

# EX series

## EX485BD USER'S GUIDE

☛ This manual contains text, diagrams and explanations which will guide the reader in the correct installation and operation of the EX-485BD communication adapters.

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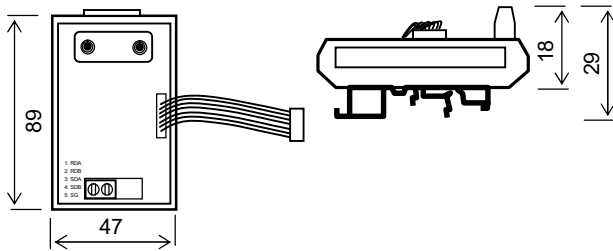
### Introduction

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#### <External dimensions>

EX485BD

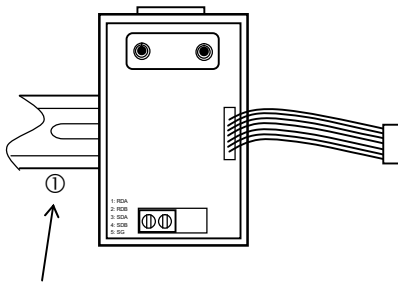
Dimensions unit: mm



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### Installation

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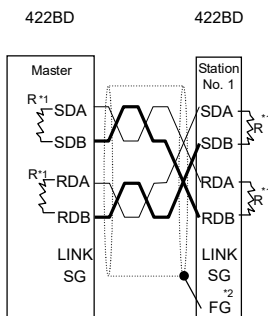
♦ it can assembly to ① (35mm).

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### Wiring

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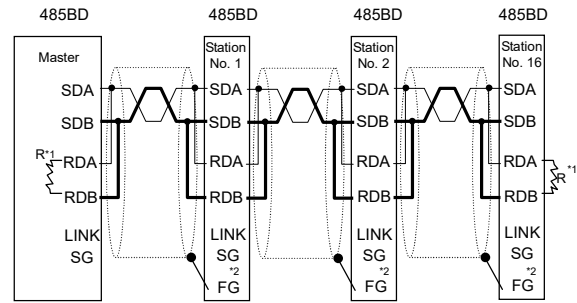
#### Examples of two-pair wiring (for RS422 circuit)



\*1 R is the terminating resistance. Connect the terminating resistance (330Ω) between terminals **SDA** and **SDB**, and terminals **RDA** and **RDB**.

\*2 Connect terminal **FG** to earth terminal of the PC main body grounded with resistance of 100Ω or less.

#### Examples of one-pair wiring (for RS485 circuit)



\*1 R is the terminating resistance. Connect the terminating resistance (110Ω) between terminals **RDA** and **RDB**.

\*2 Connect terminal **FG** to earth terminal of the PC main body grounded with resistance of 100Ω or less.

\*3 The 24V DC power requirement can be taken from the service power supply of the PLC main unit.

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### Specifications

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#### <Environmental specifications>

Operating ambient temperature	0 to 55°C, storage temperature –20 to 70°C	
Humidity no condensation	35 to 85% RH (No condensation)	
Noise immunity	Noise voltage 1000V p-p, noise width 1 μ sec	
Dielectric withstand voltage	1500V AC, 1 min	Between all terminals in batch and FG terminal
Insulation resistance	500V DC / 5M Ω	
Ground	Grounding resistance of 100 Ω or less (class 3)	
Operating ambience	Free from corrosive gases, minimal dust.	

#### <Power source specification>

Current consumption	Internal power supply from PLC: 5V DC, max. 30mA
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#### <Performance specification>

Item	Specifications
Interface	Conforming to RS422/485
Circuit configuration	1:1 or 1:n (n=1 to 16, max. 16 stations)
Transfer distance	Total extension within 50m
Station numbers	1 to 16 (set by Special D8121)

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