PROGRAM PLC\_PRG

VAR

CODE : Code ; //instance of function block code

IN1 : LREAL ;

END\_VAR

IN1 := 50 ;

CODE(In1 := IN1 ) ;

FUNCTION\_BLOCK Code

VAR\_INPUT

In1: LREAL;

END\_VAR

VAR\_OUTPUT

Out1: LREAL;

END\_VAR

VAR

TOTAL : LREAL ;

Array1 : ARRAY [1..100] OF LREAL ;

TOTAL\_dint : DINT ;

fbTimer : TON ; //instance of TON timer

TOTAL\_Time : TIME;

END\_VAR

TOTAL := EXP(In1) ;

TOTAL\_dint := LREAL\_TO\_DINT (TOTAL);

Array1[TOTAL\_dint] := In1 ;

TOTAL\_Time := LREAL\_TO\_TIME (TOTAL) ;

fbTimer (IN := TRUE, PT := TOTAL\_Time) ; //will return true after timer off

IF fbTimer.Q THEN

(\* Outputs for Atomic SubSystem: '<Root>/Code 3' \*)

(\* Gain: '<S1>/T-Sensor' \*)

Out1 := 0.32 \* In1;

(\* Saturate: '<S1>/Sat Block (mA) - S' \*)

END\_IF ;

IF Out1 >= 4.8 THEN

(\* Outport: '<Root>/Out1' \*)

Out1 := 4.8;

ELSIF Out1 <= -11.2 THEN

(\* Outport: '<Root>/Out1' \*)

Out1 := -11.2;

END\_IF;

(\* End of Saturate: '<S1>/Sat Block (mA) - S' \*)

(\* End of Outputs for SubSystem: '<Root>/Code 3' \*)