

PRO DC BUFFER 24V 20A**Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

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.	2786240000
Type	PRO DC BUFFER 24V 20A
GTIN (EAN)	4064675063469
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	130 mm	Depth (inches)	5.118 inch
Height	125 mm	Height (inches)	4.921 inch
Width	55 mm	Width (inches)	2.165 inch
Net weight	1,043 g		

Temperatures

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

Input

Connection system	Screw connection	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...21 A
Input fuse (internal)	Yes	Rated input voltage	24 V DC

Output

Connection system	Screw connection		
Mains failure bridge-over time	Mains failure bridge-over time, min.	200 mS	
	Input voltage type	DC	
	Input voltage	24 V	
	Output current	20 A	
	Output voltage	22.2 V	
Output current at 40 °C	25 A		
Output voltage	22.2 ± 0.4 V DC / Vin-1 V(± 0.4 V)		
Output voltage, note	Corresponds to the input voltage		
Overload and short circuit protection	Yes		
Overload protection	Yes		
Parallel connection option	Yes		
Protection against inverse voltage	Yes		
Rated current	20 A		
Surge protection	33 V...35 V		

General data

Degree of efficiency	≥ 98% buffer mode	Housing version	Metal, corrosion resistant
Humidity	5...95 %, no condensation	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.
Protection degree	IP20	Short-circuit protection	Yes, internal
Storage medium	Internal condenser	Weight	1,043 g

EMC / shock / vibration

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

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Insulation coordination

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

Electrical safety (applied standards)

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

Connection data (input)

Conductor cross-section, AWG/kcmil , max.	10	Conductor cross-section, AWG/kcmil , min.	26
Conductor cross-section, flexible , min.	0.22 mm ²	Conductor cross-section, rigid , max.	6 mm ²
Conductor cross-section, rigid , min.	0.18 mm ²	Connection system	Screw connection
Reverse polarity protection	Yes, ≤31 V DC	Wire connection cross section, flexible (input), max.	4 mm ²

Connection data (output)

Conductor cross-section, AWG/kcmil , max.	10	Conductor cross-section, AWG/kcmil , min.	26
Conductor cross-section, flexible , max.	4 mm ²	Conductor cross-section, flexible , min.	0.22 mm ²
Conductor cross-section, rigid , max.	6 mm ²	Conductor cross-section, rigid , min.	0.18 mm ²
Connection system	Screw connection	Number of terminals	4 (++ / -)
Reverse polarity protection	Yes, ≤31 V DC		

Connection data (signal)

Number of terminals	4 (Uin OK, Ready, Active, Sgnd)	Wire connection method	PUSH IN
Wire cross-section, AWG/kcmil , max.	14	Wire cross-section, AWG/kcmil , min.	28
Wire cross-section, solid , max.	1.5 mm ²	Wire cross-section, solid , min.	0.2 mm ²

Signalling

Status indicator	Green LED
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Approbations

Certificate no. (cULus)	E258476	Institute (cULus)	CULUS
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Classifications

ETIM 6.0	EC002850	ETIM 7.0	EC002850
ETIM 8.0	EC002850	ECLASS 9.0	27-04-06-92
ECLASS 9.1	27-04-92-01	ECLASS 10.0	27-04-06-92
ECLASS 11.0	27-04-06-92	ECLASS 12.0	27-04-06-92

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	Offa7f6e-dcfd-414c-a39f-eb67653cea98

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Approvals



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

Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	Quick start guide – OSG0009 PS-Selection Guide AC Backup Guide for AC backup for power supplies CAD data – STEP
User Documentation	Instruction sheet

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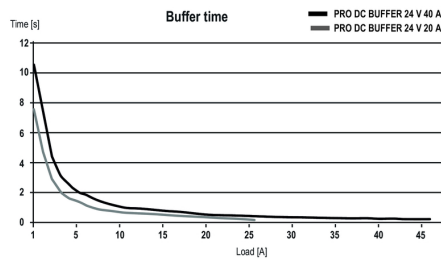
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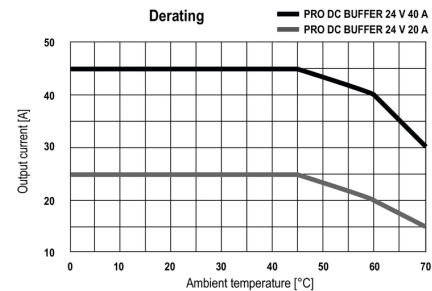
Drawings

Graph



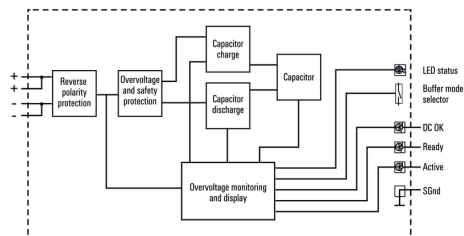
Buffer Time

Derating curve



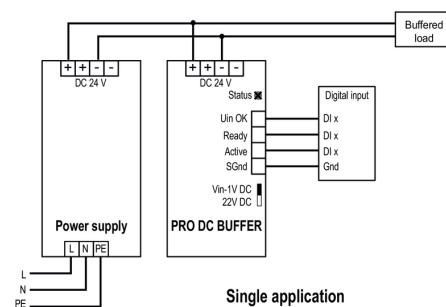
Temperature Derating

Block diagram



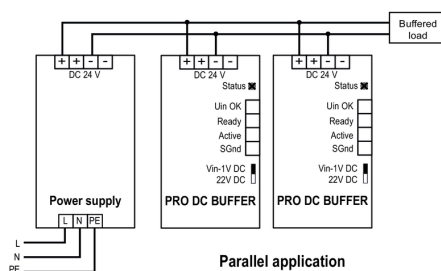
Block Diagram

Block diagram



Single Operation

Block diagram



Parallel Operation