



## BES212, BES212/N Bus Expansion Modules

With the bus expansion module BES212 and BES212/N a »high speed« connection up to 3 m away is possible with less than 1.5  $\mu$ s access time to distributed I/O units. Up to six distributed substations can be directly interconnected in a daisy chain topology. Each substation can in turn handle up to 15 M1 standard modules.

The wiring using RJ45 connectors is one advantage of this new technology. Thus wiring is significantly facilitated. A special protocol is not required to use the I/Os with the bus expansion. The user can access these modules directly: As if they were local. The bus expansion module BES212/N with integrated 24 V power supply provides power for the substation.

- Bus expansion slave module with 2 interfaces
- Bus expansion slave module optionally with integrated power supply
- Up to 6 local substations
- Minimal signal delay
- Distances of up to 3 m between 2 stations
- Integrated watchdog on slave modules

Item	Item-No.
BES212	00012847-00
BES212/N	00012848-00

<b>BES212, BES212/N</b>	
<b>Bus expansion interface</b>	
Line length	3 m
Transmission medium	CAT7 special cable
Max. number of stations	6 (BES212/N)
<b>Integrated power supply (optional)</b>	
Voltage range	18 to 34 VDC
Current consumption	Max. 1.2 A at 24 V
Nominal power	17 W
Output current at +5 V	2 A
Output current at +15 V	250 mA
Output current at -15 V	200 mA
Reverse polarity protection	Yes
<b>Approvals / Certificates</b>	
General	CE, cULus, CCC
<b>Ambient conditions</b>	
Operating temperature	-30 to +60 °C
Rel. humidity operation	5 to 95 % without condensation
Storage temperature	-40 to +85 °C
Rel. humidity storage	5 to 95 % without condensation
Pollution degree	2 (without condensation; according to IEC 60664-1)

<b>Order Codes</b>		
Item	Item No.	Description
BES212	00012847-00	Bus expansion slave module with 2 interfaces (up to 6 stations)
BES212 / N	00012848-00	Bus expansion slave module with 2 interfaces and integrated power supply 17 W (up to 6 stations)
<b>Accessories</b>		
KZ 51/03 B	00012052-00	Terminal 03-pins grid 5,08; cage clamp terminal with labeling strip
K-BE211/0.5 m	00012931-00	Cable bus expansion with RJ45 connector with 0.5 meter, converted
K-BE211/1.0 m	00012931-01	Cable bus expansion with RJ45 connector with 1.0 meter, converted
K-BE211/2.0 m	00012931-03	Cable bus expansion with RJ45 connector with 2.0 meter, converted
K-BE211/3.0 m	00012931-02	Cable bus expansion with RJ45 connector with 3.0 meter, converted