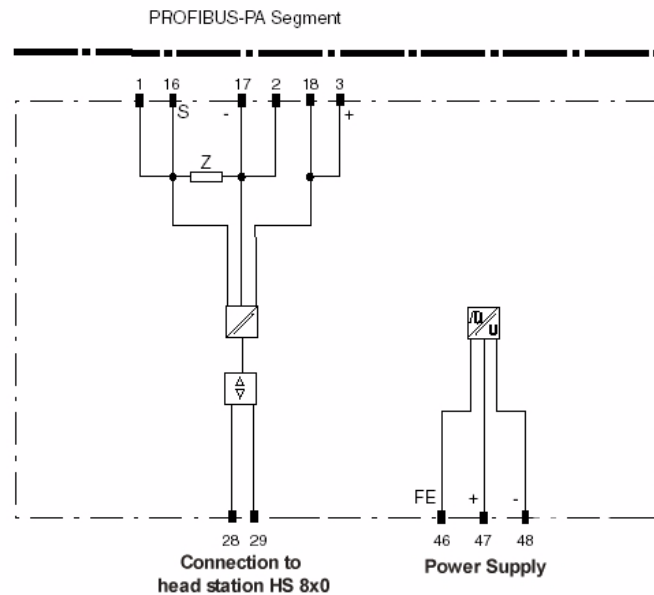


PL 810 Power Link Module for LD 800P

Benefits

- Power Link Module for a non-intrinsically safe PROFIBUS PA segment
- PROFIBUS PA output in accordance with EN 50170/2 and IEC 61158-2; 31.25 kbit/s
- Up to 32 PROFIBUS PA devices can be connected to a PA segment
- 24 V DC nominal supply voltage
- No configuration necessary
- Removable terminals
- EMC in accordance with NAMUR NE 21

Power Link Module PL 810 for PROFIBUS DP/PA Linking Device LD 800P



Function

The Power Link Module and the head station HS 8x0 form a Linking Device LD 800P. The Power Link Module can only be operated with the head station HS 810, HS 820 or HS 840. PL 810 can be mounted within zone 2.

The Power Link Module supplies PROFIBUS PA devices powered by the bus. For the data transmission between Power Link Module and head station a wire link has to be made between Power Link Module terminals and head station terminals

The communication is seamless. The Power Link Module does not have to be programmed. The PROFIBUS PA segment has a baud rate of 31.25 kbit/s in accordance with IEC 61158-2.

Technical Data

Power

Nominal voltage	20 ... 35 V DC
Nominal current	790 mA ... 400 mA
Ripples	≤ 10 %

Galvanic separation

CH/PROFIBUS DP	Function isolation, designed isolation voltage 50 V _{eff}
PROFIBUS PA/Power	Function isolation, designed isolation voltage 50 V _{eff}
CH/Power	Function isolation nach DIN EN 50178, designed isolation voltage 50 V _{eff}

Field bus connection

Connection	Terminals 3, 18+; 2, 17-
Profibus PA	in accordance with IEC 61158-2
Nominal voltage	24 ... 26 V
Nominal current	≤ 400 mA
Terminator impedance	100 Ohm integrated
Protocol	PROFIBUS DP V1

Connection to head station

Connection	Terminals 28+, 29-
Baud rate	31 kBit/s

Entity parameter

Approval for zone 2	TÜV 02 ATEX 1886 X
Group, Category, ignition protection method	⊕ II 3 G EEx n A II T4

Standards

Field bus standard	EN 50170/2
Galvanic separation	EN 50178
Electromagnetic compatibility	NAMUR NE 21
PROFIBUS DP V1	EN 50170/2
Protection type	IEC/EN 60529

Conformity to Directives

Elektromagnetic compatibility	
EC-Directive	89/336/EWG
Standard	EN 61326
Explosion protection	
EG-Directive	EG94/9
Standard	EN 50021

Environmental conditions

Ambient temperature	-20 ... 60 °C (253 ... 333 K)
Relative humidity	< 75 %

Mechanical data

Connection type	Terminals
Conductor cross section	up to 2,5 mm ²
Housing	80 mm x 115 mm x 107 mm
Mass	320 g
Protection class	IP20


Notes

Note:

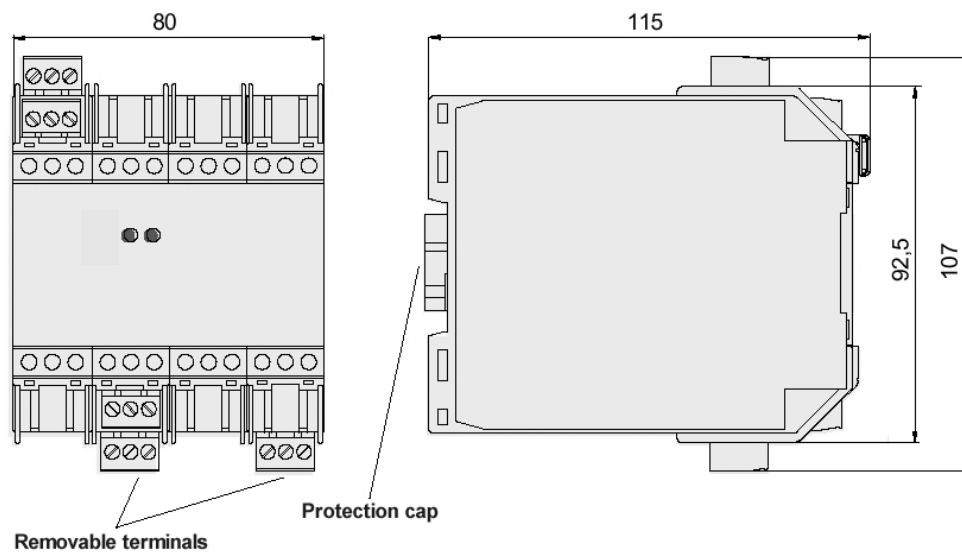
Information on installation of PROFIBUS PA can be taken from PTO PROFIBUS user organization guidelines.

Number of PA devices, current consumption of the participants:

The maximum combined current consumption of the connected PROFIBUS PA devices must be lower than the nominal current of the Linking Device. The modulation current used by the PROFIBUS PA devices to transmit data does not have to be considered.

International certificates, declarations of conformity and User Instructions can be retrieved via the search button  under <http://www.abb.com>.

Dimensions

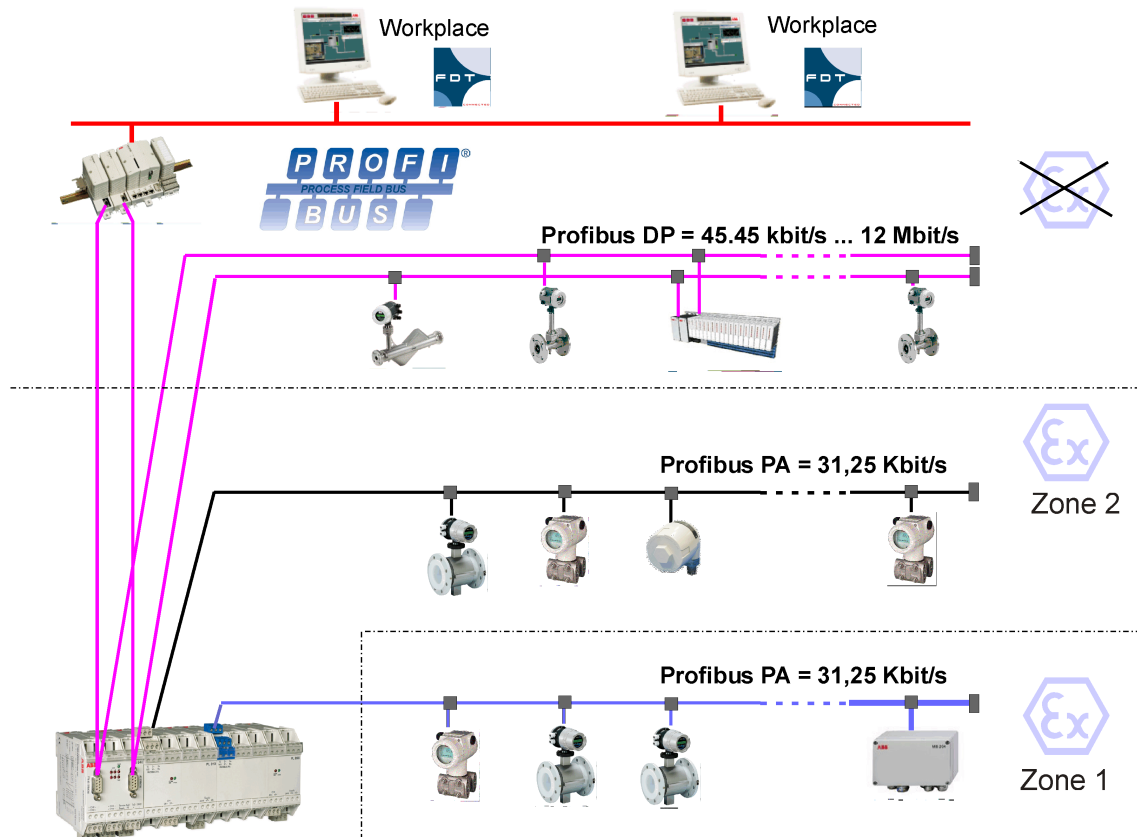


Accessories

For PROFIBUS PA applications ABB Automation Products offers the following accessories:

- Head station HS 810 (1 channel)
- Head station HS 820 (2 channel)
- Head station HS 840 (4 channel with PROFIBUS DP media redundancy)
- User Instructions Linking Device LD 800P (3BDD011704R0101)

Application example



For more information of Field^{IT}, contact us at marketing.control-products@de.abb.com
 For the latest information on ABB visit us on the World Wide Web at <http://www.abb.com/processautomation>

Our worldwide staff of professionals is ready to meet *your* needs for process automation.
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