

# DPC01DM44



## True RMS 3-Phase voltage monitoring relay



### Benefits

- **Widest input voltage range and frequency.** Very wide input voltage range: from 208Vac to 690Vac  $\pm 15\%$  (177Vac to 793Vac), up to 400Hz mains.
- **Adjustable voltage ranges.** 11 voltage ranges can be selected by front DIP Switches.
- **Asymmetry/tolerance or under/over voltage.** The function can be selected between asymmetry/tolerance or over/under voltage.
- **Switch mode power supply.** Very low consumption, heat and dissipation. Control circuit power supply is filtered and therefore immune to mains disturbances, noise and harmonics.
- **Output LED indication.** One LED each output provides output status information.
- **2 relay contact outputs.** Two relay outputs provide electrical (remote) indication of the alarms/output status.
- **2 delays on alarm.** Two independent alarms for asymmetry/tolerance or under/over voltage.

### Description

DPC01DM44 relay is a multifunction threephase mains monitoring device.

It can operate on both 3Ph and 3Ph+N mains detecting, besides the phase loss and the correct phase sequence, possible overvoltages and undervoltages or asymmetry and tolerance excess.

Power supply is provided by the monitored mains, is wide input range and switch mode.

Consumption, dissipation and consequently heat are very limited.

It is certified for Marine applications and it operates up to 400Hz of mains frequency.

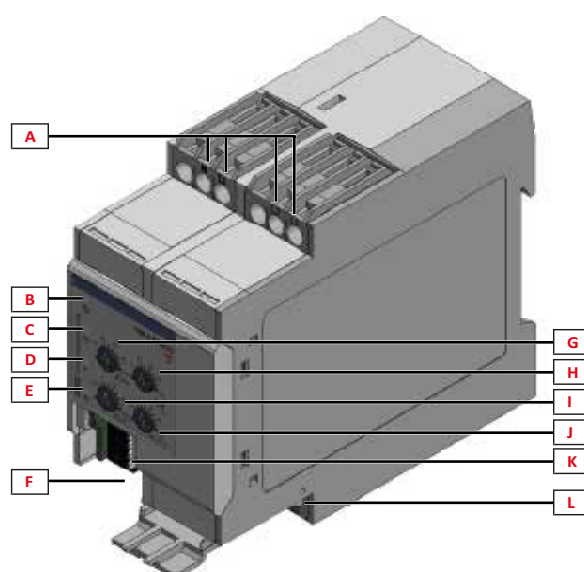
### Applications

DPC01DM44 is suitable for applications where it is necessary to monitor, besides the phase presence and correct phase sequence of threephase mains, also the correct supply voltage or symmetry between phases: lifts, escalators, HVAC, material handling, pumps and compressors, mobile machinery, for places with unstable mains or for export markets, installation on vessels, airport and aircraft applications thanks to the Marine approval and 400Hz max. operating frequency.

## Main functions

- 3Ph or 3Ph+N monitoring
- From 208V to 690V @50 to 400Hz, nominal voltage and frequency
- Over / under voltage or tolerance/asymmetry
- Phase sequence and phase loss alarm
- 2 x 8A SPDT relay outputs

## Structure



Element	Component	Function
A	Input/supply terminals	L1, L2, L3 and N (when necessary), double cage clamp terminals
B	Output status LED (2)	Yellow, ON when output 2 active (No Alarm)
C	Output status LED (1)	Yellow, ON when output 1 active (No Alarm)
D	Alarm LED "AL"	5Hz Red flashes during phase loss, wrong phase sequence. Blinking slow (2Hz) when over / under voltage is triggered but delay is elapsing, RED steady ON when delay elapsed.
E	Power ON LED	Green, lit when device supplied on at least two input lines
F	Output terminals (1)	Output 1 relay contacts terminals 15 COM, 16 NC*, 18 NO* * when power supply not applied.
G	Alarm 1: Overvoltage / Asymmetry setting	Depending upon setting: - Overvoltage setting dial - Asymmetry setting dial
H	Alarm 2: Undervoltage / Tolerance setting	Depending upon setting: - Undervoltage setting dial - Tolerance setting dial
I	Delay on alarm 1	Delay on alarm 1 setting dial. Delay from 0.1s to 30s
J	Delay on alarm 2	Delay on alarm 2 setting dial. Delay from 0.1s to 30s
K	DIP switches	See fig. 1 (DIP switch settings table)
L	Output terminals (2)	Output 2 relay contacts terminals 25 COM, 26 NC*, 28 NO* * when power supply not applied.

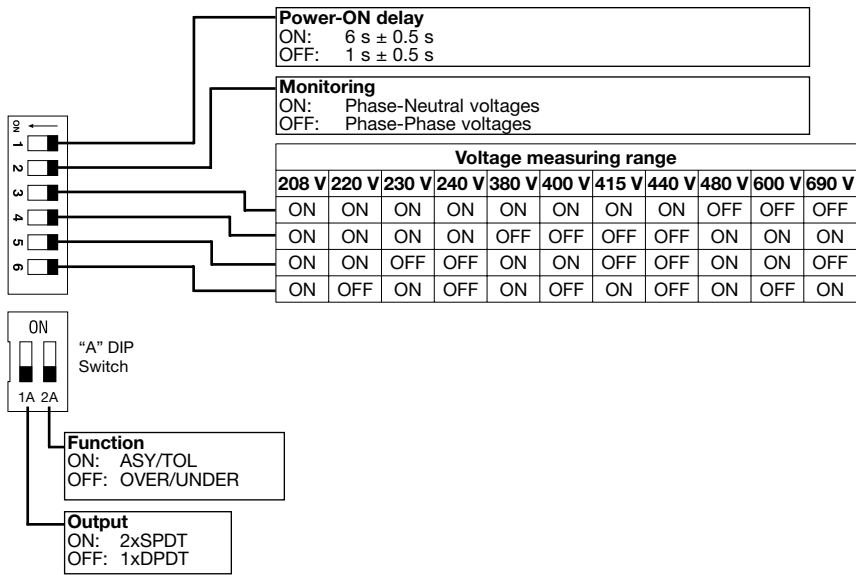


Fig. 1 DIP switch settings table