## Chapter 1. INTRODUCTION

These two modules are called G3F-PIDA and G4F-PIDA. The G3F-PIDA is used with the CPU of GLOFA PLC GM1.2.3 series, and the G4F-PIDA is used with the CPU of GM4 series. Hereafter, the two modules will be commonly called the PID control module.

PID control means a control action that in order to keep the object at a value set beforehand (SV), it compares the SV with a sensor-measured value (PV) and when a difference between them is detected the controller makes PV come to be SV by adjusting output to eliminate the difference. The PID control is composed of combinations of Proportional (P), Integral (I) and Derivative (D) actions.

When a difference between SV and PV occurs, proportional, integral, differential quantities are calculated upon that difference and a MV(Manipulated Value) is output.



## 1.1 Features

The features of the PID control module are as follows.

- 1) One module can control various processes separately and at the same time.
- 2) Forward/reverse action selection is available.
- 3) Manually manipulated out (forced to be output by the user), not operation processing output, is available.
- 4) The number of modules available on one base unit is unlimited.