

SETPOINT COMPARATOR

AMH-762

*High Conversion rate

1000times/sec (Normal speed mode)

4000times/sec (High speed mode)



■ DC Voltage Measurement

Model	Range	Display Adjustment	Input Impedance	Input Protection
AMH-762-13	±9.999V	Offset ±10000 Fullscale ±0 to 10000	1M	±250V

Accuracy:±0.1% FS (23°C±5°C)

■ 1 to 5V Measurement

Model	Range	Display Adjustment	Input Impedance	Input Protection
AMH-762-1V	1 to 5V	Offset ±10000 Fullscale ±0 to 10000	1M	±250V

Accuracy:±0.1% FS (23°C±5°C)

■ 4 to 20mA Measurement

Model	Range	Display Adjustment	Internal Resistance	Input Protection
AMH-762-2A	4 to 20mA	Offset ±10000 Fullscale ±0 to 10000	50	±70mA

Accuracy:±0.1% FS (23°C±5°C)

Condition for accuracy, (FSC-OFS)/(FIN-OIN) is less than 1

■ Specifications

• Measuring Section

Input Configuration: Single Ended
 Operation Method: Successive approximation type
 No. of Input: A input and B input
 Conversion Rate : 0.5times to 4000times(only use one input)
 0.25times to 2000times(use two input)

Mode	High Speed Mode	
	No.	2
Conversion Rate (1ch) per sec.	4000	2000
Conversion Rate (2ch) per sec.	2000	1000

Mode	Normal Speed Mode						
	No.	4	8	10	20	40	100
Conversion Rate (1ch) per sec.	1000	500	400	200	100	50	40
Conversion Rate (2ch) per sec.	500	250	200	100	50	25	20

Mode	Normal Speed Mode							
	No.	200	400	800	1000	2000	4000	8000
Conversion Rate (1ch) per sec.	20	10	5	4	2	1	0.5	
Conversion Rate (2ch) per sec.	10	5	2.5	2	1	0.5	0.25	

■ Features

- High Conversion Rate, 1000times/sec (Normal speed mode)
4000times/sec (High speed mode)
- 2 inputs computation (A input, B input)
- Digital Zero, Peak Hold, Valley Hold, Peak-Valley Hold
- Available 8-pattern Setting for Scaling value and setpoints (Data Back-up EEPROM)
- Excitation Supply 24VDC 40mA
- RS-232C, RS-485 Output (Option)
- BCD, Analog Output (Option)
- Power Supply (90 to 264VAC)
- Bright LED, 10mm (Red)

Display: LED, 10mm high (Red)
8mm high (Green) for monitor

Display Speed: 1.25, 2.5, 12.5, 25times/sec for Normal speed mode

When pressed key of "C", appear display value for High speed mode

A "." is displayed automatically

Polarity : Overrange Indication: When input exceeds the maximum display, display OL and flash

±99999

Max. Display: Settable to any digit position

Decimal Point: Leading zero suppression

Zero Display: Hold ; Shorted D.COM and S/HA, S/HB

External Control: terminal or level "0"
Start; Open D.COM and S/HA, S/HB terminal or "1" level

Digital Zero; Shorted D.COM and

DZA, DZB terminal or level "0"

Peak Hold;

Valley Hold; Shorted D.COM and PH terminal or level "0"

Peak Valley Hold;(Compare the display value)
Selected either one

Pattern Select; Combination of D.COM and P.SEL terminal

Level "0" = 0 to +1.5V

Level "1" = +3.5 to 5V

Current = less than -5mA

*Not provided PH, DZA and DZB for RS-232C and RS-485 output

SETPOINT COMPARATOR

AMH-762

• Comparator Section

Control System: Microcomputer
Setting Range: -99999 to +99999 with polarity
Comparative Condition: High High setpoint < Indication →HH
High setpoint < Indication →HI
High setpoint ≥ Indication ≥ Low setpoint →GO
High high setpoint ≥ Indication ≥ Low low setpoint]
Low setpoint > Indication →LO
Low low setpoint > Indication →LL

Relay Contact Capacity: 250VAC 0.2A Resistive load
120VAC 0.5A Resistive load
28VDC 1A Resistive load

Photo Coupler Output: Voltage=Max. 30V
Current=Max. 20mA
Saturation voltage=less than 1.2V at 20mA

Hysteresis: 1 to 9999 digit each setpoints

External Control: Reset; Shorted D.COM and R.RE terminal or level "0"

• Common Section

Memory Back-up : EEPROM (Rewrite more than 100,000 times)
back up 10 years
Operating Temp: 0 to 50°C 35 to 85% RH
Power Supply: 90 to 264VAC
Power Consumption: Approx 10VA TYP. (at 100V)
Dimensions: 48(H) × 96(W) × 161(D) mm DIN size
Weight: Approx. 600g (unit only)
Dielectric Strength: Input/earth, COM, Comparative output,
DC500V/ 1 min.
Input/D.COM of each output terminal,
DC500V/1 min.
Power supply/D.COM, case, comparative
output, 1500VAC/1 min.

Insulation Resistance: 500VDC more than 100M ohms at the above
terminals

Excitation Supply: 24VDC ±10% 40mA (Ripple less than 100mV
p-p)

Accessories: Instruction manual

■ Output

● BCD data output (Isolated input (Lo))

• At Open collector (NPN)

Measured Data: Negative logic transistor "ON" at logic 1
Polarity Signal: Transistor "ON" at minus input
Over Signal: Transistor "ON" at overflow input
Printing Command Signal: Transistor "ON" during a period at every
measurement completion

Transistor Output Capacity:

Applied voltage, 30V max. current 10mA max.
Saturated output voltage less than 1.2V at
10mA
*Available TTL output

● RS-485 (Isolated input (Lo))

Electrical Characteristics: Conforming to EIA RS-485
Synchronous Method: Start and stop
Communication Method: 2-wires system half-duplex (Polling and
selecting)
Transmission Speed: 2400/4800/9600/19200 bPS
Start Bit: 1 bit
Data Length: 7 bits
Error Detection: Even parity (BCC)
Stop Bit: 2 bits
Character Code: ASCII code
Transmission Control: No protocol
Signal name used:

Signal name	Signal	Signal Direction
Non-reversible output	+	Input/output
Reversible output	-	Input/output

No. of Connectable Meter: Up to 31 meters
Line Length: Up to 500m in total

● RS-232C (Isolated input (Lo))

Electrical Characteristics: Conforming to EIA RS-485
Communication Method: Full duplex
Synchronous Method: Start and Stop
Transmission Speed: 2400/4600/9600/19200 bps
Start Bit: 1 bit
Data Length : 7 bits
Error Detection: Even parity
Stop Bit: 2 bits
Character Code: ASCII code
Transmission Control: No protocol

● Analog Output (Isolated input (Lo))

Output	Resistive load	Accuracy(23°C±5°C)
1 to 5V	More than 10K	±0.5% FS
4 to 20mA	0 to 500	±0.5% FS

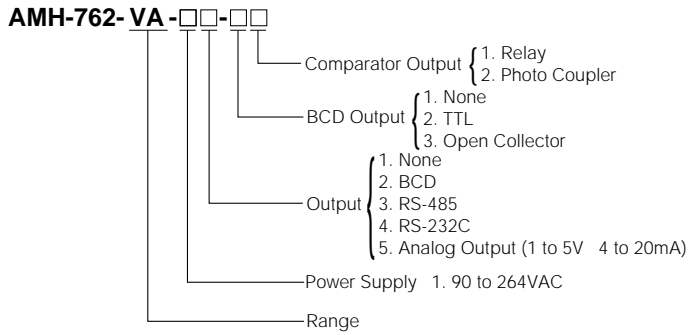
■ Other Functions

Moving Average: Digital Filter function
Fixed Zero: 10th digit is fixed to "0" for display
Display Blanking: Blanking of LEDs on main and
monitor display
Tracking Zero: Zero point shift is digitally,
automatically corrected.
Activated when digital zero function
becomes valid

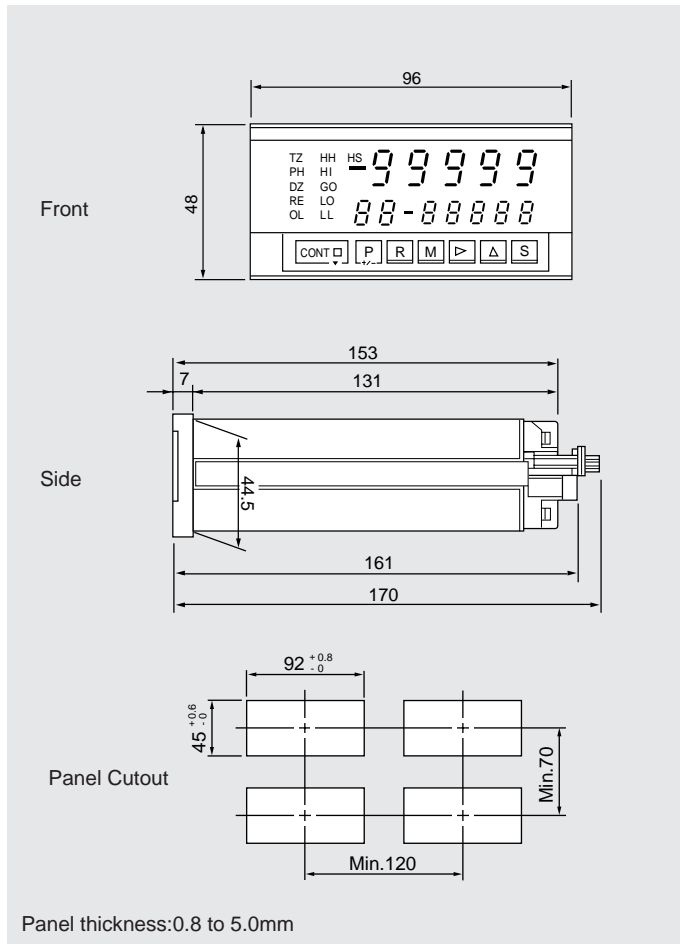
SETPOINT COMPARATOR

AMH-762

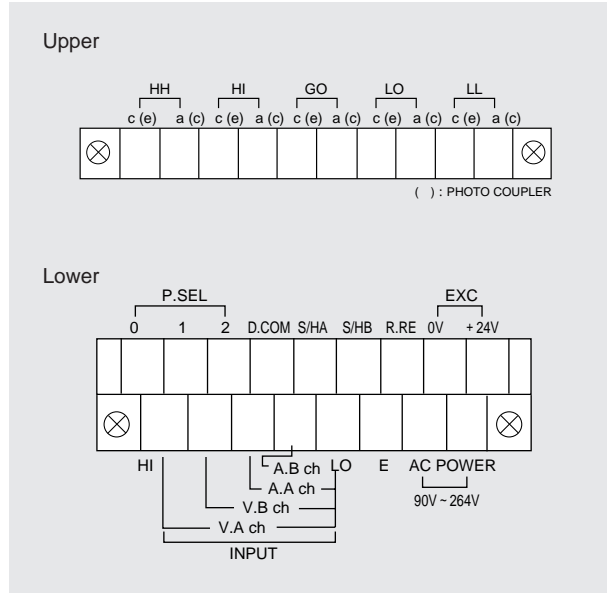
Ordering Code



Dimensions



Connection Diagram



Connection Diagram

