

Some parameters are not displayed depending on the model and the specifications.

For detailed parameters, refer to separate RB series Instruction Manual (IMR02C15-E□). The manual can be downloaded from the official RKC website: http://www.rkcinst.com/english/manual\_load.htm.

1. Monitor Display Mode

Table with 4 columns: Display, Name, Display range, Factory set value. Rows include Measured value (PV)/Set value (SV) monitor, Current transformer 1 (CT1) input value monitor, Manipulated output value (MV1) monitor, Remaining time monitor, etc.

2. SV Setting Mode

Table with 4 columns: Display, Name, Data range, Factory set value. Rows include Setting limiter low to Setting limiter high, PID control, Integral time, Derivative time, etc.

3. Mode Switching

Table with 4 columns: Display and Name, Data range, Factory set value. Rows include Auto (AUTO)/Manual (MAN) transfer, Set data unlock/lock transfer, Interlock release, etc.

4. Parameter Setting Mode

Table with 4 columns: Display, Name, Data range, Factory set value. Rows include Set value 1 (SV1) to Set value 4 (SV4), SV selection, Timer 1 to Timer 4, Timer function, Repeat execution times, Setting change rate limiter (up), etc.

Main parameter list table with 4 columns: Display, Name, Data range, Factory set value. Rows include Setting change rate limiter (down), Event 1 set value (EV1) to Event 4 set value (EV4), Autotuning (AT), Startup tuning (ST), Proportional band [heat-side], Integral time, Derivative time, Anti-reset windup (ARW), Proportional band [cool-side], Overlap/Deadband, Fine tuning setting, Heater break alarm 1 (HBA1) to Heater break alarm 2 (HBA2), Control loop break alarm (LBA) time, LBA deadband (LBD), Proportional cycle time [heat-side], Minimum ON/OFF time of proportioning cycle [heat-side], Output limiter high [Heat-side output limiter (high)], Output limiter low [Cool-side output limiter (high)], Proportional cycle time [cool-side], Minimum ON/OFF time of proportioning cycle [cool-side], PV bias, PV digital filter, Manual manipulated output value (MV).

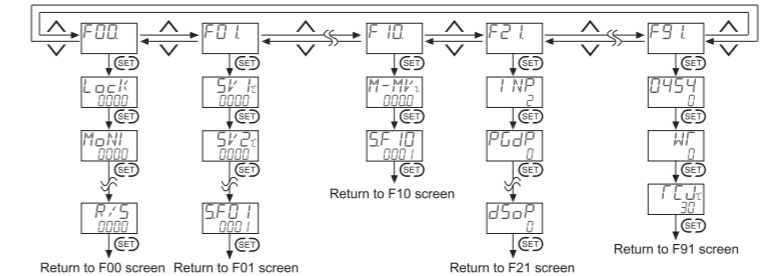
5. Engineering Mode

WARNING icon and text: Parameters in the Engineering mode (F21 to F70) should be set according to the application before setting any parameter related to operation. Once the parameters in the Engineering mode are set correctly, no further changes need to be made to parameters for the same application under normal conditions.

5.1 Function block (F□□) structure in the Engineering mode

Setting items are classified into groups (Function block: F□□) within the Engineering mode. Set to meet application requirements.

F00: Non-display screen settings (Monitor display mode, Mode switching), Set lock level settings for the Setting data lock function, and RUN/STOP switching in Engineering mode can be selected. F01 to F10: The parameter setting screen that is displayed in Parameter setting mode can be hidden. F21 to F91: Settings related to the specifications of this product can be selected. However, to display F21 and after, setting ModE (Mode selection [no display]) in F00 to 128 is required.



5.2 Restricting access to the Engineering mode

The relationships between Engineering mode, Set data unlock/lock, and RUN/STOP are shown below.

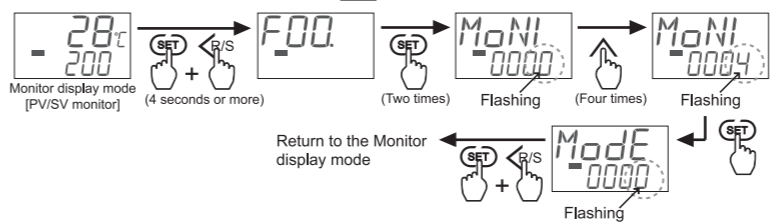
Table showing relationships between Set data unlock/lock transfer, Engineering mode (F00-F91), and RUN/STOP (RUN, STOP). Includes symbols for display and changeability.

\* Some setting items in Parameter setting mode are the same as the items in F01 to F10. When the set value of one of these items is changed, the set value of the corresponding item in the other mode also changes. However, with respect to parameters that can be changed in the locked state, this applies only to F□□ parameters that are not locked in the Set lock level setting.

5.3 Function Block 00 (F00)

Table for Function Block 00 (F00) with 4 columns: Display, Name, Data range, Factory set value. Rows include Function block 00, Set lock level, Monitor selection, Mode selection, RUN/STOP setting.

Setting example: Hiding the parameter screen of Manipulated output value (MV) monitor



Set the value of the item that you wish to hide. If there are multiple items that you wish to hide, set the sum of the values of the items.

5.4 Function Block 01 (F01) to 10 (F10)

Table for Function Blocks 01 to 10 (F01-F10) with 4 columns: Display, Name, Data range, Factory set value. Rows include Function block 01 to 06, Set value 1 (SV1) to Set value 4 (SV4), SV selection, F01 block selection, Function block 02 to 06, Timer 1 to Timer 4, Timer function, Repeat execution times, F02 block selection, Function block 03 to 06, Event 1 set value (EV1) to Event 4 set value (EV4), F04 block selection, F05 block selection, Function block 06, Proportional band [heat-side], Integral time, Derivative time.

