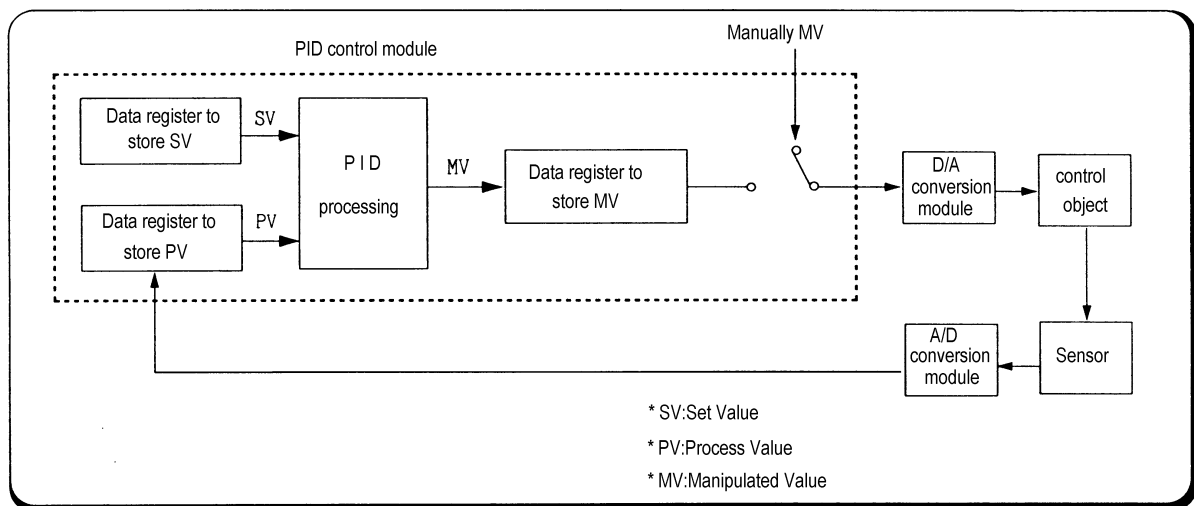


## Chapter 1. INTRODUCTION

These two modules are called K7F-PIDA and K4F-PIDA. The K7F-PIDA is used with the CPU of K1000S series, and the K4F-PIDA is used with the CPU of K300S 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.