

INTERNAL ONLY

Issue:

DG5 Modbus Register Map

Product line:

Airflow with DG5 Board

Environment:

Airflow with DG5 Board

Cause:

Resolution:

7.1 Data Guard 5.0 variable list

BACNET	MODBUS	Airflow		DG5	
Binary	Digital	Digital	R/W	DESCRIPTION	VALUE RANGE
1	10002	1		Not used	
2	10003	2	R/W	Celsius Flag	0=degrees F, 1= degrees C
3	10004	3	R/W	Keypad - system ON/OFF	0=OFF, 1=ON
4	10005	4	R	Operating Mode - Cooling	1=Cooling
5	10006	5	R	Operating Mode - Heating	1=Heating
6	10007	6	R	Operating Mode - Dehumidifying	1=Dehumidifying
7	10008	7	R	Operating Mode - Humidifying	1=Humidifying
8	10009	8		Not used	
9	10010	9		Not used	
10	10011	10	R/W	Resets all active alarms	1=Reset alarms
11	10012	11	R	Airflow Alarm	1=Alarm
12	10013	12	R	Clogged Filter Alarm	1=Alarm
13	10014	13	R	Water Detector Alarm	1=Alarm
14	10015	14	R	Compressor 1 low pressure alarm	1=Alarm
15	10016	15	R	System enable input	1=REMOTE ON
16	10017	16	R	Compressor 2 low pressure alarm	1=Alarm
17	10018	17	R	Water Flow alarm	1=Alarm
18	10019	18	R	Firestat alarm	1=Alarm
19	10020	19	R	Smoke monitor alarm	1=Alarm
20	10021	20	R	Humidifier alarm	1=Alarm
21	10022	21	R	Compressor 1 high pressure alarm	1=Alarm
22	10023	22	R	Compressor 2 high pressure alarm	1=Alarm
23	10024	23	R	Return high temperature alarm	1=Alarm

24	10025	24	R	Return low temperature alarm	1=Alarm
25	10026	25		Not used	
26	10027	26		Not used	
27	10028	27	R	Chilled water temperature high alarm	1=Alarm
28	10029	28	R	Chilled water temperature low alarm	1=Alarm
29	10030	29	R	Hot water temperature high alarm	1=Alarm
30	10031	30	R	Hot water temperature low alarm	1=Alarm
31	10032	31	R	Return air humidity high alarm	1=Alarm
32	10033	32	R	Return air humidity low alarm	1=Alarm
33	10034	33		Not used	
34	10035	34		Not used	
35	10036	35		Not used	
36	10037	36		Not used	
37	10038	37		Not used	
38	10039	38		Not used	
39	10040	39	R	Power reset alarm	1=Alarm
40	10041	40	R	relay 1 status-unit blower	1=Relay is closed
41	10042	41	R	relay 2 status-Heat1, Heat valve open	1=Relay is closed
42	10043	42	R	relay 3 status-Heat2, Heat valve close	1=Relay is closed
43	10044	43	R	relay 4 status-Humidifier	1=Relay is closed
44	10045	44	R	relay 5 status-Liquid line for compressor 1	1=Relay is closed
45	10046	45	R	relay 6 status-Compressor 1	1=Relay is closed
46	10047	46	R	relay 7 status-Liquid line for comp 2, Hot gas bypass, Fan low speed	1=Relay is closed
47	10048	47	R	relay 8 status-Compressor 2	1=Relay is closed
48	10049	48	R	relay 9 status-Cool valve open, Hot gas for comp 1, unloader for comp 1	1=Relay is closed
49	10050	49	R	relay 10 status-Cool valve close, Hot gas for comp 2, unloader for comp 2	1=Relay is closed
50	10051	50	R	relay 11 status-alarm present	1=Relay is closed
51	10052	51		Not used	
52	10053	52		Not used	
53	10054	53	R/W	Water detector input enable	1=Enabled
54	10055	54		Not used	
55	10056	55	R/W	Remote on/off enable	1=Enabled
56	10057	56		Not used	
57	10058	57		Not used	
58	10059	58	R/W	Firestat alarm input enable	1=Enabled
59	10060	59	R/W	Smoke monitor input enable	1=Enabled
60	10061	60		Not used	
61	10062	61	R/W	Compressor 1 high pressure input enable	1=Enabled
62	10063	62	R/W	Compressor 2 high pressure input enable	1=Enabled
63	10064	63		Not used	

64	10065	64		Not used	
65	10066	65		Not used	
66	10067	66		Not used	
67	10068	67		Not used	
68	10069	68		Not used	
69	10070	69		Not used	
70	10071	70		Not used	
71	10072	71		Not used	
72	10073	72		Not used	
73	10074	73		Not used	
74	10075	74		Not used	
75	10076	75		Not used	
76	10077	76		Not used	
77	10078	77		Not used	
78	10079	78		Not used	
79	10080	79		Not used	
80	10081	80		Not used	
81	10082	81		Not used	
82	10083	82		Not used	
83	10084	83		Not used	
84	10085	84		Not used	
85	10086	85		Not used	
86	10087	86		Not used	
87	10088	87		Not used	
88	10089	88		Not used	
89	10090	89		Not used	
90	10091	90	R	Return air temperature sensor failure	1=Failed
91	10092	91	R	Supply air temperature sensor failure	1=Failed
92	10093	92	R	Chilled water temperature sensor failure	1=Failed
93	10094	93	R	Hot water temperature sensor failure	1=Failed
94	10095	94	R	Return air humidity sensor failure	1=Failed
95	10096	95		Not used	
96	10097	96		Not used	
97	10098	97		Not used	
98	10099	98		Not used	
99	10100	99		Not used	
100	10101	100		Not used	
101	10102	101	R	Relay 1 maintenance alarm-blower	1=Alarm
102	10103	102	R	Relay 10 maintenance alarm-CL close, unloader 2	1=Alarm
103	10104	103	R	Relay 2 maintenance alarm-Heat 1, heat valve open	1=Alarm
104	10105	104	R	Relay 3 maintenance alarm-Heat 2, heat valve close	1=Alarm
105	10106	105	R	Relay 4 maintenance alarm-Humidifier	1=Alarm
106	10107	106	R	Relay 5 maintenance alarm-Liquid line 1	1=Alarm
107	10108	107	R	Relay 6 maintenance alarm-Compressor 1	1=Alarm
108	10109	108	R	Relay 7 maintenance alarm-Liquid line 2, HG bypass, Fan low sp	1=Alarm

109	10110	109	R	Relay 8 maintenance alarm-Compressor 2	1=Alarm
110	10111	110	R/W	RTC change day flag	1=Change
111	10112	111	R/W	RTC change hour flag	1=Change
112	10113	112	R/W	RTC change minute flag	1=Change
113	10114	113	R/W	RTC change month flag	1=Change
114	10115	114	R/W	RTC change weekday flag	1=Change
115	10116	115	R/W	RTC change year flag	1=Change
116	10117	116	R	RTC installed	1=Clock board installed
117	10118	117	R	Relay 9 maintenance alarm	1=Alarm
118	10119	118	R	Hot water flow alarm	1=Alarm
119	10120	119	R	Supply air temperature sensor enable	1=Enabled
120	10121	120	R	Chilled water temperature sensor enable	1=Enabled
121	10122	121	R	Hot water temperature sensor enable	1=Enabled
122	10123	122	R	Chilled water sensor selected	1=Selected
123	10124	123	R	Hot water sensor selected	1=Selected
124	10125	124	R	digital input 2 status-Filter alarm input	0=Closed, 1=Open
125	10126	125	R	digital input 3 status-Water detector alarm input	0=Closed, 1=Open
126	10127	126	R	digital input 4 status-Compressor 1 low pressure or Hot water flow input	0=Closed, 1=Open
127	10128	127	R	digital input 6 status-Compressor 2 low pressure or Door alarm input	0=Closed, 1=Open
128	10129	128		Not used	
129	10130	129		Not used	
130	10131	130	R	digital input 7 status-Water flow input	0=Closed, 1=Open
131	10132	131		Not used	
132	10133	132		Not used	
133	10134	133	R	door alarm	1=Alarm
134	10135	134		Not used	
135	10136	135	R	EEPROM failure	1=Failed
136	10137	136	R	freeze alarm	1=Alarm
137	10138	137	R	digital input 1 status-Airflow alarm input	0=Closed, 1=Open
138	10139	138	R	digital input 10 status-Humidifier input or Freeze alarm input	0=Closed, 1=Open
139	10140	139	R	digital input 11 status-Compressor 1 high pressure alarm input	0=Closed, 1=Open
140	10141	140	R	digital input 12 status-Compressor 2 high pressure alarm input	0=Closed, 1=Open
141	10142	141	R	Buzzer ON	1=Buzzer ON
142	10143	142	R/W	Buzzer enable	1=Buzzer Enabled
143	10144	143	R	global alarm- an alarm is currently present in the controller.	1=alarm present
144	10145	144	R/W	Buzzer reset	1=reset buzzer
145	10146	145	R	Maintenance alarm analog output 1	1=Alarm
146	10147	146	R	Maintenance alarm analog output 2	1=Alarm
ANALOG	ANALOG	ANALOG			
1	40002	1	R	Return air temperature	-450 to 1850
2	40003	2	R	Supply air temperature	-450 to 1850
3	40004	3	R	Chilled water temperature	-450 to 1850

4	40005	4	R	Hot water temperature	-450 to 1850
5	40006	5	R	Return air humidity	0 to 1000
6	40007	6		Not used	
7	40008	7		Not used	
8	40009	8		Not used	
9	40010	9	R	Analog output 1-Heat, Cool, PC, Humidifier, CG damper, ECWS	0 to 1000
10	40011	10	R	Analog output 2-Heat, Cool, PC, Humidifier, CG damper, ECWS	0 to 1000
11	40012	11	R/W	Return air temperature high alarm set point	0 to 1000
12	40013	12		Not used	
13	40014	13	R/W	Chilled water temperature high alarm set point	0 to 2120
14	40015	14	R/W	Hot water temperature high alarm set point	0 to 2120
15	40016	15	R/W	Return air humidity high alarm set point	0 to 1000
16	40017	16		Not used	
17	40018	17		Not used	
18	40019	18		Not used	
19	40020	19	R	Heat demand	0 to 100
20	40021	20		Not used	
21	40022	21	R/W	Return air temperature low alarm set point	0 to 1000
22	40023	22		Not used	
23	40024	23	R/W	Chilled water temperature low alarm set point	0 to 2120
24	40025	24	R/W	Hot water temperature low alarm set point	0 to 2120
25	40026	25	R/W	Return air humidity low alarm set point	0 to 1000
26	40027	26		Not used	
27	40028	27		Not used	
28	40029	28		Not used	
29	40030	29		Not used	
30	40031	30	R/W	Return air temperature cooling set point	Heating set point to 1000
31	40032	31	R/W	Return air temperature cooling band	1 to 99
32	40033	32		Not used	
33	40034	33	R/W	Return air temperature heating set point	0 to cooling set point
34	40035	34	R/W	Return air temperature heating band	1 to 99
35	40036	35		Not used	
36	40037	36	R/W	Return air dehumidify set point	humidity set point to 1000
37	40038	37	R/W	Return air dehumidify band	1 to 99
38	40039	38		Not used	
39	40040	39	R/W	Return air humidity set point	0 to dehumidify set point
40	40041	40	R/W	Return air humidity band	1 to 99
41	40042	41		Not used	
42	40043	42		Not used	
43	40044	43		Not used	
44	40045	44		Not used	
45	40046	45		Not used	
46	40047	46		Not used	
47	40048	47		Not used	
48	40049	48		Not used	

49	40050	49		Not used	
50	40051	50	R	RTC weekday	1 to 7 = "mon" to "sun"
51	40052	51	R	RTC hour	0 to 23
52	40053	52	R	RTC minute	0 to 59
53	40054	53	R	RTC month	1 to 12
54	40055	54	R	RTC year	0 to 99
55	40056	55	R	Sys OFF,Initial delay...,Fan ON,Rem OFF,Standby-OFF,Airflow-OFF,Transfer-OFF	0 to 6 = "system off" to "transfer alarm-off"
56	40057	56	R	Cooling,Heating,Dehumid,Reheat,PC,ECW S,Humid,Heat humid	1 to 8 = "cooling" to "heat humid"
57	40058	57	R	Humidity demand	0 to 100
58	40059	58	R	system var1	0 to 1000
59	40060	59	R	system var2	0 to 3
60	40061	60	R	RTC day	0 to 31
61	40062	61	R	Cooling demand display	0 to 100
ANALOG	ANALOG	INTEGER			
129	40130	1	R	CCT-DX,CCT-CW,CG,VERSACOO,AFX-1,AFX-2,CM-DX,CM-CW,TC-DX,TC-CW	1 to 10 = "cct-dx" to "techcool-cw"
130	40131	2	R	version month	
131	40132	3	R	version day	
132	40133	4		Not used	
133	40134	5		Not used	
134	40135	6		Not used	
135	40136	7		Not used	
136	40137	8		Not used	
137	40138	9		Not used	
138	40139	10	R	Relay 1 run hours low-unit blower	0 to 999
139	40140	11	R	Relay 1 run hours high-unit blower	0 to 99
140	40141	12	R	Relay 2 run hours low-heat stage 1	0 to 999
141	40142	13	R	Relay 2 run hours high-heat stage 1	0 to 99
142	40143	14	R	Relay 3 run hours low-heat stage 2	0 to 999
143	40144	15	R	Relay 3 run hours high-heat stage 2	0 to 99
144	40145	16	R	Relay 4 run hours low-humidifier	0 to 999
145	40146	17	R	Relay 4 run hours high-humidifier	0 to 99
146	40147	18	R	Relay 5 run hours low-comp 1 liquid line	0 to 999
147	40148	19	R	Relay 5 run hours high-comp 1 liquid line	0 to 99
148	40149	20	R	Relay 6 run hours low-compressor 1	0 to 999
149	40150	21	R	Relay 6 run hours high-compressor 1	0 to 99
150	40151	22	R	Relay 7 run hours low-LL2, HG bypass, Fan low speed	0 to 999
151	40152	23	R	Relay 7 run hours high-LL2, HG bypass, Fan low speed	0 to 99
152	40153	24	R	Relay 8 run hours low-compressor 2	0 to 999
153	40154	25	R	Relay 8 run hours high-compressor 2	0 to 99
154	40155	26	R	Relay 9 run hours low-CL open, HG1, unloader 1	0 to 999
155	40156	27	R	Relay 9 run hours high-CL open, HG1,	0 to 99

				unloader 1	
156	40157	28	R	Relay 10 run hours low-CL close, DEH/HG2, unloader 2	0 to 999
157	40158	29	R	Relay 10 run hours high-CL close, DEH/HG2, unloader 2	0 to 99
158	40159	30	R	Analog output 1 run hours low	0 to 999
159	40160	31	R	Analog output 1 run hours high	0 to 99
160	40161	32	R	Analog output 2 run hours low	0 to 999
161	40162	33	R	Analog output 2 run hours high	0 to 99
162	40163	34	R/W	Relay 1 select	0=n/a, 1=blower
163	40164	35	R/W	Relay 2 select	0=n/a, 1=heat1, 2=ht valve open
164	40165	36	R/W	Relay 3 select	0=n/a, 1=heat2, 2=ht valve close
165	40166	37	R/W	Relay 4 select	0=n/a, 1=humidifier
166	40167	38	R/W	Relay 5 select	0=n/a, 1=liquid line1
167	40168	39	R/W	Relay 6 select	0=n/a, 1=Compressor 1
168	40169	40	R/W	Relay 7 select	0=n/a, 1=LL2, 2=HG bypass, 3=Fan LS
169	40170	41	R/W	Relay 8 select	0=n/a, 1=Compressor 2
170	40171	42	R/W	Relay 9 select	0=n/a, 1=CL open, 2=HG1, 3=unloader1
171	40172	43	R/W	Relay 10 select	0=n/a, 1=CL close, 2=DEH/HG2, 3=unloader2
172	40173	44	R/W	Analog input 2 select	0=n/a, 1=Air supply T, 2=CW supply T
173	40174	45	R/W	Analog input 3 select	0=n/a, 1=CW supply T, 2=CW return T
174	40175	46	R/W	Analog input 4 select	0=n/a, 1=hot water temperature
175	40176	47		Not used	
176	40177	48		Not used	
177	40178	49		Not used	
178	40179	50		Not used	
179	40180	51		Not used	
180	40181	52		Not used	
181	40182	53		Not used	
182	40183	54		Not used	
183	40184	55	R/W	Digital input 1 select	0=n/a, 1=airflow alarm
184	40185	56	R/W	Digital input 2 select	0=n/a, 1=filter alarm
185	40186	57	R/W	Digital input 4 select	0=n/a, 1=comp1 LP, 2=hot water flow
186	40187	58	R/W	Digital input 6 select	0=n/a, 1=comp2 LP, 2=door al
187	40188	59	R/W	Digital input 7 select	0=n/a, 1=water flow 2way, 2=3way
188	40189	60	R/W	Digital input 10 select	0=n/a, 1=humidifier, 2=freeze stat
189	40190	61	R/W	Password 1	0 to 9999
190	40191	62	R/W	Password 2	0 to 9999
191	40192	63	R/W	RTC minute update value	0 to 59

192	40193	64	R/W	RTC month update value	1 to 12
193	40194	65	R/W	RTC weekday update value	1 to 7 = "mon" to "sun"