

TRANSMISSION LEVEL CONVERTER
(NestBus/RS-232-C, RS-485/RS-232-C)

MODEL

LK1

BEFORE USE

Thank you for choosing us. Before use, please check contents of the package you received as outlined below. If you have any problems or questions with the product, please contact our sales office or representatives.

■ PACKAGE INCLUDES:

Transmission level converter(1)

■ MODEL NO.

Confirm Model No. marking on the product to be exactly what you ordered.

■ INSTRUCTION MANUAL

This manual describes necessary points of caution when you use this product, including installation, connection and basic maintenance procedures.

POINTS OF CAUTION

■ POWER INPUT RATING & OPERATIONAL RANGE

- Locate the power input rating marked on the product and confirm its operational range as indicated below:
85 – 132V AC rating: 85 – 132V, 44 – 66 Hz, approx. 5VA
24V DC rating: 24V ±10%, approx. 30mA

■ GENERAL PRECAUTIONS

- Before you remove the unit or mount it, turn off the power supply for safety.

■ ENVIRONMENT

- Indoor use.
- When heavy dust or metal particles are present in the air, install the unit inside proper housing with sufficient ventilation.
- Do not install the unit where it is subjected to continuous vibration. Do not subject the unit to physical impact.
- Environmental temperature must be within -5 to +55°C (23 to 131°F) with relative humidity within 30 to 90% RH in order to ensure adequate life span and operation.

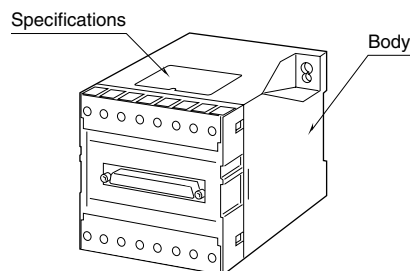
■ WIRING

- Do not install cables close to noise sources (relay drive cable, high frequency line, etc.).
- Do not bind these cables together with those in which noises are present. Do not install them in the same duct.

■ AND

- The unit is designed to function as soon as power is supplied, however, a warm up for 10 minutes is required for satisfying complete performance described in the data sheet.

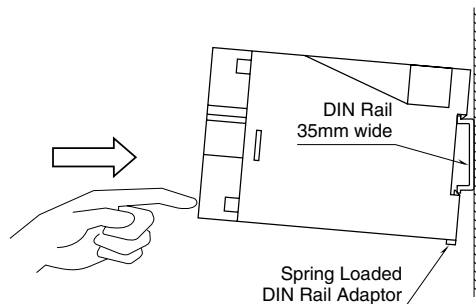
COMPONENT IDENTIFICATION



INSTALLATION

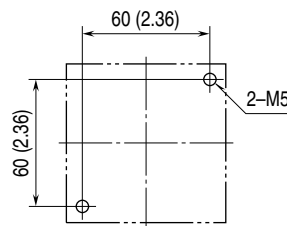
■ DIN RAIL MOUNTING

Set the unit so that its DIN rail adaptor is at the bottom. Position the upper hook at the rear side of the unit on the DIN rail and push in the lower. When removing the unit, push down the DIN rail adaptor utilizing a screwdriver (-) and pull.

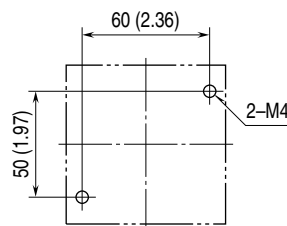


■ WALL MOUNTING unit: mm (inch)

■ M5 SCREWS



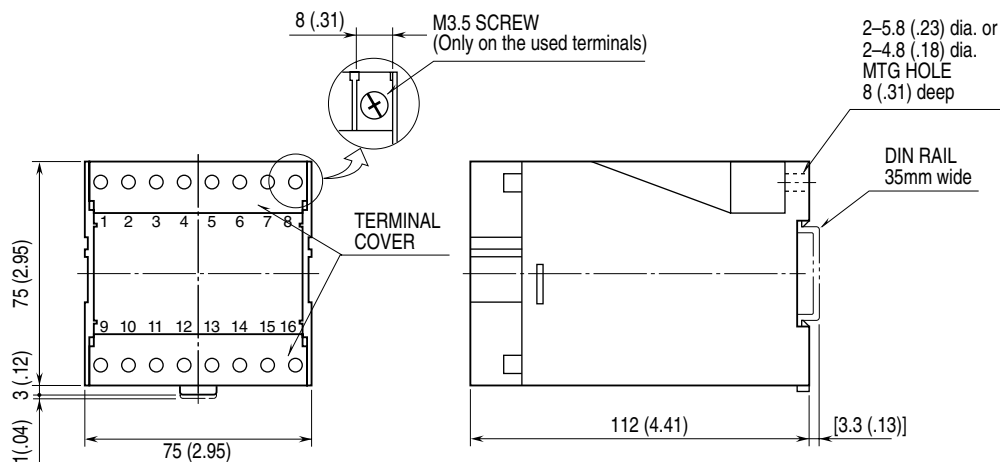
■ M4 SCREWS



TERMINAL CONNECTIONS

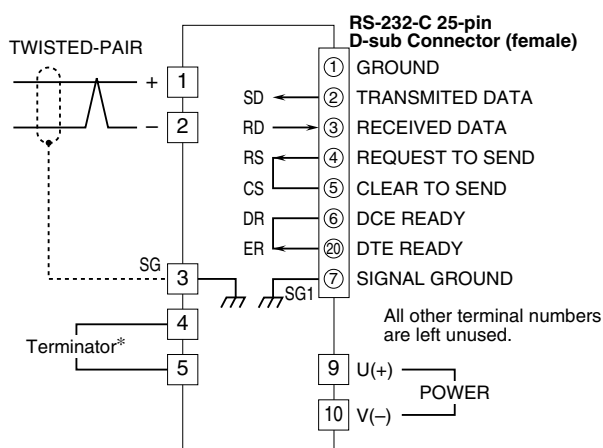
Connect the unit as in the diagram below or refer to the connection diagram on the front of the unit.

EXTERNAL DIMENSIONS unit: mm (inch)



•When mounting, no extra space is needed between units.

CONNECTION DIAGRAM



*Close across the terminal 4 – 5 when the LK1 unit is at an end of RS-485 transmission line.

WIRING INSTRUCTIONS

SCREW TERMINAL

Torque: 0.8 N·m

CHECKING

- 1) Terminal wiring: Check that all cables are correctly connected according to the connection diagram.
- 2) Power input voltage: Check voltage across the terminal 9 – 10 with a multimeter.
- 3) Check the twisted-pair cable: CPEV-S, 0.9 dia. minimum (shielded)
- 4) Be sure to short across the terminal 4 – 5 when the LK1 unit is at the end of a transmission loop.

LIGHTNING SURGE PROTECTION

We offer a series of lightning surge protector for protection against induced lightning surges. Please contact us to choose appropriate models.