mP20: DIGITAL VARIABLES (COILS)

variable address	description	variable type	MODBUS Database (e.g. address -> bit nr.)			
			unit 1	unit 2	unit 3	unit n
0	Not used	…	1	201	401	(n-1)*200+1
1	System On (Fan)	r	2	202	402	(n-1)*200+2
2	Compressor 1	r	3	203	403	(n-1)*200+3
3	Compressor 2	r	4	204	404	(n-1)*200+4
4	Net compressor 1 (Compressor 3)	r	5	205	405	(n-1)*200+5
5	Net compressor 2 (Compressor 4)	r	6	206	406	(n-1)*200+6
6	Heating Stage 1	r	7	207	407	(n-1)*200+7
7	Heating Stage 2	r	8	208	408	(n-1)*200+8
8	Heating Stage 3	r	9	209	409	(n-1)*200+9
9	Hot gas On	r	10	210	410	(n-1)*200+10
10	Dehumidification	r	11	211	411	(n-1)*200+11
11	Humidification	r	12	212	412	(n-1)*200+12
12	Wrong Password Alarm	r	13	213	413	(n-1)*200+13
13	Room High Temp. Alarm	r	14	214	414	(n-1)*200+14
14	Room Low Temp. Alarm	r	15	215	415	(n-1)*200+15
15	Room High Humid. Alarm	r	16	216	416	(n-1)*200+16
16	Room Low Humid. Alarm	r	17	217	417	(n-1)*200+17
17	Room High/Low Temp./Humid. Alarm (Ext. Devices)	r	18	218	418	(n-1)*200+18
18	Clogged Filter Alarm	r	19	219	419	(n-1)*200+19
19	Flooding Alarm	r	20	220	420	(n-1)*200+20
20	Loss of Air Flow Alarm	r	21	221	421	(n-1)*200+21
21	Heater Overheating Alarm	r	22	222	422	(n-1)*200+22
22	High Pressure 1 Alarm	r	23	223	423	(n-1)*200+23
23	High Pressure 2 Alarm	r	24	224	424	(n-1)*200+24
24	Low Pressure 1 Alarm	r	25	225	425	(n-1)*200+25
25	Low Pressure 2 Alarm	r	26	226	426	(n-1)*200+26
26	Wrong phase sequence alarm	r	27	227	427	(n-1)*200+27
27	Smoke-Fire Alarm	r	28	228	428	(n-1)*200+28
28	Interrupted LAN Alarm	r	29	229	429	(n-1)*200+29
29	Humidifier Alarm: High Current	r	30	230	430	(n-1)*200+30
30	Humidifier Alarm: Power Loss	r	31	231	431	(n-1)*200+31
31	Humidifier Alarm: Water Loss	r	32	232	432	(n-1)*200+32
32	Chilled Water Temp. too High for Dehumidification	r	33	233	433	(n-1)*200+33
33	CW Valve Failure or Water Flow too Low	r	34	234	434	(n-1)*200+34
34	Loss of Water flow Alarm	r	35	235	435	(n-1)*200+35
35	High chilled water temp. Alarm	r	36	236	436	(n-1)*200+36
36	Room air Sensor Failure/Disconnected	r	37	237	437	(n-1)*200+37
37	Hot water Sensor Failure/Disconnected	r	38	238	438	(n-1)*200+38
38	Condensing water Sensor Failure/Disconnect.	r	39	239	439	(n-1)*200+39
39	Outdoor temp. Sensor Failure/Disconnected	r	40	240	440	(n-1)*200+40
40	Delivery temp. Sensor Failure/Disconnected	r	41	241	441	(n-1)*200+41
41	Rel. Humidity Sensor Failure/Disconnected	r	42	242	442	(n-1)*200+42

mP20: DIGITAL VARIABLES (COILS) (following)

variable address	Description	variable type	MODBUS Database (e.g. address -> bit nr.)			
			unit 1	unit 2	unit 3	unit n
42	Compressor 1: hour counter threshold Alarm	r	43	243	443	(n-1)*200+43
43	Compressor 2: hour counter threshold Alarm	r	44	244	444	(n-1)*200+44
44	Compressor 3: hour counter threshold Alarm	r	45	245	445	(n-1)*200+45
45	Compressor 4: hour counter threshold Alarm	r	46	246	446	(n-1)*200+46
46	Air filter: hour counter threshold Alarm	r	47	247	447	(n-1)*200+47
47	Heater 1: hour counter threshold Alarm	r	48	248	448	(n-1)*200+48
48	Heater 2: hour counter threshold Alarm	r	49	249	449	(n-1)*200+49
49	Humidifier: hour counter threshold Alarm	r	50	250	450	(n-1)*200+50
50	Air conditioning unit: hour counter threshold Alarm	r	51	251	451	(n-1)*200+51
51	General Alarm State	r	52	252	452	(n-1)*200+52
52	2nd Level Alarm State	r	53	253	453	(n-1)*200+53
53	Outdoor Temp. Sensor Fitted	r	54	254	454	(n-1)*200+54
54	Closed Circuit (or Chilled) Water Temperature Sensor Fitted	r	55	255	455	(n-1)*200+55
55	Delivery Temp. Sensor Fitted	r	56	256	456	(n-1)*200+56
56	Hot water temp. Sensor Fitted	r	57	257	457	(n-1)*200+57
...		...	...	...	...	....
60	Unit Remote Switch-On/Off Control	r/w	61	261	461	(n-1)*200+61
61	Buzzer and Alarm Remote Reset Control	r/w	62	262	462	(n-1)*200+62

mP20: ANALOG VARIABLES (HOLDING or INPUT REGISTERS)

(all values x 10)

variable address	description	m.u.	variable type	MODBUS Database (e.g. address -> bit nr.)			
				unit 1	unit 2	unit 3	unit n
0	Not used	-	-	1	257	513	(n-1)*256+1
1	Room Temperature	°C	r	2	258	514	(n-1)*256+2
2	Outdoor Temperature	°C	r	3	259	515	(n-1)*256+3
3	Delivery Air Temperature	°C	r	4	260	516	(n-1)*256+4
4	Closed Circuit (or Chilled) Water Temperature	°C	r	5	261	517	(n-1)*256+5
5	Hot Water Temperature	°C	r	6	262	518	(n-1)*256+6
6	Room Relative Humidity	rH%	r	7	263	519	(n-1)*256+7
7	Cooling Set Point	°C	r/w	8	264	520	(n-1)*256+8
8	Cooling Sensitivity	°C	r/w	9	265	521	(n-1)*256+9
9	Heating Set point	°C	r/w	10	266	522	(n-1)*256+10
10	Heating Sensitivity	°C	r/w	11	267	523	(n-1)*256+11
11	Room High Temp. Alarm Threshold (1)	°C	r/w	12	268	524	(n-1)*256+12
12	Room Low Temp. Alarm Threshold (1)	°C	r/w	13	269	525	(n-1)*256+13
13	Setback Mode: Cooling Set Point	°C	r/w	14	270	526	(n-1)*256+14
14	Setback Mode: Heating Set Point	°C	r/w	15	271	527	(n-1)*256+15
15	CW Set Point to Start Dehumidification Cycle	°C	r/w	16	272	528	(n-1)*256+16
16	CW High Temperature Alarm Threshold	°C	r/w	17	273	529	(n-1)*256+17
17	CW Set Point to Start CW Operating Mode (TC only)	°C	r/w	18	274	530	(n-1)*256+18
18	Rad-cooler Set Point in E.S. Mode (ES Only)	°C	r/w	19	275	531	(n-1)*256+19
19	Rad-cooler Set Point in DX Mode (ES Only)	°C	r/w	20	276	532	(n-1)*256+20
20	0-10V Ramp 1 Value (CW Valve Ramp)		r	21	277	533	(n-1)*256+21
21	0-10V Ramp 2 Value (HW Valve/Rad Cooler Ramp)		r	22	278	534	(n-1)*256+22
22	Humidifier: steam capacity	kg/h	r	23	279	535	(n-1)*256+23

N.B.: all the analog variables are expressed in °C/10 except for those indicated by (1) these one are the expressed in °C.

mP20: INTEGER VARIABLES (HOLDING or INPUT REGISTERS)

variable address	description	m.u.	variable type	MODBUS Database (e.g. address -> bit nr.)			
				unit 1	unit 2	unit 3	unit n
0	Not Used	-	-	129	385	641	(n-1)*256+128+1
1	Air filter hour counter	h	r	130	386	642	(n-1)*256+128+1
2	Unit hour counter	h	r	131	387	643	(n-1)*256+128+1
3	Compressor 1 hour counter	h	r	132	388	644	(n-1)*256+128+4
4	Compressor 2 hour counter	h	r	133	389	645	(n-1)*256+128+5
5	Compressor 3 hour counter	h	r	134	390	646	(n-1)*256+128+6
6	Compressor 4 hour counter	h	r	135	391	646	(n-1)*256+128+7
7	Heater 1 hour counter	h	r	136	392	648	(n-1)*256+128+8
8	Heater 2 hour counter	h	r	137	393	649	(n-1)*256+128+9
9	Humidifier hour counter	h	r	138	394	650	(n-1)*256+128+10
10	Not Used			139	395	651	(n-1)*256+128+11
11	Not Used			140	396	652	(n-1)*256+128+12
12	Dehumidification Proportional Band	rH%	r/w	141	397	653	(n-1)*256+128+13
13	Humidification Proportional Band	rH%	r/w	142	398	654	(n-1)*256+128+14
14	High Relative Humidity Alarm Threshold	rH%	r/w	143	399	655	(n-1)*256+128+15
15	Low Relative Humidity Alarm Threshold	rH%	r/w	144	400	656	(n-1)*256+128+16
16	Dehumidification Set Point	rH%	r/w	145	401	657	(n-1)*256+128+17
17	Setback Mode: Dehumidification Set Point	rH%	r/w	146	402	658	(n-1)*256+128+18
18	Humidification Set Point	rH%	r/w	147	403	659	(n-1)*256+128+19
19	Setback Mode: Humidification Set Point	rH%	r/w	148	404	660	(n-1)*256+128+20
20	Restart Delay	sec	r/w	149	405	661	(n-1)*256+128+21
21	Regulation Start Transitory	sec	r/w	150	406	662	(n-1)*256+128+22
22	Low Pressure Delay	sec	r/w	151	407	663	(n-1)*256+128+23
23	Room T+H Alarm Delay	min	r/w	152	408	664	(n-1)*256+128+24
24	Anti-Hunting Constant of Room Regulation	min	r/w	153	409	665	(n-1)*256+128+25
25	Stand-by Cycle Base Time	h	r/w	154	410	666	(n-1)*256+128+26
26	Stand-by Actual Unit		r/w	155	411	667	(n-1)*256+128+27
27	Total of units connected in LAN	n	r/w	156	412	667	(n-1)*256+128+28