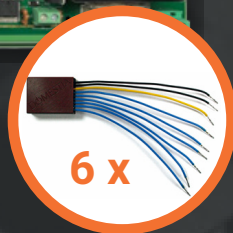
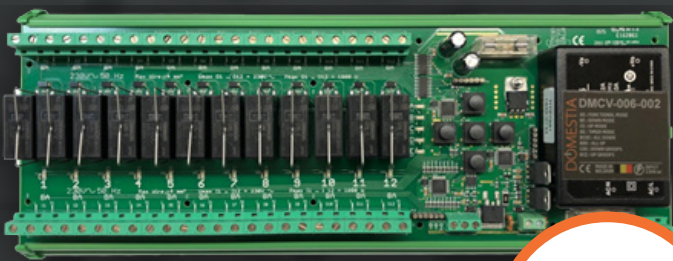




USERS MANUAL

DKV-006-002 | SHUTTER KIT



www.domestia.be



FIGURE A - DMCV-006-002 card

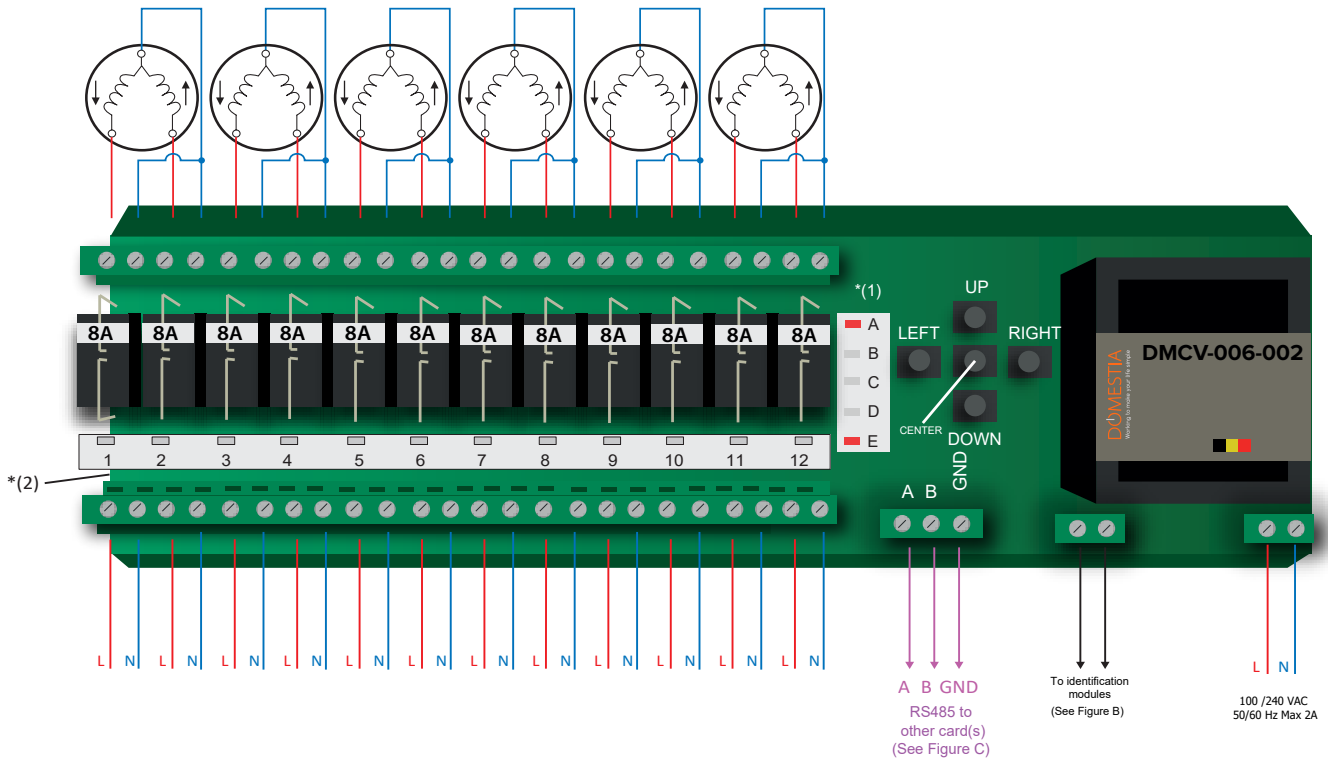


FIGURE B - Module DMI-006-001

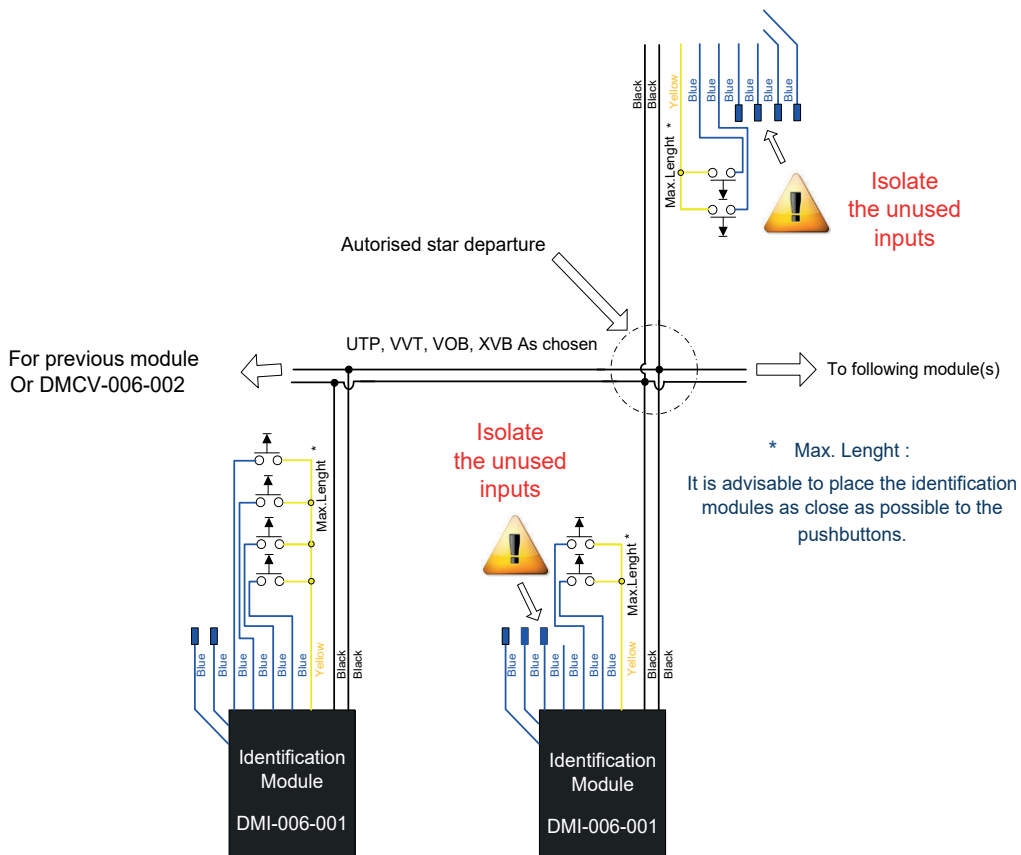
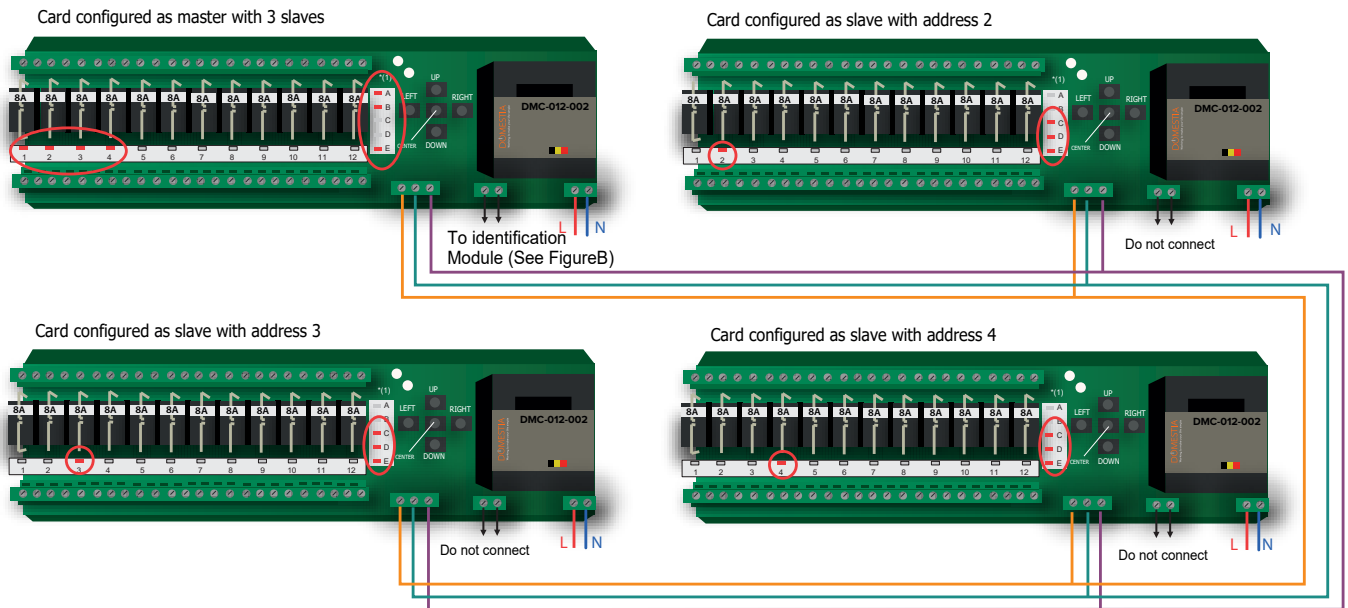


FIGURE C - Linking DMCV-006-002 cards - Example of 4 card connection



1. INSTALLATION

The DMI-006-001 modules are interwired from the shutter card using a two-wire cable without polarity. They can be wired in a variety of ways, either as bus-wired, star-wired or both ways simultaneously.

If your installation has more than one card, please refer to point 3 of this manual. The shutters lowering mode must be wired to the odd relays and raising them to the even relays. **(See Figure A)**

Please make sure that your shutters are fitted with upper and lower stoppers.

2. OPERATING

The system will enable you to manually (using 5 buttons) program (See Point 4) to operate the 6 shutters and to program the functions explained below.

2.1. LOWER MODE

This function simulates a traditional order to lower the shutter. The shutter will be lowered as soon as you press on the push button **(PB)**

Just press the **PB** briefly to activate the lowering of the shutter for the length of time set by the timer (**point 2.3**).

2.2. RAISING MODE

This function simulates a traditional order to raise the shutter. The shutter will be raised as soon as you press on the push button (**PB**)

Just press the **PB** briefly to activate the raising of the shutter for the length of time set by the timer (**point 2.3**).

2.3. TIMER MODE

This function allows you to set the time for raising and lowering the shutter.

2.4. LOWER ALL OR SELECT MODE

By pressing on a **PB** anywhere on the installation, this function allows you to lower all or to choose certain shutters to close.

2.5. RAISE ALL OR SELECT MODE

By pressing on a **PB** anywhere on the installation, this function allows you to raise all or to choose certain shutters to open.

2.6. GROUP LOWERING MODE

This function is used to create 2 groups of shutters lowering. Pushing a **BP** associated with a group lowers all the shutters belonging to this group.

2.7. GROUP RAISING MODE

This function is used to create 2 groups of shutters up. A push on a **BP** associated with a group raises all the shutters belonging to this group.

3. ASSOCIATION OF SEVERAL CARDS

If an installation has more than 6 shutters (i.e. more than one DMCV-006-002 card), you will have to interconnect the cards as described in **Figure C**.

The factory default configuration of the DMCV card is for it to operate alone, without slave(s). You must change the functions of the cards in order to use several DMCV cards.

Here is an example of an installation with 24 shutters, i.e. 4 cards (**see Figure C**):

In this example, one card must be configured as the master and the other three as slaves. The master card manages shutters 1 to 6 and runs the slave cards.

N.B.: There can only be one master card per installation!

3.1. STEPS TO BE FOLLOWED TO CONFIGURE THE MASTER CARD

- I. Switch off the electricity supply to the master card.
- II. Hold the RIGHT button down while switching on the power supply to the card. LEDS A, B and E should light up: If that does not happen, use the UP and DOWN button until LEDS A, B and E are lit up.
- III. Using the RIGHT and LEFT buttons and LEDS 1 to 4, select the number of shutters you have on the installation (in this example 4 cards).

Lit LEDs DMCV-006-002	Number of shutters
1	from 1 to 6
1, 2	from 1 to 12
1, 2, 3	from 1 to 18
1, 2, 3, 4	from 1 to 24

- IV. Validate using the CENTRE button.

3.2. STEPS TO BE FOLLOWED TO CONFIGURE THE SLAVE CARD

Warning !Please note that the configuration of the slave cards will be different when installing with DME - LAN-002.

See the additional management unit user manual for the configuration of slave cards with DME - LAN-002.

- I. Switch off the electricity supply to the slave card to be programmed.
- II. Hold the DOWN button down while switching on the power supply to the card. LEDS **C, D and E** should light up: If that does not happen, use the UP and DOWN button until LEDS **C, D and E** are lit up.
- III. Using the RIGHT and LEFT buttons and LEDS **1 to 4**, select the range of shutters you want to have for this card (**see Figure C**).

Lit LEDs DMCV-006-002	Range of shutters
2 (1e carte esclave)	from 7 to 12
3 (2e carte esclave)	from 13 to 18
4 (3e carte esclave)	from 19 to 24

- IV. Validate using the CENTRE button.

Repeat the operation for each slave card.

Once the master / slave configuration has been carried out, the programming of your home automation installation is carried out from the master card.

N.B.: If LEDs A, B, C, D and E are lit and LED 1 is blinking, there is a communications error and the master card is not accessible! Please check that you have a configured master card in the installation and the Bus RS 485 is correctly connected (See Figure C).

Details on how to reconfigure a master card are set out in Stage 3.1.

4. PROGRAMMING

The programming mode(s) are initiated using the buttons on the master card. Once the mode is established, the slave card buttons are then activated.

Press once on the DOWN button in order to start programming the outputs and identification modules. Led 1 (1st relay) is blinking. **(See *2 on Figure A).**

You can select the programming mode explained below by pressing on the UP and DOWN buttons on any card. **(See *1 on Figure A).**

- LEDES AE lit = Functional Mode
- LEDES BE lit = Lowering Mode
- LEDES CE lit = Raising Mode
- LEDES DE lit = Timer Mode
- LEDES BCDE lit = Lower All or Select Mode
- LEDES BDE lit = Raise All or Select Mode

PLEASE NOTE:

LED E is always lit. It shows whether the power supply is working.

Select the required output by pressing the LEFT and RIGHT buttons on any card.

N.B.: Each time you change the programming mode, you have to select again the output that you want to program! By default, the card returns to output 1 whose LED is blinking.

4.1. LOWER MODE OR RAISE MODE PROGRAMMING

Once you have chosen the Lower or Raise mode, use the RIGHT and LEFT buttons to choose the output and validate it by pressing the CENTRE button once the choice has been made. The LED of the chosen output should no longer be blinking.

You then have to go to the room in question and press on the **PB** that runs this output. By pressing on the selected push button, the power supply is interrupted momentarily at that point, which means that the addressing is recorded. Repeat the operation for each push button that you want to combine at that same point.

When you have selected all the **PBs** running this output, the addressing is recorded. You can then move on to the next output and repeat the operation.

To leave the Lower or Raise mode, press the UP button as many times as necessary to return to the OPERATING mode (LEDs **A and E** lit).

4.2. TIMER MODE PROGRAMMING

Once a shutter has been validated in Timer mode, press once on the DOWN button to programme it. LEDs **1, 2, 3, 4, 5, 6, 7 and 8** are lit by default, which means that the timer is programmed for the maximum time.

Use the RIGHT and LEFT buttons to change the time. The following table sets out the time value of the LEDs. The times are cumulative.

Lit LEDs DMCV-006-002	Times
1	1 second
2	5 seconds
3	10 seconds
4	20 seconds
5	40 seconds
6	80 seconds
7	160 seconds
8	320 seconds

Press on the Up button to validate the programmed time.

For example: If you want to program a shutter to operate for 65 seconds, you switch on LEDs **1, 3 and 4**.

To leave the Timer mode, press the UP button as many times as necessary to return to the OPERATING mode (LEDs **A and E** lit).

Please make sure that the period of time you have chosen is as close as possible to the time it takes for your shutters to move and that the latter are fitted with top and bottom stoppers.

4.3. LOWER ALL OR SELECT MODE PROGRAMMING

4.3.1. LOWER ALL MODE

Starting from the Operational mode (LEDs **A and E** lit), press on the DOWN button until LEDs **B, C and D** are lit. Then validate using the CENTRE button.

You then have to go to the room in question and press on the **PB** that should lower all the shutters. By pressing on the selected push button, the power supply is activated to all the shutters during the time the button is pressed, which means that the addressing is recorded. Repeat the operation for each push button that you want to combine at that same point.

To leave the Lower All mode, press the UP button as many times as necessary to return to the OPERATING mode (LEDs **A and E** lit).

4.3.2. LOWER SELECT MODE

Starting from the Lower All mode (see above), press once on the DOWN button. LEDs **A, B, C, D and E** will then be lit, together with all the LEDs from the previous configuration (by default: all).

Use the LEFT and RIGHT buttons to choose the shutters to be lowered. Press on the CENTRE button to select or deselect a shutter.

To leave the Lower All mode, press the UP button as many times as necessary to return to the OPERATING mode (LEDs **A and E** lit).

4.4. RAISE ALL OR SELECT MODE PROGRAMMING

Programming the Raise All function is identical to the method used to program the Lower All function. To access it, press the DOWN button in Operating mode until LEDs **B, D and E** are lit.

4.5. PROGRAMMING A LOWERING GROUP

At the start of the Functional mode (LEDs **A and E** on) press the DOWN key, so that LEDs **C, D and E** are on and LED 1 or 2 flashes to correspond to the number of the lowering group. Then validate with the CENTER key.

You must then go to the room concerned and press the PB which will have to control the group. By pressing the chosen BP, the power supply is activated, for the time of the push, on all descents: this means that the addressing is recorded, Repeat the operation for each BP that you wish to associate with this same operation.

To add or remove certain descents from the selected group, press the DOWN key once. At this time, LEDs **A, C, D and E** are on as well as all the LEDs of the previous configuration (by default: all descents). You can move using the LEFT and RIGHT keys to choose the descents. To select or deselect a descent, press the CENTER key.

To exit the descent selection, press the UP key once.

To exit Group mode, press the CENTER key once, and then press the UP key as many times as necessary to return to Functional mode (LEDs **A and E** on).

4.6. PROGRAMMING A RAISING GROUP

At the start of the Functional mode (LEDs A and E on) press the DOWN key, so that LEDs **B, C and E** are on and LED 1 or 2 flashes to correspond to the number of the raising group. Then validate with the CENTER key.

You must then go to the room concerned and press the PB which will have to control the group. By pressing the chosen PB, the power supply is activated, for the duration of the push, on all climbs: this means that the addressing is saved. Repeat the operation for each PB that you want to associate with this same operation.

To add or remove certain climbs from the selected group, press the DOWN key once. At this time, LEDs **A, B, C and E** are on

as well as all the LEDs of the previous configuration (default: all). You can move using the LEFT and RIGHT keys to choose the climbs. To select or deselect a climb, press the CENTER key. To exit the selection of climbs, press the UP key once.

To exit group mode, press the CENTER key once, and then press the UP key as many times as necessary to return to Functional mode (LEDs **A and E** on).

5. TECHNICAL DETAILS

5.1. DMCV-006-002

- Power supply: 230VAC / 50 Hz +/- 10%.
- Number of outputs per card: 12 8A removable, voltage-free bipolar contacts.
- Identification module bus: 10 VDC on 2 non-polarised wires.
- Communication bus: RS485.
- 5 buttons for programming.

5.2. DML-006-001 (IDENTIFICATION MODULE)

- 2 black wires: Non-polarised bus.
- 6 blue wires: Potential free inputs.
- 1 yellow wire: Shared.
- Module identification: Automated identification when activated.

5.3. CÂBLAGE

- Identification module wiring: 2 non-polarised wires (VVT, XVB, VOB, ...) (Check the quality of the connection: the section of the identification module wires is 0.6mm²).
- RS485 link between cards in a single box: use VVT, VOB, UTP,... wires
- RS485 link between different cards in different boxes: use UTP wires (one pair for A and B and one pair for GND).
- Do not exceed a 1.5mm² section for communication terminals. Do not exceed a 4mm² section for power terminals.
- "Module bus" cable: With respect to the maximum length of this bus and the section of the cable to be used, the modules use current and the maximum resistance must be 55 Ohm.

6. WARNINGS

This product has undergone a series of laboratory tests to ensure it meets the standards included in point 8.

The following rules must be respected so ensure compliance with those standards :
Afin de ne pas sortir du cadre fixé par ces normes, voici quelques règles à respecter:

- Do not roll the bus cables (identification bus modules and communication bus) into a loop.
- Do not exceed the maximum power of 8A per output contactor.
- In case of a high inductance load, place a VDR element parallel to the element in question.
- The DMC-012-002 kit is designed to be placed in an electrical box with a DIN rail.
- Make sure you place the electrical box containing the DMC-01 kit so that it is not in direct sunlight. Do not place the box above a heat source (e.g.: radiator). Make sure that there is natural ventilation for the DMCV-006-001 card.

Failure to respect the above points results in electrical risks and a loss of guarantee.

7. WARRANTIES

WARRANTY CONDITION:

The basic warranty for your product is 2 years from the date your order is received. Please make sure you keep your invoice, with the serial number safely, as it is the only document that acts as a guarantee in case of any problem.

The warranty does not apply in the following cases :

- Damage caused by inappropriate use, incorrect use, poor maintenance or not-respecting the instructions given by the manufacturer. Attempted repairs by the customer or by a non-authorized third party. Damage caused by accidents, force majeure or other causes for which Domestia may not be held responsible.
- Any fault not resulting from the correct operating or good use of the material.

8. STANDARDS

8.1. EMISSION

- EN 55022 class B emission.
- 30-1000MHz radiated emission.
- 230V 150k-30MHz AC conducted emission.

- Disturbing current emission on the 150k-30MHz bus (current tester).
- EN 61000-3-2 Harmonic emission to 2kHz.
- EN 61000-3-3 flicker emission.

8.2. IMMUNITY TESTS

8.2.1. HOUSING

- EN 61000-4-2 8kV/air electrostatic discharges (insulator part = casing) in criteria B.
- EN 61000-4-3 immunity test on RF 80MHz-2GHz 10V/m fields in criteria B.

8.2.2. AC 230V LINES.

- EN 61000-4-4 2kV burst in criteria B.
- EN 61000-4-5 2kV shock wave between phase and earth, 1kV between phases, all in criteria B.
- EN 61000-4-6 induced signals due to RF 150kHz-80MHz 3V fields in criteria A or 10V in criteria B.
- EN 61000-4-11 70%U voltage during 3 x 0.3s, then 0%U during 3 x 0.1s in criteria B.

8.2.3. BUS

- EN 61000-4-4 0.5kV burst in criteria A via capacitive clamp.
- EN 61000-4-6 included signals due to RF 150kHz-80MHz 3V fields in criteria A or 10V in criteria B.

8.2.4. SECTOR TESTS

- 1996 EN 50090-2-2 + A1 2002.
- EN 60664- 1 circuit insulation.



DOMESTIA

Rue Hector Denis 114
4420 Montegnée
Belgium

Tel +32 4 372 07 16

Fax +32 4 372 07 19

info@domestia.be

