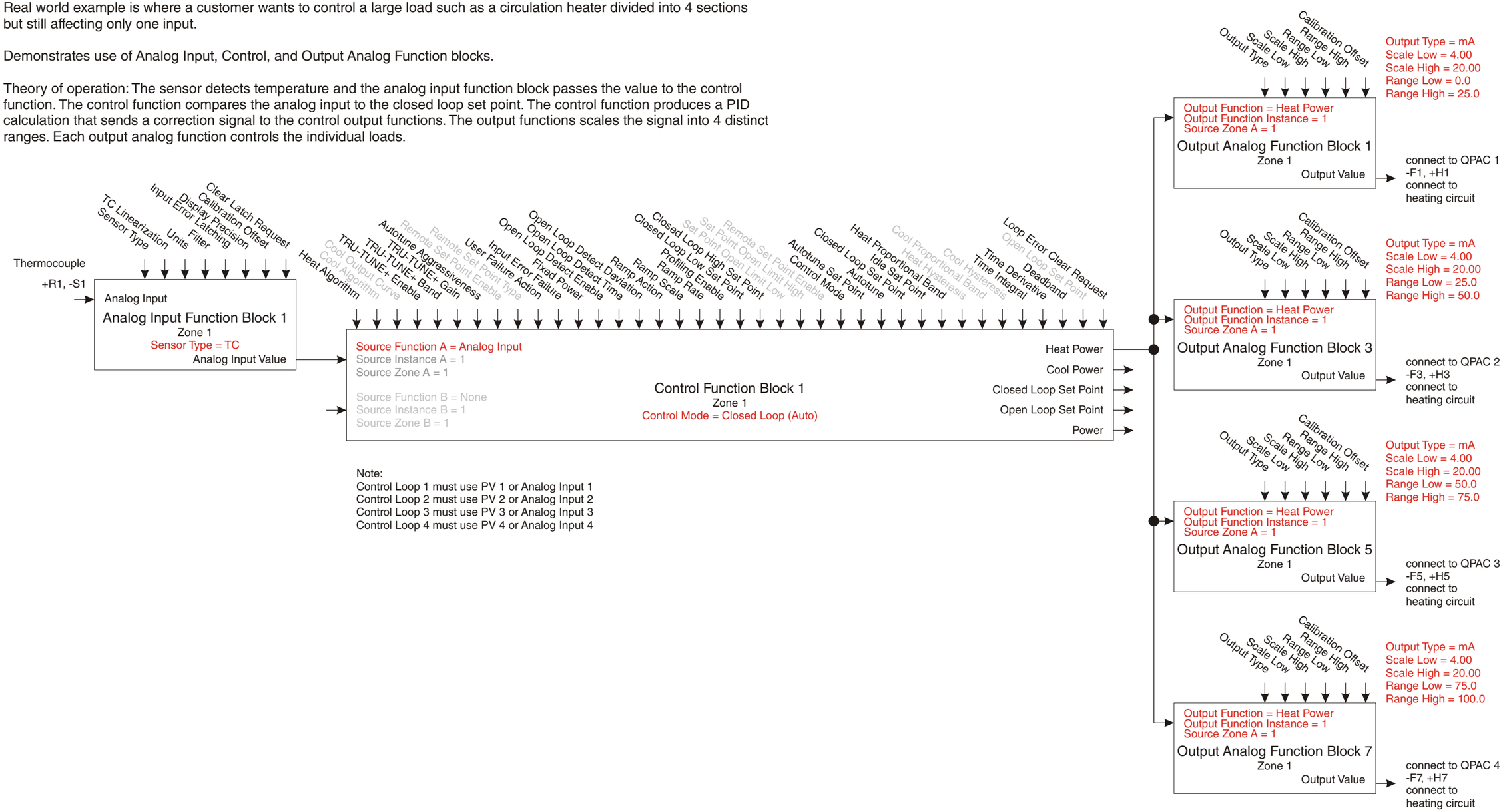
Typical staged power output control loop diagram

Example 44 - Using function blocks to stage power.

Real world example is where a customer wants to control a large load such as a circulation heater divided into 4 sections but still affecting only one input.

Demonstrates use of Analog Input, Control, and Output Analog Function blocks.

Theory of operation: The sensor detects temperature and the analog input function block passes the value to the control function. The control function compares the analog input to the closed loop set point. The control function produces a PID calculation that sends a correction signal to the control output functions. The output functions scales the signal into 4 distinct ranges. Each output analog function controls the individual loads.



Note:
Control Loop 1 must use PV 1 or Analog Input 1
Control Loop 2 must use PV 2 or Analog Input 2
Control Loop 3 must use PV 3 or Analog Input 3
Control Loop 4 must use PV 4 or Analog Input 4

Information Flow

EZ-ZONE RM Application Example - using function blocks
Print on 11” x 17” landscape paper for best viewing

User parameter settings in RED
Revision A