

Measurement and control system KJM MANDÍK  
Climatix

# Modbus table

for version software 33.01AHU

06/2023

# MANDÍK®



ATEX II 2G IIB T4

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
<b>Operating mode</b>	Selection	1	R/W	0- Schedule 1- Off 2- Tempering 3- Reduced 4- Comfort
	Current	2	R	0- Off 1- StandbyTempering 2- Reduced 3- Comfort 4- Freecooling 5- FrostProtect
	Auxiliary	3	R	0- Null 4- FanSpeed Compensation 5- Ventilation 6- ProtectWater Heating  10- Boiler 11- Start 12- BlockFan 13- SuperiorBlock 14- Testing
	Status	865	R	0- Off 1- Air 2- Heat 3- Cool 4- Off 5- Tsup
	Enabling modes	890	R/W	0- All 1- Heat+ 2- Cool+ 3- Heat 4- Cool 5- Season 6- Ventilate
<b>Desired temperature</b>	In current mode	4	R/W	Value * 10 (°C)
	Setting for Comfort mode in summer	5	R/W	Value * 10 (°C)
	Setting for Comfort mode in winter	863	R/W	Value * 10 (°C)
	Setting for Reduced mode in summer	6	R/W	Value * 10 (°C)
	Setting for Reduced mode in winter	864	R/W	Value * 10 (°C)
	Setting for Protection mode	7	R/W	Value * 10 (°C)
	Preheat	891	R/W	Value * 10 (°C)
<b>Alarming</b>	Count active alarm	8	R	Value
	Alarm acknowledge	9	R/W	0-Off / 1-Acknowledge
	Alarm LED	10	R	0- Off 1- Blinking 2- On

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
<b>Measured temperatures</b>	Behind the recuperator on the exhaust air	11	R	Value * 10 (°C)
	Behind the recuperator on the exhaust air - alarm	12	R	0- OK / 1- Error
	Supply air	13	R	Value * 10 (°C)
	Supply air - alarm	14	R	0- OK / 1- Error
	Preheat air	15	R	Value * 10 (°C)
	Prehaet air - alarm	16	R	0- OK / 1- Error
	Flue gas	17	R	Value * 10 (°C)
	Flue gas - alarm	18	R	0- OK / 1- Error
	Extract air	19	R	Value * 10 (°C)
	Extract air - alarm	20	R	0- OK / 1- Error
	Exhaust air	21	R	Value * 10 (°C)
Exhaust air - alarm	22	R	0- OK / 1- Error	
<b>Measured temperatres</b>	Outdoor	23	R	Value * 10 (°C)
	Outdoor - alarm	24	R	0- OK / 1- Error
	Heating water supplied to the exchanger	25	R	Value * 10 (°C)
	Heating water supplied to the exchanger - alarm	26	R	0- OK / 1- Error
	Heating water returning from the exchanger	27	R	Value * 10 (°C)
	Heating water returning from the exchanger - alarm	28	R	0- OK / 1- Error
	Cooling water supplied to the exchanger	29	R	Value * 10 (°C)
	Cooling water supplied to the exchanger - alarm	30	R	0- OK / 1- Error
	Cooling water returning from the exchanger	31	R	Value * 10 (°C)
	Cooling water returning from the exchanger - alarm	32	R	0- OK / 1- Error
	Room	35	R	Value * 10 (°C)
	Room - alarm	36	R	0- OK / 1- Error
	Room 2	37	R	Value * 10 (°C)
	Room 2 - alarm	38	R	0- OK / 1- Error
	Room 3	868	R	Value * 10 (°C)
	Room 3 - alarm	869	R	0- OK / 1- Error
	Inlet	47	R	Value * 10 (°C)
	Innlet - alarm	48	R	0- OK / 1- Error
	Behind recuperator on supply air	49	R	Value * 10 (°C)
	Behind recuperator on supply air - alarm	50	R	0- OK / 1- Error
	Room unit	860	R	Value * 10 (°C)
	Room unit - alarm	861	R	0- OK / 1- Error
	Internal controller	862	R	Value * 10 (°C)
Reheat	866	R	Value * 10 (°C)	
Rehaet - alarm	867	R	0- OK / 1- Error	
<b>Filter supply air</b>	Pressure	52	R	Value (Pa)
	Select type alarming for digital manostat	53	R/W	0- Info (dirty) 1- Hard (cloged)
	Setting of the filter clogging limit pressure for information message	54	R/W	Value (Pa)
	Setting the filter clogging limit pressure to shut down the unit	55	R/W	Value (Pa)
	State	56	R	0- Null 1- OK 2- Dirty (Info) 3- Clogged (Hard) 4- ErrorSensor

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
	Pressure sensor - alarm	57	R	0- OK / 1- Error
	Operating hours with a dirty filter	58	R	Value
<b>Filter supply air 2</b>	Pressure	59	R	Value (Pa)
	Select type alarming for digital manostat	60	R/W	0- Info (dirty) 1- Hard (cloged)
	Setting of the filter clogging limit pressure for information message	61	R/W	Value (Pa)
	Setting the filter clogging limit pressure to shut down the unit	62	R/W	Value (Pa)
	State	63	R	Same as filter supply air 1
	Pressure sensor - alarm	64	R	0- OK / 1- Error
	Operating hours with a dirty filter	65	R	Value
<b>Filter extract air</b>	Pressure	69	R	Value (Pa)
	Select type alarming for digital manostat	70	R/W	0- Info (dirty) 1- Hard (cloged)
	Setting of the filter clogging limit pressure for information message	71	R/W	Value (Pa)
	Setting the filter clogging limit pressure to shut down the unit	72	R/W	Value (Pa)
	State	73	R	Same as filter supply air 1
	Pressure sensor - alarm	74	R	0- OK / 1- Error
	Operating hours with a dirty filter	75	R	Value
<b>Filter extract air 2</b>	Pressure	77	R	Value (Pa)
	Select type alarming for digital manostat	78	R/W	0- Info (dirty) 1- Hard (cloged)
	Setting of the filter clogging limit pressure for information message	79	R/W	Value (Pa)
	Setting the filter clogging limit pressure to shut down the unit	80	R/W	Value (Pa)
	State	81	R	Same as filter supply air 1
	Pressure sensor - alarm	82	R	0- OK / 1- Error
	Operating hours with a dirty filter	83	R	Value
<b>Filter grease</b>	Pressure	86	R	Value (Pa)
	Select type alarming for digital manostat	87	R/W	0- Info (dirty) 1- Hard (cloged)
	Setting of the filter clogging limit pressure for information message	88	R/W	Value (Pa)
	Setting the filter clogging limit pressure to shut down the unit	89	R/W	Value (Pa)
	State	90	R	Same as filter supply air 1
	Pressure sensor - alarm	91	R	0- OK / 1- Error
	Operating hours with a dirty filter	92	R	Value

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
<b>Air quality</b>	State - alarm	109	R	0- OK / 1- Bad
	Current	110	R	Value (ppm)
	Setpoint by mode	106	R	Value (ppm)
	Setting for Comfort mode	107	R/W	Value (ppm)
	Setting for Reduced mode	108	R/W	Value (ppm)
	Number of hours of operation with poor air quality	111	R	Value
	Number of starts airing with poor air quality	112	R	Value
	Setpoint start airing - high limit	113	R/W	Value (ppm)
	Setpoint stop airing - low limit	114	R/W	Value (ppm)
	Choice of method airing in poor air quality	115	R/W	0- No 1- Fans 2- Dampers 3- Both
	Setting the supply fan speed for the airing state	116	R/W	Value (%)
	Setting the exhaust fan speed for the airing state	117	R/W	Value (%)
	Setting the amount of fresh air for the airing state	118	R/W	Value (%)
	Choice of unit status to respond to poor air quality	119	R/W	0- UnitOn 1- Always 2- Tempering
	Sensor selection	120	R/W	0- Avg 1- Max 2- Min 3- Sensor 1 4- Sensor 2 5- Sensor 3
	Sensor	121	R	Value (ppm)
	Sensor - alarm	122	R	0- OK / 1- Error
	Sensor 2	123	R	Value (ppm)
	Sensor 2 - alarm	124	R	0- OK / 1- Error
Sensor 3	125	R	Value (ppm)	
Sensor 3 - alarm	126	R	0- OK / 1- Error	
<b>Humidity</b>	State	142	R	0- Off 1- OK 2- Low 3- High 4- Outdoor
	Current	143	R	Value (%)
	Setpoint by mode	141	R	Value (%)
	Setpoint for Comfort mode	144	R/W	Value (%)
	Setpoint for Reduced mode	145	R/W	Value (%)
	Set the upper setpoint hysteresis - start	146	R/W	Value (%)
	Set the lower hysteresis of the setpoint	147	R/W	Value (%)
	Selecting the state units to respond to the humidity outside the required values	148	R/W	0- UnitOn 1- Always 2- Tempering
	Selection of components used for active dehumidification	150	R/W	0- No 1- Condens unit 2- Heat pump 3- Water cooler 4- All

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
	Selection of components used for passive dehumidification	151	R/W	0- No 1- Fans 2- Dampers 3- Both
	Setting the supply fan speed for passive dehumidification	152	R/W	Value (%)
	Setting the exhaust fan speed for passive dehumidification	153	R/W	Value (%)
	Setting the amount of fresh air in passive dehumidification	154	R/W	Value (%)
	Outdoor sensor	155	R	Value (%)
	Absolute value of the outside air	156	R	Value (g/kg)
	Outdoor sensor - alarm	157	R	0- OK / 1- Error
	Supply air sensor	158	R	Value (%)
	Absolute value of the supply air	159	R	Value (g/kg)
	Supply air ensor - alarm	160	R	0- OK / 1- Error
	Room sensor selection	149	R/W	0- Avg 1- Max 2- Min 3- Sensor 1 4- Sensor 2 5- Sensor 3
	Room sensor	161	R	Value (%)
	Absolute value in the room	162	R	Value (g/kg)
	Room sensor - alarm	163	R	0- OK / 1- Error
	Room sensor 2	167	R	Value (%)
	Absolute value 2 in the room	168	R	Value (g/kg)
	Room sensor 2 - alarm	169	R	0- OK / 1- Error
	Room sensor 3	170	R	Value (%)
	Absolute value 3 in the room	171	R	Value (g/kg)
	Room sensor 3 - alarm	172	R	0- OK / 1- Error
	Extract air sensor	164	R	Value (%)
	Absolute value of the extract air	165	R	Value (g/kg)
	Extract air sensor - alarm	166	R	0- OK / 1- Error
<b>Dampers</b>	Required minimum amount of fresh air in Comfort mode	200	R/W	Value (%)
	Required minimum amount of fresh air in Reduced mode	201	R/W	Value (%)
	Position of supply air damper	202	R	Value (%)
	Position of the mixing flap	207	R	Value (%)
	Position of the exhaust air damper	212	R	Value (%)
	State	213	R	0- Off 1- Mode 2- Humidity 3- AirQuality 4- FrostMin 5- waterMin 6- Error

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
	Selection of sensor for regulation of fresh air volume based	215	R/W	0- Outdoor 1- Preheat 2- BeforeRecup 3- Supply 4- Room 5- AfterRecup
	Setting fixed amount of fresh air for Comfort mode in winter	216	R/W	Value (%)
	Setting fixed amount of fresh air for Reduced mode in winter	217	R/W	Value (%)
	Setting fixed amount of fresh air for Comfort mode in summer	218	R/W	Value (%)
	Setting fixed amount of fresh air for Reduced mode in summer	219	R/W	Value (%)
	Temperature limit for 100% fresh air flow rate when control based on the selected temperature in the heating mode	220	R/W	Value (°C)
	Temperature limit for 0% fresh air flow rate when control based on the selected temperature in the heating mode	221	R/W	Value (°C)
	Temperature limit for 100% fresh air flow rate when control based on the selected temperature in the cooling mode	222	R/W	Value (°C)
	Temperature limit for 0% fresh air flow rate when control based on the selected temperature in the cooling mode	223	R/W	Value (°C)
	Choice of fresh air flow control in Comfort mode	224	R/W	0- Fixed 1- Linearly 2- POL (room unit) 3- Setpoint1 4- Setpoint2
	Choice of fresh air flow control in Reduced mode	225	R/W	0- Fixed 1- Linearly 2- POL (room unit) 3- Setpoint1 4- Setpoint2
<b>Water heater 1</b>	Operation pump	231	R	0- Off / 1- On
	Heating water temperature low - alarm	232	R	0- OK / 1- Error
	Valve opening	233	R	0-100%
	Heat exchanger frost protection - alarm	234	R	0- OK / 1- Error
	Low supply air temperature - alarm	235	R	0- OK / 1- Error
	State	236	R	0- Off 2- Heat 3- Humidity 4- LowTempOutdoor 5- LowTempSupply 6- LowTempWater 8- Preheating 10- TempWtrBad 11- FrostThermostat 12- Error
	Summer operation	239	R/W	0- Block 1- Allow

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
	Thermal protection pump - alarm	237	R	0- OK / 1- Error
	Pump operating hours	238	R	Value
<b>Water heater 2</b>	Operation pump	261	R	0- Off / 1- On
	Valve opening	262	R	0-100%
	Low supply air temperature - alarm	263	R	0- OK / 1- Error
	State	264	R	Same as water heater 1
	Thermal protection pump - alarm	265	R	0- OK / 1- Error
	Pump operating hours	266	R	Value
<b>Water cooler</b>	Operation pump	242	R	0- Off / 1- On
	Valve opening	243	R	0-100%
	State	244	R	0- Off 1- Cool 3- Deumid 9- NoCool 12- Error
	Thermal protection pump - alarm	245	R	0- OK / 1- Error
	Pump operating hours	246	R	Value
	<b>Recuperation</b>	State	251	R
Power		252	R	0-100%
Operation		253	R	0- Off / 1- On
Operating hours		254	R	Value
Enabling operation in ventilation mode		255	R/W	0- No 1- Cool 2- Heat 3- Always
Frost protection exchanger - alarm		256	R	0- OK / 1- Error
Frost protection pressure sensor		257	R	Value (Pa)
Frost protection pressure sensor - alarm		258	R	0- OK / 1- Error
Setting limit pressure for frost protection		259	R/W	Value (Pa)
State - feedback - alarm		260	R	0- OK / 1- Error
Glycol pressure		261	R	0- OK / 1- Low
Number of starts of make-up pump		262	R	Value
Setting the minimum glycol pressure		263	R/W	Value (Pa)
Glycol pressure sensor		264	R	Value (Pa)
Glycol pressure sensor - alarm		265	R	0- OK / 1- Error



**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
<b>Condensing unit 1</b>	State	271	R	0- Off 1- Cool 2- Heat 3- Humidity 4- LowTempOutdoor 9- NoCool 10- NoHeat 11- Frost 12- Error
	Power	272	R	0-100%
	Operation	273	R	0- Off / 1- On
	Operating hours	274	R	Value
	State - feadback - alarm	275	R	0- OK / 1- Error
	Number of defrosts	276	R	Value
	Number of starts	277	R	Value
<b>Condensing unit 2</b>	State	279	R	Same as condensing unit 1
	Power	280	R	0-100%
	Operation	281	R	0- Off / 1- On
	Operating hours	282	R	Value
	State - feadback - alarm	283	R	0- OK / 1- Error
	Number of defrosts	284	R	Value
	Number of starts	285	R	Value
<b>Condensing unit 3</b>	State	287	R	Same as condensing unit 1
	Power	288	R	0-100%
	Operation	289	R	0- Off / 1- On
	Operating hours	290	R	Value
	State - feadback - alarm	291	R	0- OK / 1- Error
	Number of defrosts	292	R	Value
	Number of starts	293	R	Value
<b>Condensing unit 4</b>	State	295	R	Same as condensing unit 1
	Power	296	R	0-100%
	Operation	297	R	0- Off / 1- On
	Operating hours	298	R	Value
	State - feadback - alarm	299	R	0- OK / 1- Error
	Number of defrosts	300	R	Value
	Number of starts	301	R	Value
<b>Condensing unit 5</b>	State	302	R	Same as condensing unit 1
	Power	303	R	0-100%
	Operation	304	R	0- Off / 1- On
	Operating hours	305	R	Value
	State - feadback - alarm	306	R	0- OK / 1- Error
	Number of defrosts	307	R	Value
	Number of starts	308	R	Value

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
<b>Condensing unit 6</b>	State	309	R	Same as condensing unit 1
	Power	310	R	0-100%
	Operation	311	R	0- Off / 1- On
	Operating hours	312	R	Value
	State - feadback - alarm	313	R	0- OK / 1- Error
	Number of defrosts	314	R	Value
	Number of starts	315	R	Value
<b>Condensing units</b>	Maximum power	319	R/W	0-100%
	Minimum outdoor temperature blocking cooling	320	R/W	Value (°C)
	Block cooling in winter or heating in summer	321	R/W	0- Ne / 1- Ano
	Minimum outdoor temperature blocking heating	322	R/W	Value (°C)
	Defrost all units - alarm	323	R	0- OK / 1- Error
<b>Electrical heater 1</b>	Operation	331	R	0- Off / 1- On
	Power	332	R	0-100%
	Maximum power	333	R/W	0-100%
	State	334	R	0- Off 2- Heat 5- HighTempSupply 12- Error
	Summer operation	335	R/W	0- Block 1- Allow
	Operating hours	336	R	Value
	State - feadback - alarm	337	R	0- OK / 1- Error
<b>Electrical heater 2</b>	Operation	338	R	0- Off / 1- On
	Power	339	R	0-100%
	Maximum power	340	R/W	0-100%
	State	341	R	Same as electrical heater 1
	Operating hours	342	R	Value
	State - feadback - alarm	343	R	0- OK / 1- Error
<b>Gas heater</b>	Burner - state	350	R	0- Off 2- Heat 5- HighTempSupply 7- HighTempFlue 10- NoHeat 12- Error
	Burner - operation	351	R	0- Off / 1- On
	Burner - power	352	R	0-100%
	Burner - maximum power	353	R/W	0-100%
	Burner - switch-off delay	355	R/W	Value (s)
	Burner - feadback - alarm	356	R	0- OK / 1- Error
	Burner - error	357	R	0- OK / 1- Error
	Maximum safe flue gas temperature - alarm	358	R	0- OK / 1- Error
	Burner - operating hours	359	R	Value
	Burner - number of turn-on's	360	R	Value
	Summer operation	354	R/W	0- Block 1- Allow

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
	Exchanger damper - position	361	R	0-100%
	Exchanger convector- operation	366	R	0- Off / 1- On
	Exchanger convector - number of starts	367	R	Value
<b>Supply fan</b>	State	381	R	0- Off 1- Tempering 2- Reduced 3- Comfort 4- 3xSpeed 5- RoomUnit 6- TempSupply 7- MixDamper 8- BadAQ 9- Press 10- Ventilation 12- Start 13- Release 14- Error
	Opearion	382	R	0- Off / 1- On
	Speed	383	R	0-100%
	Required speed for Reduced mode in summer or medium speed in 3xSpeed	384	R/W	0-100%
	Required speed for Reduced mode in winter	400	R/W	0-100%
	Required speed for Comfort mode in summer or maximum speed in 3xSpeed	385	R/W	0-100%
	Required speed for Comfort mode in winter	420	R/W	0-100%
	Operating hours	386	R	Value
	Number of starts	387	R	Value
	State - feedback - alarm	388	R	0- OK / 1- Error
	Press sensor	389	R	Value (Pa)
	Flow sensor	390	R	Value (Pa)
	Flow	391	R	Value (m3/h)
	Press sensor - alarm	392	R	0- OK / 1- Error
	Flow sensor - alarm	393	R	0- OK / 1- Error
	Service switch - alarm	394	R	0- OK / 1- Error
	Air flow contact - alarm	867	R	0- OK / 1- Error
	Required minimum speed in 3xSpeed	395	R/W	0-100%
	Required pressure for Reduced mode	396	R/W	Value (Pa)
	Required pressure for Comfort mode	397	R/W	Value (Pa)
	Required flow rate for Reduced mode	398	R/W	Value (m3/h)
	Required flow rate for Comfort mode	399	R/W	Value (m3/h)
	<b>Extract fan</b>	State	401	R
Opearion		402	R	0- Off / 1- On
Speed		403	R	0-100%
Required speed for Reduced mode in summer or medium speed in 3xSpeed		404	R/W	0-100%
Required speed for Reduced mode in winter		421	R/W	0-100%
Required speed for Comfort mode in summer or maximum speed in 3xSpeed		405	R/W	0-100%

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
	Required speed for Comfort mode in winter	422	R/W	0-100%
	Operating hours	406	R	Value
	Number of starts	407	R	Value
	State - feedback - alarm	408	R	0- OK / 1- Error
	Press sensor	409	R	Value (Pa)
	Flow sensor	410	R	Value (Pa)
	Flow	411	R	Value (m3/h)
	Press sensor - alarm	412	R	0- OK / 1- Error
	Flow sensor - alarm	413	R	0- OK / 1- Error
	Service switch - alarm	414	R	0- OK / 1- Error
	Air flow contact - alarm	868	R	0- OK / 1- Error
	Required minimum speed in 3xSpeed	415	R/W	0-100%
	Required pressure for Reduced mode	416	R/W	Value (Pa)
	Required pressure for Comfort mode	417	R/W	Value (Pa)
	Required flow rate for Reduced mode	418	R/W	Value (m3/h)
Required flow rate for Comfort mode	419	R/W	Value (m3/h)	
<b>Fans</b>	Speed compensation - alarm	423	R	0- OK / 1- Error
<b>Fire</b>	State	510	R	0- OK 1- Fire 2- Smoke 3- Fire&Smoke
	Fire - alarm	511	R	0- OK / 1- Fire
	Smoke detector 1 - alarm	512	R	0- OK / 1- Smoke
	Smoke detector 2 - alarm	513	R	0- OK / 1- Smoke
<b>Fire dampers</b>	Fire damper 1 - state	514	R	0- Null 1- Mezipoloha 2- Close 3- Open 4- Error 5- Error
	Fire damper 2 - state	515	R	Same as fire damper 1
	Fire damper 3 - state	516	R	
	Fire damper 4 - state	517	R	
	Fire damper 5 - state	518	R	
	Fire damper 6 - state	519	R	
	Fire damper 7 - state	520	R	
	Fire damper 8 - state	521	R	
	Fire damper 9 - state	523	R	
	Fire damper 10 - state	524	R	
	Fire damper 11 - state	525	R	
	Fire damper 12 - state	526	R	
	Fire damper 13 - state	527	R	
	Fire damper 14 - state	528	R	
	Fire damper 15 - state	529	R	
	Fire damper 16 - state	530	R	
	Fire damper 17 - state	502	R	
	Fire damper 18 - state	503	R	
	Fire damper 19 - state	504	R	
	Fire damper 20 - state	505	R	
	Fire damper 21 - state	506	R	

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
	Fire damper 22 - state	507	R	Same as fire damper 1
	Fire damper 23 - state	508	R	
	Fire damper 24 - state	509	R	
	Global - alarm	522	R	0- OK / 1- Error
<b>Heat pump</b>	Circuit 1 - state	531	R	0- Off 1- Cool 2- Heat 9- NoCool 10- NoHeat 11- Frost 12- Error
	Circuit 1 - power	532	R	0-100%
	Circuit 1 - operation	533	R	0- Off / 1- On
	Circuit 1 - operating hours	534	R	Value
	Circuit 1 - feadback - alarm	535	R	0- OK / 1- Error
	Circuit 1 - number of starts	536	R	Value
	Circuit 1 - compressor - alarm	537	R	0- OK / 1- Error
	Circuit 1 - frequency inverter - alarm	538	R	0- OK / 1- Error
	Circuit 1 - high press - alarm	539	R	0- OK / 1- Error
	Circuit 1 - low press - alarm	540	R	0- OK / 1- Error
	Circuit 1 - start power	541	R/W	0-100%
	Circuit 1 - compressor temperature sensor	577	R	Value * 10 (°C)
	Circuit 1 - compressor temperature sensor - alarm	578	R	0- OK / 1- Error
	Circuit 2 - state	542	R	Same as circuit 1
	Circuit 2 - power	543	R	0-100%
	Circuit 2 - operation	544	R	0- Off / 1- On
	Circuit 2 - operating hours	545	R	Value
	Circuit 2 - feadback - alarm	546	R	0- OK / 1- Error
	Circuit 2 - number of starts	547	R	Value
	Circuit 2 - compressor - alarm	548	R	0- OK / 1- Error
	Circuit 2 - frequency inverter - alarm	549	R	0- OK / 1- Error
	Circuit 2 - high press - alarm	550	R	0- OK / 1- Error
	Circuit 2 - low press - alarm	551	R	0- OK / 1- Error
	Circuit 2 - start power	552	R/W	0-100%
	Circuit 2- compressor temperature sensor	579	R	Value * 10 (°C)
	Circuit 1 - compressor temperature sensor - alarm	580	R	0- OK / 1- Error
	Frost protection - alarm	553	R	0- OK / 1- Error
	Frost protection pressure sensor	554	R	Value (Pa)
	Frost protection pressure sensor - alarm	555	R	0- OK / 1- Error
	Setting limit pressure for frost protection	556	R/W	Value (Pa)
	Maximum power	557	R/W	0-100%
	Start delay	558	R/W	Value (s)
	Shutdown delay	559	R/W	Value (s)
	Power compensation	560	R/W	0- Off / 1- On
Power compensation - min speed fans	561	R/W	0-100%	
Power compensation - max speed fans	562	R/W	0-100%	
Condensation pressure sensor	563	R	Value (Pa)	
Condensation pressure sensor - alarm	564	R	0- OK / 1- Error	
Condensation temperature sensor	565	R	Value * 10 (°C)	
Condensation temperature sensor - alarm	566	R	0- OK / 1- Error	

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
	Temperature sensor 1	567	R	Value * 10 (°C)
	Temperature sensor 1 - alarm	568	R	0- OK / 1- Error
	Temperature sensor 2	569	R	Value * 10 (°C)
	Temperature sensor 2 - alarm	570	R	0- OK / 1- Error
	Temperature sensor 3	571	R	Value * 10 (°C)
	Temperature sensor 3 - alarm	572	R	0- OK / 1- Error
	Temperature sensor 4	573	R	Value * 10 (°C)
	Temperature sensor 4 - alarm	574	R	0- OK / 1- Error
	Temperature sensor 5	575	R	Value * 10 (°C)
	Temperature sensor 5 - alarm	576	R	0- OK / 1- Error
<b>Humidifier</b>	State	601	R	0- Off 3- Dehumid 12- Error
	Opearion	602	R	0- Off / 1- On
	Power	603	R	0-100%
	Start power	604	R/W	0-100%
	Shutdown delay	605	R/W	Value (s)
	Operating hours	606	R	Value
	Number of starts	607	R	Value
	State - feeadback - alarm	608	R	0- OK / 1- Error
<b>Boiler</b>	State	611	R	0- Off / 1- On
	Selection of conditions for switching on the boiler after switching on water heating	612	R/W	0- No 1- Winter 2- Always
	Choice of switching on the boiler from low heating water	613	R/W	0- Ne / 1- Ano
	Selection of conditions for switching on the boiler from low outdoor temperature	614	R/W	0- No 1- Winter 2- Heat 3- Always
	Low outdoor temperature limit for switching on the boiler	615	R/W	Value * 10 (°C)
	Selection of conditions for switching on the boiler when the difference between the outdoor temperature and the required temperature is exceeded	616	R/W	0- No 1- Winter 2- Heat 3- Always
	The difference between the outdoor temperature and the	617	R/W	Value * 10 (°C)
	Selection of conditions for switching on the boiler from the power of the condensing unit	618	R/W	0- No 1- Winter 2- Always
	The required capacity of the condensing unit to switch on the	619	R/W	0-100%
	Selection of conditions for switching on the fans since the boiler was switched on	620	R/W	0- No 1- Winter 2- Always
	Switching on of fans after switching on of boiler	621	R/W	Value (min)
	Delay of switching on the boiler	622	R/W	Value (min)

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
<b>Energy watch</b>	Specific power consumption - fan supply	630	R	Value (kW/m3/s)
	Specific power consumption - fan extract	631	R	Value (kW/m3/s)
	Specific power consumption - AHU	632	R	Value (kW/m3/s)
	Class SFP - fan supply	633	R	1- SFP1 .... 7- SFP7
	Class SFP - fan extract	634	R	1- SFP1 .... 7- SFP7
	Class SFP - AHU	634	R	1- SFP1 .... 7- SFP7
	Electrical energy - currently	636	R	Value (kW)
	Electricity consumption - current hour	637	R	Value (kWh)
	Electricity consumption - current day	638	R	Value (kWh)
	Electricity consumption - current week	639	R	Value (kWh)
	Electricity consumption - current month	640	R	Value (MWh)
	Electricity consumption - current year	641	R	Value (MWh)
	Other supplied energy - currently	642	R	Value (kW)
	Consumption of other supplied energy - current hour	643	R	Value (kWh)
	Consumption of other supplied energy - current day	644	R	Value (kWh)
	Consumption of other supplied energy - current week	645	R	Value (kWh)
	Consumption of other supplied energy - current month	646	R	Value (MWh)
	Consumption of other supplied energy - current year	647	R	Value (MWh)
	Recovered energy - currently	648	R	Value (kW)
	Recovered energy - current hour	649	R	Value (kWh)
	Recovered energy - current day	650	R	Value (kWh)
	Recovered energy - current week	651	R	Value (kWh)
	Recovered energy - current month	652	R	Value (MWh)
	Recovered energy - current year	653	R	Value (MWh)
<b>Internal Modbus</b>	Fan supply - communication - alarm	700	R	0- OK / 1- Error
	Fan supply - speed	701	R/W	0-100%
	Fan supply - input power	702	R	Value (kW)
	Fan supply - current	703	R	Value (A)
	Fan supply - voltage	704	R	Value (V)
	Fan supply - sequential master logic (only FM)	705	R	0- Init 1- Stop 2- Startup 3- Run 4- Shutdown 5- Acknowledge
	Fan supply - status	706	R	Value
	Fan supply - status 2 (only EC motor)	707	R	Value
	Fan extract - communication - alarm	708	R	0- OK / 1- Error
	Fan extract - speed	709	R/W	0-100%
	Fan extract - input power	710	R	Value (kW)
	Fan extract - current	711	R	Value (A)
	Fan extract - voltage	712	R	Value (V)
	Fan extract - sequential master logic (only FM)	713	R	0- Init 1- Stop 2- Startup 3- Run 4- Shutdown 5- Acknowledge

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
	Fan extract - status	714	R	Value
	Fan extract - status 2 (only EC motor)	715	R	Value
	Heat pump Circuit 1 - suction temperature	716	R	Value * 10 (°C)
	Heat pump Circuit 1 - evaporate temperature	717	R	Value * 10 (°C)
	Heat pump Circuit 1 - evaporate press	718	R	Value (bar)
	Heat pump Circuit 1 - expansion valve open	719	R	0-100%
	Heat pump Circuit 1 - superheat	720	R	Value * 10 (°C)
	Heat pump Circuit 1 - state expansion valve driver	721	R	Value
	Heat pump Circuit 2 - suction temperature	722	R	Value * 10 (°C)
	Heat pump Circuit 2 - evaporate temperature	723	R	Value * 10 (°C)
	Heat pump Circuit 2 - evaporate press	724	R	Value (bar)
	Heat pump Circuit 2 - expansion valve open	725	R	0-100%
	Heat pump Circuit 2 - superheat	726	R	Value * 10 (°C)
	Heat pump Circuit 2 - state expansion valve driver	727	R	Value
	Heat pump EV driver - communication - alarm	728	R	0- OK / 1- Error
	Electricity meter- communication - alarm	729	R	0- OK / 1- Error
	Room unit AMR OP - communication - alarm	730	R	0- OK / 1- Error
<b>Mode scheduler</b>	Monday - time 1	736	R/W	Value
	Monday - mode 1	737	R/W	Value
	Monday - time 2	738	R/W	Value
	Monday - mode 2	739	R/W	Value
	Monday - time 3	740	R/W	Value
	Monday - mode 3	741	R/W	Value
	Monday - time 4	742	R/W	Value
	Monday - mode 4	743	R/W	Value
	Monday - time 5	744	R/W	Value
	Monday - mode 5	745	R/W	Value
	Monday - time 6	746	R/W	Value
	Monday - mode 6	747	R/W	Value
	Tuesday	748	R/W	Same as Monday
	Wednesday	760	R/W	Same as Monday
	Thursday	772	R/W	Same as Monday
	Friday	784	R/W	Same as Monday
	Saturday	796	R/W	Same as Monday
	Sunday	808	R/W	Same as Monday
	Exception - time 1	820	R/W	Value
	Exception - mode 1	821	R/W	Value
	Exception - time 2	822	R/W	Value
	Exception - mode 2	823	R/W	Value
	Exception - time 3	824	R/W	Value
	Exception - mode 3	825	R/W	Value
	Exception - time 4	826	R/W	Value
	Exception - mode 4	827	R/W	Value
	Exception - time 5	828	R/W	Value
	Exception - mode 5	829	R/W	Value
	Exception - time 6	830	R/W	Value
	Exception - mode 6	831	R/W	Value
	Default value out of scheduler	832	R/W	Value



**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
<b>Temperature Season</b>	Current season	833	R	0- Summer / 1- Winter
	Temperature	834	R/W	Value * 10 (°C)
	Delay	835	R/W	Value (min)
<b>External switches</b>	Temperature season	840	R/W	0- Summer / 1- Winter
	Enable Cooling/Heating	841	R/W	0- Cool / 1- Heat
	Enable BMS	842	R/W	0- Off / 1- On
	Mode status "Off"	843	R/W	0- Off / 1- Tempering
<b>Service</b>	Regular service alert	851	R	0- Ne / 1- Ano
	Regular service setting	852	R/W	0- Ne 1-Year 2-Year/2 3-Year/4 4- Month
<b>Date</b>	Year	853	R/W	Value
	Month	854	R/W	Value
	Day	855	R/W	Value
	Hodina	856	R/W	Value
	Minute	857	R/W	Value
	Second	858	R/W	Value
	Všední den	859	R/W	Value
<b>Free cooling</b>	State	896	R	0- Off 1- TOutMin 2- TOutMax 3- TSupMin 4- ErrSensor 5- MinOn 6- NormOn 7- HardOn
	Turned on	897	R	0- Off / 1- On
	Operating hours	898	R	Value
	Number of turn-on's	899	R	Value
	Set room temperature	900	R/W	Value * 10 (°C)
	Outside temperature hysteresis	901	R/W	Value * 10 (°C)
	Minimal outside temperature	902	R/W	Value * 10 (°C)
	Minimal turned-on time	903	R/W	Value (sec)
<b>Free cooling scheduler</b>	Monday - time 1	904	R/W	Value
	Monday - value 1	905	R/W	0- Off / 1- On
	Monday - time 2	906	R/W	Value
	Monday - value 2	907	R/W	0- Off / 1- On
	Monday - time 3	908	R/W	Value
	Monday - value 3	909	R/W	0- Off / 1- On
	Monday - time 4	910	R/W	Value
	Monday - value 4	911	R/W	0- Off / 1- On
	Monday - time 5	912	R/W	Value
	Monday - value 5	913	R/W	0- Off / 1- On
	Monday - time 6	914	R/W	Value
	Monday - value 6	915	R/W	0- Off / 1- On
	Tuesday	748	R/W	Same as Monday
	Wednesday	760	R/W	Same as Monday
	Thursday	772	R/W	Same as Monday

**ModBus table for KJM Mandík with Climatix controller**

Item	Data point	Registry number	Read/Write	Mapping
	Friday	784	R/W	Same as Monday
	Saturday	796	R/W	Same as Monday
	Sunday	808	R/W	Same as Monday
	Exception - time 1	988	R/W	Value
	Exception - value 1	989	R/W	0- Off / 1- On
	Exception - time 2	990	R/W	Value
	Exception - value 2	991	R/W	0- Off / 1- On
	Exception - time 3	992	R/W	Value
	Exception - value 3	993	R/W	0- Off / 1- On
	Exception - time 4	994	R/W	Value
	Exception - value 4	995	R/W	0- Off / 1- On
	Exception - time 5	996	R/W	Value
	Exception - value 5	997	R/W	0- Off / 1- On
	Exception - time 6	998	R/W	Value
	Exception - value 6	999	R/W	0- Off / 1- On

Note:

The registry address is 1 smaller than its registry number.

All registers are Holding Integer.

## Modbus connection variants:

### 1. Modbus RTU - local port



#### Cable connection

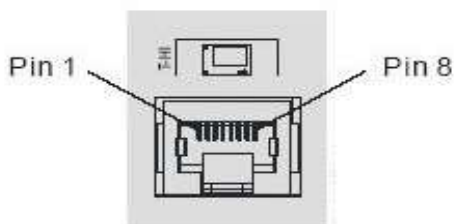


### 2. Modbus RTU - service port



#### Cable connection

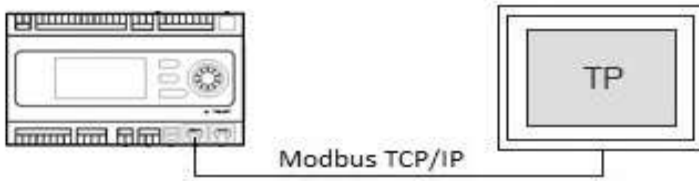
RJ45 jack, 8 pins (top view):



Pin-out for RJ45-  
connector

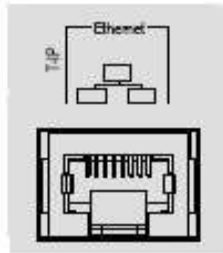
Pin	Signal
1	USB device, D+
2	USB device, D-
3	RS485, A+
4	Ground
5	Select 2
6	RS485, B-
7	Select 1
8	DC 24 V (Output)

### 3. Modbus TCP/IP - ethernet port

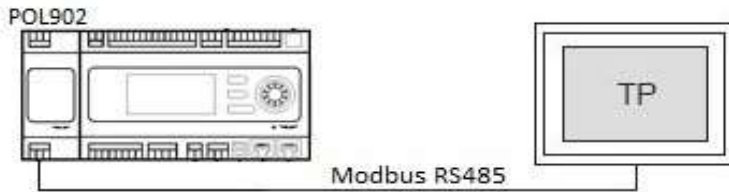


#### Cable connection

RJ45 jack, 8 pins (top view):



### 4. Modbus RS485 - communication modul POL902



#### Cable connection

