

# Product datasheet

Specifications



buffer module, phaseo ABL7 ABL8,  
24 to 28.8V DC, 40A, for power  
supply

ABL8BUF24400

## Main

|                           |                                                                                          |
|---------------------------|------------------------------------------------------------------------------------------|
| Range of product          | Phaseo                                                                                   |
| Product or component type | Buffer module                                                                            |
| Input voltage             | 24...28.8 V DC                                                                           |
| Output voltage            | (U <sub>in</sub> -0.25) V in nominal mode DC<br>(U <sub>in</sub> -1) V in buffer mode DC |
| Maximum output current    | 40 A                                                                                     |
| Holding time              | 0.1 s at 40 A<br>6 s at 0.5 A                                                            |

## Complementary

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input voltage limits           | 22...30 V                                                                                                                                                                                                                                                                                                                                                                                                        |
| Maximum power dissipation in W | 15 W                                                                                                                                                                                                                                                                                                                                                                                                             |
| Activation threshold           | (U <sub>in</sub> -1) V and 22 V min                                                                                                                                                                                                                                                                                                                                                                              |
| Charging time                  | 25 s                                                                                                                                                                                                                                                                                                                                                                                                             |
| Number of output channels      | 1                                                                                                                                                                                                                                                                                                                                                                                                                |
| Current consumption            | 0.6 A on load<br>0.1 mA no load<br><= 40.6 A                                                                                                                                                                                                                                                                                                                                                                     |
| Output protection type         | Against overload, protection technology: > 45 A<br>Against short-circuits, protection technology: power-supplied mode, automatic reset<br>Against undervoltage, protection technology: tripping if U < 19 V                                                                                                                                                                                                      |
| Connections - terminals        | For input connection: screw type terminals, connection capacity: 2 x 0.5...2 x 10 mm <sup>2</sup> AWG 20...AWG 8<br>For output connection: screw type terminals, connection capacity: 2 x 0.5...2 x 10 mm <sup>2</sup> AWG 20...AWG 8<br>For diagnostic relay: removable screw terminal block, connection capacity: 1 x 2.5 mm <sup>2</sup> AWG 14                                                               |
| Fixing mode                    | By clips on 35 mm symmetrical DIN rail, operating position: horizontal<br>By clips on 35 mm symmetrical DIN rail, operating position: vertical                                                                                                                                                                                                                                                                   |
| Output coupling                | Parallel                                                                                                                                                                                                                                                                                                                                                                                                         |
| Operating altitude             | 2000 m                                                                                                                                                                                                                                                                                                                                                                                                           |
| Marking                        | CE                                                                                                                                                                                                                                                                                                                                                                                                               |
| Name of test                   | Electrostatic discharges conforming to IEC 61000-4-2<br>Emission conforming to IEC 61000-6-3<br>Induced electromagnetic field conforming to IEC 61000-4-6 level 3<br>Radiated electromagnetic field conforming to IEC 61000-4-3 level 3<br>Rapid transient conforming to IEC 61000-4-4 level 3<br>Surge conforming to IEC 61000-4-5 level 2<br>Conducted/radiated emissions conforming to EN 55022 class B, 20 % |
| Local signalling               | 1 LED (green) for buffer ready<br>1 relay for buffer ready                                                                                                                                                                                                                                                                                                                                                       |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|            |        |
|------------|--------|
| Net weight | 1.2 kg |
|------------|--------|

## Environment

|                                       |                                                                                                                                               |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Product certifications                | RCM<br>EAC                                                                                                                                    |
| Standards                             | UL 508<br>CSA C22.2 No 60950-1                                                                                                                |
| Ambient air temperature for operation | -25...60 °C                                                                                                                                   |
| Ambient air temperature for storage   | -40...85 °C                                                                                                                                   |
| Environmental characteristic          | EMC conforming to IEC 61000-6-3<br>EMC conforming to IEC 61000-6-2<br>Safety conforming to IEC 60950-1<br>Safety conforming to EN/IEC 61204-3 |
| IP degree of protection               | IP20 conforming to IEC 60529                                                                                                                  |
| Dielectric strength                   | 500 V between input and ground<br>500 V between output and ground                                                                             |
| Overvoltage category                  | Class II conforming to VDE 0106-1                                                                                                             |
| Relative humidity                     | 0...90 % during operation<br>0...95 % during storage                                                                                          |
| MTBF reliability                      | 1119603 H at 24 V DC with UTE C80-810 calculation method                                                                                      |
| Vibration resistance                  | 2 gn (f= 11.9...150 Hz) conforming to IEC 61131-2<br>3.5 mm (f= 3...11.9 Hz) conforming to IEC 61131-2                                        |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 11.500 cm |
| Package 1 Width              | 17.000 cm |
| Package 1 Length             | 18.200 cm |
| Package 1 Weight             | 1.401 kg  |
| Unit Type of Package 2       | P06       |
| Number of Units in Package 2 | 60        |
| Package 2 Height             | 75.000 cm |
| Package 2 Width              | 60.000 cm |
| Package 2 Length             | 80.000 cm |
| Package 2 Weight             | 97.060 kg |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

# Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

How this information helps you >

## Use Better

|  Materials and Substances |                                                            |
|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Packaging made with recycled cardboard                                                                     | No                                                         |
| Packaging without single use plastic                                                                       | No                                                         |
| EU RoHS Directive                                                                                          | Pro-active compliance (Product out of EU RoHS legal scope) |
| SCIP Number                                                                                                | 30934016-db3c-45f4-8cdf-0d6e2df0aa81                       |
| REACH Regulation                                                                                           | <a href="#">REACH Declaration</a>                          |
| China RoHS Regulation                                                                                      | <a href="#">China RoHS declaration</a>                     |
| PVC free                                                                                                   | Yes                                                        |

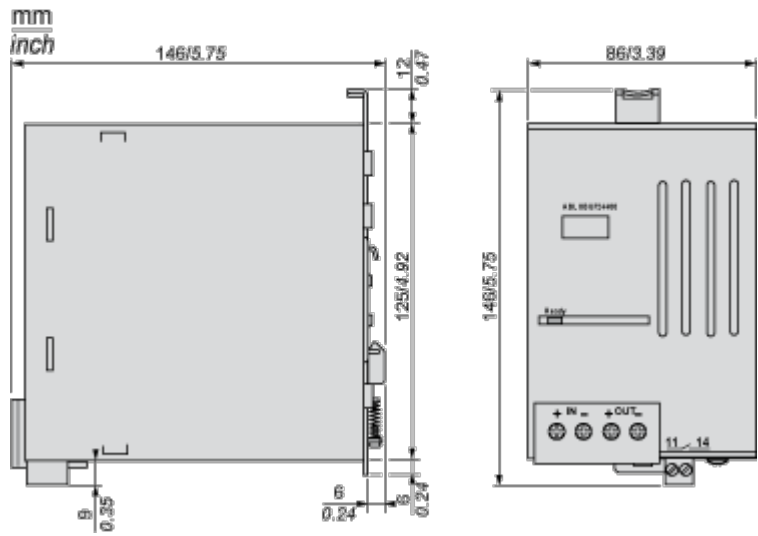
## Use Again

|  Repack and remanufacture |    |
|--------------------------------------------------------------------------------------------------------------|----|
| Take-back                                                                                                    | No |

Dimensions Drawings

24...28.8 Vdc/40 A Power Supply Buffer Module

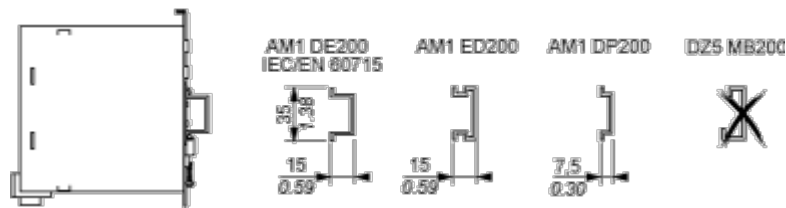
Dimensions



Mounting and Clearance

24...28.8 Vdc/40 A Power Supply Buffer Module

Mounting



## Connections and Schema

## Wiring Requirements

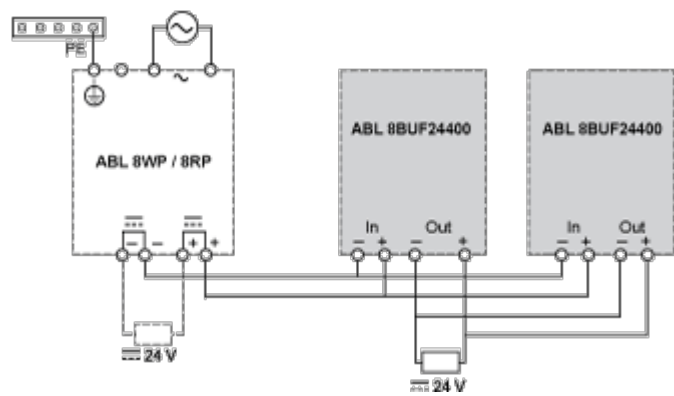
## Cable Types and Wire Sizes

|                                                                                                                                                             |                                                                                                                                                       |     |                   |                        |                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------|------------------------|------------------------------|
| <br>$\varnothing \leq 4 \text{ mm}^2$<br>$\varnothing \leq 12 \text{ AWG}$ | <br>$\varnothing > 4 \text{ mm}^2$<br>$\varnothing > 12 \text{ AWG}$ | ABL | 8RPS24030         | 8RPS24050<br>8RPS24100 | 8RPM24200<br>8WPS24200/24400 |
| + In -                                                                                                                                                      | mm <sup>2</sup> /AWG                                                                                                                                  |     | 1...4/16...12     |                        |                              |
| + Out -                                                                                                                                                     | mm <sup>2</sup> /AWG                                                                                                                                  |     | 1...4/16...12     | 4...10/12...6          |                              |
| <br>mm/in                                                                  |                                                                                                                                                       |     | 4/0,16            |                        |                              |
| 11...14                                                                                                                                                     | mm <sup>2</sup> /AWG                                                                                                                                  | -   | 0,2...2,5/24...14 |                        |                              |

Paralleling Power Supply Buffer Modules

Wiring Diagram

Two outputs of buffer modules at maximum can be connected in parallel.



Supply by R/C (NMTR2, NMTR8), (E164867), Model ABL8 series.

Image of product / Alternate images

Alternative

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