

**Instruction Manual**

**RDK-100/110/200/300 Supplementary Manual for 100W Coil**

Version 1.3 (April, 2015)

**1. Introduction**

The initial parameters in the RDK-100/110/200 controller are set for 250W coils. When a **100W Coil (Flat Coil, 20mm Coil, 15.8mm Coil w/ black Kevlar sleeve)**, rated as 100W under 120VAC, is used with these controller, some parameters should be adjusted to achieve good temperature control.

**2. For RDK-100/110**

Press SET key once, enter access code "0036". Then press SET again. You will enter parameter settings. **For 100W Coil, please set P value to 2.0. Other settings should remain unchanged.** Please see Table 1. For 250W Coil, you should keep the P value to 5.0 (default value). Please refer the flow chart below for details.

Table 1. Parameters in RDK-100/110 under access code "0036".

Symbol	Display	Description	Range	Initial
P	p	Proportional band (in 0.1 degree)	0-999	5.0
I	I	Integral constant (second)	0-999	40
d	d	Derivative constant (second)	0-999	10
SouF	SouF	Damp Constant	0.1~1.0	0.4
ot	ot	Cycle Rate	2-199(sec)	2
FILT	FILT	Digital Filter Strength	0-3	0
End	End	Exit		

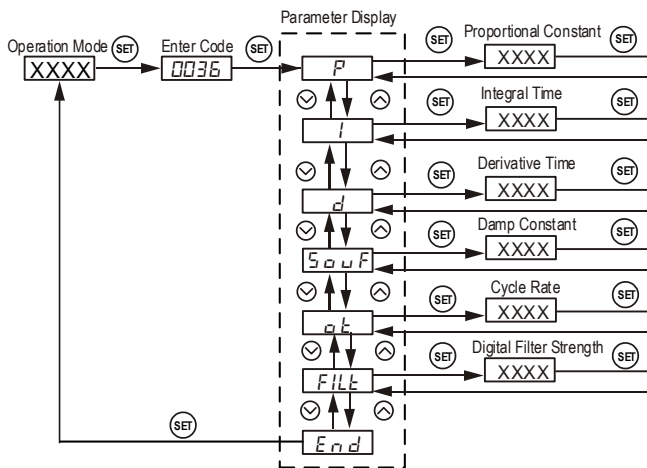


Figure 1. Flow chart of how to change parameters under code 0036.

**3. For RDK-200/300**

Press and hold the knob down for 5s, then enter access code "166", press knob once again to confirm. You will enter parameter setting mode. **For 100W Coil, you need to set OTH value to 100%. Other settings should remain unchanged.** Please see Table 2. For 250W Coil, you need to set OTH value to 40% (default value). Please refer the flow chart in Figure 2 for details.

Table 2. Parameters in RDK-200 under access code "166".

Symbol	Display	Description	Range	Initial
P	p	Proportional band (in 0.1 degree)	0-999	125
I	I	Integral constant (second)	0-999	60
d	d	Derivative constant (second)	0-999	10
o t H	OTH	Output high limit	0-100	40%

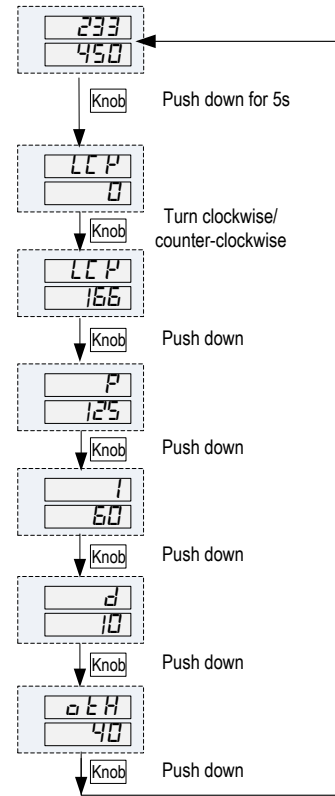


Figure 2. Flow chart of how to change the parameters under code 166.

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