Industrial heating and cooling measurement and control system MANDÍK Climatix

Modbus table

for software version IHC42.01 and higher

03/2025



ltem Dat	a point			Registry	Read/	Mapping
1 Aggregate	inao			number 1	Write	
1.Aggregate Reg	ime 01.Aggregate	Zone 1		1	R/W	0 - Auto (Scheduler)
	Regime	Scheduler	Þ â			1 - Off
	INCE THE	Scheduler	×			2 - 3rdLevel
		C 1 1 1				3 - 2ndLevel
R	egime	Scheduler	<u> </u>			4 - 1stLevel
		Scheduler Off	_			5 - Econom
		3rdLevel				6 - Frost
		2ndLevel				7- Ventilate
	Save Cancel	1stLevel				
	*	Economy				
		ESC FrostProtec	+ C			
		Ventilate	- I			
Ope	eration	Veneriuce		2	R	1 - Off
1	01.Aggregat	Zone 1	1	-		2 - 3rdLevel
	Regime	Scheduler	•			3 - 2ndLevel
	Operation	1stLevel				4 - 1stLevel
	State	Heat				5 - Econom
	Power	9%				6 - Frost
	Temperatur	15.9°C				7 - Ventilate
	DesiredTemperatur	17.0°C				
	OperatingHour	0				
Stat				3	R	1 - Off
1		Zone 1				2 - Ventilate
	Regime	Scheduler	•			3 - Start
	Operation	1stLevel				4 - Heat
	State	Heat				5 - Cool
	Power	9%				6 - ExtReg
	Temperatur	15.9°C				7 - Door
	DesiredTemperatur	17.0°C				8 - Window
	OperatingHour	0				9 - Defrost
						10 - Fault
Pow	vor			4	R	11 - FDAS Value [%]
1	01.Aggregat	Zone 1	•	4	ĸ	Value [%]
	Regime	Scheduler				
	Operation	1stLevel				
	State	Heat				
	Power	9%				
	Temperatur	15.9°C				
	DesiredTemperatur	17.0°C				
	OperatingHour	0				
Cur	rent temperature			5	R	Value * 10 [°C]
1	01.Aggregat	Zone 1	•			
	Regime	Scheduler				
	Operation	1stLevel				
	State	Heat				
	Power	9%				
	Temperatur	15.9°C				
	DesiredTemperatur	17.0°C				
	OperatingHour	0				

ltem	Data point			Registry number		Mapping
1.Aggregate	Desired temperature			6	R	Value * 10 [°C]
1.Aggregate	¹ 01.Aggregat	Zone 1	•			
	Regime	Scheduler	•			
	Operation	1stLevel				
	State	Heat				
	Power	9%				
	Temperatur	15.9°C				
	DesiredTemperatur	17.0°C				
	OperatingHour	0				
	Operating hour			7	R	Value
	¹ 01.Aggregat	Zone 1				
	Regime	Scheduler	Þ î			
	Operation	1stLevel				
	State	Heat				
	Power	9%				
	Temperatur	15.9°C				
	DesiredTemperatur	17.0°C				
	OperatingHour	0				
	Operating zone number			8	R	Value
	¹ 01.Aggregat	Zone 1				
	Regime	Scheduler	🕨 î			
	Operation	1stLevel				
	State	Heat				
	Power	9%				
	Temperatur	15.9°C				
	DesiredTemperatur	17.0°C				
	OperatingHour	0				
	Fault aggregate			9	R	0 - OK / 1- Fault
	AlarmList					
	Acknowledge		N 1			
	Aggregate1:					
	Fault current temperature sens	or		10	R	0 - OK / 1- Fault
	¹ AlarmList		•			
	Acknowledge		P î			
	Temperature1: noSensor		· •			
Aggregate 2	Same data points as in aggregat	te 1 with addr	ess range 1	1 to 20.	·	
Aggregate 3	Same data points as in aggregat					
Aggregate 4	Same data points as in aggregat	te 1 with addr	ess range 3	1 to 40.		
Aggregate 5	Same data points as in aggregat	te 1 with addr	ess range 4	1 to 50.		
Aggregate 6	Same data points as in aggregat	te 1 with addr	ess range 5	1 to 60.		
Aggregate 7	Same data points as in aggregat	te 1 with addr	ess range 6	1 to 70.		
Aggregate 8	Same data points as in aggregat	te 1 with addr	ess range 7	1 to 80.		
Aggregate 9	Same data points as in aggregat	te 1 with addr	ess range 8	1 to 90.		
Aggregate 10	Same data points as in aggregat	te 1 with addr	ess range 9	1 to 100.		
Aggregate 11	Same data points as in aggregat	te 1 with addr	ess range 1	01 to 110.		
Aggregate 12	Same data points as in aggregat	te 1 with addr	ess range 1	11 to 120.		
Aggregate 13	Same data points as in aggregat	te 1 with addr	ess range 1	21 to 130.		
Aggregate 14	Same data points as in aggregat					
Aggregate 15	Same data points as in aggregat					

ltem	Data point	Registry number	Read/ Write	Mapping
Aggregate 16	Same data points as in aggregate 1 with address range 1	51 to 160.		
Aggregate 17	Same data points as in aggregate 1 with address range 16	61 to 170.		
Aggregate 18	Same data points as in aggregate 1 with address range 1	71 to 180.		
Aggregate 19	Same data points as in aggregate 1 with address range 18	31 to 190.		
Aggregate 20	Same data points as in aggregate 1 with address range 19	91 to 20.0.		
Aggregate 21	Same data points as in aggregate 1 with address range 20	01 to 210.		
Aggregate 22	Same data points as in aggregate 1 with address range 22	11 to 220.		
Aggregate 23	Same data points as in aggregate 1 with address range 22	21 to 230.		
Aggregate 24	Same data points as in aggregate 1 with address range 23	31 to 240.		
Aggregate 25	Same data points as in aggregate 1 with address range 24	41 to 250.		
Aggregate 26	Same data points as in aggregate 1 with address range 25	51 to 260.		
Aggregate 27	Same data points as in aggregate 1 with address range 26	51 to 270.		
Aggregate 28	Same data points as in aggregate 1 with address range 27	71 to 280.		
Aggregate 29	Same data points as in aggregate 1 with address range 28	31 to 290.		
Aggregate 30	Same data points as in aggregate 1 with address range 29	91 to 300.		
Aggregate 31	Same data points as in aggregate 1 with address range 30	01 to 310.		
Outdoor temperature	Sensor	701	R	Value * 10 (°C)
	1 AlarmList Acknowledge TemperatureOutdoor: noSensor	702	R	0 - OK / 1- Fault
Fire alarm system	Fire alarm system 1 AlarmList Acknowledge Image: Compare the system FAS: Image: Compare the system	703	R	0 - OK / 1- Fault
Faults	Number of active faults 1 Alarming AlarmList 3 AlarmHistory 13	708	R	Value
	Fault acknowledge	709	R/W	0 - /1-Execute
	Fault indication	710	R	0 - Off 1 - Flashing 2 - On

ltem	Data point		Registry number	Read/ Write	Manning
Zone 1 - Desired	3nd Level - heating		711	R/W	Value * 10 (°C)
temperatures	2nd level - heating		712	R/W	Value * 10 (°C)
	1st level - heating		713	R/W	Value * 10 (°C)
	Economy - heating		714	R/W	Value * 10 (°C)
	Frost protect - heating		715	R/W	Value * 10 (°C)
	Větrání - heating		716	R/W	Value * 10 (°C)
	3rd level - cooling		717	R/W	Value * 10 (°C)
	2nd level - cooling		718	R/W	Value * 10 (°C)
	1st level - cooling		719	R/W	Value * 10 (°C)
	Economy - cooling		720	R/W	Value * 10 (°C)
	¹ OperatingZones	Þ			
	1. Zone	Off 🕨			
	>Heat				
	3rdLevel	23.0°C 🕨			
	2ndLevel	20.0°C 🕨			
	1stLevel	17.0°C 🕨			
	Economy	14.0°C 🕨			
	FrostProtect	11.0°C 🕨			
	Ventilate >Cool	10.0°C 🕨			
	3rdLevel	25.0°C 🕨			
	2ndLevel	22.0°C 🕨			
	1stLevel	19.0°C 🕨			
	Economy	16.0°C 🕨			
	2.Zone	Off 🕨			
	3rdLevel	23.0°C 🕨			
Zone 2 - Desired	Same data points as in zone 1 with	n address range 721 t	o 730.		
temperatures					
Zone 3 - Desired	Same data points as in zone 1 with	n address range 731 t	o 740.		
temperatures			750		
Zone 4 - Desired	Same data points as in zone 1 with	h address range 741 t	0 /50.		
temperatures	Come data painta as in sono 1 with		~ 700		
Zone 5 - Desired temperatures	Same data points as in zone 1 with	address range 751 t	0 760.		
Zone 6 - Desired	Same data points as in zone 1 with	address range 761 t	0 770		
temperatures		i addiess range / 01 t			
Zone 7 - Desired	Same data points as in zone 1 with	address range 771 t	o 780.		
temperatures					
Zone 8 - Desired	Same data points as in zone 1 with	n address range 781 t	o 790.		
temperatures					
	1				

Important:

- Not all registers may be accessible. The availability of some registers depends on the specific configuration.

- The address of the registers is 1 less than the register number.

- All registers are Holding Integer.

- The names of aggregates and zones are user-configurable.

Modbus connection variants

1. Modbus RTU - port RS485



2. Modbus RTU - service port T-HI



Cable connection

RJ45 jack, 8 pins (top view):



Pin-out for RJ45connector

Pin	Signal	
1	USB device, D+	
2	USB device, D-	
3	RS485, A+	
4	Ground	
5	Select 2	
6	RS485, B-	
7	Select 1	
8	DC 24 V (Output)	



Modbus connection variants

3. Modbus TCP/IP - ethernet port



Cable connection

RJ45 jack, 8 pins (top view):



4. Modbus RTU - communication modul POL902



Cable connection

