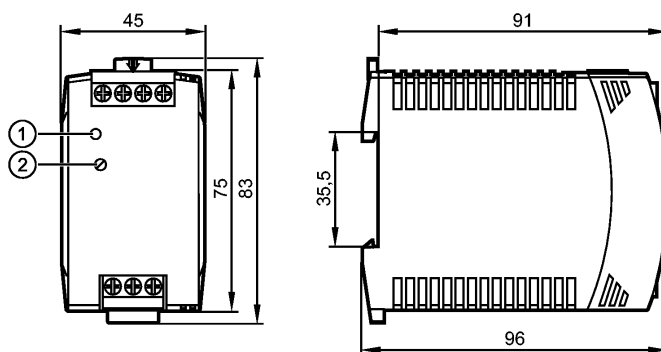


DN1023

PSU-1AC/12VDC-4.5A

Auswertesysteme, Netzteile



- 1: LED DC ok
2: Potentiometer



Produktmerkmale

Schaltnetzteil 12 V DC

primär getaktet

54 W Ausgangsleistung

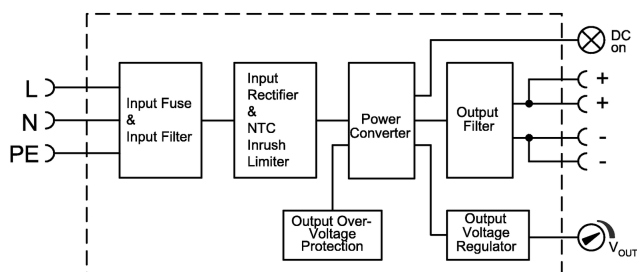
Einsatzbereich

Einsatzbereich: geregelte Stromversorgung für Sensoren, Aktuatoren, Auswertelektronik und SPS

Elektrische Daten

Eingangsspannungsbereich	[V]	85...264 AC
Nennspannung	[V]	100...240 AC
Nennfrequenz	[Hz]	50...60
Ausgangsspannung	[V]	12...15 DC ($\pm 2\%$ *) nach SELV/PELV
Ausgangsstrom	[A]	4,5 (12 V DC) / 3,6 (15 V DC)
Wirkungsgrad	[%]	87,2 (230 V AC; 12 V DC / 4,5 A)
Kurzschlusschutz		ja
Überlastfest		ja
Derating	[W/K]	1,4 (60...70 °C)
Netzausfallüberbrückungszeit	[ms]	> 113 (230 V AC; 12 V DC / 4,5 A)
Schutzklasse		I

Blockdiagramm

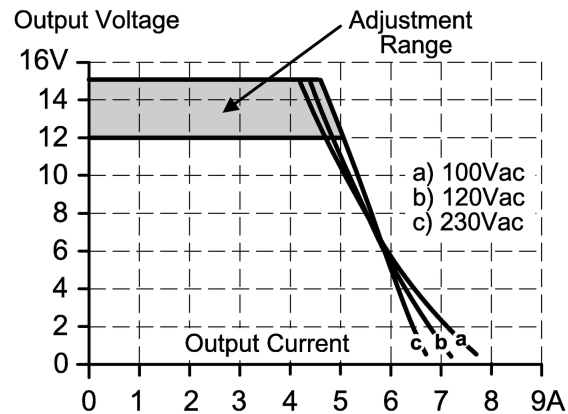


DN1023

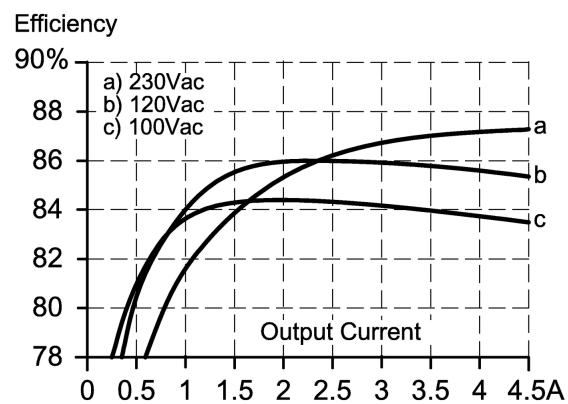
PSU-1AC/12VDC-4.5A

Auswertesysteme, Netzteile

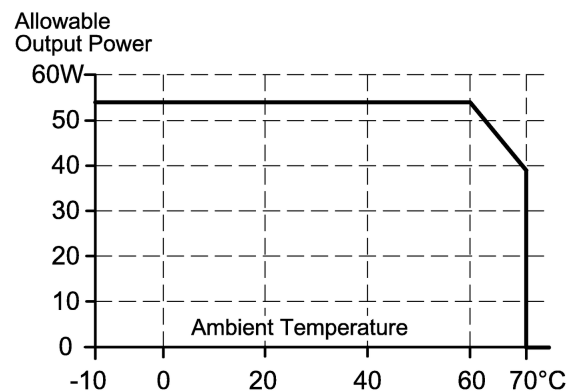
Ausgangskennlinie



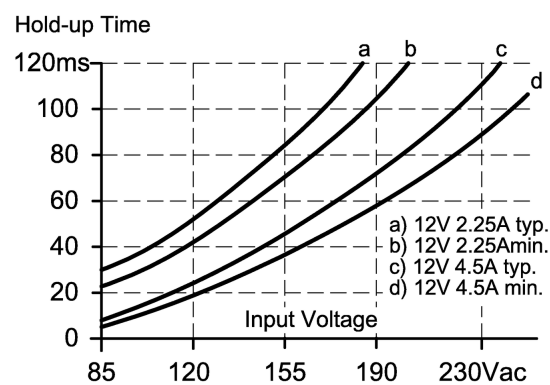
Kennlinie für Wirkungsgrad / Verlustleistung



Kennlinie für Derating



Kennlinie für Netzausfallüberbrückungszeit



Überspannungsschutz (OVP) [V]

≤ 19

Restwelligkeit [mV]

< 50

Ausgänge

Ausgang

54 W Ausgangsleistung

Umgebungsbedingungen

DN1023

PSU-1AC/12VDC-4.5A

Auswertesysteme, Netzteile

Umgebungstemperatur	[°C]	-10...70
Schutzart		IP 20

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DN1023

PSU-1AC/12VDC-4.5A

Auswertesysteme, Netzteile

Zulassungen / Prüfungen

EMV	EN 61000-6-1 EN 61000-6-2 EN 61000-6-3 EN 61000-6-4	Störfestigkeit Störemission
Schockfestigkeit	IEC 60068-2-27	
MTBF [h]	1690000 (40° C), SN 29500	

Mechanische Daten

Gehäusewerkstoffe	Polycarbonat	
Montage	Tragschiene TH35 (gemäß EN 60715)	
Gewicht [kg]	0,316	

Anzeigen / Bedienelemente

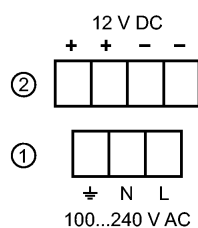
Funktionsanzeige	LED	grün
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Elektrischer Anschluss

Anschluss	Schraubklemmen; ≤ 6 mm² (20-10 AWG)	
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Anschlussbelegung

1: primär, 2: sekundär


Bemerkungen

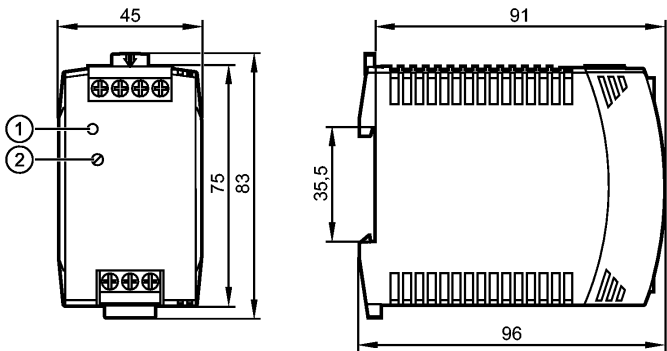
Bemerkungen	*) einstellbar	
Verpackungseinheit [Stück]	1	



DN1023

PSU-1AC/12VDC-4.5A

Evaluation systems, power supplies



- 1: LED DC ok
- 2: potentiometer



Product characteristics

Switched-mode power supply 12 V DC
Primary switched mode
54 W power output

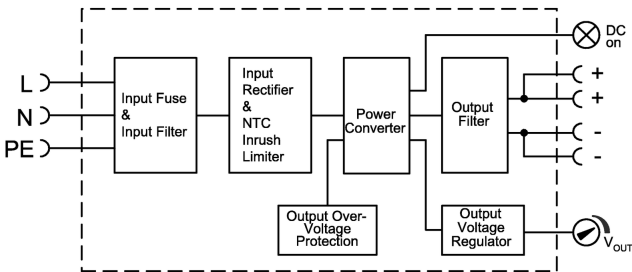
Application

Application	regulated power supply for sensors, actuators, evaluation electronics and plcs
-------------	--

Electrical data

Input voltage range	[V]	85...264 AC
Nominal voltage	[V]	100...240 AC
Nominal frequency	[Hz]	50...60
Output voltage	[V]	12...15 DC ($\pm 2\%$) *) to SELV/PELV
Output current	[A]	4.5 (12 V DC) / 3.6 (15 V DC)
Efficiency	[%]	87.2 (230 V AC; 12 V DC / 4.5 A)
Short-circuit protection		yes
Overload protection		yes
Derating	[W/K]	1.4 (60...70 °C)
Mains buffering time	[ms]	> 113 (230 V AC; 12 V DC / 4.5 A)
Protection class		I

Block diagram



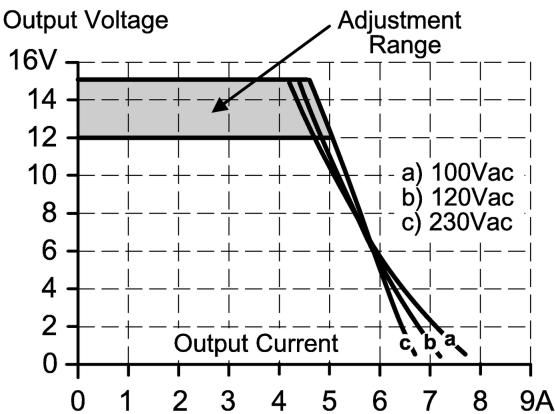


DN1023

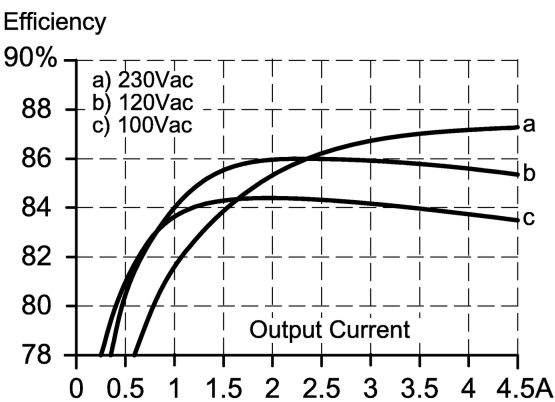
PSU-1AC/12VDC-4.5A

Evaluation systems, power supplies

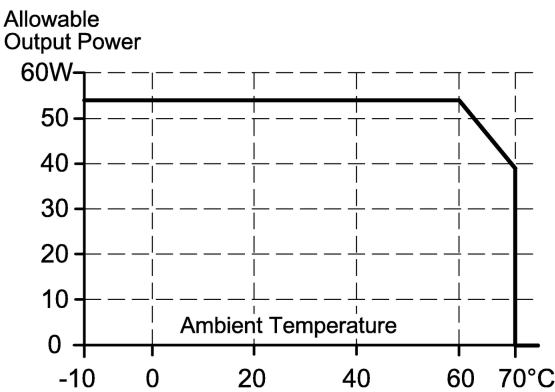
Output curve



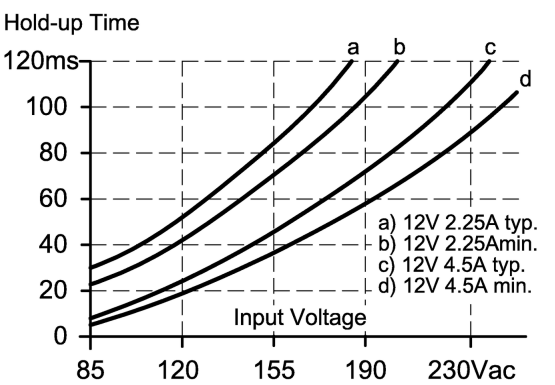
Characteristic curve for degree of efficiency / power loss



Characteristic curve for derating



Characteristic curve for mains buffering time



Overvoltage protection (OVP) [V]

≤ 19

Residual ripple [mV]

< 50

Outputs

Output

54 W power output

Environment

**DN1023**

PSU-1AC/12VDC-4.5A

Evaluation systems, power supplies

Ambient temperature	[°C]	-10...70
Protection		IP 20

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DN1023

PSU-1AC/12VDC-4.5A

Evaluation systems, power supplies

Tests / approvals

EMC	EN 61000-6-1	noise immunity
	EN 61000-6-2	
	EN 61000-6-3	radiation of interference
	EN 61000-6-4	
Shock resistance	IEC 60068-2-27	
MTBF [h]	1690000 (40° C), SN 29500	

Mechanical data

Housing materials	polycarbonate
Installation	rail TH35 (to EN 60715)
Weight [kg]	0.316

Displays / operating elements

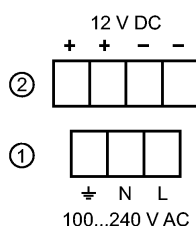
Function display	LED	green
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Electrical connection

Connection	screw terminals; $\leq 6 \text{ mm}^2$ (20-10 AWG)
------------	--

Wiring

1: primary, 2: secondary

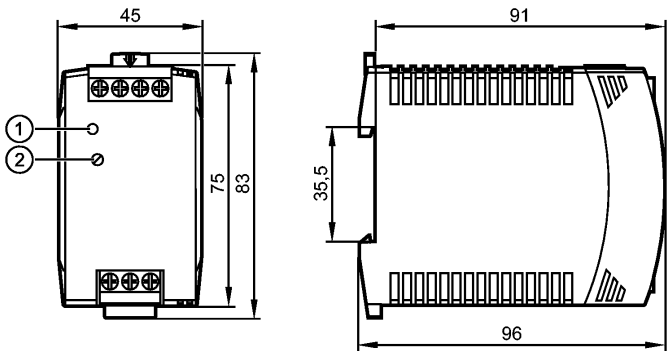

Remarks

Remarks	*) adjustable
Pack quantity [piece]	1

DN1023

PSU-1AC/12VDC-4.5A

Boîtiers de contrôle, alimentations



- 1: LED DC ok
2: potentiomètre



Caractéristiques du produit

Alimentation à découpage 12 V DC
A synchronisation primaire
Puissance de sortie 54 W

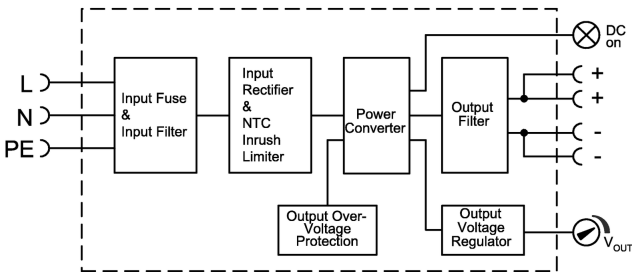
Application

Application	alimentation régulée pour capteurs, actionneurs, boîtiers électroniques et API
-------------	--

Données électriques

Plage de la tension d'entrée	[V]	85...264 AC
Tension nominale	[V]	100...240 AC
Fréquence nominale	[Hz]	50...60
Tension de sortie	[V]	12...15 DC ($\pm 2\%$) *) selon TBTS/TBTP
Courant de sortie	[A]	4,5 (12 V DC) / 3,6 (15 V DC)
Rendement	[%]	87,2 (230 V AC; 12 V DC / 4,5 A)
Protection courts-circuits		oui
Protection surcharges		oui
Derating	[W/K]	1,4 (60...70 °C)
Immunité aux coupures secteur	[ms]	> 113 (230 V AC; 12 V DC / 4,5 A)
Classe de protection		I

schéma bloc

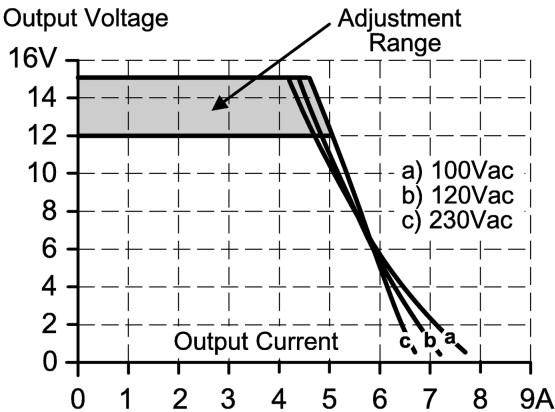


DN1023

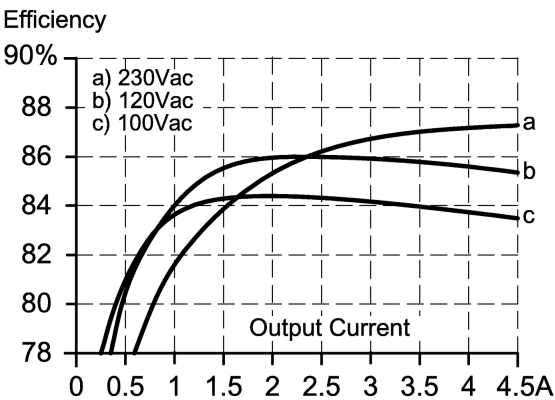
PSU-1AC/12VDC-4.5A

Boîtiers de contrôle, alimentations

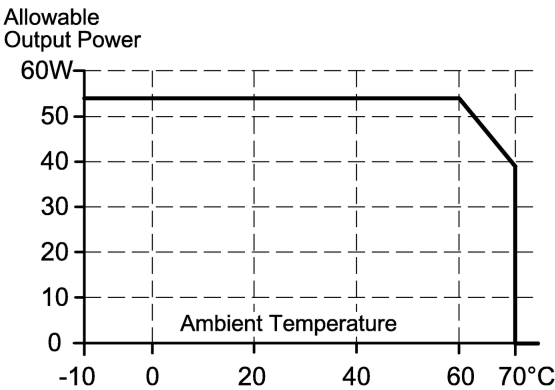
Caractéristique de sortie



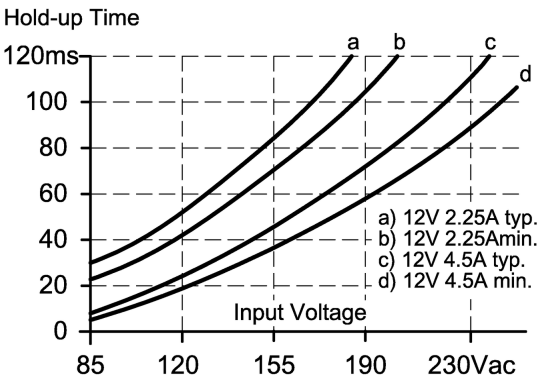
Courbe caractéristique rendement / perte en puissance



Courbe caractéristique du déclassement



Courbe caractéristique de l'immunité aux coupures secteur



Limiteur de surtension (OVP) [V]

≤ 19

Courant résiduel [mV]

< 50

Sorties

Sortie

Puissance de sortie 54 W

Conditions d'utilisation



DN1023

PSU-1AC/12VDC-4.5A

Boîtiers de contrôle, alimentations

Température ambiante	[°C]	-10...70
Protection		IP 20

DN1023

PSU-1AC/12VDC-4.5A

Boîtiers de contrôle, alimentations

Tests / Homologations

CEM	EN 61000-6-1 EN 61000-6-2 EN 61000-6-3 EN 61000-6-4	immunité aux parasites émission
Tenue aux chocs	CEI 60068-2-27	
MTBF [h]	1690000 (40° C), SN 29500	

Données mécaniques

Matières boîtier	polycarbonate
Montage	rail TH35 (selon EN 60715)
Poids [kg]	0,316

Afficheurs / éléments de service

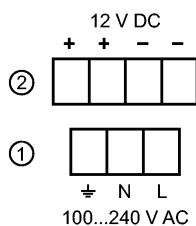
Indication de fonction	LED	vert
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Raccordement électrique

Raccordement	Bornes à vis; $\leq 6 \text{ mm}^2$ (20-10 AWG)
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Branchement

1: primaire, 2: secondaire


Remarques

Remarques	*) réglable
Quantité [pièce]	1