PC D235 A – AC 800PEC CIO-FU Combined Input Output Data Sheet



PC D235 A Device

Features

- 16 Relay outputs
- 12 digital control inputs, 24V or 48V with two independent 24V polling voltage supplies
- 3 analog outputs, +/-10V
- 3 analog inputs, +/-10V or +/-20mA
- 3 interfaces to PT100 or PTC temperature sensors
- Isolated bender relay interface RS485
- 1 optical module interface with 3 optical links
- 4 system control LED's
- Independent watchdog function
- High Reliability
- Operation temperature range −25 to +70 °C

Highlights

The Combined Input Output device PC D235 A is a general purpose interface device which provides digital and analog inputs and outputs. Redundancy of all system interfaces by means of two PC D235 A devices is supported.

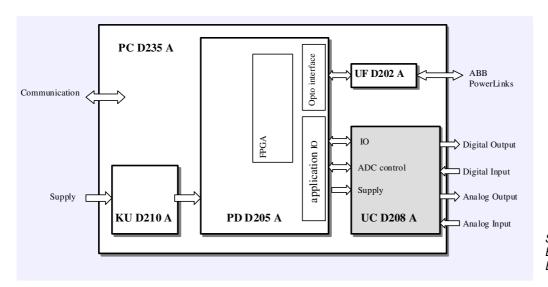
The device is based on the AC 800PEC control platform and includes the FPGA based control module PD D205 A, application interface board UC D208 A, power supply KU D210 A and one optical module UF D202 A.

The device is powered by a redundant 24 volt supply input.

Product Name	ABB Part Code	Ordering Code
AC 800PEC CIO-FU	PC D235 A101	3BHE032025R0101



Technical Data



Simplified Block Diagram

Power Supply Inputs

Redundant 24V 20 to 28VMax. supply current 2A

Communication

- RS 485 Isolated bender relay interface
- 10MBd Optical Link

Analog Inputs

Input voltage range
 Input current range
 Burden resistance
 Accuracy
 Input bandwith
 -10V...+10V
 -20mA...+20mA
 50Ω
 < 1% FSR
 2kHz

Analog Outputs

Output voltage range -10V...+10V
 Max. output current 5mA
 Accuracy < 1% FSR

Temperature Inputs

3-Wire measurement
Suitable sensor
Meas. range PT100
Accuracy PT100
Switching resistance PTC
PTC and PT100
-40 to +240 ℃
< 1.5 ℃
500Ω

Digital Inputs

Isolated 24/48 volt

Input Channels 2 groups of 6

One polling voltage supply per group

Input current typically 6mA
 Isolation test voltage 500V_{rms}
 Polling voltage 24V

85mA

Max. current of polling voltage supply

Digital Outputs

Relay output channels
 Switching voltage
 Switching voltage
 Switching voltage
 Isolation test voltage
 2 groups of 8
 240VAC; 2A
 250VDC; 0.3A
 500V_{rms}

Device Address

Setting range 0 to 15

Environmental Requirements

Operating temp -25 to +70 °C
 Relative humidity (40 °C) 5% to 95%
 Vibrations IEC 60255-21
 EMC IEC/EN 61000
 Reliability (GB, 40 °C) 7082 FIT



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