

R485 Data Cable Splitter



R485 data cable splitter

The R485 data cable splitter allows terminal block type connection of R485 networks.

The Optidrive ODV-3 (Eco) product can be connected to a R485 communications network using the on-board RJ45 port, alternatively this R485 Data Cable splitter can be used as an alternative method of network cable termination.

The R485 splitter also includes:

- RJ45 port for connection of remote keypad options or further Optidrives.

For further details on R485 operation and the ODV-3 product please refer to the Optidrive Eco User Guide.

User Guide

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The manufacturer accepts no liability for any consequences resulting from inappropriate, negligent or incorrect installation.

The contents of this User Guide are believed to be correct at the time of printing. In the interests of a commitment to a policy of continuous improvement, the manufacturer reserves the right to change the specification of the product or its performance or the contents of the User Guide without notice.

Compatibility

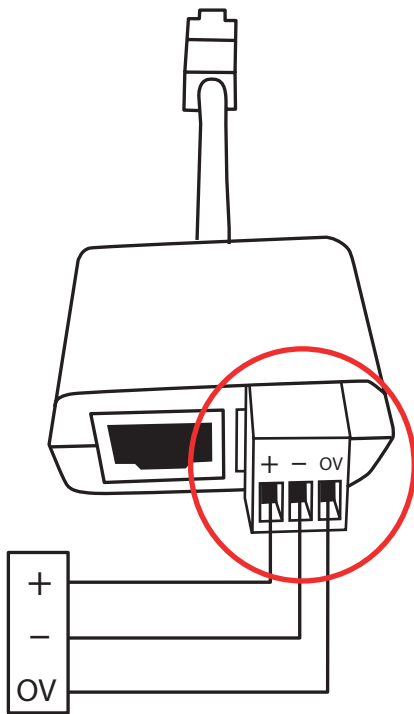
This Option is solely suitable for use on ODV-3 Eco Drives.

NOTE The splitter can also be used for Modbus network connection.

Model Code

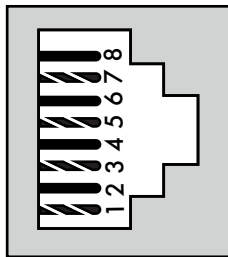
OPT-3-BNTSP-IN

Data Cable Splitter Connections



RJ45 Port Connections

Pin	Function
1	Not Used
2	Not Used
3	OV
4	RS485- (Optibus)
5	RS485+ (Optibus)
6	+24V
7	RS485- (Modbus/BACnet)
8	RS485+ (Modbus/BACnet)



Dimensions

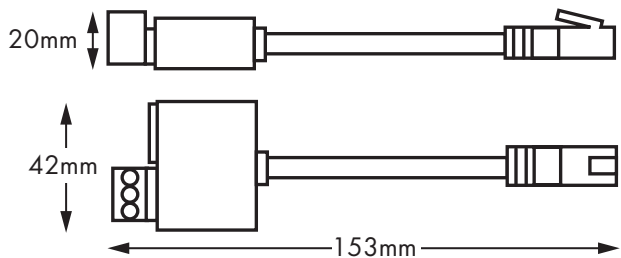
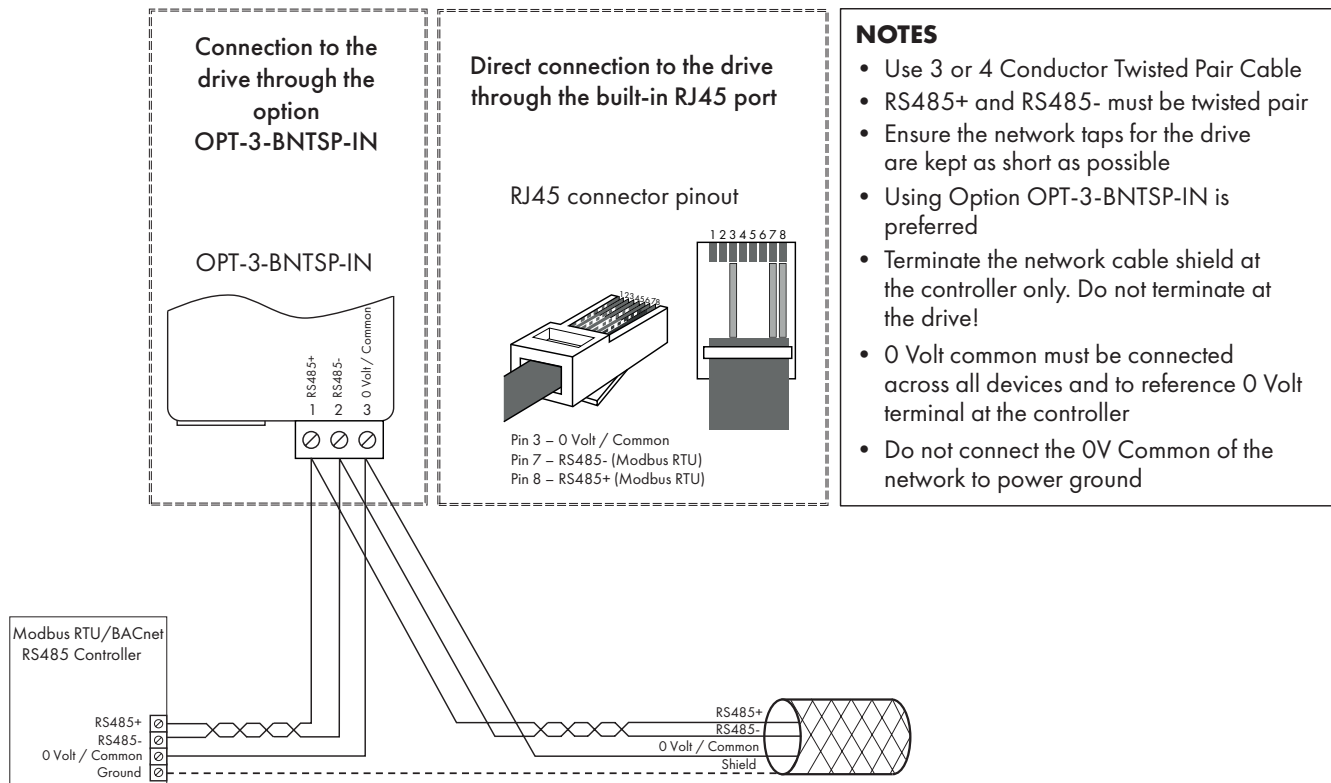


Diagram 1 - Example of Using the Splitter

Shielded data cables should be used wherever possible.

The shield should be grounded at the controller/router, furthermore the shield should be maintained the full length of the cable.



Important Safety Information

This option is specifically designed to be used with the Optidrive variable speed drive product and is intended for professional incorporation into complete equipment or systems. If installed incorrectly it may present a safety hazard. The Optidrive uses high voltages and currents, carries a high level of stored electrical energy, and is used to control mechanical plant that may cause injury. Close attention is required to system design and electrical installation to avoid hazards in either normal operation or in the event of equipment malfunction.

System design, installation, commissioning and maintenance must be carried out only by personnel who have the necessary training and experience. They must read carefully this safety information and the instructions in this Guide and follow all information regarding transport, storage, installation and use of the Option module, including the specified environmental limitations.

Safety Notices

WARNING is given where there is a hazard that could lead to injury or death of personnel.

CAUTION is given where there is a hazard that could lead to damage to equipment.

It is the responsibility of the installer to ensure that the equipment or system into which the product is incorporated complies with the EMC legislation of the country of use.

WARNING Within the European Union, all machinery in which this product is used must comply with the Directive 2006/42/EC, Safety of Machinery. In particular, the equipment should comply with EN60204-1.

CAUTION

- Store the Option in its box until required. It should be stored in a clean and dry environment. Temperature range -40°C to $+60^{\circ}\text{C}$.
- Install the splitter into the Optidrive by inserting the RJ45 plug into the RJ45 port of the Optidrive. (See Diagram 1).

WARNING

- Optidrives and the Options should be installed only by qualified electrical persons and in accordance with local and national regulations and codes of practice.
- **Electric shock hazard!** Disconnect and **ISOLATE** the Optidrive before attempting any work on it. High voltages are present at the terminals and within the drive for up to 10 minutes after disconnection of the electrical supply.
- Where the electrical supply to the drive is through a plug and socket connector, do not disconnect until 10 minutes have elapsed after turning off the supply.

Warranty

Complete Warranty Terms and Conditions are available upon request from your IDL Authorised Distributor.



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