

GSD-File			V??	16.6.2021	PLANRAY													
DATE			VKo	TRACE HEATING CONTROLLERS														
OUTPUT - 14 Bytes - BT/MT take parameters																		
Logic	Byte	Channel	Description			Data type	7	6	5	4	3	2	1	0	bit count		NOTES	
0	1	1	Heating ON/OFF			Bit						x		x state, bit				
		1	Auto/Man drive (Auto=0, Man=1)									x		NOT USED				
		1										x		NOT USED				
		1								x			x	NOT USED				
		1							x				x	NOT USED				
		1								x			x	NOT USED				
		1								x			x	NOT USED				
1	2	1	Temperature setpoint (TC), 1th byte			Signed Int16									scale factor 10, (167=16,7 Degrees Celcius)			
2	3	1	Temperature setpoint (TC), 2th byte			Signed Int16									scale factor 10, (167=16,7 Degrees Celcius)			
3	4	1	TC measurement via bus, 1th byte			Signed Int16									TC value to the BlueTrace controller, NO			
4	5	1	TC measurement via bus, 2th byte			Signed Int16									TC value to the BlueTrace controller, NO			
5	6	1	TL measurement via bus, 1th byte			Signed Int16									TL value to the BlueTrace controller, NO			
6	7	1	TL measurement via bus, 2th byte			Signed Int16									TL value to the BlueTrace controller, NO			
7	8	2	Heating ON/OFF			Bit						x		x state, bit				
		2	Auto/Man drive (Auto=0, Man=1)									x		NOT USED				
		2								x			x	NOT USED				
		2							x			x	x	NOT USED				
		2						x			x	x	x	NOT USED				
		2							x		x	x	x	NOT USED				
		2							x		x	x	x	NOT USED				
8	9	2	Temperature setpoint (TC), 1th byte			Signed Int16									scale factor 10, (167=16,7 Degrees Celcius)			
9	10	2	Temperature setpoint (TC), 2th byte			Signed Int16									scale factor 10, (167=16,7 Degrees Celcius)			
10	11	2	TC measurement via bus, 1th byte			Signed Int16									TC value to the BlueTrace controller, NO			
11	12	2	TC measurement via bus, 2th byte			Signed Int16									TC value to the BlueTrace controller, NO			
12	13	2	TL measurement via bus, 1th byte			Signed Int16									TL value to the BlueTrace controller, NO			
13	14	2	TL measurement via bus, 2th byte			Signed Int16									TL value to the BlueTrace controller, NO			

OUTPUT - 14 Bytes - BT/MT take parameters												
INPUT - 60 Bytes - BT/MT send parameters												
Logic	Byte	Channel	Description	Data type	bit count						NOTES	
					7	6	5	4	3	2	1	
0	1	1	Heating ON/OFF	Bit					x			state, bit
		1	Auto/Man drive (Auto=0, Man=1)	Bit					x			NOT USED
		1	Profibus com. Alarm, BT not respond	Bit				x				Alarm, bit
		1	NOT USED	Bit			x					NOT USED
		1	TC max temperature alarm	Bit			x					Alarm, bit
		1	TC min temperature alarm	Bit		x						Alarm, bit
		1	TL max temperature alarm	Bit	x							Alarm, bit
		1	Load current max alarm	Bit	x							Alarm, bit
1	2	1	GFC (GroundFaultCurrent) max alarm	Bit					x			Alarm, bit
		1	GFC (GroundFaultCurrent) trip alarm	Bit					x			Alarm, bit
		1	Tyristor (SSR) failure alarm	Bit			x					Alarm, bit
		1	Load/main circuit feed missing alarm	Bit		x						Alarm, bit
		1	PT100 temperature sensor alarm	Bit		x						Alarm, bit
		1	BT-TL600 ATEX teperature limiter alarm	Bit		x						Alarm, bit
		1	BlueTrace com alarm	Bit	x							Alarm, bit
		1	TH (Heat Sink) max temperature alarm	Bit	x							Alarm, bit
2	3	1	Temperature setpoint (TC), 1th byte	Signed Int16								scale factor 10, Degrees Celcius
3	4	1	Temperature setpoint (TC), 2h byte	Signed Int16								scale factor 10, Degrees Celcius
4	5	1	TC measurement (Control sensor), 1th byte	Signed Int16								scale factor 10, Degrees Celcius
5	6	1	TC measurement (Control sensor), 2th byte	Signed Int16								scale factor 10, Degrees Celcius
6	7	1	TL measurement (Limit sensor), 2th byte	Signed Int16								scale factor 10, Degrees Celcius
7	8	1	TL measurement (Limit sensor), 2th byte	Signed Int16								scale factor 10, Degrees Celcius
8	9	1	TH (Heat Sink) temperature, 1th byte	Signed Int16								scale factor 10, Degrees Celcius
9	10	1	TH (Heat Sink) temperature, 2th byte	Signed Int16								scale factor 10, Degrees Celcius
10	11	1	GFC measurement, milliamperes, 1th byte	Unsigned Int16								scale factor 10, mA
11	12	1	GFC measurement, milliamperes, 2th byte	Unsigned Int16								scale factor 10, mA
12	13	1	L1 load current, amperes*10, 1th byte	Unsigned Int16								scale factor 10, A
13	14	1	L1 load current, amperes*10, 2th byte	Unsigned Int16								scale factor 10, A
14	15	1	L2 load current, amperes*10, 1th byte	Unsigned Int16								scale factor 10, A
15	16	1	L2 load current, amperes*10, 2th byte	Unsigned Int16								scale factor 10, A
16	17	1	L3 load current, amperes*10, 1th byte	Unsigned Int16								scale factor 10, A
17	18	1	L3 load current, amperes*10, 2th byte	Unsigned Int16								scale factor 10, A
18	19	1	L1 power, kilowatts*10, 1th byte	Unsigned Int16								scale factor 10, kW
19	20	1	L1 power, kilowatts*10, 2th byte	Unsigned Int16								scale factor 10, kW
20	21	1	L2 power, kilowatts*10, 1th byte	Unsigned Int16								scale factor 10, kW
21	22	1	L2 power, kilowatts*10, 2th byte	Unsigned Int16								scale factor 10, kW
22	23	1	L3 power, kilowatts*10, 1th byte	Unsigned Int16								scale factor 10, kW
23	24	1	L3 power, kilowatts*10, 2th byte	Unsigned Int16								scale factor 10, kW
24	25	1	Total power, kilowatts*10, 1th byte	Unsigned Int16								scale factor 10, kW
25	26	1	Total power, kilowatts*10, 2th byte	Unsigned Int16								scale factor 10, kW
26	27	1	Total Energy consumption, 1th byte	Unsigned Int32								scale factor 10, kWh
27	28	1	Total Energy consumption, 2th byte	Unsigned Int32								scale factor 10, kWh
28	29	1	Total Energy consumption, 3th byte	Unsigned Int32								scale factor 10, kWh
29	30	1	Total Energy consumption, 4th byte	Unsigned Int32								scale factor 10, kWh

OUTPUT - 14 Bytes - BT/MT take parameters												
INPUT - 60 Bytes - BT/MT send parameters												
Logic	Byte	Channel	Description	Data type	bit count							NOTES
					7	6	5	4	3	2	1	
30	31	2	Heating ON/OFF	Bit			x					x state, bit
		2	Auto/Man drive (Auto=0, Man=1)	Bit				x				NOT USED
		2	Profibus com. Alarm, BT not respond	Bit					x			Alarm, bit
		2	NOT USED	Bit						x		NOT USED
		2	TC max temperature alarm	Bit			x					Alarm, bit
		2	TC min temperature alarm	Bit			x					Alarm, bit
		2	TL max temperature alarm	Bit		x						Alarm, bit
		2	Load current max alarm	Bit	x							Alarm, bit
31	32	2	GFC (GroundFaultCurrent) max alarm	Bit			x					x Alarm, bit
		2	GFC (GroundFaultCurrent) trip alarm	Bit				x				Alarm, bit
		2	Tyristor (SSR) failure alarm	Bit				x				Alarm, bit
		2	Load/main circuit feed missing alarm	Bit			x					Alarm, bit
		2	PT100 temperature sensor alarm	Bit				x				Alarm, bit
		2	BT-TL600 ATEX teperature limiter alarm	Bit			x					Alarm, bit
		2	BlueTrace com alarm	Bit		x						Alarm, bit
		2	TH (Heat Sink) max temperature alarm	Bit	x							Alarm, bit
32	33	2	Temperature setpoint (TC), 1th byte	Signed Int16								scale factor 10, Degrees Celcius
33	34	2	Temperature setpoint (TC), 2h byte	Signed Int16								scale factor 10, Degrees Celcius
34	35	2	TC measurement (Control sensor), 1th byte	Signed Int16								scale factor 10, Degrees Celcius
35	36	2	TC measurement (Control sensor), 2th byte	Signed Int16								scale factor 10, Degrees Celcius
36	37	2	TL measurement (Limit sensor), 2th byte	Signed Int16								scale factor 10, Degrees Celcius
37	38	2	TL measurement (Limit sensor), 2h byte	Signed Int16								scale factor 10, Degrees Celcius
38	39	2	TH (Heat Sink) temperature, 1th byte	Signed Int16								scale factor 10, Degrees Celcius
39	40	2	TH (Heat Sink) temperature, 2th byte	Signed Int16								scale factor 10, Degrees Celcius
40	41	2	GFC measurement, milliamperes, 1th byte	Unsigned Int16								scale factor 10, mA
41	42	2	GFC measurement, milliamperes, 2th byte	Unsigned Int16								scale factor 10, mA
42	43	2	L1 load current, amperes*10, 1th byte	Unsigned Int16								scale factor 10, A
43	44	2	L1 load current, amperes*10, 2th byte	Unsigned Int16								scale factor 10, A
44	45	2	L2 load current, amperes*10, 1th byte	Unsigned Int16								scale factor 10, A
45	46	2	L2 load current, amperes*10, 2th byte	Unsigned Int16								scale factor 10, A
46	47	2	L3 load current, amperes*10, 1th byte	Unsigned Int16								scale factor 10, A
47	48	2	L3 load current, amperes*10, 2th byte	Unsigned Int16								scale factor 10, A
48	49	2	L1 power, kilowatts*10, 1th byte	Unsigned Int16								scale factor 10, kW
49	50	2	L1 power, kilowatts*10, 2th byte	Unsigned Int16								scale factor 10, kW
50	51	2	L2 power, kilowatts*10, 1th byte	Unsigned Int16								scale factor 10, kW
51	52	2	L2 power, kilowatts*10, 2th byte	Unsigned Int16								scale factor 10, kW
52	53	2	L3 power, kilowatts*10, 1th byte	Unsigned Int16								scale factor 10, kW
53	54	2	L3 power, kilowatts*10, 2th byte	Unsigned Int16								scale factor 10, kW
54	55	2	Total power, kilowatts*10, 1th byte	Unsigned Int16								scale factor 10, kW
55	56	2	Total power, kilowatts*10, 2th byte	Unsigned Int16								scale factor 10, kW
56	57	2	Total Energy consumption, 1th byte	Unsigned Int32								scale factor 10, kWh
57	58	2	Total Energy consumption, 2th byte	Unsigned Int32								scale factor 10, kWh
58	59	2	Total Energy consumption, 3th byte	Unsigned Int32								scale factor 10, kWh
59	60	2	Total Energy consumption, 4th byte	Unsigned Int32								scale factor 10, kWh