

PRO DC BUFFER 24V 20A**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.	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
Humidity	5...95 %, no condensation		

Input

Connection system		DC current consumption	<0.2 A @ no load, <1 A @ charging process for typ. 10s
	Screw connection		
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		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.
	5...95 %, no condensation		
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 EN55032	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
Number of terminals	4 (++-)	Reverse polarity protection	Yes, ≤31 V DC
Tightening torque, max.	0.6 Nm	Tightening torque, min.	0.5 Nm
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	Tightening torque, max.	0.6 Nm
Tightening torque, min.	0.5 Nm		

Connection data (signal)

Number of terminals	4 (Uin OK, Ready, Active, Sgnd)	Wire connection cross-section, flexible (signal), max.	1.5 mm ²
Wire connection cross-section, flexible (signal), min.	0.2 mm ²	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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Classifications

ETIM 6.0	EC002850	ETIM 7.0	EC002850
ETIM 8.0	EC002850	ETIM 9.0	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	ECLASS 13.0	27-04-06-92
ECLASS 14.0	27-04-06-92		

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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	Offa7f6e-dcfd-4 14c-a39f-eb67653cea98
RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl

Approvals

Approvals



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

Downloads

Approval/Certificate/Document of Conformity	UL 61010 Certificate IECEX Certificate ATEX Certificate Declaration of Conformity
Engineering Data	Quick start guide – QSG0009 PS-Selection Guide AC Backup Guide for AC backup for power supplies CAD data – STEP CAD data – STEP
User Documentation	Instruction sheet
Catalogues	Catalogues in PDF-format

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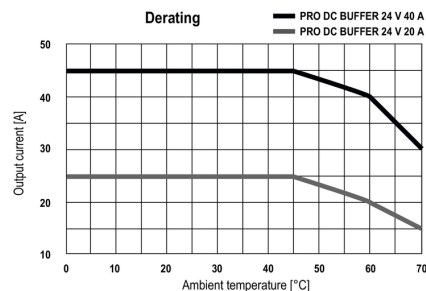
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Drawings

Graph

Derating curve

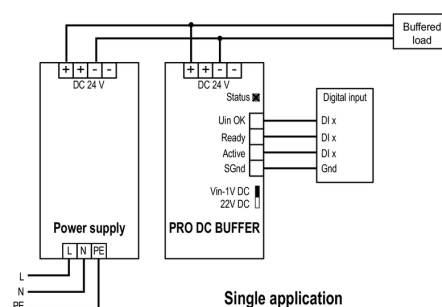
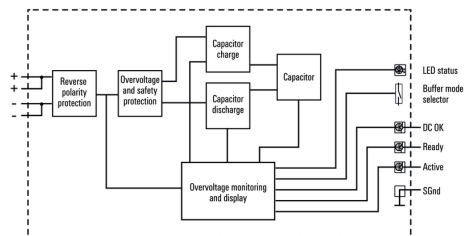


Buffer Time

Temperature Derating

Block diagram

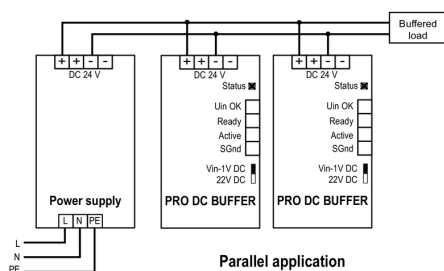
Block diagram



Block Diagram

Single Operation

Block diagram



Parallel Operation