

PRO DC BUFFER 24V 40A

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com



Weidmüller's maintenance-free maxSHIELD DC buffer modules guarantee an uninterruptible power supply and are therefore an important basis for 24 V systems. They supply the required voltage to the electronic load to bridge outages. The maintenance-free electrolytic capacitors enable continuous operation at ambient temperatures of up to +70°C . Optionally, a parallel connection is possible to bridge longer failures or to increase the output power.

General ordering data

| | |
|------------|----------------------------|
| Version | Buffer module, 24 V |
| Order No. | 2786250000 |
| Type | PRO DC BUFFER 24V 40A |
| GTIN (EAN) | 4064675063490 |
| Qty. | 1 items |

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Technical data

Approvals

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| | |
|-------------------------|----------------------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate no. (cULus) | E258476 |

Dimensions and weights

| | | | |
|------------|--------|-----------------|-------------|
| Depth | 130 mm | Depth (inches) | 5.1181 inch |
| Height | 125 mm | Height (inches) | 4.9212 inch |
| Width | 65 mm | Width (inches) | 2.5591 inch |
| Net weight | 1142 g | | |

Temperatures

| | | | |
|---------------------|---------------------------|-----------------------|----------------|
| Storage temperature | -40 °C...85 °C | Operating temperature | -25 °C...70 °C |
| Humidity | 5...95 %, no condensation | | |

Environmental Product Compliance

| | |
|--------------------------------------|--------------------------------------|
| RoHS Compliance Status | Compliant with exemption |
| RoHS Exemption (if applicable/known) | 7a, 7cl |
| REACH SVHC | Lead 7439-92-1 |
| SCIP | Offa7f6e-dcfd-414c-a39f-eb67653cea98 |

Input

| | | | |
|------------------------|------------------|------------------------|--|
| Connection system | Screw connection | Rated input voltage | 24 V DC |
| Input fuse (internal) | Yes | DC current consumption | <0.2 A @ no load, <1 A @ charging process for typ. 10s |
| DC input voltage range | 22.5 - 30 V DC | Input current | 0...41 A |

Output

| | | |
|---------------------------------------|--------------------------------------|--------|
| Connection system | Screw connection | |
| Parallel connection option | Yes | |
| Overload protection | Yes | |
| Surge protection | 33 V...35 V | |
| Output voltage, note | Corresponds to the input voltage | |
| Output current at 40 °C | 25 A | |
| Mains failure bridge-over time | Mains failure bridge-over time, min. | 200 ms |
| | Input voltage type | DC |
| | Input voltage | 24 V |
| | Output current | 40 A |
| | Output voltage | 22.2 V |
| Rated current | 40 A | |
| Output voltage | 22.2 ± 0.4 V DC / Vin-1 V(± 0.4 V) | |
| Protection against inverse voltage | Yes | |
| Overload and short circuit protection | Yes | |

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General data

| | | | |
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| Degree of efficiency | ≥ 98% buffer mode | Weight | 1142 g |
| Humidity | 5...95 %, no condensation | Protection degree | IP20 |
| Mounting position, installation notice | Horizontal on DIN rail TS 35, top and bottom 50 mm clearance for free air flow, 10 mm clearance to neighbouring subassemblies. | Housing version | Metal, corrosion resistant |
| Conformal coating | Yes | Storage medium | Internal condenser |
| Short-circuit protection | Yes, internal | | |

EMC / shock / vibration

| | | | |
|------------------------------------|------------------------------|---|---------------------|
| Shock resistance IEC 60068-2-27 | 30 g in all directions | Noise emission in accordance with EN55032 | Class B |
| Interference immunity test acc. to | EN 61000-4-2, -3, -4, -5, -6 | Vibration resistance IEC 60068-2-6 | 2.3 g (on DIN rail) |

Insulation coordination

| | | | |
|----------------------------------|--------|-----------------------------------|--|
| Pollution severity | 2 | Protection class | III, with no ground connection, for SELV |
| Insulation voltage input / earth | 0.5 kV | Insulation voltage output / earth | 0.5 kV |

Electrical safety (applied standards)

| | | | |
|------------------------------|-----------------|--------------------------|--|
| Electrical machine equipment | Acc. to EN60204 | Safety extra-low voltage | SELV acc. to IEC 60950-1, PELV according to EN 60204-1 |
|------------------------------|-----------------|--------------------------|--|

Connection data (input)

| | | | |
|---|---------------------|---|--------------------|
| Connection system | Screw connection | Number of terminals | 4 (++-) |
| Reverse polarity protection | Yes, ≤31 V DC | Conductor cross-section, AWG/kcmil , max. | 8 AWG |
| Conductor cross-section, AWG/kcmil , min. | 22 AWG | Wire connection cross section, flexible (input), max. | 16 mm ² |
| Conductor cross-section, flexible , min. | 0.5 mm ² | Conductor cross-section, rigid , max. | 16 mm ² |
| Conductor cross-section, rigid , min. | 0.5 mm ² | Tightening torque, min. | 0.5 Nm |
| Tightening torque, max. | 0.6 Nm | | |

Connection data (output)

| | | | |
|---|---------------------|---|--------------------|
| Connection system | Screw connection | Number of terminals | 4 (++ / -) |
| Reverse polarity protection | Yes, ≤31 V DC | Conductor cross-section, AWG/kcmil , max. | 8 AWG |
| Conductor cross-section, AWG/kcmil , min. | 22 AWG | Conductor cross-section, flexible , max. | 16 mm ² |
| Conductor cross-section, flexible , min. | 0.5 mm ² | Conductor cross-section, rigid , max. | 16 mm ² |
| Conductor cross-section, rigid , min. | 0.5 mm ² | Tightening torque, min. | 0.5 Nm |
| Tightening torque, max. | 0.6 Nm | | |

Connection data (signal)

| | | | |
|--|---------------------|----------------------------------|---------------------|
| Wire connection cross-section, flexible (signal), max. | 1.5 mm ² | Wire connection method | PUSH IN |
| Wire cross-section, AWG/kcmil , max. | 14 | Wire cross-section, solid , min. | 0.2 mm ² |

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|----------------------------------|---------------------------------|--|---------------------|
| Wire cross-section, solid , max. | 1.5 mm ² | Wire connection cross-section, flexible (signal), min. | 0.2 mm ² |
| Number of terminals | 4 (Uin OK, Ready, Active, Sgnd) | Wire cross-section, AWG/kcmil , min. | 28 mm ² |

Signalling

Status indicator Green LED

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | EC002850 | ETIM 9.0 | EC002850 |
| ETIM 10.0 | EC002850 | ECLASS 14.0 | 27-04-06-92 |
| ECLASS 15.0 | 27-04-06-92 | | |

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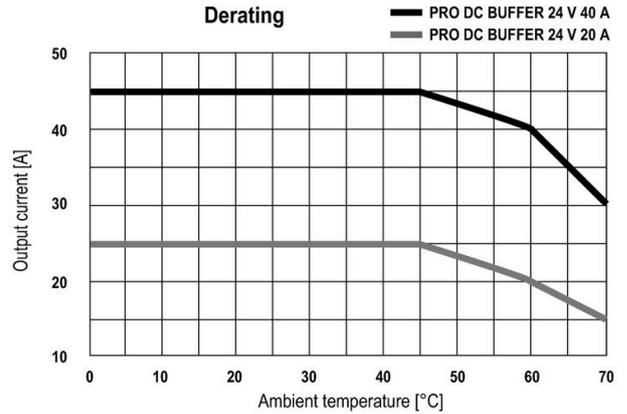
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Drawings

Graph

Derating curve

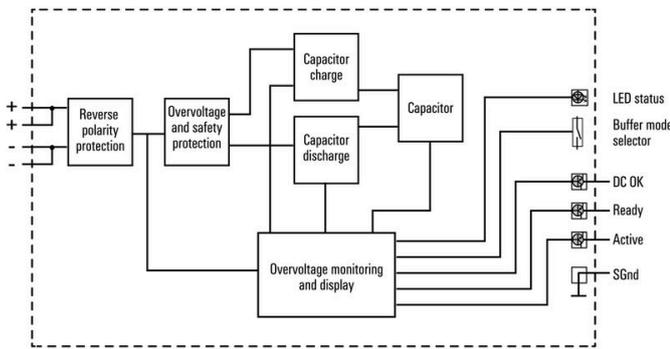
Buffer Time



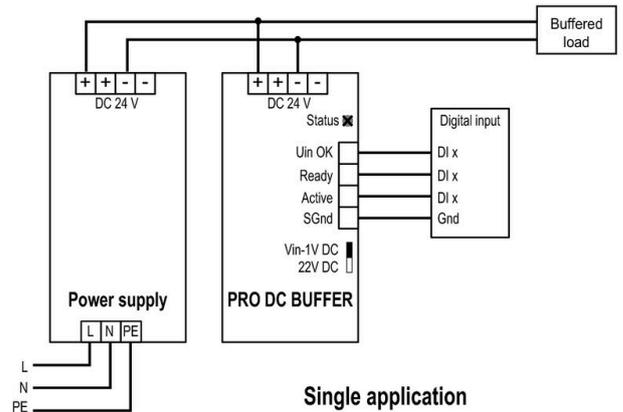
Temperature Derating

Block diagram

Block diagram



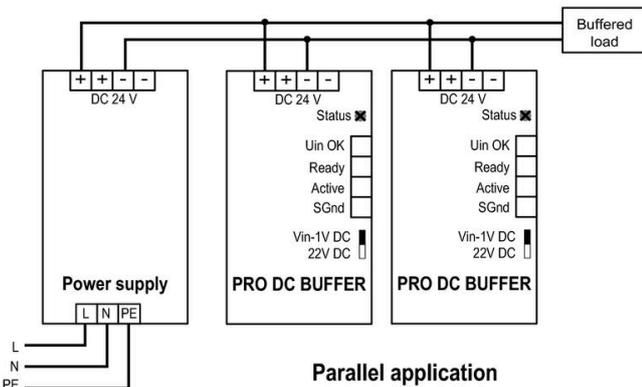
Block Diagram



Single application

Single Operation

Block diagram



Parallel application

Parallel Operation