

## EnOcean Equipment Profiles

### REVISION HISTORY

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## System Specification



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## D2-20: Fan Control

The EEP family D2-20-xx provides different telegram types for fan control and fan supervision messages using various parameters and variables.

Devices using this EEP family may include a master-slave function (for further description see subheading 'Master-slave function').

### EEP Properties:

#### DATA EXCHANGE

Direction: bidirectional

Addressing: unicast (ADT) + broadcast

Communication trigger: event-triggered

Communication interval: N/A

Trigger event: query / polling

Tx delay: N/A

Rx timeout : N/A

#### TEACH-IN

Teach-in method: Universal teach-in (UTE)

#### SECURITY

Encryption supported: no

Security level: none

### EEP Family Table:

| Supported function         | Type 00 | Type 01 | Type 02 |
|----------------------------|---------|---------|---------|
| Fan Speed                  | X       | X       | X       |
| Fan Speed Status           | X       | X       | X       |
| Humidity                   | X       | -       | -       |
| Humidity Control           | X       | -       | -       |
| Humidity Control Status    | X       | -       | X       |
| Humidity Threshold         | X       | -       | -       |
| Message Type               | X       | X       | X       |
| Operating Mode             | X       | -       | -       |
| Operating Mode Status      | X       | X       | -       |
| Room Size                  | X       | X       | X       |
| Room Size Reference        | X       | X       | X       |
| Room Size Reference Status | X       | X       | X       |
| Room Size Status           | X       | X       | X       |
| Service Information        | X       | -       | -       |
| Temperature Level          | X       | -       | -       |

Each TYPE has to support every parameter that is marked in its column!

### Master-slave function:

A device using this EEP may be able to work as a master or a slave fan. Master fans control slave fans. Slave fans are controlled by master fans. These roles are defined during the teach-in process. A slave fan will always be taught-in to a master. A master fan will accept teach-in requests from slave fans. A fan that is taught-in to another device will from now on work as a slave. A fan that accepted the teach-in of another device will go on working as a master. Combining master fans is not possible. Not every device is able to work as a master and a slave. Certain fans might only be able to be used as slaves.

# System Specification

|             |    |                     |
|-------------|----|---------------------|
| <b>RORG</b> | D2 | <b>VLD Telegram</b> |
| <b>FUNC</b> | 20 | Fan Control         |
| <b>TYPE</b> | 02 | Type 0x02           |

Submitter: Maico Elektroapparate-Fabrik GmbH

## Telegram Definition : 'Fan Control Message'

\* Devices with discrete fan speed levels instead of a continuous fan speed range should divide the full range linearly and match values beside those discrete levels to the next lower fan speed level.

| Offset | Size | Data                | ShortCut | Description  | Valid Range | Scale                    | Unit |
|--------|------|---------------------|----------|--|-------------|--------------------------|------|
| 0      | 7    | Not Used (= 0)      |          |  |             |                          |      |
| 7      | 1    | Message Type        | MT       | Defines the message type                               | Enum:       |                          |      |
|        |      |                     |          |  | 0:          | Fan control              |      |
| 8      | 2    | Not Used (= 0)      |          |  |             |                          |      |
| 10     | 2    | Room Size Reference | RSR      | Defines if the provided room size has to be considered | Enum:       |                          |      |
|        |      |                     |          |  | 0:          | Used                     |      |
|        |      |                     |          |  | 1:          | Not used                 |      |
|        |      |                     |          |  | 2:          | Default                  |      |
|        |      |                     |          |  | 3:          | No change                |      |
| 12     | 4    | Room Size           | RS       | Defines the room size                                  | Enum:       |                          |      |
|        |      |                     |          |  | 0:          | < 25 m <sup>2</sup>      |      |
|        |      |                     |          |  | 1:          | 25...50 m <sup>2</sup>   |      |
|        |      |                     |          |  | 2:          | 50...75 m <sup>2</sup>   |      |
|        |      |                     |          |  | 3:          | 75...100 m <sup>2</sup>  |      |
|        |      |                     |          |  | 4:          | 100...125 m <sup>2</sup> |      |
|        |      |                     |          |  | 5:          | 125...150 m <sup>2</sup> |      |
|        |      |                     |          |  | 6:          | 150...175 m <sup>2</sup> |      |
|        |      |                     |          |  | 7:          | 175...200 m <sup>2</sup> |      |
|        |      |                     |          |  | 8:          | 200...225 m <sup>2</sup> |      |
|        |      |                     |          |  | 9:          | 225...250 m <sup>2</sup> |      |
|        |      |                     |          |  | 10:         | 250...275 m <sup>2</sup> |      |
|        |      |                     |          |  | 11:         | 275...300 m <sup>2</sup> |      |
|        |      |                     |          |  | 12:         | 300...325 m <sup>2</sup> |      |
|        |      |                     |          |  | 13:         | 325...350 m <sup>2</sup> |      |
|        |      |                     |          |  | 14:         | > 350 m <sup>2</sup>     |      |
|        |      |                     |          |  | 15:         | No change                |      |
| 16     | 8    | Not Used (= 0)      |          |  |             |                          |      |
| 24     | 8    | Fan Speed *         | FS       | Sets the fan speed                                     | Enum:       |                          |      |
|        |      |                     |          |  | 0...100:    | 0...100%                 |      |
|        |      |                     |          |  | Reserved    |                          |      |
|        |      |                     |          |  | 101...252:  |                          |      |
|        |      |                     |          |  | 253:        | Auto                     |      |
|        |      |                     |          |  | 254:        | Default                  |      |
|        |      |                     |          |  | 255:        | No change                |      |

# System Specification

## Telegram Definition : 'Fan Status Message'

| Offset | Size | Data                    | ShortCut | Description   | Valid Range | Scale                    | Unit |
|--------|------|-------------------------|----------|---|-------------|--------------------------|------|
| 0      | 7    | Not Used (= 0)          |          |   |             |                          |      |
| 7      | 1    | Message Type            | MT       | Defines the message type                              | Enum:       |                          |      |
|        |      |                         |          |   | 1:          | Fan status               |      |
| 8      | 2    | Humidity Control Status | HCS      | States if the humidity control is active              | Enum:       |                          |      |
|        |      |                         |          |   | 0:          | Disabled                 |      |
|        |      |                         |          |   | 1:          | Enabled                  |      |
|        |      |                         |          |   | 2:          | Reserved                 |      |
|        |      |                         |          |   | 3:          | Not supported            |      |
| 10     | 2    | Room Size Reference     | RSR      | States if the provided room size has to be considered | Enum:       |                          |      |
|        |      |                         |          |   | 0:          | Used                     |      |
|        |      |                         |          |   | 1:          | Not used                 |      |
|        |      |                         |          |   | 2:          | Reserved                 |      |
|        |      |                         |          |   | 3:          | Not supported            |      |
| 12     | 4    | Room Size Status        | RSS      | Room size status                                      | Enum:       |                          |      |
|        |      |                         |          |   | 0:          | < 25 m <sup>2</sup>      |      |
|        |      |                         |          |   | 1:          | 25...50 m <sup>2</sup>   |      |
|        |      |                         |          |   | 2:          | 50...75 m <sup>2</sup>   |      |
|        |      |                         |          |   | 3:          | 75...100 m <sup>2</sup>  |      |
|        |      |                         |          |   | 4:          | 100...125 m <sup>2</sup> |      |
|        |      |                         |          |   | 5:          | 125...150 m <sup>2</sup> |      |
|        |      |                         |          |   | 6:          | 150...175 m <sup>2</sup> |      |
|        |      |                         |          |   | 7:          | 175...200 m <sup>2</sup> |      |
|        |      |                         |          |   | 8:          | 200...225 m <sup>2</sup> |      |
|        |      |                         |          |   | 9:          | 225...250 m <sup>2</sup> |      |
|        |      |                         |          |   | 10:         | 250...275 m <sup>2</sup> |      |
|        |      |                         |          |   | 11:         | 275...300 m <sup>2</sup> |      |
|        |      |                         |          |   | 12:         | 300...325 m <sup>2</sup> |      |
|        |      |                         |          |   | 13:         | 325...350 m <sup>2</sup> |      |
|        |      |                         |          |   | 14:         | > 350 m <sup>2</sup>     |      |
|        |      |                         |          |   | 15:         | Not supported            |      |
| 16     | 8    | Not Used (= 0)          |          |   |             |                          |      |
| 24     | 8    | Fan Speed Status        | FSS      | Fan speed   | Enum:       |                          |      |
|        |      |                         |          |   | 0...100:    | 0...100%                 |      |
|        |      |                         |          |   | 101...254:  | Reserved                 |      |
|        |      |                         |          |   | 255:        | Not supported            |      |