- 5. Który rejestr Modbus służy do zmiany rodzaju regulacji: n-const, Δp-c, Δp-v?
- a) MODBUS Stratos MAXO, Stratos GIGA 2.0, IL-E, IP-E, BL-E
- b) BACnet Stratos MAXO, Stratos GIGA 2.0, IL-E, IP-E, BL-E

## a) MODBUS:

Za zamianę trybu pracy odpowiada address #42 Control Function:

627342	Control	Function

property	value
address	42
scope	pump system
function	input value
data type	WORD
Module versions	Yonos MULTI CP Modbus (1.0099.99), CIF-Module Ethernet Multiprotocol (3.0399.99), CIF-Module Modbus RTU (1.0099.99), IF-Module Modbus Stratos (1.1399.99), IF-Module Modbus (1.1399.99)

Aby ustawić jeden z trzech trybów regulacji n-const,  $\Delta P$ -c,  $\Delta P$ -v należy wybrać odpowiednio:

value	Name	description	support
1	Gen_Spd	This control mode operates the device with constant speed.	Stratos MAXO; Stratos; IL_E,; MVIE,;
6	Gen_PHdConst	This control mode operates the device with constant differential pressure.	Stratos MAXO; Stratos; IL_E,;
7	Gen_PHdVar	This control mode operates the device with a differential pressure which varies with the flow.	Stratos MAXO; Stratos; IL_E,;

Pełna lista dostępnych trybów regulacji znajduje się w spisie rejestrów.

## b) BACnet:

Tryb sterowania pompą możemy zmieniać parametrem Bus Control Mode

6.2.14.0 Bus Control Mode

property	value
instance #	0
relinquish default	1
function	input value
Module versions	IF-Module BACnet (1.1199.99)

Aby ustawić jeden z trzech trybów regulacji n-const,  $\Delta P$ -c,  $\Delta P$ -v należy wybrać odpowiednio:

value	Name	description	support
1	Gen_Spd	This control mode operates the device with constant speed.	Stratos MAXO; Stratos; IL_E,; MVIE,;
6	Gen_PHdConst	This control mode operates the device with constant differential pressure.	Stratos MAXO; Stratos; IL_E,;
7	Gen_PHdVar	This control mode operates the device with a differential pressure which varies with the flow.	Stratos MAXO; Stratos; IL_E,;

Pełna lista dostępnych trybów regulacji znajduje się w spisie rejestrów.

## Przykładowy opis rejestrów (suplement Bacnet). Ilość dostępnych trybów regulacji zależy od typoszeregu pomp. Numery rejetrów mogą się różnić między protokołami.

value	Name	description	support
1	Gen_Spd	This control mode operates the device with constant speed.	Stratos MAXO; Stratos; IL_E,; MVIE,;
2	CONST_FREQ	reserved	
3	CONST_POWER	reserved	-
4	CONST_HEAD	reserved	_
5	CONST_PRESSURE	This control mode operates the device with constant discharge pressure.	MVIE,;
6	Gen_PHdConst	This control mode operates the device with constant differential pressure.	Stratos MAXO; Stratos; IL_E,;
7	Gen_PHdVar	This control mode operates the device with a differential pressure which varies with the flow.	Stratos MAXO; Stratos; IL_E,;
8	CONST_FLOW	reserved	-
9	Gen_T	This control mode operates the device with constant temperature for generic application.	Stratos MAXO;
10	Gen_TDiff	This control mode operates the device with constant differential temperature for generic application.	Stratos MAXO;
11	CONST_LEV	reserved	_
12	TEMP_VARIABLE	This control mode operates the device with a differential pressure which varies with the fluid temperature.	CIF-/IF-Module internal; Stratos;
13	Gen_UsrDfd	This control mode operates the device with user configurable PID controller.	Stratos MAXO; IL_E,; MVIE,;
14	VAR_PRESSURE	This control mode operates the device with a discharge pressure that varies with the flow.	MVIE,;
15	INVALID	Invalid value	CIF-/IF-Module internal;
16	HeatRadiator_PHd	This control mode operates the device with a differential pressure which varies with the flow for heating radiator applications.	Stratos MAXO;
17	HeatRadiator_DA	This control mode operates the device with automatic setpoint adjustement (dynamic adapt) for heating radiator applications.	Stratos MAXO;
18	HeatRadiator_T	This control mode operates the device with constant temperature for heating radiator application.	Stratos MAXO;
19	HeatFloor_PHd	This control mode operates the device with a differential pressure which varies with the flow for floor heating applications.	Stratos MAXO;
20	HeatFloor_DA	This control mode operates the device with automatic setpoint adjustement (dynamic adapt) for floor heating applications.	Stratos MAXO;
21	HeatFloor_T	This control mode operates the device with constant temperature for floor heating application.	Stratos MAXO;
22	HeatCeiling_PHd	This control mode operates the device with constant differential pressure for ceiling heating applications.	Stratos MAXO;
23	HeatCeiling_DA	This control mode operates the device with automatic setpoint adjustement (dynamic adapt) for ceiling heating applications.	Stratos MAXO;
24	HeatCeiling_T	This control mode operates the device with constant temperature for ceiling heating applications.	Stratos MAXO;
25	HeatFan_PHd	This control mode operates the device with a differential pressure which varies with the flow for fan coil heating applications.	Stratos MAXO;
26	HeatFan_DA	This control mode operates the device with automatic setpoint adjustement (dynamic adapt) for fan coil heating applications.	Stratos MAXO;
27	HeatFan_T	This control mode operates the device with constant temperature for fan coil heating applications.	Stratos MAXO;
28	HeatBT	This control mode operates the device with constant temperature for heating applications with hydraulic separator.	Stratos MAXO;
29	HeatBTDiff	This control mode operates the device with constant differential temperature for heating applications with hydraulic separator.	Stratos MAXO;
30	HeatBAcc.Flow	This control mode operates the device with a setpoint depending on the volume flow of other pumps for heating applications with hydraulic separator.	Stratos MAXO;
31	HeatET	This control mode operates the device with constant temperature for heating applications with heat exchanger.	Stratos MAXO;
32	HeatETDiff	This control mode operates the device with constant differential temperature for heating applications with heat exchanger.	Stratos MAXO;

value	Name	description	support
33	HeatEAcc.Flow	This control mode operates the device with a setpoint depending on the volume flow of other pumps for heating applications with heat exchanger.	Stratos MAXO;
34	Heat_PHdConst	This control mode operates the device with constant differential pressure for heating applications.	Stratos MAXO;
35	Heat_PHdVar	This control mode operates the device with a differential pressure which varies with the flow for heating applications.	Stratos MAXO;
36	Heat_PHdExt	This control mode operates the device with constant differential pressure for heating applications with external differential pressure sensor.	Stratos MAXO;
37	Heat_DA	This control mode operates the device with automatic setpoint adjustement (dynamic adapt) for heating applications.	Stratos MAXO;
38	Heat_VolFlow	This control mode operates the device with constant volume flow for heating applications.	Stratos MAXO;
39	Heat_Acc.Flow	This control mode operates the device with a setpoint depending on the volume flow of other pumps for heating applications.	Stratos MAXO;
40	Heat_T	This control mode operates the device with constant temperature for heating application.	Stratos MAXO;
41	Heat_TDiff	This control mode operates the device with constant differential temperature for heating application.	Stratos MAXO;
42	Heat_Spd	This control mode operates the device with constant speed for heating applications.	Stratos MAXO;
43	CoolCeiling_PHd	This control mode operates the device with constant differential pressure for ceiling cooling applications.	Stratos MAXO;
44	CoolCeiling_DA	This control mode operates the device with automatic setpoint adjustement (dynamic adapt) for ceiling cooling applications.	Stratos MAXO;
45	CoolCeiling_T	This control mode operates the device with constant temperature for ceiling cooling application.	Stratos MAXO;
46	CoolFloor_PHd	This control mode operates the device with constant differential pressure for floor cooling applications.	Stratos MAXO;
47	CoolFloor_DA	This control mode operates the device with automatic setpoint adjustement (dynamic adapt) for floor cooling applications.	Stratos MAXO;
48	CoolFloor_T	This control mode operates the device with constant temperature mode for floor cooling applications.	Stratos MAXO;
49	CoolFan_PHd	This control mode operates the device with a differential pressure which varies with the flow for fan coil cooling applications.	Stratos MAXO;
50	CoolFan_DA	This control mode operates the device with automatic setpoint adjustement (dynamic adapt) for fan coil cooling applications.	Stratos MAXO;
51	CoolFan_T	This control mode operates the device with constant temperature mode for fan coil cooling application.	Stratos MAXO;
52	CoolBT	This control mode operates the device with constant temperature for cooling applications with hydraulic separator.	Stratos MAXO;
53	CoolBTDiff	This control mode operates the device with constant differential temperature for cooling applications with hydraulic separator.	Stratos MAXO;
54	CoolBAcc.Flow	This control mode operates the device with a setpoint depending on the volume flow of other pumps for cooling applications with hydraulic separator.	Stratos MAXO;
55	CoolET	This control mode operates the device with constant temperature mode for cooling application with heat exchanger.	Stratos MAXO;
56	CoolETDiff	This control mode operates the device with constant differential temperature for cooling applications with heat exchanger.	Stratos MAXO;
57	CoolEAcc.Flow	This control mode operates the device with a setpoint depending on the volume flow of other pumps for cooling applications with heat exhanger.	Stratos MAXO;
58	Cool_PHdConst	This control mode operates the device with constant differential pressure for cooling applications.	Stratos MAXO;
59	Cool_PHdVar	This control mode operates the device with a differential pressure which varies with the flow for cooling applications.	Stratos MAXO;
60	Cool_PHdExt	This control mode operates the device with constant differential pressure for cooling application with external differential pressure sensor.	Stratos MAXO;
61	Cool_DA	This control mode operates the device with automatic setpoint adjustement (dynamic adapt) for cooling applications.	Stratos MAXO;
62	Cool_VolFlow	This control mode operates the device with constant volume flow for cooling applications.	Stratos MAXO;
63	Cool_Acc.Flow	This control mode operates the device with a setpoint depending on the volume flow of other pumps for cooling applications.	Stratos MAXO;
64	Cool_T	This control mode operates the device with constant temperature mode for cooling application.	Stratos MAXO;

value	Name	description	support
65	Cool_TDiff	This control mode operates the device with constant differential temperature for cooling application.	Stratos MAXO;
66	Cool_Spd	This control mode operates the motor with constant speed for cooling applications.	Stratos MAXO;
67	San_CircT	This control mode operates the device with constant temperature for sanitary hot water circulation.	Stratos MAXO;
68	SanW.HeatTDiff	This control mode operates the device with constant differential temperature for sanitary hot water application with heat exchanger in the storage tank.	Stratos MAXO;
69	SanL.ST	reserved	Stratos MAXO;
70	SanL.SAcc.Flow	reserved	Stratos MAXO;
71	San_PHdConst	This control mode operates the device with constant differential pressure for sanitary hot water applications.	Stratos MAXO;
72	San_PHdVar	This control mode operates the device with a differential pressure which varies with the flow for sanitary hot water applications.	Stratos MAXO;
73	San_PHdExternal	This control mode operates the device with constant differential pressure for sanitary hot water applications with external differential pressure sensor.	Stratos MAXO;
74	San_VolFlow	This control mode operates the device with constant volume flow for sanitary hot water applications.	Stratos MAXO;
75	San_Acc.Flow	This control mode operates the device with a setpoint depending on the volume flow of other pumps for sanitary hot water applications.	Stratos MAXO;
76	San_T	This control mode operates the device with constant temperature for sanitary hot water application.	Stratos MAXO;
77	San_TDiff	This control mode operates the device with constant differential temperature for sanitary hot water application.	Stratos MAXO;
78	San_Spd	This control mode operates the motor with constant speed for sanitary hot water applications.	Stratos MAXO;
79	Gen_PHdExt	This control mode operates the device with constant differential pressure for generic applications with external diffential pressure sensor.	Stratos MAXO;
80	Gen_DA	This control mode operates the device with automatic setpoint adjustement (dynamic adapt) for generic applications.	Stratos MAXO;
81	Gen_VolFlow	This control mode operates the device with constant volume flow for generic applications.	Stratos MAXO;
82	Gen_Acc.Flow	This control mode operates the device with a setpoint depending on the volume flow of other pumps for generic applications.	Stratos MAXO;
83	ScndPHdConst	This control mode operates the device with constant differential pressure. A special parameter set which is stored in the device is used.	Stratos MAXO;
84	ScndPHdVar	This control mode operates the device with a differential pressure which varies with the flow. A special parameter set which is stored in the device is used.	Stratos MAXO;
85	ScndFlow	This control mode operates the device with constant volume flow. A special parameter set which is stored in the device is used.	Stratos MAXO;
86	ScndSpd	This control mode operates the motor with constant speed. A special parameter set which is stored in the device is used.	Stratos MAXO;

This signal represents the control mode for the device. In case a selected mode is not supported, the device will stay in the previously selected mode. Support reference

Stratos MAXO; Stratos; IL\_E, ...; MVIE, ...;