Data point list Modbus/TCP run around coil system

TROX® TECHNIK
The art of handling air

V006 - 09/2021

D: important data points
S: system specific data points

default IP address: 192.168.0.180 OR 192.168.0.200
Modbus/TCP port: 502

no.	D/S	group	datapoint	description	R/W	unit	scale	data type	values	register	bit	function code
1	D	system data	eSystemMode	AHU operation mode	R/W			uint	0 = off; 1 = manual mode; 2 = auto mode	32769		(0x03; 0x06)
2	D	system data	nResetErrors	reset all errors, auto returns to 0	R/W			int	1 = reset	32771		(0x03; 0x06)
3	S	setpoints	fTempMinSetpoint	setpoint of the min. air temperature	R/W	°C	10	int		32794		(0x03; 0x06)
4	S	setpoints	fTempMaxSetpoint	setpoint of the max. air temperature	R/W	°C	10	int		32795		(0x03; 0x06)
5	S	setpoints	fHumMinSetpoint	setpoint of the min. air humidity	R/W	%	10	uint		32796		(0x03; 0x06)
6	S	setpoints	fHumMaxSetpoint	setpoint of the max. air humidity	R/W	%	10	uint		32797		(0x03; 0x06)
7	D	setpoints	rInputPowerDemandRac	power demand 0…100% of the run around coil system (standalone only)	R/W	%		uint		32799		(0x03; 0x06)
8	D	setpoints	rSupplyAirFlowRac	supply air volume flow to the run around coil system (standalone only)	R/W	m³/h		uint		32800		(0x03; 0x06)
9	S	settings	fSetTempSUPMin	setpoint of the min. supply air temperature	W	°C	10	int		32808		(0x03; 0x06)
10	S	settings	fSetTempSUPMax	setpoint of the max. supply air temperature	W	°C	10	int		32809		(0x03; 0x06)
11	S	settings	fSetHumSUPMin	setpoint of the min. supply air humidity	W	%rH	10	int		32810		(0x03; 0x06)
12	S	settings	fSetHumSUPMax	setpoint of the max. supply air humidity	W	%rH	10	int		32811		(0x03; 0x06)
13	D	system data	eEventNotification	notification of alarm class	R			uint	0 = no alarm; 1 = warning (B-alarm); 2 = critical (A-alarm)	32769		(0x04)
14	S	measurement data	fTempODA	present value outdoor air temperature	R	°C	0.1	int		32791		(0x04)
15	S	measurement data	fTempSUP	present value supply air temperature	R	°C	0.1	int		32792		(0x04)
16	S	measurement data	fTempETA	present value extracted air temperature	R	°C	0.1	int		32793		(0x04)
17	S	measurement data	fHumODA	present value outdoor air humidity	R	%rH	0.1	uint		32795		(0x04)
18	S	measurement data	fHumSUP	present value supply air humidity	R	%rH	0.1	uint		32796		(0x04)
19	S	measurement data	fHumETA	present value extracted air humidity	R	%rH	0.1	uint		32797		(0x04)
20	S	supply air fan	fFanMeaAirFlowSUP	present value supply airflow	R	m³/h		uint		32875		(0x04)
21	S	extract air fan	fFanMeaAirFlowETA	present value extract airflow	R	m³/h		uint		32885		(0x04)
22		modbus comm. error	bModErrHumODA	modbus comm. error with the outdoor air humidity sensor	R			bool	TRUE = ok	32929	0	(0x04)
23		modbus comm. error	bModErrHumSUP	modbus comm. error with the supply air humidity sensor	R			bool	TRUE = ok	32929	1	(0x04)
24		modbus comm. error	bModErrHumETA	modbus comm. error with the extract air humidity sensor	R			bool	TRUE = ok	32929	2	(0x04)
25		modbus comm. error	bModErrTempODA	modbus comm. error with the outdoor air temperature sensor	R			bool	TRUE = ok	32929	4	(0x04)
26		modbus comm. error	bModErrTempSUP	modbus comm. error with the supply air temperature sensor	R			bool	TRUE = ok	32929	5	(0x04)
27		modbus comm. error	bModErrTempETA	modbus comm. error with the extract air temperature sensor	R			bool	TRUE = ok	32929	6	(0x04)
28	D	current operation mode	eOperationMode	current operation mode of the air handling unit.	R			uint	0 = off; 1 = standby; 2 = control; 7 = manual	32942		(0x04)
29	D	rac	bReleasePump	pump release	R			bool	TRUE = on	32960	0	(0x04)
30		rac	bPumpError	pump error	R			bool	TRUE = alarm	32960	1	(0x04)
31		rac	bBrinePressure1	pressure step 1 triggered	R			bool	TRUE = alarm	32960	2	(0x04)
32		rac	bBrinePressure2	pressure step 2 triggered	R			bool	TRUE = alarm	32960	3	(0x04)
33		rac	bMsgMinTempInletETA	exhaust air heat exchanger is frosting (prio=2)	R			bool	TRUE = alarm	32960	4	(0x04)
34		rac	bMsgPumpError	pump error (prio=3)	R			bool	TRUE = alarm	32960	5	(0x04)
35		rac	bMsgFrostFeedCoil	alarm feed coil frosting (prio=3)	R			bool	TRUE = alarm	32960	6	(0x04)
36	D	rac	bMsgNoRecovery	heat recovery is currently not possible (prio=2)	R			bool	TRUE = alarm	32960	7	(0x04)
37		rac	bMsgNoFeed	feed doesnt have cooling or heating (prio=2)	R			bool	TRUE = alarm	32960	8	(0x04)
38		rac	bMsgPumpMinVolumeFlow	min. pump volume flow (prio=3)	R			bool	TRUE = alarm	32960	9	(0x04)
39		rac	bMsgBrinePressureLow	brine pressure have to be checked, low pressure (prio=2)	R			bool	TRUE = alarm	32960	10	(0x04)

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40		**rac**	bMsgBrinePressureCritical	critical brine pressure (prio=3)	R			bool	TRUE = alarm	32960	11	(0x04)
41		**rac**	bMsgAutoPumpOff	auto pump stop (prio=2)	R			bool	TRUE = alarm	32960	12	(0x04)
42	**D**	**rac**	bStateHeatExchangerOperation	state of the operation signal be released	R			bool	TRUE = on	32960	13	(0x04)
43		**rac**	bStateFastMode	state of the fast cool- or heating mode active	R			bool	TRUE = on	32960	14	(0x04)
44	**S**	**rac**	bStateCoolingFeed	state of the cooling feed feeding is active	R			bool	TRUE = on	32960	15	(0x04)
45	**S**	**rac**	bStateHeatingFeed	state of the heating feed feeding is active	R			bool	TRUE = on	32961	0	(0x04)
46		**rac**	bMsgPumpWarning	pump error outputted a warning signal (prio=2)	R			bool	TRUE = alarm	32961	1	(0x04)
47		**rac**	bActuatingValueFeedCoolingPump	pump release cooling feed	R			bool	TRUE = on	32961	2	(0x04)
48		**rac**	bActuatingValueFeedHeatingPump	pump release heating feed	R			bool	TRUE = on	32961	3	(0x04)
49		**rac**	bReleaseColdProvider	release cold provider	R			bool	TRUE = on	32961	4	(0x04)
50		**rac**	bReleaseHeatProvider	release heat provider	R			bool	TRUE = on	32961	5	(0x04)
51	**D**	**rac**	rActuatingValuePump	controlled value pump speed	R	%		uint		32962		(0x04)
52	**D**	**rac**	rActuatingValuePowerValve	controlled value run around coil power valve	R	%		uint		32963		(0x04)
53	**S**	**rac**	rActuatingValueFrostProtectionValve	controlled value run around coil frost protection valve	R	%		uint		32964		(0x04)
54		**rac**	rTempSUPIn	current value inlet temperature of the fresh air heat exchanger	R	°C	0.1	int		32965		(0x04)
55		**rac**	rTempSUPOut	current value outlet temperature of the fresh air heat exchanger	R	°C	0.1	int		32966		(0x04)
56		**rac**	rTempETAIn	current value inlet temperature of exhaust air heat exchanger	R	°C	0.1	int		32967		(0x04)
57		**rac**	rTempETAOut	current value return temperature exhaust air heat exchanger	R	°C	0.1	int		32968		(0x04)
58		**rac**	rTempPreFeed	current value brine temperature	R	°C	0.1	int		32969		(0x04)
59	**D**	**rac**	rBrineVolumeFlow	present value brine volume flow	R	m³/h	0.01	uint		32970		(0x04)
60	**S**	**rac**	rThermalPowerSUP	current value thermal power of the fresh air heat exchanger	R	kW		int		32971		(0x04)
61	**S**	**rac**	rThermalPowerETA	current value thermal power of the exhaust air heat exchanger	R	kW		int		32972		(0x04)
62	**S**	**rac**	rThermalPowerFeedHeat	current value thermal power of the heating feed	R	kW		int		32973		(0x04)
63	**S**	**rac**	rThermalPowerFeedCool	current value thermal power of the cooling feed	R	kW		int		32974		(0x04)
64	**S**	**rac**	rActuatingValueFeedCoolingValve	controlled value run around coil cooling feed valve	R	%		uint		32975		(0x04)
65	**S**	**rac**	rActuatingValueFeedHeatingValve	controlled value run around coil heating feed valve	R	%		uint		32976		(0x04)
66		**rac**	rTempCoolFeedIn	current value inlet temperature of cooling feed	R	°C	0.1	int		32977		(0x04)
67		**rac**	rTempHeatFeedOut	current value return temperature of heating feed	R	°C	0.1	int		32978		(0x04)
68		**rac**	rActuatingValueDehumCoolValve	controlled value run around coil dehumdifier cooling valve	R	%		uint		32979		(0x04)
69		**rac**	rActuatingValueDehumReaheater	controlled value run around coil dehumdifier cooling recovery valve	R	%		uint		32980		(0x04)
70		**loop controller temperature**	nTemperatureControlStrategy	control strategy temperature	R			uint	0 = no control; 1 = supply; 2 = extract; 3 = supply-extract cascade	33092		(0x04)
71		**loop controller temperature**	fSupTempSetpointLowLimit	min. supply air temperature setpoint	R	°C	0.1	uint		33093		(0x04)
72		**loop controller temperature**	fSupTempSetpointHighLimit	max. supply air temperature setpoint	R	°C	0.1	uint		33094		(0x04)
73	**S**	**loop controller temperature**	fSupTempSetpointCurrent	current supply air temperature setpoint	R	°C	0.1	uint		33095		(0x04)
74	**S**	**loop controller temperature**	fSupTempCurrentValue	present value supply air temperature	R	°C	0.1	uint		33096		(0x04)
75		**loop controller temperature**	fEtaTempSetpointLowLimit	min. extract air temperature setpoint	R	°C	0.1	uint		33097		(0x04)
76		**loop controller temperature**	fEtaTempSetpointHighLimit	max. extract air temperature setpoint	R	°C	0.1	uint		33098		(0x04)
77		**loop controller temperature**	fEtaTempSetpointCurrent	current extract air temperature setpoint	R	°C	0.1	uint		33099		(0x04)
78		**loop controller temperature**	fEtaTempCurrentValue	present value extract air temperature	R	°C	0.1	uint		33100		(0x04)

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79		**loop controller humidity**	nHumidityControlStrategy	control strategy humidity	R			uint	0 = no control; 1 = supply; 2 = extract; 3 = supply-extract cascade	33111		(0x04)
80		**loop controller humidity**	fSupHumSetpointLowLimit	min. supply air humidity setpoint	R	g/kg	0.01	uint		33112		(0x04)
81		**loop controller humidity**	fSupHumSetpointHighLimit	max. supply air humidity setpoint	R	g/kg	0.01	uint		33113		(0x04)
82	**S**	**loop controller humidity**	fSupHumSetpointCurrent	current supply air humidity setpoint	R	g/kg	0.01	uint		33114		(0x04)
83	**S**	**loop controller humidity**	fSupHumCurrentValue	present value supply air humidity	R	g/kg	0.01	uint		33115		(0x04)
84		**loop controller humidity**	fEtaHumSetpointLowLimit	min. extract air humidity setpoint	R	g/kg	0.01	uint		33116		(0x04)
85		**loop controller humidity**	fEtaHumSetpointHighLimit	max. extract air humidity setpoint	R	g/kg	0.01	uint		33117		(0x04)
86		**loop controller humidity**	fEtaHumSetpointCurrent	current extract air humidity setpoint	R	g/kg	0.01	uint		33118		(0x04)
87		**loop controller humidity**	fEtaHumCurrentValue	present value extract air humidity	R	g/kg	0.01	uint		33119		(0x04)