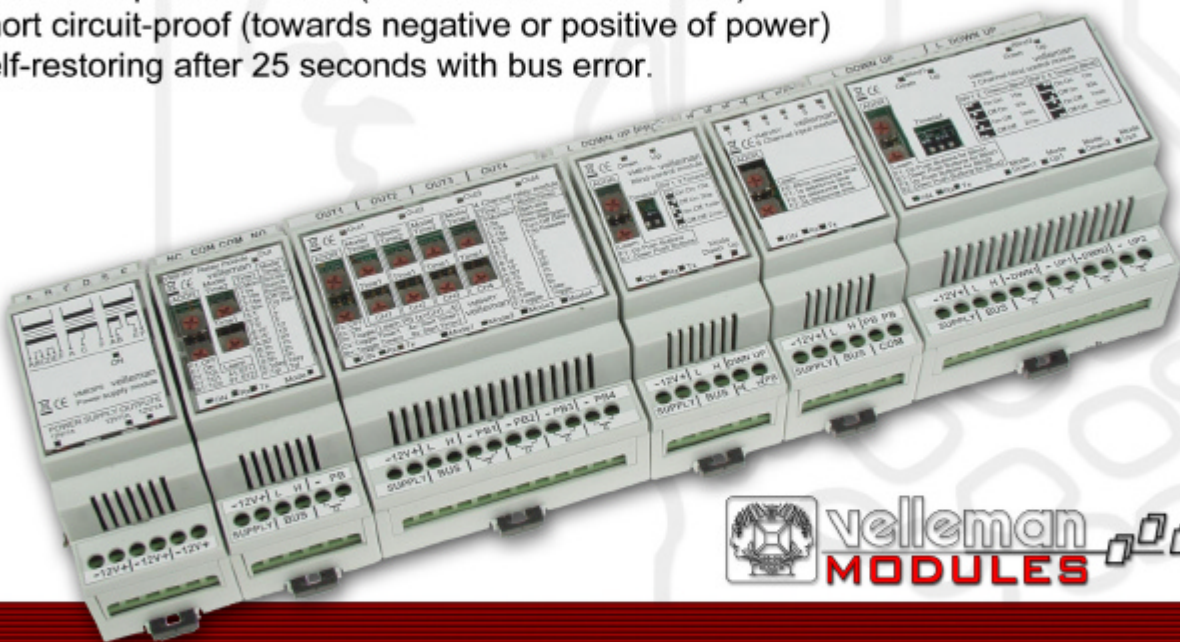# VELBUS

Flexibility combined with simple wiring are the key points of this system.
One 4 wire low voltage loop cable connects all your input and output modules,
resulting in a full two way control system.
Each input module can handle up to 8 buttons, each button can control from 1 to
more then 200 output modules!
Simply put; you can teach 1 button to turn "off" or "on" all you appliances and lights.
A LED indication in or next to the control push button gives feedback on the output status.

Some features:
Learn function for each push button (manual learning)
Possibility to Control / configure and monitor the system using PC connection
Power fail safe
Timer function on relay output modules (example; press push button twice to
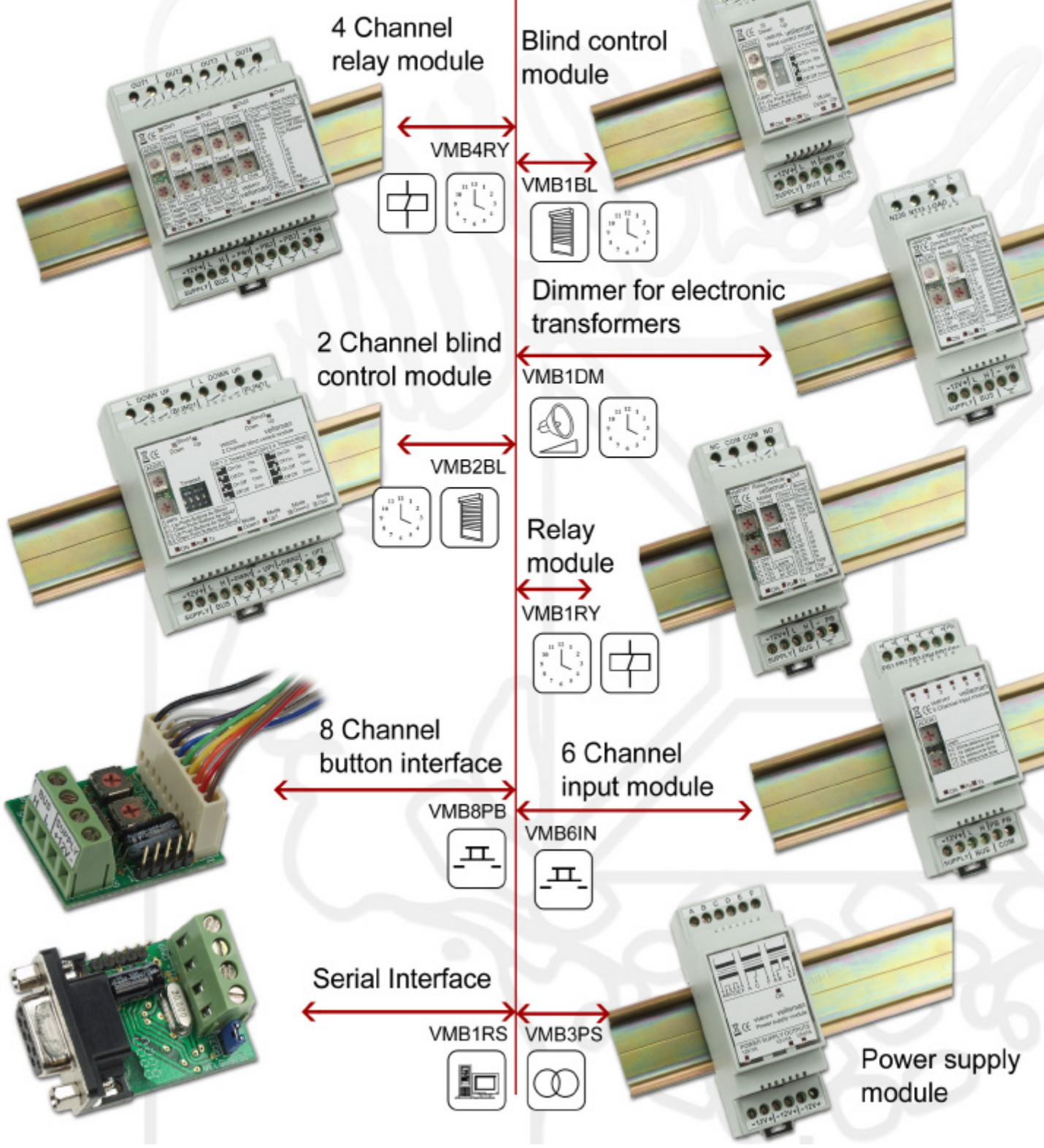engage timer function)

VELBUS:
2-wire communication for VELBUS data and 2 wires for power.
Data transfer: 16,6Kbit/s.
Serial data protocol: CAN (Controller Area Network)
Short circuit-proof (towards negative or positive of power)
Self-restoring after 25 seconds with bus error.

Velleman Home Automation System

VEL BUS

4 Channel relay module

VMB4RY

Blind control module

VMB1BL

2 Channel blind control module

VMB2BL

Dimmer for electronic transformers

VMB1DM

Relay module

VMB1RY

8 Channel button interface

VMB8PB

6 Channel input module

VMB6IN

Serial Interface

VMB1RS   VMB3PS

Power supply module

VMB8PB

8-channel push button module

Can be used to connect any type of push button on the VELBUS.
Up to 8 push buttons connectable.
Key debounce: 65ms.
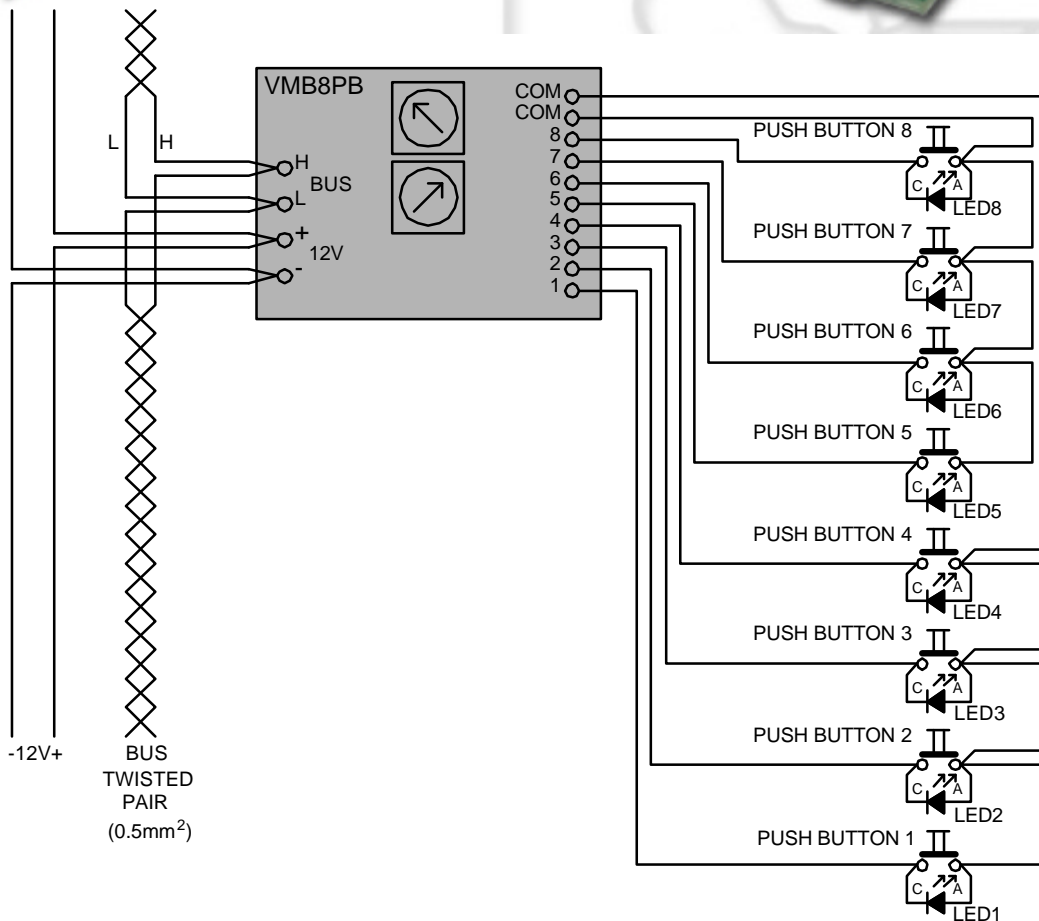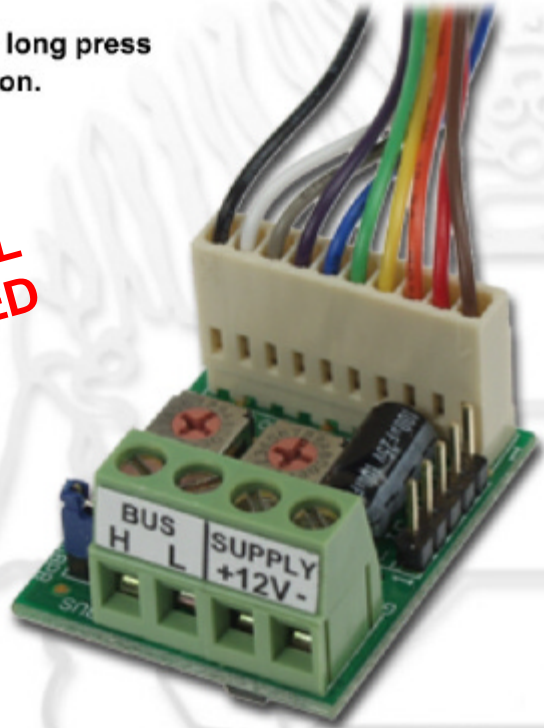Possibility for each push button to react only to long press
Connection possibility for a LED over push button.
LED indications per push button.
252 possible addresses
Dimensions (L x W x H): 36 x 29 x 21mm.

WORKS ALSO IF SEVERAL BUTTONS ARE OPERATED SIMULTANEOUSLY !

VMB4RY
4-Channel relay module

4 Independent suppressed relay outputs: 5A/230Vac max.
8 Operation modes independently adjustable per channel:

Moment control
ON/OFF control
Start/stop timer
Staircase lighting
Non restorable timer
Cut-off delay
Start of timer by releasing the push button
2-way timer (short push starts timer1/ long push starts timer2)

16 possible time settings (adjustable through hexadecimal rotary switch):
   moment - 5/10/15/30sec - 1/2/5/10/15/30min - 1/2/5u - 1day – ON/OFF
10 possible time settings for timer2:
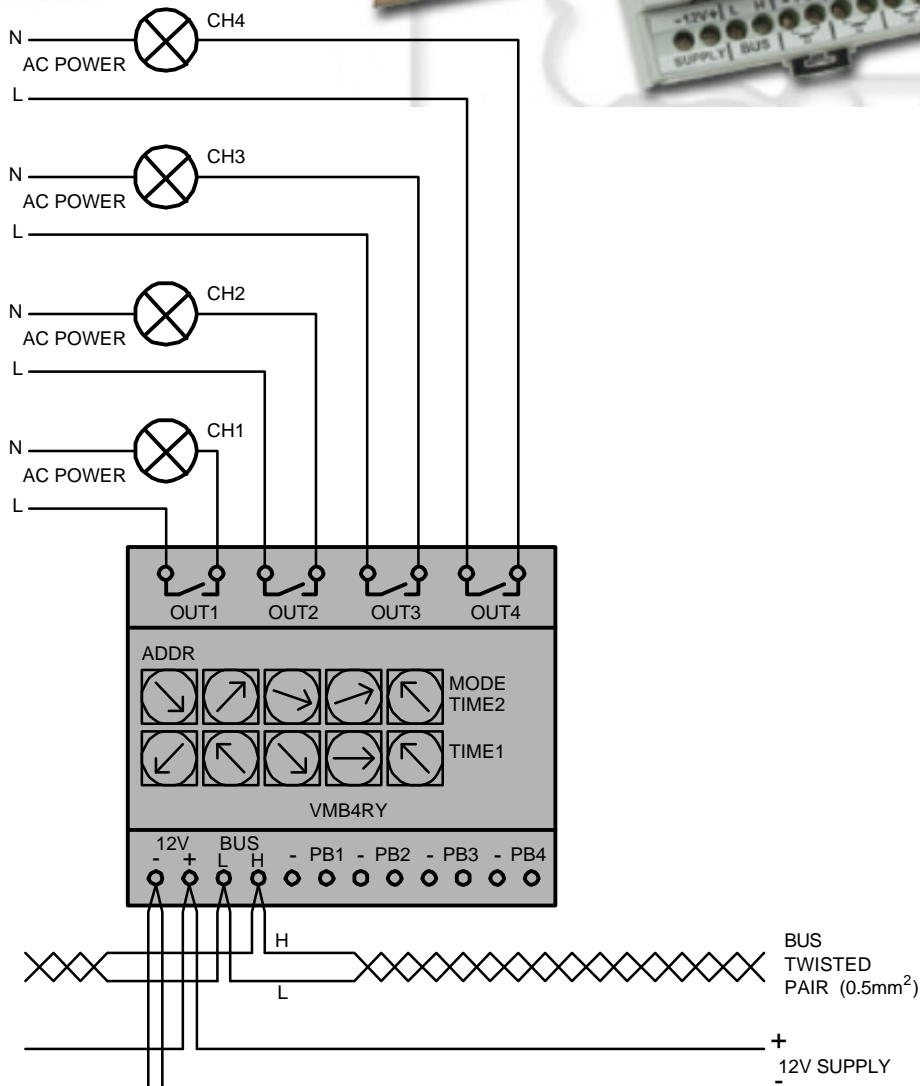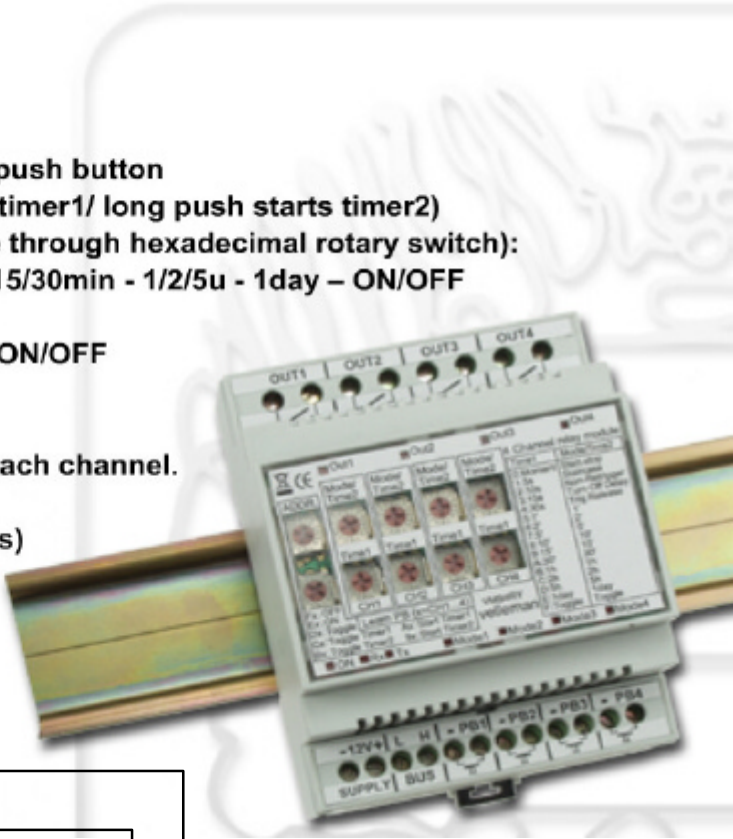   1/2/5/10/15/30min - 1/2/5u - 1day – ON/OFF
7 different control possibilities
Storage space for 16 different
push buttons per control group for each channel.
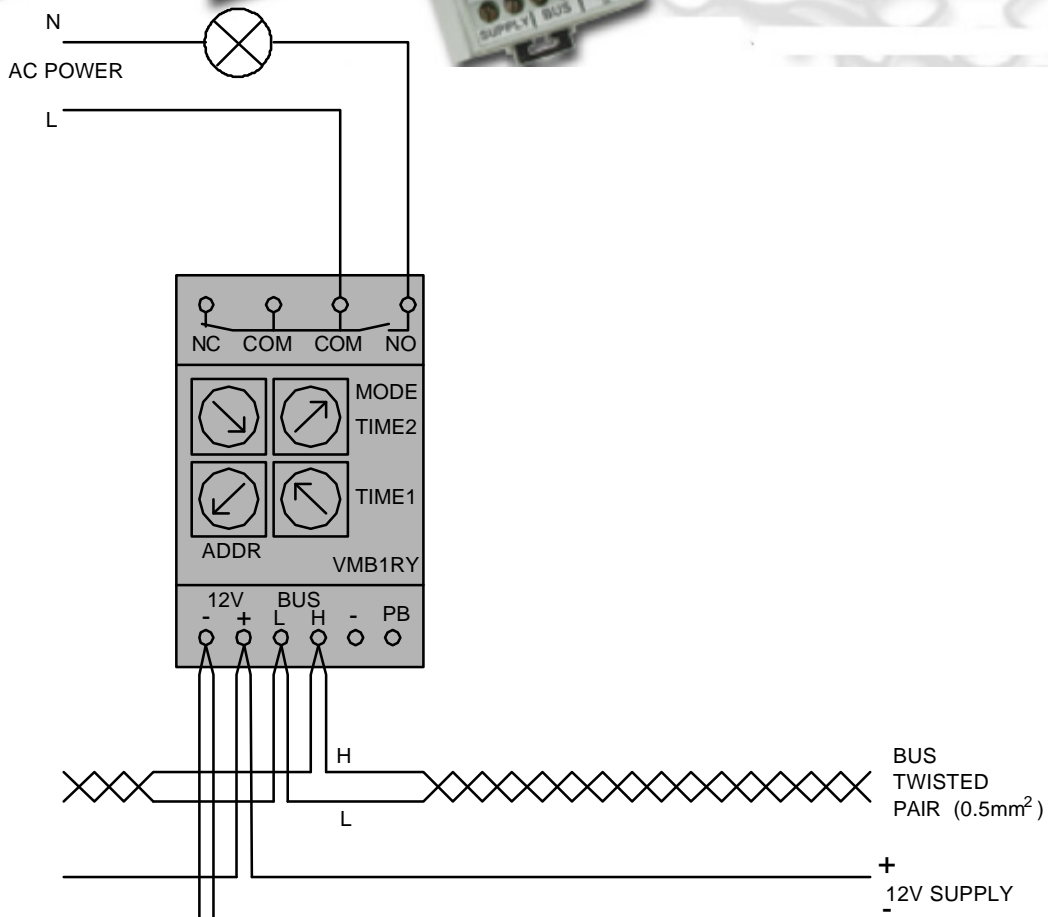228 possible addresses
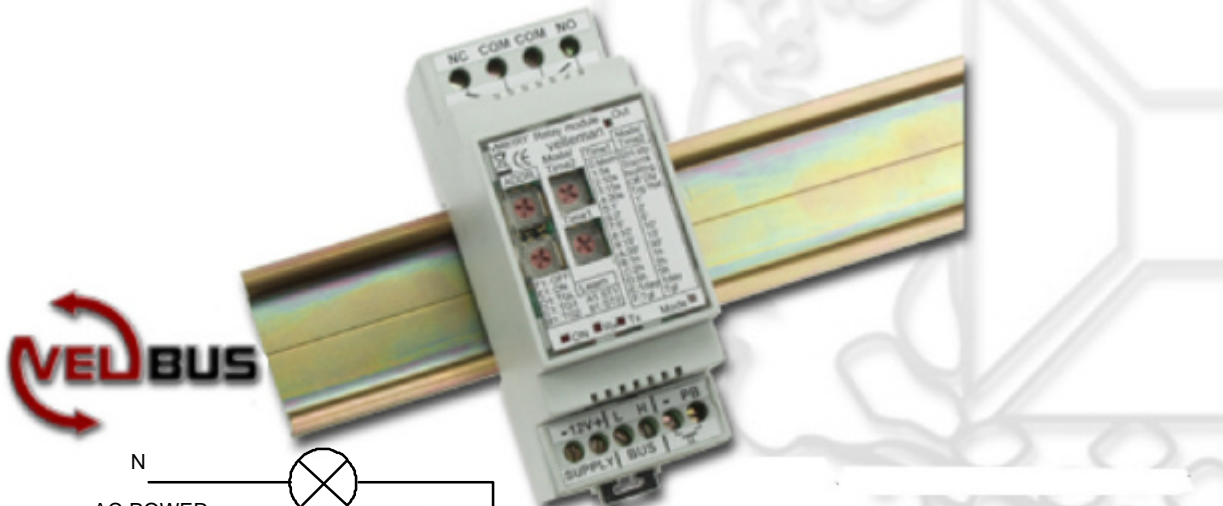Standard DIN-rail housing (4 modules)

VMB1RY
Relay module

- Suppressed relay contacts: 5A/230Vac max.
- 8 different operation modes (adjustable through hexadecimal rotary switch)
    Moment control - ON/OFF - Start/stop timer - Staircase - Non-restorable timer
    Cut-off delay - Start timer by releasing push button - 2-way timer
- 16 possible time settings
    Moment - 5/10/15/30s - 1/2/5/10/15/30 min - 1/2/5 hours - 1 day – ON/OFF
- 10 possible time settings for timer2
    1min - 2 min - 5min - 10min - 15min - 30min - 1u - 2u - 5u - 1dag – ON/OFF
- 7 different control possibilities:
- Storage for 8 different push buttons per control group.
- 249 possible addresses (adjustable through hexadecimal rotary switch)
- Standard DIN-rail housing (2 modules)

VMB1DM
Dimmer module

Fit for light bulbs, halogen on mains and low mains halogen
in combination with a dimmable electronic transformer
Phase cut-off technology through CoolMOS™ FET transistor
Mains pollution (EMI) conform EN55015
Required mains voltage: 100-125V/60Hz or 220-240V/50Hz
Maximum load: 300W at 230V or 150W at 115V
Dimming from 0 to 100% in ca. 4 seconds
9 different operation modes (adjustable through hexadecimal rotary switch):
- Moment control
- Start/stop timer
- Staircase lighting
- Dimmer
- Dimmer with memory function
- Multi-position dimmer
- Slow-on dimmer
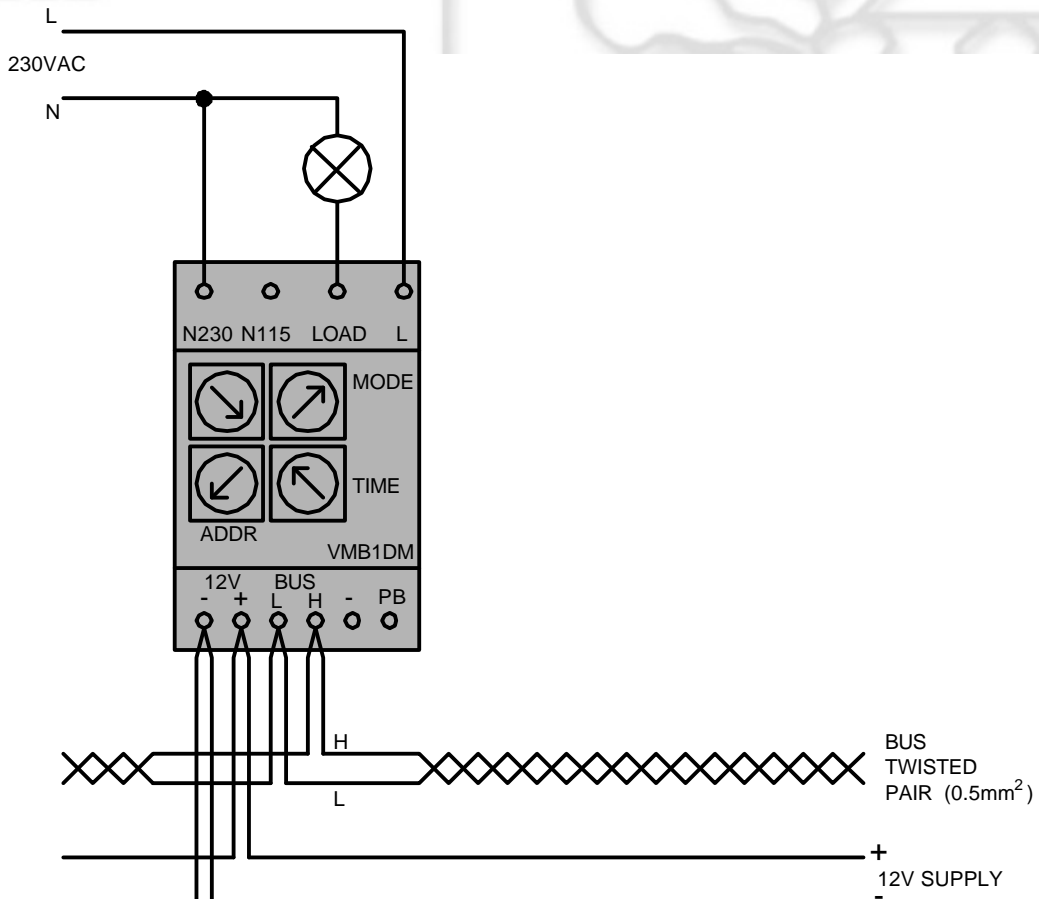- Slow-off dimmer
- Slow on-off dimmer

16 possible time settings
   moment - 5/10/15/30s
   1/2/5/10/15/30min - 1/2/5u - 1day
7 different control possibilities:
249 possible addresses

VMB1BL
Blind control module

Can be used to control an electric roll-down shutter, sunblind ...
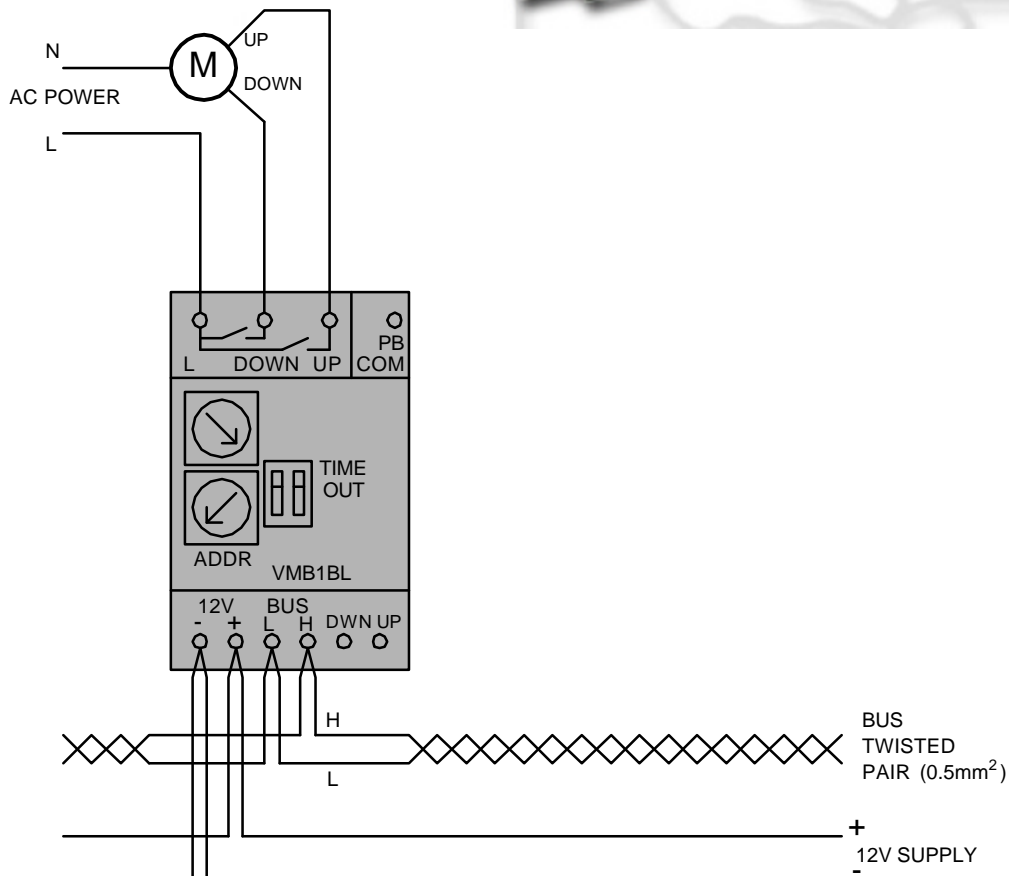Suppressed relay contacts: 5A/230Vac max.
4 possible switching times (set-up through bipolar toggle switch):
   15s - 30s - 1min - 2 min
Storage for 16 different push up buttons and 16 different push down buttons
254 possible addresses (adjustable through hexadecimal rotating switch)
Standard DIN-rail housing (2 modules)

VMB2BL

2-Channel blind control module

Can be used to power two electric controlled roll-down shutters, sunblinds ...

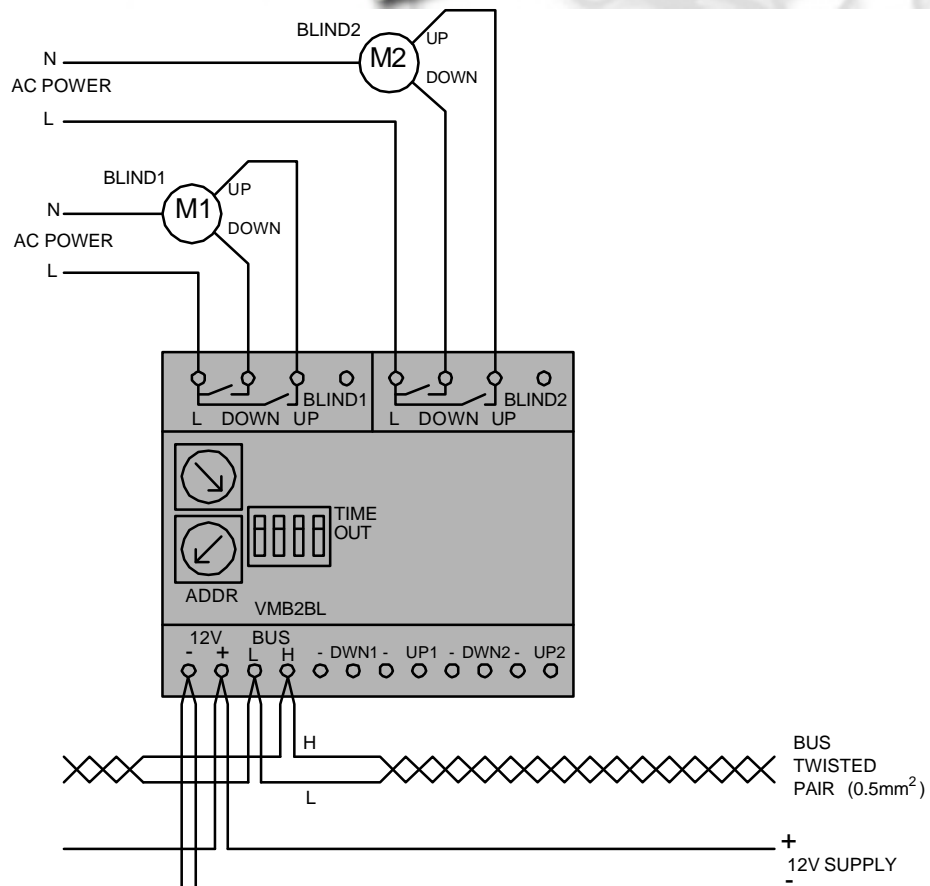Suppressed relay contacts: 5A/230Vac max.

4 possible adjustable cut-off times (through 4-pole tumble switch) per channel:

  15s - 30s - 1min - 2 min

Storage space for 16 different push-up buttons and 16 different push-down buttons for eac channel.

252 possible addresses (adjustable through hexadecimal rotary switches)

Standard DIN-rail housing (4 modules)

VMB6IN
6-channel input module

Can be used to connect push buttons, door or window contacts, movement
detector relay contacts, open collector outputs ... on the VELBUS system.
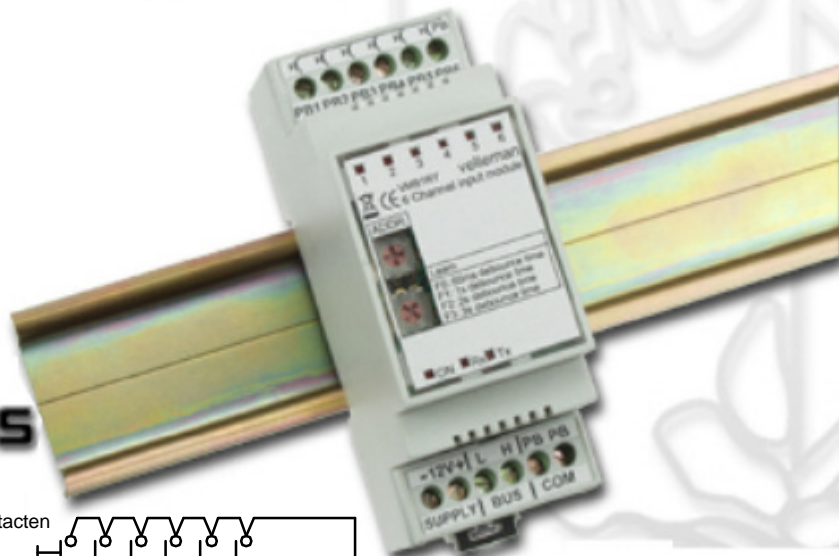Contacts may be placed on a long distance from the module.
Up to 6 inputs.
Input debounce: 65ms.
Possibility for each input to react only when they are closed for 1, 2 or 3 seconds.
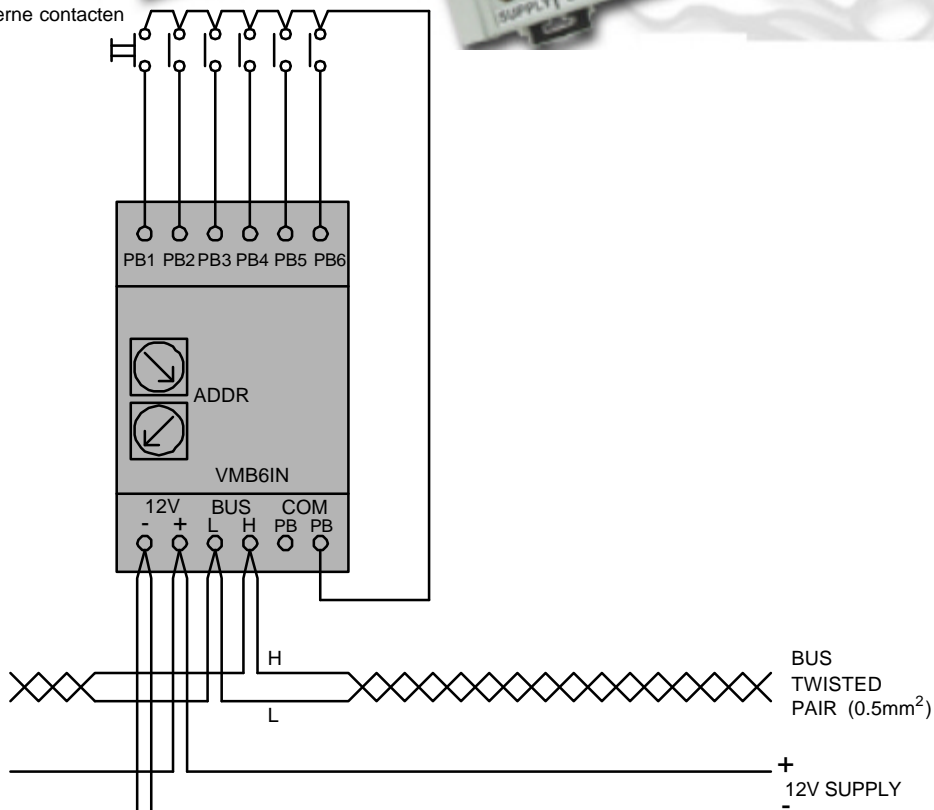LED indication per input.
252 possible addresses (adjustable through hexadecimal rotary switch)
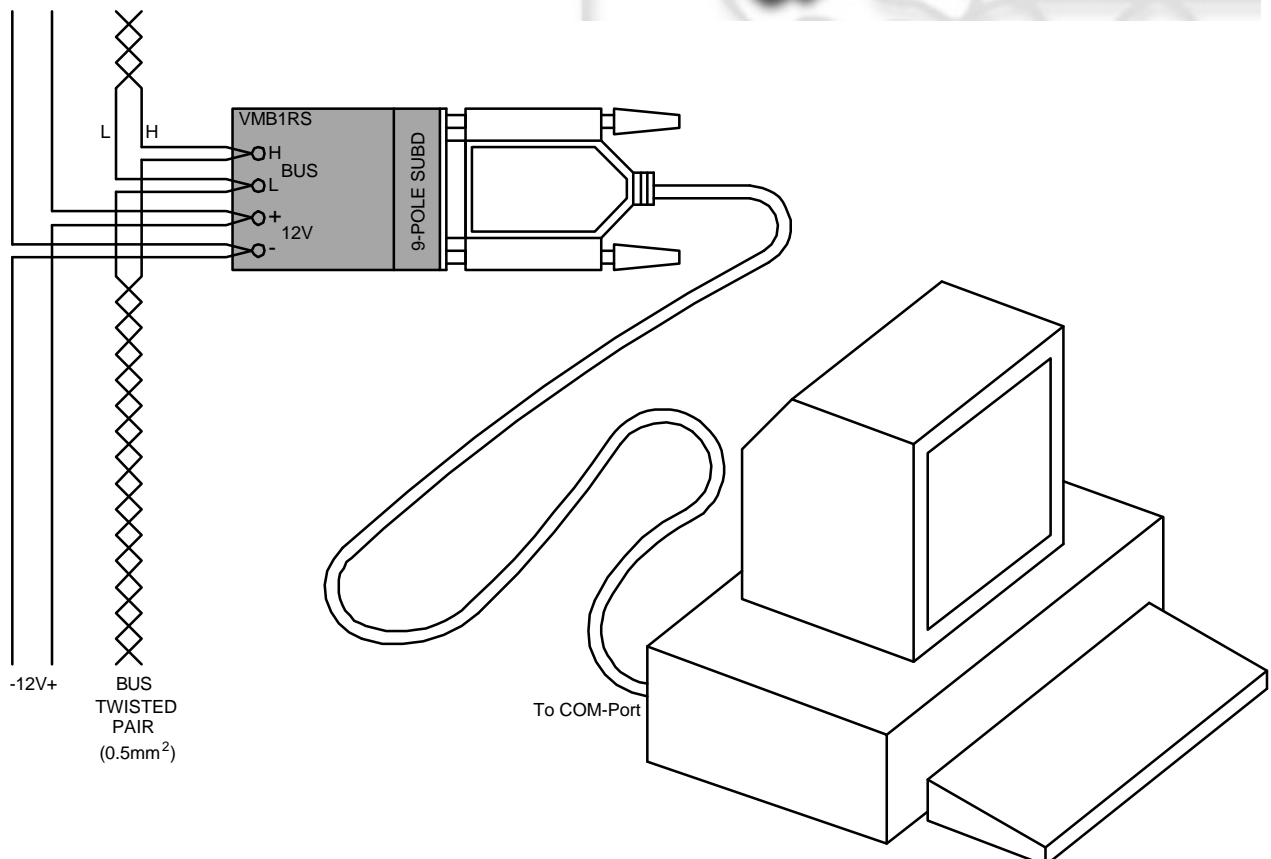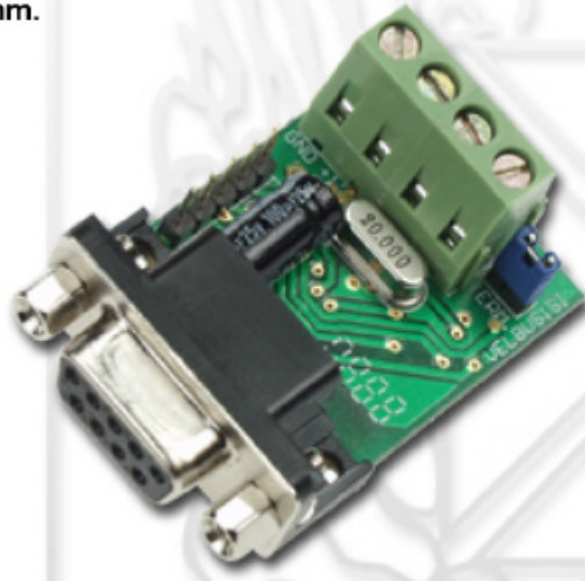Standard DIN-rail housing (2 modules)

Externe contacten

PB1 PB2 PB3 PB4 PB5 PB6

ADDR

VMB6IN

12V		BUS		COM	
-	+	L	H	PB	PB

H

L

BUS
TWISTED
PAIR (0.5mm^2)

+
12V SUPPLY
-

VMB1RS
Serial interface

VELBUS system control through a computer.
Processing VELBUS messages on the computer.
Full duplex RS232C communication with PC.
Optical separation between computer and VELBUS system.
LED indicators for:
•Power tension.
•Data reception and forwarding to computer.
•Data reception and forwarding through VELBUS.
Dimensions (L x W x H): 48 x 30 x 18mm.

VMB3PS
Power supply module

Three 12V/1A DC outputs for powering VELBUS module
Short circuit-safe
Required input tension: 12VAC/3A
Standard DIN-rail housing (2 modules)

To power loads

N   L

A B C D E F

Circuit breaker

12V Sec.

Prim.

VMB3PS

VMB...

N   L

AC Power

12V -+   12V -+   12V -+   12V -+   BUS L H

1A max.

+
12V/1A max.
-

+
12V/1A max.
-