VMB2BLE_10

2 channel blind module

Binairy format:
<SOF-SID10...SID0-RTR-IDE-r0-DLC3...0-DATABYTE1...DATABYTEn-CRC14...CRC1-CRCDEL-ACK-ACKDEL-EOF7...EOF1-IFS3...IFS1>

bits	***Description***
SOF	Start Of Frame (always 0)
SID10 & SID9	Priority (00: highest … 11: lowest priority)
SID8…SID1	Address
SID0	Always 0
RTR	Remote Transmit Request
IDE	Identifier Extension (always 0)
R0	reserved (always 0)
DLC3…DLC0	Data Length Code (0…8)
Databyte1	Command
Databyte2	Parameter
Databyte3	Parameter
Databyte4	Parameter
Databyte5	Parameter
Databyte6	Parameter
Databyte7	Parameter
Databyte8	Parameter
CRC14…CRC1	Cyclic Redundancy Checksum
CRCDEL	CRC Delimiter (always 1)
ACK	Acknowledge slot (transmit 1 readback 0 if received correctly)
ACKDEL	Acknowledge Delimiter (always 1)
EOF7...EOF1	End Of Frame (always 1111111)
IFS3...IFS1	InterFrame Space (always 111)

The blind module can transmit the following commands:

- Clears LEDs on a push button module
- Sets LEDs on a push button module
- Blinks LEDs fast on a push button module

The blind module can transmit the following messages:

- Blind status
- Blind switch status
- Module type
- Bus error counter status
- First, second and third part of the blind name
- Memory data
- Memory data block (4 bytes)
- Real-time clock status
- Date status
- Daylight savings status
- Real-time clock status request

The blind module can receive the following messages:

- Linked push button status

The blind module can receive the following commands:

- Switch blind off
- Switch blind up
- Switch blind down
- Set blind position
- Forced up
- Cancel forced up
- Forced down
- Cancel forced down
- Inhibit
- Inhibit preset up
- Inhibit preset down
- Cancel inhibit
- Lock

- Unlock
- Blind status request
- Clear Push button Led
- Module type request
- Bus error counter status request
- Blind name request
- Read memory data
- Read memory data block (4 bytes)
- Memory dump request
- Write memory data
- Write memory data block (4 bytes)
- Write module address and serial number
- Real-time clock status request
- Set real-time clock
- Set date
- Set daylight savings
- Enable/disable global sunrise/sunset related actions
- Enable/disable local sunrise/sunset related actions
- Set local alarm clock
- Set global alarm clock
- Select auto mode

Transmits real time clock status request:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = H'00'
RTR = 0
DLC3...DLC0 = 1 databyte to send
DATABYTE1 = COMMAND_REALTIME_CLOCK_STATUS_REQUEST (H'D7')

Transmits the real time clock status:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 4 databytes to send
DATABYTE1 = COMMAND_REALTIME_CLOCK_STATUS (H'D8')
DATABYTE2 = Day

Contents	Day
0	Monday
1	Tuesday
2	Wednesday
3	Thursday
4	Friday
5	Saturday
6	Sunday

DATABYTE3 = Hour (0…23)
DATABYTE4 = Minute (0…59)

Transmits the date status:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes to send
DATABYTE1 = COMMAND_DATE_STATUS (H'B7')
DATABYTE2 = Day (1…31)
DATABYTE3 = Month (1…12)
DATABYTE4 = High byte of Year
DATABYTE5 = Low byte of Year

Transmits the daylight savings status:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes to send
DATABYTE1 = COMMAND_DAYLIGHT_SAVING_STATUS (H'AF')
DATABYTE2 = 0 =disabled / 1 = enabled

Transmits the blind relays switch status:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 4 databytes to send
DATABYTE1 = COMMAND_PUSH_BUTTON_STATUS (H'00')
DATABYTE2 = Blind relays just switched on (1 = just pressed/switched on)
DATABYTE3 = Blind relays just switched off (1 = just released/switched off)
DATABYTE4 = 0x00

	Databyte2	***Databyte3***	***Databyte4***
Channel 1 blind up relay just switched on	B'xxxxxx01'	B'xxxxxx00'	B'00000000'
Channel 1 blind up relay just switched off	B'xxxxxx00'	B'xxxxxx01'	B'00000000'
Channel 1 blind down relay just switched on	B'xxxxxx10'	B'xxxxxx00'	B'00000000'
Channel 1 blind down relay just switched off	B'xxxxxx00'	B'xxxxxx10'	B'00000000'
Channel 2blind up relay just switched on	B'xxxx01xx'	B'xxxx00xx'	B'00000000'
Channel 2blind up relay just switched off	B'xxxx00xx'	B'xxxx01xx'	B'00000000'
Channel 2 blind down relay just switched on	B'xxxx10xx'	B'xxxx00xx'	B'00000000'
Channel 2 blind down relay just switched off	B'xxxx00xx'	B'xxxx10xx'	B'00000000'

Transmit: Clears LEDs on a push button module:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Address of the push button module for clearing LEDs
RTR = 0
DLC3...DLC0 = 2 databytes to send
DATABYTE1 = COMMAND_CLEAR_LED (H'F5')
DATABYTE2 = LED bit numbers (1 = clear LED)

Transmit: Sets LEDs on a push button module:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Address of the push button module for setting LEDs on
RTR = 0
DLC3...DLC0 = 2 databytes to send
DATABYTE1 = COMMAND_SET_LED (H'F6')
DATABYTE2 = LED bit numbers (1 = set LED)

Transmit: Blinks LEDs fast on a push button module:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Address of the push button module for fast blinking LEDs
RTR = 0
DLC3...DLC0 = 2 databytes to send
DATABYTE1 = COMMAND_FAST_BLINKING_LED (H'F8')
DATABYTE2 = LED bit numbers (1 = fast blink LED)

Transmit: Bus error counter status:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 4 databytes to send
DATABYTE1 = COMMAND_BUSERROR_COUNTER_STATUS (H'DA')
DATABYTE2 = Transmit error counter
DATABYTE3 = Receive error counter
DATABYTE4 = Bus off counter

Transmits the module type:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 7 databytes to send
DATABYTE1 = COMMAND_MODULE_TYPE (H'FF')
DATABYTE2 = VMB2BLE_10_TYPE (H'4A')
DATABYTE3 = High byte of serial number
DATABYTE4 = Low byte of serial number
DATABYTE5 = Memorymap version
DATABYTE6 = Build year
DATABYTE7 = Build week
DATABYTE8 = Terminator (0 = open / 1 = closed)

Transmits the memory data:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 4 databytes to send
DATABYTE1 = COMMAND_MEMORY_DATA (H'FE')
DATABYTE2 = High memory address (H'00'...H'01')
DATABYTE3 = LOW memory address (H'00'...H'FF')
DATABYTE4 = memory data

Transmits memory data block (4 bytes):

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 4 databytes to send
DATABYTE1 = COMMAND_MEMORY_DATA_BLOCK (H'CC')
DATABYTE2 = High start address of memory block
DATABYTE3 = LOW start address of memory block
DATABYTE4 = memory data1
DATABYTE5 = memory data2
DATABYTE6 = memory data3
DATABYTE7 = memory data4

Remark: address range: H'0000' to H'01FC'

Transmits the first part of the blind name:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 8 databytes to send
DATABYTE1 = COMMAND_BLIND_NAME_PART1 (H'F0')
DATABYTE2 = Blind channel

Contents	***Blind***
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = Character 1 of the blind name
DATABYTE4 = Character 2 of the blind name
DATABYTE5 = Character 3 of the blind name
DATABYTE6 = Character 4 of the blind name
DATABYTE7 = Character 5 of the blind name
DATABYTE8 = Character 6 of the blind name

Transmits the second part of the blind name:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 8 databytes to send
DATABYTE1 = COMMAND_BLIND_NAME_PART2 (H'F1')
DATABYTE2 = Blind channel

Contents	***Blind***
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = Character 7 of the blind name
DATABYTE4 = Character 8 of the blind name
DATABYTE5 = Character 9 of the blind name
DATABYTE6 = Character 10 of the blind name
DATABYTE7 = Character 11 of the blind name
DATABYTE8 = Character 12 of the blind name

Transmits the third part of the blind name:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 6 databytes to send
DATABYTE1 = COMMAND_BLIND_NAME_PART3 (H'F2')
DATABYTE2 = Blind channel

Contents	***Blind***
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = Character 13 of the blind name
DATABYTE4 = Character 14 of the blind name
DATABYTE5 = Character 14 of the blind name
DATABYTE6 = Character 16 of the blind name
Remarks: Unused characters contain H'FF'.

Transmits the blind status:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 8 databytes to send
DATABYTE1 = COMMAND_BLIND_STATUS (H'EC')
DATABYTE2 = Blind channel

Contents	*Relay number*
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = Default time out setting in seconds (0=no time out)
DATABYTE4 = Blind status

Contents	*Blind status*
B'00000000'	Blinds off
B'00000001'	Blind up
B'00000010'	Blind down

DATABYTE5 = Led status

Contents	*Mode*
B'00000000'	LEDs off
B'10000000'	'Down' LED on
B'01000000'	'Down' LED slow blinking
B'00100000'	'Down' LED fast blinking
B'00010000'	'Down' LED very fast blinking
B'00001000'	'Up LED on
B'00000100'	'Up' LED slow blinking
B'00000010'	'Up' LED fast blinking
B'00000001'	'Up' LED very fast blinking

DATABYTE6 = blind position (0% = up...100%=down)
DATABYTE7 = Locked/inhibit/Forced up/ Forced down on setting

Contents	*Setting*
B'xxxxx000'	Channel normal
B'xxxxx001'	Channel inhibited
B'xxxxx010'	Channel inhibit preset down
B'xxxxx011'	Channel inhibit preset up
B'xxxxx100'	Channel forced down
B'xxxxx101'	Channel forced up
B'xxxxx110'	Channel locked

DATABYTE8 = alarm & auto mode selection

Contents	*Selected programl*
B'xxxxxx00'	Auto mode disabled
B'xxxxxx01'	Auto mode 1
B'xxxxxx10'	Auto mode 2
B'xxxxxx11'	Auto mode 3
B'xxxxx0xx'	Alarm 1 off
B'xxxxx1xx'	Alarm 1 on
B'xxxx0xxx'	Local alarm 1
B'xxxx1xxx'	Global alarm 1
B'xxx0xxxx'	Alarm 2 off
B'xxx1xxxx'	Alarm 2 on
B'xx0xxxxx'	Local alarm 2
B'xx1xxxxx'	Global alarm 2
B'x0xxxxxx'	Sunrise disabled
B'x1xxxxxx'	Sunrise enabled
B'0xxxxxxx'	Sunset disabled
B'1xxxxxxx'	Sunset enabled

'Linked push button status' received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Address of linked push button module
RTR = 0
DLC3...DLC0 = 4 databytes received
DATABYTE1 = COMMAND_PUSH_BUTTON_STATUS (H'00')
DATABYTE2 = Linked push buttons just pressed (1 = just pressed)
DATABYTE3 = Linked push buttons just released (1 = just released)
DATABYTE4 = Linked push buttons long pressed (1 = longer than 0.85s pressed)

'Clear linked button LED' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Address of linked push button module
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_CLEAR_LED (H'F5')
DATABYTE2 = LEDs to clear (a one clears the corresponding LED)

'Set real time clock' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = H'00'
RTR = 0
DLC3...DLC0 = 4 databytes to send
DATABYTE1 = COMMAND_SET_REALTIME_CLOCK (H'D8')
DATABYTE2 = Day of week

Contents day of week'	***Description***
H'00'	Monday
H'01'	Tuesday
H'02'	Wednesday
H'03'	Thursday
H'04'	Friday
H'05'	Saterday
H'06'	Sunday

DATABYTE3 = Hours (0…23)
DATABYTE4 = Minutes (0…59)

'Set date' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = H'00'
RTR = 0
DLC3...DLC0 = 5 databytes to send
DATABYTE1 = COMMAND_SET_REALTIME_DATE (H'B7')
DATABYTE2 = Day (1…31)
DATABYTE3 = Month (1…12)
DATABYTE4 = High byte of Year
DATABYTE5 = Low byte of Year

'Set daylight savings' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = H'00'
RTR = 0
DLC3...DLC0 = 2 databytes to send
DATABYTE1 = COMMAND_SET_DAYLIGHT_SAVING (H'AF')
DATABYTE2 = 0 =disabled / 1 = enabled

'Enable/disable global sunrise/sunset related actions' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = H'00'
RTR = 0
DLC3...DLC0 = 3 databytes to send
DATABYTE1 = COMMAND_ENA_DIS_SUNRISE_SUNSET (H'AE')
DATABYTE2 = Channel

Contents	***Description***
B'xxxxxxx1'	Channel 1
B'xxxxxx1x'	Channel 2

DATABYTE3 = enable/disable flags

Contents	***Description***
B'xxxxxxx0'	Disable sunrise related actions
B'xxxxxxx1'	Enable sunrise related actions
B'xxxxxx0x'	Disable sunset related actions
B'xxxxxx1x'	Enable sunset related actions

'Enable/disable local sunrise/sunset related actions' command received :

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 3 databytes to send
DATABYTE1 = COMMAND_ENA_DIS_SUNRISE_SUNSET (H'AE')
DATABYTE2 = Channel

Contents	***Description***
B'xxxxxxx1'	Channel 1
B'xxxxxx1x'	Channel 2

DATABYTE3 = enable/disable flags

Contents	***Description***
B'xxxxxxx0'	Disable sunrise related actions
B'xxxxxxx1'	Enable sunrise related actions
B'xxxxxx0x'	Disable sunset related actions
B'xxxxxx1x'	Enable sunset related actions

'Set global clock alarm' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = H'00'
RTR = 0
DLC3...DLC0 = 7 databytes to send
DATABYTE1 = COMMAND_SET_ALARM_CLOCK (H'C3')
DATABYTE2 = Alarm number (1 or 2)
DATABYTE3 = Wake up hour (0…23)
DATABYTE4 = Wake up minute (0…59)
DATABYTE5 = Go to bed hour (0…23)
DATABYTE6 = Go to bed minute (0…59)
DATABYTE7 = Clock alarm enable flag (0 = disabled / 1 = enabled)

'Real time clock status request' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 1 databyte to send
DATABYTE1 = COMMAND_REALTIME_CLOCK_STATUS_REQUEST (H'D7')

'Set local clock alarm' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 7 databytes to send
DATABYTE1 = COMMAND_SET_ALARM_CLOCK (H'C3')
DATABYTE2 = Alarm number (1 or 2)
DATABYTE3 = Wake up hour (0…23)
DATABYTE4 = Wake up minute (0…59)
DATABYTE5 = Go to bed hour (0…23)
DATABYTE6 = Go to bed minute (0…59)
DATABYTE7 = Clock alarm enable flag (0 = disabled / 1 = enabled)

'Switch blind off' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_SWITCH_BLIND_OFF (H'04')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

'Switch blind up'' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_BLIND_UP (H'05')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = high byte of time out
DATABYTE4 = mid byte of time out
DATABYTE5 = low byte of time out

Remark:
[DATABYTE3][DATABYTE4][DATABYTE5] contain a 24-bit time out in seconds
If the time parameter contains zero then the default time out is selected.
If the time parameter contains H'FFFFFF' then the blind up output switches permanently on.

'Switch blind down'' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_BLIND_DOWN (H'06')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = high byte of time out
DATABYTE4 = mid byte of time out
DATABYTE5 = low byte of time out

Remark:
[DATABYTE3][DATABYTE4][DATABYTE5] contain a 24-bit time out in seconds
If the time parameter contains zero then the default time out is selected.
If the time parameter contains H'FFFFFF' then the blind down output switches permanently on.

'Set blind position' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 3 databytes received
DATABYTE1 = COMMAND_BLIND_POS (H'1C')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = Blind position (0...100%)

'Lock channel' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_LOCK (H'1A')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = high byte of delay time
DATABYTE4 = mid byte of delay time
DATABYTE5 = low byte of delay time

Remark:
[DATABYTE3][DATABYTE4][DATABYTE5] contain a 24-bit time in seconds
The command will be skipped when the time parameter contains zero.
When the time parameter contains H'FFFFFF' then the channel will be permanently locked.

'Unlock channel' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_UNLOCK (H'1B')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

'Forced up' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_FORCED_OFF (H'12')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = high byte of delay time
DATABYTE4 = mid byte of delay time
DATABYTE5 = low byte of delay time

Remark:
[DATABYTE3][DATABYTE4][DATABYTE5] contain a 24-bit time in seconds
The command will be skipped when the time parameter contains zero or the channel is already locked.
When the time parameter contains H'FFFFFF' then the channel is permanently forced up.

'Cancel forced up' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_CANCEL_FORCED_OFF (H'13')
DATABYTE2 = Blind chanel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

'Forced down' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_FORCED_ON (H'14')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = high byte of delay time
DATABYTE4 = mid byte of delay time
DATABYTE5 = low byte of delay time

Remark:
[DATABYTE3][DATABYTE4][DATABYTE5] contain a 24-bit time in seconds
The command will be skipped when the time parameter contains zero or the channel is already locked or forced up.
When the time parameter contains H'FFFFFF' then the channel is permanently forced down.

'Cancel forced down' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_CANCEL_FORCED_ON (H'15')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

'Inhibit' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_INHIBIT (H'16')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = high byte of delay time
DATABYTE4 = mid byte of delay time
DATABYTE5 = low byte of delay time

Remark:
[DATABYTE3][DATABYTE4][DATABYTE5] contain a 24-bit time in seconds
The command will be skipped when the time parameter contains zero or the channels is already locked, forced up or forced down.
When the time parameter contains H'FFFFFF' then the channel is permanently inhibited.

'Inhibit preset up' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_INHIBIT_PRESET_UP (H'18')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = high byte of delay time
DATABYTE4 = mid byte of delay time
DATABYTE5 = low byte of delay time

Remark:
[DATABYTE3][DATABYTE4][DATABYTE5] contain a 24-bit time in seconds
The command will be skipped when the time parameter contains zero or the channel is already locked, forced up, forced down or inhibited.
When the time parameter contains H'FFFFFF' then the channel is permanently inhibited with preset up.

'Inhibit preset down' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_INHIBIT_PRESET_DOWN (H'19')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = high byte of delay time
DATABYTE4 = mid byte of delay time
DATABYTE5 = low byte of delay time

Remark:
[DATABYTE3][DATABYTE4][DATABYTE5] contain a 24-bit time in seconds
The command will be skipped when the time parameter contains zero or the channel is already locked, forced up, forced down, inhibited or inhibited with preset up.
When the time parameter contains H'FFFFFF' then the channel is permanently inhibited with preset down.

'Cancel inhibit' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_CANCEL_INHIBIT (H'17')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

'Blind status request' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_RELAY_STATUS_REQUEST (H'FA')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

'Module type request' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 1
DLC3...DLC0 = 0 databytes received

'Blind name request' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_BLIND_NAME_REQUEST (H'EF')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

'Read data from memory' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 3 databytes received
DATABYTE1 = COMMAND_READ_DATA_FROM_MEMORY (H'FD')
DATABYTE2 = High memory address (H'00'...H'01')
DATABYTE3 = LOW memory address (H'00'...H'FF')

'Read data block from memory' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 3 databytes received
DATABYTE1 = COMMAND_READ_MEMORY_BLOCK (H'C9')
DATABYTE2 = High memory address
DATABYTE3 = LOW memory address

Remark: Valid address range: H'0000' to H'01FC'

'Memory dump request' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 1 databytes received
DATABYTE1 = COMMAND_MEMORY_DUMP_REQUEST (H'CB')

'Write data to memory' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 4 databytes received
DATABYTE1 = COMMAND_WRITE_DATA_TO_MEMORY (H'FC')
DATABYTE2 = High memory address (H'00'...H'01')
DATABYTE3 = LOW memory address (H'00'...H'FF')
DATABYTE4 = memory data to write

Remark: Wait at least 10ms or wait for 'memory data block' feedback before sending a next command on the velbus.

'Write memory block' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 7 databytes received
DATABYTE1 = COMMAND_WRITE_MEMORY_BLOCK (H'CA')
DATABYTE2 = High memory address
DATABYTE3 = LOW memory address
DATABYTE4 = memory databyte1 to write
DATABYTE5 = memory databyte2 to write
DATABYTE6 = memory databyte3 to write
DATABYTE7 = memory databyte4 to write

Remark:
Valid address range: H'0000' to H'01FC'
Wait for 'memory data block' feedback before sending a next command on the velbus.

'Bus error counter status request' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 1 databytes to send
DATABYTE1 = COMMAND_BUS_ERROR_CONTER_STATUS_REQUEST (H'D9')

'Select Auto Mode' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 3 databytes received
DATABYTE1 = COMMAND_SELECT_PROGRAM (H'B3')
DATABYTE2 = Blind channel

Contents	*Blind channel*
B'00000001'	Blind 1
B'00000010'	Blind 2

DATABYTE3 = Auto mode

Contents	*Selected auto mode*
0	All auto modes disabled
1	Auto mode 1
2	Auto mode 2
3	Auto mode 3

'Write module address & serial number' command received:

SID10-SID9 = 01 (firmware priority)
SID8...SID1 = Current module address
RTR = 0
DLC3...DLC0 = 7 databytes received
DATABYTE1 = COMMAND_WRITE_ADDR_SERIALNR (H'6A')
DATABYTE2 = VMB2BLE_MODULE_TYPE (H'1D')
DATABYTE3 = current high byte SERIAL NUMBER
DATABYTE4 = current low byte SERIAL NUMBER
DATABYTE5 = new module address
DATABYTE6 = new high byte SERIAL NUMBER
DATABYTE7 = new low byte SERIAL NUMBER

Memory map version 1:

Address	*Contents*	*Address*	*Contents*
H'0000'	Blind 1 name character 1	H'0001'	Blind 1 name character 2
...	...	...	...
H'000E'	Blind 1 name character 15	H'000F'	Blind 1 name character 16
H'0010'	Blind 2 name character 1	H'0011'	Blind 2 name character 2
...	...	...	...
H'001E'	Blind 2 name character 15	H'001F'	Blind 2 name character 16
H'0020'	Blind 1 time out	H'0021'	Low byte 256/(Blind 1 timeout*0.0131072)
H'0022'	High byte 256/(Blind 1 timeout*0.0131072)	H'0023'	Blind 2 time out
H'0024'	Low byte 256/(Blind 2 timeout*0.0131072)	H'0025'	High byte 256/(Blind 2 timeout*0.0131072)
H'0026'	Blind1 unwind delay (s)	H'0027'	Blind2 unwind delay (s)
H'0028'	Blind1collapse delay (s)	H'0029'	Blind2 collapse delay (s)
H'002A'	Blind1 slats rotate time	H'002B'	Blind2 slats rotate time
H'002C'	Not used	H'002D'	Not used
...	...	...	...
H'003A'	Not used	H'003B'	Not used
H'003C'	Blind 1 location id low byte	H'003D'	Blind 1 location id high byte
H'003E'	Blind 1 group id low byte	H'003F'	Blind 1group id high byte
H'0040'	Blind 1 circuit id low byte	H'0041'	Blind 1 circuit id high byte
H'0042'	Blind 1 load id low byte	H'0043'	Blind 1 load id high byte
H'0044'	Blind 2 location id low byte	H'0045'	Blind 2 location id high byte
H'0046'	Blind 2 group id low byte	H'0047'	Blind 2 group id high byte
H'0048'	Blind 2 circuit id low byte	H'0049'	Blind 2 circuit id high byte
H'004A'	Blind 2 load id low byte	H'004B'	Blind 2 load id high byte
H'004C'	Module name character 1	H'004D'	Module name character 2
…	..	..	..
H'008A'	Module name character 63	H'008B'	Module name character 64
H'008C'	Blind 1 Sunrise offset (-128'…127')	H'008D'	Blind 1 Sunset offset (-128'…127')
H'008E'	Blind 2 Sunrise offset (-128'…127')	H'008F'	Blind 2 Sunset offset (-128'…127')
H'0090'	Blind 1 Wake up 1 offset (-128'…127')	H'0091'	Not used
H'0092'	Blind 1 Go to bed 1 offset (-128'…127')	H'0093'	Not used
H'0094'	Blind 1 Wake up 2 offset (-128'…127')	H'0095'	Not used
H'0096'	Blind 1 Go to bed 2 offset (-128'…127')	H'0097'	Not used
H'0098'	Blind 2 Wake up 1 offset (-128'…127')	H'0099'	Not used
H'009A'	Blind 2 Go to bed 1 offset (-128'…127')	H'009B'	Not used
H'009C'	Blind 2 Wake up 2 offset (-128'…127')	H'009D'	Not used
H'009E'	Blind 2 Go to bed 2 offset (-128'…127')	H'009F'	Not used
H'00A0'	Blind 1 Wake up 1 hour (0…23)	H'00A1'	Blind 1 Wake up 1 minutes (0…59)
H'00A2'	Blind 1 Go to bed 1 hour (0…23)	H'00A3'	Blind 1 Go to bed 1 minutes (0…59)
H'00A4'	Blind 1 Wake up 2 hour (0…23)	H'00A5'	Blind 1 Wake up 2 minutes (0…59)
H'00A6'	Blind 1 Go to bed 2 hour (0…23)	H'00A7'	Blind 1 Go to bed 2 minutes (0…59)
H'00A8'	Blind 2 Wake up 1 hour (0…23)	H'00A9'	Blind 2 Wake up 1 minutes (0…59)
H'00AA'	Blind 2 Go to bed 1 hour (0…23)	H'00AB'	Blind 2 Go to bed 1 minutes (0…59)
H'00AC'	Blind 2 Wake up 2 hour (0…23)	H'00AD'	Blind 2 Wake up 2 minutes (0…59)
H'00AE'	Blind 2 Go to bed 2 hour (0…23)	H'00AF'	Blind 2 Go to bed 2 minutes (0…59)
H'00B0'	Sunrise hour at 21 December (0…23)	H'00B1'	Sunrise minutes at 21 December (0…59)
H'00B2'	Sunrise 21 January – sunrise 5 January (-128'..127')	H'00B3'	Sunrise 5 February – sunrise 21 January (-128'..127')
H'00B4'	Sunrise 21 February – sunrise 5 February (-128'..127')	H'00B5'	Sunrise 5 March – sunrise 21 February (-128'..127')
H'00B6'	Sunrise 21 March – sunrise 5 March (-128'..127')	H'00B7'	Sunrise 5 April – sunrise 21 March (-128'..127')
H'00B8'	Sunrise 21 April – sunrise 5 April (-128'..127')	H'00B9'	Sunrise 5 May – sunrise 21 April (-128'..127')
H'00BA'	Sunrise 21 May – sunrise 5 May (-128'..127')	H'00BB'	Sunrise 5 June – sunrise 21 May (-128'..127')
H'00BC'	Sunrise 21 June – sunrise 5 June (-128'..127')	H'00BD'	Sunrise 5 July – sunrise 21 June (-128'..127')
H'00BE'	Sunrise 21 July – sunrise 5 July (-128'..127')	H'00BF'	Sunrise 5 August – sunrise 21 July (-128'..127')
H'00C0'	Sunrise 21 August – sunrise 5 August (-128'..127')	H'00C1'	Sunrise 5 September – sunrise 21 August (-128'..127')
H'00C2'	Sunrise 21 September – sunrise 5 September (-128..127')	H'00C3'	Sunrise 5 October – sunrise 21 September (-128'..127')
H'00C4'	Sunrise 21 October – sunrise 5 October (-128'..127')	H'00C5'	Sunrise 5 November – sunrise 21 October (-128'..127')
H'00C6'	Sunrise 21 November – sunrise 5 November (-128'..127')	H'00C7'	Sunrise 5 December – sunrise 21 November (-128'..127')
H'00C8'	Sunrise 21 December – sunrise 5 December (-128'..127')	H'00C9'	Sunrise 5 January – sunrise 21 December (-128'..127')
H'00CA'	Sunset hour at 21 December (0…23)	H'00CB'	Sunset minutes at 21 December (0…59)
H'00CC'	Sunset 21 January – sunrise 5 January (-128'..127')	H'00CD'	Sunset 5 February – sunrise 21 January (-128'..127')
H'00CE'	Sunset 21 February – sunrise 5 February (-128'..127')	H'00CF'	Sunset 5 March – sunrise 21 February (-128'..127')
H'00D0'	Sunset 21 March – sunrise 5 March (-128'..127')	H'00D1'	Sunset 5 April – sunrise 21 March (-128'..127')
H'00D2'	Sunset 21 April – sunrise 5 April (-128'..127')	H'00D3'	Sunset 5 May – sunrise 21 April (-128'..127')
H'00D4'	Sunset 21 May – sunrise 5 May (-128'..127')	H'00D5'	Sunset 5 June – sunrise 21 May (-128'..127')
H'00D6'	Sunset 21 June – sunrise 5 June (-128'..127')	H'00D7'	Sunset 5 July – sunrise 21 June (-128'..127')

H'00D8'	Sunset 21 July – sunrise 5 July (-128'..127')	H'00D9'	Sunset 5 August – sunrise 21 July (-128'..127')
H'00DA'	Sunset 21 August – sunrise 5 August (-128'..127')	H'00DA'	Sunset 5 September – sunrise 21 August (-128'..127')
H'00DC'	Sunset 21 September – sunrise 5 September (-128'..127')	H'00DC'	Sunset 5 October – sunrise 21 September (-128'..127')
H'00DE'	Sunset 21 October – sunrise 5 October (-128'..127')	H'00DF'	Sunset 5 November – sunrise 21 October (-128'..127')
H'00E0'	Sunset 21 November – sunrise 5 November (-128'..127')	H'00E1'	Sunset 5 December – sunrise 21 November (-128'..127')
H'00E2'	Sunset 21 December – sunrise 5 December (-128'..127')	H'00E3'	Sunset 5 January – sunrise 21 December (-128'..127')
H'00E4'	Led feedback for 0% and 100%	H'00E5'	Terminator
H'00E6'	Module location id low byte	H'00E7'	Module location id high byte
H'00E8'	Module group id low byte	H'00E9'	Module group id high byte
H'00EA'	Module circuit id low byte	H'00EB'	Module circuit id high byte
H'00EC'	Module load id low byte	H'00ED'	Module load id high byte
H'00EE'	Channels Forced up	H'00EF'	Channels Forced down
H'00F0'	Channels Inhibited	H'00F1'	Channels Inhibited preset up
H'00F2'	Channels Inhibited preset down	H'00F3'	Channels Locked/Unlocked
H'00F4'	Blind 1 Auto mode (none , 1, 2 or 3)	H'00F5'	Blind 1 Alarm clock configuration
H'00F6'	Blind 2 Auto mode (none , 1, 2 or 3)	H'00F7'	Blind 2 Alarm clock configuration
H'00F8'	Current day (1…31)	H'00F9'	Current month (1…12)
H'00FA'	Current year high byte	H'00FB'	Current year low byte
H'00FC'	Module Zone Address	H'00FD'	Module Address
H'00FE'	Serial number high	H'00FF'	Serial number low

Remark:
Unused locations contain H'FF'
Do not overwrite the following address location:

H'00EE'	Channels Forced up
H'00EF'	Channels Forced down
H'00F0'	Channels Inhibited
H'00F1'	Channels Inhibited preset up
H'00F2'	Channels Inhibited preset down
H'00F3'	Channel locked/unlocked
H'00F4'	Blind 1 Auto mode (none, 1, 2 or 3)
H'00F5'	Blind 1 Alarm clock configuration
H'00F6'	Blind 2 Auto mode (none, 1, 2 or 3)
H'00F7'	Blind 2 Alarm clock configuration
H'00F8'	Current day of month
H'00F9'	Current month
H'00FA' & H'00FB'	Current year
H'00FC'	Module zone address
H'00FD'	Module address
H'00FE' & H'00FF'	Module serial number

Blind timeout

Contents	*Time out*
0	No timeout (continuous)
1	1.3 sec (1 *1.31072s)
2	2.6 sec (2 *1.31072s)
...	...
255	5min 34 sec (255 *1.31072s)

Blind slats rotate time

Contents	*Rotate time*
0	No rotating slats blind (default)
1	1 sec
2	2 sec
...	...
255	255 sec

Channel forced up

Contents	*Channel forced up*
B'xxxxxxx0'	Blind 1 forced up cancelled
B'xxxxxxx1'	Blind 1 forced up
B'xxxxxx0x'	Blind 2 forced up cancelled
B'xxxxxx1x'	Blind 2 forced up

Channel forced down

Contents	*Channel forced down*
B'xxxxxxx0'	Blind 1 forced down cancelled
B'xxxxxxx1'	Blind 1 forced down
B'xxxxxx0x'	Blind 2 forced down cancelled
B'xxxxxx1x'	Blind 2 forced down

Channel inhibited

Contents	*Channel inhibited*
B'xxxxxxx0'	Blind 1 inhibit cancelled
B'xxxxxxx1'	Blind 1 inhibit
B'xxxxxx0x'	Blind 2 inhibit cancelled
B'xxxxxx1x'	Blind 2 inhibit

Channel inhibited preset up

Contents	*Channel inhibited but preset up*
B'xxxxxxx0'	Blind 1 inhibit preset up cancelled
B'xxxxxxx1'	Blind 1 inhibit preset up
B'xxxxxx0x'	Blind 2 inhibit preset up cancelled
B'xxxxxx1x'	Blind 2 inhibit preset up

Channel inhibited preset down

Contents	*Channel inhibited but preset down*
B'xxxxxxx0'	Blind 1 inhibit preset down cancelled
B'xxxxxxx1'	Blind 1 inhibit preset down
B'xxxxxx0x'	Blind 2 inhibit preset down cancelled
B'xxxxxx1x'	Blind 2 inhibit preset down

Channel locked/unlocked

Contents	*Channel locked/unlocked*
B'xxxxxxx0'	Blind 1 unlocked
B'xxxxxxx1'	Blind 1 locked
B'xxxxxx0x'	Blind 2 unlocked
B'xxxxxx1x'	Blind 2 locked

Blind Auto mode selection

Contents	*Selected auto mode*
0	No auto mode activated
1	Auto mode 1 activated
2	Auto mode 2 activated
3	Auto mode 3 activated

Blind Alarm clock configuration

Contents	*Alarm clock configuration*
B'xxxxxxx0'	Alarm 1 disabled
B'xxxxxxx1'	Alarm 1 enabled
B'xxxxxx0x'	Local alarm 1
B'xxxxxx1x'	Global alarm 1
B'xxxxx0xx'	Alarm 2 disabled
B'xxxxx1xx'	Alarm 2 enabled
B'xxxx0xxx'	Local alarm 2
B'xxxx1xxx'	Global alarm 2
B'xxx0xxxx'	Sunrise disabled
B'xxx1xxxx'	Sunrise enabled

B’xx0xxxxx’	Sunset disabled
B’xx1xxxxx’	Sunset enabled
B’x0xxxxxx’	Summer time disabled
B’x1xxxxxx’	Summer time enabled

Led feedback for 0% and 100%

Contents	*Led feedback 0% and 100%*
0x00	Off
0xFF	On (factory default)

Address	*Contents*	*Address*	*Contents*
H'0100'	Push button 1 module address	H'0101'	Push button 1 bit number
H'0102'	Push button 1 action for channel 1	H'0103'	Push button 1 first time parameter
H'0104'	Push button 1 second time parameter	H'0105'	Push button 2 module address
H'0106'	Push button 2 bit number	H'0107'	Push button 2 action for channel 1
H'0108'	Push button 2 first parameter	H'0109'	Push button 2 second parameter
...	...	...	...
H'0178'	Push button 25 module address	H'0179'	Push button 25 bit number
H'017A'	Push button 25 action for channel 1	H'017B'	Push button 25 first time parameter
H'017C'	Push button 25 second time parameter	H'017D'	Not used
H'017E'	Not used	H'017F'	Not used

Address	*Contents*	*Address*	*Contents*
H'0180'	Push button 1 module address	H'0181'	Push button 1 bit number
H'0182'	Push button 1 action for channel 2	H'0183'	Push button 1 first time parameter
H'0184'	Push button 1 second time parameter	H'0185'	Push button 2 module address
H'0186'	Push button 2 bit number	H'0187'	Push button 2 action for channel 2
H'0188'	Push button 2 first time parameter	H'0189'	Push button 2 second time parameter
...	...	...	...
H'01F8'	Push button 25 module address	H'01F9'	Push button 25 bit number
H'01FA'	Push button 25 action for channel 2	H'01FB'	Push button 25 first time parameter
H'01FC'	Push button 25 second time parameter	H'01FD'	Not used
H'01FE'	Not used	H'01FF'	Not used

Remark:
Unused locations contain H'FF'

Action	Description	First time parameter	Second time parameter
H'00'	Up	Pulse time	H'00'
H'01'	Direct up	Delayed on time	H'00'
H'02'	Direct up at release	Delayed on time	H'00'
H'03'	Down	Pulse time	H'00'
H'04'	Direct down	Delayed on time	H'00'
H'05'	Direct down at release	Delayed on time	H'00'
H'06'	Up/down	H'00'	H'00'
H'07'	Go to position	Delayed on time	Position (0 to 100%)
H'08'	Go to position at release	Delayed on time	Position (0 to 100%)
H'09'	Up in auto mode 1	Pulse time	H'00'
H'0A'	Direct up in auto mode 1	Delayed on time	H'00'
H'0B'	Direct up at release in auto mode 1	Delayed on time	H'00'
H'0C'	Down in auto mode 1	Pulse time	H'00'
H'0D'	Direct down in auto mode 1	Delayed on time	H'00'
H'0E'	Direct down at release in auto mode 1	Delayed on time	H'00'
H'0F'	Up/down in auto mode 1	H'00'	H'00'
H'10'	Go to position in auto mode 1	Delayed on time	Position (0 to 100%)
H'11'	Go to position at release in auto mode 1	Delayed on time	Position (0 to 100%)
H'12'	Select auto mode 1	H'00'	H'00'
H'13'	Select auto mode 1 at release	H'00'	H'00'
H'14'	Select/deselect auto mode 1	H'00'	H'00'
H'15'	Deselect auto mode	H'00'	H'00'
H'16'	Deselect auto mode at release	H'00'	H'00'
H'17'	Up in auto mode 2	Pulse time	H'00'
H'18'	Direct up in auto mode 2	Delayed on time	H'00'
H'19'	Direct up at release in auto mode 2	Delayed on time	H'00'
H'1A'	Down in auto mode 2	Pulse time	H'00'
H'1B'	Direct down in auto mode 2	Delayed on time	H'00'
H'1C'	Direct down at release in auto mode 2	Delayed on time	H'00'
H'1D'	Up/down in auto mode 2	H'00'	H'00'
H'1E'	Position in auto mode 2	Delayed on time	Position (0 to 100%)
H'1F'	Go to position at release in auto mode 2	Delayed on time	Position (0 to 100%)
H'20'	Select auto mode 2	H'00'	H'00'
H'21'	Select auto mode 2 at release	H'00'	H'00'
H'22'	Select/deselect auto mode 2	H'00'	H'00'
H'23'	Up in auto mode 3	Pulse time'	H'00'
H'24'	Direct up in auto mode 3	Delayed on time	H'00'
H'25'	Direct up at release in auto mode 3	Delayed on time	H'00'
H'26'	Down in auto mode 3	Pulse time	H'00'
H'27'	Direct down in auto mode 3	Delayed on time	H'00'
H'28'	Direct down at release in auto mode 3	Delayed on time	H'00'
H'29'	Up/down in auto mode 3	H'00'	H'00'
H'2A'	Position in auto mode 3	Delayed on time	Position (0 to 100%)
H'2B'	Go to position at release in auto mode 3	Delayed on time	Position (0 to 100%)
H'2C'	Select auto mode 3	H'00'	H'00'
H'2D'	Select auto mode 3 at release	H'00'	H'00'
H'2E'	Select/deselect auto mode 3	H'00'	H'00'
H'2F'	Lock at closed switch	H'00'	H'00'
H'30'	Lock at open switch	H'00'	H'00'
H'31'	Lock	Timeout	H'00'
H'32'	Lock/unlock	Timeout	H'00'
H'33'	Unlock	H'00'	H'00'
H'34'	Forced up at closed switch	H'00'	H'00'
H'35'	Forced up at open switch	H'00'	H'00'
H'36'	Forced up	Timeout	H'00'
H'37'	Forced up/cancel forced up	Timeout	H'00'
H'38'	Cancel forced up	H'00'	H'00'
H'39'	Forced down at closed switch	H'00'	H'00'
H'3A'	Forced down at open switch	H'00'	H'00'
H'3B'	Forced down	Timeout	H'00'
H'3C'	Forced down/cancel forced down	Timeout	H'00'
H'3D'	Cancel forced down	H'00'	H'00'
H'3E'	Inhibit at closed switch	H'00'	H'00'
H'3F'	Inhibit at open switch	H'00'	H'00'
H'40'	Inhibit	Timeout	H'00'
H'41'	Inhibit /cancel inhibit	Timeout	H'00'
H'42'	Cancel inhibit	H'00'	H'00'

H’43’	Inhibit but preset up at closed switch	H’00’	H’00’
H’44’	Inhibit but preset up at open switch	H’00’	H’00’
H’45’	Inhibit but preset up	Timeout	H’00’
H’46’	Inhibit but preset up/cancel inhibit preset up	Timeout	H’00’
H’47’	Cancel inhibit but preset up	H’00’	H’00’
H’48’	Inhibit but preset down at closed switch	H’00’	H’00’
H’49’	Inhibit but preset down at closed switch	H’00’	H’00’
H’4A’	Inhibit but preset down	Timeout	H’00’
H’4B’	Inhibit but preset down/cancel inhibit preset down	Timeout	H’00’
H’4C’	Cancel but inhibit preset down	H’00’	H’00’
H’4D’	Enable Alarm 1 at closed switch	H’00’	H’00’
H’4E’	Enable Alarm 1 at open switch	H’00’	H’00’
H’4F’	Disable Alarm 1 at closed switch	H’00’	H’00’
H’50’	Disable Alarm 1 at open switch	H’00’	H’00’
H’51’	Enable Alarm 1	H’00’	H’00’
H’52’	Enable/disable Alarm 1	H’00’	H’00’
H’53’	Disable Alarm 1	H’00’	H’00’
H’54’	Enable Alarm 2 at closed switch	H’00’	H’00’
H’55’	Enable Alarm 2 at open switch	H’00’	H’00’
H’56’	Disable Alarm 2 at closed switch	H’00’	H’00’
H’57’	Disable Alarm 2 at open switch	H’00’	H’00’
H’58’	Enable Alarm 2	H’00’	H’00’
H’59’	Enable/disable Alarm 2	H’00’	H’00’
H’5A’	Disable Alarm 2	H’00’	H’00’
H’5B’	Enable sunrise at closed switch	H’00’	H’00’
H’5C’	Enable sunrise at open switch	H’00’	H’00’
H’5D’	Disable sunrise at closed switch	H’00’	H’00’
H’5E’	Disable sunrise at open switch	H’00’	H’00’
H’5F’	Enable sunrise	H’00’	H’00’
H’60’	Enable/disable sunrise	H’00’	H’00’
H’61’	Disable sunrise	H’00’	H’00’
H’62’	Enable sunset at closed switch	H’00’	H’00’
H’63’	Enable sunset at open switch	H’00’	H’00’
H’64’	Disable sunset at closed switch	H’00’	H’00’
H’65’	Disable sunset at open switch	H’00’	H’00’
H’66’	Enable sunset	H’00’	H’00’
H’67’	Enable/disable sunset	H’00’	H’00’
H’68’	Disable sunset	H’00’	H’00’

Time parameter	Time out
0	0s or No timer
1	1s
2	2s
...	
119	1min59s
120	2min
121	2min15s
...	
131	4min45s
132	5min
133	5min30s
...	
181	29min30s
182	30min
183	31min
...	
211	59min
212	1h
213	1h15min
...	
227	4h45min
228	5h
229	5h30min
...	
237	9h30min
238	10h
239	11h
...	
251	23h
252	1d
253	2d
254	3d
255	infinite

Time parameter	Delayed on time
0	0 s
1	1 s
2	2 s
...	
119	1 min 59 s
120	2 min
121	2 min 15 s
...	
131	4 min 45 s
132	5 min
133	5 min 30 s
...	
150	14 min
...	
255	14 min

Time parameter	Pulse time
0	No pulse
1	1 * 0.0131072 s
2	2 * 0.0131072 s
...	
255	255 * 0.0131072 s