Velbus® Module installation

One double sided page per module,
with simple application
and connection instructions

Print double sided

Modules covered in this document

Clickable links

4 Channel Relay - LD	10V controller	ELV Dimming (12V LED)
4 Channel Relay - NO	Finder 220V Dimmer	ELV power isolation
2 Channel motor controller	Velbus® Control of Finder 220V Dimmer	
1 Channel Relay and Input		Switches & Sensor
8 channel input device		
	Phoenix CANbus connector	Molex Interconnect cables
Velbus® 15V power supply	15v Power supply manager	Single USB Connection

All DIN rail modules have 2 x Molex data connections, for interconnecting with BUS cable

Phoenix CANbus connector

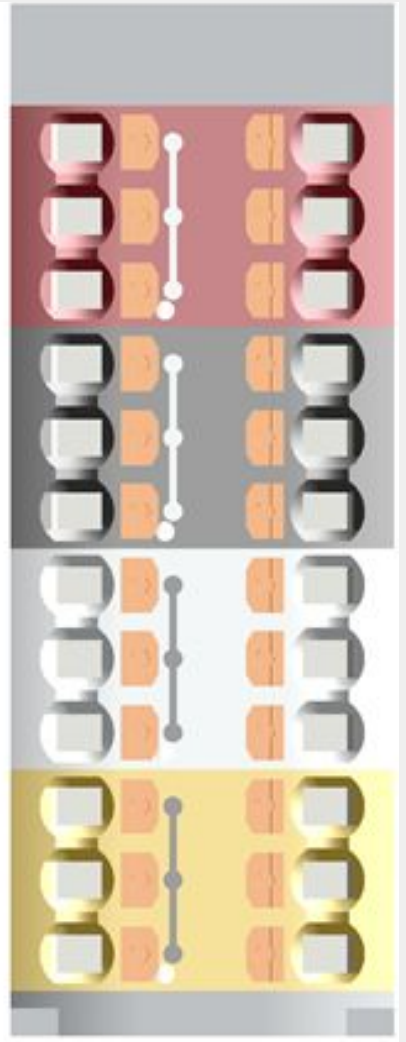
Module concept - Cabinet joint for ALL
Velbus® data cables, inside
and out of cabinet

RED = +15V Velbus® Power

Black = 0V Velbus® Power

WHITE = Velbus® CANBUS LOW

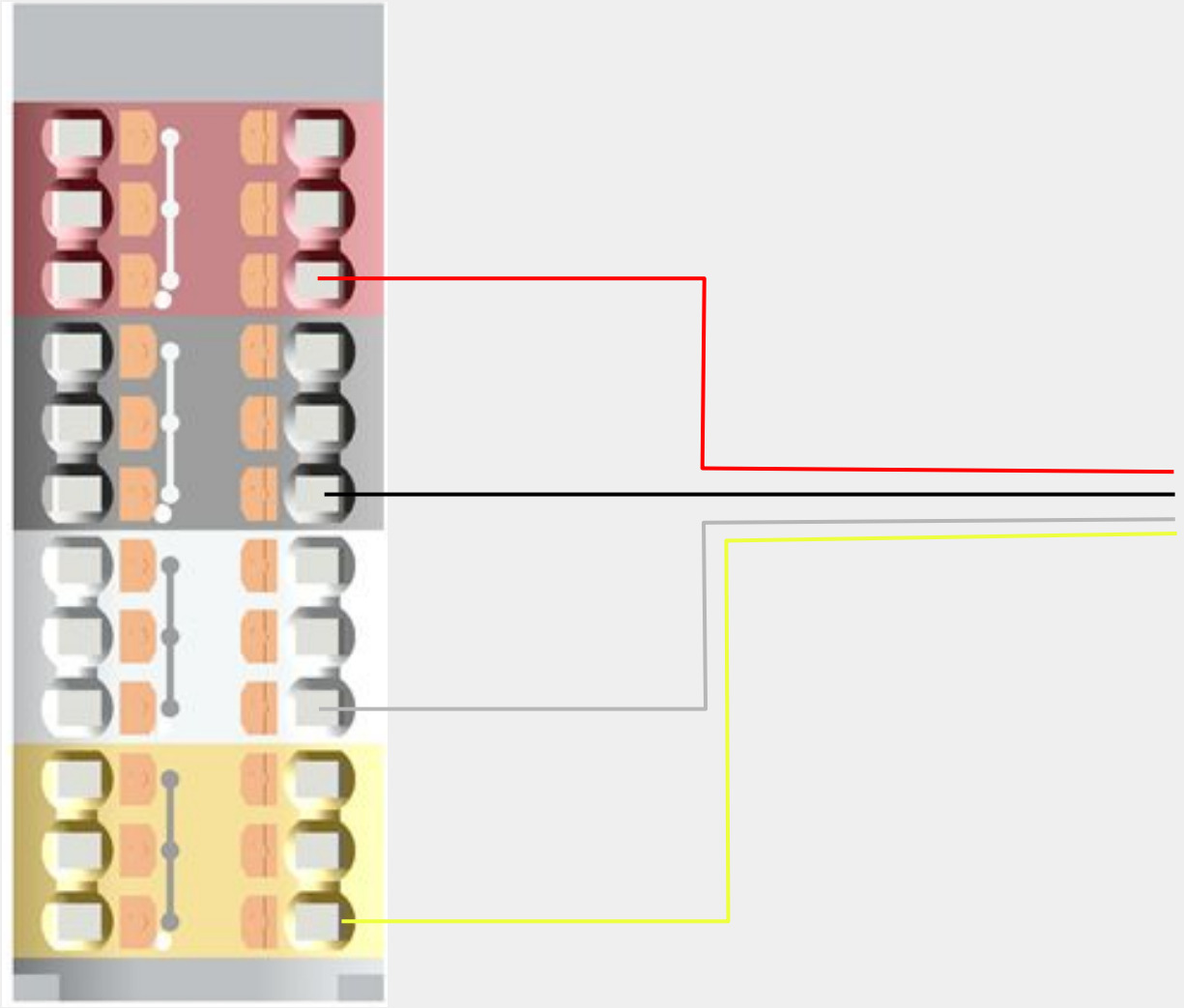
YELLOW = Velbus® CANBUS HIGH



Phoenix CANbus connector

Use a small tool (small terminal screwdriver etc) to push in the small Orange lever to open the terminal. Insert solid core or ferrule covered cable

Release Orange level to close the terminal and hold the cable



15V Power supply - VMBPSU-2

Module concept - Primary 15V Bus power.
Can be installed singularly or as a pair via a VMBPSUMNG-20

AC(L) = Mains Voltage Live IN

AC(N) = Mains Voltage Neutral IN

-Vo x 2 = 0V output

+Vo x 2 = 15V output

15V Power supply - VMBPSU-2

15V Bus voltage, to VMBPSUMNG-20 or directly to Phoenix connector

Mains supply voltage

15V Power supply manager - VMBPSUMNG-20

Module concept - To manage 2 x 15V power supplies for resilience

1- **= PSU #1 0V IN**

1+ **= PSU #1 15V IN**

2- **= PSU #2 0V IN**

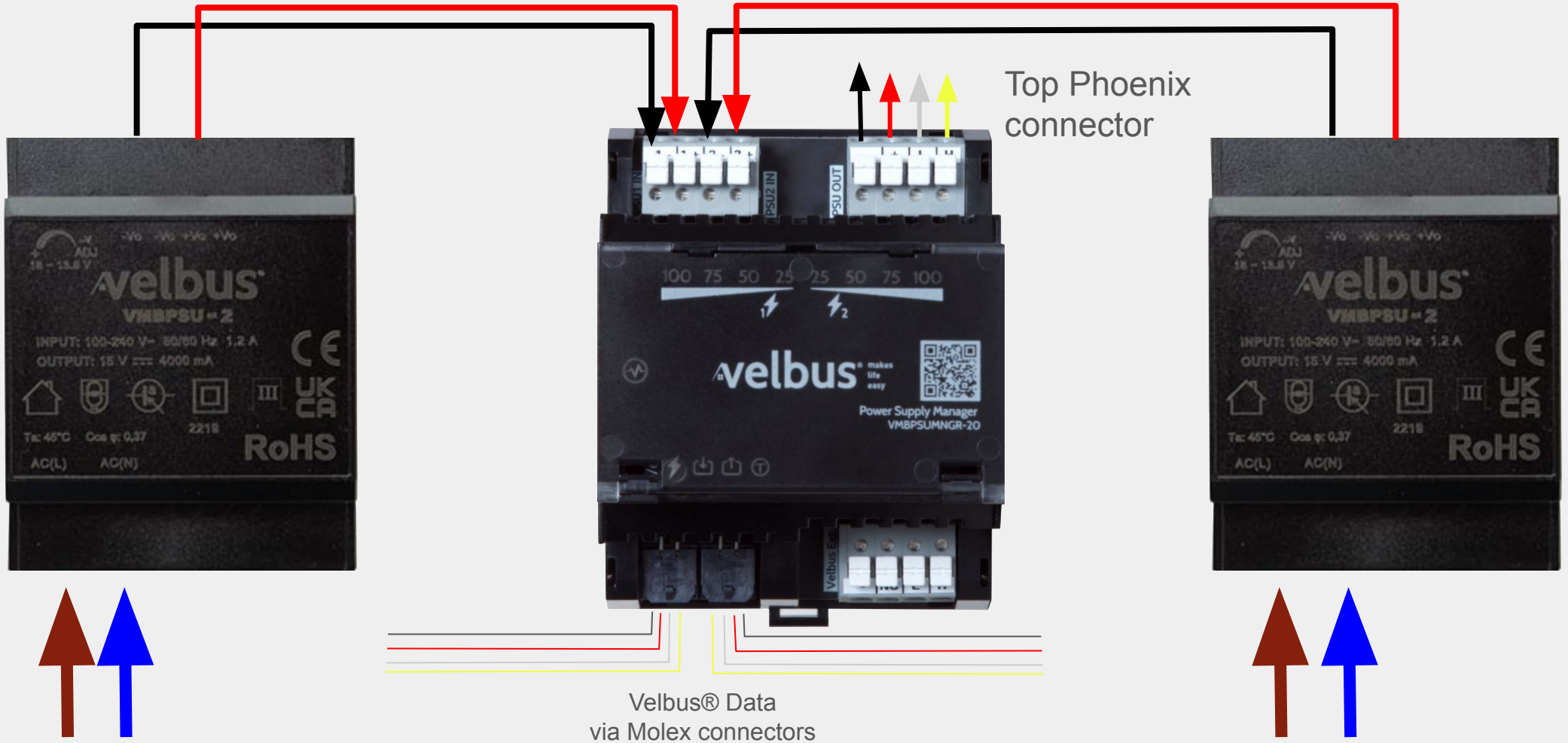
2+ **= PSU #2 15V IN**

-, +, L & H **= PSU Out BUS connection to Phoenix connector**

Bottom right hand side

-,nc,L&H = Connection **ONLY** to secondary cabinets - nc = No Connection for + voltage between cabinets

15V Power supply manager - VMBPSUMNG-20



VMB4RYLD & VMB4RYLD-10 & VMB4RYLD-20

Module concept - To provide four switched outputs of whatever voltage is connected at bottom right hand corner.

Lin x 2 = Voltage Live / +V IN - linked

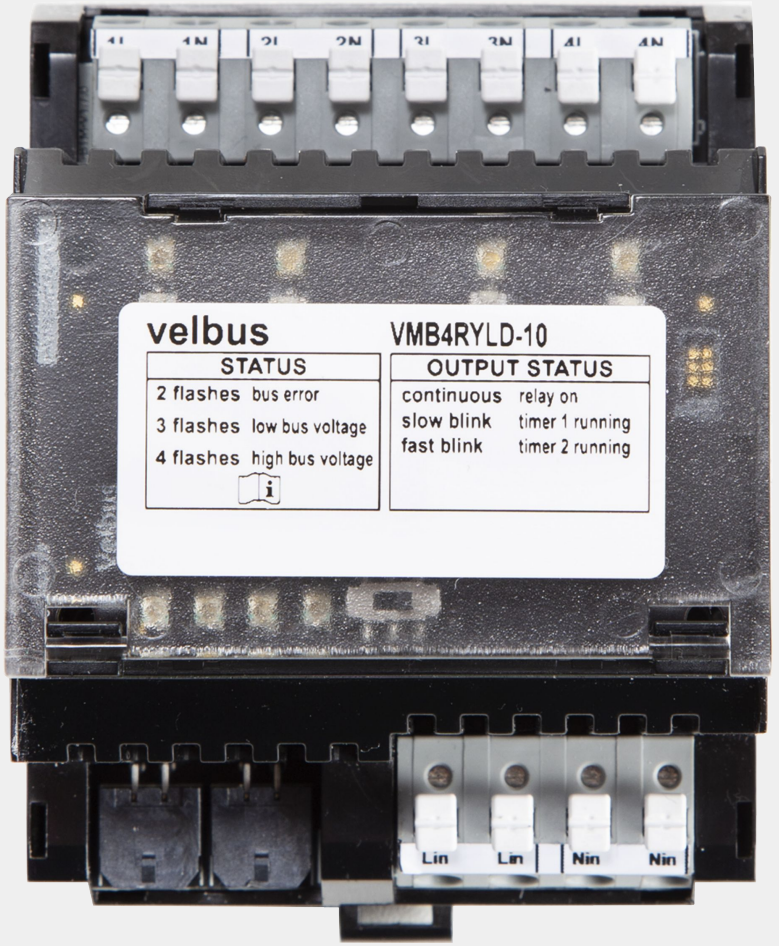
Nin x 2 = Voltage Neutral / 0V IN - linked

L1 & **N**1 = Switch output 1 - to device or terminal connection

L2 & **N**2 = Switch output 2 - to device or terminal connection

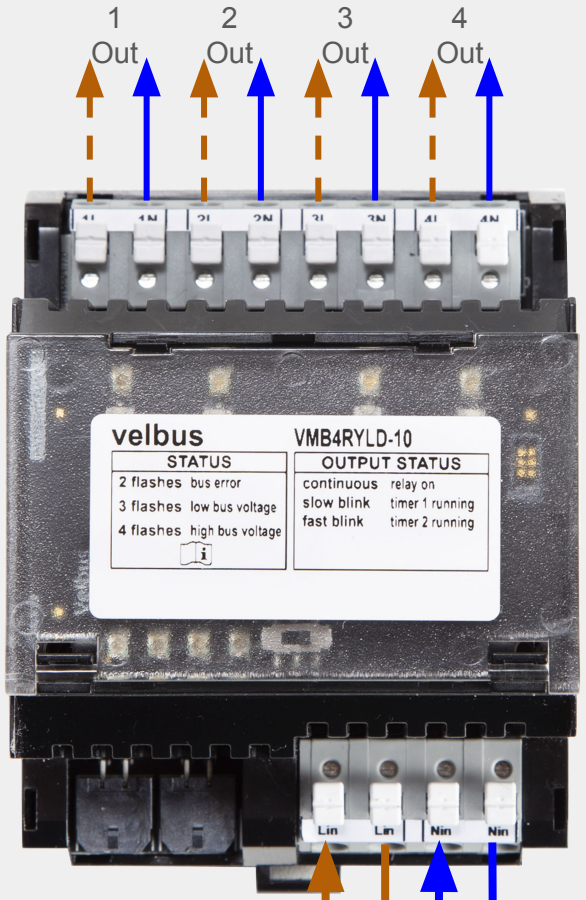
L3 & **N**3 = Switch output 3 - to device or terminal connection

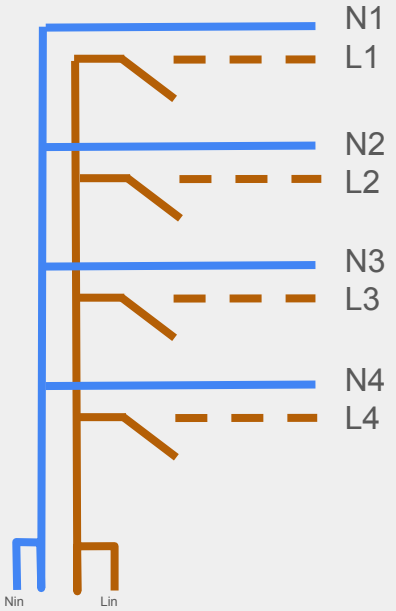
L4 & **N**4 = Switch output 1 - to device or terminal connection



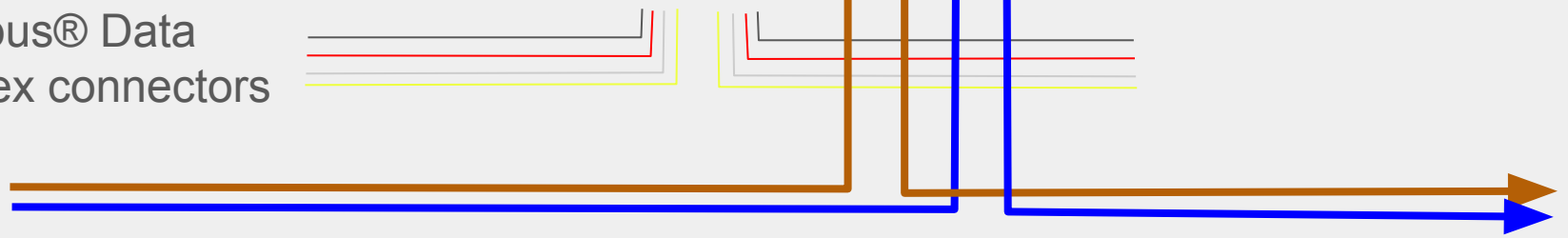
VMB4RYLD & VMB4RYLD-10 & VMB4RYLD-20

COMBINED LOAD
MAX 16A @ 220Vac
MAX 10A @ 12Vdc





Velbus® Data
via Molex connectors



Supply voltage IN and LINK

VMB4RYNO & VMB4RYNO-10 & VMB4RYNO-20

Module concept - To provide four switched outputs of whatever voltage is connected to each input.

1 x2 = Input 1 connection (with link out)

1’ = Switched output 1 to device or terminal

2 x2 = Input 2 connection (with link out)

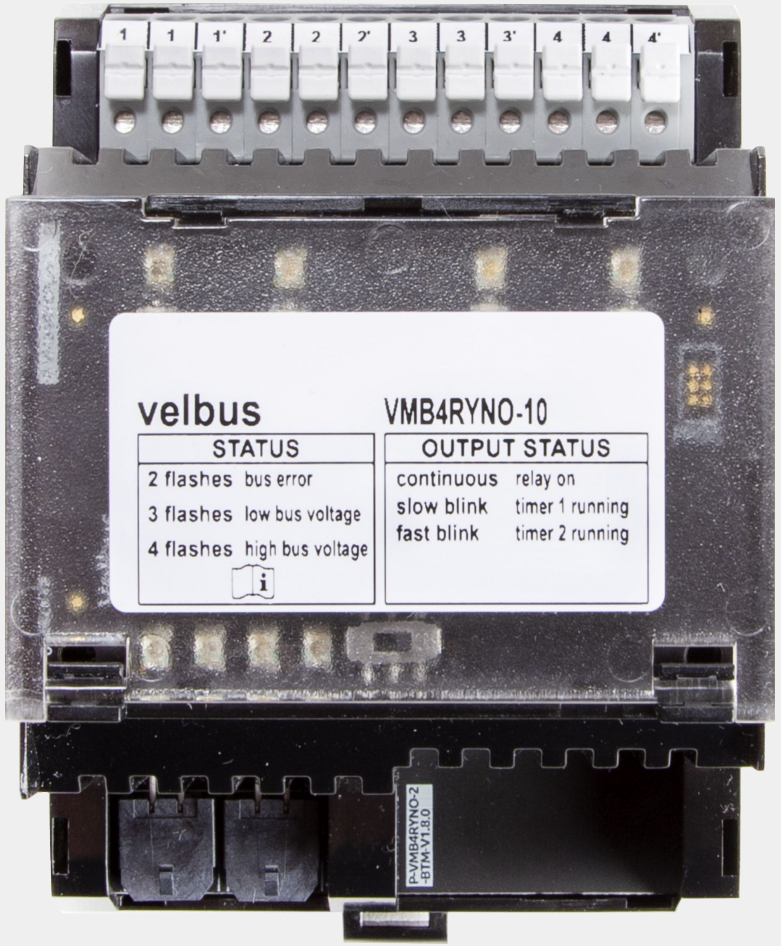
2’ = Switched output 2 to device or terminal

3 x2 = Input 3 connection (with link out)

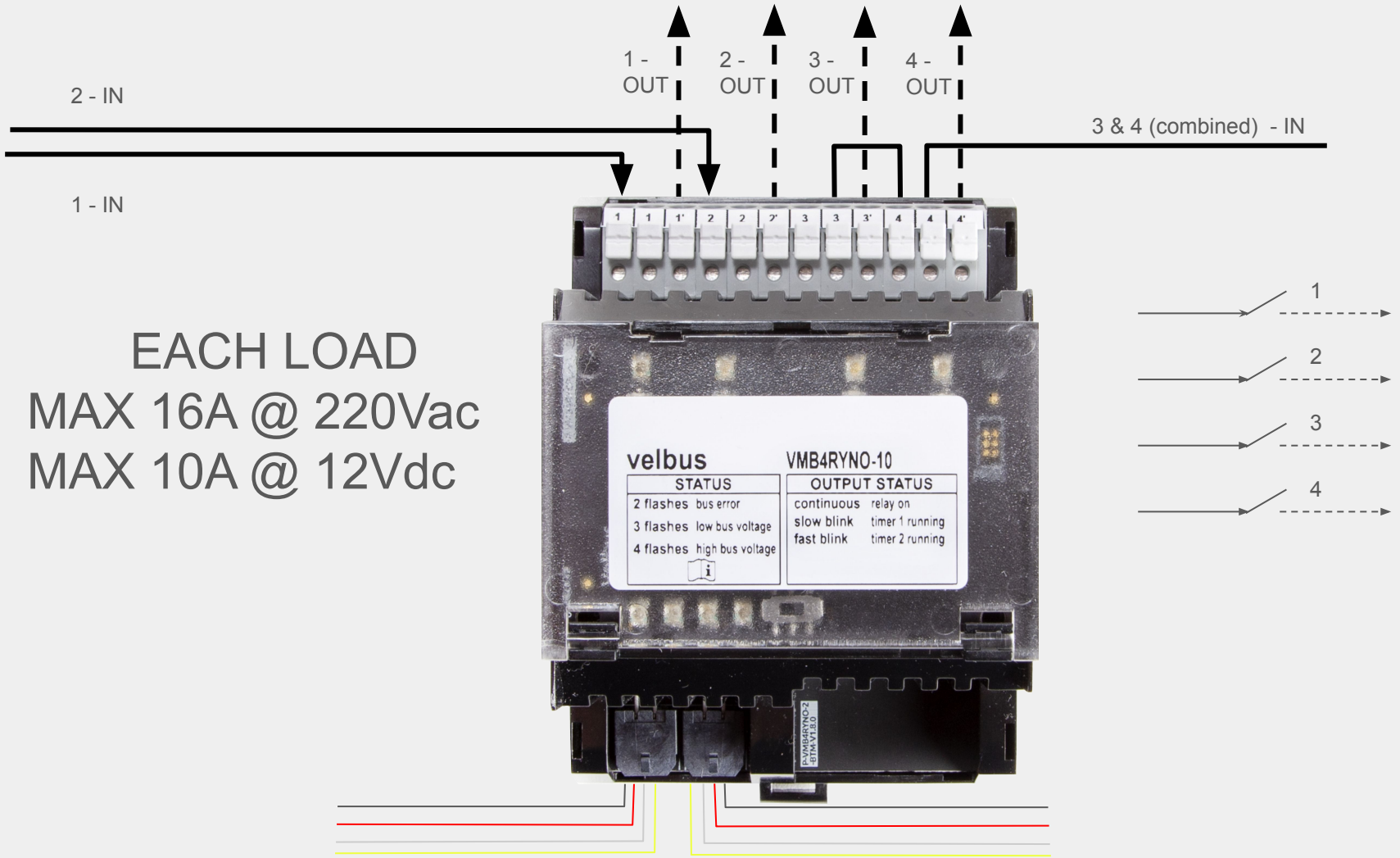
3’ = Switched output 1 to device or terminal

4 x2 = Input 4 connection (with link out)

4’ = Switched output 1 to device or terminal



VMB4RYNO & VMB4RYNO-10 & VMB4RYNO-20



EACH LOAD
MAX 16A @ 220Vac
MAX 10A @ 12Vdc

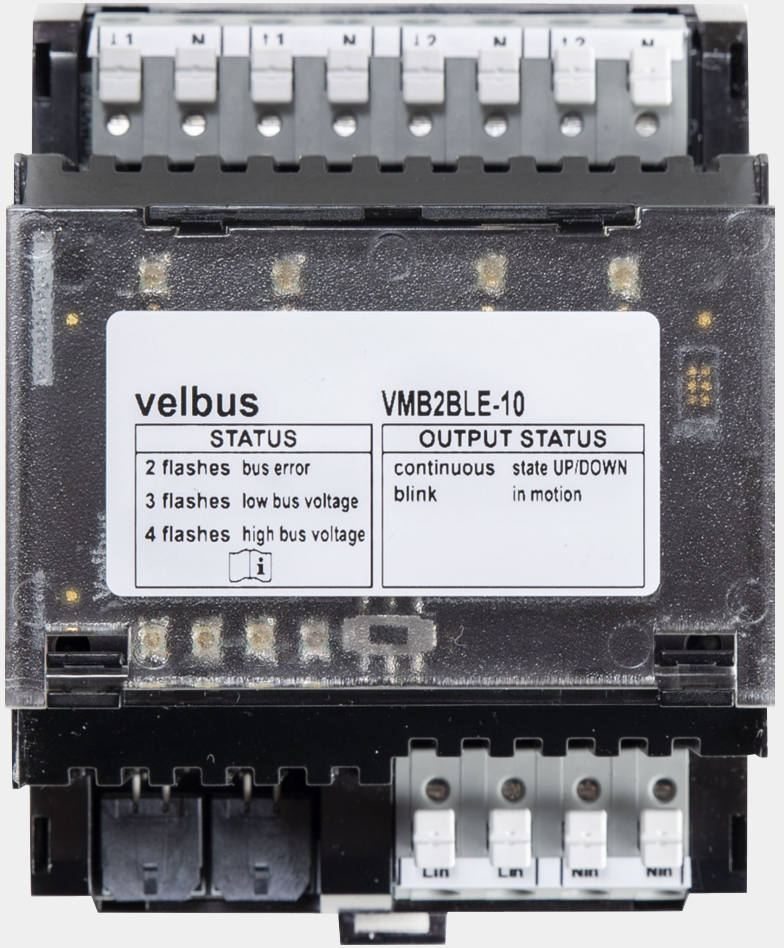
Velbus® Data
via Molex connectors

VMB2BLE, VMB2BLE-10 & VMB2BLE-20

Module concept - Mains voltage motor controller with 2 channels. Live for UP, Live for DOWN with Neutral

Lin x 2 = Voltage Live / +V IN - linked

Nin x 2 = Voltage Neutral / 0V IN - linked



↑1 = Live 1 UP voltage to device or terminal

N = Neutral 1 out to device or terminal

↓1 = Live 1 DOWN voltage to device or terminal

N = Neutral 1 out to device or terminal

↑2 = Live 2 UP voltage to device or terminal

N = Neutral 2 out to device or terminal

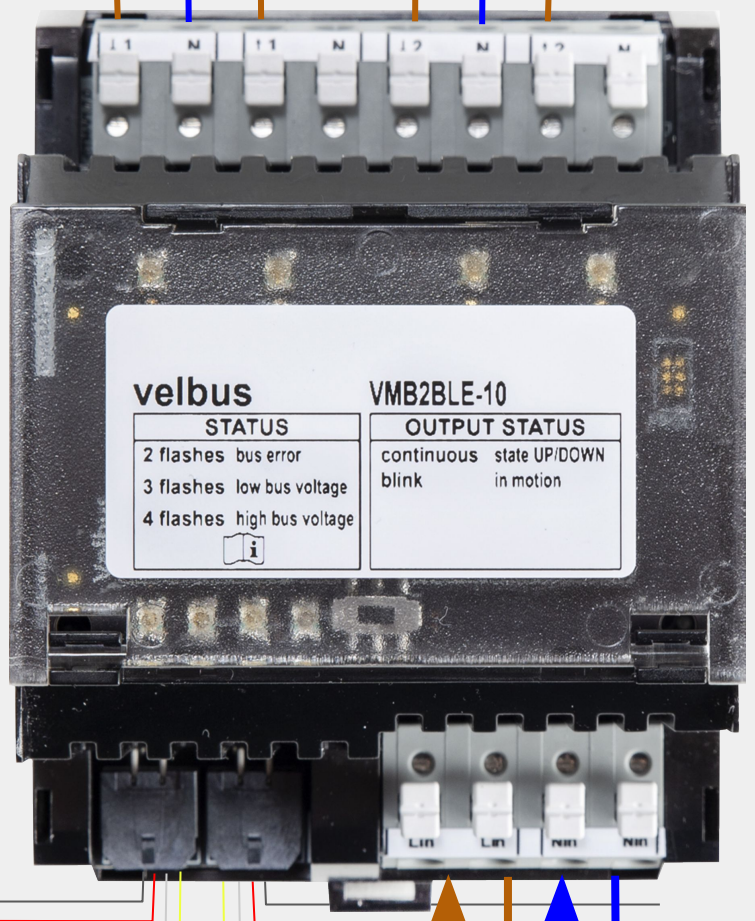
↓2 = Live 2 DOWN voltage to device or terminal

N = Neutral 2 out to device or terminal

VMB2BLE, VMB2BLE-10 & VMB2BLE-20

Blind / Motor #1
To Device or Termination

Blind / Motor #2
To Device or Termination



Velbus® Data
via Molex connectors

Supply voltage IN and LINK

VMBUSB-20

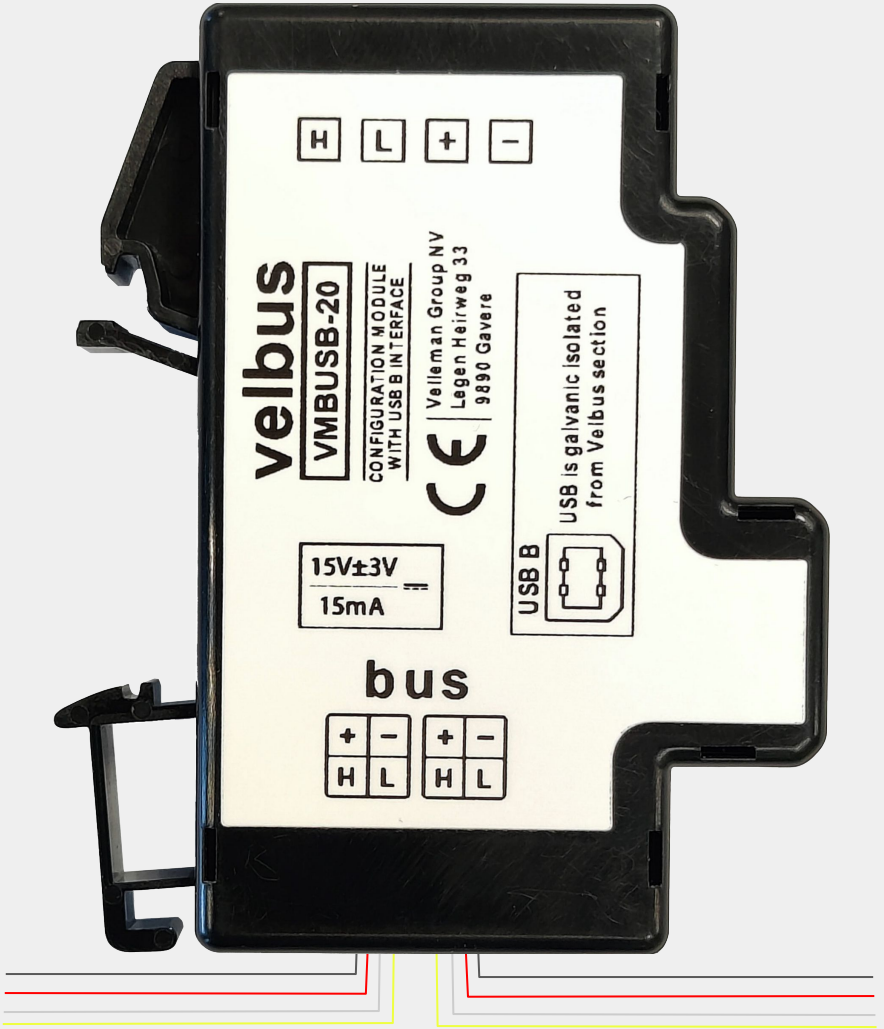
Module concept - USB Bus connection for configuration or mini-computer connection

H,L,+ & - = Wire connections for data bus. Not for connection to primary BUS power

2 x Molex connection

= Plug in connection to other DIN rail modules or Phoenix building bus cabling joint

VMBUSB-20



Velbus® Data
via Molex connectors

Molex Interconnecting cables

Sole purpose is to connect DIN rail modules

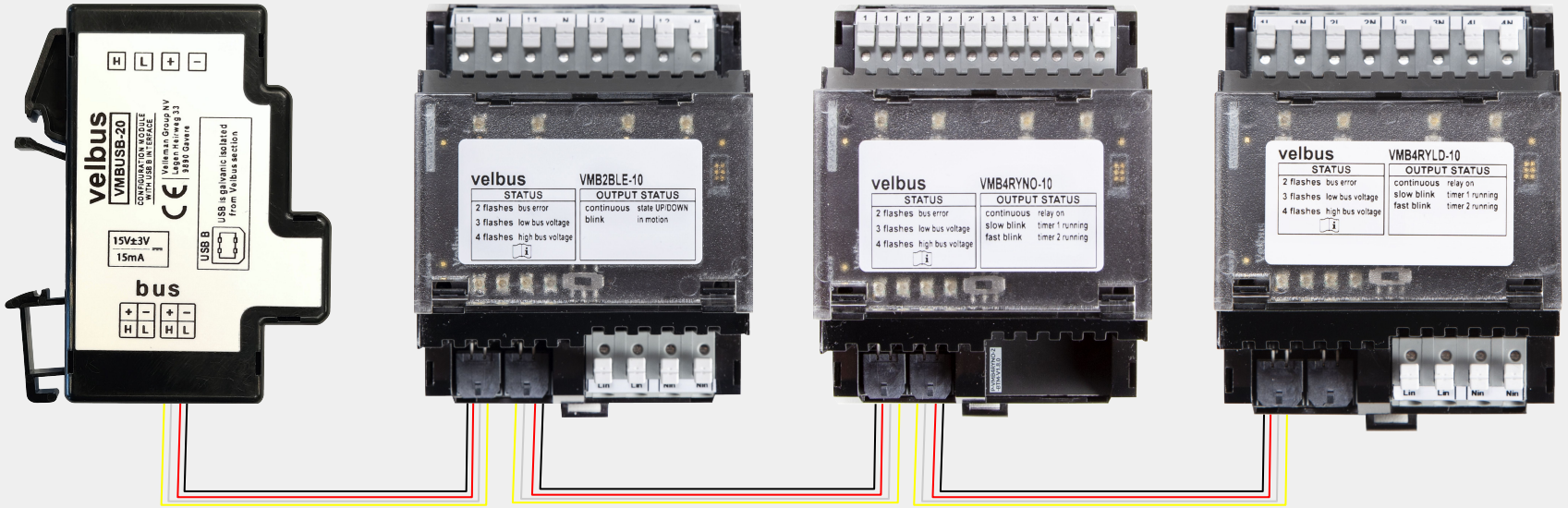
Available in three sizes

20cm

40cm

150cm

Molex Interconnecting cables



Velbus® Data
via Molex connectors

VMB8DC-20

Module concept - 8 channel 0 to 10Vdc controller.

For driving :

Mains Dimmers

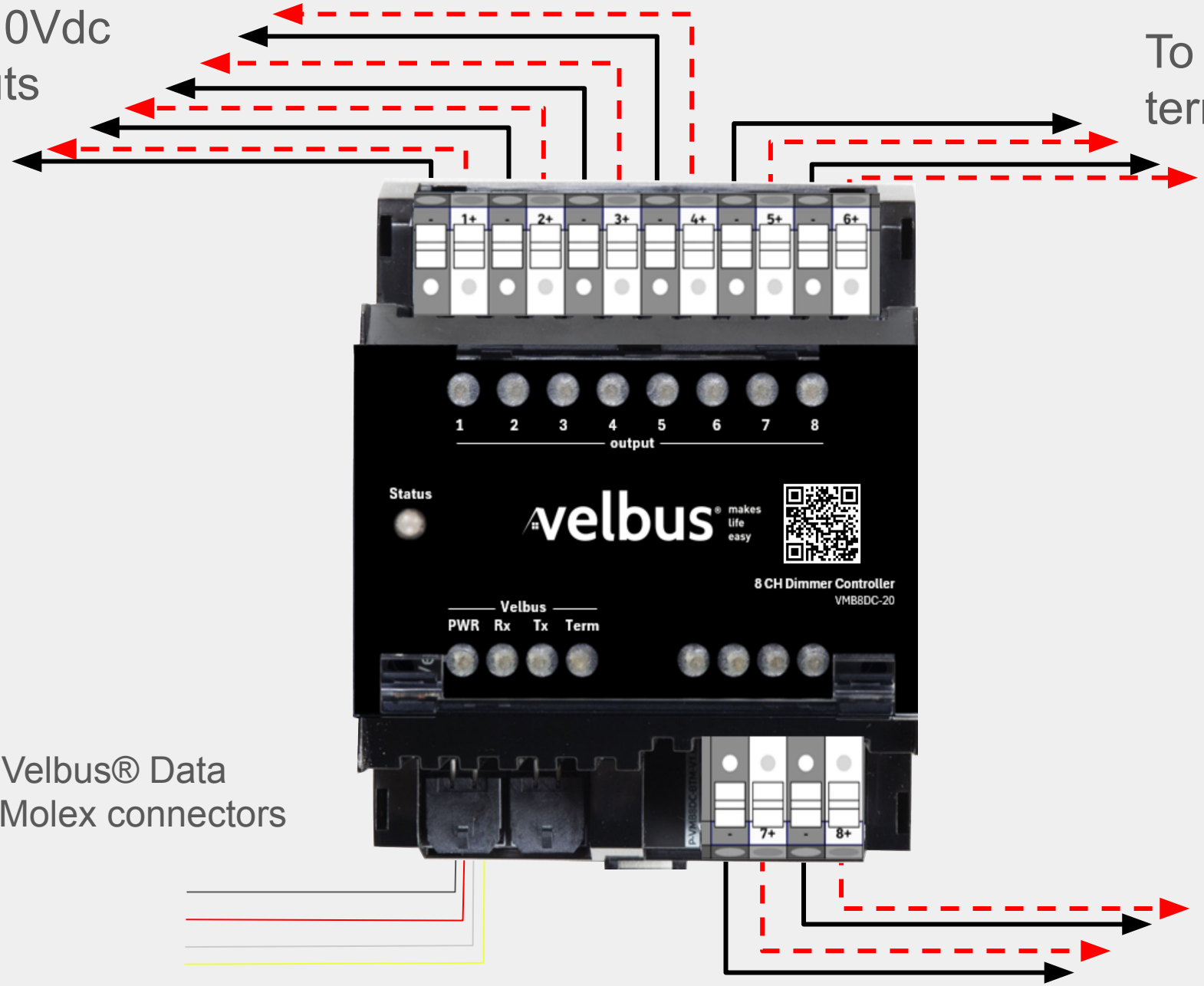
PWM Dimmers

Linear actuators

Fan Coil Units

8 x 0V and 0~10V output pairs

VMB8DC-20


0 to 10Vdc outputs
To device or termination
1+
2+
3+
4+
5+
6+
7+
8+
1 2 3 4 5 6 7 8
output
Status
velbus makes life easy
8 CH Dimmer Controller
VMB8DC-20
Velbus
PWR Rx Tx Term
Velbus® Data via Molex connectors

Finder 15.11.9.220.0400 - Mains Dimmer

Module concept - Provide mains dimming in a single channel format.

Support for, Leading edge and Trailing edge dimming

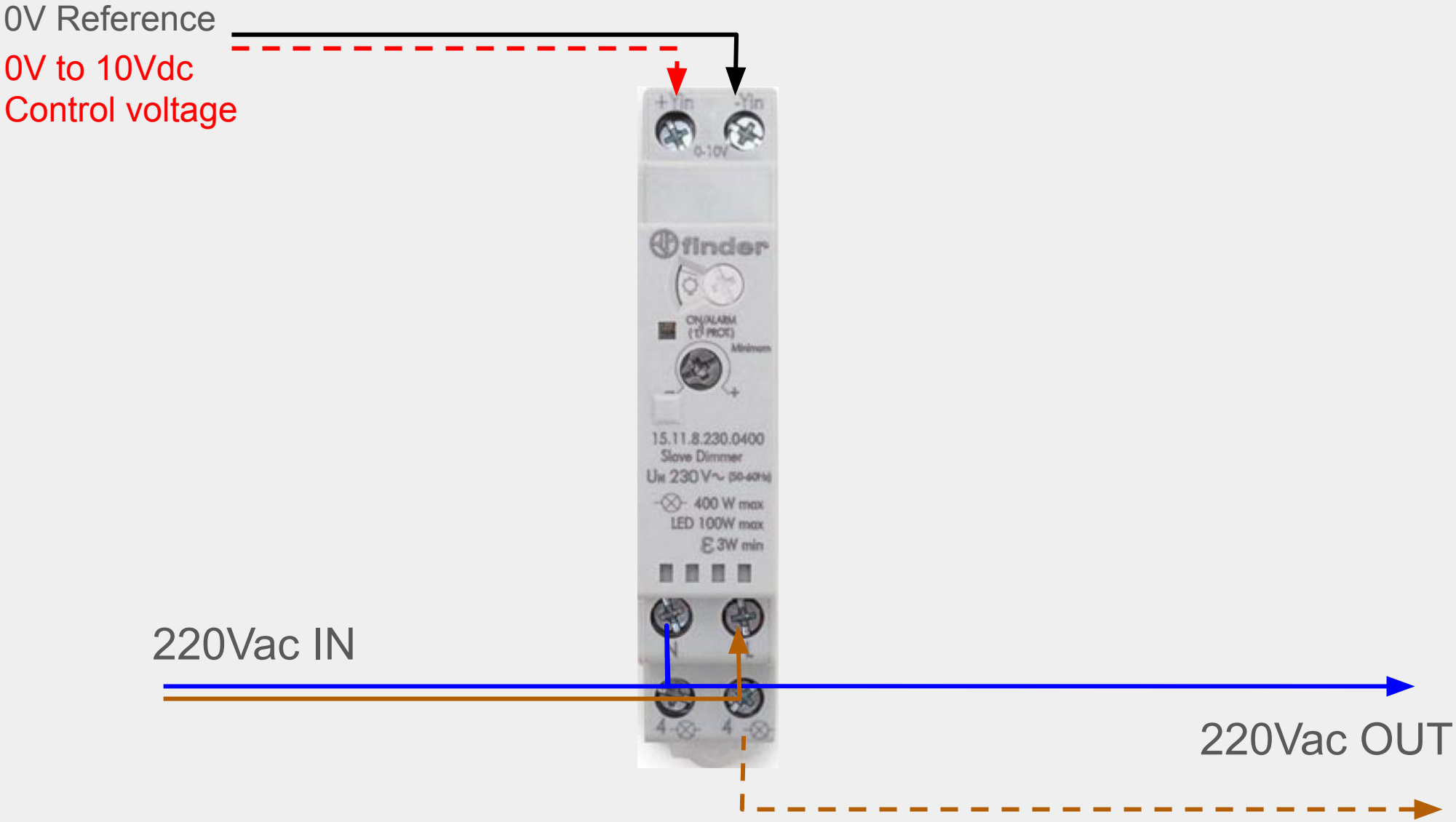
Mains voltage in and out on the bottom

0v reference and 0~10Vdc control input on the top

To be controlled by;

- VMB8DC-20
- VMB2DC-20
- VMB4DC

Finder 15.11.9.220.0400 - Mains Dimmer

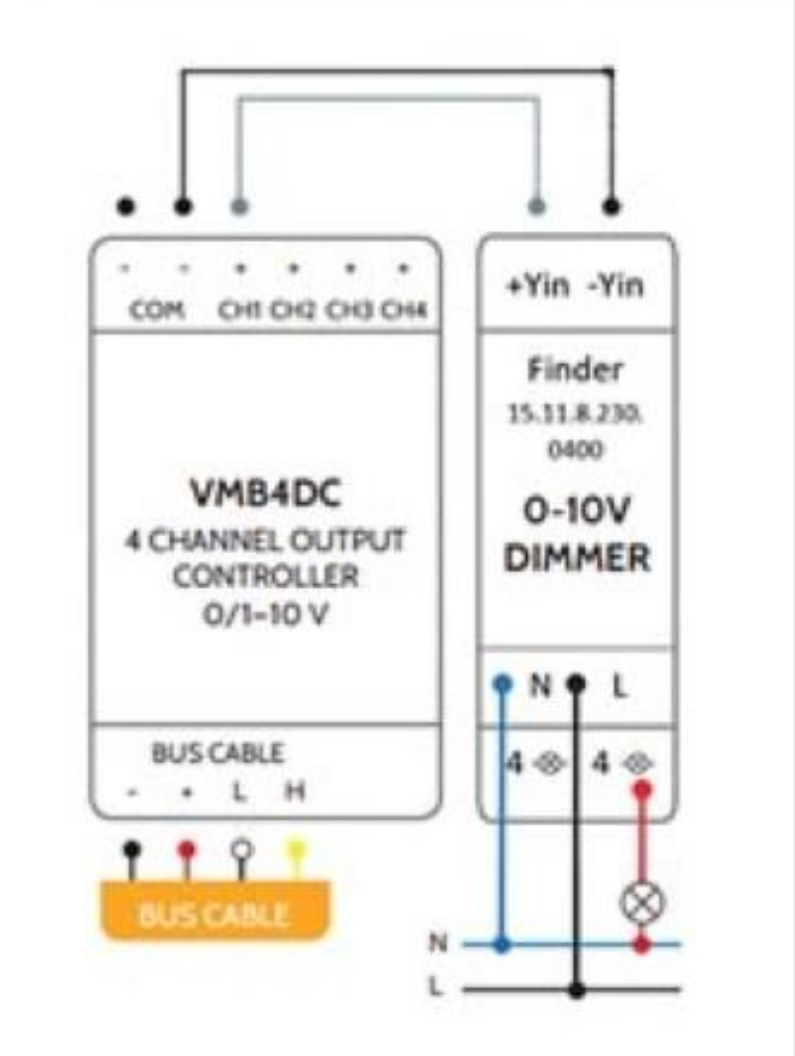


Fin15.11 with VMB8DC-20

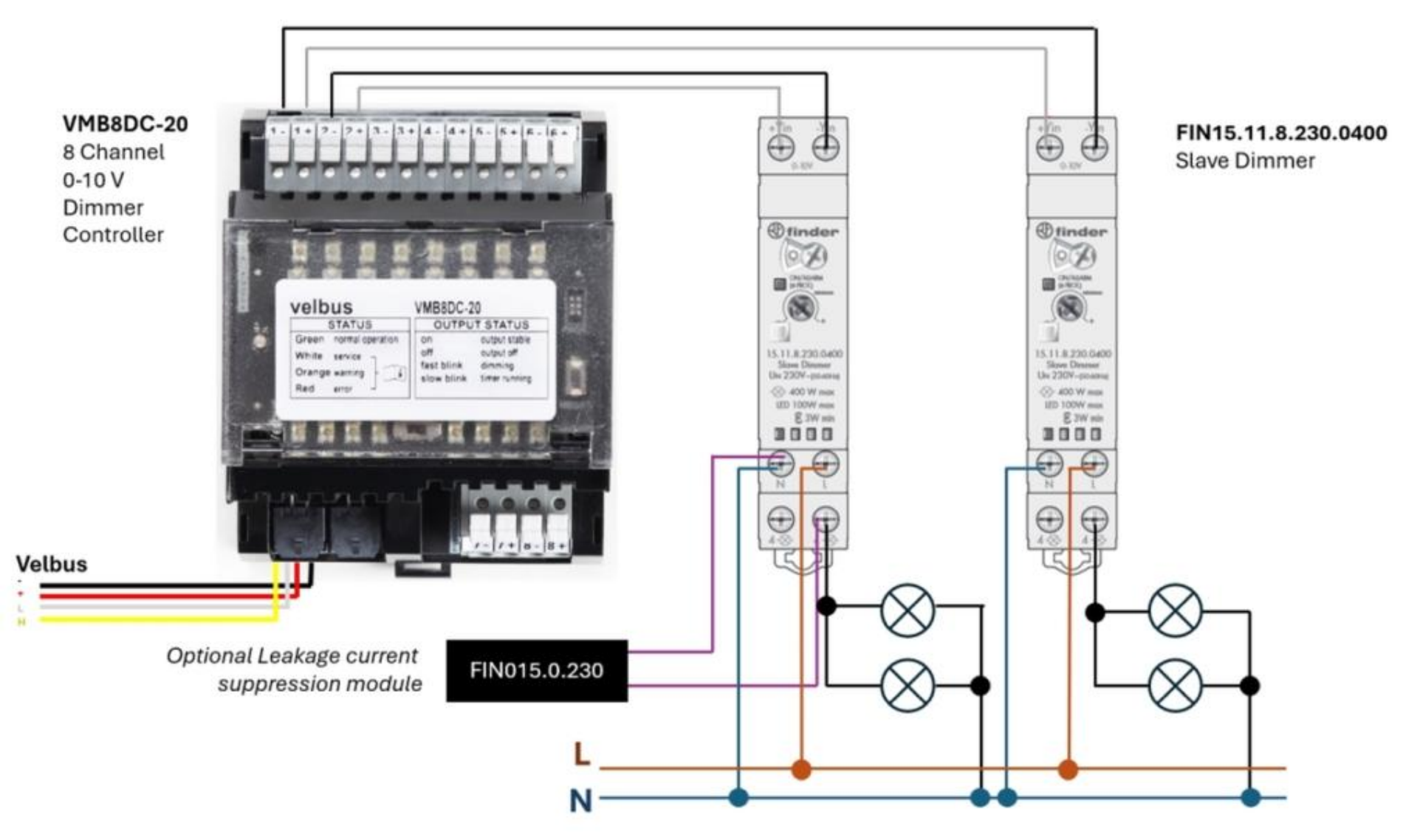
Module combination concept -

Multiples of Finder dimmers are controlled by a single multi-channel Velbus® 10V controller

Although more complex to install than a combined unit, should the dimmer part ever fail, it should take a few minutes to replace and NOT require any re-programming



Fin15.11 with VMB8DC-20



VMB4LEDPWM-20

Module combination concept -

Multi function ELV Dimmer module

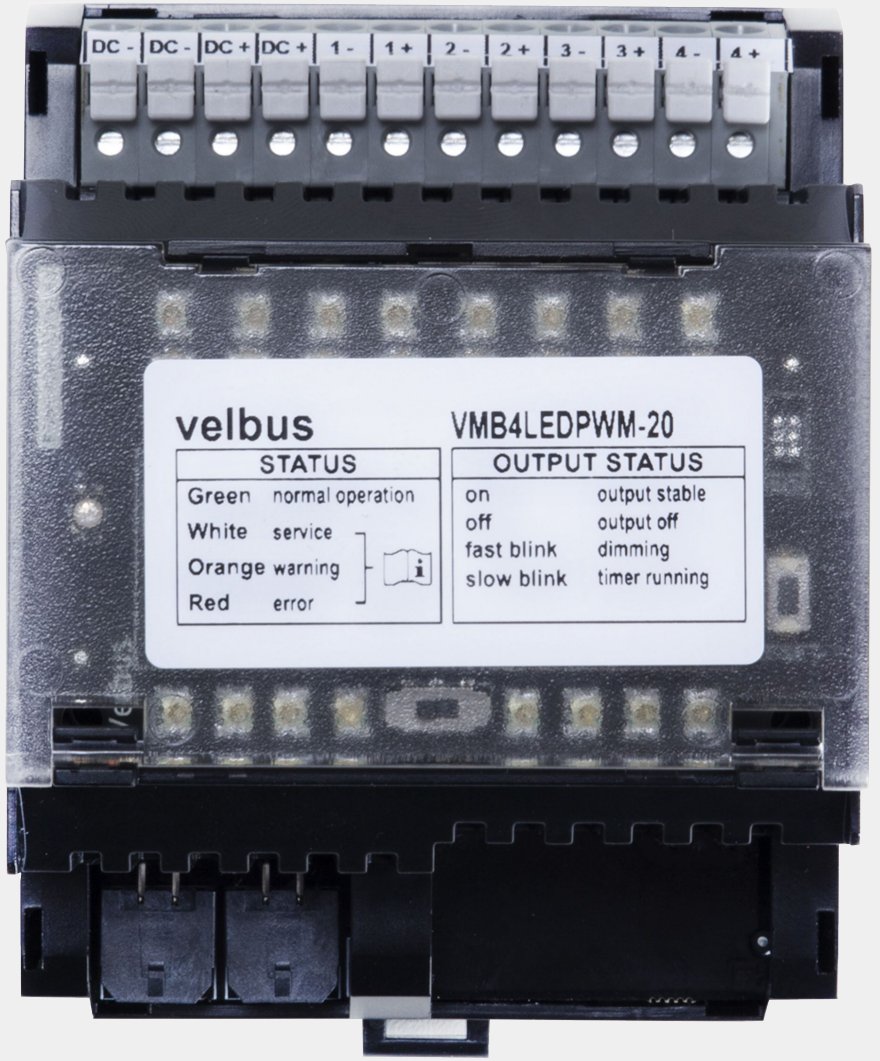
Provides 500HZ PWM dimming of 4 12Vdc or 24Vdc LED fixtures

Configurable as:

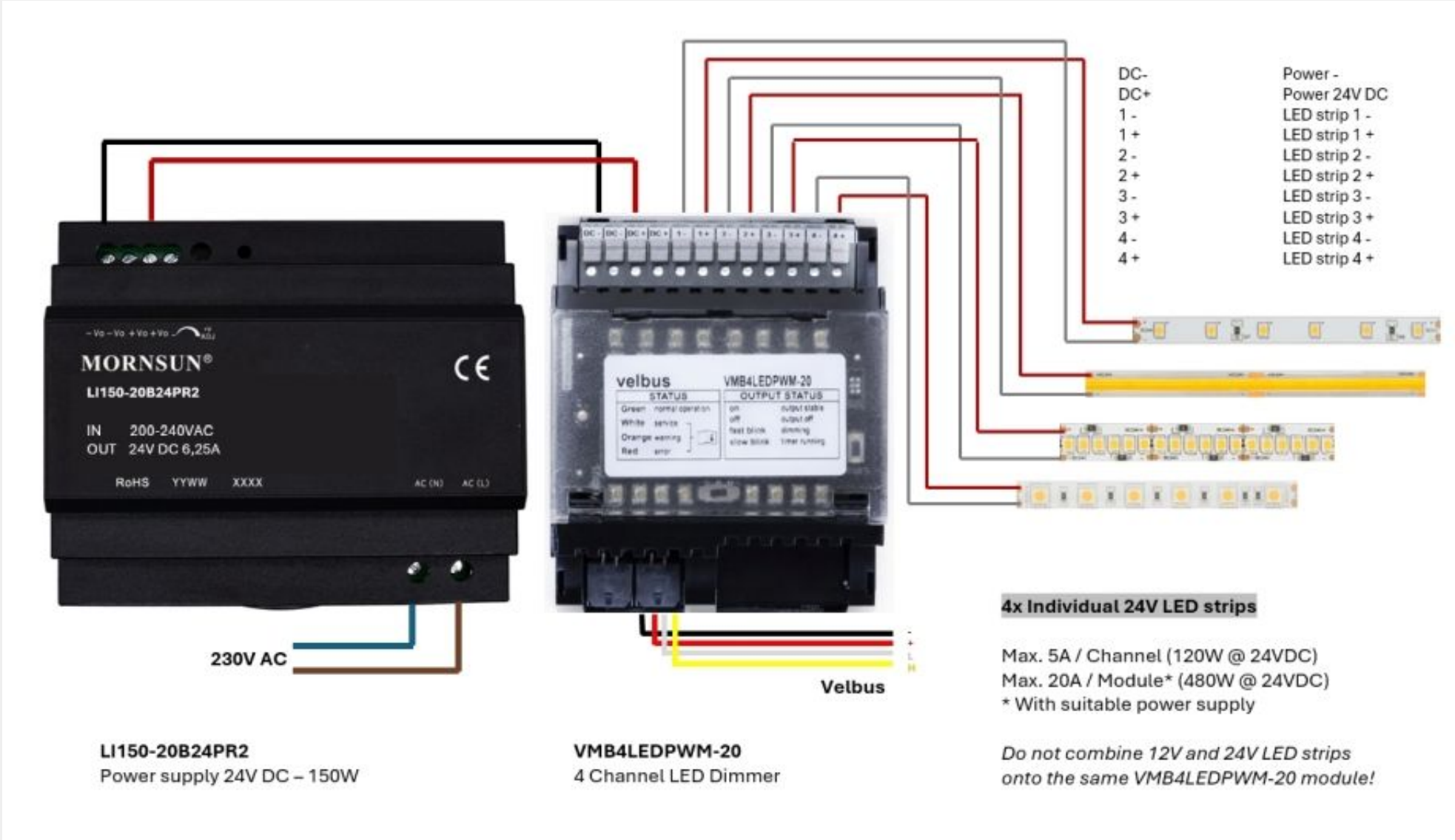
4 x Single colour

2 x Tunable Colour

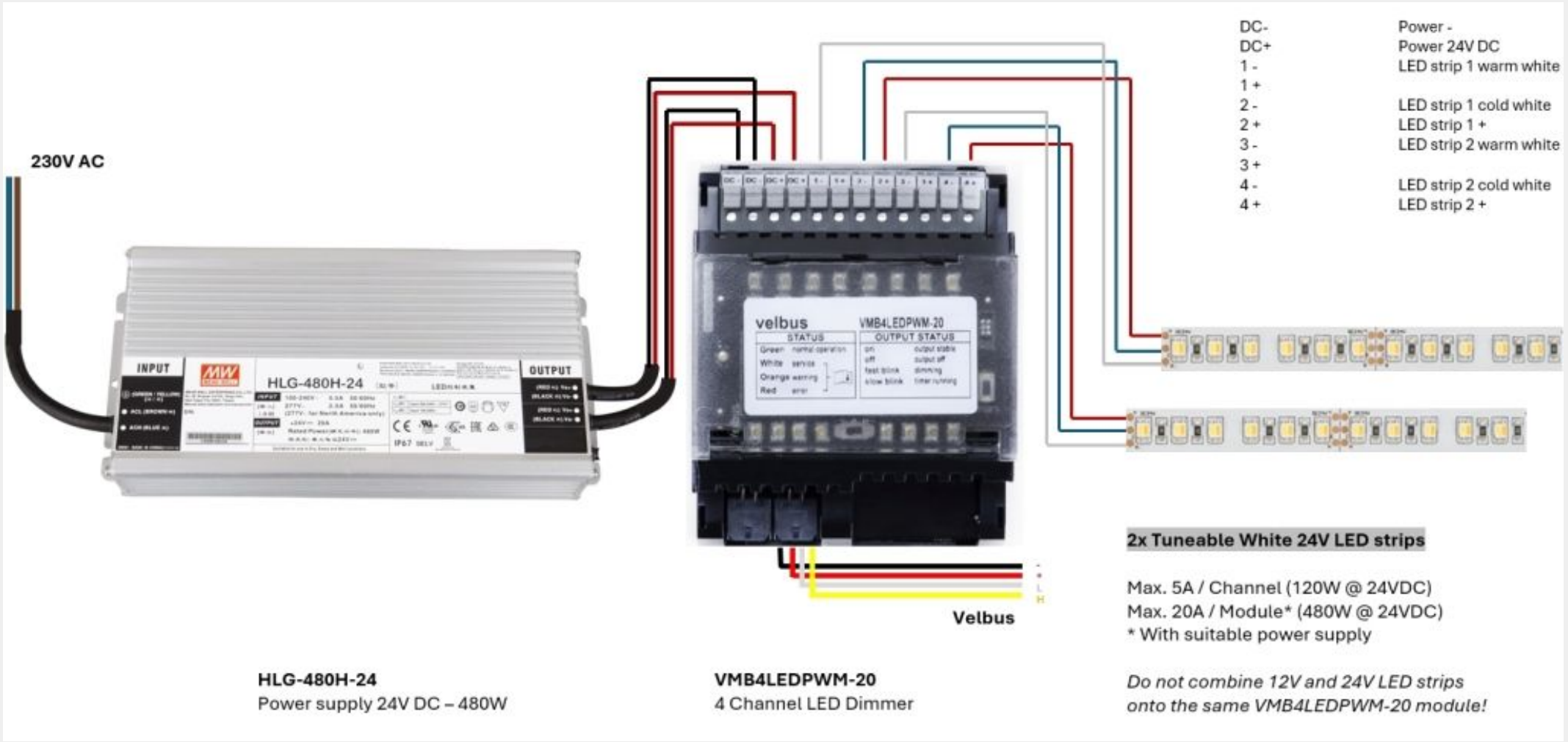
1 x RGBW



VMB4LEDPWM-20 - 4 Single circuits



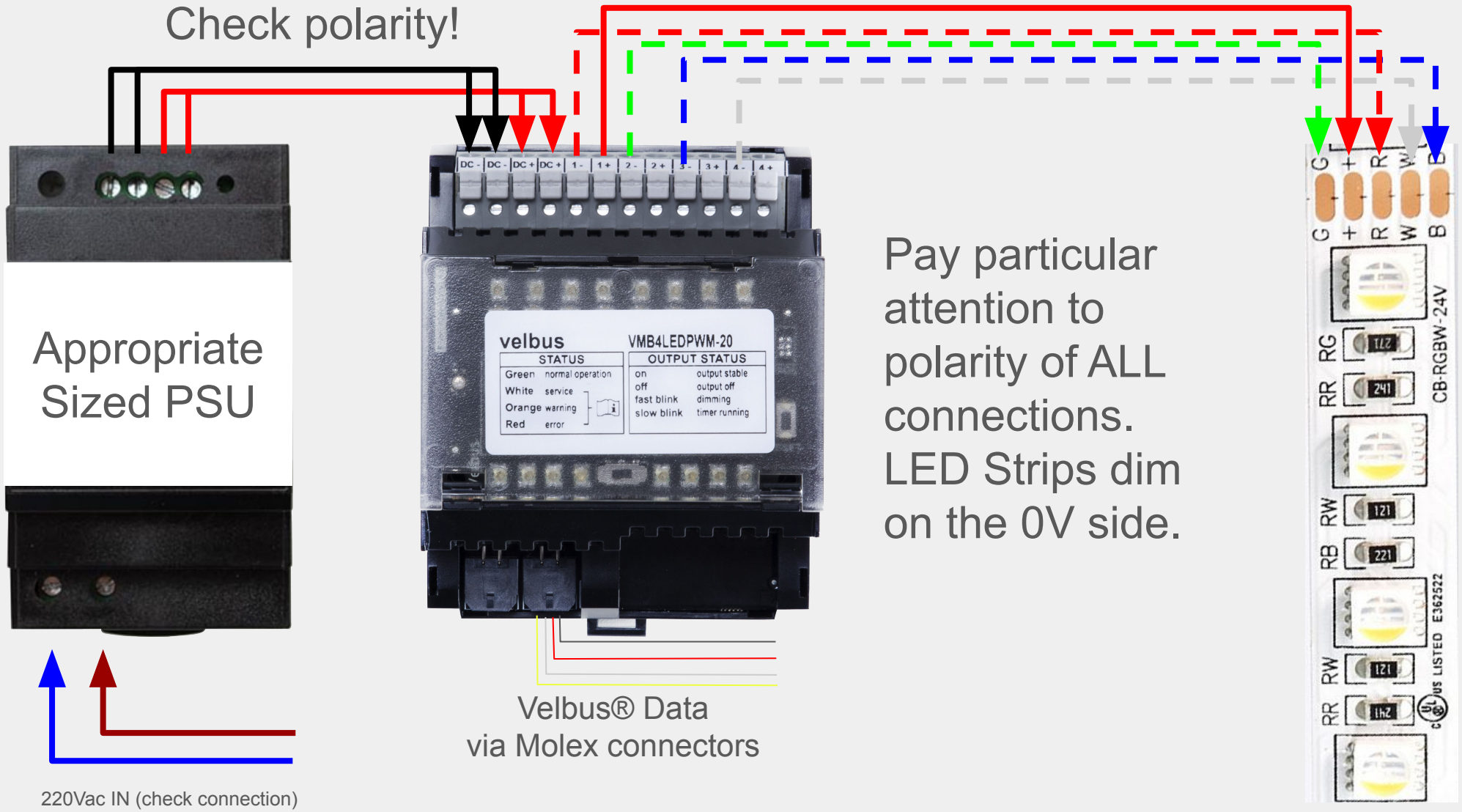
VMB4LEDPWM-20 - 2 Tunable circuits



HLG-480H-24
Power supply 24V DC – 480W

VMB4LEDPWM-20
4 Channel LED Dimmer

VMB4LEDPWM-20 - 1 x RGBW



Isolating power to ELV Dimmers

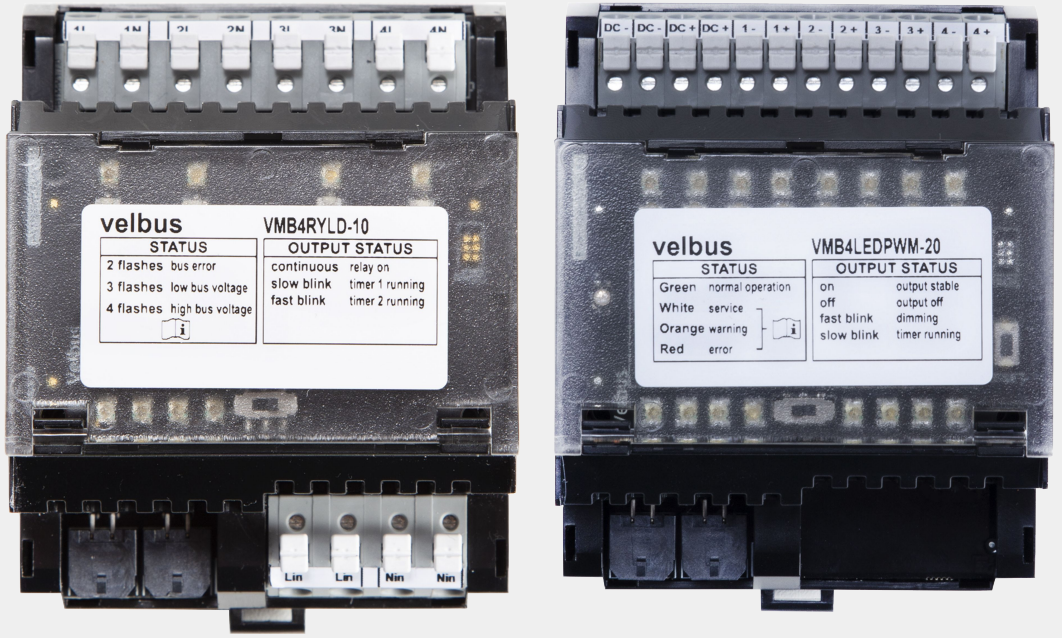
Module combination concept -

To power down LED Strip power supplies when not in use.

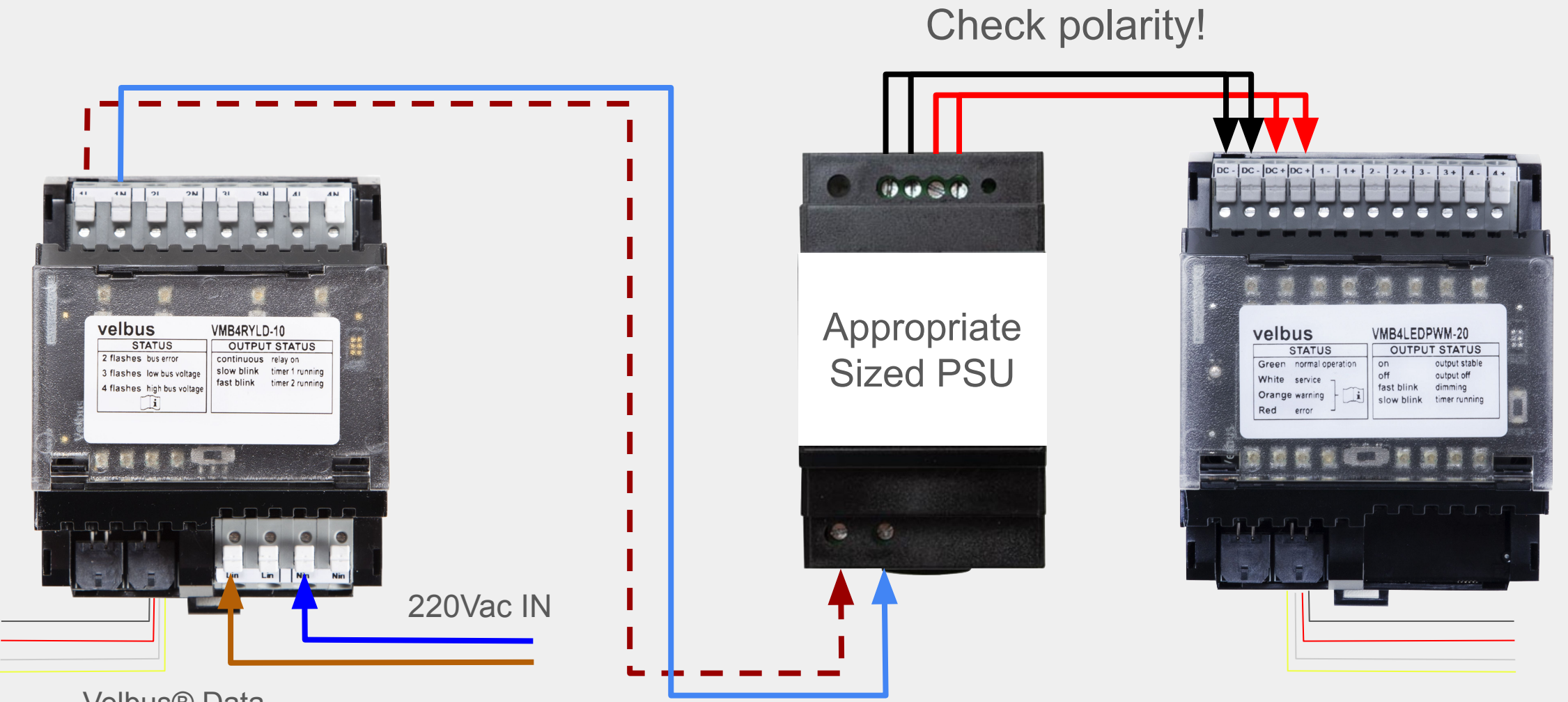
To extend life of PSU and Dimmer components

Relay channel power up ELV PSU on demand,

via a [0104 Follow action]



Isolating power to ELV Dimmers



Velbus® Data
via Molex connectors

Velbus® Data
via Molex connectors

VMB8IN-20

Module concept - 8 channel Input device

- Accepting;
- Momentary / switch contacts
- 0V Pulse contacts

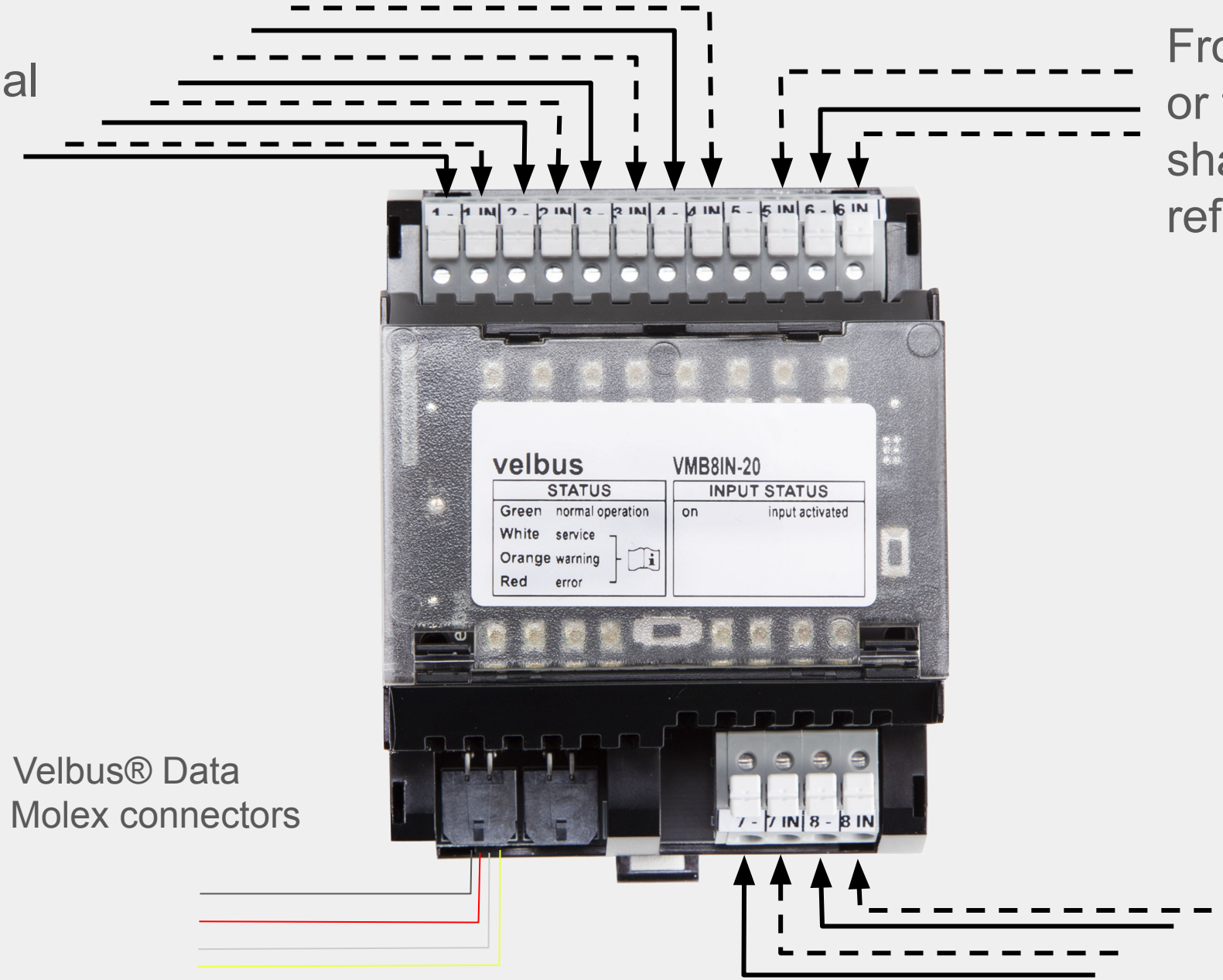
- Future capabilities (firmware upgrade)
- 2Kohm
- 0~10Vdc

8 x 0V contact pairs

VMB8IN-20

0v contact
Inputs,
individual
feeds

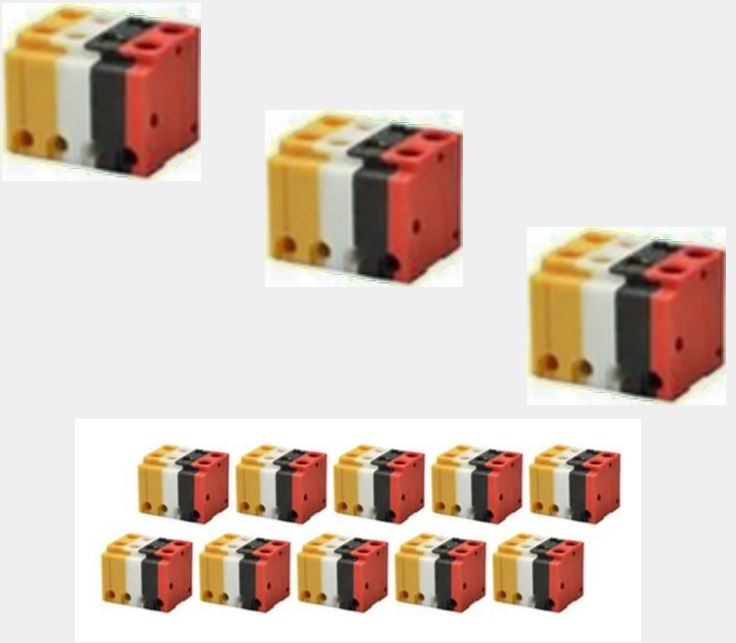
From device
or termination,
sharing a 0V
reference



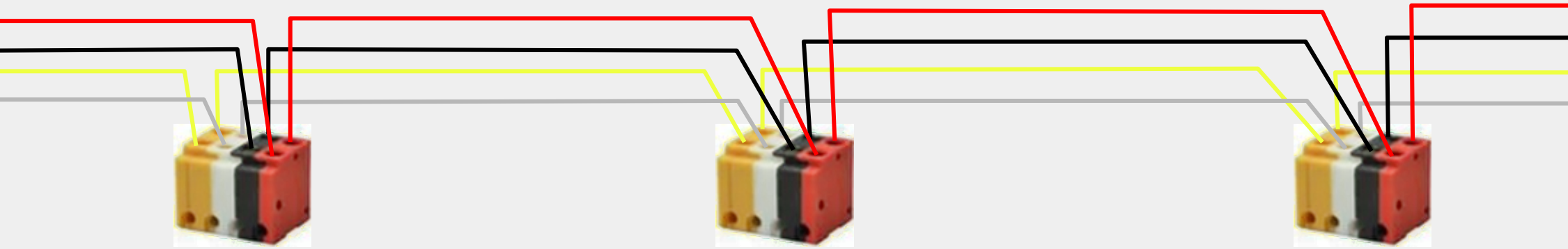
Velbus® Data
via Molex connectors

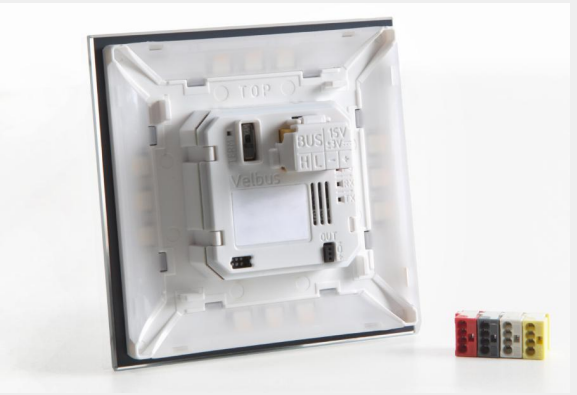
Switches & Sensor connection

Module concept - Unified 4 pin connector for Glass Panel “switches”, PIRs and single channel relay module



Switches & Sensor connection





VMB1RYS-20

Module concept - Single channel

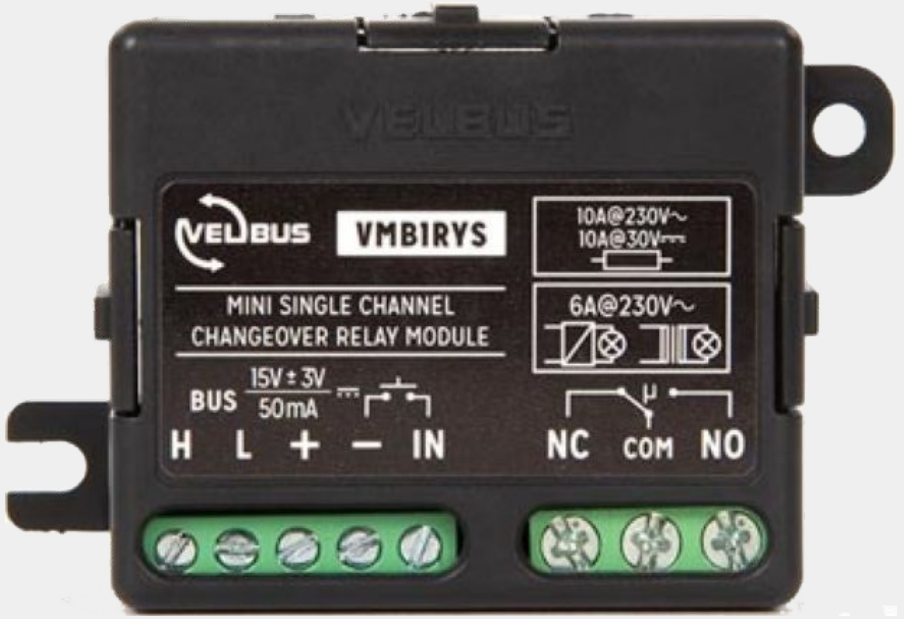
Input and output device for deployment within or next to final load

Resistive Load = 10Amp @ 230Vac

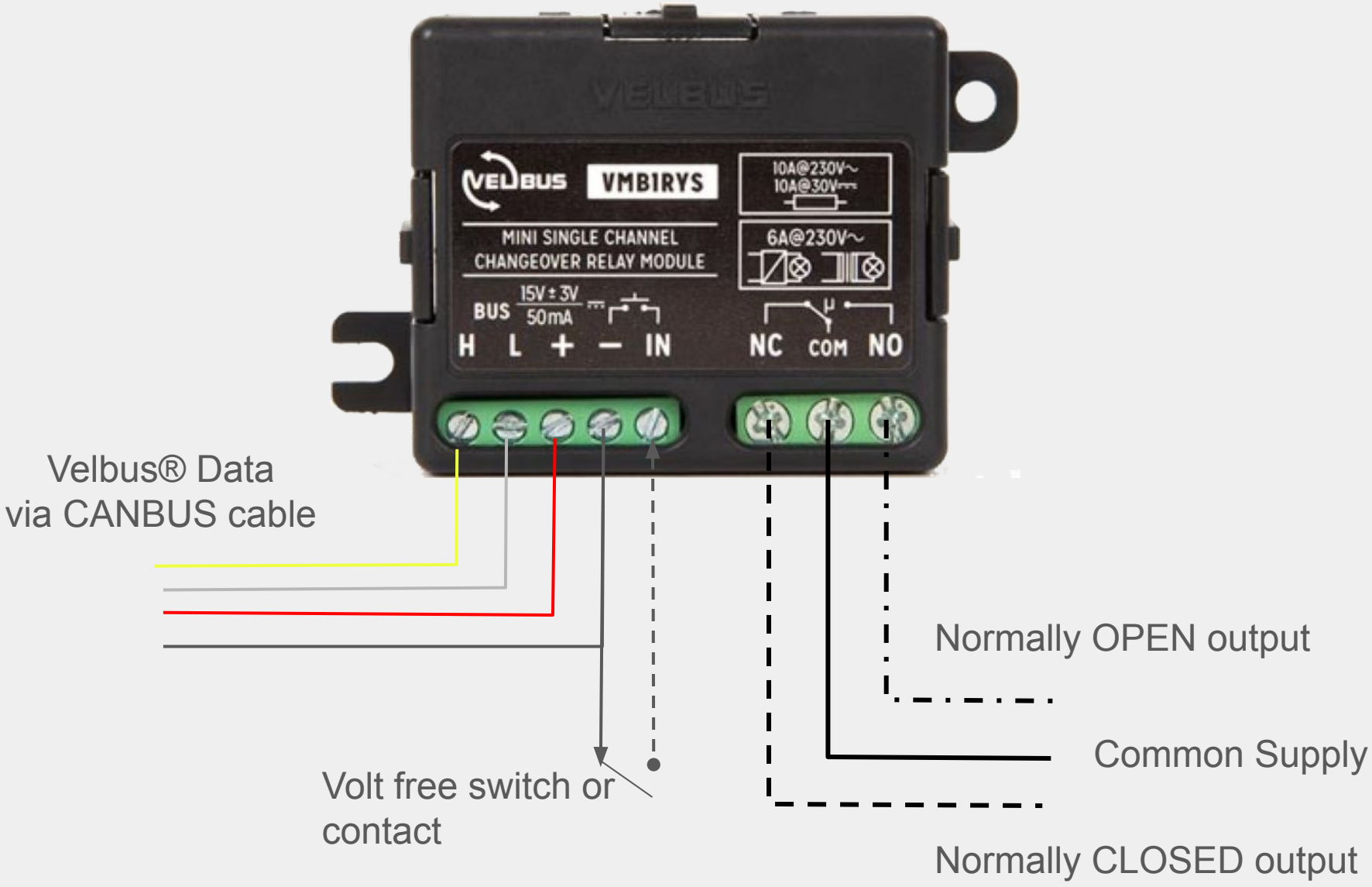
or 10Amp @ 30Vdc

Inductive Load = 6Amp @ 230Vac

0V input connection



VMB1RYS-20


VELBUS
VMB1RYS
MINI SINGLE CHANNEL
CHANGEOVER RELAY MODULE
BUS 15V ± 3V 50mA
H L + − IN
10A@230V~
10A@30V⎓
6A@230V~
NC COM NO
Velbus® Data
via CANBUS cable
Volt free switch or
contact
Normally OPEN output
Common Supply
Normally CLOSED output