TABLE OF ERRORS

Classification	Item	Error display	CPU status	Timing of error detection: Under all operations	On power up rising	On rising of RUN	On checking of grammar	On program operation	
System error	CPU abnormality	CPU CPU abnormal	Stop	○					
	Battery voltage dropping	BATT		○					
	Program memory abnormality	E21	Stop		○	○	○		
	Password memory abnormality	E22	Stop		○	○	○		
	Inadequate execution preparation	E31	Stop		○	○			
Grammar error	Output number error	E02	Stop		○	○	○		
	MCS stack over	E03	Stop		○	○	○		
	Duplicate use of the output coil	E05	Stop		○	○	○		
	MCR stack over	E06	Stop		○	○	○		
	Shortage of counter condition	E07	Stop		○	○	○		
	Incomplete circuit	E09	Stop		○	○	○		
Operation error	Erroneous key operation	E01						○	
	Erroneous writing of different instruction in the second-word address	E08						○	
	No vacant address in the program memory	E11						○	
	Missing of search instruction	E99						○	
Cassette error	Unmatched comparison	E25						○	
	Improper cassette leveling	E28						○	

Error code	Description of error	Countermeasure
CPU abnormal ● CPU	CPU watchdog timer error detection (Erroneous operation of CPU)	Retry to turn ON the power source after turning OFF once. It is allright if the CPU is put under RUN state. If not, replace the CPU.
● BATT	Dropping of battery voltage. Diminishing life of the battery	Replace the battery within a week.
E21	Changed instruction for program memory	Rewrite the instruction that caused error when written under the program mode. Replace the CPU if the abnormal state is again found.
E22	Changed memory of the password	Register the password again because it is canceled by the [CLR] [CLR] key operation.
E31	Capacity shortage of RAM for execution	Shorten the program.
E02	The output instruction is programmed to the number to which the input module is installed.	Rewrite the program. (Check the base unit because of the possibility of erroneous switching of the switch in the base unit.)
E03	Excess use of MCS instruction more than nine to the number of MCR	Reduce the number of MCS instruction by changing the program.
E05	Duplicate use of the same operation (coil) instruction of output, relay, timer, and counter more than twice	Change the number of relay, timer, and counter in duplicate use.
E06	Excess use of MCR instruction more than MCS instruction	Reduce the number of MCR instruction by changing the program.
E07	Shortage of conditions for the counter and shift register instructions	Change the program to the program prepared with count condition and reset condition.
E09	Incomplete programming without the operation (coil) instruction but only with the condition circuit	Correct the circuit by checking the program.
E01	Erroneous writing order of program (Erroneous operation mode, instruction, and number)	Proceed with the correct operation after depressing the [CLR] key.
E08	Erroneous writing of another instruction into the second word of two word instruction	Write the second word of the instruction that is written in the previous address in the address that had an error.
E11	Erroneous instruction or operation to write a two-word instruction even when the program memory is full	Expand the program memory, or shorten the program.
E99	The instruction in search is not found before the END instruction	Depress the [CLR] key.
E25	Unmatched tape program to the CPU program content	Repeat to check or playback. Repeat recording if the same error is found.
E28	Unmatched playback leveling (volume controlling) of cassette tape recorder	Repeat the operation by adjusting the volume controller on the cassette tape recorder.