

Buffer module PVUC



General Data

Input rated voltage 24 Vdc
Output rated voltage 24 Vdc
Output rated current 10 - 20 A
Ambient temperature -10° C to +60° C
Efficiency typ. 97 %
Protection index IP 20

Advantages

Electronic overcurrent and short circuit protection
Reverse polarity protection
Configurable switch-in threshold
3 LEDs for signalling purposes
Isolated signal contact
Service-friendly spring-loaded connector system
Parallel connection option
Decoupled output
Panel installation on mounting rails

Applications

Maintenance-free buffer module to secure the power supply during short power interruptions.

Sample application



Standards

Maintenance-free buffer module
to UL 508

Safety:
EN 60950, EN 60950 (SELV), EN 60204 (PELV)

EMC:
EN 61000-6-3 (Interference emissions), EN 61000-6-2 (Interference immunity)

Approvals



UL 508 (E219022)



Buffer module PVUC



Typ	PVUC 24/24-10	PVUC 24/24-20
Electrical data		
Input		
Input rated voltage	24 Vdc	24 Vdc
Input voltage range	20 - 30 Vdc	20 - 30 Vdc
Current input (idle/charging/max.)	60 mA / 1 A / 11 A	60 mA / 1 A / 22 A
Switching threshold for buffer mode	20 - 24 Vdc	21 - 24 Vdc
Output		
Output rated voltage	24 Vdc	24 Vdc
Output voltage normal operation	typ. $U_{in} - 0.5$ Vdc (10 A)	typ. $U_{in} - 1$ Vdc (20 A)
Output rated voltage, battery mode	20 - 24 Vdc (adjustable)	20 - 24 Vdc (adjustable)
Resistance to reverse feed max.	35 Vdc	35 Vdc
Output rated current	10.00 A	20.00 A
Buffer period	0.4 s (10 A) / 6.3 s (1 A)	0.4 s (20 A) / 15.5 s (1 A)
Charging time	typ. 5 minutes	typ. 5 minutes
Internal fuse	No	No
Overload behaviour	Constant current (typ. 11 A)	Constant current (typ. 22 A)
Parallel connection	Yes	Yes
Serial operation	No	No
max. Power loss idling/nominal load	1.5 / 6.5 W	1.5 / 15 W
Efficiency	typ. 97 %	typ. 97 %
Storage medium		
Type of the storage medium	Capacitors, internal	Capacitors, internal
Signaling		
Operating status	LED green, LED red, LED yellow	LED green, LED red, LED yellow
Potential free signal contact	Changeover contact	Changeover contact
Active signal outputs	No	No
Display, interface	No	No
Approvals		
Approvals	cULus	cULus
Environment		
Ambient temperature	-10° C to +60° C	-10° C to +60° C
Storage temperature	-25° C to +85° C	-25° C to +85° C
Safety and protection		
Protection index	IP 20	IP 20
Safety class	III, without PE connection	III, without PE connection
Reverse connection protection	Yes	Yes
Accessory		
Side DIN Rail mounting	PV-TS35M (optional)	PV-TS35M (optional)
Direct screw fastening plate for lateral mounting	PV-WB2 (optional)	PV-WB2 (optional)
Order numbers		
Order Number	PVUC 24/24-10	PVUC 24/24-20

1.1

1.2

1.3

2.1

2.2

3.1

3.2

3.3

4.0

5.1

5.2



Buffer module **PVUC**



Mechanical data	Typ	Connections input, (spring clamp terminal, pluggable)	Connections output, (spring clamp terminal, pluggable)	Connections signalling, (spring clamp terminal, pluggable)	Mounting position	Fixing method	Weight	Dimension picture (in mm)	A	B	C	D	E
									1	2	3	4	5
PVUC 24/24-10		max. 2.5 mm ²	max. 2.5 mm ²	max. 2.5 mm ²	vertical	DIN Rail system TH 35	1.00 kg	1	57	179.5	127	76	12.5
PVUC 24/24-20		max. 10 mm ²	max. 10 mm ²	max. 2.5 mm ²	vertical	DIN Rail system TH 35	1.00 kg	2	57	179.5	127	76	12.5

Dimension pictures

