

# MLY Decoupling Module



CE

UL US LISTED

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- Decoupling Diode to produce redundant applications or to decouple power sources from each other as well as from the load
- DC 10 - 60V
- 0 - 10A
- Hazardous Location Class I Div. 2 (UL 1604)

- Mounted and connected in record time, no tools required
- usable everywhere
- Tiny: W x H x D = 45 x 75 x 91mm

**Mini is more.**

## Technical Data MLY Decoupling Module

### ● Concept

The decoupling module is a dual input diode with 2 inputs and one output in a MiniLine housing, suitable for various applications such as

- to produce redundant applications
- to decouple power sources from each other as well as from the loads e.g. separation of sensitive loads from the power bus, design buffered branches, block reverse power etc.

### ● Decoupling Part

Input #1	DC 10-60V, 0-10A
Input #2	DC 10-60V, 0-10A
Output	$V_{in}$ -0,9V (typ.), 0-10A
	Ensure, that the max. output current does not exceed 16A. Check short circuit current of power sources.
Peak current	125A for max. 10ms
Reverse current	<0,6mA per diode

When both inputs are used (Dual Input Mode, Fig. 1) the output current results as the sum of the two inputs. If used with only one input (Single Input Mode, Fig. 2), both positive input terminals can be linked. Negative poles do not have to be used.

Connection by Spring Clamp terminals; uniformly firm hold, vibration-resistant and maintenance-free:  
2 terminals per output

Connector size range

- flexible cable 0.3-2.5mm<sup>2</sup> (28-12 AWG)
  - solid cable 0.3-4mm<sup>2</sup> (28-12 AWG)
- Ferrules admissible
- Wire strip length 6mm (0.24in) recommended

### ● Construction, Mechanics, Installation

Robust plastic housing (US Patent No. D442, 923S), fine ventilation grid on three housing sides to keep out small parts (e.g. screws), IP20

Dimensions and weight

- B x H x T 45mm x 75mm x 91mm (+ DIN Rail)
- Weight 136g

DIN-rail mounting

Easy snap-on mounting onto the DIN-rail (TS35/7,5 or TS35/15). Unit sits safely and firmly on the rail; no tools required even to remove

Mounting orientation



Ventilation/Cooling

Convection cooling, no fan required

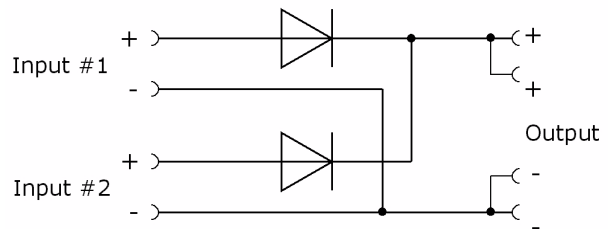
- Free space f. cooling 25mm above and beyond recommended

Design details – for your advantage:

- All terminals are easy to reach as mounted on the front panel.
  - Input and output are strictly apart from each other (input below, output above) and so cannot be mixed up
  - Mounting *and* connection do not require any screwdriver
- Easy, quick, durable and reliable installation



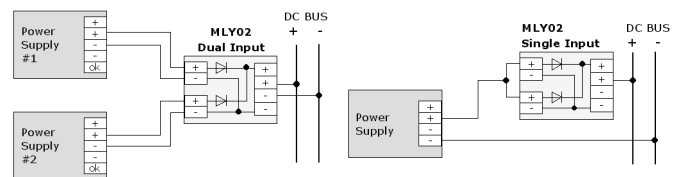
### ● Block Diagram



### ● Wiring Scheme

Fig. 1: Dual Input Mode

Fig. 2: Single Input Mode



### ● Environmental Data, Safety

Ambient temperature range (measured 25mm below unit)

- storage, transport -40°C ... +85°C
- operation -40°C ... +60°C (70°C, for derating see diagram below)

Humidity max. 95% (without condensation)

Prot. class IP20 (EN 60529)

Fusing If sources with higher current capability are used, protect the inputs with a fuse or circuit breaker.

Inputs or output 10A slow blowing circuit breaker, Char. B recommended

Approvals UL60950 recognized and UL508 LISTED  
Hazardous Location Class I Div. 2 (UL 1604)

### ● Derating Diagram

Derating characteristic  $V_{out}/T_{amb}$

