

# DDMP

## Digital Diagnostic Motor Protection



### Necessary innovation

The management of electrical utilities by PLC improved the quality of service continuity thanks to the prompt replacement of an utility with its own backup system. The technician in charge of maintenance periodically checks the system and must work on the basic program to make functional tests on the system that is out of work.

Current starting devices (soft starters) and regulation devices (inverters) keep anomalies in memory which caused the shutdown of the system, electromechanical and electronic thermal relays do not report and do not memorize the causes of the shutdown.

The result is the urgency to protect each motor with more complex device that can memorize the electrical causes of the fault, easy to use and with compatible dimensions.

The DDMP distinguishes and stores the shutdown causes and guides the maintenance technician to a correct and quick solution in order to re-establish the working conditions of the system, also it allows a better programming of subsequent checks of the part of the system affected by the failure.

User overload, damage to the motor windings, abnormal connections resistances, irregularities in the power supply network can be identified and shown by the LEDs of DDMP.

## Product overview

- Thermal overload protection with 4 trip class
- Manual / remote / automatic reset
- Compact dimensions with pass-thru CT
- Complete line for currents from 0.75 to 1500A.
- 1000V 50/60Hz AC rated voltage
- Visual indicators of intervention
- Thermistor overtemperature protection (up to 6 PTC sensors in series)
- Phase loss and asymmetry protection
- Easy wiring and DIN rail mounting



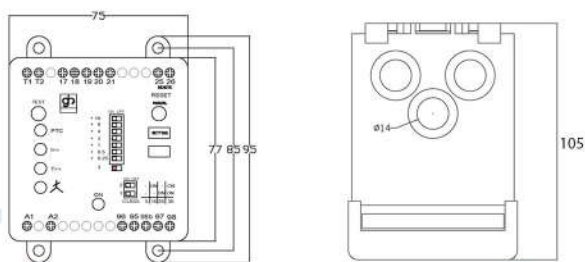
## Tecnichal features

| Power circuit   |   |                               |
|---|---|-------------------------------|
| Rated voltage Ue  | V AC  | 1000                          |
| Rated insulation voltage Ui                                     | V AC  | 1000                          |
| DDMP-34 minimum and maximum current value settable              | A   | 3...34,5                      |
| DDMP-65 minimum and maximum current value settable              | A   | 33.5...65                     |
| DDMP-320 minimum and maximum current value settable             | A   | 66...320                      |
| DDMP-900 minimum and maximum current value settable             | A   | 186...900                     |
| DDMP-1500 minimum and maximum current value settable            | A   | 310...1500                    |
| Connections DDMP 34 & 65  | mm2   | Cable up to 16 (pass - thru)  |
| Connections DDMP 320  | mm2   | Cable up to 50 (pass - thru)  |
| Connections DDMP 900  | mm2   | links included from 50 to 185 |
| Tripp class   | -   | 5-10-20-30                    |
| Consumption   | VA  | 2                             |
| Control circuit   |   |                               |
| Reset type  | Manual / automatic / remote                 |                               |
| Test function   | yes   |                               |
| Supply voltage  | 24V DC / 24V AC / 110-120V AC / 230-240V AC |                               |
| Trip and alarm contacts -95-96 (N/C), 97-98 (N/O), 97-98B (N/C) |   |                               |
| Rated voltage   | V AC  | 400                           |
| Max thermal current   | A   | 7                             |
| Rated current 24V AC  | A   | 5                             |
| Rated current 230-240V AC                                       | A   | 2                             |
| Rated current 380-415V AC                                       | A   | 1                             |
| Max protection fuse (gG)  | A   | 10                            |
| Connections cross section                                       | mm2   | 0,5 to 2,5                    |
| Phase loss and phase imbalance protection                       |   |                               |
| Imbalance of current  | Limit                                       | > 40% for 30 sec              |
| Phase loss  | Limit                                       | 1fase < 20% for 3 sec         |
| PTC protection  |   |                               |
| Max number of PTC sensor in series                              | #   | 6                             |
| Standard compliance   |   |                               |
| IEC 60947-4-1 RINA  |   |                               |

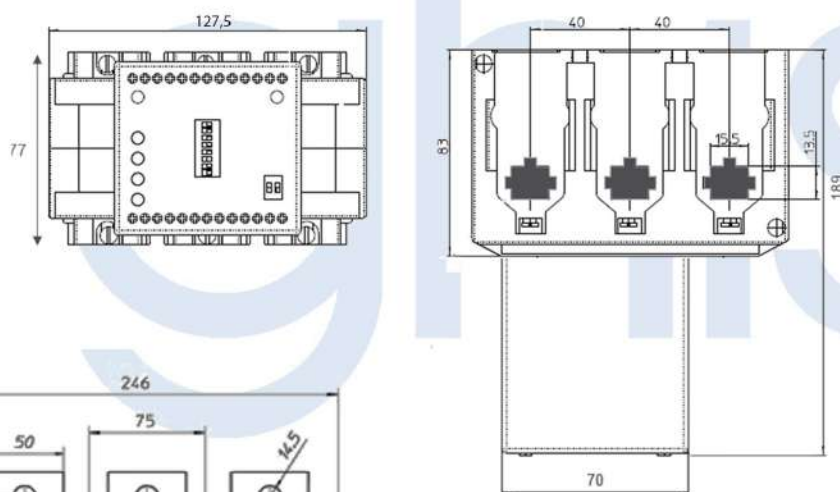
| DDMP      | Setting range (A) | Contactor | AC-3<br>Ie Ue ≤ 440V 50/60Hz (A) |        |     |
|-----------|-------------------|-----------|----------------------------------|--------|-----|
| DDMP-34   | 3 - 34,5          | GH15BN    | 9                                |        |     |
|           |                   | GH15CN    | 12                               |        |     |
|           |                   | GH15DN    | 16                               |        |     |
|           |                   | GH15EN    | 23                               |        |     |
|           |                   | GH15ET    | 25                               |        |     |
| DDMP-65   | 33,5 - 65         | GH15FT    | 32                               |        |     |
|           |                   | GH15GS    | 40                               |        |     |
|           |                   | GH15HT    | 50                               |        |     |
|           |                   | GH15JT    | 63                               |        |     |
|           |                   | GH15KT    | 80                               |        |     |
| DDMP-320  | 66 - 320          | GH15LT    | 95                               |        |     |
|           |                   | GH15MT    | 110                              |        |     |
|           |                   | GH15NT    | 150                              |        |     |
|           |                   | GH15PT    | 175                              |        |     |
|           |                   | GH15RT    | 210                              |        |     |
|           |                   | GH15ST    | 260                              |        |     |
|           |                   | GH15TT    | 315                              |        |     |
|           |                   | GH15UT    | 400                              |        |     |
|           |                   | DDMP-900  | 186 - 900                        | GH55/B | 450 |
|           |                   |           |                                  | GH57/B | 550 |
| GH62/B    | 700               |           |                                  |        |     |
| DDMP-1500 | 310 - 1500        | GH64      | 860                              |        |     |
|           |                   | GH76      | 1000                             |        |     |
|           |                   | GH78      | 1200                             |        |     |

## Dimensions

### DDMP-34 (3-34.5A) & DDMP-65 (33.5 -65)



### DDMP-320 (66-320A)



### DDMP-900 (186-900A)

