Specifications

Inputs:
Thermocouples
Built-in compensation with sensor break protection and incorrect polarity.
Accuracy: < 0.25% for max. 50 ohm lead res.
Linear error: < 0.1%
Influence of ambient: < 0.01%/K

RTD; (Pt 100)
Built-in protection against breaks and short-circuits.
Sensor current: max. 1mA
Accuracy: < 0.2%
Linear error: < 0.1%
Influence of ambient: < 0.01%/K

Control Action: Standard: PID with optimizing (auto-tuning)
P–, PD–, PI action possible.

Parameter Adjustment: Feed back P (xp) : 0 to 100 %
D (Tv) : 0 to 200 sec.
I (Tn) : 0 to 999 sec.
Cycle time: 1 to 240 sec.
Limits; output: 1 to 100%
Setpoint ramp: 0.0 to 99.9 deg/min.

Data Protection: EAROM, semiconductor memory

7-segment indication: Height = 10 mm

Storage Temperature: –30 to 75 deg. C (–22 to 167 deg. F)

Operating Temperature: 0 to 50 deg. C (32 to 122 deg. F)

Climate Class: KWF DIN 40040: Corresponding to 75% relative humidity, no condensation.

Outputs:
a. Relay, n/o relay (max. 250 VAC, max. 5A)
b. Bistable Voltage output depending on user configuration
isolated:
ext. 24V DC +/– 25%; max. 20 mA, R1 = 1 K Ohm
non-isolated:
int. 24V DC +/– 25%; max. 20 mA, R1 = 1 K Ohm

Alarm Outputs: Relays (max. 250 V AC; max. 5A)

Supply Voltage: 230 V AC or 115 V AC; can be switched in field –10, +6%, 48 - 62 Hz
Influence of alterations of supply voltage on control accuracy: 0.01%/10%
Power consumption: approx. 20 VA

Case: 192 x 96 mm, DIN 43700
installation depth approx. 214 mm
material: glass-fiber reinforced NORYL, self-extinguishing, drip-proof, UL 94-V1.
Type of protection: IP 50 DIN 40050 (front) IP 54, NEMA 4 on request.

Connections: connector/terminal board
protection IP 20 DIN 40050
insulation group C

Weight: Approx. 2000 g, 4.4 lbs.

Serial Interface: RS 232-C, RS 485
Adjustable transfer form and rate

Dimensions: 96mm (3.79") H x 192mm (7.55") W x 214mm (8.42") Deep

Subject to change.

Parameters (Displayed codes & setable ranges)

Working plane / zone:

SP	setpoint	
AL	temp. alarm 1 value or AC current alarm value	
AH	temp. alarm 2 value	
///	percentage output indication, heating	
///	percentage output indication, cooling	

Parameter plane / zone:

b	percentage output limits, heating	1 - 100%
b.	percentage output limits, cooling	1 - 100%
P	Prop. band (xp) — heating	0 - 100%
d	Rate — heating (derivative or TV)	0 - 200 sec.
I	Reset (also called Integral or Tn)	0 - 999 sec.
P.	P (xp) — cooling	0 - 100%
d.	D (Tv) — cooling	0 - 200 sec.
I.	I (Tn) — cooling	0 - 999 sec.
C	Cycle time, heating	1 - 240 sec.
C.	Cycle time, cooling	1 - 240 sec.
Sb	setpoint limit (max. setable)	
A	alarm configuration, Sec. 13.3	enter code on zone 1
S2	second setpoint	
Co	control zone on/off	on/off
OP	configuration: additional functions	Sec. 14.0
r	baud rate	enter codes on zone 1
F	transmission format	enter codes on zone 1
S ⌐	setpoint ramp	off — 99.9 deg/min

Ordering

Series 8000 – □ - □ - □ - □ - □ - □

10: 8 zone controller (heat or heat/cool)
12: 8 zone controller (heat or heat/cool) *with heater circuit monitoring*

INPUTS

01:	FE-CuNI	0 to 600 deg. C 32 to 999 deg. F
02:	Type J	0 to 600 deg. C 32 to 999 deg. F
22:	K (NiCr-Ni)	0 to 600 deg. C 32 to 999 deg. F
50:	RTD (PT 100)	0 to 600 deg. C, 32 to 999 deg. F 2 and 4 wire circuits
64:	RTD (PT 100)	–90 to +300 deg. C, –99 . . . +572 deg. F 2 and 4 wire circuits
65:	RTD (PT 100)	–90 to +300 deg. C, –99 to +572 deg. F 3 wire circuit

OUTPUT TYPES
10: Relay, SPST (8 control zones)
max. 8 zones "heating"
max. 4 zones "heating - cooling"
22: Bistable voltage output (8 control zones)
max. 8 zones "heating"
max. 8 zones "heating - cooling"

SUPPLY VOLTAGE
7: 230V AC (changeable to 115 V AC via internal jumpers)
5: 115 V AC (changeable to 230 V AC)
2: 24 V AC

INTERFACE
2: RS 232-C
4: RS 485
5: TTY, 20mA passive

FRONT
3: IP50 DIN 40050
4: IP54 DIN 40050, NEMA 4 (optional)