



ASB Heating Elements Ltd.

# Electronic Temperature Controls



Figure 324

## ETR-9090 series

1/16th DIN  
dual display  
1 set point  
1 optional alarm

80-260 vac 50/60Hz  
PID auto tune/ or on/off  
3 3/8" depth

Model	Sensor type	Output action	Alarm
ETR9090-121	any thermocouple	3a, 240vac SPDT relay	2a, 240vac SPST relay
ETR9090-122			no alarm relay
ETR9090-131		24 vdc, 20ma max.	2a, 240vac SPST relay
ETR9090-132			no alarm relay
ETR9090-151		4-20ma isolated linear	2a, 240vac SPST relay
ETR9090-152			no alarm relay
ETR9090-221	RTD Pt100 ohms	3a, 240vac SPDT relay	2a, 240vac SPST relay
ETR9090-222			no alarm relay
ETR9090-231		24 vdc, 20am max	2a, 240vac SPST relay
ETR9090-232			no alarm relay



Figure 325

## ETR-9200 series

1/16th DIN  
dual display  
1 set point  
2 optional alarms  
4-20 ma PV re-transmission

80-260 vac 50/60Hz  
PID auto tune/ or on/off  
3" depth  
NEMA 4X

Model	Sensor type	Output action	Alarm
ETR9200-1211	any thermocouple	3a, 240vac SPDT relay	no alarm relay
ETR9200-1221			2a, 240vac SPST relay
ETR9200-1311		24 vdc, 20ma max.	no alarm relay
ETR9200-1321			2a, 240vac SPST relay
ETR9200-1511		4-20ma isolated linear	no alarm relay
ETR9200-1521			2a, 240vac SPST relay
ETR9200-2211	RTD Pt100 ohms	3a, 240vac SPDT relay	no alarm relay
ETR9200-2221			2a, 240vac SPST relay
ETR9200-2311		24 vdc, 20ma max	no alarm relay
ETR9200-2321			2a, 240vac SPST relay



Figure 326

## ETR-9300 series

1/16th DIN  
dual display  
2 set points  
1 optional alarm

remote set point capable  
loop break alarm  
heater break alarm

digital communications  
bumpless transfer  
low voltage Input

Model	Power input	Input	Output action	Output action 2	Alarm	Communications
ETR9300-411000	90-264 vac 50/60Hz	Thermocouple	3a, 240vac SPST relay	none	none	none
ETR9300-411110		RTD		2A/240vac Form A relay	4-20ma/0-20ma	
ETR9300-412110		4-20ma/0-20ma	SSR, 5V/30a,		4-20ma/0-20ma	
ETR9300-413110			4-20ma/0-20ma			
ETR9300-413310				4-20ma/0-20ma		
ETR9300-513310	11-26vac or vdc					
ETR9300-xxxxx	Many other options available					Available



ASB Heating Elements Ltd.

# Electronic Temperature Controls



Figure 327

## ETR-9000 series

1/16th DIN  
dual display (red or green)  
2 outputs  
universal input  
90-264 vac 50/60Hz  
11-26 VAC or VDC

Model	Sensor type	Output 1	Output 2
ETR9000 41100	Universal input Thermocouple,	Relay, 2A/240 vac	none
ETR9000 41110	RTD, 4-20ma, voltage	Relay, 2A/240 vac	4-20ma/-20ma
ETR9000 41200		SSR-5V/30ma	none
ETR9000 41220		SSR-5V/30ma	SSR-5V/30ma
ETR9000 41300		4-20ma/0-20ma	none
ETR9000 41310		4-20ma/0-20ma	4-20ma/0-20ma



Figure 328

## ETR-901 series

1/16th DIN  
no display  
Proportional or on/off  
120 vac  
3 3/8" depth

Model	Sensor type	Output action	Temperature range
ETR901-01	"J" thermocouple	proportioning relay 3a, 120 vac SPST relay	50-850°F
ETR901-02		SSR, 32 vdc, 20ma max.	
ETR901-03		on/off 3a, 120 vac SPST relay	



Figure 329

## ETR-902 series

1/16th DIN  
PID or on/off  
3 3/8" depth  
no display, deviation lights

Model	Sensor type	Output action	Temperature Range	Power Input
ETR902-01	"J" thermocouple	proportioning 3a, 240vac SPST relay	50-850°F	120 vac
ETR902-02		SSR, 32vdc, 20ma max.		
ETR902-03		proportioning 3a, 240vac SPST relay	50-300°F	240 vac
ETR902-04		proportioning 3a, 240vac SPST relay	50-850°F	
ETR902-05		on/off 3a, 240vac SPST relay		120 vac
ETR902-06		proportioning SSR, 32vdc, 20ma max.		
ETR902-08		SSR, 32vdc, 20ma max.		240 vac



Figure 330

**ETR-8120 series**  
**ETR-8130 series**

Smarter Logic® 80-260 vac, 50-60HZ  
1/8th DIN 2 1/2" depth  
dual display PID-auto tune, or on/off  
front panel set-up 12-36 vdc/vac available

Model	Sensor type	Output action	2 alarms
ETR8120-31211	any thermocouple	3a, 240vac SPDT relay	no alarm
ETR8120-31221			2a, 240vac SPST relay
ETR8120-31311		SSR 32 vdc, 20ma max.	no alarm
ETR8120-31321			2a, 240vac SPST relay
ETR8120-31511		4-20ma, isolated, linear	no alarm
ETR8120-31521			2a, 240vac SPST relay
ETR8120-31221	RTD-PT 100 ohms	3a, 240vac SPDT relay	2a, 240vac SPST relay
ETR8120-32521	DIN curve	4-20ma, isolated, linear	2a, 240vac SPST relay

Smarter Logic® 80-260 vac, 50-60HZ  
1/8th DIN 2 outputs - heat/cool  
2 1/2" depth dual display  
PID-auto tune, or on/off front panel set-up

Model	Sensor type	Output action	2 alarms
ETR8130-312211	any thermocouple	3a, 120 vac SPDT relay	no alarm relay
ETR8130-312221			2a, 240vac SPST relay
ETR8130-322211	RTD-PT 100 ohms		no alarm relay
ETR8130-322221	DIN curve		2a, 240vac SPST relay



Figure 331

**ETR-4130 series**  
**ETR-4120 series**

Smarter Logic® 80-260 vac, 50-60HZ  
1/4th DIN 2" depth  
dual display PID-auto tune, or on/off  
front panel set-up

Model	Sensor type	Output action	2 alarms
ETR4120-31211	any thermocouple	3a, 120 vac SPDT relay	no alarm relay
ETR4120-31221			2a, 240vac SPST relay
ETR4120-31521		4-20ma, isolated, linear	
ETR4120-32221	RTD-PT 100 ohms		

Smarter Logic® 80-260 vac, 50-60HZ  
1/4th DIN 2 outputs heat/cool  
dual display 2" depth  
front panel set-up PID-auto tune, or on/off

Model	Sensor type	Output action	2 alarms
ETR4130-312211	any thermocouple	3a, 120 vac SPDT relay	no alarm relay
ETR4130-312221			2a, 240vac SPST relay
ETR4130-322211	RTD-PT 100 ohms		no alarm relay
ETR4130-322221	DIN curve		2a, 240vac SPST relay



Figure 332

**ETR-401 series**

1/4th DIN  
2" depth  
on/off  
100-260 vac  
no display  
proportioning

Model	Sensor type	Output action	Temperature range
ETR401-01	"J" thermocouple	on/off 3a, 240vac SPDT relay	50° - 850°F
ETR401-02		proportioning 3a, 240vac SPDT relay	
ETR401-04	"K" thermocouple	Proportioning 3a, 240vac SPDT relay	1-1200°C



Figure 333

**ETR-404 series**

1/4th DIN  
2" depth  
on/off  
90-260 vac  
indicating  
proportioning

Model	Sensor type	Output action	Temperature range
ETR404-01	"J" thermocouple	Proportioning 3a, 240vac SPDT relay	50° - 850°F
ETR404-03	"K" thermocouple	Proportioning 3a, 240vac SPDT relay	1-1200°C



Figure 334

**ETR-3 high limit series**

high limit control  
no display  
manual reset  
surface mount or DIN rail  
FM approved  
optional DC output for SSR

Model	Sensor type	Output action	Temperature range
ETR3-01	"J" thermocouple	120 volt / 3.8amp 240v max	0-1400°F
ETR3-02	"K" thermocouple	120 volt / 3.8amp 240v max	0-2300°F
ETR3-03	"J" thermocouple	120 volt / 3.8amp 240v max	0-600°F
ETR3-05	"J" thermocouple	120 volt / 3.8amp 240v max	0-750°F
ETR3-06	"J" thermocouple	24vac / 3.8amp 240v max	0-1400°F
ETR3-09	RTD	120 volt / 3.8amp 240v max	0-850°F
ETR3-17	"J" thermocouple	240 volt / 3.8amp 240v max	0-1400°F



Figure 335

**ETR-4 high limit series**

high limit  
no display  
latching relay  
auto reset  
surface mount, no enclosure  
100-260 vac  
manual reset requires remote push button

Model	Sensor type	Output action	Temperature range
ETR4-02	"J" thermocouple	20a, 240vac SPDT relay	0-1000°F & 0-500°C
ETR4-03	"K" thermocouple	20a, 240vac SPDT relay	1-2000°F & 0-1100°C