

Controller IntraCon Series IA-RE55



Technical Information

03/2011



Accessories

THE EXPERT IN LEVEL AND FLOW

Intra-Automation
Technical Information
03/2011

Technical details subject to be changed without notice.

For comments regarding this brochure, please contact:
info@intra-automation.de

IA-RE55 IntraCon Controller

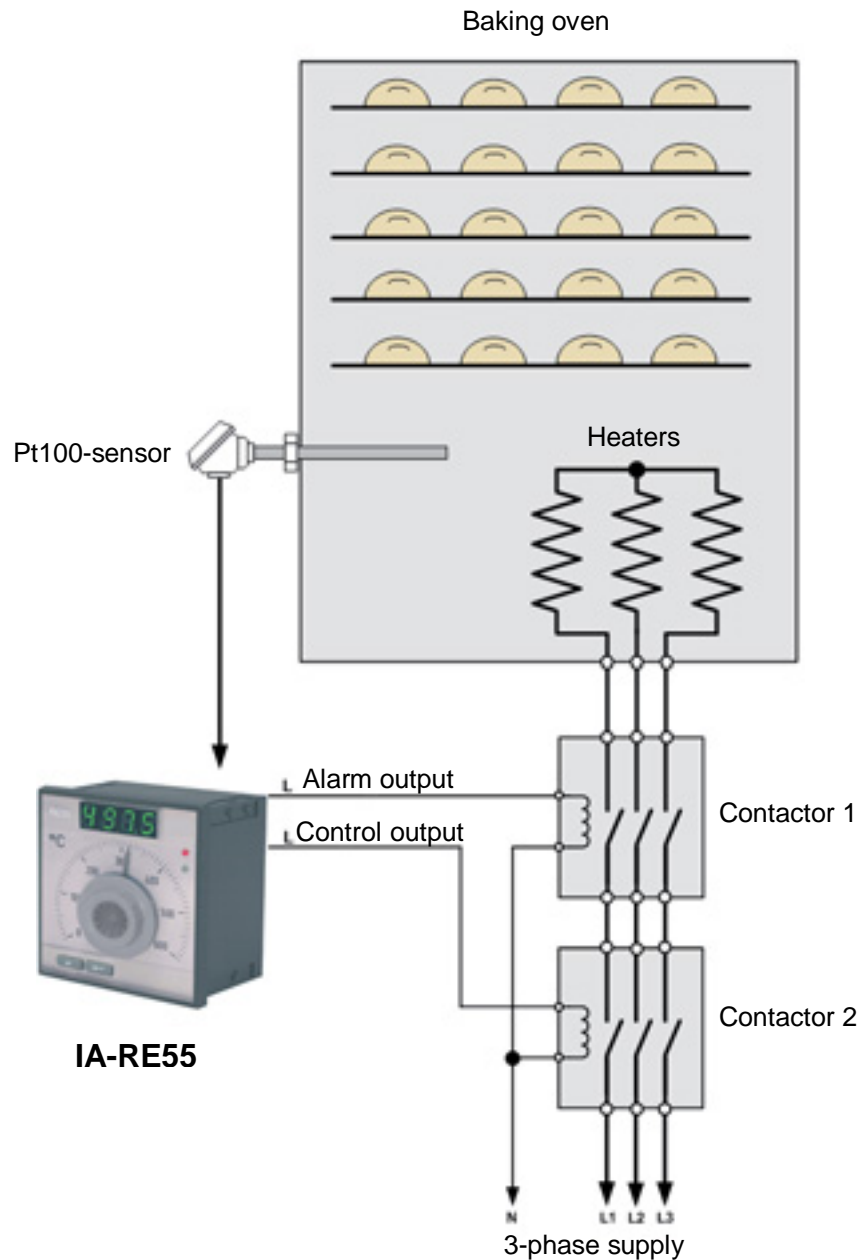
List of Contents:

Chapt.	Title	Page
1	Features	3
2	Application Example	3
3	Technical details	4
4	Electrical Connection	5
5	Ordering code	5

1 Features

- ◆ Temperature input (thermocouple or resistance thermometer)
- ◆ Control output: relay or transistor
- ◆ Alarm output: relay (optional)
- ◆ Control: PID with auto-tuning, on/off
- ◆ Setting of the set point value by means of the knob
- ◆ Programming push-buttons (optional)

2 Application example



3 Technical details

Inputs			
Kind of input	Range [°C]	Error [°C]	Additional error
Pt100	-50...100	0.8	Compensation of cold junction temperature changes: $\leq 2\text{ °C}$ Ambient temperature change: $\leq 100\%$ of basic error /10 K Resistance thermometer line resistance change: $\leq 50\%$ of basic error
Pt100	0...100	0.5	
Pt100	0...150	0.8	
Pt100	0...250	1.3	
Pt100	0...400	2.0	
Pt100	0...600	3.0	
FE-CuNi (J)	0...250	2.0	
FE-CuNi (J)	0...400	2.0	
FE-CuNi (J)	0...600	3.0	
FE-CuNi (J)	0...900	4.0	
NiCr-NiAl (K)	0...600	3.0	
NiCr-NiAl (K)	0...900	4.0	
NiCr-NiAl (K)	0...1300	6.0	
PtRh10-Pt (S)	0...1600	8.0	

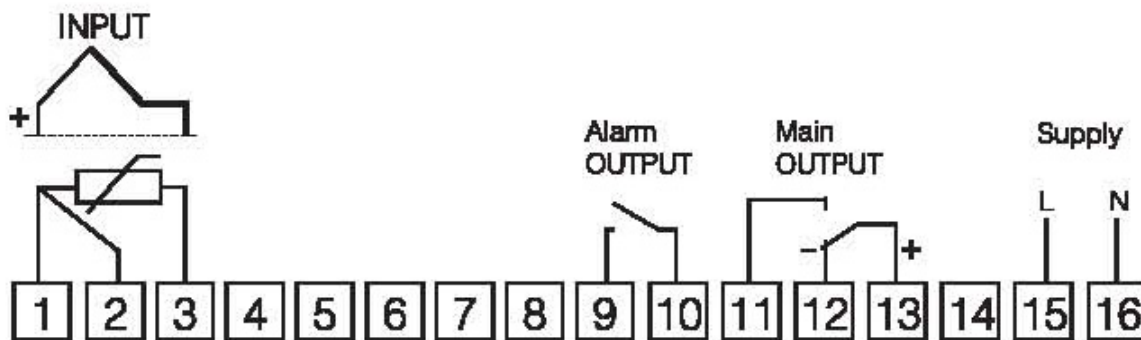
Outputs		
Kind of output	Properties	Remarks
Relay (Control)	-1 output	switch-over contact, 2 A/ 230 V
Transistor voltage (Control)	-1 output 5 V	resistance limiting the current 10 Ω , without isolation from input side
Relay (Alarm)	-1 output	NO contact, 1 A/ 230 V

External features		
Readout field	LED	10 mm, 4 digits
Weight	0.3 kg	
Overall dimensions	96 x 93 x 65 mm	
Protection:	IP40 (front side)	IP20 (terminal side)

Rated operating conditions		
Supply voltage	85...253 V AC/DC	Frequency: 40...440 Hz
Temperature	Ambient: 0...23...50 °C	Storage: -20...70 °C
Relative Humidity	< 85 %	without condensation
Operating position	any	
External magnetic field	0...400 A/m	
Power input	< 4 VA	

Safety and compatibility conditions		
Electromagnetic compatibility	noise immunity	acc. to EN 61000-6-2
	noise emissions	acc. to EN 61000-6-4
Pollution grade	2	Acc. to EN 61010-1
Installation category	III	
Maximal phase-to-earth working voltage	for the supply circuit, output: 300 V	
	for input circuits: 50 V	
Altitude above sea level	< 2000 m	

4 Connecting diagrams



5 Order codes

Code	Description
IA-RE55	Controller
Input	
01	-50...100 °C
02	0...100 °C
03	0...150 °C
04	Pt100/1.3850 0...250 °C
05	0...400 °C
06	0...600 °C
07	0...250 °C
08	Fe-CuNi (J) 0...400 °C
09	0...600 °C
10	0...900 °C
11	0...600 °C
12	NiCr-NiAl (K) 0...900 °C
13	0...1300 °C
14	PtRh10-Pt (S) 0...1600 °C
99	as per order*
Option	
1	on/off controller
2	PID controller
3	configurable controller with push-buttons
Control output	
1	relay
2	voltage 0/5 V
Version	
00	standard
XX	custom-made*
Certification	
8	without additional quality inspection certificate
7	with additional quality inspection certificate
X	on request*

IA-RE55

*Please contact manufacturer

Besides the products covered by this brochure, Intra-Automation GmbH also manufactures other high-quality and high precision instruments for industrial measurement tasks. For more information, please contact us (contact details on the backside of this brochure).

Flow measurement



Itabar®-Flow Sensor



IntraSonic IS210 Ultrasonic Flow Meter

Level measurement



ITA-mag. Level Gauge



MAGLINK Level Indicator

Other Measurement Tasks:



DigiFlow Flow and Level Computers



IntraCon Digital Controllers



IntraDigit Digital Indicators / Meters



INTRA-AUTOMATION

MESS- UND REGELINSTRUMENTE / MEASUREMENT AND CONTROL

IA



TÜVRheinland®
CERT
ISO 9001

International Headquarters:

Intra-Automation GmbH
Otto-Hahn-Str. 20
41515 Grevenbroich
GERMANY

☎ +49 – (0) 21 81 / 7 56 65-0

☎ +49 – (0) 21 81 / 6 44 92

✉ info@intra-automation.de

🌐 www.intra-automation.com

Sales Office for the BENELUX:

B.V. Intra-Automation HTP
PO Box 10
4730 AA Oudenbosch
THE NETHERLANDS

☎ +31 – (0)165 – 32 22 01

☎ +31 – (0)165 – 32 29 70

