System Specification

EnOcean Equipment Profiles

REVISION HISTORY

Ver.	Editor	Change	Date
2.6.8	NM	Last xml edition of the EEP-Specification	Dec 31, 2017

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A5-20: HVAC Components

RORG	A5	4BS Telegram
FUNC	20	HVAC Components
TYPE	05	Ventilation Unit (BI-DIR)

Submitter: Itho Daalderop

Description
The device represented by this EEP is a stand-alone ventilation unit.

Smart-Ack is not supported/required.

The ventilation unit itself does not send messages on a regular (time or event triggered) base but will always send a response message after it receives a message from e.g. a remote control or gateway.

When the controller only wants to know the status of the ventilation unit and does not want to change the ventilation setting this can be requested by sending a message from controller to the fan unit with new fan speed setting NSP = 7 = "no change".

When more than one controller is connected to the unit the last received speed setting will be the new speed setting.

When a ventilation unit supports auto speed this means that the speed is influenced / calculated by sensor values which are directly connected to the ventilation unit (e.g. CO_2 or RH sensors).

How the timer setting for a new fan speed (NSPT) is handled by the ventilation unit is depending on the unit and legislation.

When the timer period has expired the ventilation unit will go back to the previous or auto setting, this behavior is depending on the ventilation unit and legislation.

Data exchange
Direction: bidirectional
Addressing: addressed
Communication trigger: event-triggered
Communication interval: N/A
Trigger event: received message
Tx delay: -
Rx timeout: -

Teach-in
Teach-in method: 4BS teach-in variation 3 (bidirectional)

Security
Encryption supported: no
Security level format: -

Directions
DIRECTION-1 = Transmit mode: Message from ventilation unit to controller
DIRECTION-2 = Receive mode: Commands from controller to ventilation unit

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DIRECTION-1

Offset	Size	Bitrange	Data	ShortCut	Description	Valid Range		Scale	Unit
0	3	DB3.7...DB3.5	Actual speed setting	ASP	Actual speed setting of ventilation unit	Enum:			
						0:	Minimum speed / away		
						1:	Speed 1 / low		
						2:	Speed 2 / mid		
						3:	Speed 3 / high		
						4:	Max speed		
						5:	Auto		
						6:	Not used		
						7:	Not used		
3	3	DB3.4...DB3.2	Actual speed timer setting	ASPT	Actual timer value for actual speed	Enum:			
						0:	No timer set or expired		
						1:	1..10 min left		
						2:	11..20 min left		
						3:	21..30 min left		
						4:	31..40 min left		
						5:	41..50 min left		
						6:	51..60 min left		
						7:	> 60 min left		
6	2	DB3.1...DB3.0	Not Used (= 0)						
8	3	DB2.7...DB2.5	Not Used (= 0)						
11	1	DB2.4	Node low battery	E-NBAT	External node low battery error	Enum:			
						0:	No error		
						1:	Error		
12	1	DB2.3	Node comm. error	E-NCOM	External node communication error	Enum:			
						0:	No error		
						1:	Error		

13	1	DB2.2	Sensor error	E-SENS	Internal sensor error	Enum: 0: No error 1: Error
14	1	DB2.1	Fan speed error	E-FSPD	Desired fan speed not reached error	Enum: 0: No error 1: Error
15	1	DB2.0	Error	ERR	Unit has an error	Enum: 0: No error 1: Error
16	8	DB1.7...DB1.0	Filter condition	FLTR	Indication of the air filter's condition	Enum: 0: Filter needs replacement 1...100: % dirty..clean filter 101...254: Not used 255: No filter present
24	1	DB0.7	Auto speed supported	AUTO	Ventilation unit supports auto speed or not	Enum: 0: Auto speed not supported 1: Auto speed supported
25	1	DB0.6	By-pass active	BPASS	Summer bypass active or not	Enum: 0: Summer bypass not active 1: Summer bypass active
26	1	DB0.5	Frost protection	FROST	Frost protection active or not	Enum: 0: Frost protection not active 1: Frost protection active
27	1	DB0.4	Not Used (= 0)			
28	1	DB0.3	LRN Bit	LRNB	LRN Bit	Enum: 0: Teach-in telegram 1: Data telegram
29	3	DB0.2...DB0.0	Not Used (= 0)			

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DIRECTION-2

Offset	Size	Bitrange	Data	ShortCut	Description	Valid Range	Scale	Unit
0	3	DB3.7...DB3.5	New speed setting	NSP	New speed setting for ventilation unit	Enum: 0: Minimum speed / away 1: Speed 1 / low 2: Speed 2 / mid 3: Speed 3 / high 4: Max speed 5: Auto 6: Not used 7: No change		
3	5	DB3.4...DB3.0	New speed timer setting	NSPT	Timer setting for new speed	Enum: 0: No timer / no change 1...6: 10..60 min 7...29: 2..24 hrs 30...31: Not used		
8	8	DB2.7...DB2.0	Not Used (= 0)					
16	8	DB1.7...DB1.0	Not Used (= 0)					
24	1	DB0.7	Reset error	RSTE	Reset the unit when error present	Enum: 0: Don't reset error 1: Reset error		
25	1	DB0.6	Reset filter timer	RSTF	Reset the filter timer	Enum: 0: Don't reset filter timer 1: Reset filter timer Reset only possible when timer expired (FLTR=0)		
26	2	DB0.5...DB0.4	Not Used (= 0)					
28	1	DB0.3	LRN Bit	LRNB	LRN Bit	Enum: 0: Teach-in telegram 1: Data telegram		
29	3	DB0.2...DB0.0	Not Used (= 0)					