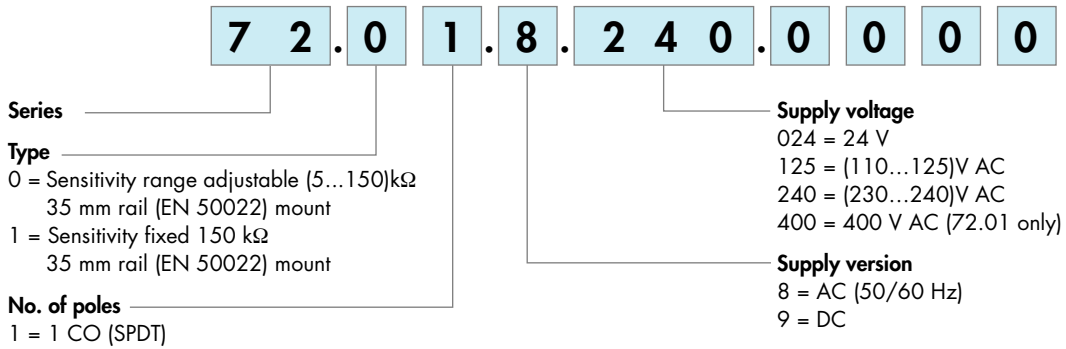


Ordering information

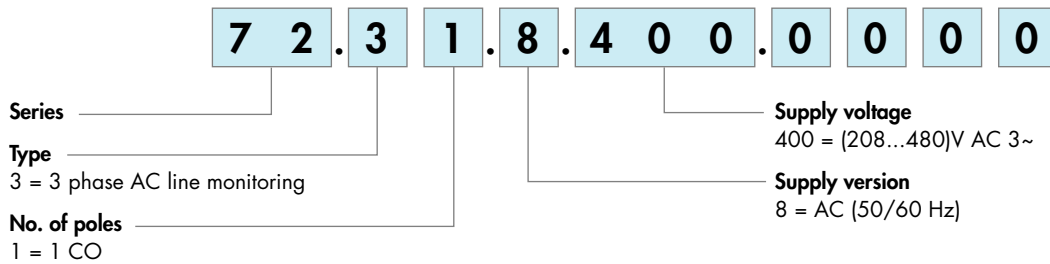
Level control relays

Example: 72 series level control relay, adjustable sensitivity range, (230...240)V AC supply voltage.



Monitoring relays

Example : 3 phase line monitoring relay, phase rotation and loss monitoring, supply voltage (208...480)V AC 3~.



Technical data for 72.01 and 72.11

Insulation			
Insulation		Dielectric strength	Impulse (1.2/50 µs)
	between supply and contacts	4,000 V AC	6 kV
	between electrodes, Z1-Z2 and supply*	4,000 V AC	6 kV
	between contacts and electrodes	4,000 V AC	6 kV
	between open contacts	1,000 V AC	1.5 kV
EMC specifications			
Type of test		Reference standard	
Electrostatic discharge	contact discharge	EN 61000-4-2	4 kV
	air discharge	EN 61000-4-2	8 kV
Radio-frequency electromagnetic field (80 ÷ 1000 MHz)		EN 61000-4-3	10 V/m
Fast transients (burst) (5-50 ns, 5 kHz) on Supply terminals		EN 61000-4-4	4 kV
Surges (1.2/50 µs) on Supply terminals		EN 61000-4-5	4 kV
Radio-frequency common mode (0.15 ÷ 80 MHz) on Supply terminals		EN 61000-4-6	10 V
Radiated and conducted emission		EN 55022	class B
Other data			
Current absorption on Z1 and Z2	mA	< 1	
Power lost to the environment	without contact current	W	1.5
	with rated current	W	3.2
Screw torque	Nm	0.8	
Max. wire size		solid cable	stranded cable
	mm ²	1x6 / 2x4	1x4 / 2x2.5
	AWG	1x10 / 2x12	1x12 / 2x14
Max cable length between electrode and relay	m	200 (max. capacitance of 100 nF/km)	

*There is no electrical isolation between electrodes and supply voltage for the 24 V DC types (72.x1.9.024.0000). Therefore, for SELV applications it would be necessary to use a SELV (non-grounded) power supply. In the case of a PELV (grounded) power supply take care to protect the level control relay against harmful circulating currents by ensuring that no electrodes are grounded. However, there is no such problem for the 24 V AC types (72.x1.8.024.0000) which, by virtue of an internal isolating transformer, assure reinforced isolation between electrodes and supply.

Technical data for 72.31

Insulation			
Insulation		Dielectric strength	Impulse (1.2/50 µs)
	between supply and contacts	3,000 V	5 kV
	between open contacts	1,000 V	1.5 kV
EMC specifications			
Type of test		Reference standard	
Electrostatic discharge	contact discharge	EN 61000-4-2	4 kV
	air discharge	EN 61000-4-2	8 kV
Fast transients (burst) (5-50ns, 5kHz) on A1, A2, A3		EN 61000-4-4	2 kV
Surge (1.2/50 µs)	differential mode	EN 61000-4-5	4 kV
Other data			
Start up time (NO contact closure after energising)	s	< 2	
Regeneration level (Maximum)		≤ 80% of average of other 2 phase	
Power lost to the environment	without contact current	W	1
	with rated current	W	1.4
Screw torque	Nm	0.8	
Max. wire size		solid cable	stranded cable
	mm ²	1x6 / 2x4	1x4 / 2x2.5
	AWG	1x10 / 2x12	1x12 / 2x14