Pyrosales
Total Temperature Solutions

RKC

MELT PRESSURE DIGITAL TEMPERATURE CONTROLLER

HA Series – Melt Pressure.
HA430, HA930. Single or Dual Channel.

- Single channel strain gauge input or dual channel strain gauge and universal input
- Data units MPa, Bar, Kgf/cm^2. PSI
- Selectable 1 of 19 pre-programmed linearising curves to suit RKC strain gauge
- Measuring accuracy Strain gauge 0.1% of span
- Scan time 0.025 second. 40 time per second
- Auto/manual control over output. At the touch of a button. Smooth change in output when changing from manual to Auto control
- 5 digit dual display resolution selectable to 2nd decimal place (123.45)
- Coms: RS485 ASCII, Modbus
- Protocol: Profibus, Devicenet on board
- 16 memory areas
- 7 digital inputs. 4 x memory area change. 3 x assignable
- 4 digital event outputs (alarms)
- Retransmit PV, MV, DV, SV
- Remote setpoint input
- Onboard 8 Vdc power supply for strain gauge. Optional 24 Vdc Sensor power supply
- Strain gauge easy setting. Zero adjustment -5.0 to +5.0 mV, Gain Setting 0.500 to 4.000mV/V
- √ Extraction PV= √(input value * PV ratio+ PV bias)

CE,UL,CSA, C-Tick

HA930 **HA430**

Pyrosales Pty Ltd
A.B.N. 32 001 378 070
www.pyrosales.com.au

4 Wordie Place
Padstow NSW 2211
PO Box 309, Padstow, NSW 2211 Australia
Tel (02) 9790 1988 Fax (02) 9790 1040
sales@pyrosales.com.au

Factory 4, Enterprise Way,
Bayswater, Vic 3153
PO Box 553, Bayswater, Vic, 3153 Australia
Tel (03) 9729 2100 Fax (03) 9720 5559
vicsales@pyrosales.com.au

Unit 1,(Lot3), 70 Flanders Street
Salisbury QLD 4107
PO Box 182, Salisbury QLD 4107 Australia
Tel (07) 3277 9400 Fax (03) 3277 9495
qldsales@pyrosales.com.au

HA430/930 MELT PRESSURE SELECTION

1 channel control type

Specifications	Model and Suffix Code												
Model	HA430 (48 x 96mm 1/8 DIN size) HA930 (96 x 96mm 1/4 DIN size)	−□	□−□	□−□∗□	□−□	□−□/□							
Strain gauge type pressure sensor input	CZ-100P/200P input CZ-GP100 input or 0.500 to 4.000mV/V output type pressure sensor (Maximum supply voltage : More than 8V DC)	H X											
Non isolated type remote set value	Not supplied See Remote input code table		0 □										
Output 1 (Main output)	See output code table			□									
Output 2 (Main output) * Not isolated from OUT1.	No output from OUT2 See output code table				N □								
Power supply	24V AC/DC 100 to 240V AC					3 4							
Output 3 (Main output)	No output from OUT3 See output code table						N □						
Output 4, 5 (OUT4, 5 : Sub output)	No outputs from OUT4 and OUT5 OUT4 : Relay contact output, No output from OUT5 OUT4 and OUT5 : Relay contact output							N 1 2					
Event input 1 to 5	Not supplied Event input : 5 points (DI 1 to DI5)								N 1				
Communication	Not supplied RS-232C (ANSI/RKC standard) RS-422A (ANSI/RKC standard) RS-485 (ANSI/RKC standard) RS-485 (MODBUS) RS-422A (MODBUS) RS-232C (MODBUS) DeviceNet PROFIBUS									N 1 4 5 6 7 8 A B			
Body color	White Black										N A		
Instrument version	Version symbol												Y

<Remarks>
· OUT 1 can be used for control outputs.
· Event (alarm) outputs are assignable to OUT 2 - OUT 5.
· Analog output (PV, SV, etc) are assignable to OUT 1 -OUT 3.
· If two isolated analog outputs are required, use OUT 1 (or OUT 2) and OUT 3.

Remote Signal Code Table

Not isolated from the No.1 input [IN1]

Input type		Code
Low voltage group	0 − 10mV DC	G
	0 − 100mV DC	
	0 − 1V DC	
High voltage group	0 − 5V DC	V
	0 − 10V DC	
	1 − 5V DC	
Current group	0 − 20mA DC	Y
	4 − 20mA DC	

• Configurable within group

Output Code Table

Output Type	Code
Relay contact output	M
Voltage pulse output DC0/12V	V
Continuous voltage output DC 0 to 5V	4
Continuous voltage output DC 0 to 10V	5
Continuous voltage output DC 1 to 5V	6
Current output DC 0 to 20mA	7
Current output DC 4 to 20mA	8
SSR (Triac) output	T

Model and Suffix Code

2 channel control type

Specifications	Model and Suffix Code
Model	HA430 (48 x 96mm 1/8 DIN size) HA930 (96 x 96mm 1/4 DIN size) −□ □−□ □−□✳□ □−□ □−□/□
Strain gauge type pressure sensor input	CZ-100P/200P input CZ-GP100 input or 0.500 to 4.000mV/V output type pressure sensor (Maximum supply voltage : More than 8V DC) H X
Input 2 (IN2 : No 2 input)	See Input and Range code table □
Output 1 (Main output)	See output code table □
Output 2 (Main output) * Not isolated from OUT1.	No output from OUT2 See output code table N □
Power supply	24V AC/DC 100 to 240V AC 3 4
Output 3 (Main output)	No output from OUT3 See output code table Sensor power supply output *1 N □ P
Output 4, 5 (OUT4, 5 : Sub output) *1	No outputs from OUT4 and OUT5 OUT4 : Relay contact output, No output from OUT5 OUT4 and OUT5 : Relay contact output N 1 2
Event input 1 to 5	Not supplied Event input : 5 points (DI 1 to DI5) N 1
Communication	Not supplied RS-232C (ANSI/RKC standard) RS-422A (ANSI/RKC standard) RS-485 (ANSI/RKC standard) RS-485 (MODBUS) RS-422A (MODBUS) RS-232C (MODBUS) DeviceNet PROFIBUS N 1 4 5 6 7 8 A B
Body color	White Black N A
Instrument version	Version symbol Y

*1 When sensor power supply output is specified, output 4 and 5 can not added.

<Remarks>
· OUT 1 and OUT 2 can be used for control outputs.
· Event (alarm) outputs are assignable to OUT 2 - OUT 5.
· Analog output (PV, SV, etc) are assignable to OUT 1 - OUT3.
· If two isolated analog outputs are required, use OUT 1 (or OUT 2) and OUT3.

Range and Input Table

Thermocouple, RTD, Low voltage and Current group

Input	Code	Range		Resolution
K	K	-200 − 1372℃	-328 − 2501℉	1℃, 0.1℃, 1℉, 0.1℉ (Selectable)
J	J	-200 − 1200℃	-328 − 2192℉	
T	T	-200 − 400℃	-328 − 752℉	
E	E	-200 − 1000℃	-328 − 1832℉	
PLII	A	0 − 1390℃	32 − 2534℉	
N	N	0 − 1300℃	32 − 2372℉	
S	S	-50 − 1768℃	-58 − 3214℉	
R	R	-50 − 1768℃	-58 − 3214℉	
W5Re/W26Re	W	0 − 2300℃	32 − 4172℉	
B	B	0 − 1800℃	32 − 3272℉	
Pt100 (3 wire)	D	-200 − 850℃	-328 − 1562℉	1℃, 0.1℃, 0.01℃
JPt100 (3 wire)		-200 − 600℃	-328 − 1112℉	1℉, 0.1℉, 0.01℉ (Selectable)
0 − 10mV DC	3	-19999 − 99999 (Programmable)		1, 0.1, 0.01, 0.001, 0.0001 (Programmable)
0 − 100mV DC				
0 − 1V DC				
0 − 20mA DC	8			
4 − 20mA DC				

High voltage group

0 − 5V DC	6	-19999 − 99999 (Programmable)	1, 0.1, 0.01, 0.001, 0.0001 (Programmable)
0 − 10V DC			
1 − 5V DC			

Output Code Table

Output Type	Code
Relay contact output	M
Voltage pulse output DC0/12V	V
Continuous voltage output DC 0 to 5V	4
Continuous voltage output DC 0 to 10V	5
Continuous voltage output DC 1 to 5V	6
Current output DC 0 to 20mA	7
Current output DC 4 to 20mA	8
SSR (Triac) output	T