

CS3-RS 4 2/3 Digital Resistance Meter (1/32 DIN) ADTEK

Description

CS3-RS Resistance Indicator is equipped with high accuracy, display, control, and remote communication.

Its small structure reduces the space required for installation.

Also, it provides many functions such as control, alarm, communication, data collection, production inspection, and central monitoring.



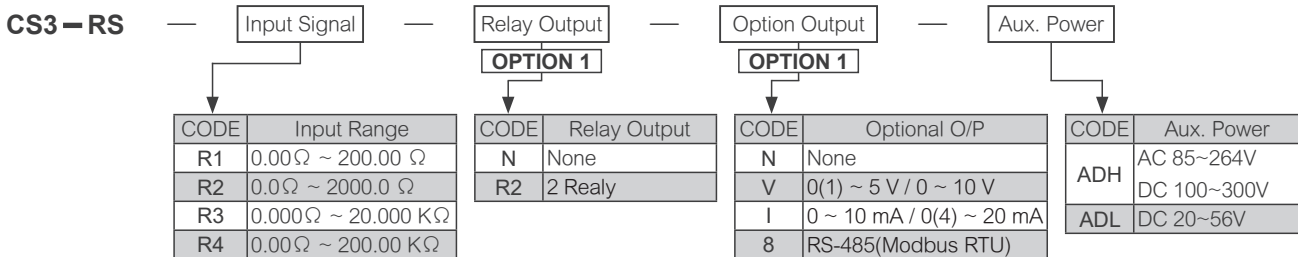
Features

- Measuring range: 0~200Ω/2000Ω/20.0KΩ/200.0KΩ (2-wire)
- Field calibration for potentiometer according to actual needs
- Relay output can be set to be Hi / Lo / Hi Hold /Lo Hold / DO mode and can setting as Start delay band / Hysteresis band / Delay on & Delay off function
- Analog output or RS-485 communication are optional
- External control input can be set to PV Hold / Max or Min value reset / Relay Reset
- CE and FCC approved

Applications

- Testing equipments such as motors, transformer, relays for measurement; work with PC/PLC for alarm and Communication
- Online testing for resistance element

Ordering Information



Measurement and Wiring

Measuring Range	Input Impedance
0.0 Ω ~ 200.00 Ω (2 wire)	≥ 1M Ω
0.0 Ω ~ 2000.0 Ω (2 wire)	
0.00 Ω ~ 20.000 KΩ (2 wire)	
0.00 Ω ~ 200.00 KΩ (2 wire)	

Technical Specification

Input

A/D converter:	16-bits resolution
Accuracy:	±0.04% F.S. ±1C
Sampling rate:	15 times/sec
Response time:	≤100 mS (when the AvG = "1")

Display & Functions

LED:	Numeric: 4 2/3 digits, 0.4"(10.0mm) red high-brightness LED Relay output indication: square red LED RS-485 communication: square orange LED E.C.I function indication: square green LED
Display range:	-19,999~29,999 L 0.5 : Low Scale; Settable range: -19,999~+29,999 H 0.5 : High Scale; Settable range: -19,999~+29,999
Decimal point:	0 / 0.0 / 0.00 / 0.000 / 0.0000
Over range indication:	OFH : Over 20% of input Hi limit value
Under range indication:	OFL : Under 20% of input Low limit value
Max / Mini recording:	Maximum and Minimum value storage during power on
Display functions:	PV / Max(Mini) Hold / RS-485 programmable
Front key functions:	Down key can be set as DI function
Low cut:	-19,999~29,999 counts
Digital fine adjust:	PV zero [P u P o]: -19,999~+29,999 PV span [P u S P n]: -19,999~+29,999

Reading Stability Function

Average: [$\overline{\text{RUD}}$] 1~99 times
 Moving average: [$\overline{\text{RUD}}$] 1(None)~10 times
 Digital filter: [dF , L] 0(None)/1~99 times

IEC 61000-4-6:2013 / IEC 61000-4-8:2009
 IEC 61000-4-11:2004
 Safety(LVD): EN 61010-1:2010
 FCC: FCC part 15 subpart B: Class A

Relay Output (optional)

Set points: 2 set-points, range -19,999~29,999
 Relay capacity: 2 channels SPDT(1c), 2A/250Vac
 Action mode: Hi / Lo / Hi.Hold / Lo. Hold / DO / OFF
 Action function: Start delay / Start band / Dealy ON / Delay OFF / Hysteresis
 Start delay time: 0:00.0~9(M):59.9(S)
 Start band: 0~9999 counts
 Delay ON time: 0.00.0~9(M):59.9(S)
 Delay OFF time: 0.00.0~9(M):59.9(S)
 Hysteresis: 0~5000 counts

Environmental Conditons

Operating temp: 0~60 °C
 Humidity temp: 20~95 %RH, Non-condensing
 Temp. coefficient: ≤ 100 PPM/°C
 Storage temp.: -10~70 °C
 Enclosure: Front panel: IEC 529 (IP52); Housing: IP20

External Control Input (ECI)

Input mode: 1 Channel input, mechanical contact or open collector input are available
 Input function: Tare / PV Hold / Max. or Min. value reset / DI / Relay reset
 Debouncing time: 5~255 (x8mS) programble

Mechanical Structure

Dimensions: 48mm(W) x 24mm(H) x 107mm(D)
 Panel cutout: 45mm(W) x 22.5mm(H)
 Case material: ABS fire-resistance (UL 94V-0)
 Mounting: Panel flush mounting
 Terminal block: PA 66 (UL 94V-0)
 28~14AWG / 0.5~1.5mm²
 Screw Torque Value: M2.0 / 2.0kgf.cm(Max)
 Weight: 110g

Analog Output (optional)

Accuracy: $\leq \pm 0.1\%$ F.S.; 16 bits DA converter
 Ripple: $\leq \pm 0.1\%$ F.S.
 Response time: ≤ 100 mS. (10~90% of input)
 Output range: Voltage: 0~5V / 0~10V / 1~5V
 Current: 0~10mA / 0~20mA / 4~20mA
 Output capability: Voltage: 0~10V: $\geq 1000\Omega$;
 Current: 4(0)~20mA: $\leq 600\Omega$ max
 Functions: R_{OH5} : output High setting: -19,999~29,999
 R_{OL5} : output Low setting: -19,999~29,999
 $R_{OL\%}$: output High Limit 0.00~110.00%
 Digital fine adjust: R_{OFF} : adjust range: -38,011~+27,524
 R_{ON} : adjust range: -38,011~+27,524

RS-485 Communication (optional)

Protocol: Modbus RTU mode
 Address: 1 ~ 247
 Baud rate: 1200/2400/4800/9600/19200/38400 bps
 Data bits: 8 bits
 Parity: None / Even / Odd
 Stop bit: 1 or 2
 Distance: 1200M max

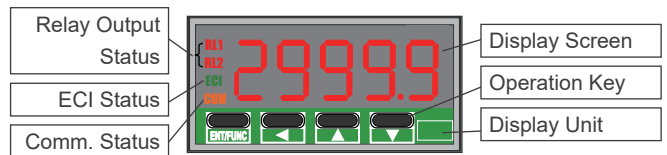
Power Supply

Power supply: ADH : AC 85~264V / DC 100~300V
 ADL : AC / DC 20~56V
 Power consumption: AC : $\leq 8VA$ @ 230V / DC : $\leq 3W$
 Back up memory: By EEPROM

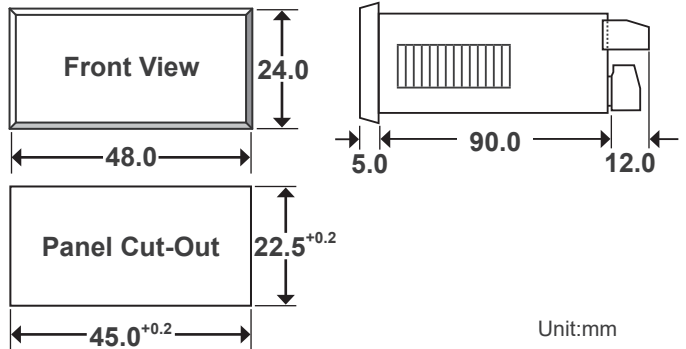
Safety

Isolation: AC 2.0 KV, 50/60Hz for 1 min,
 Between Power / Input / Output / Case
 Insulation resistance: $\geq 100M\Omega$ @ 500Vdc,
 Between Power / Input / Output / Case
 EMC: EN61326:1:2013 / CISPR11 Class A
 EN61000-3-2:2014 / EN61000-3-3:2013
 IEC 61000-4-2:2008 / IEC61000-4-3:2006+A1:2007+A2:2010
 IEC 61000-4-4:2012 / IEC 61000-4-5:2005

Front Panel

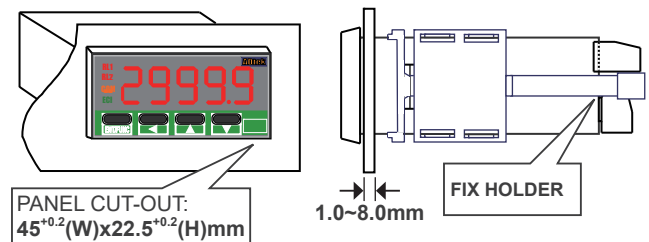


Dimensions



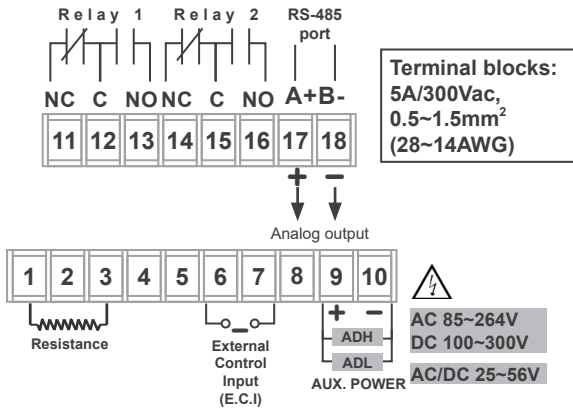
Unit:mm

Installation



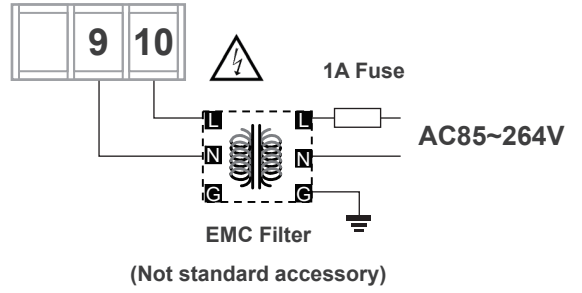
The meter should be installed in a location that does not exceed the maximum operating temperature and provides good air circulation.

■ Connection Diagram



⚠ Please check the voltage of power supplied first, and then connect to the specified terminals. It is recommended that power supplied to the meter be protected by a fuse or circuit breaker.

■ Power Connection



■ RS-485 Communication Port

