Measurement and control system KJM MANDÍK
Climatix

BACnet table

for AHU version software 40.01 and higher

02/2025

ATEX II 2G IIB T4

Item	Data point	Mapping	Read/ Write
Operating mode -	selection - Manual Operatin - PRIO8	0-Schedule 1-Off 2-Tempering 3-Reduced 4-Comfort	R/W
	current	1 -Off 2-StandbyTempering 3-Reduced 4-Comfort 5-TemperingFreecooling 6-TemperingFrostProtect	R
	auxiliary	5-FanSpeedCompensation 6-Ventilation 8-Preheating 11-Boiler 12-Start 13-BlockFan 14-SuperiorBlock 15-Testing	R
	status	1 - Off 2 - Air 3 - Heat 4 - Cool 5 - Off 6 -Tsup	R
Setpoint temperature -	current	Value (°C)	R
	Comfort - summer	Value (°C)	R/W
	Comfort - winter	Value (°C)	R/W
	Reduced - summer	Value (°C)	R/W
	Reduced - winter	Value (°C)	R/W
	frost protection mode	Value (°C)	R/W
Temperature -	after recovery - extract air	Value (°C)	R
	supply air	Value (°C)	R
	preheat air	Value (°C)	R
	exhaust gas	Value (°C)	R
	extract air	Value (°C)	R
	exhaust air	Value (°C)	R
	outdoor	Value (°C)	R
	heat water supply	Value (°C)	R
	heat water extract	Value (°C)	R
	cool water supply	Value (°C)	R
	cool water extract	Value (°C)	R
	room	Value (°C)	R
	room 2	Value (°C)	R
	inlet	Value (°C)	R
	after recovery - supply air	Value (°C)	R
	room unit	Value (°C)	R
	internal controller	Value (°C)	R
	Reheat	Value (°C)	R

Item	Data point	Mapping	Read/ Write
Filter supply 1 or 2 -	pressure	Value (Pa)	R
	type alarm digital manostat	1 - Info (dirty) 2 - Hard (cloged)	R/W
	setpoint info level pressure	Value (Pa)	R/W
	setpoint hard level pressure	Value (Pa)	R/W
	state	0 - Null 1 - OK 2 - Dirty (Info) 3 - Clogged (Hard) 4 - ErrorSensor	R
Filter extract 1 or 2 -	pressure	Value (Pa)	R
	type alarm digital manostat	1 - Info (dirty) 2 - Hard (cloged)	R/W
	setpoint info level pressure	Value (Pa)	R/W
	setpoint hard level pressure	Value (Pa)	R/W
	state	0 - Null 1 - OK 2 - Dirty (Info) 3 - Clogged (Hard) 4 - ErrorSensor	R
Filter grease -	pressure	Value (Pa)	R
	type alarm digital manostat	1 - Info (dirty) 2 - Hard (cloged)	R/W
	setpoint info level pressure	Value (Pa)	R/W
	setpoint hard level pressure	Value (Pa)	R/W
	state	0 - Null 1 - OK 2 - Dirty (Info) 3 - Clogged (Hard) 4 - ErrorSensor	R
Air quality -	state	0- OK / 1- Bad	R
	current	Value (ppm)	R
	number starts airing	Value	R
	setpoint start airing	Value (ppm)	R/W
	setpoint stop airing	Value (ppm)	R/W
	selection airing	1 - No 2 - Fans 3 - Dampers 4 - Both	R/W
	setpoint supply fan	Value (%)	R/W
	setpoint exhaust fan	Value (%)	R/W
	setpoint fresh air	Value (%)	R/W
	regime airing	1 - UnitOn 2 - Always 3 - Tempering	R/W
	selection sensor	1 - Avg 2 - Max 3 - Min 4 -Sensor 1 5 -Sensor 2	R/W

		6 -Sensor 3 7 -Sensor 4	

Item	Data point	Mapping	Read/ Write
Air quality -	sensor 1	Value (ppm)	R
	sensor 2	Value (ppm)	R
	sensor 3	Value (ppm)	R
	sensor 4	Value (ppm)	R
Air flow regulators -	Regulator 1	Value (%)	R
	Regulator 2	Value (%)	R
	Regulator 3	Value (%)	R
	Regulator 4	Value (%)	R
Humidity -	state	1 -Off 2 - OK 3 - Low 4 - High 5 - Outdoor	R
	current	Value (%)	R
	setpoint - Comfort	Value (%)	R/W
	setpoint - Reduced	Value (%)	R/W
	upper hystereze - start	Value (%)	R/W
	lower hystereze - stop	Value (%)	R/W
	regime	1 - UnitOn 2 - Always 3 - Tempering	R/W
	selection sensor	1 - Room 2 - Extract 3 - Supply	R/W
	active dehumidification	1 - No 2 - Condens unit 3 - Heat pump 4 - Watter cooler 5 - All	R/W
	passive dehumidification	1 - No 2 - Fans 3 - Dampers 4 - Both	R/W
	setpoint supply fan	Value (%)	R/W
	setpoint exhaust fan	Value (%)	R/W
	setpoint fresh air	Value (%)	R/W
	outdoor sensor	Value (%)	R/W
	outdoor absolute	Value (g/kg)	R
	supply air sensor	Value (%)	R
	supply air absolute	Value (g/kg)	R
	room sensor 1	Value (%)	R
	room absolute 1	Value (g/kg)	R
	room sensor 2	Value (%)	R
	room absolute 2	Value (g/kg)	R
	room sensor 3	Value (%)	R
	room absolute 3	Value (g/kg)	R
	room sensor 4	Value (%)	R
	room absolute 4	Value (g/kg)	R

	Inlet sensor	Value (%)	R
	Inleat absolute	Value (g/kg)	R
	After recuperation sensor	Value (%)	R
	After recuperation absolute	Value (g/kg)	R
	Exhaust recuperation sensor	Value (%)	R
	Exhaust recuperation absolute	Value (g/kg)	R
	extract air sensor	Value (%)	R
	extract air absolute	Value (g/kg)	R
Dampers -	min fresh air - Comfort	Value (%)	R/W
	min fresh air - Reduced	Value (%)	R/W
	supply	Value (%)	R
	mixing	Value (%)	R
	exhaust	Value (%)	R
	state	1 - Ready 2 - Cool 3 - Heat 4 - NoCool 5 - NoHeat 6 - Choice 7 - Humidity	R/W

Item	Data point	Mapping	Read/ Write
Dampers -	state	8 - AirQuality 9 - Defrost 10 - LowTempSupply 11 - WaterHeater 12 - Preheating 13 - Error	
	control temperatue fresh air	1 - Outdoor 2 - Preheat 3 - BeforeRecup 4 - Supply 5 - Room 6 - AfterRecup	R/W
	setpoint fix fresh air - Comfort	Value (%)	R/W
	setpoint fix fresh air - Reduced	Value (%)	R/W
	setpoint 100% fresh air - heating	Value (°C)	R/W
	setpoint 0% fresh air - heating	Value (°C)	R/W
	setpoint 100% fresh air - cooling	Value (°C)	R/W
	setpoint 0% fresh air - cooling	Value (°C)	R/W
	selection control - Comfort	1 - Fixed 2 - Linearly 3 - POL (room unit) 4 - Setpoint1 5 - Setpoint2	R/W
	selection control - Reduced	1 - Fixed 2 - Linearly 3 - POL (room unit) 4 - Setpoint1 5 - Setpoint2	R/W
Water heater 1 or 2 -	pump	0- Off / 1- On	R
	valve	0-100%	R
	state	1 - Ready 3 - Heat	R

		4 - Humidity 5 - LowTempOutdoor 6 - LowTempSupply 7 - LowTempWater 9 - Preheating 11 - NoHeat 12 - FrostThermostat 13 - Error (Sensor, Pump)	
	temperature supply low	0- OK / 1- Error	R
	number starts	Value	R
Water heater 1 -	frost protection	0- OK / 1- Error	R
	temperature water low	0- OK / 1- Error	R
Water cooler -	pump	0- Off / 1- On	R
	valve	0-100%	R
	state	1 - Ready 2 - Cool 10 - NoCool 13 - Error (Sensor, Pump)	R
	number starts	Value	R

Item	Data point	Mapping	Read/ Write
Recovery -	state	1 - Ready 2 - Cool 3 - Heat 4 - Deumid 9 - Preheating 10 - NoCool 11 - NoHeat 12 - Frost 13 - Error	R
	power	0-100%	R
	turned on	0- Off / 1- On	R
	number starts	Value	R
	frost protection	0- OK/ 1- Error	R
	frost protection pressure	Value (Pa)	R
	frost protection - setpoint pressure	Value (Pa)	R/W
	glycol refill pump - turned on	0- Off / 1- On	R
	glycol refill pump - number starts	Value	R
	glycol - pressure	Value (Pa)	R
	glycol - low press	0- OK / 1- Error	R
Water cooler -	pump	0- Off / 1- On	R
	valve	0-100%	R
	state	1 - Ready 2 - Cool 10 - NoCool 13 - Error (Sensor, Pump)	R
	number starts	Value	R
Condensing unit unit 1 to 6 -	state	1 - Ready 2 - Cool 3 - Heat 3 - Humidity 5 - LowTempOutdoor 10 - NoCool	R

		11 - NoHeat 12 - FrostThermostat 13 - Error	
	power	0-100%	R
	turned on	0- Off / 1- On	R
	number defrosts	Value	R
	number starts	Value	R
Condensing units units	max power	0-100%	R/W
	min temperature outdoor - cooling	Value (°C)	R/W
	block season	0-No/1-Yes	R/W
	min temperature outdoor - heating	Value (°C)	R/W
	defrost all units	0- OK/ 1- Error	R
Electrical heater 1 or 2 -	turned on	0- Off / 1- On	R
	power	0-100%	R
	max power	0-100%	R/W

Item	Data point	Mapping	Read/ Write
Electrical heater 1 or 2 -	state	1 - Ready 3 - Heat 6 - HighTempSupply 13 - Error (contactor)	R
	number starts	Value	R
Gas heater -	state	1 - Ready 3 - Heat 6 - HighTempSupply 8 - HighTempFlue 11 - NoHeat 13 - Error	R
	turned on	0- Off / 1- On	R
	power	0-100%	R
	max power	0-100%	R/W
	delay off	Value (s)	R/W
	burner - error	0- OK / 1- Error	R
	safe flue temperature emergency	0- OK / 1- Error	R
	number starts	Value	R
	damper	0-100%	R
	convector - turned on	0- Off / 1- On	R
	convector - number starts	Value	R
Fan supply -	state	1 - Ready 2 - Tempering 3 - Economy 4 - Comfort 5 - 3xSpeed 6 - RoomUnit 7 - TempSupply 8 - MixDamper 9 - BadAQ 10 - Press 11 - Ventilation 13 - Start	R

		14 - Release 15 - Error	
	turned on	0- Off / 1- On	R
	speed	0-100%	R
	setpoint speed - Reduced summer	0-100%	R/W
	setpoint speed - Reduced winter	0-100%	R/W
	setpoint speed - Comfort summer	0-100%	R/W
	setpoint speed - Comfort winter	0-100%	R/W
	number starts	Value	R
	pressure	Value (Pa)	R
	flow sensor	Value (Pa)	R
	flow	Value (m3/h)	R
	service switch - alarm	0- OK / 1- Error	R
	air flow contact - alarm	0- OK / 1- Error	R
	setpoint speed - low 3xSpeed	0-100%	R/W
	setpoint pressure - Reduced	Value (Pa)	R/W
	setpoint pressure - Comfort	Value (Pa)	R/W
	setpoint flow - Reduced	Value (m3/h)	R/W

Item	Data point	Mapping	Read/ Write
Fan supply -	setpoint flow - Comfort	Value (m3/h)	R/W
Fan extract -	state	1 - Ready 2 - Tempering 3 - Economy 4 - Comfort 5 - 3xSpeed 6 - RoomUnit 7 - TempSupply 8 - MixDamper 9 - BadAQ 10 - Press 11 - Ventilation 13 - Start 14 - Release 15 - Error	R
	turned on	0- Off / 1- On	R
	speed	0-100%	R
	setpoint speed - Reduced summer	0-100%	R/W
	setpoint speed - Reduced winter	0-100%	R/W
	setpoint speed - Comfort summer	0-100%	R/W
	setpoint speed - Comfort winter	0-100%	R/W
	number starts	Value	R
	pressure	Value (Pa)	R
	flow sensor	Value (Pa)	R
	flow	Value (m3/h)	R
	service switch - alarm	0- OK / 1- Error	R
	air flow contact - alarm	0- OK / 1- Error	R
	setpoint speed - low 3xSpeed	0-100%	R/W
	setpoint pressure - Reduced	Value (Pa)	R/W
	setpoint pressure - Comfort	Value (Pa)	R/W
	setpoint flow - Reduced	Value (m3/h)	R/W
	setpoint flow - Comfort	Value (m3/h)	R/W

Fans -	speed compensation	0- OK / 1- Error	R
Fire -	state	1 - OK 2 - Fire 3 - Smoke 4 - Fire&Smoke	R
Smoke sensor - 1 or 2	state -alarm	1 - Between 2 - Close 3 - Open 4 - Error 5 - Error	R
Fire damper 1 to 24 -	state -alarm	1 - Between 2 - Close 3 - Open 4 - Error 5 - Error	R
Fire dampers -	global - alarm	1- OK / 2- Error	R
Heat pump circuit 1 or 2 -	state	1 - Ready 2 - Cool	R

Item	Data point	Mapping	Read/ Write
Heat pump circuit 1 or 2 -		3 - Heat 10 - NoCool 11 - NoHeat 12 - FrostThermostat 13 - Error	
	power	0-100%	R
	turned on	0- Off / 1- On	R
	compressor	0- OK / 1- Error	R
	frequency inverter	0- OK / 1- Error	R
	high press	0- OK / 1- Error	R
	low press	0- OK / 1- Error	R
	number starts	Value	R
	start power	0-100%	R/W
Heat pump -	frost protection	0- OK / 1- Error	R
	frost protection pressure	Value (Pa)	R
	frost protection - setpoint pressure	Value (Pa)	R/W
	max power	0-100%	R/W
	delay on	Value (s)	R/W
	delay off	Value (s)	R/W
	compensation	1- Off / 2- On	R/W
	compensation - min speed fans	0-100%	R/W
	compensation - max speed fans	0-100%	R/W
	press sensor	Value (Pa)	R
	temperature sensor 1	Value (°C)	R
	temperature sensor 2	Value (°C)	R
	temperature sensor 3	Value (°C)	R
	temperature sensor 4	Value (°C)	R
	temperature sensor 5	Value (°C)	R
Humidifier -	state	1 - Ready 4 - Humidity 13 - Error	R

	turned on	0- Off / 1- On	R
	power	0-100%	R
	start power	0-100%	R/W
	delay off	Value (s)	R/W
	number starts	Value	R
Boiler -	state	0- Off / 1- On	R
	water heating	1 - No 2 - Winter 3 - Always	R/W
	low water temperature	1 - No / 2 - Yes	R/W
	low outdoor temperature	1 - No 2 - Winter 3 - Heat 4 - Always	R/W
	low outdoor temperature	Value (°C)	R/W

Item	Data point	Mapping	Read/ Write
Boiler -	difference desired temperature	1 - No 2 - Winter 3 - Heat 4 - Always	R/W
	difference desired temperature	Value (°C)	R/W
	activates condensation unit	1 - No 2 - Winter 3 - Always	R/W
	Power condensation unit	0-100%	R/W
	delay turned on fans	1 - No 2- Winter 3 - Always	R/W
	delay turned on fans	Value (°C)	R/W
	delay turned on boiler	Value (min)	R/W
Energy watch -	Specific power consumption - fan supply	Value (kW/m3/s)	R
	Specific power consumption - fan extract	Value (kW/m3/s)	R
	Specific power consumption - AHU	Value (kW/m3/s)	R
	Class SFP - fan supply	1- SFP1 …. 7- SFP7	R
	Class SFP - fan extract	1- SFP1 …. 7- SFP7	R
	Class SFP - AHU	1- SFP1 …. 7- SFP7	R
	Electrical energy - currently	Value (kW)	R
	Electricity consumption - current hour	Value (kWh)	R
	Electricity consumption - current day	Value (kWh)	R
	Electricity consumption - last hour	Value (kWh)	R
	Electricity consumption - last day	Value (kWh)	R
	Electricity consumption - current week	Value (kWh)	R
	Electricity consumption - current month	Value (MWh)	R
	Electricity consumption - current year	Value (MWh)	R
	Supplied energy - currently	Value (kW)	R
	Consumption supplied energy - current hour	Value (kWh)	R
	Consumption supplied energy - current day	Value (kWh)	R
	Consumption supplied energy - last hour	Value (kWh)	R
	Consumption supplied energy - last day	Value (kWh)	R

	Consumption supplied energy - current week	Value (kWh)	R
	Consumption supplied energy - current month	Value (MWh)	R
	Consumption supplied energy - current year	Value (MWh)	R
	Recovered energy - currently	Value (kW)	R
	Recovered energy - current hour	Value (kWh)	R
	Recovered energy - current day	Value (kWh)	R
	Recovered energy - last hour	Value (kWh)	R
	Recovered energy - last day	Value (kWh)	R
	Recovered energy - current week	Value (kWh)	R
	Recovered energy - current month	Value (MWh)	R
	Recovered energy - current year	Value (MWh)	R
	Energy watch - Recovered efficiency	Value (%)	R
	Energy watch - Recovered COP	Value	R
	Energy watch - Recovered EER	Value	R
	Energy watch - Unit COP	Value	R
	Energy watch - Unit EER	Value	R

Item	Data point	Mapping	Read/ Write
Internal Modbus -	Fan supply - communication	0- OK / 1- Error	R
	Fan supply - speed	0-100%	R/W
	Fan supply - sequential master logic	0- Init 1- Stop 2- Startup 3- Run 4- Shutdown 5- Acknowledge	R
	Fan supply - input power	Value (kW)	R
	Fan supply - current	Value (A)	R
	Fan supply - voltage	Value (V)	R
	Fan supply - status	Value	R
	Fan supply - status 2	Value	R
	Fan extract - communication	0- OK / 1- Error	R
	Fan extract - speed	0-100%	R/W
	Fan extract - input power	Value (kW)	R
	Fan extract - current	Value (A)	R
	Fan extract - voltage	Value (V)	R
	Fan extract - sequential master logic	0- Init 1- Stop 2- Startup 3- Run 4- Shutdown 5- Acknowledge	R
	Fan extract - status	Value	R
	Fan extract - status 2	Value	R
	Heat pump circuit 1 - suction temperature	Value * 10 (°C)	R
	Heat pump circuit 1 - evaporate temperature	Value * 10 (°C)	R
	Heat pump circuit 1 - evaporate press	Value (bar)	R
	Heat pump circuit 1 - expansion valve open	0-100%	R
	Heat pump circuit 1 - superheat	Value * 10 (°C)	R

	Heat pump circuit 1 - state expansion valve driver	Value	R
	Heat pump circuit 2 - suction temperature	Value * 10 (°C)	R
	Heat pump circuit 2 - evaporate temperature	Value * 10 (°C)	R
	Heat pump circuit 2 - evaporate press	Value (bar)	R
	Heat pump circuit 2 - expansion valve open	0-100%	R
	Heat pump circuit 2 - superheat	Value * 10 (°C)	R
	Heat pump circuit 2 - state expansion valve driver	Value	R
	Heat pump EV driver - communication	0- OK / 1- Error	R
	Electricity meter- communication	0- OK / 1- Error	R
	Room unit AMR OP - communication	0- OK / 1- Error	R
Season -	state	0- Summer / 1- Winter	R
	temperature	Value (°C)	R/W
	delay	Value (min)	R/W

Item	Data point	Mapping	Read/ Write
Service -	period	1 - No 2 - Year 3 - Year/2 4 -Year/4 5 - Month	R/W
Free cooling -	state	1 - Off 2 - TOutMin 4 - TSupMin 3 - TOutMax	R
	state	5 - ErrSensor 6 - MinOn 7 - NormOn 8 - HardOn	
	hand	1 - Off / 2 - On	R/W
	turned on	0- Off / 1- On	R
	number starts	Value	R
Scheduler -	mode	0- Default (Off) 1- Off 2- Protect 3- Reduced 4- Comfort	R/W
	freecooling	0- Default (Off) 1- Off 2- On	R/W

Important:

- All BACnet objects may not be accessible. The usability of some registers depends on the specific configuration of the Climatix controller.

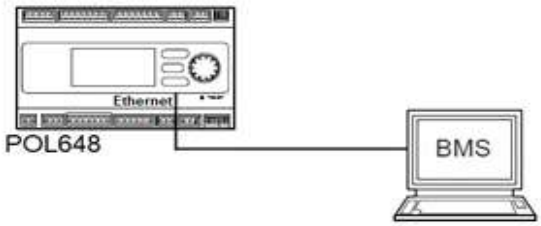
- Integration of max 300 BACnet objects.

- R/W - The object can be read and written.

- R - The object can be read. Write to priority 5, if the object type allows it.

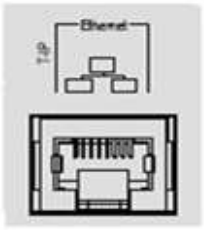
BACnet connection variants

1. BACnet IP - ethernet port

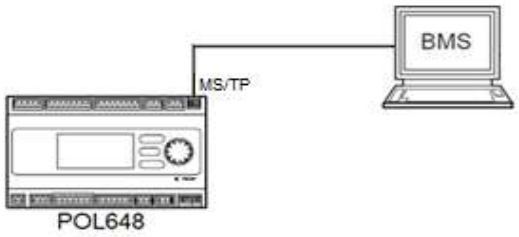


Cable connection

RJ45 jack, 8 pins (top view):



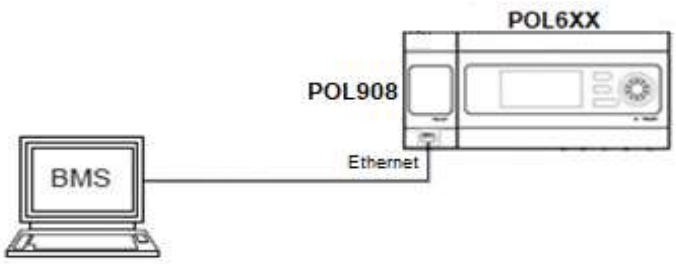
2. BACnet MS/TP - port RS485



Cable connection

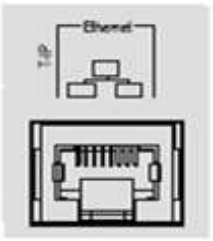
BACnet connection variants

3. BACnet IP - communication modul POL908

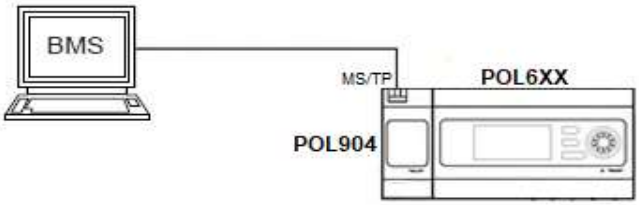


Cable connection

RJ45 jack, 8 pins (top view):



4. BACnet MS/TP - communication modul POL904



Cable connection