Model UT32A/MDL Controller
(Mount on DIN Rail)

External Dimensions

Unit: mm
(approx. inch)

Note:
Trigonometry
General tolerance = ±(JIS B 0401-1998 tolerance class IT18)/2
Terminal Wiring Diagrams

**Control output**
- OUT (Suffix code: Type 1=-0)
  - Factory default: Control output is relay.
- ALM (Equipped as standard)
  - 3 terminal relay output (transistor)
  - Alarm-3 output (PV high limit)
  - Common
  - Alarm-2 output (PV low limit)
  - Common
  - Alarm-1 output (PV high limit)
  - Common
  - Relay contact rating: 240 V AC, 3 A, 30 V DC, 3 A (resistance load)

**PV input**
- PV (Equipped as standard)
  - Current (mA) input
  - Voltage (mV, V) input

**Retransmission output**
- RET (Equipped as standard)
  - Can be used for 15 V DC loop power supply when not used for retransmission output.
- RET/OUT2 (Suffix code: Type 1=-2)
  - Can be used for retransmission output or 15 V DC loop power supply when current/voltage pulse output is not used for control output.
  - Current output range can be changed.

**Heating/cooling control output**
- OUT2 (Suffix code: Type 1=-2)
  - Heat/cooling relay contact output
  - Contact rating: 240 V AC, 3 A, 30 V DC, 3 A (resistance load)

**Power supply**
- 24 V AC/DC power supply
  - Optional suffix code /DC

**Heater break alarm**
- HBA (Optional suffix code /HA)
  - External contact output (transistor)
  - Heater break alarm-1
  - Heater break alarm-2
  - Common
  - Contact rating: 12 V DC, 50 mA
  - Function can be assigned to the terminal with no function.

**Contact input**
- DI (Equipped as standard)
  - External contact input
  - STOP when DI=ON
  - RUN when DI=OFF
  - Common
  - Contact rating: 12 V DC, 10 mA or more
Terminal Wiring Diagrams (E1-Terminal Area)

301-306  E1-Terminal Area

### RS-485 Communication
- **RS-485**
  - SDB (+) [Type 2=1]
- **RS-485 (Suffix code: Type 2=1)**
  - SDB (+) [SDB (+) 301-306]
  - SDA (-) [SDA (-) 301-306]
  - RDB (+) [RDB (+) 301-306]
  - RDA (-) [RDA (-) 301-306]
  - SG [SG 301-306]

### 24 V DC Loop Power Supply
- **24 V DC Loop Power Supply**
  - 21.6-28.0 V DC (Max. 30 mA DC)
  - (Suffix code: Type 2=0 and optional suffix code /LP)
  - 305 [305]
  - 306 [306]

### RS-485 Communication/24 V DC Loop Power Supply
- **RS-485/LPS24**
  - (Suffix code: Type 2=1 and optional suffix code /LP)
  - 24 V DC Loop Power Supply
  - 21.6-28.0 V DC (Max. 30 mA DC)
  - RS485/LPS24 [RS485/LPS24 301-306]

### CC-Link Communication (with Modbus Master)
- **CC-L**
  - (Suffix code: Type 3=3)
  - FG: Flame ground
  - SLD: Shield
  - DG: TX/RX signal ground
  - DB: RX/TX signal - signal
  - DA: RX/TX signal + signal

### Optional Components
- **RS-485**
  - 110 Ω

### CC-Link Communication (with Modbus Master)
- **RS-485**
  - 110 Ω

- **Not used**
  - 508

- **OH (red)**
  - Lit: User profile error/Address error, Unlit: Normal

- **L ERR (red)**
  - Lit: Communication failure (CRC error), Unlit: Normal

- **L RUN (green)**
  - Lit: Normal, Unlit: No carrier detected/Communication timeout

If the UT is located at the end of a segment for the CC-Link communication wiring, terminating resistors are separately needed. These are to be prepared by users. (110 Ω: 1 pc.)