

Diode Network Modules type MDL70 for 250Vdc / 127Vdc / 110Vdc / 48Vdc /24Vdc applications



• Several configurations available :

- MDL70-cc : 22 diodes with common cathode
- MDL70-ac : 22 diodes with common anode
- MDL70-dl : 12 diodes for free wiring
- MDL70-xxx : according to custom specifications

• Wide range of application :

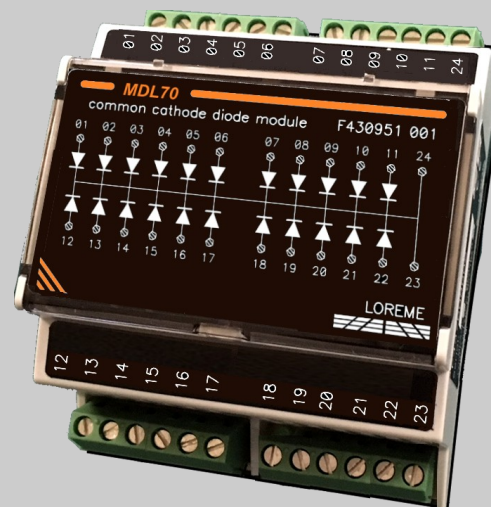
- Centralization of control signals
- Decoupling of defect signalling system
- Flyback diode for inductive load

• Diode model configurable on request

type BY500-800 by default (5A - 800V)

• Fast transient burst protection in option

MDL70 /TVS with transil protection diodes on each input



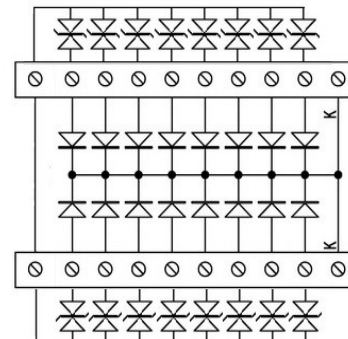
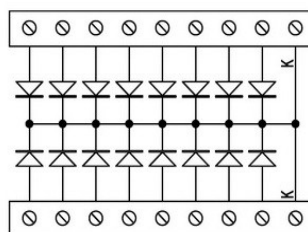
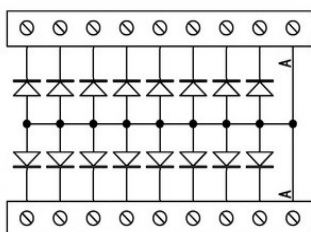
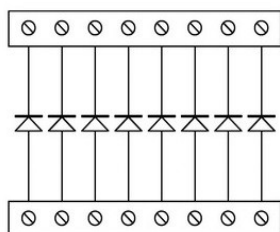
The diode network module MDL70 ensures the classical functions of decoupling and centralization of commands. This module adapts to constraints of each application domain: The diode type may be adapted to customer need as well as the fast transient protection of inputs for highly disturbed environments.

MDL70-dl (free wiring)

MDL70-ac (common anode)

MDL70-CC (common cathode)

MDL70-CC/TVS (transient protected)



Remark : All diode are not shown in the wiring diagrams above.

Making, mounting and connection

- Symmetrical DIN rail mounting according to EN50022
- Connection on screw terminal : 2.5 mm² max
- Protection class : IP20 + conformal coating
- Optional LED on inputs
- Assignment of custom number for diagram or specific diodes
- High EMC immunity.
- Transient protection from 24Vdc to 400Vdc (optional)

Application

- Electrical decoupling for defect signalling systems.
- Suppress of overvoltage spike for inductive load as solenoid, DC relay coil, ...
- wiring of test lamp circuits
- discrete logical function.
- power supply redundant

Version and order code:

[Request a quote](#)

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- MDL70-ac** : 22 diodes with common anode
- MDL70-dl** : 12 diodes for free wiring
- MDL70-xxx** : according to custom specifications

default diodes type BY500-800 (5A - 800V)
other model on request

- Option :
- /TVS** with transil diode (surges protection)
(nominal voltage must be defined)
 - /A** LED to visualize the inputs state

Default specifications of diodes

Type BY500-800
 Peak reverse voltage : 800V
 Forward current : 5A
 Recovery time : 200ns
 Maximum reverse current : 10uA
 Forward voltage : 1.35V @ 5Adc

OPTION TVS (surge protection)

Input voltage limiter : from 30Vdc to 400 Vdc bidirectional
 clamping protection by transil : 600 W (10 / 1000 us)

ENVIRONMENT

Operating temperature: -20 to 60 °C
 Storage temperature: -40 to +85 °C
 Hygrometry: 85 % non condensed
 Protection class: (accord. to : EN 60 529) IP 20

Weight: 150 g.

MTBF (MIL HDBK 217F) > 4 000 000 Hrs @ 25°C
 Lifetime > 300 000 Hrs @ 30°C

Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE

Immunity standard for industrial environments EN 61000-6-2		Emission standard for industrial environments EN 61000-6-4
EN 61000-4-2 ESD	EN 61000-4-8 AC MF	EN 55011 group 1 class A
EN 61000-4-3 RF	EN 61000-4-9 pulse MF	
EN 61000-4-4 EFT	EN 61000-4-11 AC dips	
EN 61000-4-5 CWG	EN 61000-4-12 ring wave	
EN 61000-4-6 RF	EN 61000-4-29 DC dips	



WIRING AND OUTLINE DIMENSIONS :

