.8	37.3	45.3	25.9	35.8	41.8	27.5	27.1	(16)
(17)	Monthly Design Dry Bulb and Mean Coincident Wet Bulb Temperatures	0.4%	DB		6.7	9.7	15.9	22.7	30.5	31.2	33.8	35.7	28.3	23.3	15.0	8.9	(17)
(18)			MCWB		5.6	6.6	9.3	12.8	18.5	19.3	20.9	20.1	16.9	15.8	11.7	8.0	(18)
(19)		2%	DB		4.6	6.4	12.7	20.3	27.4	29.4	31.4	31.8	25.4	19.3	11.7	6.6	(19)
(20)			MCWB		3.7	5.0	7.6	12.0	16.9	19.4	20.9	19.8	15.9	14.1	9.9	5.8	(20)
(21)		5%	DB		3.3	4.2	10.1	18.2	24.6	27.5	29.5	29.1	22.9	16.5	9.7	4.5	(21)
(22)			MCWB		2.4	3.0	6.3	10.8	16.0	19.0	20.1	19.0	15.5	12.8	8.5	4.0	(22)
(23)		10%	DB		2.1	2.6	7.9	16.3	22.3	25.7	27.6	27.1	21.0	14.5	7.9	2.8	(23)
(24)			MCWB		1.3	1.7	5.1	9.9	14.8	18.4	19.6	18.3	14.8	11.5	6.9	2.2	(24)
(25)	Monthly Design Wet Bulb and Mean Coincident Dry Bulb Temperatures	0.4%	WB		5.9	7.2	10.2	14.1	20.1	22.1	22.9	22.4	18.8	17.1	11.9	8.0	(25)
(26)			MCDB		6.5	8.8	14.1	20.1	28.8	27.8	30.0	29.6	24.5	21.7	14.2	8.6	(26)
(27)		2%	WB		3.9	5.0	8.3	12.8	18.0	20.9	21.9	20.9	17.3	14.8	10.3	5.9	(27)
(28)			MCDB		4.4	6.3	11.6	18.4	24.6	26.8	28.8	28.5	22.6	17.9	11.5	6.5	(28)
(29)		5%	WB		2.5	3.1	6.7	11.7	16.7	19.9	21.2	19.9	16.4	13.4	8.6	4.1	(29)
(30)			MCDB		3.1	3.9	9.4	16.4	22.8	25.6	27.7	27.1	21.0	15.8	9.5	4.6	(30)
(31)		10%	WB		1.4	1.9	5.4	10.7	15.6	19.0	20.3	19.0	15.4	12.0	7.0	2.3	(31)
(32)			MCDB		2.0	2.6	7.6	15.1	21.0	24.6	26.2	25.7	19.5	14.2	7.8	2.7	(32)
(33)	Mean Daily Temperature Range		MDBR		4.4	5.2	5.9	8.3	9.6	9.1	9.6	10.0	8.5	7.0	4.5	4.4	(33)
(34)		5% DB	MCDBR		3.8	5.8	9.3	11.3	12.3	11.4	12.0	12.7	11.8	9.7	6.6	4.8	(34)
(35)			MCWBR		3.6	4.7	5.7	5.5	5.2	4.9	4.6	4.7	5.3	5.5	5.2	4.3	(35)
(36)		5% WB	MCDBR		3.8	5.3	8.4	9.7	10.8	10.1	10.4	11.0	9.9	8.2	5.8	4.3	(36)
(37)			MCWBR		3.7	4.6	5.7	5.3	5.3	4.9	4.6	4.9	5.4	5.5	4.9	4.0	(37)
(38)	Clear Sky Solar Irradiance	taub			0.397	0.331	0.343	0.340	0.323	0.346	0.389	0.375	0.336	0.333	0.324	0.347	(38)
(39)		taud			2.137	2.219	2.321	2.410	2.438	2.404	2.274	2.338	2.488	2.493	2.488	2.330	(39)
(40)		Ebn,noon			592	796	862	907	935	911	863	859	865	801	718	617	(40)
(41)		Edh,noon			85	97	104	106	108	113	127	113	88	74	60	62	(41)

Nomenclature: See separate page