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

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.
# Tecnical 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
- **Electromagnetic compatibility**: 89/336/EWG
- **Standard**: EN 61326
- **Explosion protection**: 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 mm²
- **Housing**: 80 mm x 115 mm x 107 mm
- **Mass**: 320 g
- **Protection class**: IP20
Notes

Note:

Informationen 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

![Diagram of dimensions with annotations for Removable terminals and Protection cap]
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 FieldIT, 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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