iDM

EIB/KNX
Navigator Control 2.0

QUALITY SINCE 1977
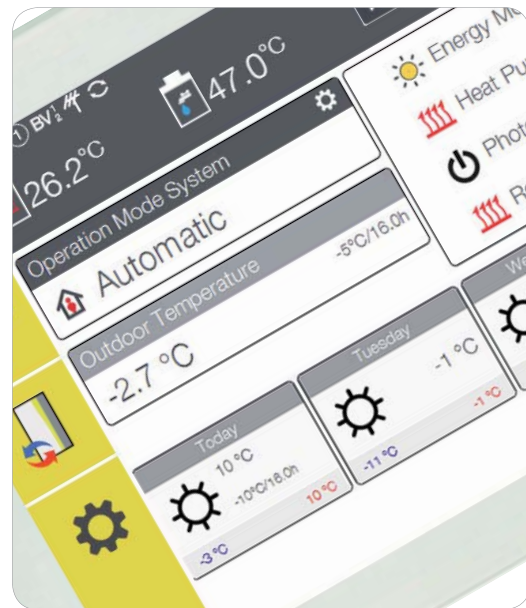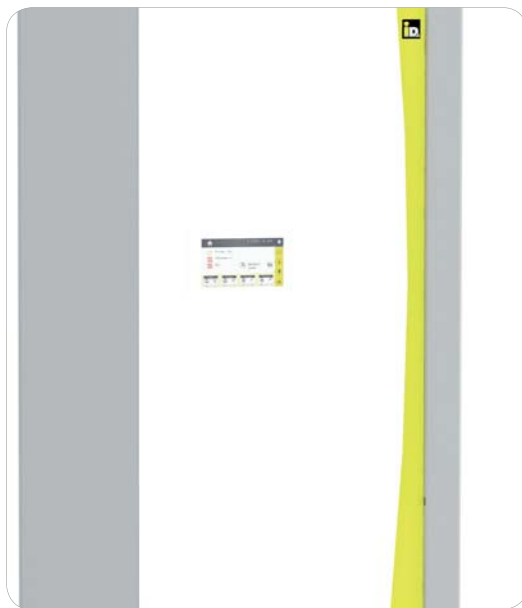
HEAT PUMPS FROM AUSTRIA

www.idm-energie.at

CONTENTS

DIE ENERGIEFAMILIE

1.1. General Information

Please read through this documentation carefully. It contains important information for correct installation and safe and economical operation of the system.

1.2. Safety Instructions

Installation and maintenance work can be hazardous due to high system pressure, high temperatures and live parts and, as such, it should only be conducted by specialist staff.

Heat pumps may only be installed by competent specialist staff and commissioned by a customer service company trained to do so by IDM-Energiesysteme GmbH.

When working on the heat pump the system must be deactivated and secured against reactivation.

In addition, all safety instructions in the relevant documentation, stickers on the heat pump itself and all other applicable safety regulations must be observed.

1.3. Installing Additional Components

The installation of additional components which have not been tested with the equipment may impair function. No liability is accepted and the guarantee will become void in the event of damage arising as a result.

1.4. Environmental Protection Information

Heat pumps are electrical devices manufactured from high quality materials that should not be disposed of as normal household waste, but disposed of properly in accordance with the provisions stipulated by local authorities.

Besides the penalties issued for offenders, improper disposal can also result in environmental damage and health problems.

1.5. Standards and Guidelines

When installing piping systems and electrical components and devices observe all of the applicable national and international installation, accident prevention and safety regulations, as well as the information included in these installation instructions.

These include:

- the generally accepted accident prevention and safety regulations
- the directives for environmental protection
- the regulations of the Employer's Liability Insurance Association
- the applicable laws, standards, guidelines and regulations, e.g. DIN, EN, DVGW, VDI and VDE
- directives of the local utility companies.

General instructions for <u>operating</u> the heat pump.

General information for installing the heat pump.

Important information for installing and operating the heat pump. It is imperative that this is observed!

Space for the customer service telephone number

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General Informations

2.1. Technical Data EIB/KNX module

Power supply	- KNX Bus ca. 15 mA
Bedien- und Anzeigeelemente	- 2 buttons and 3 LEDs, multicoloured - KNX programming button with LED (red)
Ethernet	- 10BaseT (10Mbit/s) - Internet protocols ARP, ICMP, IGMP, UDP/IP, TCP/IP, DHCP and Auto IP - Up to 5 connections simultaneously via KNXnet/IP tunneling - KNX BAOS Binary Protocol V2.0 - KNX BAOS Web Services (JSON)
KNX	- Medium TP
Connections	- Bus terminal for KNX (red/black) - LAN connection clamp RJ-45
Ambient temperature range	- Ambient temperature during usage: - 5 ... + 45°C - Storage temperature: - 25 ... + 70°C - Relative humidity (noncondensing): 5 % ... 93 %
Model	- Modular device
Mechanical data	- Case: plastic(PC) - DIN serial installation with 1 TE (18mm) - Weight: ca. 40 g
Mounting and wiring	The device can be used for fixed installion in dry indoor rooms or in power distributions cabinet on a top hat rail.
Dimensions	- 90 x 18 x 60 mm (H x W x D)
Certification	- KNX- certified communication module

Electrical safety	- Protection class acc. to EN 60529: IP 20 - Safety-low voltage SELV 29V=
CE labeling	- Low voltage guideline 2014 / 35 / EU - EMC guideline 2014 / 30 / EU - RoHS guideline 2011 / 65 / EU - EN 50491-3: 2009, EN 50491-5-1:2010, EN 50491-5-2:2010, EN 50491-5-3:2010 - EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011 - EN 50581:2012

3. Installation

3.1. Description

With the EIB/KNX module it is possible to connect EIB/KNX devices to the heat pump. Via the KNX module the heat pump can communicate with other EIB/KNX devices e.g sensors and actuators. Between those devices data like temperatures, operating modes and so on can be exchanged and processed.

3.2. Connection EIB/KNX module

The EIB/KNX module is connected via a network cable to the Navigator 2.0 touchdisplay or the network socket on at the heat pump case.
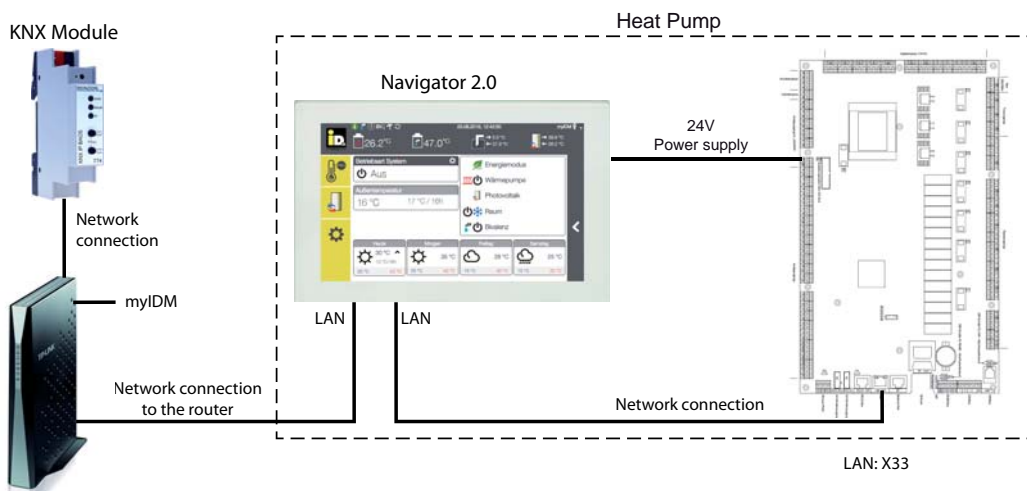
Version 1: Connection via router/switch and myIDM-integration
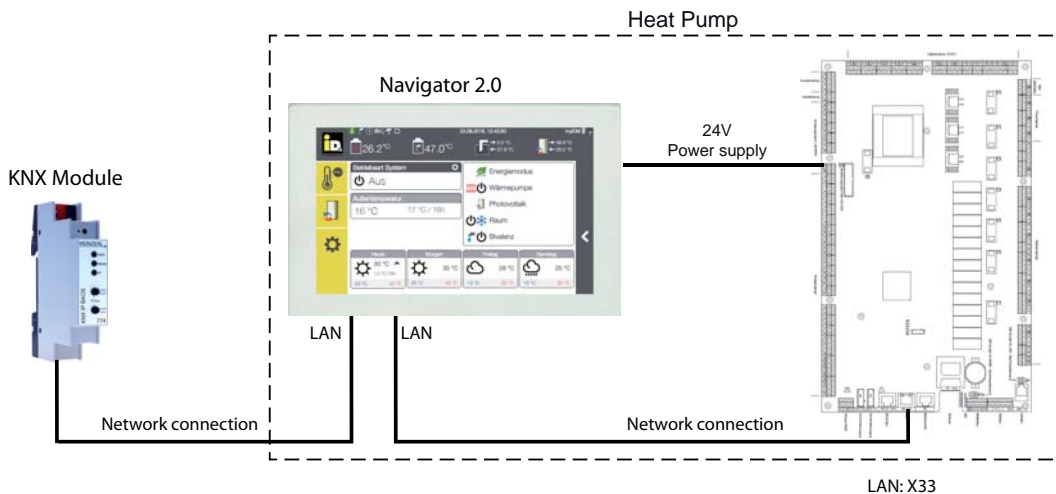
Version 2: Connection without router/switch and without myIDM-integration

> **!** **Before connecting the EIB/KNX module the heat pump must be set currentless! For connection version 2 an additional switch (onsite) needs to be used, if a myIDM connection is wanted.**

3.3. Connection EIB/KNX bus cable on the EIB/KNX module

The EIB/KNX- bus cable needs to be clamped on the EIB/KNX-module.

No additional power supply is necessary for the EIB/KNX module, this is done via the EIB/KNX bus connection.

For the EIB/KNX bus the general restrictions for EIB/KNX devices are applied.

bus cable clamps

LEDs

> **!** **For the connection of the bus cable to the EIB/KNX module the correct connection pole (-/+) has to be used.**
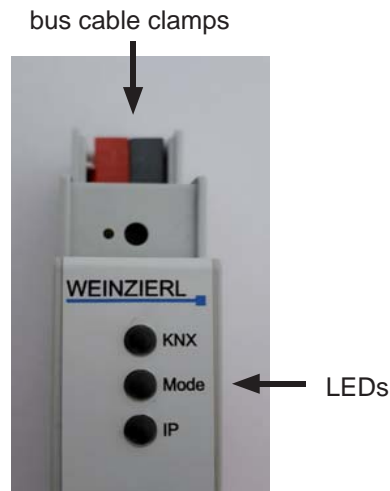
3.4. Statusanzeige LEDs

LED	LED Verhalten	Bedeutung
KNX	LED glowing green	KNX bus voltage present.
	LED flickering red	Telegram traffic via the KNX Bus.
	LED short-time red	Communication error within the KNX bus.
IP	LED glowing green	Active ethernet-link and valid IP settings on the device.
	LED glowing red	Active ethernet-link and invalid IP settings or no IP settings from the DHCP-server to the device
	LED flickering green	IP telegram traffic.
Mode	LED glowing green	The device is working in normal operating mode.
	LED glowing red	Programming mode is active.
	LED flashing 1x..10x green	Programming mode is not aktive. manual mode (state BAOS) active. the chosen BAOS connection (1...10) is free.
	LED flashing 1x..10x orange	Programming mode is not active. manual mode (state BAOS) active. the chosen BAOS connection (1...10) is occupied.
	LED flashing 1x..5x green	Programming mode is not aktive. manual mode (state BAOS) active. the chosen tunnel connection (1...5) is free.
	LED flashing 1x..10x orange	Programming mode is not active. manual mode (state BAOS) active. the chosen tunnel connection (1...5) is occupied.
	LED blinking red	Programming mode is not active. Manual mode not active. The device was not correctly loaded, e.g. after canceleing a download.

3.5. Scope of delivery

- EIB/KNX module (KNX IP BAOS 774)
- Technical manual

4.1. Programming the EIB/KNX

Before starting to use the EIB-KNX module for the first time it must be programmed via the EIB/KNX bus.

The module is programmed via the ETS software like all EIB/KNX devices. An ETS project with a pre-configured module is available for programming the EIB/KNX module

> **!** The ETS project can be downloaded from our website at http://www.idm-energie.at/. (in the partner area under accessories)

After importing the ETS project the module can be copied into any ETS project.

> **!** The configuration of the objects and the module's serial interface should not be changed! If this is not observed, flawless operation cannot be guaranteed!

4.2. EIB/KNX Objektbelegung

The detailed assignment of the objects can be inferred from the following table.

> **!** It is essential to ensure that the parameter values marked with an * in the following table are not altered more than is absolutely necessary. These values are written directly into the EEPROM memory of the Navigator. A permanent alteration of these values can result in damage to the memory.

NAVIGATOR - EIB/KNX communication

Version: 25.08.2017

Softwareversion Navigator control : since **mod20.3-0**

Object	Data type	Access	Designation	Navigator parameter	Min. value	Max. value	Default-value	Unit
1	9	RO	External temperature (B31)					[°C]
2	9	RO	Averaged external temperature					[°C]
3	7	RO	Current error code					
4	5	RW	System operating mode	SYSMODE	-1	5	1	
					-1 … Off 0 … Standby 1 … Automatic 2 … Absent 3 … Holiday 4 … Only hot water 5 … Only heating			
5	7	RO	Smart Grid Status		0	4		
				0 … Utility lock and no PV current 1 … Current from utility provider and no PV current 2 … No current from utility provider and PV current 4 … Utility lock and PV current				
6	9	RO	Heat accumulator (B38)					[°C]
7	9	RO	Cold reservoir (B40)					[°C]
8	9	RO	DHW sensor bottom (B41)					[°C]
9	9	RO	DHW sensor top (B48)					[°C]
20	9	RO	Fresh water temperature (B42)					[°C]
*21	7	RW	Desired hot water temperature	FW030	35	95	46	[°C]
30	9	RO	Heat pump flow temperature (B33)					[°C]
31	9	RO	Heat pump return temperature (B34)					[°C]
32	9	RO	HGL Flow temperature (B35)					[°C]
33	9	RO	Heat source inlet temperature (B43)					[°C]
34	9	RO	Heat source outlet temperature (B36)					[°C]
35	9	RO	Air inlet sensor (B37)					[°C]
36	9	RO	Evaporater (heat exchanger) sensor (B72)					[°C]
50	7	RO	Heat pump operating mode		0	8		
					0 … Off 1 … Heating 2 … Cooling 4 … Priority 8 … Defrosting			
60	7	RO	Status compressor 1		0	1		
					0 … Off 1 … On			
61	7	RO	Status compressor 2		0	1		

Object	Data type	Access	Designation	Navigator parameter	Min. value	Max. value	Default-value	Unit
62	7	RO	Status compressor 3		0	1		
63	7	RO	Status compressor 4		0	1		
*80	8	RW	2. heat generator - bivalence point 1	BV002	-30	40	0	[°C]
*81	8	RW	2. heat generator - bivalence point 2	BV003	-30	40	-10	[°C]
*82	8	RW	3. heat generator - bivalence point 1	BV102	-30	40	0	[°C]
*83	8	RW	3. heat generator - bivalence point 2	BV103	-30	40	-10	[°C]
200	9	RO	Heating circuit A flow temperature (B51)					[°C]
201	9	RO	Heating circuit B flow temperature (B52)					[°C]
202	9	RO	Heating circuit C flow temperature (B53)					[°C]
203	9	RO	Heating circuit D flow temperature (B54)					[°C]
204	9	RO	Heating circuit E flow temperature (B55)					[°C]
205	9	RO	Heating circuit F flow temperature (B56)					[°C]
206	9	RO	Heating circuit G flow temperature (B57)					[°C]
207	9	RO	Heating circuit A room temperature (B61)					[°C]
208	9	RO	Heating circuit B room temperature (B62)					[°C]
209	9	RO	Heating circuit C room temperature (B63)					[°C]
210	9	RO	Heating circuit D room temperature (B64)					[°C]
211	9	RO	Heating circuit E room temperature (B65)					[°C]
212	9	RO	Heating circuit F room temperature (B66)					[°C]
213	9	RO	Heating circuit G room temperature (B67)					[°C]
214	9	RO	Heating circuit A set flow temperature					[°C]
215	9	RO	Heating circuit B set flow temperature					[°C]
216	9	RO	Heating circuit C set flow temperature					[°C]
217	9	RO	Heating circuit D set flow temperature					[°C]
218	9	RO	Heating circuit E set flow temperature					[°C]
219	9	RO	Heating circuit F set flow temperature					[°C]
220	9	RO	Heating circuit G set flow temperature					[°C]
221	9	RO	Humidity sensor		0	100		[%rF]
*222	7	RW	Operation mode Heating circuit A	HCA01	0	5	1	
					0 … Off 1 … Time programm 2 … Normal 3 … Eco 4 … Manuel heating 5 … Manuel cooling				
*223	7	RW	Operation mode Heating circuit B	HCB01	0	5	1	
*224	7	RW	Operation mode Heating circuit C	HCC01	0	5	1	
*225	7	RW	Operation mode Heating circuit D	HCD01	0	5	1	
*226	7	RW	Operation mode Heating circuit E	HCE01	0	5	1	
*227	7	RW	Operation mode Heating circuit F	HCF01	0	5	1	

Object	Data type	Access	Designation	Navigator parameter	Min. value	Max. value	Default-value	Unit
*228	7	RW	Operation mode heating circuit G	HCG01	0	5	1	
*229	9	RW	Set room temperature heating normal HC A	HCA04	15	30	22	[°C]
*230	9	RW	Set room temperature heating normal HC B	HCB04	15	30	22	[°C]
*231	9	RW	Set room temperature heating normal HC C	HCC04	15	30	22	[°C]
*232	9	RW	Set room temperature heating normal HC D	HCD04	15	30	22	[°C]
*233	9	RW	Set room temperature heating normal HC E	HCE04	15	30	22	[°C]
*234	9	RW	Set room temperature heating normal HC F	HCF04	15	30	22	[°C]
*235	9	RW	Set room temperature heating normal HC G	HCG04	15	30	22	[°C]
*236	9	RW	Set room temperature heating eco HC A	HCA05	10	25	18	[°C]
*237	9	RW	Set room temperature heating eco HC B	HCB05	10	25	18	[°C]
*238	9	RW	Set room temperature heating eco HC C	HCC05	10	25	18	[°C]
*239	9	RW	Set room temperature heating eco HC D	HCD05	10	25	18	[°C]
*240	9	RW	Set room temperature heating eco HC E	HCE05	10	25	18	[°C]
*241	9	RW	Set room temperature heating eco HC F	HCF05	10	25	18	[°C]
*242	9	RW	Set room temperature heating eco HC G	HCG05	10	25	18	[°C]
*243	9	RW	Heating curve HC A	HCA10	0,1	3,5	1,2	
*244	9	RW	Heating curve HC B	HCB10	0,1	3,5	1,2	
*245	9	RW	Heating curve HC C	HCC10	0,1	3,5	1,2	
*246	9	RW	Heating curve HC D	HCD10	0,1	3,5	1,2	
*247	9	RW	Heating curve HC E	HCE10	0,1	3,5	1,2	
*248	9	RW	Heating curve HC F	HCF10	0,1	3,5	1,2	
*249	9	RW	Heating curve HC G	HCG10	0,1	3,5	1,2	
*250	7	RW	Heating limit HC A	HCA08	0	50	15	[°C]
*251	7	RW	Heating limit HC B	HCB08	0	50	15	[°C]
*252	7	RW	Heating limit HC C	HCC08	0	50	15	[°C]
*253	7	RW	Heating limit HC D	HCD08	0	50	15	[°C]
*254	7	RW	Heating limit HC E	HCE08	0	50	15	[°C]
*255	7	RW	Heating limit HC F	HCF08	0	50	15	[°C]
*256	7	RW	Heating limit HC G	HCG08	0	50	15	[°C]
*257	7	RW	Set flow temperature HC A (constant-HC)	HCA03	20	90	45	[°C]
*258	7	RW	Set flow temperature HC B (constant-HC)	HCB03	20	90	45	[°C]
*259	7	RW	Set flow temperature HC C (constant-HC)	HCC03	20	90	45	[°C]
*260	7	RW	Set flow temperature HC D (constant-HC)	HCD03	20	90	45	[°C]
*261	7	RW	Set flow temperature HC E (constant-HC)	HCE03	20	90	45	[°C]
*262	7	RW	Set flow temperature HC F (constant-HC)	HCF03	20	90	45	[°C]
*263	7	RW	Set flow temperature HC G (constant-HC)	HCG03	20	90	45	[°C]
*264	9	RW	Set room temperature cooling normal HC A	HCA50	15	30	23	[°C]
*265	9	RW	Set room temperature cooling normal HC B	HCB50	15	30	23	[°C]

Object	Data type	Access	Designation	Navigator parameter	Min. value	Max. value	Default-value	Unit
*266	9	RW	Set room temperature cooling normal HC C	HCC50	15	30	23	[°C]
*267	9	RW	Set room temperature cooling normal HC D	HCD50	15	30	23	[°C]
*268	9	RW	Set room temperature cooling normal HC E	HCE50	15	30	23	[°C]
*269	9	RW	Set room temperature cooling normal HC F	HCF50	15	30	23	[°C]
*270	9	RW	Set room temperature cooling normal HC G	HCG50	15	30	23	[°C]
*271	9	RW	Set room temperature cooling eco HC A	HCA51	15	30	25	[°C]
*272	9	RW	Set room temperature cooling eco HC B	HCB51	15	30	25	[°C]
*273	9	RW	Set room temperature cooling eco HC C	HCC51	15	30	25	[°C]
*274	9	RW	Set room temperature cooling eco HC D	HCD51	15	30	25	[°C]
*275	9	RW	Set room temperature cooling eco HC E	HCE51	15	30	25	[°C]
*276	9	RW	Set room temperature cooling eco HC F	HCF51	15	30	25	[°C]
*277	9	RW	Set room temperature cooling eco HC G	HCG51	15	30	25	[°C]
*278	7	RW	Cooling limit HC A	HCA58	0	36	25	[°C]
*279	7	RW	Cooling limit HC B	HCB58	0	36	25	[°C]
*280	7	RW	Cooling limit HC C	HCC58	0	36	25	[°C]
*281	7	RW	Cooling limit HC D	HCD58	0	36	25	[°C]
*282	7	RW	Cooling limit HC E	HCE58	0	36	25	[°C]
*283	7	RW	Cooling limit HC F	HCF58	0	36	25	[°C]
*284	7	RW	Cooling limit HC G	HCG58	0	36	25	[°C]
*285	7	RW	Set flow temperature cooling HC A	HCA53	8	30	18	[°C]
*286	7	RW	Set flow temperature cooling HC B	HCB53	8	30	18	[°C]
*287	7	RW	Set flow temperature cooling HC C	HCC53	8	30	18	[°C]
*288	7	RW	Set flow temperature cooling HC D	HCD53	8	30	18	[°C]
*289	7	RW	Set flow temperature cooling HC E	HCE53	8	30	18	[°C]
*290	7	RW	Set flow temperature cooling HC F	HCF53	8	30	18	[°C]
*291	7	RW	Set flow temperature cooling HC G	HCG53	8	30	18	[°C]
350	9	W	External room temperature HC A	ZERTA	15	30		[°C]
351	9	W	External room temperature HC B	ZERTB	15	30		[°C]
352	9	W	External room temperature HC C	ZERTC	15	30		[°C]
353	9	W	External room temperature HC D	ZERTD	15	30		[°C]
354	9	W	External room temperature HC E	ZERTE	15	30		[°C]
355	9	W	External room temperature HC F	ZERTF	15	30		[°C]
356	9	W	External room temperature HC G	ZERTG	15	30		[°C]
370	9	W	External outdoor temperature	ZEOT1				[°C]
371	9	W	External humidity	ZEHS1	0	100		[%rF]
*372	7	RW	External requested heating temperature	PH003	20	65	40	[°C]
*373	7	RW	External requested cooling temperature	PC004	10	25	18	[°C]
380	1	RW	Demand heating	ZEBRH	0	1	0	

Object	Data type	Access	Designation	Navigator parameter	Min. value	Max. value	Default-value	Unit
381	1	RW	Demand cooling	ZEBRC	0	1	0	
382	1	RW	Demand domestic hot water	ZEBRF	0	1	0	
					0 … Off 1 … On			
400	14	RO	Heat quantity heating					kWh
401	14	RO	Heat quantity cooling					kWh
402	14	RO	Heat quantity hot water					kWh
403	14	RO	Heat quantity defrosting					kWh
404	14	RO	Heat quantity passive cooling					kWh
405	14	RO	Heat quantity solar					kWh
406	14	RO	Heat quantity heating immerser					kWh
420	9	RO	Instanteneous power					kW
421	9	RO	Instanteneous power solar					kW
450	9	RO	Solar collector temperature (B73)					[°C]
451	9	RO	Solar collector return temperature (B75)					[°C]
452	9	RO	Solar loading temperature (B74)					[°C]
*453	7	RW	Operation mode solar		0	4	0	
					0 … Automatik 1 … Hot water 2 … Heating 3 … Hot water + heating 4 … Heat source / pool			
454	9	RO	Solar heat source - reference temperature/Pool temperature (B76)					[°C]
460	9	RO	ISC loading temperature cooling (B44)					[°C]
461	9	RO	ISC recooling temperature (B49)					[°C]
462	7	RO	ISC mode		0	8		
					0 … No waste heat 1 … heating 4 … Hot water 8 … Heat source			
499	7	W	Quit error message	ERQALL				
Navigator Pro - single room control								
500	7	RO	Zone module 1 mode heating/cooling A14	ZM1	0	1		
					0 … Cooling 1 … Heating			
501	7	RO	Zone module 1 dehumidification A12	ZE1	0	1	0	
					0 … Off 1 … On			
502	9	RW/RO	Zone module 1room temperature zone 1	RT1-1	15	30		[°C]
		RW … Usage of external room sensors RO … Usage of IDM room sensors							
503	9	RW	Zone module 1 set room temperature zone 1	RS1-1				[°C]

Object	Data type	Access	Designation	Navigator parameter	Min. value	Max. value	Default-value	Unit
			100 + set temp. = eco-temperature heating; e.g. 120,5 --> eco-temp. heating 20,5°C 200 + set temp. = normal-temperature heating; e.g. 221,5 --> normal-temp. heating 21,5°C 300 + set temp. = comfort-temperature heating; e.g. 323 --> comfort-temp. heating 23°C 400 + set temp. = eco-temperature cooling; e.g. 425,5 --> eco-temp. cooling 25,5°C 500 + set temp. = normal-temperature cooling; e.g. 523 --> normal-temp. cooling 23°C 600 + set temp. = comfort-temperature cooling; e.g. 622 --> comfort-temp. cooling 22°C *Desired temperatures can be set in 0.5 steps within the temperature limits! e.g.: The normal temperature must be between the eco und comfort temperature.*					
504	7	RW/RO	zone module 1 rroom humidity zone 1	RF1-1	0	100		[%rF]
			RW … Usage of external room sensors RO … Usage of IDM room sensors					
505	7	RW	Zone module 1 operation mode zone 1	RM1-1	0	4		
					0 … Off 1 … Automatic 2 … Eco 3 … Normal 4 … Comfort				
506	7	RO	Zone module 1 status zone 1 (A1)	RR1-1	0	1		
					0 … Off 1 … On				
507	9	RW/RO	Zone module 1 room temperature zone 2	RT1-2	15	30		[°C]
508	9	RW	Zone module 1 set room temperature zone 2	RS1-2				[°C]
509	7	RW/RO	Zone module 1 room humidity zone 2	RF1-2	0	100		[%rF]
510	7	RW	Zone module 1 operation mode zone 2	RM1-2	0	4		
511	7	RO	Zone module 1 status zone 2 (A2)	RR1-2	0	1		
512	9	RW/RO	Zone module 1 room temperature zone 3	RT1-3	15	30		[°C]
513	9	RW	Zone module 1 set room temperature zone 3	RS1-3				[°C]
514	7	RW/RO	Zone module 1 room humidity zone 3	RF1-3	0	100		[%rF]
515	7	RW	Zone module 1 operation mode zone 3	RM1-3	0	4		
516	7	RO	Zone module 1 status zone 3 (A3)	RR1-3	0	1		
517	9	RW/RO	Zone module 1 room temperature zone 4	RT1-4	15	30		[°C]
518	9	RW	Zone module 1 set room temperature zone 4	RS1-4				[°C]
519	7	RW/RO	Zone module 1 room humidity zone 4	RF1-4	0	100		[%rF]
520	7	RW	Zone module 1 operation mode zone 4	RM1-4	0	4		
521	7	RO	Zone module 1 status zone 4 (A4)	RR1-4	0	1		
522	9	RW/RO	Zone module 1 room temperature zone 5	RT1-5	15	30		[°C]
523	9	RW	Zone module 1 set room temperature zone 5	RS1-5				[°C]
524	7	RW/RO	Zone module 1 room humidity zone 5	RF1-5	0	100		[%rF]
525	7	RW	Zone module 1 operation mode zone 5	RM1-5	0	4		
526	7	RO	Zone module 1 status zone 5 (A5)	RR1-5	0	1		
527	9	RW/RO	Zone module 1 room temperature zone 6	RT1-6	15	30		[°C]
528	9	RW	Zone module 1 set room temperature zone 6	RS1-6				[°C]
529	7	RW/RO	Zone module 1 room humidity zone 6	RF1-6	0	100		[%rF]

Object	Data type	Access	Designation	Navigator parameter	Min. value	Max. value	Default-value	Unit
530	7	RW	Zone module 1 operation mode zone 6	RM1-6	0	4		
531	7	RO	Zone module 1 status Zone 6 (A6)	RR1-6	0	1		
532	9	RW/RO	Zone module 1 room temperature zone 7	RT1-7	15	30		[°C]
533	9	RW	Zone module 1 set room temperature zone 7	RS1-7				[°C]
534	7	RW/RO	Zone module 1 room humidity zone 7	RF1-7	0	100		[%rF]
535	7	RW	Zone module 1 operation mode zone 7	RM1-7	0	4		
536	7	RO	Zone module 1 status zone 7 (A7)	RR1-7	0	1		
537	9	RW/RO	Zone module 1 room temperature zone 8	RT1-8	15	30		[°C]
538	9	RW	Zone module 1 set room temperature zone 8	RS1-8				[°C]
539	7	RW/RO	Zone module 1 room humidity zone 8	RF1-8	0	100		[%rF]
540	7	RW	Zone module 1 operation mode zone 8	RM1-8	0	4		
541	7	RO	Zone module 1 status zone 8 (A8)	RR1-8	0	1		
546	7	RO	Zone module 1 status zone 9 (A9)	RR1-9	0	1		
547	7	RO	Zone module 2 mode heating/cooling A14	ZM2	0	1		
548	7	RO	Zone module 2 dehumidification A12	ZE2	0	1	0	
549	9	RW/RO	Zone module 2 room temperature zone 1	RT2-1	15	30		[°C]
550	9	RW	Zone module 2 set room temperature zone 1	RS2-1				[°C]
551	7	RW/RO	Zone module 2 room humidity zone 1	RF2-1	0	100		[%rF]
552	7	RW	Zone module 2 operation mode zone 1	RM2-1	0	4		
553	7	RO	Zone module 2 status zone 1 (A1)	RR2-1	0	1		
554	9	RW/RO	Zone module 2 room temperature zone 2	RT2-2	15	30		[°C]
555	9	RW	Zone module 2 set room temperature zone 2	RS2-2				[°C]
556	7	RW/RO	Zone module 2 room humidity zone 2	RF2-2	0	100		[%rF]
557	7	RW	Zone module 2 operation mode zone 2	RM2-2	0	4		
558	7	RO	Zone module 2 status zone 2 (A2)	RR2-2	0	1		
559	9	RW/RO	Zone module 2 room temperature zone 3	RT2-3	15	30		[°C]
560	9	RW	Zone module 2 set room temperature zone 3	RS2-3				[°C]
561	7	RW/RO	Zone module 2 room humidity zone 3	RF2-3	0	100		[%rF]
562	7	RW	Zone module 2 operation mode zone 3	RM2-3	0	4		
563	7	RO	Zone module 2 status zone 3 (A3)	RR2-3	0	1		
564	9	RW/RO	Zone module 2 room temperature zone 4	RT2-4	15	30		[°C]
565	9	RW	Zone module 2 set room temperature zone 4	RS2-4				[°C]
566	7	RW/RO	Zone module 2 room humidity zone 4	RF2-4	0	100		[%rF]
567	7	RW	Zone module 2 operation mode zone 4	RM2-4	0	4		
568	7	RO	Zone module 2 status zone 4 (A4)	RR2-4	0	1		
569	9	RW/RO	Zone module 2 room temperature zone 5	RT2-5	15	30		[°C]
570	9	RW	Zone module 2 set room temperature zone 5	RS2-5				[°C]
571	7	RW/RO	Zone module 2 room humidity zone 5	RF2-5	0	100		[%rF]

Object	Data type	Access	Designation	Navigator parameter	Min. value	Max. value	Default- value	Unit
572	7	RW	Zone module 2 operation mode zone 5	RM2-5	0	4		
573	7	RO	Zone module 2 status zone 5 (A5)	RR2-5	0	1		
574	9	RW/RO	Zone module 2 room temperature zone 6	RT2-6	15	30		[°C]
575	9	RW	Zone module 2 set room temperature zone 6	RS2-6				[°C]
576	7	RW/RO	Zone module 2 room humidity zone 6	RF2-6	0	100		[%rF]
577	7	RW	Zone module 2 operation mode zone 6	RM2-6	0	4		
578	7	RO	Zone module 2 status zone 6 (A6)	RR2-6	0	1		
579	9	RW/RO	Zone module 2 room temperature zone 7	RT2-7	15	30		[°C]
580	9	RW	Zone module 2 set room temperature zone 7	RS2-7				[°C]
581	7	RW/RO	Zone module 2 room humidity zone 7	RF2-7	0	100		[%rF]
582	7	RW	Zone module 2 operation mode zone 7	RM2-7	0	4		
583	7	RO	Zone module 2 status zone 7 (A7)	RR2-7	0	1		
584	9	RW/RO	Zone module 2 room temperature zone 8	RT2-8	15	30		[°C]
585	9	RW	Zone module 2 set room temperature zone 8	RS2-8				[°C]
586	7	RW/RO	Zone module 2 room humidity zone 8	RF2-8	0	100		[%rF]
587	7	RW	Zone module 2 operation mode zone 8	RM2-8	0	4		
588	7	RO	Zone module 2 status zone 8 (A8)	RR2-8	0	1		
593	7	RO	Zone module 2 status zone 9 (A9)	RR2-9	0	1		
594	7	RO	Zone module 3 mode heating/cooling A14	ZM3	0	1		
595	7	RO	Zone module 3 dehumidification A12	ZE3	0	1	0	
596	9	RW/RO	Zone module 3 room temperature zone 1	RT3-1	15	30		[°C]
597	9	RW	Zone module 3 set room temperature zone 1	RS3-1				[°C]
598	7	RW/RO	Zone module 3 room humidity zone 1	RF3-1	0	100		[%rF]
599	7	RW	Zone module 3 operation mode zone 1	RM3-1	0	4		
600	7	RO	Zone module 3 status zone 1 (A1)	RR3-1	0	1		
601	9	RW/RO	Zone module 3 room temperature zone 2	RT3-2	15	30		[°C]
602	9	RW	Zone module 3 set room temperature zone 2	RS3-2				[°C]
603	7	RW/RO	Zone module 3 room humidity zone 2	RF3-2	0	100		[%rF]
604	7	RW	Zone module 3 operation mode zone 2	RM3-2	0	4		
605	7	RO	Zone module 3 status zone 2 (A2)	RR3-2	0	1		
606	9	RW/RO	Zone module 3 room temperature zone 3	RT3-3	15	30		[°C]
607	9	RW	Zone module 3 set room temperature zone 3	RS3-3				[°C]
608	7	RW/RO	Zone module 3 room humidity zone 3	RF3-3	0	100		[%rF]
609	7	RW	Zone module 3 operation mode zone 3	RM3-3	0	4		
610	7	RO	Zone module 3 status zone 3 (A3)	RR3-3	0	1		
611	9	RW/RO	Zone module 3 room temperature zone 4	RT3-4	15	30		[°C]
612	9	RW	Zone module 3 set room temperature zone 4	RS3-4				[°C]
613	7	RW/RO	Zone module 3 room humidity zone 4	RF3-4	0	100		[%rF]

Object	Data type	Access	Designation	Navigator parameter	Min. value	Max. value	Default-value	Unit
614	7	RW	Zone module 3 operation mode zone 4	RM3-4	0	4		
615	7	RO	Zone module 3 status zone 4 (A4)	RR3-4	0	1		
616	9	RW/RO	Zone module 3 room temperature zone 5	RT3-5	15	30		[°C]
617	9	RW	Zone module 3 set room temperature zone 5	RS3-5				[°C]
618	7	RW/RO	Zone module 3 room humidity zone 5	RF3-5	0	100		[%rF]
619	7	RW	Zone module 3 operation mode zone 5	RM3-5	0	4		
620	7	RO	Zone module 3 status zone 5 (A5)	RR3-5	0	1		
621	9	RW/RO	Zone module 3 room temperature zone 6	RT3-6	15	30		[°C]
622	9	RW	Zone module 3 set room temperature zone 6	RS3-6				[°C]
623	7	RW/RO	Zone module 3 room humidity zone 6	RF3-6	0	100		[%rF]
624	7	RW	Zone module 3 operation mode zone 6	RM3-6	0	4		
625	7	RO	Zone module 3 status zone 6 (A6)	RR3-6	0	1		
626	9	RW/RO	Zone module 3 room temperature zone 7	RT3-7	15	30		[°C]
627	9	RW	Zone module 3 set room temperature zone 7	RS3-7				[°C]
628	7	RW/RO	Zone module 3 room humidity zone 7	RF3-7	0	100		[%rF]
629	7	RW	Zone module 3 operation mode zone 7	RM3-7	0	4		
630	7	RO	Zone module 3 status zone 7 (A7)	RR3-7	0	1		
631	9	RW/RO	Zone module 3 room temperature zone 8	RT3-8	15	30		[°C]
632	9	RW	Zone module 3 set room temperature zone 8	RS3-8				[°C]
633	7	RW/RO	Zone module 3 room humidity zone 8	RF3-8	0	100		[%rF]
634	7	RW	Zone module 3 operation mode zone 8	RM3-8	0	4		
635	7	RO	Zone module 3 status zone 8 (A8)	RR3-8	0	1		
640	7	RO	Zone module 3 status zone 9 (A9)	RR3-9	0	1		
641	7	RO	Zone module 4 mode heating/cooling A14	ZM4	0	1		
642	7	RO	Zone module 4 dehumidification A12	ZE4	0	1	0	
643	9	RW/RO	Zone module 4 room temperature zone 1	RT4-1	15	30		[°C]
644	9	RW	Zone module 4 set room temperature zone 1	RS4-1				[°C]
645	7	RW/RO	Zone module 4 room humidity zone 1	RF4-1	0	100		[%rF]
646	7	RW	Zone module 4 operation mode zone 1	RM4-1	0	4		
647	7	RO	Zone module 4 status zone 1 (A1)	RR4-1	0	1		
648	9	RW/RO	Zone module 4 room temperature zone 2	RT4-2	15	30		[°C]
649	9	RW	Zone module 4 set room temperature zone 2	RS4-2				[°C]
650	7	RW/RO	Zone module 4 room humidity zone 2	RF4-2	0	100		[%rF]
651	7	RW	Zone module 4 operation mode zone 2	RM4-2	0	4		
652	7	RO	Zone module 4 status zone 2 (A2)	RR4-2	0	1		
653	9	RW/RO	Zone module 4 room temperature zone 3	RT4-3	15	30		[°C]
654	9	RW	Zone module 4 set room temperature zone 3	RS4-3				[°C]
655	7	RW/RO	Zone module 4 room humidity zone 3	RF4-3	0	100		[%rF]

Object	Data type	Access	Designation	Parameter Navigator	Min. value	Max. value	Default-value	Unit
656	7	RW	Zone module 4 operation mode zone 3		0	4		
657	7	RO	Zone module 4 status zone 3 (A3)		0	1		
658	9	RW/RO	Zone module 4 room temperature zone 4		15	30		[°C]
659	9	RW	Zone module 4 set room temperature zone 4					[°C]
660	7	RW/RO	Zone module 4 room humidity zone 4		0	100		[%rF]
661	7	RW	Zone module 4 operation mode zone 4		0	4		
662	7	RO	Zone module 4 status zone 4 (A4)		0	1		
663	9	RW/RO	Zone module 4 room temperature zone 5		15	30		[°C]
664	9	RW	Zone module 4 set room temperature zone 5					[°C]
665	7	RW/RO	Zone module 4 room humidity zone 5		0	100		[%rF]
666	7	RW	Zone module 4 operation mode zone 5		0	4		
667	7	RO	Zone module 4 status zone 5 (A5)		0	1		
668	9	RW/RO	Zone module 4 room temperature zone 6		15	30		[°C]
669	9	RW	Zone module 4 set room temperature zone 6					[°C]
670	7	RW/RO	Zone module 4 room humidity zone 6		0	100		[%rF]
671	7	RW	Zone module 4 operation mode zone 6		0	4		
672	7	RO	Zone module 4 status zone 6 (A6)		0	1		
673	9	RW/RO	Zone module 4 room temperature zone 7		15	30		[°C]
674	9	RW	Zone module 4 set room temperature zone 7					[°C]
675	7	RW/RO	Zone module 4 room humidity zone 7		0	100		[%rF]
676	7	RW	Zone module 4 operation mode zone 7		0	4		
677	7	RO	Zone module 4 status zone 7 (A7)		0	1		
678	9	RW/RO	Zone module 4 room temperature zone 8		15	30		[°C]
679	9	RW	Zone module 4 set room temperature zone 8					[°C]
680	7	RW/RO	Zone module 4 room humidity zone 8		0	100		[%rF]
681	7	RW	Zone module 4 operation mode zone 8		0	4		
682	7	RO	Zone module 4 status zone 8 (A8)		0	1		
687	7	RO	Zone module 4 status zone 9 (A9)		0	1		

Object	Designation
*…	Values from EEPROM, only limited write cycles possible, see documention
499	Is not allowed to write permanently, otherwise errors are not shown!

ⓘ The update of the parameters is cyclical, this can result in a delay for changes (ca. 15 sec)
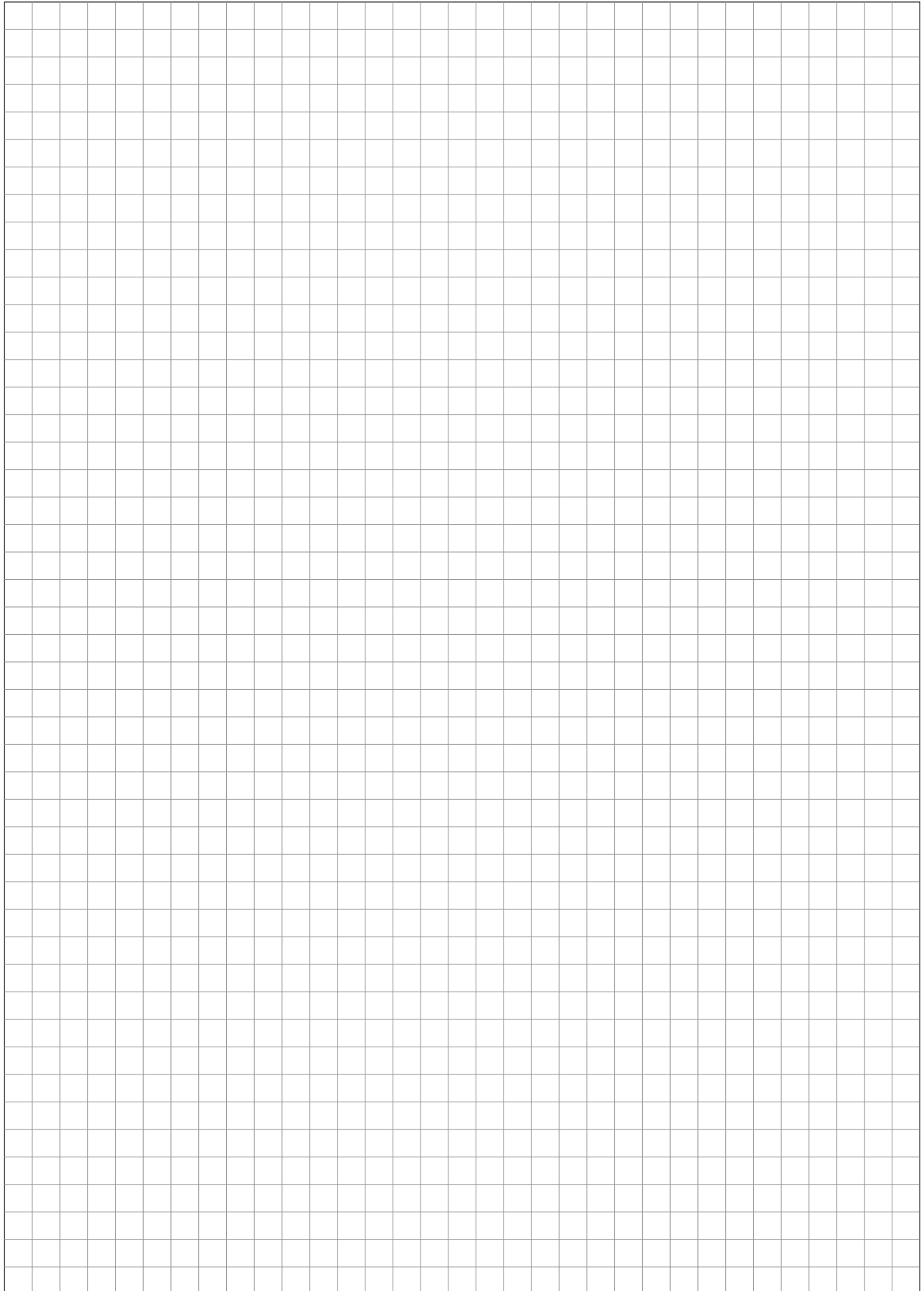
5. Navigator Settings

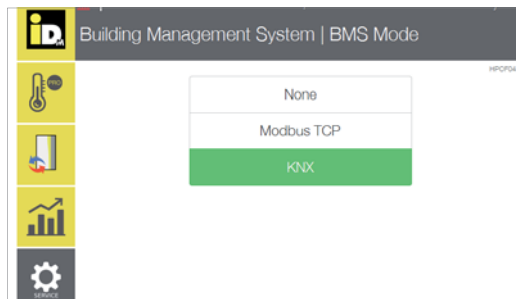## 5.1. Configuration EIB/KNX Modul in the Navigator control

For EIB/KNX communication it is necessary the do the following settings within the service level of the Navigator control.
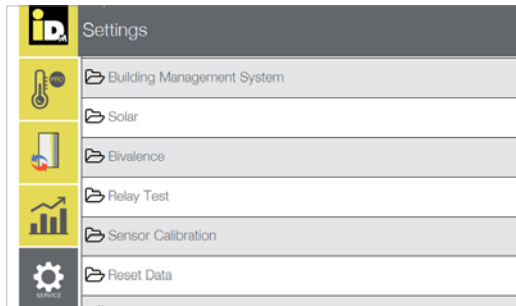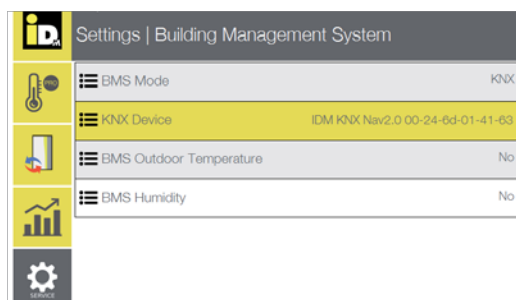

In the main menu „Settings" choose building control.
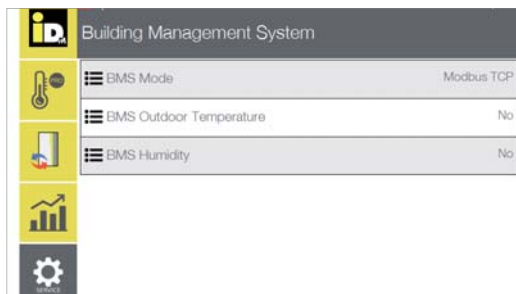

Choose parameter „*BMS mode.*"

Select „KNX."

The outdoor temperature and humidity can be communicated via EIB/KNX, therefore change the parameter to „yes."
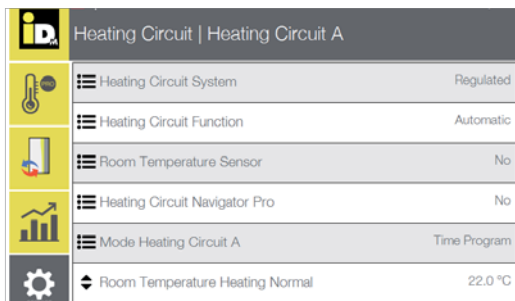
.

5.2. Configuration EIB/KNX room sensor in the Navigator control

If one or more EIB/KNX room sensors are used, they have to be configured in the Navigator control. Therefore the following settings have to be done in the service level of the Navigator control.
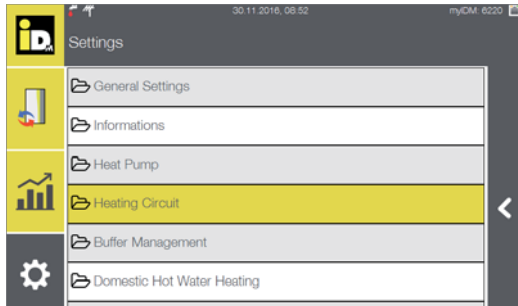
Within the main menu „settings" choose „Heating circuit."

Select the desired heating circuit.

Select the parameter „Room temperature sensor."
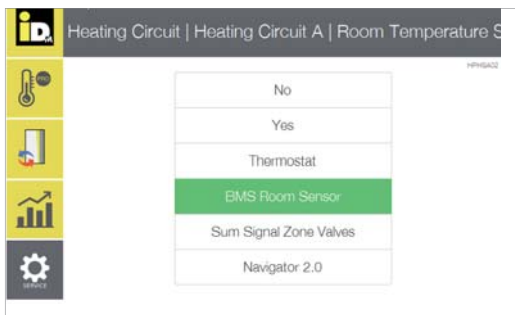
Select „BMS room sensor."

5.3. Configuration EIB/KNX room sensors with IDM single room control

If the IDM single room control and EIB/KNX sensors are used, it is necessary to configure them within the Navigator control service level. Therefore the following settings have to be done.
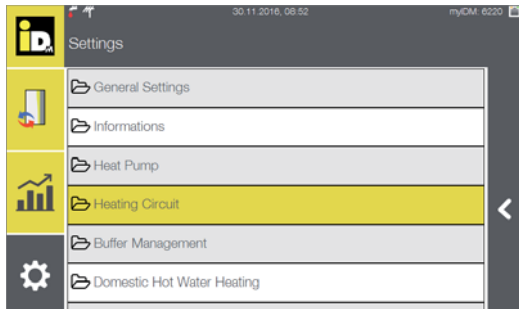
Within the main menu „settings" choose „Heating circuit"
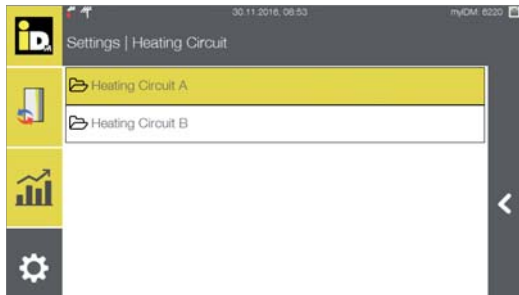
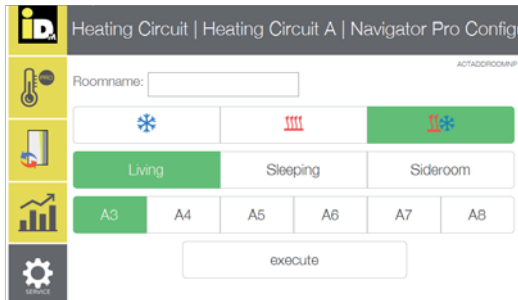Select the corresponding heating circuit.
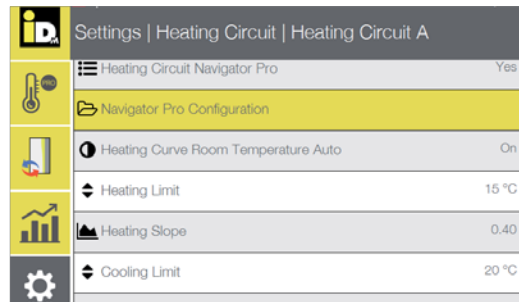
Select the parameter „Navigator Pro Configuration"
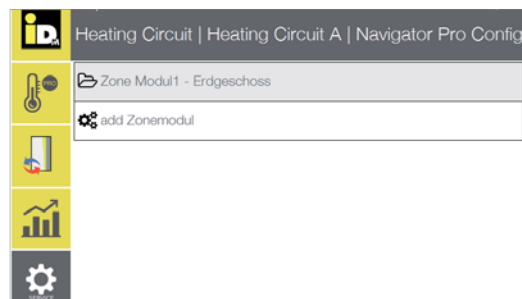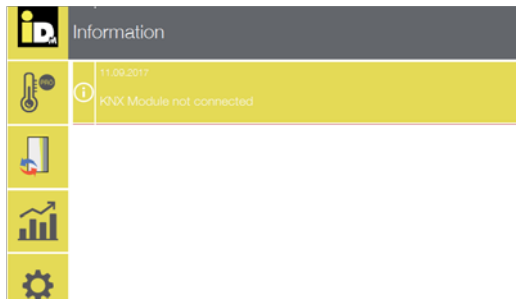

Select the corresponding zone module.
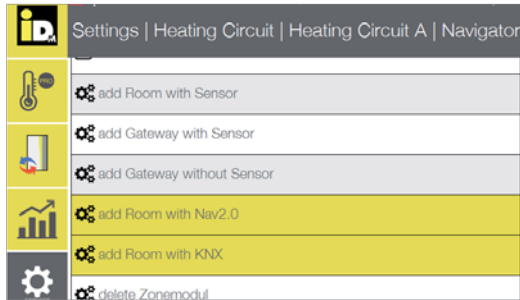
Choose „Add room with KNX."

Configurate the room name and corresponding set-

tings and confirm with execute.

5.4. Error messages

Within the Navigator control and preconfigured EIB/
KNX module, the error message „KNX-module not
connected" is displayed if there is a problem with the
network connection.
In this case the network connection (cable) and the
power supply via the KNX-bus has to be checked.
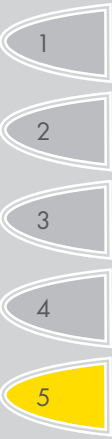
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