

DF4RP / DF4RPR

DF4RP / DF4RPR: 4 power relay output module

DF4RP and DF4RPR modules allow the driving, through the **Domino** bus, of 4 loads, such as lamps, heaters, etc. The difference among DF4R and DF4RPR concerns the housing only, which for DF4RPR has a reduced height.

DF4RP and DF4RPR modules provides a 2-pole terminal block for the connection to the bus; as for the majority of modules of **Domino** family, the bus itself carries the power supply for the module operation.

Near to the bus terminal block, the module features a small pushbutton with double function (see the related paragraph) and a green LED that shows the operating status; the same green LED normally flashes every 2 seconds about to signal that the module is properly supplied and operating. Removing the cover of the bus terminal block, a small connector (PRG) can be accessed; this one allows the connection to the optional tester/programmer.

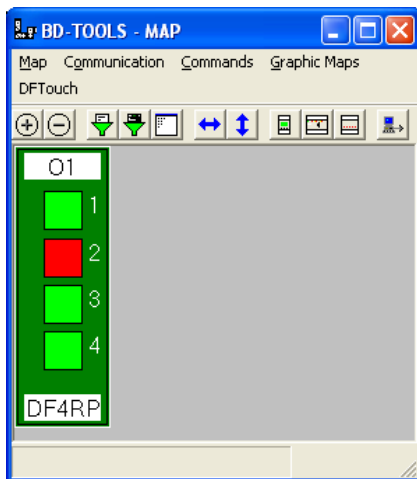
A 8-pole terminal block allows the connection of four loads; each relay provides its normally open contact. DF4RP and DF4RPR are modules specifically developed for ON-OFF control, typically for lamps in domestic appliances and especially for fluorescent lamps; for details about programming and functions, refer to the related documentation.

Each DF4RP or DF4RPR module takes, inside **Domino** bus, a single output address. For details about the address programming, refer to the related documentation. A white label on the front panel allows the writing of the programmed module address for an immediate visual identification. DF4RP housing is a standard DIN 3M module. DF4RPR module housing is instead a 3M DIN module with reduced height.

Note: this data sheet applies DF4RP and DF4RPR modules equipped with firmware 6.1 or higher.

Mapping

DF4RP and DF4RPR modules are displayed on the map of BDTools as in the figure on this left side. As for all **Domino** modules, the background of the module is in green color if the module is connected and properly working, otherwise the background is in red color. As usual, the status of the outputs is shown on the map in red or green color respectively depending on the active or not active status of the related point.



Functions of the local pushbutton

The pushbutton on the module has a double function: pushing it for a time lower than 3 seconds, the module switches to the addressing mode, during which the LED on the module is fixed lighted; the addressing mode will be active until the module receives the address and anyway no more than 10 seconds from the last release of the pushbutton. When the module enters the addressing mode, all outputs will be switched off.

Holding down the pushbutton for more than 3 seconds, the module switches to the test mode; the LED signals this condition by a regular blinking (1s ON and 1s OFF). At every successive pushing of the button all the output will be alternatively switched between ON and OFF. The module exit the test mode after 30 seconds from the last release of the pushbutton.

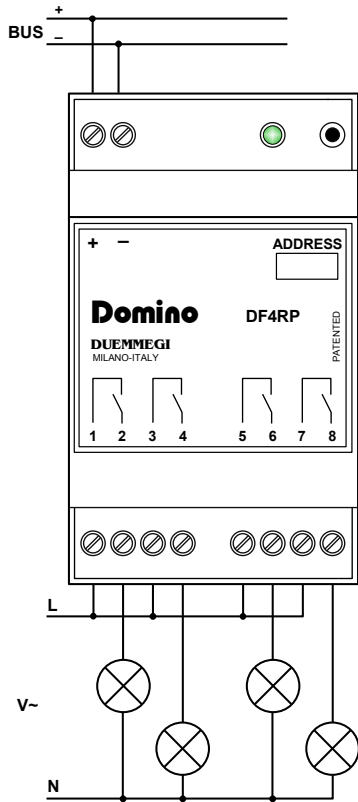
Technical characteristics

Power supply (bus side)	By specific centralized power supply Mod. DFPW2
MAX Contact rating (each output)	<ul style="list-style-type: none"> Resistive load (cosfi = 1): 12A at 250V~ (3000VA) Inductive load (cosfi = 0.5): 3.6A at 250V~ (900VA) Incandescent lamps: 8A at 250V~ (2000VA) Fluorescent lamps: 350W with 42uF MAX power factor correction capacitor
Rating on single phase motor	550VA (0.75HP)
MAX switching voltage	250V~
Housing	<ul style="list-style-type: none"> DF4RP: standard 3M for DIN rail DF4RPR: standard 3M with reduced height for DIN rail
Operating temperature	-5 ÷ +50 °C
Storage temperature	-20 ÷ +70 °C
Protection degree	IP20

DF4RP / DF4RPR

Module connection

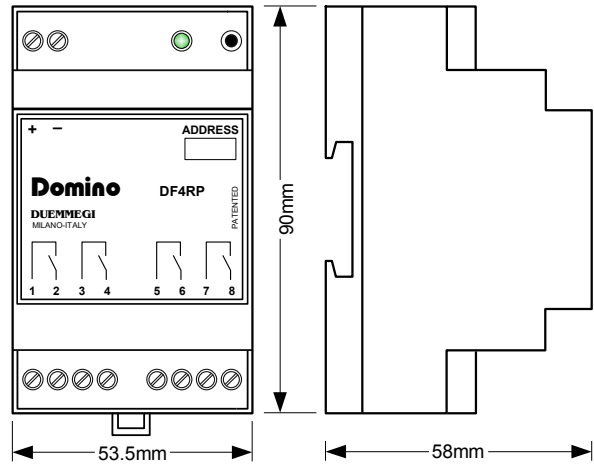
DF4RP module can be connected to 4 loads; following figure shows the proper connections to be made, for instance, to 4 lamps. The schematic diagram for DF4RPR is absolutely identical.



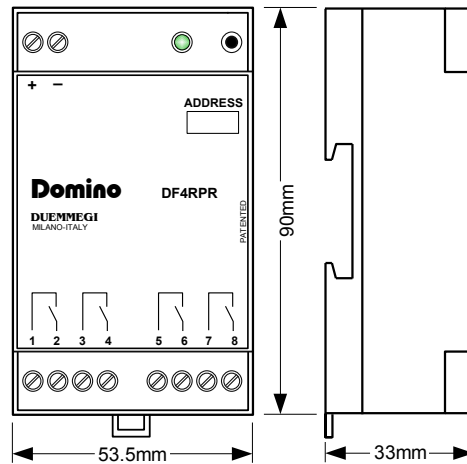
Warning: the output contacts of each module **CANNOT** be connected to different phases because the clearance between components do not allow this; otherwise the module may be damaged.

Outline dimensions

DF4RP:



DF4RPR:



Correct disposal of this product

(Waste Electrical & Electronic Equipment)
(Applicable in the European Union and other European countries with separate collection systems). This marking on the product, accessories or literature indicates that the product should not be disposed of with other household waste at the end of their working life. To prevent possible harm to

the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

Installation and use restrictions**Standards and regulations**

The design and the setting up of electrical systems must be performed according to the relevant standards, guidelines, specifications and regulations of the relevant country. The installation, configuration and programming of the devices must be carried out by trained personnel.

The installation and the wiring of the bus line and the related devices must be performed according to the recommendations of the manufacturers (reported on the specific data sheet of the product) and according to the applicable standards.

All the relevant safety regulations, e.g. accident prevention regulations, law on technical work equipment, must also be observed.

Safety instructions

Protect the unit against moisture, dirt and any kind of damage during transport, storage and operation. Do not operate the unit outside the specified technical data.

Never open the housing. If not otherwise specified, install in closed housing (e.g. distribution cabinet). Earth the unit at the terminals provided, if existing, for this purpose. Do not obstruct cooling of the units. Keep out of the reach of children.

Setting up

The physical address assignment and the setting of parameters (if any) must be performed by the specific softwares provided together the device or by the specific programmer. For the first installation of the device proceed according to the following guidelines:

- Check that any voltage supplying the plant has been removed
- Assign the address to module (if any)
- Install and wire the device according to the schematic diagrams on the specific data sheet of the product
- Only then switch on the 230Vac supplying the bus power supply and the other related circuits

Applied standards

This device complies with the essential requirements of the following directives:

2004/108/CE (EMC)
2006/95/CE (Low Voltage)
2002/95/CE (RoHS)

Note

Technical characteristics and this data sheet are subject to change without notice.