

APPLICATION

Relay Module Boards are used in industrial automation systems as coupling elements between electronic control circuits (for example BMS controllers) with executive devices. The galvanic separation of input/output circuits prevents controllers from effects of undefined states as well as increases current-voltage load capacity.

CHARACTERISTIC

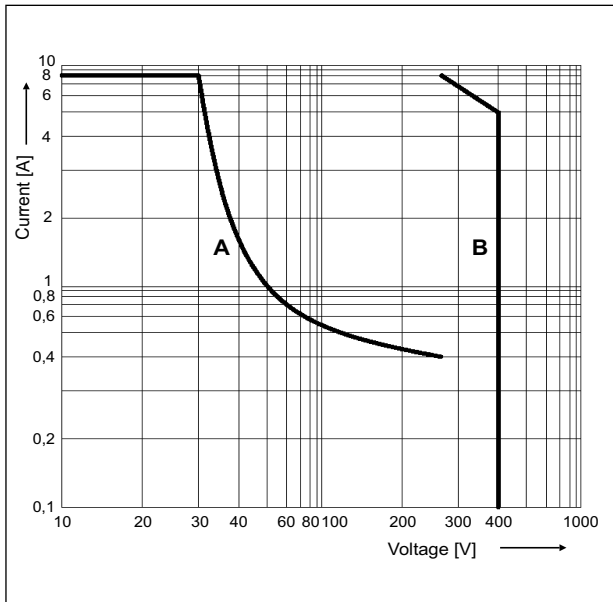
- Modular structure – amount of relays is multiplicity of number 4 (e.g. 4, 8, 12 and 16),
- Common pole, independent, alternating current, direct current versions,
- Each relay have one single-pole double-throw (SPDT) contacts,
- LED diode indicates switched-on state of the relay,
- Overvoltage protection of input/output circuits.

TECHNICAL DATA

Power supply DC/AC	6-48 V / 24-240V
Nominal power consumption of single relay	0,3W for DC 0,75VA for AC
Max. voltage of contacts for DC/AC	250V / 400V
Contacts switching capacity: AC $\cos\varphi=1$ DC	380V, 8A [2000VA] 32V, 8A
Galvanic isolation	1000V AC
Mechanical endurance of contacts	2×10^7 operations
Protection class of the case	IP-00
Ambient temperature range	-10...+55°C
Diameter of terminals	2,5 mm ²
Mounting	DIN-35 or DIN-32 rail
Dimensions of 4-relay module (L x W x H)	80mm x 70,4mm x 30mm
Weight of 4-relay module	140 g

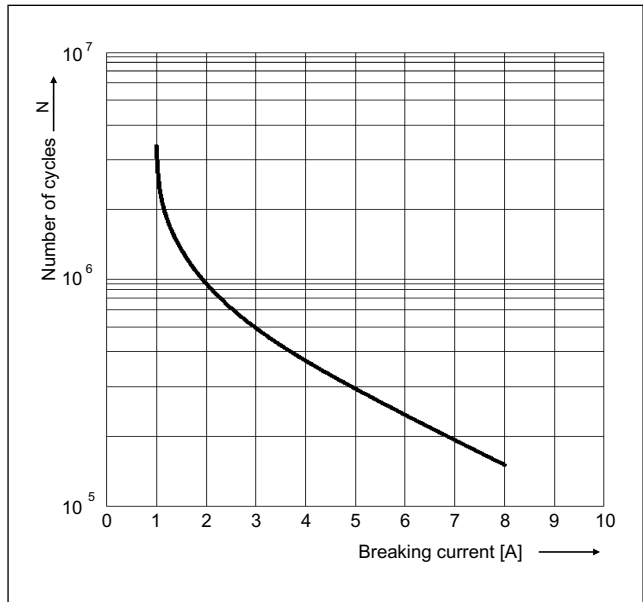
RELAY CHARACTERISTIC

Supplied by manufacturer – Relpol S.A.

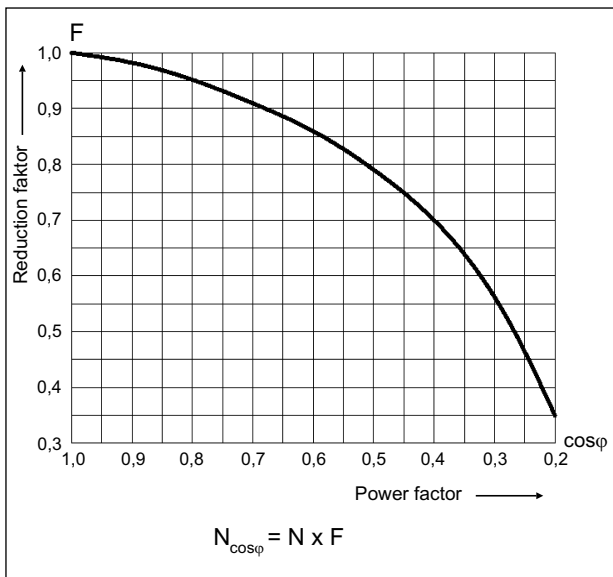


Max. AC and DC resistive load breaking capacity

A - resistive load at DC current
B - resistive load at AC current



Electrical life at AC resistive load



Electrical life reduction factor at AC inductive load

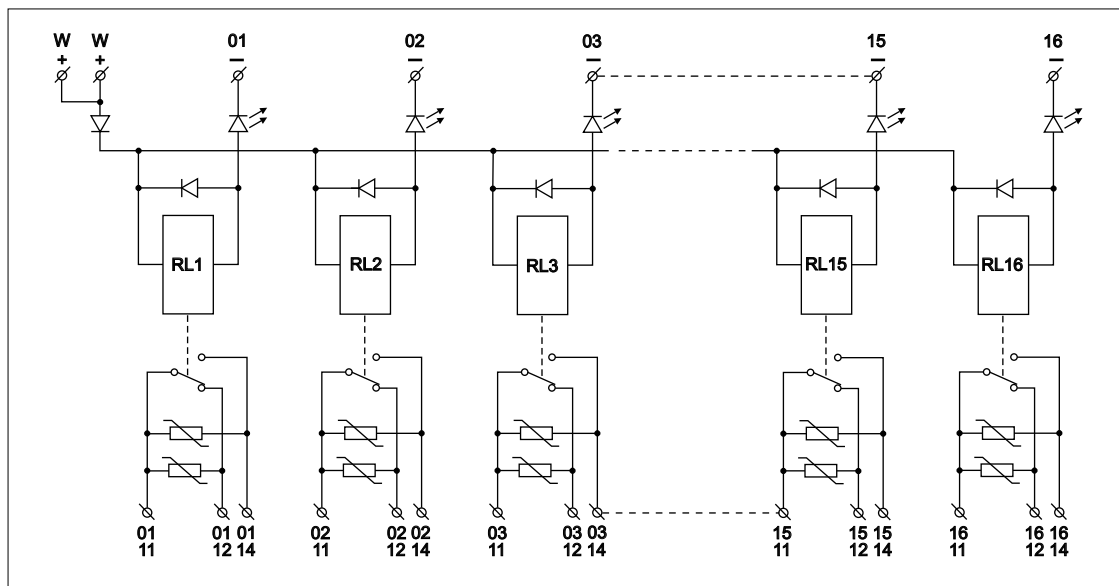
Type	Offered control voltages [V]							
	6	9	12	18	24	48	110	230
ACN	-	-	X	-	X	-	X	X
ACW	-	-	X	-	X	-	X	X
DCN	X	X	X	X	X	X	-	-
DCWP	X	X	X	X	X	X	-	-
DCWM	X	X	X	X	X	X	-	-

Note:

There is possibility of using other control voltages

LMP-DCWP-yy-nn MODULE

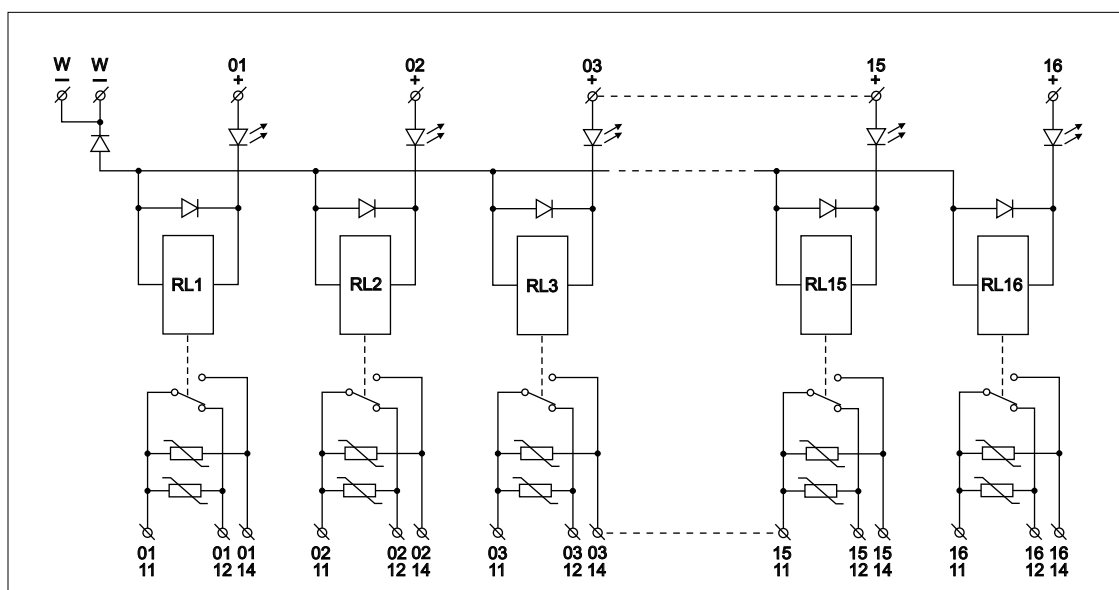
DC control voltage with common positive contact. Applied for controllers with OC (open collector) binary outputs type (NPN transistors) or relay outputs. The input circuit protected by the diode, relay contacts – by varistors.



Contacts: 14 – normal opened, 12 – normal closed, 11 – common

LMP-DCWM-yy-nn MODULE

DC control voltage with common negative contact. Applied for controllers with OC (open collector) binary outputs type (PNP transistors) or relay outputs. The input circuit protected by the diode, relay contacts – by varistors.

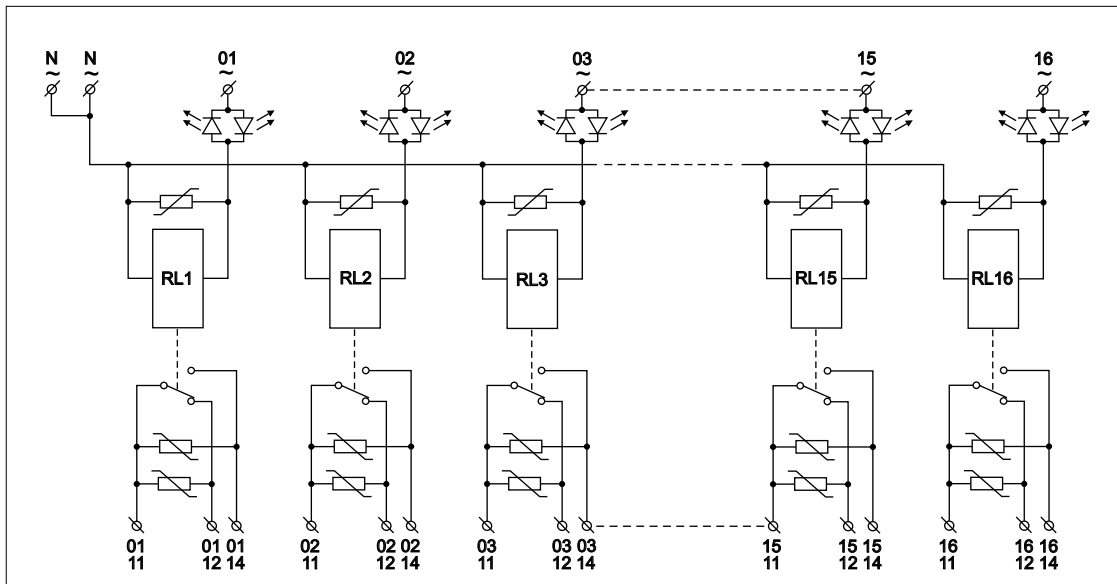


Contacts: 14 – normal opened, 12 – normal closed, 11 – common

LMP

LMP-ACW-yy-nn MODULE

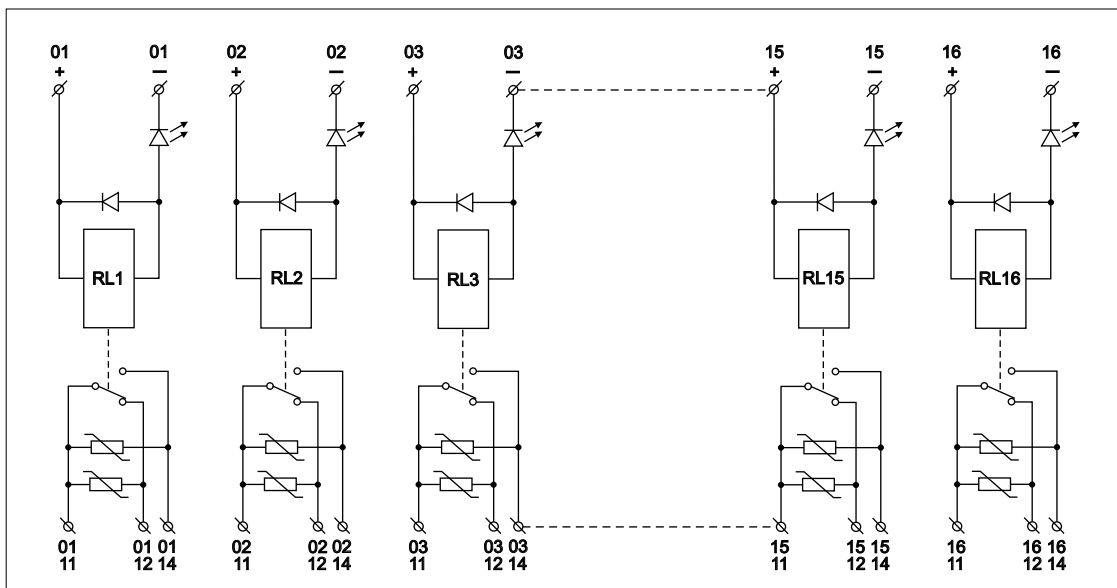
AC control voltage with common pole. Applied for controllers with triac or relay binary outputs. The input circuit and relay contacts protected by varistors.



Contacts: 14 – normal opened, 12 – normal closed, 11 – common

LMP-DCN-yy-nn MODULE

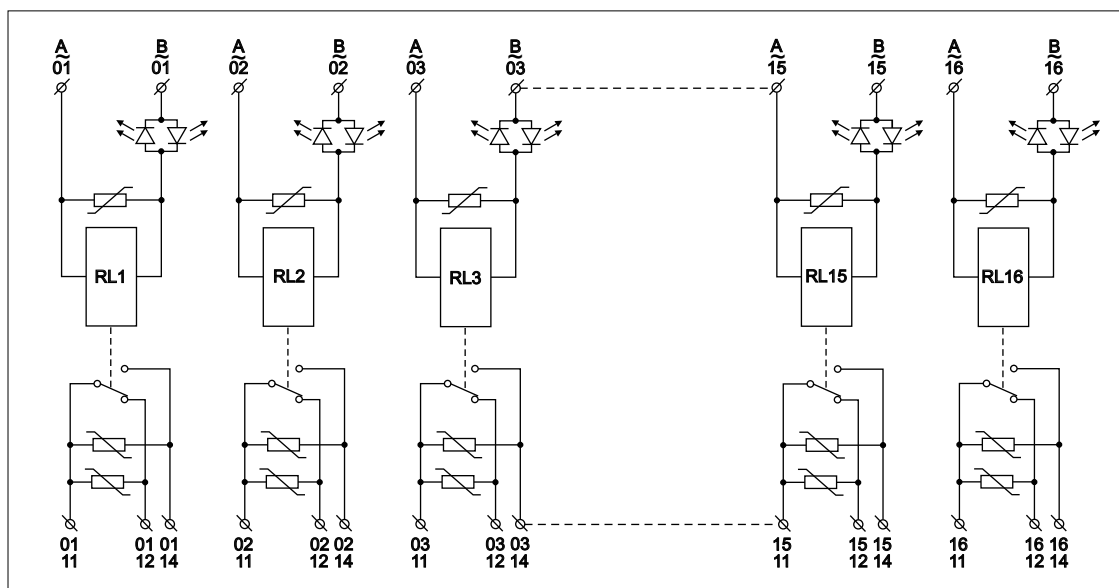
DC control voltage with independent channels. The input circuit protected by the diode, relay contacts – by varistors.



Contacts: 14 – normal opened, 12 – normal closed, 11 – common

LMP-ACN-yy-nn MODULE

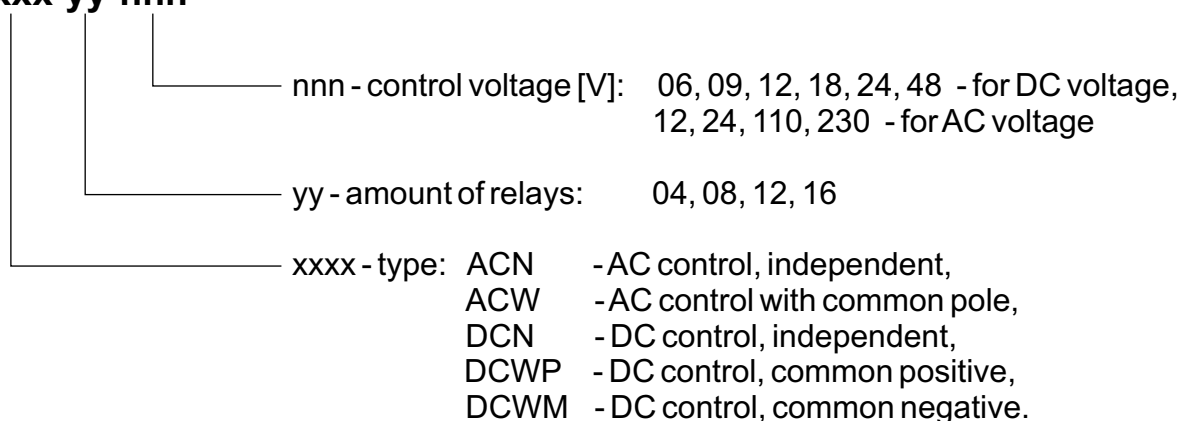
AC control voltage with independent channels. The input circuit and relay contacts protected by varistors.



Contacts: 14 – normal opened, 12 – normal closed, 11 – common

ORDER CODE

LMP-xxxx-yy-nnn



Example: LMP-DCWP-04-12: the Relay Module Board with 4 relays, 12V DC control voltage, common positive contacts.

June 2004, revised: April 2008