UT350L



The UT350L is configurable as either a high or low limit controller.

The limit controller
with no limitations

It could happen one day. Your process equipment might lose its cool. That's why the new UT350L was developed—to be there when your machinery loses control. The UT350L was designed to accept input from virtually any processing system.

This FM–approved, ¼ DIN limit controller is configurable as either a high or low limit. Features include universal input, retransmission output, two alarm outputs, and an optional RS-485 communications package. To further safeguard your system, its timer will track the total time the setpoint has been exceeded, and a register will retain the maximum temperature reached. An LED display with 20mm high characters makes the process variable easy to read.

BENEFITS:

Limit control—high or low limit latching action

Universal inputs—thermocouples, RTDs, DC current, and voltage

Alarm function—two programmable alarm outputs

Comprehensive display—four-digit display of variable and setpoint; alarms, limit, and output status indication LEDs

Retransmission output—PV or setpoint output as 4–20mA

Optional RS-485 communications—connect up to 31 controllers to a PC, PLC, or network

Safety—drip-proof front panel (IP55 compatible)

Universal power supply—rated at 100–240V AC (±10%)

Security feature—password protection

UT350L SPECIFICATIONS

ALARM FUNCTION

The alarm status is indicated by the alarm lamp on the front panel
Alarm types: PV high limit, PV low limit, Deviation high limit, Deviation low limit. De-energized on deviation high limit, De-energized on low limit. Deviation high and low limits, High and low limits within deviation, De-energized on PV high limit, De-energized on low limit.
Alarm outputs: 2 points

COMMUNICATION INTERFACE (OPTIONAL)

Communication protocol: Computer link or ladder communication
Standard: EIA RS-485
Maximum number of connectable controllers: 31 GREEN series controllers
Maximum communication distance: 1200m
Communication method: 2-wire half duplex or 4-wire half duplex, start-stop synchronization, non-procedural
Communication rate: 600, 1200, 2400, 4800, 9600 bps

INPUT

Number of input points: 1
Thermocouple: J, K, T, B, S, R, N, E, L, U, W, Platinel 2, PR 20-40, W97Re3-W75Re25
RTD: Pt100, JPt100
DC voltage: 0–2V, 1-5V, 0–10V, -10–20mV, 0–100mV
Input resistance: 1MΩ or more for TC/mV
About 1MΩ for DC voltage input
Noise rejection ratio:
Normal mode: 40dB (50/60Hz) or more
Common mode: 120dB (50/60Hz) or more

CONTACT INPUT

Usage: Confirmation of limit output
Number of input points: 1
Input type: Voltage-free contact input type or transistor contact input
Input contact rating: 12V DC, 10mA or more

OUTPUT

RETRANSMISSION OUTPUT

Either PV or target setpoint is output
Number of output points: 1
Output signal: 4–20mA DC
Load resistance: 600 (or less)
Output accuracy: ±0.3% of span

CONTROL OUTPUT

Relay contact output: 1 SPDT 250V AC 3A, or 30V DC 3A (resistance load)
Number of output points: 1

CONTACT OUTPUT

Usage: Alarm output and FAIL output
Number of relay contact output points: 2
Relay contact rating: 240V AC, 1A or 30V DC, 1A

DISPLAY SPECIFICATIONS

PV display: 4-digit, 7-segment red LED, 20mm character height
Setpoint display: 4-digit, 7-segment red LED, 9.3mm character height
Status indicating la: LEDs

CONFORMANCE TO SAFETY AND EMC STANDARDS

Safety:
Conforms to IEC1010-1: 1990 and EN61010-1: 1992. Certified for FM-3810 and FM-3545. The overvoltage category for each input is CAT II (IEC1010-1). Certified for UL508
EMC Standards:
Conforms to the following standards:
EN55011: Class A Group 1 for EMI (emissions)
EN50082-2: 1995 for EMS (immunity)

CONSTRUCTION, MOUNTING, AND WIRING

Construction: Front panel drip-proof (IP55 compatible)
Weight: Approx. 1kg or less
External dimensions: 96mm (W) x 96mm (H) x 100mm (D)
Panel cut-out dimensions: 92+.8mm (W) x 92+.8mm (H)

POWER SUPPLY SPECIFICATIONS AND ISOLATION

Power supply: Rated at 100–240V AC (±10%), 50/60Hz
Power consumption: max 20VA (max 8.0 W)
Memory back-up: Non-volatile memory

LIMIT CONTROL FUNCTION

Setpoint: 1
Control type: High limit or low limit
Limit action: Latching

MODEL CONFIGURATION

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MODEL	
Limit controller with retransmission output	

OPTIONAL FUNCTIONS	
None	0
with communication	1