



PRODUCTS 2017

AC/DC MEDIUM + HIGH VOLTAGE



Camtec high-performance power supplies are one of the most leading products on the market.

Camtec Stromversorgungen gehören heute zu den leistungsfähigsten Geräten auf dem Weltmarkt.

Since established in 1995 Camtec designs high-end switch mode power supplies for challenging demands. The result is outstanding quality, trend-setting technology, extended life-time and extraordinary market-compliance.

Camtec exposes as a system-supplier and as a partner of the user. Applied solutions are being developed in a close team-work with our customers. The Camtec POWER SUPPLIES GMBH represents the outstanding character of the modern electronic industry.

Our engineering-team hardly aspires towards high-efficient solutions for complex demands under challenging ambient conditions. Camtec strictly reinvest 40% of its operative income into research and development to cope the customer future requirements. The primary objective is the wise handling of our limited energy resources.

Seit der Gründung des Unternehmens im Jahr 1995 entwickelt Camtec als Spezialist für Stromversorgungstechnik anspruchsvolle Innovationen. Das Ergebnis sind Produkte mit herausragenden Eigenschaften in Qualität, Langlebigkeit, Technologie und Marktkonformität.

Camtec sieht sich als Systemlieferant und Partner des Anwenders. Orientierte Lösungen werden in engster Zusammenarbeit mit dem Kunden entwickelt. Die Camtec POWER SUPPLIES GMBH repräsentiert damit den herausragenden Charakter der modernen Elektronikindustrie.

Unsere Ingenieure sehen es als ihre Aufgabe, effiziente Lösungen für komplexe Systeme unter harten Betriebsbedingungen zu entwickeln. Um den zukünftigen Anforderungen unserer Kunden gerecht werden zu können, reinvestiert das Unternehmen konsequent 40% seiner operativen Ergebnisse in Forschung & Entwicklung. Ein primäres Ziel ist der sinnvolle Umgang mit unseren limitierten Energie-Ressourcen.



Oliver Walter, CEO Camtec GmbH



The engineering of Camtec is trend-setting.
Entwicklungen von Camtec sind richtungsweisend.

DIN ISO 9001:2015



Advanced Design

Size ratio and power are standing well-balanced. Aware of physical headroom and high energy reserves, Camtec power supplies are not trimmed tiny. Our engineers design pro-power products with emphasis on ultimate lifetime and all-out product reliability. Connectors are mechanical oversized and electrical robust. Cabling connections are located in cool area.

Solid Mechanical Design

The mechanical size and the power are well-balanced. Our design consciously features life-time and reliability before a few cubic centimeters of volume savings. All mechanical and all power connections are robust and electrical oversized. Power connections remain in cool operation areas. Our elaborate temperature design protects sensitive parts from wear out. Endangered parts are fixed against shock and vibration, preferred flexible substructure.

Variable Inputs

Camtec power supplies are made for worldwide operation. The input filter dimension and the typical hold-up-time healthy exceed standard requirements and the norms. The Camtec reliability and the rugged design set the benchmark.

Ausgereiftes Design

Camtec-Netzteile sind nach professionellen Gesichtspunkten in ein stabiles Metallgehäuse verpackt. Die LED-Status-Anzeigen, Geräteinformationen und Bedienelemente sind übersichtlich und leicht zugänglich an der Frontseite angebracht. Das speziell von Camtec entwickelte Lüftungsgitter am Geräteboden und an der Oberseite gewährleistet einen hervorragenden Luftdurchsatz.



High Quality Power Supplies

Stabile und ausgeklügelte Mechanik

Volumen und Leistung stehen in einem ausgewogenen Verhältnis. Bei unseren Designs steht der physikalische Sicherheitsfaktor ganz bewusst vor wenigen Kubikzentimeter Volumeneinsparung. Auf lange Lebensdauer und Zuverlässigkeit kommt es an. Alle Schraub- und Steckverbinder sind robust und elektrisch überbelastbar ausgeführt. Sämtliche Anschlüsse befinden sich im kühlen Bereich. Eine ausgeklügelte Temperaturführung schützt empfindliche Teile vor Alterung. Sämtliche gefährdete Bauteile sind gegen Schock und Vibration flexibel fixiert. Eine starre Befestigung mit harten Materialien wird hierbei konsequent vermieden.

Variable Eingänge

Camtec Geräte sind für den weltweiten Einsatz konzipiert. Sie sind mit genügend Pufferzeit zur Überbrückung von Netzstörungen ausgerüstet und liegen weit über den üblichen Marktwerten. In puncto Zuverlässigkeit und Robustheit setzen Camtec-Geräte Maßstäbe.



Complex Loads: Consequently No to the Fuse-Breaker-Design

Camtec power supplies provide a stable control loop and a very low ripple and noise. Huge energy resources cover extended load changes. We consequently avoid excessive designs like the over-powered Fuse-Breaker technology. Instead of an uncontrolled and imperiling power-boost we count on stored high energy buffer, cyberspeed control loop and a controlled and continuous energy supply. A very long C/V chart without foldback provides safe start-up of critical loads. In the process the control circuit masters the power supply safely even under extreme operation conditions. The connected load is protected against damage and contrawise the load can be as complex as conceivable – the Camtec power supplies are built to bear each challenge.

Schwierige Lasten: Ein klares Nein zum Fuse-Breaker-Design

Camtec Netzteile zeichnen sich durch eine stabile Regelung bei besonders niedriger Restwelligkeit aus. Große Energiereserven fangen auch große Lastsprünge mühelos ab. Konsequentermaßen vermeiden wir ein exzessives Design, welches gemeinhin als Fuse-Breaker bezeichnet wird. Statt die Leistung unkontrolliert und gefährdend an einen Verbraucher zu liefern, setzen wir auf hohe gespeicherte Energiereserven, blitzschnelle Regelkreise und eine kontrollierte und konstante Energieabgabe. Eine sehr lange U/I Kennlinie ohne Foldback ermöglicht den gesicherten Anlauf im Zusammenspiel mit kritischen Lasten. Dabei hat der Regelkreis das Netzteil jederzeit und auch in extremen Betriebszuständen voll im Griff. So wird die angeschlossene Last einerseits vor Beschädigungen geschützt – aber gleichzeitig kann die Last noch so komplex sein – unsere Netzteile stellen sich jeder erdenklichen Herausforderung entgegen.

Quality is no Offer. It is a Promise:

Life-Time made for 24/7

The efficiency of the Camtec power supplies belongs to the world top level. Lower power losses ensure lower heat dissipation. This results in higher life time of all involved components and devices.

Regardless if prototype or a series production – each Camtec switch mode power supply is subject to our strict quality control. The life time (MTTF Mean Time To Failure @ +40°C ambient) of our products, mostly exceed 160.000 hours. This fact comes to more than 18 years of 24/7 operation. The statistic MTTF (Mean Time Between Failure) results in an upper level.

Quality means to be consequent – even more concerning the manufacturing base. Camtec Power Supplies GmbH designs and manufactures all products in its own fabrication in Germany. The Camtec understands itself as a manufactory and a specialist – our staff lives quality. In fact it already begins with the feasibility study. ISO9001:2015, UL-certified fabrication, traceability and the 100% test of each product are no statistic luxury. For us it is the impression of a corporate culture that has just one target in focus – customer satisfaction.

Our statistic over a 10 years time period 2003 to 2013 showed a failure rate of 0,004% of all Camtec products sold into the field. Selected sales partners in more than 50 countries locally support our customers.

Qualität ist kein Angebot sondern ein Versprechen:

Höchste Lebenserwartung 24/7

Der Wirkungsgrad der Camtec Stromversorgungen gehört weltweit zur Oberklasse. Weniger Verlustleistung bedeutet geringere Wärmeentwicklung am Einbauort und dadurch eine längere Lebenserwartung aller Bauteile und Geräte.

Egal ob Prototyp oder Serienprodukt, jedes Camtec Stromversorgungsgerät muss sich unseren strengen Qualitätskontrollen stellen. So liegt die Lebenserwartung (MTTF = Mean Time to Failure, +40°C Ambient) der Camtec-Netzteile in der Regel bei 160.000 Stunden Plus. Das entspricht einem Einsatz von mehr als 18 Jahren, rund um die Uhr. Die statistische Ausfallsicherheit (MTBF Mean Time Between Failure) erreicht ein Oberklassenniveau.

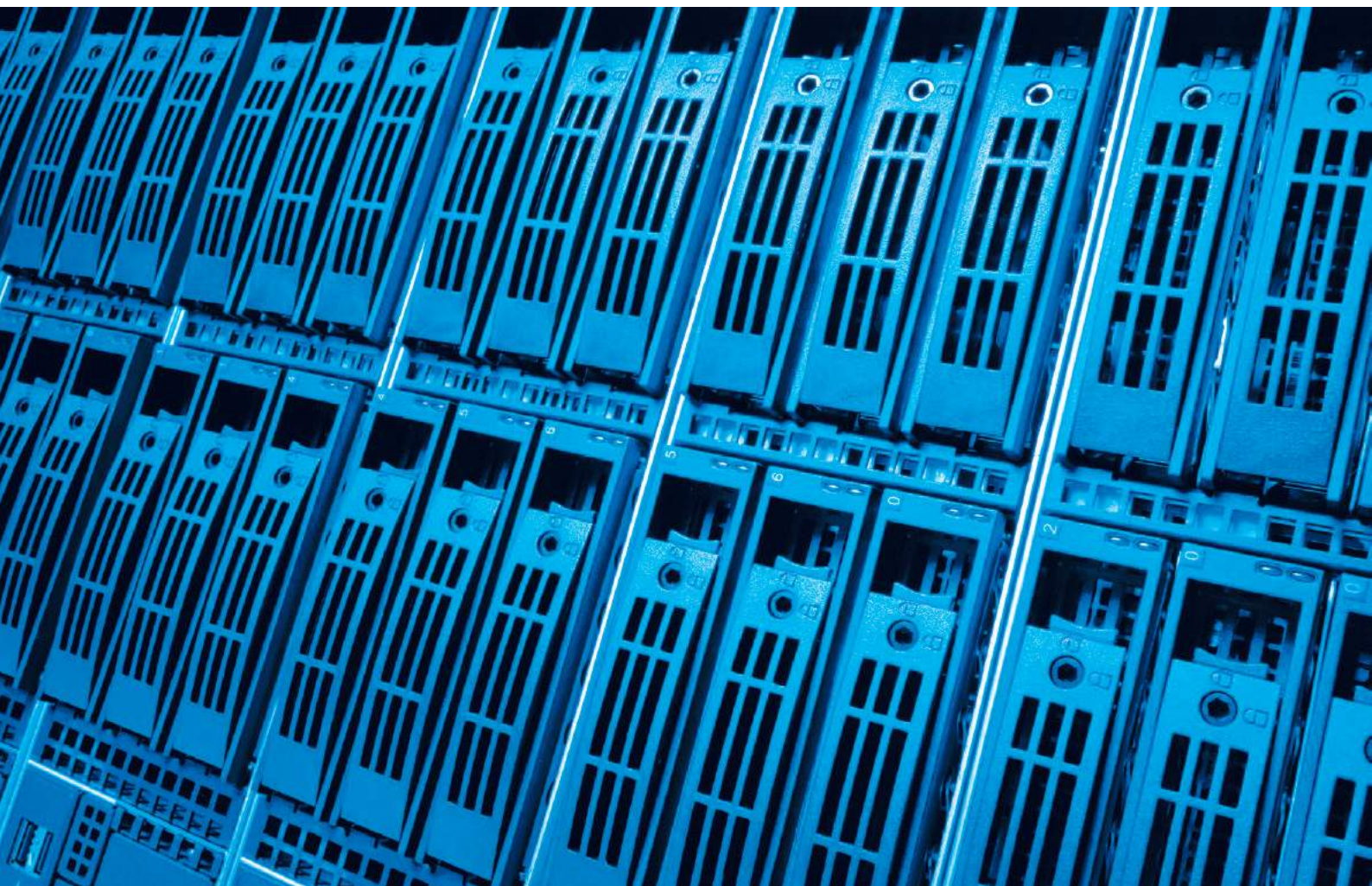
Qualität bedeutet Konsequenz – auch bei der Wahl des Produktionsstandortes. Die Camtec Power Supplies GmbH fertigt und entwickelt alle Geräte im eigenen Werk in Deutschland. Die Camtec GmbH versteht sich als Manufaktur und als Spezialist – unsere Mitarbeiter leben Qualität. Dies beginnt bereits in der Machbarkeitsstudie eines Designs. Die ISO9001:2015, eine UL-zertifizierte Produktionsstätte, die implementierte Traceability und der 100% Stücktest sind für uns kein statistischer Luxus, sondern der selbstverständliche Ausdruck einer Unternehmenskultur, deren alleiniger Fokus die Zufriedenheit des Kunden ist.

Unsere erhobene Statistik aus 2013 ergab eine Ausfallquote von 0,004% aller von 2003 bis 2013 gefertigter Geräte im Feld. Ausgewählte Vertriebspartner für den Export in über 50 Länder unterstützen unsere Kunden vor Ort.



IECEE
CB
SCHEME





AC/DC DIN-Rail Power Supplies 1phase
AC/DC Hutschienen-Netzteile 1phasig

LCR-Series

- Low Cost Industrial Class Switch Mode Power Supply
- Fits into VDE0603 Sub-Distribution Switchbox
- Low Cost Industrie Netzteile
- Passend in VDE0603 Unterverteilungsschrank



Model	LCR010.24	LCR030.24	LCR060.24	LCR100.24
Nominal Power	10W	30W	60W	100W
AC Nominal Input	100... 240Vac			
AC Input Voltage	90... 264Vac			
DC Input Voltage	140... 340Vdc			
AC Frequency	47... 63Hz			
Hold-Up Time	90ms	160ms	80ms	80ms
Inrush Current	41A	41A	81A	52A
Start	softstart			
Output Voltage	24V	24V	24V	24V
Adjust Range	24 ... 28V	24 ... 28V	24 ... 28V	24 ... 28V
Ripple P-P	7mV	7mV	7mV	8mV
DC Nominal Current	420mA	1,25A	2,5A	4,2A
Load Regulation dyn.	±0,02%			
Load Regulation Time	4,4ms	5,8ms	4,2ms	4,5ms
Efficiency 230Vac typ.	82%	85%	85%	86%
Base Load	none required			
Short Circuit	continous protected			
Ambient Operation	-10 bis +60°C			
Cooling	natural			
Temperature Control	yes, Hiccup, auto-recovery			
Housing	VDE0603 for CB boxes			
Type Class	IP20			
Burn Proof Class	UL94V-0			
Safety Norms	IEC60950-1/UL60950-1, EN60204			
Safety IEC	EN60950-1 EN50178			
Safety Class PELV	II A			
Input- /Output Isolation	3000Vac			
Humidity Operation	20 ... 90% non condensing			
EMI	EN55022B EN61000-3-2A			
EMS	EN61000-6-2,3			
MTBF IEC61709 [h]	299T	287T	250T	248T

HPW00601

- DIN-Rail Power Supply 1phase fix output TS35mm DIN EN 50022
- Active Inrush Current Protection 0,7Apeak/0,5Arms
- Active PFC
- Temperature Control
- Clean C/V chart without foldback, ideal for dc drives and dc-UPS
- Hutschienen-Netzteil 1phasig Festspannung
- Einschaltstrom 700mA (ideal für LED-Arrays)
- -15°C ... +75°C Umgebung
- Aktive PFC (Power Faktor Korrektur)



Model	HPW00601	
Power	60W	
Nominal AC Input	100... 240Vac	
Input Range AC	90... 265Vac	
Input Range DC	120... 375Vdc	
Input Frequency	47... 63Hz	
Hold-Up Time	50ms	
Inrush Current Protection	495mAeff / 700mApeak active protection ±5%	
Autostart	Soft start	
Output Voltage	24V	48V
Adjust Range Uout	22,5... 28,5V	40,5... 50,7V
Ripple & Noise mVss	20mV	40mV
Nominal Output Current	2,5A	1.25A
Power Boost ≤60°C/60s	10%	
Stability at Load Switch	±0,5%	
Transient Time		
Efficiency	86%	
Basic load	Idling-proof	
Short Circuit Protection	Continuous	
Ambient Operation Temperature	-15°C... +70°C	
Cooling	Natural convection	
Temperature Monitoring	Yes	
Dimensions (WxHxD)	50x124x96mm	
IP-Range	IP20	
Safety Norms	CSA UL CE according to IEC60950-1	
Safety IEC	EN60950-1 EN50178	
Safety Class 1(A)	VDE0100 VDE0805	
Input to Output Isolation	3000Vac	
Climatic Class, Humidity	3k3, 90% non condensing	
EMI	EN55022B EN61000-3-2D	
EMS	EN61000-6-2,3	
MTBF IEC61709	600000h	
Power Good Relay	galvanic insulated 60Vdc	
Sense operation	No	
Remote Shutdown	No	
Features	Active PFC	
Ordering options	Protective coating	
Options	See datasheet	

HSW00751

- DIN-Rail 1phase Fixed Output TS35mm DIN EN 50022
- Hutschienen-Netzteil 1phasig Festspannung TS35mm DIN EN 50022
- präziser Sperrwandler mit geringer Restwelligkeit für fortgeschrittene Anforderungen



Model	HSW00751				
Power	75W				
Nominal AC Input	100... 240Vac				
Input Range AC	90... 265Vac				
Input Range DC	110... 375Vdc				
Input Frequency	47... 63Hz				
Hold-Up Time	40ms				
Inrush Current Protection	NTC <32A				
Autostart	Soft start 50ms				
Output Voltage	5V	9V	12V	15V	24V
Adjust Range Vout	4,9... 5,5V	8,6... 9,9V	11,4... 13,2V	14,3... 16,5V	22,5... 28,5V
Ripple & Noise mVpp	15mV	15mV	20mV	20mV	50mV
Nominal Output Current	7,5A	7,6A	6A	5A	3,2A
Power Boost <=60°C/60s	9A	9,1A	7,2A	6A	3,8A
Stability at Load Switch	±0,1%	±0,5%	±0,3%	±0,2%	±0,1%
Transient Time	< 1ms				
Efficiency	90%				
Basic load	Idling-proof				
Short Circuit Protection	Continuous				
Ambient Operation Temperature	-20°C... +70°C				
Cooling	Natural convection				
Temperature Monitoring	Upon request				
Dimensions (WxHxD)	50x102x96mm				
IP-Range	IP20				
Safety Norms	CSA UL CE according to IEC60950-1				
Safety IEC	EN60950-1 EN50178 EN60204-1				
Safety Class 1(A)	VDE0100 VDE0805				
Input to Output Isolation	3000Vac				
Climatic Class, Humidity	3k3, 90% non condensing				
EMI	EN55022B EN61000-3-2A				
EMS	EN61000-6-2,3				
MTBF IEC61709	500000h				
Power Good Relay	Galvanic insulated 60Vdc				
Sense operation	Yes 5V-model ±200mV				
Remote Shutdown	No				
Ordering options	Protective Coating				
Options	see Datasheet				

HSW00901

- DIN-Rail 1phase Fixed Output TS35mm DIN EN 50022
- Hutschienen-Netzteil 1phasig Festspannung TS35mm DIN EN 50022
- präziser Sperrwandler mit geringer Restwelligkeit für fortgeschrittene Anforderungen



Model	HSW00901					
Power	90W					
Nominal AC Input	100... 240Vac					
Input Range AC	90... 265Vac					
Input Range DC	110... 375Vdc					
Input Frequency	47... 63Hz					
Hold-Up Time	40ms					
Inrush Current Protection	NTC < 32A					
Autostart	Soft start					
Output Voltage	24V	36V	48V	60V	72V	140V
Adjust Range Vout	22,5... 28,5V	34,2... 39,6V	45,6... 52,8V	57... 66V	68... 68V	133... 155V
Ripple & Noise mVpp	50mV	50mV	60mV	100mV	120mV	120mV
Nominal Output Current	3,8A	2,5A	1,9A	1,5A	1,3A	640mA
Power Boost <=60°C/60s	4,6A	3,0A	2,7A	1,8A	1,6A	770mA
Stability at Load Switch	±0,1%	±0,1%	±0,1%	±0,1%	±0,3%	±0,5%
Transient Time	< 1ms					
Efficiency	90%					
Basic load	Idling-proof					
Short Circuit Protection	Short circuit protected					
Ambient Operation Temperature	-20°C... +70°C					
Cooling	Natural Convection					
Temperature Monitoring	Upon request					
Dimensions (WxHxD)	50x102x96mm					
IP-Range	IP20					
Safety Norms	CSA UL CE according to IEC60950-1					
Safety IEC	EN60950-1 EN50178 EN60204-1					
Safety Class 1(A)	VDE0100 VDE0805					
Input to Output Isolation	3000Vac					
Climatic Class, Humidity	3k3, 90% non condensing					
EMI	EN55022B EN61000-3-2A					
EMS	EN61000-6-2,3					
MTBF IEC61709	500000h					
Power Good Relay	galvan. insulated 60Vdc					
Ordering options	Protective Coating					
Options	see Datasheet					

HPW02401

- DIN-Rail Power Supply 1phase fix output TS35mm DIN EN 50022
- Active Inrush Current Protection
- Active PFC (Power Factor Korrektur)
- Remote Shutdown
- Temperature Control
- Clean C/V chart without foldback, ideal for dc drives and dc-USV
- Hutschienen-Netzteil 1phasig Festspannung TS35mm DIN EN 50022
- Aktive Einschaltstrombegrenzung für niedrigen Anlaufstrom
- Aktives PFC (Power Factor Correction)
- Remote Shutdown
- Temperaturüberwachung
- Saubere U/I Kennlinie ohne Foldback, ideal für Antriebe und DC-USV



Model	HPW02401					
Power	240W/312W					
Nominal AC Input	100... 240Vac					
Input Range AC	90... 265Vac					
Input Range DC	120... 375Vdc					
Input Frequency	47... 63Hz					
Hold-Up Time	40ms					
Inrush Current Protection	5Aeff / 7Apeak electronic protection $\pm 6\%$					
Autostart	Soft start / Soft start 50ms					
Output Voltage	12V	24V	36V	48V	60V	72V
Adjust Range Vout	9... 18V	18... 30V	30... 43V	43... 53V	53... 72V	68... 86V
Ripple & Noise mVpp	30mV	30mV	60mV	50mV	50mV	60mV
Nominal Output Current 40°/60°C	15/19A	10/13A	6,7/8,7A	5/6,8A	4,0/5,2A	3,3/4,3A
Power Boost $\leq 60^\circ\text{C}/60\text{s}$	18A	12A	8A	6A	5,2A	4,3A
Stability at Load Switch	$\pm 0,5\%$	$\pm 0,2\%$	$\pm 0,2\%$	$\pm 0,2\%$	$\pm 0,2\%$	$\pm 0,2\%$
Transient Time	$< 1\text{ms}$					
Efficiency	0,92					
Basic load	Idling-proof					
Short Circuit Protection	Continuous					
Ambient Operation Temperature	$-20^\circ\text{C} \dots +70^\circ\text{C}$					
Cooling	Natural convection					
Temperature Monitoring	yes					
Dimensions (WxHxD)	75x130x115mm					
IP-Range	IP20					
Safety Norms	CSA UL CE according to IEC60950-1					
Safety IEC	EN60950-1 EN50178 EN60204-1					
Safety Class 1(A)	VDE0100 VDE0805					
Input to Output Isolation	3000Vac					
Climatic Class, Humidity	3k3, 90% non condensing					
EMI	EN55022B					
EMS	EN61000-6-2,3					
MTBF IEC61709	500000h					
Power Good Relay	Yes					
Remote Shutdown	Yes					
Features	Active PFC					
Ordering options	Protective coating					
Options	See datasheet					

HSE01201

- DIN-Rail 1phase Fixed Output TS35mm DIN EN 50022
- Ideal vertically C/V chart for complex loads
- Hutschienen-Netzteil 1phasig Festspannung TS35mm DIN EN 50022
- präziser Sperrwandler mit geringer Restwelligkeit
- hohe Robustheit mit langer Lebensdauer für einfache USV-Anwendungen und leichte DC-Antriebe geeignet



Model	HSE01201							
Power	120W							
Nominal AC Input	115/230Vac select							
Input Range AC	90..115Vac/184..265Vac							
Input Range DC	250... 375Vdc							
Input Frequency	47... 63Hz							
Hold-Up Time	30ms							
Inrush Current Protection	NTC < 16A							
Autostart	Soft start							
Output Voltage	12V	24V	36V	48V	60V	72V	110V	
Adjust Range Vout	11,4..13,2V	22,5... 28,5V	34,2V... 39,6V	45,6... 42,8V	57... 66V	68... 86V	100... 120V	
Ripple & Noise mVpp	50mV	65mV	65mV	100mV	120mV	120mV	200mV	
Nominal Output Current	8A	5A	3,3A	2,5A	2A	1,7A	1,1A	
Power Boost <=60°C/60s	9,6A	6A	4A	3A	2,4A	2A	1,3A	
Stability at Load Switch	±0,5%							
Transient Time	< 1ms							
Efficiency	91%							
Basic load	Idling-proof							
Short Circuit Protection	Continuous							
Ambient Operation Temperature	-20°C... +70°C							
Cooling	Natural convection							
Temperature Monitoring	Upon request							
Dimensions (WxHxD)	50x124x96mm							
IP-Range	IP20							
Safety Norms	CSA UL CE according to IEC60950-1							
Safety IEC	EN60950-1 EN50178 EN60204-1							
Safety Class 1(A)	VDE0100 VDE0805							
Input to Output Isolation	3000Vac							
Climatic Class, Humidity	3k3, 90% non condensing							
EMI	EN55022B EN61000-3-2A							
EMS	EN61000-6-2,3							
MTBF IEC61709	600000h							
Power Good Relay	galvan. insulated 60Vdc							
Ordering options	Protective coating							
Options	See datasheet							

HSE01201CC

Constant Current DC Source

- Constant Current Battery Charger
- LED Driver
- Ideal vertically C/V chart
- Hutschienen-Netzteil 1phasig Festspannung TS35mm DIN EN 50022
- präziser Sperrwandler mit geringer Restwelligkeit
- hohe Robustheit mit langer Lebensdauer
- für USV-Anwendungen
- LED Netzteil
- Saubere I/U-Kennlinie



Model	HSE01201CC
Power	120W
Nominal AC Input	115/230Vac select
Input Range AC	90..115Vac/184..265Vac
Input Range DC	110... 375Vdc
Input Frequency	47... 63Hz
Hold-Up Time	30ms
Inrush Current Protection	NTC < 16A
Autostart	Soft start
Output Voltage	57,4V (other voltages upon request)
Adjust Range Vout	factory set current limiting
Ripple & Noise mVpp	120mV
Nominal Output Current	2A
Power Boost <=60°C/60s	-
Stability at Load Switch	±0,5%
Transient Time	< 1ms
Efficiency	89%
Basic load	Idling-proof
Short Circuit Protection	Continuous
Ambient Operation Temperature	-20°C... +70°C
Cooling	Natural convection
Temperature Monitoring	-
Dimensions (WxHxD)	50x124x96mm
IP-Range	IP20
Safety Norms	CSA UL CE according to IEC60950-1
Safety IEC	EN60950-1 EN50178 EN60204-1
Safety Class 1(A)	VDE0100 VDE0805
Input to Output Isolation	3000Vac
Climatic Class, Humidity	3k3, 90% non condensing
EMI	EN55022B EN61000-3-2A
EMS	EN61000-6-2,3
MTBF IEC61709	589000h
Power Good Relay	galvan. insulated 60Vdc
Ordering options	Protective coating
Options	See datasheet

HSE03201LIRC

- DIN-Rail Power Supply 1phase fix output TS35mm DIN EN 50022
- Active Inrush Current Protection
- Temperature Control
- Clean C/V chart without foldback, ideal for dc drives and dc-UPS
- Hutschienen-Netzteil 1phasig Festspannung TS35mm DIN EN 50022
- Aktive Einschaltstrombegrenzung für kleine Anlaufströme
- Saubere U/I Kennlinie ohne Foldback, ideal für Antriebe und DC-USV



Model	HSE03201LIRC					
Power	320W					
Nominal AC Input	115/230Vac select					
Input Range AC	90..115Vac/184..265Vac					
Input Range DC	250... 375Vdc					
Input Frequency	47... 63Hz					
Hold-Up Time	30ms					
Inrush Current Protection	10,6Aeff / 15Apeak active protection ±6%					
Autostart	Soft start 20ms					
Output Voltage	12V	15V	24V	36V	48V	60V
Adjust Range Vout	11,4... 14,4V	14,2... 18V	22,5... 28,5V	34,2... 43,2V	45,6... 57,6V	57... 72V
Ripple & Noise mVpp	30mV	30mV	20mV	30mV	50mV	50mV
Nominal Output Current	18A	17A	13,5A	8,9A	6,7A	5,4A
Power Boost ≤60°C/60s	21,6A	20,4A	16,2A	10,7A	8A	6,5A
Stability at Load Switch	±0,5%					
Transient Time	< 1ms					
Efficiency	91%					
Basic load	Idling-proof					
Short Circuit Protection	Continuous					
Ambient Operation Temperature	-20°C... +70°C					
Cooling	Natural convection					
Temperature Monitoring	Yes					
Dimensions (WxHxD)	120x124x96mm					
IP-Range	IP20					
Safety Norms	CSA UL CE according to IEC60950-1					
Safety IEC	EN60950-1 EN50178 EN60204-1					
Safety Class 1(A)	VDE0100 VDE0805					
Input to Output Isolation	3000Vac					
Climatic Class, Humidity	3k3, 90% non condensing					
EMI	EN55022B					
EMS	EN61000-6-2,3					
MTBF IEC61709	600000h					
Power Good Relay	Galvanic insulated 60Vdc					
Features	Low Inrush Current Limiter					
Ordering options	Protective Coating					
Options	See datasheet					

HSR03201LIRC Redundant O-Ring

- DIN-Rail Power Supply 1phase fix output TS35mm DIN EN 50022
- Active Inrush Current Protection
- Temperature Control
- Clean C/V chart without foldback, ideal for dc drives and dc-UPS
- Redundant Power Supply
- Built in O-ring diode

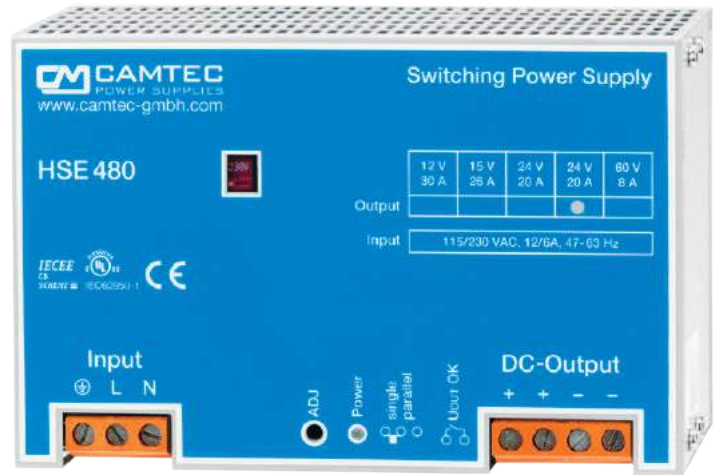
- Hutschienen-Netzteil redundant O-Ring
- 1phasig Festspannung TS35mm DIN EN 50022
- Elektronisch limitierter Einschaltstrom
- Saubere U/I-Kennlinie ohne Foldback
- für komplexe Lasten geeignet
- ideal für DC-USV und redundant versorgte Zwischenkreise



Model	HSR03201LIRC Redundant		
Power	320W		
Nominal AC Input	115/230Vac select		
Input Range AC	90..115Vac/184..265Vac		
Input Range DC	250... 375Vdc		
Input Frequency	47... 63Hz		
Hold-Up Time	40ms		
Inrush Current Protection	10,6Aeff / 15Apeak active protection ±6%		
Autostart	Soft start 20ms		
Output Voltage	24V	48V	60V
Adjust Range Vout	22,5... 28,8V	45,6... 52,8V	57... 66V
Ripple & Noise mVpp	20mV	50mV	50mV
Nominal Output Current	13,5A	6,7A	5,4A
Power Boost ≤60°C/60s	16,2A	8A	6,5A
Stability at Load Switch	±0,3%	±0,1%	±0,1%
Transient Time	< 1ms		
Efficiency	91%		
Basic load	Idling-proof		
Short Circuit Protection	Continuous		
Ambient Operation Temperature	-20°C... +70°C		
Cooling	Natural convection		
Temperature Monitoring	Yes		
Dimensions (WxHxD)	120x124x96mm		
IP-Range	IP20		
Safety Norms	CSA UL CE according to IEC60950-1		
Safety IEC	EN60950-1 EN50178 EN60204-1		
Safety Class 1(A)	VDE0100 VDE0805		
Input to Output Isolation	3000Vac		
Climatic Class, Humidity	3k3, 95% non condensing		
EMI	EN55022B		
EMS	EN61000-6-2,3		
MTBF IEC61709	600000h		
Power Good Relay	Yes		
Features	Built-in redundant O-ring diode, low inrush current		
Ordering options	Protective coating		
Options	See datasheet		

HSE04801

- DIN-Rail Power Supply
- 1phase fix output TS35mm DIN EN 50022
- Temperature Control
- Clean C/V chart without foldback, ideal for dc drives



- Hutschienen-Netzteil
- 1phasig Festspannung TS35mm DIN EN 50022
- Saubere U/I Kennlinie ohne Foldback, ideal für Antriebe
- Hohe Energiereserven und konstante Stromabgabe bis nahe 0V ermöglichen eine kontrollierte Leistungsabgabe an komplexe Lasten ohne unerwünscht unkontrollierten Powerboost

Model	HSE04801				
Power	480W				
Nominal AC Input	115/230Vac select				
Input Range AC	90..115Vac/184..265Vac				
Input Range DC	250... 375Vdc				
Input Frequency	47... 63Hz				
Hold-Up Time	40ms				
Inrush Current Protection	NTC <40A				
Autostart	Soft start 20ms				
Output Voltage	12V	15V	24V	36V	48V
Adjust Range Vout	11,4... 14,4V	14,2... 18V	22,8... 28,8V	34,2... 43,2V	45,6... 52,8V
Ripple & Noise mVpp	40mV	50mV	50mV	100mV	100mV
Nominal Output Current	30A	26A	20A	13,3A	10A
Power Boost <=60°C/60s	33A	28,6A	22A	14,6A	11A
Stability at Load Switch	±0,5%				
Transient Time	< 1ms				
Efficiency	91%				
Basic load	Idling-proof				
Short Circuit Protection	Short circuit protected				
Ambient Operation Temperature	-20°C... +70°C				
Cooling	Natural convection				
Temperature Monitoring	Yes				
Dimensions (WxHxD)	200x130x114,5mm				
IP-Range	IP20				
Safety Norms	CSA UL CE according to IEC60950-1				
Safety IEC	EN60950-1 EN50178 EN60204-1				
Safety Class 1(A)	VDE0100 VDE0805				
Input to Output Isolation	3000Vac				
Climatic Class, Humidity	3k3, 90% non condensing				
EMI	EN55022B				
EMS	EN61000-6-2,3				
MTBF IEC61709	500000h				
Power Good Relay	Yes				
Ordering options	Protective coating				
Options	See datasheet				

HPV04801

- DIN-Rail Power Supply
1phase fix output TS35mm DIN EN 50022
- Temperature Control
- Clean C/V chart without foldback,
ideal for dc drives and dc-UPS



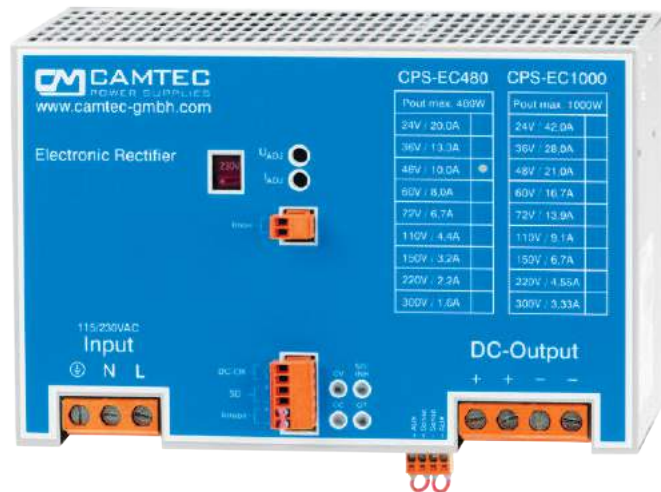
- Hutschienen-Netzteil
1phasig Festspannung TS35mm DIN EN 50022
- Saubere U/I Kennlinie ohne Foldback, ideal für Antriebe und DC-USV
- Hohe Energiereserven und konstante Stromabgabe bis nahe 0V ermöglichen eine kontrollierte Leistungsabgabe an komplexe Lasten ohne unerwünscht unkontrollierten Powerboost

Model	HPV04801			
Power	480W			
Nominal AC Input	115/230Vac select			
Input Range AC	90..115Vac/184..265Vac			
Input Range DC	250... 375Vdc			
Input Frequency	47... 63Hz			
Hold-Up Time	40ms			
Inrush Current Protection	NTC <40A			
Autostart	Soft start 20ms			
Output Voltage	72V	110V	150V	240V
Adjust Range Vout	58... 86V	86... 132V	132... 180V	180... 240V
Ripple & Noise mVpp	150mV	200mV	200mV	300mV
Nominal Output Current	6,7A	4,4A	3,2A	2,2A
Power Boost <=60°C/60s	7,2A	5,3A	3,8A	2,6A
Stability at Load Switch	±0,5%			
Transient Time	< 1ms			
Efficiency	93 %			
Basic load	Idling-proof			
Short Circuit Protection	Continuous			
Ambient Operation Temperature	-20°C... +70°C			
Cooling	Natural Convection			
Temperature Monitoring	Yes			
Dimensions (WxHxD)	200x130x114,5mm			
IP-Range	IP20			
Safety Norms	CSA UL CE according to IEC60950-1			
Safety IEC	EN60950-1 EN50178 EN60204-1			
Safety Class 1(A)	VDE0100 VDE0805			
Input to Output Isolation	3000Vac			
Climatic Class, Humidity	3k3, 95% non condensing			
EMI	EN55022B			
EMS	EN61000-6-2,3			
MTBF IEC61709	400000h			
Power Good Relay	Yes, Option			
Ordering options	Protective coating, Power Good Relay (PG)			
Options	See datasheet			

CPS-EC480

- C/V pricesely adjustable
- Current Monitor Imon
- Perfect C/V chart with no Foldback
- Power Good Relay AC & DC
- Remote Shutdown
- Inhibit (Interlock) Function
- Sense
- Natural Cooling

- Batterielademodul Gleichrichter
- Hochgenaues Industrie-Netzteil
- I/U Kennlinie ohne Foldback
- Strom & Spannung präzise einstellbar
- Strom-Monitor Imon
- AC & DC Power Good, Shutdown, Interlock, Sense
- Konvektionskühlung ohne Lüfter



Model	CPS-EC480									
Power	480W									
Nominal AC Input	115/230Vac									
Input Range AC	90..115Vac/186..265Vac									
Input Range DC	250... 375Vdc									
Input Frequency	47... 63Hz									
Hold-Up Time	50ms									
Inrush Current	Electronic Inrush Current Limiter 9,8Arms									
Autostart	Soft start 100ms									
Output Voltage	24V	36V	48V	60V	72V	110V	150V	220V	300V	
Output Current	20A	13,3A	10A	8A	6,7A	4,4A	3,2A	2,2A	1,6A	
DC Voltage Setting	24-30V	36-45V	48-58V	60-75V	72-90V	110-137,5V	132-180V	220-264V	264-360V	
DC Current Setting	10-21A	6,6-14A	5-10,5A	4-8,4A	3,4-7A	2,2-4,6A	1,6-3,3A	1,1-2,3A	0,8-1,7A	
Ripple & Noise mVpp	40mV	40mV	100mV	150mV	200mV	300mV	400mV	400mV	400mV	
Load Regulation	±0,05% 0-100%									
Load Change	Response < 1ms 10-100% 100-10%									
Efficiency	up to 92%									
Base load	non, continuous open circuit proof									
Short Circuit Protection	Continuous									
Ambient Temperature	-20°C... +70°C Operation									
Cooling	natural cooling									
Temperature Control	Yes									
Dimensions	(WxHxD) 200x130x114,5mm IP20									
Safety Norms	CSA UL CE in accordance to IEC60950-1									
Safety IEC	EN60950-1 EN50178 EN60204-1, UL classified in accordance to EN60950									
Safety Class 1(A)	VDE0100 VDE0805									
Input/Output Isolation	3000Vac									
Climatic Class, Humidity	3k3, 95% non condensing									
EMI/EMS	EN55022B / EN61000-6-2,3									
EMS	EN61000-6-2,3									
MTBF / MTTF IEC61709	400000h / 148312h									
Power Good Relay	AC & DC low voltage detection, isolated									
Features	Current-Monitoring, External Shutdown, Inhibit (Interlock), Sense Compensation									
Options	Protective Coating, Baseplate cooler for hardmount									

HSE06001

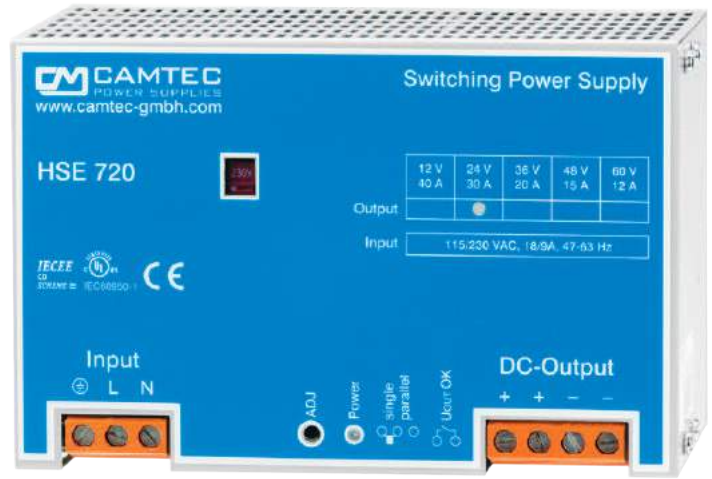
- DIN-Rail Power Supply
- 1phase fix output TS35mm DIN EN 50022
- Temperature Control
- Clean C/V chart without foldback, ideal for dc drives and dc-UPS
- Hutschienen-Netzteil
- 1phasig Festspannung TS35mm DIN EN 50022
- Saubere U/I Kennlinie ohne Foldback, ideal für Antriebe und DC-USV
- Hohe Energiereserven und konstante Stromabgabe bis nahe 0V ermöglichen eine kontrollierte Leistungsabgabe an komplexe Lasten ohne unerwünscht unkontrollierten Powerboost



Model	HSE06001		
Power	600W		
Nominal AC Input	115/230Vac select		
Input Range AC	90..115Vac/184..265Vac		
Input Range DC	250... 375Vdc		
Input Frequency	47... 63Hz		
Hold-Up Time	30ms		
Inrush Current Protection	NTC <81A		
Autostart	Soft start 20ms		
Output Voltage	24V	36V	48V
Adjust Range Vout	22,8... 28,8V	34,2... 43,2V	45,6... 52,8V
Ripple & Noise mVpp	50mV	100mV	100mV
Nominal Output Current	25A	16,7A	12,5A
Power Boost <=60°C/60s	27,5A	18,4A	13,8A
Stability at Load Switch	±0,5%		
Transient Time	< 1ms		
Efficiency	91%		
Basic load	Idling-proof		
Short Circuit Protection	Continuous		
Ambient Operation Temperature	-20°C... +70°C		
Cooling	Natural convection		
Temperature Monitoring	Yes		
Dimensions (WxHxD)	200x130x114,5mm		
IP-Range	IP20		
Safety Norms	CSA UL CE according to IEC60950-1		
Safety IEC	EN60950-1 EN50178 EN60204-1		
Safety Class 1(A)	VDE0100 VDE0805		
Input to Output Isolation	3000Vac		
Climatic Class, Humidity	3k3, 95% non condensing		
EMI	EN55022B		
EMS	EN61000-6-2,3		
MTBF IEC61709	500000h		
Power Good Relay	yes		
Ordering options	Protective coating		
Options	See datasheet		

HSE07201

- DIN-Rail Power Supply
1phase fix output TS35mm DIN EN 50022
- Temperature Control
- Clean C/V chart without foldback,
ideal for dc drives and dc-UPS
- Hutschienen-Netzteil
1phasig Festspannung TS35mm DIN EN 50022
- Saubere U/I Kennlinie ohne Foldback,
ideal für Antriebe und DC-USV
- Hohe Energiereserven und konstante Stromabgabe bis nahe 0V ermöglichen eine kontrollierte Leistungsabgabe
an komplexe Lasten ohne unerwünscht unkontrollierten Powerboost



Model	HSE07201				
Power	720W				
Nominal AC Input	115/230Vac select				
Input Range AC	90..115Vac/184..265Vac				
Input Range DC	250... 375Vdc				
Input Frequency	47... 63Hz				
Hold-Up Time	30ms				
Inrush Current Protection	NTC < 81A (MCB 16C)				
Autostart	Soft start				
Output Voltage	12V	24V	36V	48V	60V
Adjust Range Vout	11,4... 14,4V	22,8... 28,8V	34,2... 43,2V	45,6... 52,8V	57V... 66V
Ripple & Noise mVpp	50mV	50mV	100mV	100mV	120mV
Nominal Output Current	40A	30A	20A	15A	12A
Power Boost <=60°C/60s	44A	33A	22A	16,5A	13,2A
Stability at Load Switch	±0,5%				
Transient Time	< 1ms				
Efficiency	91%				
Basic load	Idling-proof				
Short Circuit Protection	Continuous				
Ambient Operation Temperature	-20°C... +70°C				
Cooling	Natural convection				
Temperature Monitoring	Yes				
Dimensions (WxHxD)	200x130x114,5mm				
IP-Range	IP20				
Safety Norms	CSA UL CE according to IEC60950-1				
Safety IEC	EN60950-1 EN50178 EN60204-1				
Safety Class 1(A)	VDE0100 VDE0805				
Input to Output Isolation	3000Vac				
Climatic Class, Humidity	3k3, 95% non condensing				
EMI	EN55022B				
EMS	EN61000-6-2,3				
MTBF IEC61709	500000h				
Power Good Relay	Galvanic insulated 60Vdc				
Features	48V model with 4,2KV input to output insulation				
Ordering options	Protective coating				
Options	See datasheet				

HSE10001

- DIN-Rail Power Supply
1phase fix output TS35mm DIN EN 50022
- Temperature Control
- Clean C/V chart without foldback,
ideal for dc drives and dc-UPS
- Hutschienen-Netzteil
1phasig Festspannung TS35mm DIN EN 50022
- Saubere U/I Kennlinie ohne Foldback,
ideal für Antriebe und DC-USV
- Hohe Energiereserven und konstante Stromabgabe bis nahe 0V ermöglichen eine kontrollierte Leistungsabgabe
an komplexe Lasten ohne unerwünscht unkontrollierten Powerboost



Model	HSE10001				
Power	1008W				
Nominal AC Input	115/230Vac select				
Input Range AC	90..115Vac/184..265Vac				
Input Range DC	250... 375Vdc				
Input Frequency	47... 63Hz				
Hold-Up Time	30ms				
Inrush Current Protection	< 81A				
Autostart	Soft start 100ms				
Output Voltage	12V	15V	24V	36V	48V
Adjust Range Vout	11,4... 14,4V	14,2... 18V	22,8... 28,8V	34,2... 43,2V	45,6... 52,8V
Ripple & Noise mVpp	50mV	50mV	50mV	100mV	120mV
Nominal Output Current	50A	50A	42A	28A	21A
Power Boost <=60°C/60s	55A	55A	46,2A	31A	23A
Stability at Load Switch	±0,5%				
Transient Time	< 1ms				
Efficiency	91%				
Basic load	Idling-proof				
Short Circuit Protection	Continuous				
Ambient Operation Temperature	-20°C... +70°C				
Cooling	Natural convection & controlled fan from Papst				
Temperature Monitoring	Yes				
Dimensions (WxHxD)	200x156x114,5mm				
IP-Range	IP20				
Safety Norms	CSA UL CE according to IEC60950-1				
Safety IEC	EN60950-1 EN50178 EN60204-1				
Safety Class 1(A)	VDE0100 VDE0805				
Input to Output Isolation	3000Vac				
Climatic Class, Humidity	3k3, 95% non condensing				
EMI	EN55022B				
EMS	EN61000-6-2,3				
MTBF IEC61709	500000h				
Power Good Relay	Galvanic insulated 60Vdc				
Options	See datasheet				

HPV10001

- DIN-Rail Power Supply 1phase fix output TS35mm DIN EN 50022
- Temperature Control
- Clean C/V chart without foldback, ideal for dc drives and dc-UPS
- Hutschienen-Netzteil 1phasig Festspannung TS35mm DIN EN 50022
- Saubere U/I Kennlinie ohne Foldback, ideal für Antriebe und DC-USV
- Hohe Energiereserven und konstante Stromabgabe bis nahe 0V ermöglichen eine kontrollierte Leistungsabgabe an komplexe Lasten ohne unerwünscht unkontrollierten Powerboost

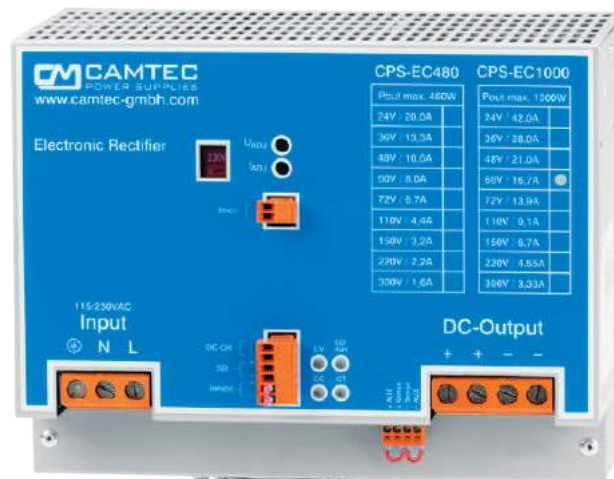


Model	HPV10001			
Power	1008W			
Nominal AC Input	115/230Vac			
Input Range AC	90..115Vac/186..265Vac			
Input Range DC	250... 375Vdc			
Input Frequency	47... 63Hz			
Hold-Up Time	30ms			
Inrush Current Protection	NTC < 84A			
Autostart	Soft start 100ms			
Output Voltage	72V	110V	150V	240V
Adjust Range Vout	58... 86V	86... 132V	132... 180V	180... 240V
Ripple & Noise mVpp	200mV	250mV	250mV	300mV
Nominal Output Current	13,9A	9,1A	6,7A	4,6A
Power Boost <=60°C/60s	15,3A	10A	7,4A	5A
Stability at Load Switch	±0,5%			
Transient Time	< 1ms			
Efficiency	0,93			
Basic load	Idling-proof			
Short Circuit Protection	Continuous			
Ambient Operation Temperature	-20°C... +70°C			
Cooling	Natural convection + controlled fan from Papst			
Temperature Monitoring	Yes			
Dimensions (WxHxD)	200x156x114,5mm			
IP-Range	IP20			
Safety Norms	CSA UL CE according to IEC60950-1			
Safety IEC	EN60950-1 EN50178 EN60204-1			
Safety Class 1(A)	VDE0100 VDE0805			
Input to Output Isolation	3000Vac			
Climatic Class, Humidity	3k3, 95% non condensing			
EMI	EN55022B			
EMS	EN61000-6-2,3			
MTBF IEC61709	500000h			
Power Good Relay	Yes, Option			
Ordering options	Protective coating, Popwer Good Relais (PG)			
Options	See datasheet			

CPS-EC1000

DIN-Rail Battery Charger & Industrial Precision Power

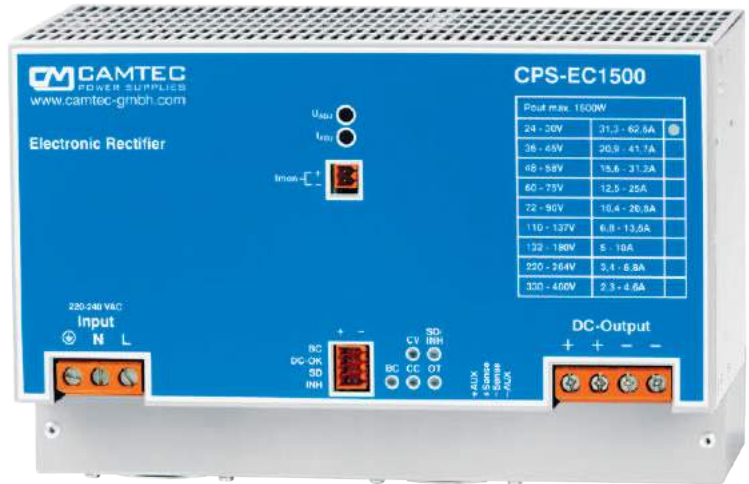
- C/V precisely adjustable
 - Current Monitor Imon
 - Perfect C/V chart with no Foldback
 - Power Good Relay AC & DC
 - Remote Shutdown, Inhibit (Interlock) Function, Sense
-
- Batterielademodul Gleichrichter, Hochgenaues Industrie-Netzteil
 - I/U Kennlinie ohne Foldback
 - Strom & Spannung präzise einstellbar
 - Strom-Monitor Imon
 - AC & DC Power Good, Shutdown, Interlock, Sense
 - Parallelbetrieb N+1



Model	CPS-EC1000									
Power	1008W									
Nominal AC Input	115/230Vac									
Input Range AC	90..115Vac/186..265Vac									
Input Range DC	250... 375Vdc									
Input Frequency	47... 63Hz									
Hold-Up Time	30ms									
Inrush Current	Electronic Inrush Current Limiter 9,8Arms									
Autostart	Soft start 100ms									
Output Voltage	24V	36V	48V	60V	72V	110V	150V	220V	300V	
Output Current	42A	28A	21A	16,7A	13,9A	9,1A	6,7A	4,55A	3,33A	
DC Voltage Setting	24-30V	36-45V	48-58V	60-75V	72-90V	110-137,5V	132-180V	220-264V	264-360V	
DC Current Setting	21-44,1A	14-29,4A	10,5-22A	8-17,6A	7-14,6A	4,6-9,6A	3,4-7A	3,3-4,8A	1,7-3,5A	
Ripple & Noise PP	40mV	40mV	100mV	150mV	200mV	300mV	400mV	400mV	400mV	
Load Regulation	±0,05% 0-100%									
Load Change	Response									
Efficiency	up to 92%									
Base load	non, continuous open circuit proof									
Short Circuit	Continuous Protection									
Ambient	-20°C... +70°C Operation Temperature									
Cooling	controlled fan from EBM Papst (Germany)									
Temp. Control	Yes									
Dimensions	(WxHxD) 200x156x114,5mm IP20									
Safety Norms	CSA UL CE in accordance to IEC60950-1									
Safety IEC	EN60950-1 EN50178 EN60204-1, UL classified in accordance to EN60950									
Safety Class 1(A)	VDE0100 VDE0805									
Isolation	3000Vac Input/Output									
Climatic Class	3k3, Humidity 95% non condensing									
EMI/EMS	EN55022B / EN61000-6-2,3									
EMS	EN61000-6-2,3									
MTBF / MTTF	389000h / 143036h (IEC61709)									
Power Good Relay	AC & DC low voltage detection, isolated									
Features	Current-Monitoring, External Shutdown, Inhibit (Interlock), Sense Compensation									
Options	Protective Coating, Baseplate cooler for hardmount									

CPS-EC1500

- C/V pricesely adjustable
- Current Monitor Imon
- Perfect C/V chart with no Foldback
- Power Good Relay AC & DC
- Remote Shutdown, Inhibit (Interlock) Function, Sense
- Hutschienen-Netzteil
1phasig Festspannung TS35mm DIN EN 50022
- Saubere U/I Kennlinie ohne Foldback,
ideal für Antriebe und DC-USV
- Hohe Energiereserven und konstante Stromabgabe bis nahe 0V ermöglichen eine kontrollierte Leistungsabgabe an komplexe Lasten ohne unerwünscht unkontrollierten Powerboost
- Parallelbetrieb N+1
- Starkladefunktion



Model	CPS-EC1500									
Power	1500W									
Nominal AC Input	230Vac									
Input Range AC	186..265Vac									
Input Range DC	250... 375Vdc									
Input Frequency	47... 63Hz									
Hold-Up Time	20ms									
Inrush Current	Electronic Inrush Current Limiter 9,8Arms									
Autostart	Soft start 100ms									
Output Voltage	24V	36V	48V	60V	72V	110V	150V	220V	400V	
Output Current	62,5A	41,7A	31,2A	25A	20,8A	13,6A	10A	6,8A	4,6A	
DC Voltage Setting	24-30V	36-45V	48-58V	60-75V	72-90V	110-137,5V	132-180V	220-264V	330-400V	
DC Current Setting	31,3-62,5A	20,9-41,7A	15,6-31,2A	12-25A	10,4-20,8A	6,8-13,6A	5-10A	3,4-6,8A	2,3-4,6A	
Ripple & Noise PP	40mV	40mV	120mV	150mV	200mV	300mV	400mV	400mV	400mV	
Load Regulation	±0,05% 0-100%									
Load Change	Response									
Efficiency	up to 94%									
Base load	non, continuous open circuit proof									
Short Circuit	Continuous Protection									
Ambient	-20°C... +70°C Operation Temperature									
Cooling	controlled fan from EBM Papst (Germany)									
Temp. Control	Yes									
Dimensions	(WxHxD) 250x156x114,5mm IP20									
Safety Norms	CSA UL CE in accordance to IEC60950-1									
Safety IEC	EN60950-1 EN50178 EN60204-1, UL classified in accordance to EN60950									
Safety Class 1(A)	VDE0100 VDE0805									
Isolation	3000Vac Input/Output									
Climatic Class	3k3, Humidity 95% non condensing									
EMI/EMS	EN55022B / EN61000-6-2,3									
EMS	EN61000-6-2,3									
MTBF / MTTF	400000h / 144006h (IEC61709)									
Power Good Relay	AC & DC low voltage detection, isolated									
Features	Current-Monitoring, External Shutdown, Inhibit (Interlock), Sense Compensation, Boost Charge Mode									
Options	Protective Coating, Baseplate cooler for hardmount, Protected Inhibit Module acc. with SIL03									

RED00202 Redundant O-Ring Modul 1000W Continuous Load

- N+1 Power Redundant Module DIN-Rail TS35mm
- 2x 1000W Inputs, 1x 1000W Output
- Lower voltage margin adjustable
- Input & Output = floating
- Decoupling Diode = fast Schottky
- Voltage Drop typ. 500mV



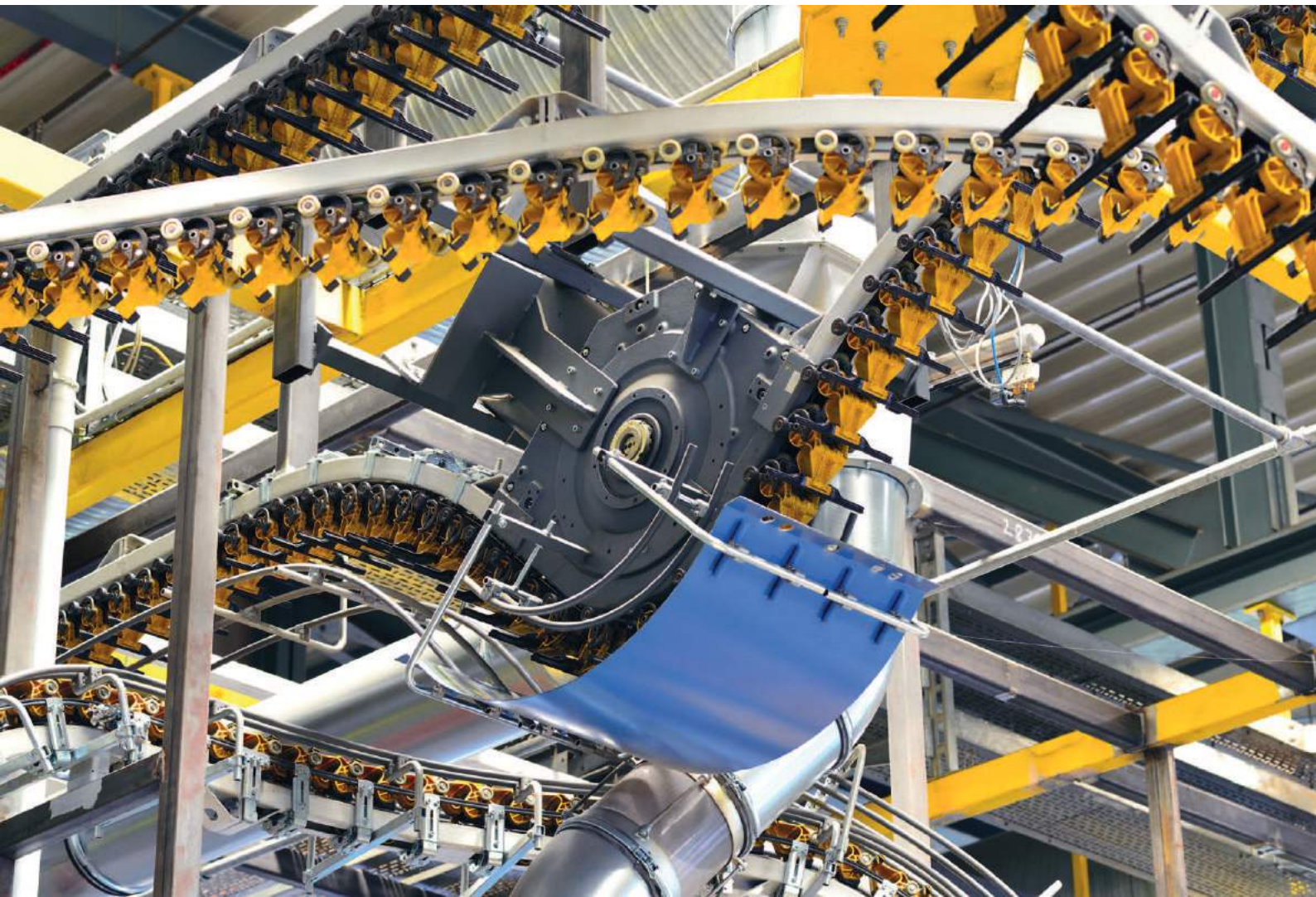
- Power-Redundanzmodul auf der Tragschiene TS35, mit 2 Eingängen
- Für den Aufbau von N+1 Redundanzen
- Eingangsspannung ist gleich Ausgangsspannung
- Spannungsabfall der Diodenstrecke typ. 0,5V (O-Ring Entkopplungsdiode)

Model	RED00202A
Maximum Current	Up to 2x50A per connection
V1in/V2in	+ 12 up to 28Vdc (36V) 2x 50A
LED	Control-LED
Monitoring Relay	Integrated (floating)
Cooling	Natural convection
Efficiency	> 97% (24Vdc)
Load connection	Screw-type terminal
Alarm contact	Screw-type terminal plug-in
Ambient temperature	-20°C ... +70°C
Dimensions WxHxD	62 x 130 x 115mm
Special Features	High reliable
	Compact outline
	Reverse polarity protection
	Alarm monitoring loss of U1/U2

Model	RED00202B
Maximum Current	Up to 2x 28A per connection
V1in/V2in	+ 36Vdc up to 60Vdc (75V) 2x 28A
LED	Control-LED
Monitoring Relay	Integrated (floating)
Cooling	Natural convection
Efficiency	> 97% (48Vdc)
Load connection	Screw-type terminal
Alarm contact	Screw-type terminal plug-in
Ambient temperature	-20°C ... +70°C
Dimensions WxHxD	62 x 130 x 115mm
Special Features	High reliable
	Compact outline
	Reverse polarity protection
	Alarm monitoring loss of U1/U2

Model	RED00202C
Maximum Current	Up to 2x 9,1A per connection
V1in/V2in	+ 90Vdc up to 125Vdc (140Vdc) 2x 9,1A
LED	Control-LED
Monitoring Relay	Integrated (floating)
Cooling	Natural convection
Efficiency	> 97% (110Vdc)
Load connection	Screw-type terminal
Alarm contact	Screw-type terminal plug-in
Ambient temperature	-20°C ... +70°C
Dimensions WxHxD	62 x 130 x 115mm
Special Features	High reliable
	Compact outline
	Reverse polarity protection
	Alarm monitoring loss of U1/U2





AC/DC DIN-Rail Power Supplies 3phase
AC/DC Hutschienen-Netzteile 3phasig

HSD04801

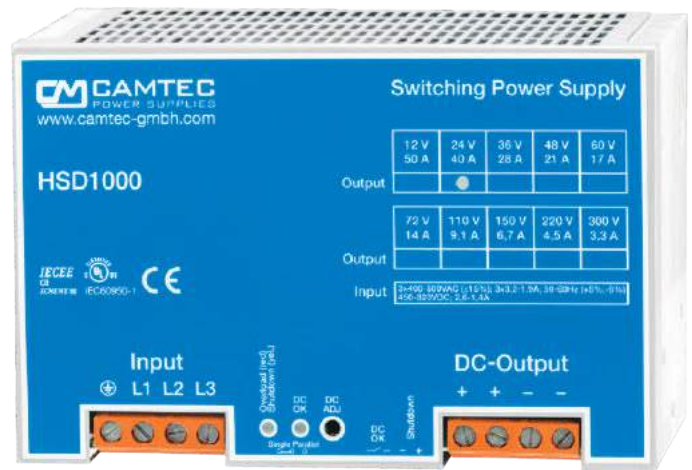
- DIN-Rail Power Supply 3phase fix output TS35mm DIN EN 50022
- Active Inrush Current Protection
- Active PFC (Power Factor Korrektion)
- Temperature Control
- Clean C/V chart without foldback, ideal for dc drives and dc-UPS
- Hutschienen-Netzteil 2/3phasig Festspannung TS35mm DIN EN 50022
- Saubere U/I Kennlinie ohne Foldback, ideal für Antriebe und DC-USV
- Hohe Energiereserven und konstante Stromabgabe bis nahe 0V ermöglichen eine kontrollierte Leistungsabgabe an komplexe Lasten ohne unerwünscht unkontrollierten Powerboost
- Parallelbetrieb N+1
- Aktive Einschaltstrombegrenzung für kleine Anlaufströme
- Aktives PFC (Power Factor Correction)



Model	HSD04801						
Power	480W						
Nominal AC Input	3PH 400... 500Vac						
Input Range AC	3PH 340... 575Vac						
Input Range DC	450... 820Vdc						
Input Frequency	47... 63Hz						
Hold-Up Time	12ms						
Inrush Current Protection	3,5Aeff / 5Apeak active protection $\pm 6\%$						
Autostart	Soft start 5ms						
Output Voltage	12V	24V	36V	48V	60V	72V	
Adjust Range Vout	11,6... 13,8V	22,5... 28,5V	32,8... 38V	45,6... 52,8V	57... 66V	68... 86V	
Ripple & Noise mVpp	50mV	50mV	100mV	100mV	120mV	150mV	
Nominal Output Current	30A	20A	13,3A	10A	8A	6,7A	
Power Boost $\leq 60^\circ\text{C}/60\text{s}$	36A	24A	16A	12A	9,6A	8A	
Stability at Load Switch	$\pm 0,5\%$						
Transient Time	< 1ms						
Efficiency	92,50%						
Basic load	Idling-proof						
Short Circuit Protection	Continuous						
Ambient Operation Temperature	$-20^\circ\text{C} \dots +70^\circ\text{C}$						
Cooling	Natural convection						
Temperature Monitoring	yes						
Dimensions (WxHxD)	150x130x114,5mm						
IP-Range	IP20						
Safety Norms	CSA UL CE according to IEC60950-1						
Safety IEC	EN60950-1 EN50178 EN60204-1						
Safety Class 1(A)	VDE0100 VDE0805						
Input to Output Isolation	3000Vac						
Climatic Class, Humidity	3k3, 95% non condensing						
EMI	EN55022B						
EMS	EN61000-6-2,3						
MTBF IEC61709	600000h						
Power Good Relay	Yes						
Features	PFC, 2phase Operation						
Ordering options	Protective coating						
Options	See datasheet						

HSD10001

- DIN-Rail Power Supply 3phase fix output TS35mm DIN EN 50022
- Active Inrush Current Protection
- Active PFC (Power Factor Korrektion)
- Temperature Control
- Clean C/V chart without foldback, ideal for dc drives and dc-UPS



- Hutschienen-Netzteil 2/3phasig Festspannung TS35mm DIN EN 50022
- Saubere U/I Kennlinie ohne Foldback, ideal für Antriebe und DC-USV
- Hohe Energiereserven und konstante Stromabgabe bis nahe 0V ermöglichen eine kontrollierte Leistungsabgabe an komplexe Lasten ohne unerwünscht unkontrollierten Powerboost
- Parallelbetrieb N+1
- Aktive Einschaltstrombegrenzung für kleine Anlaufströme
- Aktives PFC (Power Factor Correction)

Model	HSD10001						
Power	960W/1080W						
Nominal AC Input	3PH 400... 500Vac						
Input Range AC	3PH 340... 575Vac						
Input Range DC	450... 820Vdc						
Input Frequency	47... 63Hz						
Hold-Up Time	12ms						
Inrush Current Protection	14,2Aeff / 20Apeak active protection $\pm 6\%$						
Autostart	Soft start 50ms						
Output Voltage	12V	24V	36V	48V	60V	72V	
Adjust Range Vout	10... 17V	22... 30V	32... 43V	43... 53V	53... 72V	68... 86V	
Ripple & Noise mVpp	50mV	50mV	80mV	100mV	100mV	150mV	
Nominal Output Current 60°/40°C	50/55A	40/44A	28/31A	21/23A	17/18A	14/15A	
Power Boost $\leq 60^\circ\text{C}/60\text{s}$	55A	44A	30,8A	23,1A	18,7A	15,4A	
Stability at Load Switch	$\pm 0,5\%$	$\pm 0,2\%$	$\pm 0,2\%$	$\pm 0,2\%$	$\pm 0,2\%$	$\pm 0,2\%$	
Transient Time	< 1ms						
Efficiency	92,50%						
Basic load	Idling-proof						
Short Circuit Protection	Continuous						
Ambient Operation Temperature	$-20^\circ\text{C} \dots +70^\circ\text{C}$						
Cooling	Natural convection						
Temperature Monitoring	Yes						
Dimensions (WxHxD)	200x131,5x124mm						
IP-Range	IP20						
Safety Norms	CSA UL CE according to IEC60950-1						
Safety IEC	EN60950-1 EN50178 EN60204-1						
Safety Class 1(A)	VDE0100 VDE0805						
Input to Output Isolation	3000Vac						
Climatic Class, Humidity	3k3, 95% non condensing						
EMI	EN55022B						
EMS	EN61000-6-2,3						
MTBF IEC61709	500000h						
Power Good Relay	Yes						
Remote Shutdown	Yes						
Features	Active PFC, 2phase operation						
Ordering options	Protective coating						
Options	See datasheet						





AC/DC Programmable Laboratory Power Supply AC/DC Programmierbare Labornetzgeräte

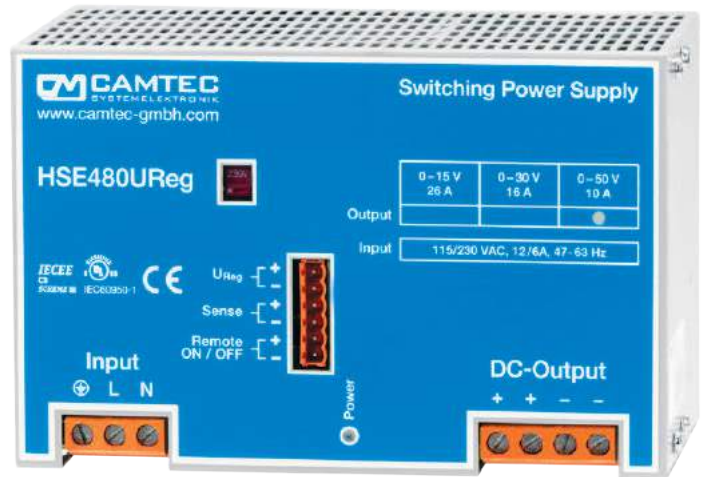
HSEureg04801

Lab Power Supply DIN-Rail

2.6W/CUI free air

- Cost effective 480W V-programmable Laboratory Power Supply
- Scalable for test bench
- Multifunctional analogue Interface 0-10V/0-20mA
- Remote Shutdown
- Sensing

- 1phasig U programmierbar TS35mm DIN EN 50022



Model	HSEureg04801					
Power	480W					
Nominal Input	115/230Vac select					
Input Range AC	90..115Vac/184..265Vac					
Input Range DC	250... 375Vdc					
Input Frequency	47... 63Hz					
Hold-Up Time	50ms					
Inrush Current Protection	NTC <41A					
Autostart	Soft start 100ms					
Programmable Output Voltage	0-15V	0-30V	0-50V	0-90V	0-130V	0-180V
Continuous Current (fix)	26A	16A	10A	5,3A	3,7A	2,7A
Ripple & Noise mVpp	40mV	50mV	100mV	150mV	200mV	300mV
Powerboost	28,6A	17,6A	11A	5,8A	4,1A	3A
Stability at Load Switch	±0,5%					
Transient Time	< 1ms					
Efficiency	90%					
Basic Load	Idling-proof					
Short Circuit Protection	Continuous					
Ambient Operating Temperature	-20°C... +70°C					
Cooling	Natural convection					
Temperature Monitoring	Yes					
Dimensions (WxHxD)	200x130x114,5mm					
IP-Range	IP20					
Safety Norms	CSA UL CE according to IEC60950-1					
Safety IEC	EN60950-1 EN50178 EN60204-1					
Safety Class 1(A)	VDE0100 VDE0805					
Input to Output Isolation	3000Vac					
Climatic Class, Humidity	3k3, 95% non condensing					
EMI	EN55022B					
EMS	EN61000-6-2,3					
MTBF IEC61709	400000h					
Programming Interface Voltage	0... 10Vdc, 0-20mA					
Programming Interface Current	No					
Monitoring Interface Voltage	No					
Monitoring Interface Current	No					
Power Good Relay	No					
Sense Operation	Yes					
Remote Shutdown	Yes					
Reference Voltage	No					
Ordering Options	Protective coating, 4-20mA interface					
Options	Isolating transformer for analogue interface, wall mount					

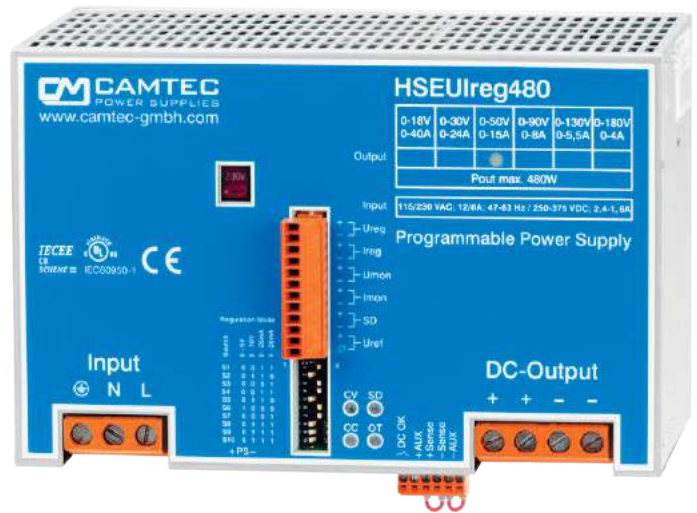
HSEuⁱreg04801

Lab Power Supply DIN-Rail

2.6W/CUI free air

- 480W C/V programmable, Laboratory Power Supply
- Scalable for test bench
- Multifunctional analogue Interface 0-5V/0-10V/0-20mA/4-20mA
- Real Time Monitoring

- 1phasig U/I programmierbar TS35mm DIN EN 50022



Model	HSEu ⁱ reg04801						
Power	480W						
Nominal Input	115/230Vac select						
Input Range AC	90..115Vac/184..265Vac						
Input Range DC	250... 375Vdc						
Input Frequency	47... 63Hz						
Hold-Up Time	50ms						
Inrush Current Protection	9,8Aeff / 13,8Apeak active limiter ±6%						
Autostart	Soft start						
Programmable Output Voltage	0-18V	0-30V	0-50V	0-90V	0-130V	0-180V	0-240V
Programmable Output Current	0-40A	0-24A	0-15A	0-8A	0-5,5A	0-4A	0-3A
Ripple & Noise mVpp	40mV	40mV	100mV	150mV	200mV	300mV	400mV
Stability at Load Switch	±0,2%						
Transient Time	< 1ms						
Efficiency	90%						
Basic Load	Idling-proof						
Short Circuit Protection	Continuous						
Ambient Operating Temperature	-20°C... +70°C						
Cooling	Natural convection						
Temperature Monitoring	Yes						
Dimensions (WxHxD)	200x130x114,5mm						
IP-Range	IP20						
Safety Norms	CSA UL CE according to IEC60950-1						
Safety IEC	EN60950-1 EN50178 EN60204-1						
Safety Class 1(A)	VDE0100 VDE0805						
Input to Output Isolation	3000Vac						
Climatic Class, Humidity	3k3, 95% non condensing						
EMI	EN55022B						
EMS	EN61000-6-2,3						
MTBF IEC61709	400000h						
Programming Interface Voltage	0... 5Vdc, 0... 10Vdc, 0-20mA, 4-20mA						
Programming Interface Current	0... 5Vdc, 0... 10Vdc, 0-20mA, 4-20mA						
Monitoring Interface Voltage	0... 5Vdc, 0... 10Vdc						
Monitoring Interface Current	0... 5Vdc, 0... 10Vdc						
Power Good Relay	Yes						
Sense Operation	Yes						
Remote Shutdown	Yes						
Reference Voltage	Yes						
Ordering Options	Protective coating						
Options	Isolating transformer for analogue interface, wall mount, USB interface						

HSEureg07201

Lab Power Supply DIN-Rail

4W/CUI free air

- Cost effective 720W V-programmable Laboratory Power Supply
- Scalable for test bench
- Multifunctional analogue Interface 0-10V/0-20mA
- Remote Shutdown
- Sensing

- 1phasig U programmierbar TS35mm DIN EN 50022



Model	HSEureg07201					
Power	720W					
Nominal Input	115/230Vac select					
Input Range AC	90..115Vac/184..265Vac					
Input Range DC	250... 375Vdc					
Input Frequency	47... 63Hz					
Hold-Up Time	40ms					
Inrush Current Protection	NTC					
Autostart	Soft start 100ms					
Programmable Output Voltage	0-15V	0-30V	0-50V	0-90V	0-130V	0-180V
Continuous Current (fix)	35A	24A	15A	8A	5,5A	4A
Ripple & Noise mVpp	40mV	50mV	100mV	150mV	200mV	200mV
Powerboost	38,5A	26,4A	16,5A	8,8A	6,1A	4,4A
Stability at Load Switch	±0,5%					
Transient Time	< 1ms					
Efficiency	90%					
Basic Load	Idling-proof					
Short Circuit Protection	Continuous					
Ambient Operating Temperature	-20°C... +70°C					
Cooling	Natural convection					
Temperature Monitoring	Yes					
Dimensions (WxHxD)	200x130x114,5mm					
IP-Range	IP20					
Safety Norms	CSA UL CE according to IEC60950-1					
Safety IEC	EN60950-1 EN50178 EN60204-1					
Safety Class 1(A)	VDE0100 VDE0805					
Input to Output Isolation	3000Vac					
Climatic Class, Humidity	3k3, 95% non condensing					
EMI	EN55022B					
EMS	EN61000-6-2,3					
MTBF IEC61709	400000h					
Programming Interface Voltage	0... 10Vdc, 0-20mA					
Programming Interface Current	No					
Monitoring Interface Voltage	No					
Monitoring Interface Current	No					
Power Good Relay	No					
Sense Operation	Yes					
Remote Shutdown	Yes					
Reference Voltage	No					
Ordering Options	Protective coating, 4-20mA interface					
Options	Isolating transformer for analogue interface, wall mount					

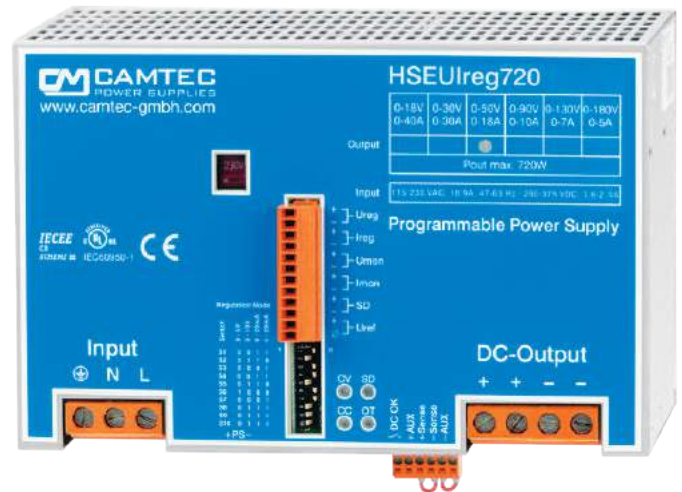
HSEuⁱreg07201

Lab Power Supply DIN-Rail

4W/CUI free air

- 720W C/V programmable, Laboratory Power Supply
- Scalable for test bench
- Multifunctional analogue Interface 0-5V/0-10V/0-20mA/4-20mA
- Real Time Monitoring

- 1phasig U/I programmierbar TS35mm DIN EN 50022



Model	HSEu ⁱ reg07201								
Power	720W								
Nominal Input	115/230Vac select								
Input Range AC	90..115Vac/184..265Vac								
Input Range DC	250... 375Vdc								
Input Frequency	47... 63Hz								
Hold-Up Time	40ms								
Inrush Current Protection	9,8Aeff / 13,8Apeak active limiter ±6%								
Autostart	Soft start								
Programmable Output Voltage	0-18V	0-30V	0-50V	0-60V	0-90V	0-130V	0-180V	0-240V	
Programmable Output Current	0-40A	0-30A	0-18A	0-15A	0-10A	0-7A	0-5A	0-3,8A	
Ripple & Noise mVss	40mV	50mV	100mV	120mV	150mV	200mV	200mV	320mV	
Powerboost	See datasheet								
Stability at Load Switch	±0,2%								
Transient Time	< 1ms								
Efficiency	90%								
Basic Load	Idling-proof								
Short Circuit Protection	Continuous								
Ambient Operating Temperature	-20°C... +70°C								
Cooling	Natural convection								
Temperature Monitoring	Yes								
Dimensions (WxHxD)	200x130x114,5mm								
IP-Range	IP20								
Safety Norms	CSA UL CE according to IEC60950-1								
Safety IEC	EN60950-1 EN50178 EN60204-1								
Safety Class 1(A)	VDE0100 VDE0805								
Input to Output Isolation	3000Vac								
Climatic Class, Humidity	3k3, 95% non condensing								
EMI	EN55022B								
EMS	EN61000-6-2,3								
MTBF IEC61709	400000h								
Programming Interface Voltage	0... 5Vdc, 0... 10Vdc, 0-20mA, 4-20mA								
Programming Interface Current	0... 5Vdc, 0... 10Vdc, 0-20mA, 4-20mA								
Monitoring Interface Voltage	0... 5Vdc, 0... 10Vdc								
Monitoring Interface Current	0... 5Vdc, 0... 10Vdc								
Power Good Relay	Yes								
Sense Operation	yes								
Remote Shutdown	yes								
Reference Voltage	yes								
Ordering Options	Protective coating								
Options	Isolating transformer for analogue interface, wall mount, USB interface								

HSEureg10001 Lab Power Supply DIN-Rail, 5W/CUI

- Cost effective 1000W V programmable, 5W/Cubic-Inch High Density Laboratory Power Supply scalable for test bench
 - Multifunctional analogue Interface 0-10V/0-20mA
 - Remote Shutdown
 - Sensing
- 1phasig U programmierbar TS35mm DIN EN 50022



Model	HSEureg10001					
Power	1008W					
Nominal Input	115/230Vac select					
Input Range AC	90..115Vac/184..265Vac					
Input Range DC	250... 375Vdc					
Input Frequency	47... 63Hz					
Hold-Up Time	30ms					
Inrush Current Protection	NTC < 81A (recommended MCB=C16A)					
Autostart	Soft start 100ms					
Programmable Output Voltage	0-15V	0-30V	0-50V	0-90V	0-130V	0-180V
Continuous Current (fix)	50A	33A	20A	11,2A	7,8A	5,6A
Ripple & Noise mVss	50mV	50mV	100mV	200mV	250mV	250mV
Powerboost	55A	36,8A	22A	12,3A	8,6A	8,1A
Stability at Load Switch	±0,5%					
Transient Time	< 1ms					
Efficiency	90%					
Basic Load	Idling-proof					
Short Circuit Protection	Continuous					
Ambient Operating Temperature	-20°C... +70°C					
Cooling	Natural convection & controlled fan from Papst					
Temperature Monitoring	Yes					
Dimensions (WxHxD)	200x156x114,5mm					
IP-Range	IP20					
Safety Norms	CSA UL CE according to IEC60950-1					
Safety IEC	EN60950-1 EN50178 EN60204-1					
Safety Class 1(A)	VDE0100 VDE0805					
Input to Output Isolation	3000Vac					
Climatic Class, Humidity	3k3, 95% non condensing					
EMI	EN55022B					
EMS	EN61000-6-2,3					
MTBF IEC61709	400000h					
Programming Interface Voltage	0... 10Vdc, 0-20mA					
Programming Interface Current	No					
Monitoring Interface Voltage	No					
Monitoring Interface Current	No					
Power Good Relay	No					
Sense Operation	Yes					
Remote Shutdown	Yes					
Reference Voltage	No					
Ordering Options	Protective coating, 4-20mA interface					
Options	Isolating transformer for analogue interface, wall mount					

HSEuireg10001

Lab Power Supply

DIN-Rail, 5W/CUI

- 1000W C/V programmable, 5W/Cubic-Inch High Density Laboratory Power Supply scalable for test bench
- Multifunctional analogue Interface 0-5V/0-10V/0-20mA/4-20mA
- Real Time Monitoring



- 1phasig U/I programmierbar TS35mm DIN EN 50022

Model	HSEuireg10001								
Power	1008W								
Nominal Input	115/230Vac select								
Input Range AC	90..115Vac/184..265Vac								
Input Range DC	250... 375Vdc								
Input Frequency	47... 63Hz								
Hold-Up Time	30ms								
Inrush Current Protection	9,8Aeff / 13,8Apeak active limiter ±6%								
Autostart	Soft start								
Programmable Output Voltage	0-18V	0-30V	0-50V	0-90V	0-130V	0-180V	0-240V	0-400V	
Programmable Output Current	0-50A	0-42A	0-25A	0-14A	0-9,5A	0-7A	0-5,3A	0-3,2A	
Ripple & Noise mVss	40mV	40mV	120mV	150mV	200mV	300mV	400mV	400mV	
Powerboost	See datasheet								
Stability at Load Switch	±0,2%								
Transient Time	< 1ms								
Efficiency	90%								
Basic Load	Idling-proof								
Short Circuit Protection	Continuous								
Ambient Operating Temperature	-20°C... +70°C								
Cooling	Natural convection & controlled fan from Papst								
Temperature Monitoring	Yes								
Dimensions (WxHxD)	200x156x114,5mm								
IP-Range	IP20								
Safety Norms	CSA UL CE according to IEC60950-1								
Safety IEC	EN60950-1 EN50178 EN60204-1								
Safety Class 1(A)	VDE0100 VDE0805								
Input to Output Isolation	3000Vac								
Climatic Class, Humidity	3k3, 95% non condensing								
EMI	EN55022B								
EMS	EN61000-6-2,3								
MTBF IEC61709	400000h								
Programming Interface Voltage	0... 5Vdc, 0... 10Vdc, 0-20mA, 4-20mA								
Programming Interface Current	0... 5Vdc, 0... 10Vdc, 0-20mA, 4-20mA								
Monitoring Interface Voltage	0... 5Vdc, 0... 10Vdc								
Monitoring Interface Current	0... 5Vdc, 0... 10Vdc								
Power Good Relay	Yes								
Sense Operation	yes								
Remote Shutdown	yes								
Reference Voltage	yes								
Ordering Options	Protective coating								
Options	Isolating transformer for analogue interface, wall mount, USB interface								

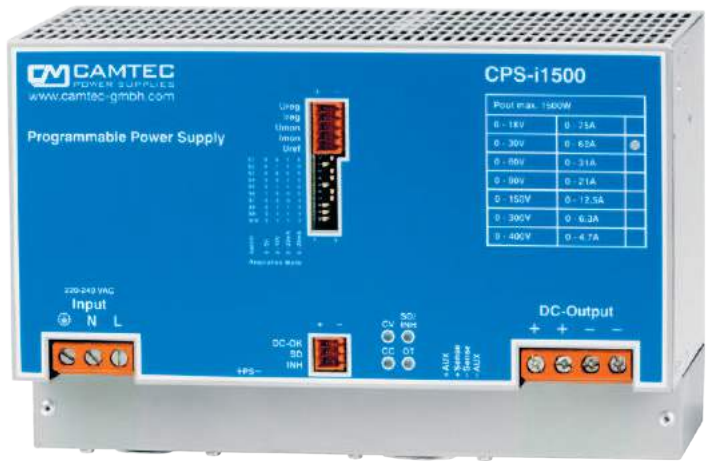
CPS-i1500

Lab Power Supply

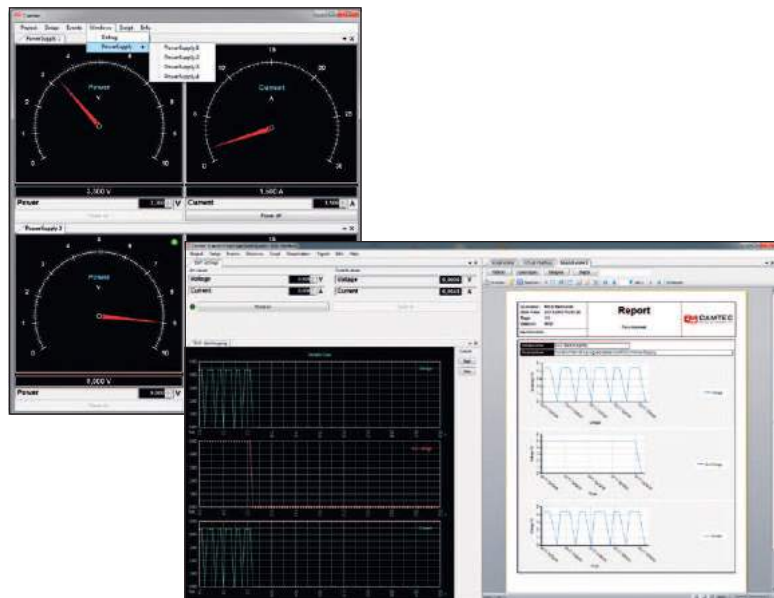
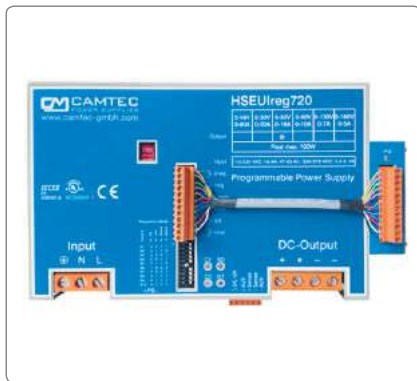
DIN-Rail, 7.2W/CUI

- 1500W C/V programmable High Density Laboratory Power Supply
- Scalable for test bench
- Multifunctional analogue Interface 0-5V/0-10V/0-20mA/4-20mA
- Real Time Monitoring

- 1phasig U/I programmierbar TS35mm DIN EN 50022



Model	CPS-i1500						
Power	1500W						
Nominal Input	230Vac slelect						
Input Range AC	184..265Vac						
Input Range DC	250... 375Vdc						
Input Frequency	47... 63Hz						
Hold-Up Time	20ms						
Inrush Current Protection	9,8Aeff / 13,8Apeak active limiter ±6%						
Autostart	Soft start						
Programmable Output Voltage	0-18V	0-30V	0-60V	0-90V	0-150V	0-300V	0-400V
Programmable Output Current	0-75A	0-62A	0-31A	0-21A	0-12,5A	0-6,3A	0-4,7A
Ripple & Noise mVss	40mV	40mV	120mV	150mV	200mV	300mV	400mV
Stability at Load Switch	±0,2%						
Transient Time	< 1ms						
Efficiency	90%						
Basic Load	Idling-proof						
Short Circuit Protection	Continuous						
Ambient Operating Temperature	-20°C... +70°C						
Cooling	Natural convection & controlled fan from Papst						
Temperature Monitoring	Yes						
Dimensions (WxHxD)	250x156x114,5mm						
IP-Range	IP20						
Safety Norms	CSA UL CE according to IEC60950-1						
Safety IEC	EN60950-1 EN50178 EN60204-1						
Safety Class 1(A)	VDE0100 VDE0805						
Input to Output Isolation	3000Vac						
Climatic Class, Humidity	3k3, 95% non condensing						
EMI	EN55022B						
EMS	EN61000-6-2,3						
MTBF IEC61709	400000h						
Programming Interface Voltage	0... 5Vdc, 0... 10Vdc, 0-20mA, 4-20mA						
Programming Interface Current	0... 5Vdc, 0... 10Vdc, 0-20mA, 4-20mA						
Monitoring Interface Voltage	0... 5Vdc, 0... 10Vdc						
Monitoring Interface Current	0... 5Vdc, 0... 10Vdc						
Power Good Relay	Yes						
Sense Operation	yes						
Remote Shutdown	yes						
Reference Voltage	yes						
Inhibit Contact	yes						
Ordering Options	Protective coatingPower Sink ModuleProtected Inhibit Module acc. with SIL03						
Options	Isolating transformer for analogue interface, USB2.0 interface with software						



USB2.0 UI.Drive-Interface HSEUireg-Series

- UI.Drive-Interface including UI.Drive-Software for MS Windows 2000/XP/7
- UI.Drive-Interface inkl. UI.Drive-Software Lizenz für MS Windows 2000/XP/7

Model	UI.Drive Interface USB2.0
Supply Voltage	+5V USB-Port
Current Consumption	115mV typ.
Isolation USB / DC-Output	3000Vac / 4300Vdc
Isolation USB / PE	500Vdc
Isolation DC-Output / PE	2000Vac / 2900Vdc
Resolution AD/DA Converter	12 Bit
Accuracy AD Converter	± 0,05% 15ppm/°C
Accuracy Monitoring Output	± 0,5% max.
Accuracy Control Input U/I	± 0,8% max.
Data Flow Control/Monitor	400ms interval
Remote On/Off	forced directly
Install Space	22,1mm windth (mounted)
UI.Drive Software	Microsoft Windows® 2000/XP/Win7
Quantity Power Supplies	10 pcs configurable
U / I / Monitoring / Remote	manual and automatic via ToolMonitor
Data Logger	available
Data Record	Logfile, customized setup
Script Engine	.DLL / .NET Framework
Visualisation	Customized window design
COM Server (DCOM/.NET)	UI.Drive -Software controllable via 3rd party software: e.g. LabView, MCD Test Manager CE, MS Excel, Open Office, others
Export Log File	HTML, PDF, E-Mail, Printer
Programming Language	MS Visual Studio, C#, C++, Visual Basic
Scope of Delivery	USB2.0 UI.Drive-Interface Hardware UI.Drive-Software Licence USB2.0 AB cable 5m / 16,4 ft. Interface Link Cable HSEUireg-Power Supply Installation Kit Installation Guide



CPS-i2000 Laboratory Power Supply Embedded & Wallmount, 8W/CUI, PFC0.99

- 3D-HD (3D Heat Dissipation) performs 360° mount in the 3-dimensional room
- 0-max. C/V Programmable & Real Value monitoring
- N+1 Parallel Operation
- Master - Slave
- Current Share Bus
- Constant Current / Constant Voltage
- Fuse Mode & Continuous Mode
- Sensing
- Remote Shutdown
- Inhibit (Interlock)
- Temperature Alarm & Monitor, Fan Fail
- Aux +12V 500mA
- Option Quick Downprogramming Powersink
- 6KW in a 2U & up to 9KW in a 3U subframe

- 3D-HD (3D Heat Dissipation) ermöglicht 360° Montage im dreidimensionalen Raum
- Frei programmierbar & Echtwert Monitoring
- N+1 skalierbar bis >100KW
- Master Slave Betrieb
- Current Share Bus
- Konstantstrom- / Konstantspannungsbetrieb
- Fuse Mode & Konstantstrom wählbar
- Sensebetrieb
- Remote Shutdown
- Inhibit (Interlock) sichere Abschaltung
- Temperaturalarm, Fan-Fail, Temperaturmeldung präventiv
- AUX 12V 500mA
- Option PowerSink schnelle Abwärtsprogrammierung
- Option 19" Subrack 2HE & 3HE, 6kW - 10kW
- Option Wandhalterung für Schaltschrankmontage

Model	CPS-i2000				
Continuous Power	2000W				
Nominal Input Voltage	230Vac				
Input Voltage Range AC	184..265Vac				
Input Voltage Range DC	250... 375Vdc				
Input Frequency	47... 63Hz				
Hold-up Time	30ms				
Inrush Current AC	14,6A RMS / 20,7A peak active electronic protection $\pm 6\%$				
Startautomatic	Softstart 100ms				
Programmable Output Voltage	0-18V	0-30V	0-60V	0-90V	0-150V
Programmable Output Current	0-165A	0-100A	0-50A	0-33A	0-20A
Ripply & Boise mVpp	35mV	35mV	100mV	150mV	200mV
Stability Loadswitch	$\pm 0,05\%$ 0-100%				
Respose	< 1ms 10-100%				
Effeciency	92-94%				
Power Faktor	PFC0,99				
Load Free Operation	Continuous				
Short Cicuit Protection	Continuous				
Ambient Operations	-20°C... +60°C				
Cooling	Stepless controlled fans from EBM-Papst flow front-to-rear, FanFail Monitor				
Temperature Control	Power reduction & Monitoring				
Dimensions (WxHxD)	126,4x84x444mm, 2U or 3U Embedded or hard mount in 90° steps				
IP Housing	IP20				
Safety Norms	CSA UL CE according to IEC60950-1				
Safety IEC	EN60950-1 EN50178 EN60204-1				
Safety Class 1(A)	VDE0100 VDE0805				
Input- /Output Isolation	3000Vac				
Climatic Calss, Humidity	3k3, 90% non-condensing				
EMI	EN55022B				
EMS	EN61000-6-2,3				
MTBF IEC61709	500000h				
Interface Voltage Programming	0... 5Vdc, 0... 10Vdc, 0-20mA, 4-20mA				
Interface Current Programming	0... 5Vdc, 0... 10Vdc, 0-20mA, 4-20mA				
Interface Voltage Monitoring	0... 5Vdc, 0... 10Vdc				
Interface Current Monitoring	0... 5Vdc, 0... 10Vdc				
Inhibit (Interlock)	Message				
O-Ring Current Share	Optional				
Power Good Relais	Open/Center/Close				
Sense	2V per load line				
Remote Shutdown	Monitor				
Reference Voltage	+12V 500mA				
Options	Protective coating, Internal Powersink				
Accessory	2U & 3U Frontpanel, 2U & 3U Subframe, Hard-Mount-Kit, RS385, TCP/IP				



CPS-i3000 Laboratory Power Supply Embedded & Wallmount, 12W/CUI, PFC0.99

- 3D-HD (3D Heat Dissipation) performs 360° mount in the 3-dimensional room
- 0-max. C/V Programmable & Real Value monitoring
- N+1 Parallel Operation
- Master - Slave
- Current Share Bus
- Constant Current / Constant Voltage
- Fuse Mode & Continuous Mode
- Sensing
- Remote Shutdown
- Inhibit (Interlock)
- Temperature Alarm & Monitor, Fan Fail
- Aux +12V 500mA
- Option Quick Downprogramming Powersink
- Option Intewrnal O-Ring Diode
- 9KW in a 2U & up to 15KE in a 3U subframe, >100KW per system

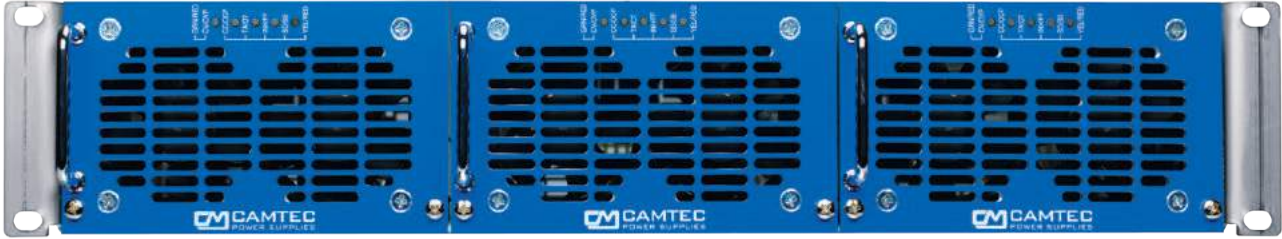
- 3D-HD (3D Heat Dissipation) ermöglicht 360° Montage im dreidimensionalen Raum
- Frei programmierbar & Echtwert Monitoring
- N+1 skalierbar bis >100KW
- Master Slave Betrieb
- Current Share Bus
- Konstantstrom- / Konstantspannungsbetrieb
- Fuse Mode & Konstantstrom wählbar
- Sensebetrieb
- Remote Shutdown
- Inhibit (Interlock) sichere Abschaltung
- Temperaturalarm, Fan-Fail, Temperaturmeldung präventiv
- AUX 12V 500mA
- Option PowerSink schnelle Abwärtsprogrammierung
- Option 19" Subrack 2HE & 3HE, 9kW - 15k
- Option Wandhalterung für Schaltschrankmontage

Model	CPS-i3000					
Continuous Power	3000W					
Nominal Input Voltage	230Vac					
Input Voltage Range AC	184..265Vac					
Input Voltage Range DC	250... 375Vdc					
Input Frequency	47... 63Hz					
Hold-up Time	30ms					
Inrush Current AC	14,6A RMS / 20,7A peak active electronic protection $\pm 6\%$					
Startautomatic	Softstart 100ms					
Programmable Output Voltage	0-18V	0-30V	0-60V	0-90V	0-150V	0-300V
Programmable Output Current	0-185A	0-125A	0-62,5A	0-41,5A	0-25A	0-12,5A
Ripply & Boise mVpp	35mV	35mV	100mV	150mV	200mV	300mV
Stability Loadswitch	$\pm 0,2\%$ 0-100%					
Response	< 1ms 10-100%					
Effeciency	92-94%					
Power Faktor	PFC 0,99					
Load Free Operation	Continuous					
Short Cicuit Protection	Continuous					
Ambient Operations	-20°C... +60°C					
Cooling	Stepless controlled fans from EBM-Papst flow front-to-rear, Fan Fail Monitor					
Temperature Control	Power reduction & Monitor					
Dimensions (WxHxD)	126,4x84x444mm, 2U or 3U Embedded or hard mount in 90° steps					
IP Housing	IP20					
Safety Norms	CSA UL CE according to IEC60950-1					
Safety IEC	EN60950-1 EN50178 EN60204-1					
Safety Class 1(A)	VDE0100 VDE0805					
Input- /Output Isolation	3000Vac					
Climatic Calss, Humidity	3k3, 90% non-condensing					
EMI	EN55022B					
EMS	EN61000-6-2,3					
MTBF IEC61709	500000h					
Interface Voltage Programming	0... 5Vdc, 0... 10Vdc, 0-20mA, 4-20mA					
Interface Current Programming	0... 5Vdc, 0... 10Vdc, 0-20mA, 4-20mA					
Interface Voltage Monitoring	0... 5Vdc, 0... 10Vdc					
Interface Current Monitoring	0... 5Vdc, 0... 10Vdc					
Inhibit (Interlock)	Message					
O-Ring Current Share	Option					
Power Good Relais	Open/Center/Close					
Sense	2V load line					
Remote Shutdown	Monitor					
Reference Voltage	+12V 500mA					
Options	Protective coating, Internal Powersink					
Accessory	2U & 3U Frontpanel, 2U & 3U Subframe, Hard-Mount-Kit, RS485, TCP/IP					





AC/DC Embedded Power System
AC/DC Embedded Power System



CPS-EP2000 Embedded & Wallmount PFC0,99

- Current Share Bus for N+1 parallel operation
- O-Ring Diode optional
- Sense Mode
- AUX +12V 500mA
- Current Monitoring
- Remote Shutdown
- DC & AC Power Good Relay Open/Center/Close
- Fan Fail Monitoring
- Temperature Warning & Alarm
- Temperature Shutdown Alarm
- 6KW in a 2U or 10KW in a 3U subframe
- Hard mount in 90° steps

- Current Share Bus für N+1 Parallelschaltung
- O-Ring Diode optional
- Sensebetrieb
- AUX +12V 500mA
- Monitoring Strom
- Remote Shutdown
- DC & AC Power Good Relais Öffner/Center/Schließer
- Lüfterüberwachung
- Temperaturalarm
- Thermische Abschaltung Meldesignal
- Bis 6KW im 2U oder bis 10KW im 3U Subframe skalierbar
- Wandmontagehalterungen für freie Montage in 90° Schritten

Model	CPS-EP2000					
Continuous Power	2000W					
Nominal Input Voltage	230Vac					
Input Voltage Range AC	184...265Vac					
Input Voltage Range DC	250... 375Vdc					
Input Frequency	47... 63Hz					
Hold-up Time	30ms					
Inrush Current AC	14,6A RMS / 20,7A peak active electronic protection $\pm 6\%$					
Startautomatic	Softstart 100ms					
Vout	24V	36V	48V	72V	110V	220V
Vout prog. poti	24-30V	30-45V	45-58V	58-90V	90-150V	200-300V
Aout	83A	55A	42A	27,8A	18,2A	9,1A
Ripply & Boise mVpp	35mV	35mV	100mV	150mV	200mV	300mV
Stability Loadswitch	$\pm 0,05\%$ 0-100%					
Response	< 1ms 10-100%					
Effeciency	92-94%					
Power Faktor	PFC 0,99					
Load Free Operation	Continuous					
Short Cicuit Protection	Continuous					
Ambient Operations	-20°C... +60°C					
Cooling	Stepless controlled fans from EBM-Papst flow front-to-rear, Fan Fail Message					
Temperature Control	ÜPower reduction and message					
Dimensions (WxHxD)	126,4x84444mm, 2U or 3U Embedded or hard mount in 90° steps					
IP Housing	IP20					
Safety Norms	CSA UL CE according to IEC60950-1					
Safety IEC	EN60950-1 EN50178 EN60204-1					
Safety Class 1(A)	VDE0100 VDE0805					
Input - /Output Isolation	3000Vac					
Climatic Calss, Humidity	3k3, 90% non-condensing					
EMI	EN55022B					
EMS	EN61000-6-2,3					
MTBF IEC61709	500000h					
Interface Current Monitoring	0-5Vdc					
O-Ring Diode	Optional					
Power Good Relay	OPen/Center/Close					
Sense Mode	2V per load line					
Remote Shutdown	Message					
Options	Protective coating					
Accessory	2U & 3U Frontpanel, 2U & 3U Subframe, Hard-Mount-Kit					

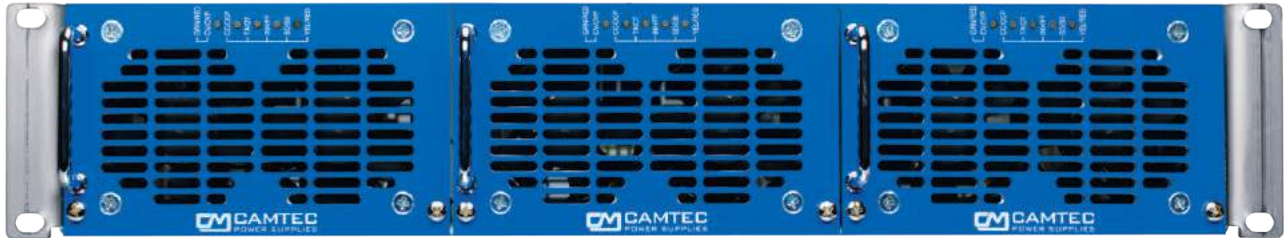


CPS-EP3000 Embedded & Wallmount, PFC0.99

- Current Share Bus for N+1 parallel operation
- O-Ring Diode optional
- Sense Mode
- AUX +12V 500mA
- Current Monitoring
- Remote Shutdown
- DC & AC Power Good Relay Open/Center/Close
- Fan Fail Monitoring
- Temperature Warning & Alarm
- Temperature Shutdown Alarm
- 9KW in a 2U or 15KW in a 3U subframe,
>100KW scalable power system
- Hard mount in 90° steps

- Current Share Bus für N+1 Parallelschaltung
- O-Ring Diode optional
- Sensebetrieb
- AUX +12V 500mA
- Monitoring Strom
- Remote Shutdown
- DC & AC Power Good Relais Öffner/Center/Schließer
- Lüfterüberwachung
- Temperaturalarm
- Thermische Abschaltung Meldesignal
- Bis 9KW im 2U oder bis 15KW im 3U Subframe,
>100KW Systeme skalierbar
- Wandmontagehalterungen für freie Montage in 90° Schritten

Model	CPS-EP3000							
Continuous Power	3000W							
Nominal Input Voltage	230Vac							
Input Voltage Range AC	184...265Vac							
Input Voltage Range DC	250... 375Vdc							
Input Frequency	47... 63Hz							
Hold-up Time	30ms							
Inrush Current AC	14,6A RMS / 20,7A peak active electronic protection $\pm 6\%$							
Startautomatic	Softstart 100ms							
Vout	12V	24V	36V	48V	72V	110V	220V	
Vout range poti	12-15V	24-30V	30-45V	45-58V	58-90V	90-150V	200-300V	
Aout	200A	125A	83A	62,5A	41,7A	27,3A	13,6A	
Ripple & Boise mVpp	35mV	35mV	35mV	100mV	150mV	200mV	300mV	
Stability Loadswitch	$\pm 0,05\%$ 0-100%							
Response	< 1ms 10-100%							
Effeciency	92-94%							
Power Faktor	PFC 0,99							
Load Free Operation	Continuous							
Short Cicuit Protection	Continuous							
Ambient Operations	-20°C... +60°C							
Cooling	Stepless controlled fans from EBM-Papst flow front-to-rear, Fan Fail message							
Temperature Control	Power reduction, message							
Dimensions (WxHxD)	126,4x84x444mm, 2U or 3U Embedded or hard mount in 90° steps							
IP Housing	IP20							
Safety Norms	CSA UL CE according to IEC60950-1							
Safety IEC	EN60950-1 EN50178 EN60204-1							
Safety Class 1(A)	VDE0100 VDE0805							
Input - /Output Isolation	3000Vac							
Climatic Calss, Humidity	3k3, 90% non-condensing							
EMI	EN55022B							
EMS	EN61000-6-2,3							
MTBF IEC61709	500000h							
Interface Current Monitoring	0-5Vdc							
O-Ring Diode	Optional							
Power Good Relay	OPen/Center/Close							
Sense Mode	2V per load line							
Remote Shutdown	Message							
Options	Protective coating							
Accessory	2U & 3U Frontpanel, 2U & 3U Subframe, Hard-Mount-Kit							



CPS-EX2000 Embedded & Wallmount, programmable, PFC0.99

- C/V programming interface
- C/V programming internal potis
- Current Mode
- Fuse Mode
- OCP & OVP message
- Current Share Bus for N+1 parallel operation
- O-Ring Diode option
- Sense Mode
- AUX +12V 500mA
- Current Monitoring
- Remote Shutdown
- Inhibit (Interlock)
- DC & AC Power Good Relay open/center/close
- Fan Monitoring
- Temperature warning & alarm
- 6KW in a 2U & 10KW in a 3U subframe
- Hard mount in 90° steps
- Strom und Spannung extern programmierbar
- Strom & Spannung über Poti einstellbar
- Konstantstromquelle Current Mode
- Fuse Mode wählbar
- OCP & OVP Meldesignal
- Current Share Bus für N+1 Parallelschaltung
- O-Ring Diode optional
- Sensebetrieb
- AUX +12V 500mA
- Monitoring Strom
- Remote Shutdown
- Inhibit (Interlock) externe Sicherheitsabschaltung
- DC & AC Power Good Relais Öffner/Center/Schließer
- Lüfterüberwachung
- Temperaturalarm & thermische Abschaltung Meldesignal
- Bis 6KW im 2U oder 10KW im 3U Subframe skalierbar
- Wandmontagehalterungen für freie Montage in 90° Schritte

Model	CPS-EX2000					
Continuous Power	2000W					
Nominal Input Voltage	230Vac					
Input Voltage Range AC	184...265Vac					
Input Voltage Range DC	250... 375Vdc					
Input Frequency	47... 63Hz					
Hold-up Time	30ms					
Inrush Current AC	14,6A RMS / 20,7A peak active electronic protection $\pm 6\%$					
Start automatic	Softstart 100ms					
Vout	24V	36V	48V	72V	110V	220V
Vout prog. range 0-5V/poti	24-30V	30-45V	45-58V	58-90V	90-150V	200-300V
Aout	83A	55A	42A	27,8A	18,2A	9,1A
Iout prog. range 0-5V/poti	66-83A	44-55A	33-42A	22,2-27,8A	14-18,2A	7,3-9,1A
Ripple & Noise mVpp	35mV	35mV	100mV	150mV	200mV	300mV
Stability Loadswitch	$\pm 0,05\%$ 0-100%					
Response	< 1ms 10-100%					
Efficiency	92-94%					
Power Factor	PFC 0,99					
Load Free Operation	Continuous					
Short Circuit Protection	Continuous					
Ambient Operations	-20°C... +60°C					
Cooling	Stepless controlled fans from EBM-Papst flow front-to-rear, Fan Fail Monitor					
Temperature Control	Power reduction, Monitor					
Dimensions (WxHxD)	126,4x8444mm, 2U or 3U Embedded or hard mount in 90° steps					
IP Housing	IP20					
Safety Norms	CSA UL CE according to IEC60950-1					
Safety IEC	EN60950-1 EN50178 EN60204-1					
Safety Class 1(A)	VDE0100 VDE0805					
Input- /Output Isolation	3000Vac					
Climatic Class, Humidity	3k3, 90% non-condensing					
EMI	EN55022B					
EMS	EN61000-6-2,3					
MTBF IEC61709	500000h					
Interface Voltage Programming	0-5Vdc / Poti					
Interface Current Monitoring	0-5Vdc / Poti					
O-Ring Diode	Option					
Power Good Relay	Open/Center/Close					
Remote Shutdown	Monitoring					
Inhibit (Interlock)	Monitoring					
Options	Protective coating					
Accessory	2U & 3U Frontpanel, 2U & 3U Subframe, Hard-Mount-Kit					



CPS-EX3000 Embedded & Wallmount, programmable, PFC0.99

- C/V programming interface
- C/V programming internal pots
- Current Mode
- Fuse Mode
- OCP & OVP message
- Current Share Bus for N+1 parallel operation
- O-Ring Diode option
- Sense Mode
- AUX +12V 500mA
- Current Monitoring
- Remote Shutdown
- Inhibit (Interlock)
- DC & AC Power Good Relay open/center/close
- Fan Monitoring
- Temperature warning & alarm
- 9KW in a 2U & 15KW in a 3U subframe,
>100KW scalable power system
- Hard mount in 90° steps
- Strom und Spannung extern programmierbar
- Strom & Spannung über Poti einstellbar
- Konstantstromquelle Current Mode
- Fuse Mode wählbar
- OCP & OVP Meldesignal
- Current Share Bus für N+1 Parallelschaltung
- O-Ring Diode optional
- Sensebetrieb
- AUX +12V 500mA
- Monitoring Strom
- Remote Shutdown
- Inhibit (Interlock) externe Sicherheitsabschaltung
- DC & AC Power Good Relais Öffner/Center/Schließer
- Lüfterüberwachung
- Temperaturalarm & thermische Abschaltung Meldesignal
- Bis 9KW im 2U oder 15KW im 3U Subframe,
>100KW Systeme skalierbar
- Wandmontagehalterungen für freie Montage in 90° Schritte

Model	CPS-EX3000						
Continuous Power	3000W						
Nominal Input Voltage	230Vac						
Input Voltage Range AC	184...265Vac						
Input Voltage Range DC	250... 375Vdc						
Input Frequency	47... 63Hz						
Hold-up Time	20ms						
Inrush Current AC	14,6A RMS / 20,7A peak active electronic protection $\pm 6\%$						
Startautomatic	Softstart 100ms						
Vout	12V	24V	36V	48V	72V	110V	220V
Vout prog. range 0-5V/poti	12- 15V	24.- 30V	30- 45V	45- 58V	58- 90V	90- 150V	200- 300V
Aout	200A	125A	83A	62,5A	41,7A	27,3A	13,6A
Iout prog. range poti	180- 200A	100- 125A	66,4- 83A	50- 62,5A	33,4- 41,7A	21,8- 27,3A	10,9- 15,6A
Ripply & Boise mVpp	35mV	35mV	35mV	100mV	150mV	200mV	200mV
Stability Loadswitch	$\pm 0,05\%$ 0-100%						
Response	< 1ms 10-100%						
Effeciency	92-94%						
Power Faktor	PFC 0,99						
Load Free Operation	Continuous						
Short Cicuit Protection	Continuous						
Ambient Operations	-20°C... +60°C						
Cooling	Stepless controlled fans from EBM-Papst flow front-to-rear, Fan Monitoring						
Temperature Control	Power reduction, Monitoring						
Dimensions (WxHxD)	126,4x84x444mm, 2U or 3U Embedded or hard mount in 90° steps						
IP Housing	IP20						
Safety Norms	CSA UL CE according to IEC60950-1						
Safety IEC	EN60950-1 EN50178 EN60204-1						
Safety Class 1(A)	VDE0100 VDE0805						
Input- /Output Isolation	3000Vac						
Climatic Calss, Humidity	3k3, 90% non-condensing						
EMI	EN55022B						
EMS	EN61000-6-2,3						
MTBF IEC61709	500000h						
Interface Voltage Programming	0-5Vdc / Poti						
Interface Current Monitoring	0-5Vdc / Poti						
Current Monitoring	0-5Vdc						
O-Ring Diode	Optional						
Sense Mode	2V per load line						
Remote Shutdwon	Monitor						
Inhibit (Interlock)	Monitor						
Options	Protective coating						
Accessory	2U & 3U Frontpanel, 2U & 3U Subframe, Hard-Mount-Kit						



DC UPS Battery Charger
DC USV Ladegleichrichter

HSE01201CC

120W Battery Charging Rectifier & Constant Current DC-Source

- Constant Current Battery Charger
- Ideal vertically C/V chart

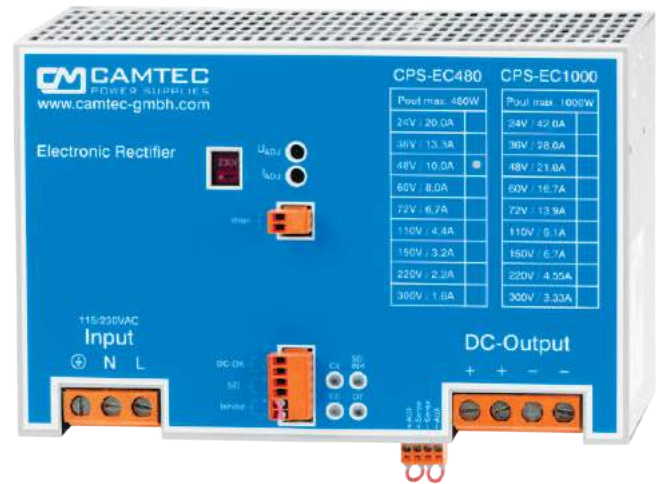
- Batterielademodul Gleichrichter
- I/U Kennlinie ohne Foldback
- Konvektionskühlung ohne Lüfter



Model	HSE01201CC
Power	120W
Nominal AC Input	115/230Vac select
Input Range AC	90..115Vac/184..265Vac
Input Range DC	110... 375Vdc
Input Frequency	47... 63Hz
Hold-Up Time	30ms
Inrush Current Protection	NTC < 16A
Autostart	Soft start
Output Voltage	57,4V (other voltages upon request)
Adjust Range Vout	factory set current limiting
Ripple & Noise mVpp	120mV
Nominal Output Current	2A
Power Boost <=60°C/60s	-
Stability at Load Switch	±0,5%
Transient Time	< 1ms
Efficiency	89%
Basic load	Idling-proof
Short Circuit Protection	Continuous
Ambient Operation Temperature	-20°C... +70°C
Cooling	Natural convection
Temperature Monitoring	-
Dimensions (WxHxD)	50x124x96mm
IP-Range	IP20
Safety Norms	CSA UL CE according to IEC60950-1
Safety IEC	EN60950-1 EN50178 EN60204-1
Safety Class 1(A)	VDE0100 VDE0805
Input to Output Isolation	3000Vac
Climatic Class, Humidity	3k3, 90% non condensing
EMI	EN55022B EN61000-3-2A
EMS	EN61000-6-2,3
MTBF IEC61709	589000h
Power Good Relay	galvan. insulated 60Vdc
Ordering options	Protective coating
Options	See datasheet

CPS-EC480 DIN-Rail Battery Charger & Industrial Precision Power

- C/V pricesely adjustable
 - Current Monitor Imon
 - Perfect C/V chart with no Foldback
 - Power Good Relay AC & DC
 - Remote Shutdown
 - Inhibit (Interlock) Function, Sense
 - Natural Cooling
- Batterielademodul Gleichrichter
 - Hochgenaues Industrie-Netzteil
 - I/U Kennlinie ohne Foldback
 - Strom & Spannung präzise einstellbar
 - Strom-Monitor Imon
 - AC & DC Power Good, Shutdown, Interlock, Sense
 - Konvektionskühlung ohne Lüfter

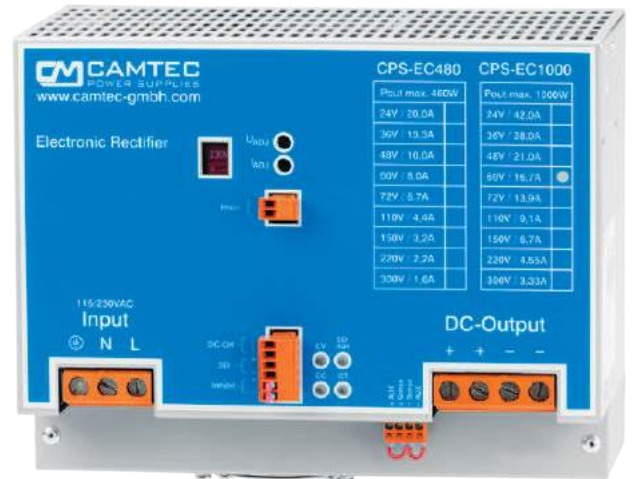


Model	CPS-EC480									
Power	480W									
Nominal AC Input	115/230Vac									
Input Range AC	90..115Vac/186..265Vac									
Input Range DC	250... 375Vdc									
Input Frequency	47... 63Hz									
Hold-Up Time	50ms									
Inrush Current	Electronic Inrush Current Limiter 9,8Arms									
Autostart	Soft start 100ms									
Output Voltage	24V	36V	48V	60V	72V	110V	150V	220V	300V	
Output Current	20A	13,3A	10A	8A	6,7A	4,4A	3,2A	2,2A	1,6A	
DC Voltage Setting	24-30V	36-45V	48-58V	60-75V	72-90V	110-137,5V	132-180V	220-264V	264-360V	
DC Current Setting	10-21A	6,6-14A	5-10,5A	4-8,4A	3,4-7A	2,2-4,6A	1,6-3,3A	1,1-2,3A	0,8-1,7A	
Ripple & Noise mVpp	40mV	40mV	100mV	150mV	200mV	300mV	400mV	400mV	400mV	
Load Regulation	±0,05% 0-100%									
Load Change	Response < 1ms 10-100% 100-10%									
Efficiency	up to 92%									
Base load	non, continuous open circuit proof									
Short Circuit Protection	Continuous									
Ambient Temperature	-20°C... +70°C Operation									
Cooling	natural cooling									
Temperature Control	Yes									
Dimensions	(WxHxD) 200x130x114,5mm IP20									
Safety Norms	CSA UL CE in accordance to IEC60950-1									
Safety IEC	EN60950-1 EN50178 EN60204-1, UL classified in accordance to EN60950									
Safety Class 1(A)	VDE0100 VDE0805									
Input/Output Isolation	3000Vac									
Climatic Class, Humidity	3k3, 95% non condensing									
EMI/EMS	EN55022B / EN61000-6-2,3									
EMS	EN61000-6-2,3									
MTBF / MTTF IEC61709	400000h / 148312h									
Power Good Relay	AC & DC low voltage detection, isolated									
Features	Current-Monitoring, External Shutdown, Inhibit (Interlock), Sense Compensation									
Options	Protective Coating, Baseplate cooler for hardmount									

CPS-EC1000

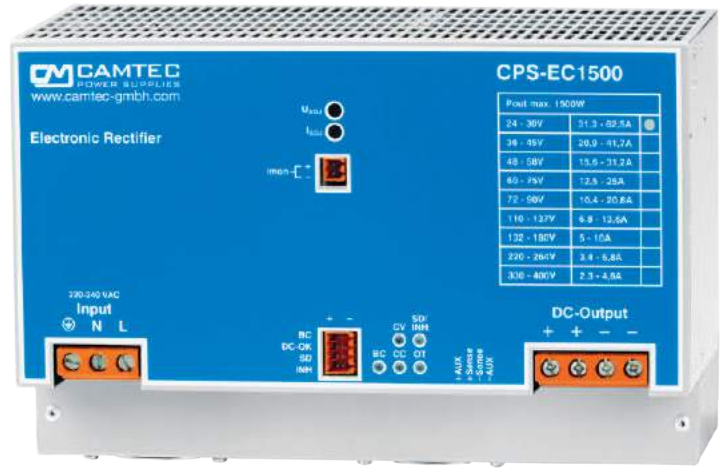
DIN-Rail Battery Charger & Industrial Precision Power

- C/V pricesely adjustable
- Current Monitor Imon
- Perfect C/V chart with no Foldback
- Power Good Relay AC & DC
- Remote Shutdown
- Inhibit (Interlock) Function, Sense



- Batterielademodul Gleichrichter
- Hochgenaues Industrie-Netzteil
- I/U Kennlinie ohne Foldback
- Strom & Spannung präzise einstellbar
- Strom-Monitor Imon
- AC & DC Power Good, Shutdown, Interlock, Sense

Model	CPS-EC1000									
Power	1008W									
Nominal AC Input	115/230Vac									
Input Range AC	90..115Vac/186..265Vac									
Input Range DC	250... 375Vdc									
Input Frequency	47... 63Hz									
Hold-Up Time	30ms									
Inrush Current	Electronic Inrush Current Limiter 9,8Arms									
Autostart	Soft start 100ms									
Output Voltage	24V	36V	48V	60V	72V	110V	150V	220V	300V	
Output Current	42A	28A	21A	16,7A	13,9A	9,1A	6,7A	4,55A	3,33A	
DC Voltage Setting	24-30V	36-45V	48-58V	60-75V	72-90V	110-137,5V	132-180V	220-264V	264-360V	
DC Current Setting	21-44,1A	14-29,4A	10,5-22A	8-17,6A	7-14,6A	4,6-9,6A	3,4-7A	3,3-4,8A	1,7-3,5A	
Ripple & Noise PP	40mV	40mV	100mV	150mV	200mV	300mV	400mV	400mV	400mV	
Load Regulation	±0,05% 0-100%									
Load Change	Response									
Efficiency	up to 92%									
Base load	non, continuous open circuit proof									
Short Circuit	Continuous Protection									
Ambient	-20°C... +70°C Operation Temperature									
Cooling	controlled fan from EBM Papst (Germany)									
Temp. Control	Yes									
Dimensions	(WxHxD) 200x156x114,5mm IP20									
Safety Norms	CSA UL CE in accordance to IEC60950-1									
Safety IEC	EN60950-1 EN50178 EN60204-1, UL classified in accordance to EN60950									
Safety Class 1(A)	VDE0100 VDE0805									
Isolation	3000Vac Input/Output									
Climatic Class	3k3, Humidity 95% non condensing									
EMI/EMS	EN55022B / EN61000-6-2,3									
EMS	EN61000-6-2,3									
MTBF / MTTF	389000h / 143036h (IEC61709)									
Power Good Relay	AC & DC low voltage detection, isolated									
Features	Current-Monitoring, External Shutdown, Inhibit (Interlock), Sense Compensation									
Options	Protective Coating, Baseplate cooler for hardmount									



CPS-EC1500 DIN-Rail Battery Charger & Industrial Precision Power

- C/V precisely adjustable
- Boost Charge Mode
- Current Monitor Imon
- Perfect C/V chart with no Foldback
- Power Good Relay AC & DC
- Remote Shutdown
- Inhibit (Interlock) Function, Sense
- Batterielademodul Gleichrichter
- Starkladefunktion
- Hochgenaues Industrie-Netzteil
- I/U Kennlinie ohne Foldback
- Strom & Spannung präzise einstellbar
- Strom-Monitor Imon
- AC & DC Power Good, Shutdown, Interlock, Sense

Model	CPS-EC1500									
Power	1500W									
Nominal AC Input	230Vac									
Input Range AC	186..265Vac									
Input Range DC	250... 375Vdc									
Input Frequency	47... 63Hz									
Hold-Up Time	20ms									
Inrush Current	Electronic Inrush Current Limiter 9,8Arms									
Autostart	Soft start 100ms									
Output Voltage	24V	36V	48V	60V	72V	110V	150V	220V	400V	
Output Current	62,5A	41,7A	31,2A	25A	20,8A	13,6A	10A	6,8A	4,6A	
DC Voltage Setting	24-30V	36-45V	48-58V	60-75V	72-90V	110-137,5V	132-180V	220-264V	330-400V	
DC Current Setting	31,3-62,5A	20,9-41,7A	15,6-31,2A	12-25A	10,4-20,8A	6,8-13,6A	5-10A	3,4-6,8A	2,3-4,6A	
Ripple & Noise PP	40mV	40mV	120mV	150mV	200mV	300mV	400mV	400mV	400mV	
Load Regulation	±0,05% 0-100%									
Load Change	Response									
Efficiency	up to 94%									
Base load	non, continuous open circuit proof									
Short Circuit	Continuous Protection									
Ambient	-20°C... +70°C Operation Temperature									
Cooling	controlled fan from EBM Papst (Germany)									
Temp. Control	Yes									
Dimensions	(WxHxD) 250x156x114,5mm IP20									
Safety Norms	CSA UL CE in accordance to IEC60950-1									
Safety IEC	EN60950-1 EN50178 EN60204-1, UL classified in accordance to EN60950									
Safety Class 1(A)	VDE0100 VDE0805									
Isolation	3000Vac Input/Output									
Climatic Class	3k3, Humidity 95% non condensing									
EMI/EMS	EN55022B / EN61000-6-2,3									
EMS	EN61000-6-2,3									
MTBF / MTTF	400000h / 144006h (IEC61709)									
Power Good Relay	AC & DC low voltage detection, isolated									
Features	Current-Monitoring, External Shutdown, Inhibit (Interlock), Sense Compensation, Boost Charge Mode									
Options	Protective Coating, Baseplate cooler for hardmount, Protected Inhibit Module acc. with SIL03									

DCUPS2U

- Unbreakable DC Power Supply (UPS), Subrack, 2U 84HP D=280mm
 - Integrated Battery Pack
 - 2 internal, independent Power Supplies for Continuous Operation and Battery Charging
 - Zero voltage drop at powerswitch between mains supply and battery supply
 - AC-Fail, DC-Fail Charger und Main Power Supply, O-Ring
-
- Unterbrechungsfreie Stromversorgung (USV) für DC-Anwendungen, als 19"-Baugruppenträger, 2HE 84TE T=280mm
 - Batterien im Gerät integriert
 - 2 interne, unabhängige Netzteile für Nennbetrieb und Batterieladung
 - Kein Spannungs-Drop bei Umschaltung von Netz- auf Batteriebetrieb
 - AC-Fail, DC-Fail Charger und Lastnetzteil, O-Ring
 - Mastereinheit und Slaves zur Kapazitätserweiterung mit jeweils eigenem Charger



Model	DCUPS2U		
Power	114W		
Master-slave operation	Slave-Units for modular capacity expansion available		
Master Vout	12V	24V	48V
Continous Current	8A	4A	2A
Backup Capacity	16Ah	8Ah	4Ah
'19"-Subframe'	2U 84HP 280mm		
Mains Input	184... 265Vac (230Vac) 47-63Hz		
Mains Input Connector	Inlet connector male with Lock		
Monitoring	Relay, piezo-sound interval		
AC Power Fail	yes		
Battery Low Voltage	Signaling for relay		
Battery O.K.	LED & signal		
Battery Charger	Integrated		
Monitoring Battery Charger	Relay, Sub-D		
Power Supply	Active during mains operation for load		
Monitoring Power Supply	Relay, Sub-D		
Short Circuit Protection DC for Battery	Thermic fuse, manual resettable		
Cooling	Natural convection		
Efficiency	>90% continuous operation		
Operating Temperature	+10°C... +40°C, IEC60068-2-1		
Connection Output	Phoenix Power Combicon, screw-lock		
Battery Type	Built-in, type Panasonic LCR124R5P for cycle operation		
GND-Type DC	Plus connected GND		
PE Connection	Additional for front screw terminals		

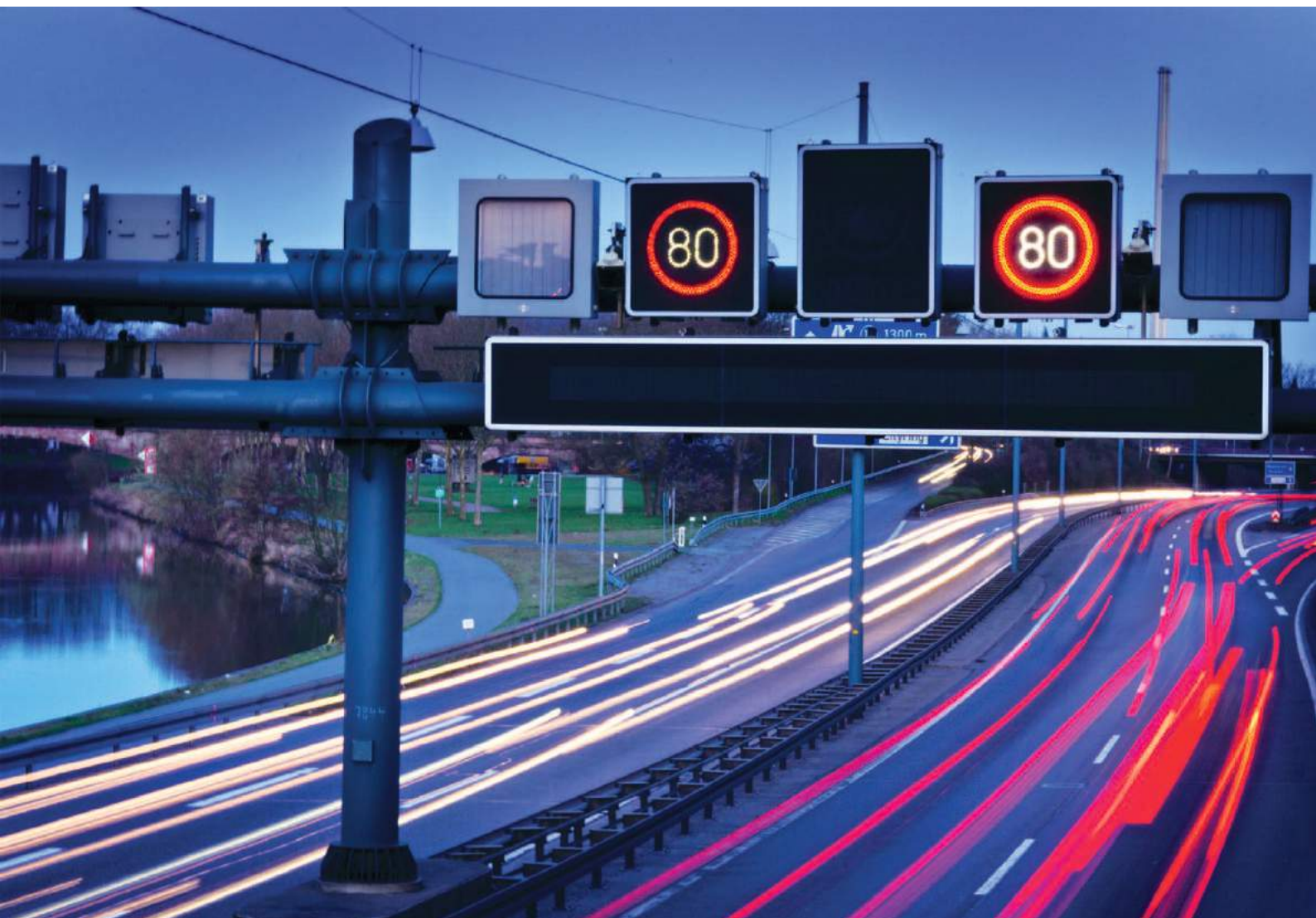
GL1800 / RM1800

- Charger Electronic Rectifier
 - O-ring N+1 from 1,8KW up to 54KW (1,8KW-steps)
 - Compatible with Eltek RM1800 WBrug, Convertec RM1800
 - Compatible with Eltek Contoller SVS-SM7, Flatpack MCU, Flatpack 2
 - Digital Interface Shunt for Eltek Flatpack 2 Controller available as an option
-
- Batterielademodul Gleichrichter
 - kaskadierbar bis 54KW (ab 1,8KW in 1,8KW-Schritten)
 - Kompatibel zu Eltek RM1800 WBrug, Convertec RM1800
 - Kompatibel mit Eltek Contoller SVS-SM7, Flatpack MCU, Flatpack 2
 - Digital Interface Shunt für Eltek Flatpack 2 Controller als Option erhältlich

Model	GL1800 / RM1800				
Power	1800 watt				
Rack Mount	6U 21HP				
Input AC	230Vac				
Input Frequency	47-63Hz / 16 2/3Hz				
Output	Output voltage selectable				
Output voltage selectable via switch	12V	24V	36V	48V	60V
Output current	30A	30A	30A	30A	25A
Ripple Ripple mV (@20MHz/50R)	10mV	10mV	10mV	10mV	10mV
Inrush current protection	Active protection				
Mains short circuit	Connector inlet male				
Control- & Monitoring Signal	Connector Amphenol Sub-D 15pin				
Output Voltage	Connector Phoenix HDLVL 10				
Efficiency typ.	> 90%				
Ambient Operating Temperature	-10°C +50°C				
Cooling	Speed controlled fan				
Special Features	Monitoring (relay)				
	Low inrush current				
	Battery voltage adjustable				
	Railway use				







AC/DC 19"
AC/DC 19 Zoll

PSM00803

- Rack Mount 1phase Fixed Output
- Active inrush current protection
- 8KV surge
- 19 Zoll Stromversorgung 1phasig Festspannung
- 8 KV Spannungsfestigkeit



Model	PSM00803	
Power	80W	
Nominal Input Voltage	100... 240Vac	
Input Range AC	90... 265Vac	
Input Range DC	110... 300Vdc	
Input Frequency	47... 63Hz	
Hold-Up Time	100ms	
Inrush Current Protection	< 24Apeak / 17Arms active protection ±6%	
Autostart	Soft start 100ms	
Output Voltage U1	+ 5V	+ 5V
Output Voltage U2	+ 12V	+ 15V
Output Voltage U3	- 12V	- 15V
Adjust Range U1	4,85... 5,15V	4,85... 5,15V
Ripple & Noise mVpp U1	20mV	20mV
Ripple & Noise mVpp U2	10mV	10mV
Ripple & Noise mVpp U3	10mV	10mV
Output Current I1	8A	8A
Output Current I2	2A	1,8A
Output Current I3	2A	1,8A
Power Boost ≤60°C/60s	96W	
Power Fail	yes	
Stability at Load Switch	±1%	
Transient Time	< 1ms	
Efficiency	83%	
Basic Load	Idling-proof	
Short Circuit Protected	Continuous	
Ambient Operating Temperature	-20°C... +70°C	
Cooling	Natural convection	
Temperature Monitoring	Yes	
Dimensions (WxHxD)	3U 8HP 160mm	
IP-Range	IP20	
Safety Norms	CSA UL CE according to IEC60950-1	
Safety IEC	EN60950-1 EN50178 EN60204-1	
Safety class 1(A)	VDE0100 VDE0805	
Input to Output Insulation	3000Vac	
Climatic Class, Humidity	3k3, 90% non condensing	
EMI	EN55022B EN61000-3-2A	
EMS	EN61000-6-2,3	
MTBF IEC61709	250000h	
Features	8KV/2.5kHz Input transient protection / power fail	
Ordering options	Protective coating	
Options	see Datasheet	

PSM01502

- Rack Mount 1phase Fixed Output
- Active inrush current protection
- 8KV strange
- 19 Zoll Stromversorgung 1phasig Festspannung
- 8 KV Spannungsfestigkeit



Model	PSM01502		
Power	150W		
Nominal Input Voltage	230Vac		
Input Range AC	184... 264Vac		
Input Range DC	250... 300Vdc		
Input Frequency	47... 63Hz		
Hold-Up Time	50ms		
Inrush Current Protection	< 15Apeak / 10,6Arms aktive protection ±6%		
Autostart	Soft start 20ms		
Output Voltage V1	+ 12V	+ 15V	
Output Voltage V2	- 12V	- 15V	
Output Voltage V3	+ 24V	+ 30V	U1 and U2 connectable
Adjust Range V1 / V2	±10%		
Ripple & Noise mVss V1	15mV	15mV	
Ripple & Noise mVss V2	15mV	15mV	
Ripple & Noise mVss V3	30mV U1 and U2 connectable		
Output Current I1	12A	10A	
Output Current I2	12A	10A	
Output Current I3	6,25A	5A	U1 and U2 connectable
Power Boost ≤60°C/60s	EN60950-1		
Stability at Load Switch	±1%		
Transient Time	< 1ms		
Efficiency	89%		
Basic Load	Idling-proof		
Short Circuit Protected	Continuous		
Ambient Operating Temperature	-20°C... +70°C		
Cooling	Natural Convection		
Temperature Monitoring	Yes		
Dimensions (WxHxD)	3U 8HP 160mm		
IP-Range	IP20		
Safety Norms	CSA UL CE according to IEC60950-1		
Safety IEC	EN60950-1 EN50178 EN60204-1		
Safety class 1(A)	VDE0100 VDE0805		
Input to Output Insulation	3000Vac		
Climatic Class, Humidity	3k3, 90% non condensing		
EMI	EN55022B EN61000-3-2A		
EMS	EN61000-6-2,3		
MTBF IEC61709	450000h		
Remote Shutdown	Yes		
Features	8KV/2.5kHz input transient protection		
Ordering options	Protective coating		
Options	See datasheet		

PSR01801 Redundant O-RING N+1

- Rack Mount 1phase Fixed Output
 - Active inrush current protection
 - Option Line Switch
 - Redundant N+1
 - Built-in O-ring diode
 - PSR01801S with AC mains switch
-
- 19 Zoll Stromversorgung 1phasig Festspannung
 - O-Ring Diode für Redundanzbetrieb integriert
 - PSR01801 Redundant ohne Netzschalter
 - PSR01801S Redundant mit Netzschalter



Model	PSR01801				
Output power continuous	180W				
Nominal input voltage	100... 240Vac				
Input range AC	85... 265Vac				
Input range DC	250... 375Vdc				
Input frequency	47... 63Hz				
Hold-Up time	50ms				
Inrush current protection	< 24Apeak / 17Arms active protection ±6%				
Auto-start	Soft start 40ms				
Output voltage U1	5V	12V	24V	48V	60V
Adjust range U1	5... 5,5V	12... 15V	24... 30V	42... 53V	53... 70V
Ripple mVss U1	25mV	25mV	20mV	50mV	50mV
Output nominal current I1	25A	15A	7,5A	3,8A	3A
Power Boost ≤60°C/60s	30A	18A	9A	4,6A	3,6A
Stability at Load Switch	±3%	±1%	±1%	±1%	±1%
Transient Time	< 1ms				
Efficiency	90%				
Basic Load	Idling-proof				
Short Circuit Protected	Continuous				
Ambient Operating Temperature	-20°C... +60°C				
Cooling	Natural convection				
Temperature Monitoring	Yes				
Dimensions (WxHxD)	3U 10HP 220mm				
IP-Range	IP20				
Safety Norms	CSA UL CE according to IEC60950-1				
Safety IEC	EN60950-1 EN50178 EN60204-1				
Safety class 1(A)	VDE0100 VDE0805				
Input to Output Insulation	3000Vac				
Climatic Class, Humidity	3k3, 90% non condensing				
EMI	EN55022B EN61000-3-2A				
EMS	EN61000-6-2,3				
MTBF IEC61709	300000h				
Power Good Relay	Yes				
Features	redundant decoupling O-ring diodes				
Ordering options	Protective coating / line switcher				
Options	See datasheet				

PSM02202

- Rack Mount 1phase Fixed Output
- Active inrush current protection
- 8KV strange
- 19 Zoll Stromversorgung 1phasig Festspannung
- 8 KV Spannungsfestigkeit



Model	PSM02202		
Power	220W		
Nominal Input Voltage	230Vac		
Input Range AC	184... 264Vac		
Input Range DC	250... 300Vdc		
Input Frequency	47... 63Hz		
Hold-Up Time	50ms		
Inrush Current Protection	< 24Apeak / 17Arms active protection ±6%		
Autostart	Soft start 20ms		
Output Voltage U1	+ 12V	+ 15V	
Output Voltage U2	- 12V	- 15V	
Output Voltage U3	+ 24V	+ 30V	U1 and U2 connectable
Ripple & Noise mVss U1	15mV	15mV	
Ripple & Noise mVss U2	15mV	15mV	
Ripple & Noise mVss U3	30mV U1 and U2 connectable		
Output Current I1	12A	10A	
Output Current I2	12A	10A	
Output Current I3	9,17A	7,33A	U1 and U2 connectable
Power Boost ≤60°C/60s	264W		
Stability at Load Switch	±1%		
Transient Time	< 1ms		
Efficiency	91%		
Basic Load	Idling-proof		
Short Circuit Protected	Continuous		
Ambient Operating Temperature	-20°C... +70°C		
Cooling	Natural Convection		
Temperature Monitoring	Yes		
Dimensions (WxHxD)	3U 8HP 160mm		
IP-Range	IP20		
Safety Norms	CSA UL CE according to IEC60950-1		
Safety IEC	EN60950-1 EN50178 EN60204-1		
Safety class 1(A)	VDE0100 VDE0805		
Input to Output Insulation	3000Vac		
Climatic Class, Humidity	3k3, 90% non condensing		
EMI	EN55022B EN61000-3-2A		
EMS	EN61000-6-2,3		
MTBF IEC61709	450000h		
Remote Shutdown	Yes		
Features	8KV/2.5kHz input transient protection		
Ordering options	Protective coating		
Options	See datasheet		



AC/DC Chassis Mount Power Supply
AC/DC Kassetten-Netzgerät

APW00803S

- 1phase Fixed Output baseplate cooled (not required for full operation)
- Active inrush current protection
- 8KV strange
- Kassette 1phasig Festspannung Baseplatekühlung
- mit Tripple-Ausgang



Model	APW00803S	
Power	80W	
Nominal Input	100... 240Vac	
AC Input Range	90... 265Vac	
DC Input Range	110... 300Vdc	
Input Frequency	47... 63Hz	
Hold-Up Time	100ms	
Inrush Current Protection	< 24Apeak / 17Arms active protection $\pm 6\%$	
Auto-start	Soft start 100ms	
Output voltage U1	+ 5V	+ 5V
Output voltage U2	+ 12V	+ 15V
Output voltage U3	- 12V	- 15V
Adjust range U1	4,85... 5,15V	4,85... 5,15V
Ripple mVss U1	20mV	20mV
Ripple mVss U2	10mV	10mV
Ripple mVss U3	10mV	10mV
Output current I1	8A	8A
Output current I2	2A	1,8A
Output current I3	2A	1,8A
Power boost <60°C	96W	
Stability at Load switch	$\pm 1\%$	
Transient time	< 1ms	
Efficiency	83%	
Base load	idling-proof	
Short Circuit Protection	Continuous	
Ambient Operation Temperature	-20°C... +70°C	
Cooling	Natural convection & baseplate cooled power	
Temperature Monitoring	yes	
Dimensions (WxHxD)	126x51x177mm	
Model	IP20	
Safety Norms	CSA UL CE according to IEC60950-1	
Safety IEC	EN60950-1 EN50178 EN60204-1	
Safety class 1(A)	VDE0100 VDE0805	
Input to Output Isolation	3000Vac	
Climatic class, Humidity	3k3, 90% non condensing	
EMI	EN55022B EN61000-3-2A	
EMS	EN61000-6-2,3	
MTBF IEC61709	250000h	
Power Fail	Yes (+5V high)	
Features	8KV/2.5kHz input transient protection	
Ordering options	Protective coating	
Options	see datasheet	

APW01502

- 1phase Fixed Output baseplate cooled (not required for full operation)
 - Active inrush current protection
 - 8KV surge
 - 2+1 dc output
-
- Kassette 1phasig Festspannung Baseplatekühlung
 - mit Dual-Ausgang & Tripple-Ausgang



Model	APW01502		
Power	150W		
Nominal Input AC	230Vac		
Input range AC	184... 264Vac		
Input range DC	250... 300Vdc		
Input frequency	47... 63Hz		
Hold-Up Time	50ms		
Inrush Current Protection	< 24Apeak / 17Arms electronic protection $\pm 6\%$		
Auto-start	Soft start 20ms		
Output voltage V1	+ 12V	+ 15V	
Output voltage V2	- 12V	- 15V	
Output voltage V3	+ 24V	+ 30V	U1 and U2 connectable
Adjust range V1 & V2	$\pm 10\%$		
Ripple mVpp V1	15mV	15mV	
Ripple mVpp V2	15mV	15mV	
Ripple mVpp V3	20mV		
Output current I1	12A	10A	
Output current I2	12A	10A	
Output current I3	6,25A	5A	U1 and U2 connectable
Power boost 60s	180W		
Stability Load switch	$\pm 1\%$		
Transient time	< 1ms		
Efficiency	89%		
Basic load	Idling-proof		
Short Circuit Protection	Continuous		
Ambient Operation Temperature	$-20^{\circ}\text{C} \dots +70^{\circ}\text{C}$		
Cooling	Natural convection & baseplate cooled power		
Temperature monitoring	yes		
Dimensions (WxHxD)	126x51x177mm		
IP Rated	IP20		
Safety norm	CSA UL CE according to IEC60950-1		
Safety IEC	EN60950-1 EN50178 EN60204-1		
Safety class 1(A)	VDE0100 VDE0805		
Input to Output Isolation	3000Vac		
Climatic Class, Humidity	3k3, 90% non condensing		
EMI	EN55022B EN61000-3-2A		
EMS	EN61000-6-2,3		
MTBF IEC61709	450000h		
Remote Shutdown	Yes		
Features	8KV/2.5kHz input transient protection		
Ordering options	Protective coating		
Options	See datasheet		

APW02202

- 1phase Fixed Output baseplate cooled (not required for full operation)
 - Active inrush current protection
 - 8KV strange
 - 2+1 dc output
-
- Kassette 1phasig Festspannung Baseplatekühlung
 - mit Dual-Ausgang & Tripple-Ausgang



Model	APW02202		
Power	220W		
Nominal Input AC	230Vac		
Input range AC	184... 264Vac		
Input range DC	250... 300Vdc		
Input frequency	47... 63Hz		
Hold-Up Time	50ms		
Inrush Current Protection	< 24Apeak / 17Arms electronic protection $\pm 6\%$		
Auto-start	Soft start 20ms		
Output voltage V1	+ 12V	+ 15V	
Output voltage V2	- 12V	- 15V	
Output voltage V3	+ 24V	+ 30V	U1 and U2 connectable
Adjust range V1 & V2	$\pm 10\%$		
Ripple mVpp V1	15mV	15mV	
Ripple mVpp V2	15mV	15mV	
Ripple mVpp V3	20mV		
Output current I1	12A	10A	
Output current I2	12A	10A	
Output current I3	9,1A	7,3A	U1 and U2 connectable
Power boost 60s	264W		
Stability Load switch	$\pm 1\%$		
Transient time	< 1ms		
Efficiency	89%		
Basic load	Idling-proof		
Short Circuit Protection	Continuous		
Ambient Operation Temperature	$-20^{\circ}\text{C} \dots +70^{\circ}\text{C}$		
Cooling	Natural convection & baseplate cooled power		
Temperature monitoring	yes		
Dimensions (WxHxD)	126x51x177mm		
IP Rated	IP20		
Safety norm	CSA UL CE according to IEC60950-1		
Safety IEC	EN60950-1 EN50178 EN60204-1		
Safety class 1(A)	VDE0100 VDE0805		
Input to Output Isolation	3000Vac		
Climatic Class, Humidity	3k3, 90% non condensing		
EMI	EN55022B EN61000-3-2A		
EMS	EN61000-6-2,3		
MTBF IEC61709	450000h		
Remote Shutdown	Yes		
Features	8KV/2.5kHz input transient protection		
Ordering options	Protective coating		
Options	See datasheet		





AC/DC Open Frame Power Supply

AC/DC Open Frame Schaltnetzteil

OSW00301

- Open Frame 1phase Fixed Output high precision switch mode power supply
- Low ripple & noise for sensitive loads like sensors, professional audio, measuring & control equipment
- Open Frame 1phasig Festspannung
- Hohe Leistungsdichte
- Präzise Regelung
- Niedrige Restwelligkeit für Sensorik, Audiosysteme, empfindliche Messtechnik



Model	OSW00301							
Power	30W							
Nominal AC Input	100... 240Vac							
Input Range AC	90... 265Vac							
Input Range DC	110... 375Vdc							
Input Frequency	47... 63Hz							
Hold-Up Time	40ms							
Inrush Current Protection	NTC <17A							
Autostart	Soft start 30ms							
Output Voltage	5V	9V	12V	15V	24V	48V	60V	
Adjust Range Uout	4,9... 5,5V	8,6... 9,9V	11,4... 23,2V	14,2... 16,5V	23,5... 28,5V	45,6... 52,8V	57... 66V	
Ripple & Noise mVss	15mV	15mV	10mV	10mV	50mV	100mV	100mV	
Nominal Output Current	5A	3,3A	2,5A	2A	1,3A	600mA	500mA	
Power Boost <=60°C/60s	6A	4A	3A	2,4A	1,56A	720mA	600mA	
Stability at Load Switch	±0,5%							
Transient Time	< 1ms							
Efficiency	86%							
Basic load	Idling-proof							
Short Circuit Protection	Continuous							
Ambient Operation Temperature	-20°C... +70°C							
Cooling	Natural convection							
Dimensions (WxHxD)	96,5x62x29mm							
IP-Range	Open frame							
Safety IEC	EN60950-1 EN50178 EN60204-1							
Safety Class 1(A)	VDE0100 VDE0805							
Input to Output Isolation	3000Vac							
Climatic Class, Humidity	3k3, 90% non condensing							
EMI	EN55022B EN61000-3-2A							
EMS	EN61000-6-2,3							
MTBF IEC61709	500000h							
Sense operation	5V ±200mV standard							
Options	See datasheet							

OSW00751

- 1phase Fixed Output baseplate cooled (not required for full operation)
- low ripple & noise for sensitive loads like professional audio, sensors, measuring & control equipment
- Open Frame 1phasig Festspannung
- Ultrakompaktes Arbeitspferd - ausgelegt auf lange Lebensdauer
- Baseplate-Kühlung zur optimalen Temperaturabführung möglich (kein Zwang, da für Eigenkonvektion dimensioniert)
- Geringe Restwelligkeit für Audio, LED, Messtechnik, Sensorik



Model	OSW00751				
Power	75W				
Nominal AC Input	100... 240Vac				
Input Range AC	90... 265Vac				
Input Range DC	110... 375Vdc				
Input Frequency	47... 63Hz				
Hold-Up Time	40ms				
Inrush Current Protection	NTC <32A				
Autostart	Soft start 50ms				
Output Voltage	5V	9V	12V	15V	24V
Adjust Range Vout	4,9... 5,5V	8,6... 9,9V	11,4... 13,2V	14,3... 16,5V	22,5... 28,5V
Ripple & Noise mVpp	15mV	15mV	20mV	20mV	50mV
Nominal Output Current	7,5A	7,6A	6A	5A	3,2A
Power Boost <=60°C/60s	9A	9,1A	7,2A	6A	3,8A
Stability at Load Switch	±0,1%	±0,5%	±0,3%	±0,2%	±0,1%
Transient Time	< 1ms				
Efficiency	90%				
Basic load	Idling-proof				
Short Circuit Protection	Continuous				
Ambient Operation Temperature	-20°C... +70°C				
Cooling	Natural convection				
Temperature Monitoring	Upon request				
Dimensions (WxHxD)	100x91x45mm				
IP-Range	Open frame				
Safety Norms	CSA UL CE according to IEC60950-1				
Safety IEC	EN60950-1 EN50178 EN60204-1				
Safety Class 1(A)	VDE0100 VDE0805				
Input to Output Isolation	3000Vac				
Climatic Class, Humidity	3k3, 90% non condensing				
EMI	EN55022B EN61000-3-2A				
EMS	EN61000-6-2,3				
MTBF IEC61709	500000h				
Power Good Relay	Upon request				
Sense operation	Upon request for 5V ±200mV				
Features	Baseplate cooled power				
Ordering options	Power good relay, sensing for 5Vdc model				
Options	See datasheet				

OSW00901

- 1phase Fixed Output baseplate cooled (not required for full operation)
- Low ripple & noise for sensitive loads like professional audio, sensors, measuring & control equipment
- Open Frame 1phasig Festspannung
- Ultrakompaktes Arbeitspferd - ausgelegt auf lange Lebensdauer
- Baseplate-Kühlung zur optimalen Temperaturabführung möglich (kein Zwang, da für Eigenkonvektion dimensioniert)



Model	OSW00901					
Power	90W					
Nominal AC Input	100... 240Vac					
Input Range AC	90... 265Vac					
Input Range DC	110... 375Vdc					
Input Frequency	47... 63Hz					
Hold-Up Time	40ms					
Inrush Current Protection	NTC <32A					
Autostart	Soft start 50ms					
Output Voltage	24V	36V	48V	60V	72V	140V
Adjust Range Vout	22,5... 28,5V	43,2... 39,6V	45,6... 52,8V	57... 66V	68... 86V	133... 155V
Ripple & Noise mVpp	50mV	60mV	60mV	100mV	120mV	120mV
Nominal Output Current	3,8A	2,5A	1,9A	1,5A	1,3A	640mA
Power Boost <=60°C/60s	4,6A	3A	2,7A	1,8A	1,6A	770mA
Stability at Load Switch	±0,1%	±0,1%	±0,1%	±0,1%	±0,3%	±0,5%
Transient Time	< 1ms					
Efficiency	90%					
Basic load	Idling-proof					
Short Circuit Protection	Continuous					
Ambient Operation Temperature	-20°C... +70°C					
Cooling	Natural convection					
Temperature Monitoring	Upon request					
Dimensions (WxHxD)	100x91x45mm					
IP-Range	Open frame					
Safety Norms	CSA UL CE according to IEC60950-1					
Safety IEC	EN60950-1 EN50178 EN60204-1					
Safety Class 1(A)	VDE0100 VDE0805					
Input to Output Isolation	3000Vac					
Climatic Class, Humidity	3k3, 95% non condensing					
EMI	EN55022B EN61000-3-2A					
EMS	EN61000-6-2,3					
MTBF IEC61709	500000h					
Power Good Relay	Upon request (PG)					
Features	Baseplate cooled power					
Ordering options	Power good relay, temperature control					
Options	See datasheet					

OSE01201

- 1phase Fixed Output baseplate cooled (not required for full operation)
- low ripple & noise for sensitive loads like professional audio, sensors, measuring & control equipment
- Open Frame 1phasig Festspannung
- Ultrakompaktes Arbeitspferd - ausgelegt auf lange Lebensdauer
- Baseplate-Kühlung zur optimalen Temperaturabführung möglich (kein Zwang, da für Eigenkonvektion dimensioniert)



Model	OSE01201							
Power	120W							
Nominal AC Input	115/230Vac select							
Input Range AC	90..115Vac/184..265Vac							
Input Range DC	250... 375Vdc							
Input Frequency	47... 63Hz							
Hold-Up Time	30ms							
Inrush Current Protection	NTC <16A							
Autostart	Soft start 50ms							
Output Voltage	12V	24V	36V	48V	60V	72V	110V	
Adjust Range Vout	11,4..13,2V	22,5... 28,5V	34,2... 39,6V	42,8... 52,8V	57... 66V	68... 86V	133... 155V	
Ripple & Noise mVpp	50mV	65mV	65mV	100mV	120mV	120mV	200mV	
Nominal Output Current	8A	5A	3,3A	2,5A	2A	1,7A	1,1A	
Power Boost <=60°C/60s	9,6A	6A	4A	3A	2,4A	2A	1,3A	
Stability at Load Switch	±0,5%							
Transient Time	< 1ms							
Efficiency	91%							
Basic load	Idling-proof							
Short Circuit Protection	Continuous							
Ambient Operation Temperature	-20°C... +70°C							
Cooling	Natural convection							
Temperature Monitoring	on Wunsch							
Dimensions (WxHxD)	124x96x50mm							
IP-Range	Open frame							
Safety Norms	CSA UL CE according to IEC60950-1							
Safety IEC	EN60950-1 EN50178							
Safety Class 1(A)	VDE0100 VDE0805							
Input to Output Isolation	4000Vac							
Climatic Class, Humidity	3k3, 90% non condensing							
EMI	EN55022B EN61000-3-2A							
EMS	EN61000-6-2,3							
MTBF IEC61709	600000h							
Power Good Relay	Upon request							
Features	Baseplate cooled power							
Ordering options	Power Good Relay							
Options	See datasheet							



ESB AC Inrush Current Limiter

ESB AC Einschaltstrombegrenzer

ESB101.LED.230Vac

- Inrush Current Limiter (ESB) DIN-Rail TS35mm
- Einschaltstrombegrenzer (ESB) auf der Tragschiene TS35mm

Model	ESB101.LED.230Vac
Limiting Peak current	48A for Ton=300ms
Limiting RMS-value	33,9A for Ton=300ms
Limiting Cycle Interval	900ms (3x/minute)
Low Voltage Detection	Toff=550ms
Input Voltage	184... 265Vac 16 1/3... 440Hz 1PH
Nominal voltage	220... 240Vac
AC Continuous Current	16A input/output
Load capacity	6000uF
Connectors	Spring-type-terminal 0,5... 6mm ²
Ambient Operating Temperature	-40°C +70°C no derating
Cooling	Natural convection
Dimensions (WxHxD)	36,5 x 62 x 110mm
Special Features	Temperature protected (fuse)
	Fire protected
	Accuracy ±5%, independent from ambient temperature
	Capacitive loads
	Bypass circuit
	4000m / 13123 ft. Above sea level



ESB101.LED.115Vac

- Inrush Current Limiter (ESB) DIN-Rail TS35mm
- Einschaltstrombegrenzer (ESB) auf der Tragschiene TS35mm

Model	ESB101.LED.115Vac
Limiting Peak current	43A for Ton=500ms
Limiting RMS-value	30,4A for Ton=500ms
Limiting Cycle Interval	900ms (3x/minute)
Low Voltage Detection	Toff=550ms
Input Voltage	90... 130Vac 16 1/3... 440Hz 1PH
Nominal voltage	110... 120Vac
AC Continuous Current	16A
Load capacity	10000uF
Connectors	Spring-type-terminal 0,5... 6mm ²
Ambient Operating Temperature	-40°C... +0°C no derating
Cooling	Natural convection
Dimensions (WxHxD)	36,5 x 62 x 110mm
Special Features	Temperature protected (fuse)
	Fire protected
	Accuracy ±5%, independent from ambient temperature
	Capacitive loads
	Bypass circuit
	4000m / 13123 ft. Above sea level

ESB101.16

- Inrush Current Limiter (ESB) DIN-Rail TS35mm
- Einschaltstrombegrenzer (ESB) auf der Tragschiene TS35mm

Model	ESB101.16
Limiting Peak current	16A for Ton=300ms
Limiting RMS-value	11,3A for Ton=300ms
Limiting Cycle Interval	900ms (3x/minute)
Low Voltage Detection	Toff=500ms
Input Voltage	184... 265Vac 16 1/3... 440Hz 1PH
Nominal voltage	220... 240Vac
AC Continuous Current	16A input/output
Load capacity	1500uF
Connectors	Spring-type-terminal 0,5... 6mm ²
Ambient Opearting Temperature	-40°C +70°C no derating
Cooling	Natural convection
Dimensions (WxHxD)	36,5 x 62 x 110mm
Special Features	Temperature protected (fuse)
	Fire protected
	Accuracy ±5%, independent from ambient temperature
	Capacitive loads
	Bypass circuit
	4000m / 13123 ft. Above sea level

ESB101.23

- Inrush Current Limiter (ESB) DIN-Rail TS35mm
- Einschaltstrombegrenzer (ESB) auf der Tragschiene TS35mm

Model	ESB101.23
Limiting Peak current	23A for Ton=300ms
Limiting RMS-value	16,3A for Ton=300ms
Limiting Cycle Interval	900ms (3x/minute)
Low Voltage Detection	Toff=500ms
Input Voltage	184... 265Vac 16 1/3... 440Hz 1PH
Nominal voltage	220... 240Vac
AC Continuous Current	16A input/output
Load capacity	2000uF
Connectors	Spring-type-terminal 0,5... 6mm ²
Ambient Opearting Temperature	-40°C... +70°C no derating
Cooling	Natural convection
Dimensions (WxHxD)	36,5 x 62 x 110mm
Special Features	Temperature protected (fuse)
	Fire protected
	Accuracy ±5%, independent from ambient temperature
	Capacitive loads
	Bypass circuit
	4000m / 13123 ft. Above sea level

ESB101.23S

- Inrush Current Limiter (ESB) DIN-Rail TS35mm
- Einschaltstrombegrenzer (ESB) auf der Tragschiene TS35mm

Model	ESB101.23S
Limiting Peak current	23A for Ton=500ms
Limiting RMS-value	16,3A for Ton=500ms
Limiting Cycle Interval	1400ms (3x/minute)
Low Voltage Detection	Toff=800ms
Input Voltage	184... 265Vac 16 1/3... 440Hz 1PH
Nominal voltage	220... 240Vac
AC Continuous Current	16A
Load capacity	2000uF
Connectors	Spring-type-terminal 0,5... 6mm ²
Ambient Opearting Temperature	-40°C... +0°C no derating
Cooling	Natural convection
Dimensions (WxHxD)	36,5 x 62 x 110mm
Special Features	Temperature protected (fuse)
	Fire protected
	Accuracy ±5%, independent from ambient temperature
	Capacitive loads
	Bypass circuit
	4000m / 13123 ft. Above sea level

ESB101.23S.115Vac

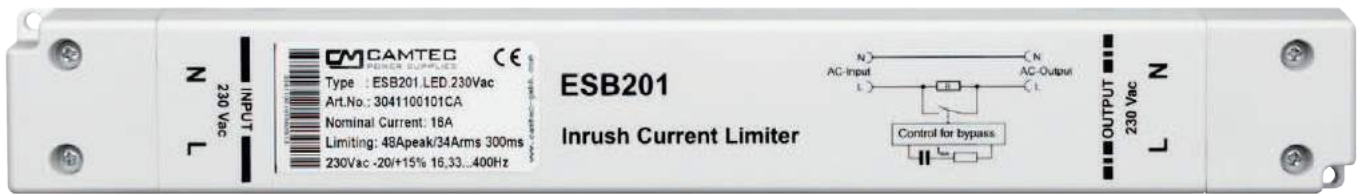
- Inrush Current Limiter (ESB) DIN-Rail TS35mm
- Einschaltstrombegrenzer (ESB) auf der Tragschiene TS35mm

Model	ESB101.23S.115Vac
Limiting Peak current	23A for Ton=500ms
Limiting RMS-value	16,3A for Ton=500ms
Limiting Cycle Interval	1400ms (3x/minute)
Low Voltage Detection	Toff=900ms
Input Voltage	90... 130Vac 16 1/3... 440Hz 1PH
Nominal voltage	110... 120Vac
AC Continuous Current	16A
Load capacity	4000uF
Connectors	Spring-type-terminal 0,5... 6mm ²
Ambient Opearting Temperature	-40°C... +0°C no derating
Cooling	Natural convection
Dimensions (WxHxD)	36,5 x 62 x 110mm
Special Features	Temperature protected (fuse)
	Fire protected
	Accuracy ±5%, independent from ambient temperature
	Capacitive loads
	Bypass circuit
	4000m / 13123 ft. Above sea level

ESB101.33

- Inrush Current Limiter (ESB) DIN-Rail TS35mm
- Einschaltstrombegrenzer (ESB) auf der Tragschiene TS35mm

Model	ESB101.33
Limiting Peak current	33A for Ton=300ms
Limiting RMS-value	23,3A for Ton=300ms
Limiting Cycle Interval	900ms (3x/minute)
Low Voltage Detection	Toff=800ms
Input Voltage	184... 265Vac 16 1/3... 440Hz 1PH
Nominal voltage	220... 240Vac
AC Continuous Current	16A
Load capacity	4000uF
Connectors	Spring-type-terminal 0,5... 6mm ²
Ambient Opearting Temperature	-40°C... +70°C no derating
Cooling	Natural convection
Dimensions (WxHxD)	36,5 x 62 x 110mm
Special Features	Temperature protected (fuse)
	Fire protected
	Accuracy ±5%, independent from ambient temperature
	Capacitive loads
	Bypass circuit
	4000m / 13123 ft. Above sea level



ESB201.LED.230Vac

- Inrush Current Limiter (ESB)
for LED Power Supply and Electronic Ballast
- Einschaltstrombegrenzer (ESB) für die LED Beleuchtung

Model	ESB201.LED.230Vac
Limiting Peak current	48A for Ton=300ms
Limiting RMS-value	33,9A for Ton=300ms
Limiting Cycle Interval	900ms (3x/minute)
Low Voltage Detection	Toff=550ms
Input Voltage	184... 265Vac 16 1/3... 440Hz 1PH
Nominal voltage	220... 240Vac
AC Continuous Current	16A input/output
Load capacity	6000uF
Connectors	Spring-type-terminal 0,5... 6mm ²
Ambient Operating Temperature	-20... +C45°C no derating
Cooling	Natural convection
Dimensions (HxDxW)	35,4 x 23,5 x 260mm
Special Features	Temperature protected (fuse)
	Safety covered terminals against electrical shock
	Fire protected
	Accuracy ±6%, independent from ambient temperature
	Ballast and capacitive loads
	Bypass circuit
	4000m / 13123 ft. above sea level

ESB201.LED.115Vac

- Inrush Current Limiter (ESB)
for LED Power Supply and Electronic Ballast
- Einschaltstrombegrenzer (ESB) für die LED Beleuchtung

Model	ESB201.LED.115Vac
Limiting Peak current	43A for Ton=500ms
Limiting RMS-value	30,4A for Ton=500ms
Limiting Cycle Interval	900ms (3x/minute)
Low Voltage Detection	Toff=550ms
Input Voltage	90... 130Vac 16 1/3... 440Hz 1PH
Nominal voltage	110... 120Vac
AC Continuous Current	16A
Load capacity	10000uF
Connectors	Spring-type-terminal 0,5... 6mm ²
Ambient Operating Temperature	-20°C... +45°C no derating
Cooling	Natural convection
Dimensions (WxHxD)	35,4 x 23,5 x 260mm
Special Features	Temperature protected (fuse)
	Safety covered terminals against electrical shock
	Fire protected
	Accuracy ±6%, independent from ambient temperature
	Ballast and capacitive loads
	Bypass circuit
	4000m / 13123 ft. above sea level

ESB00351

- Inrush Current Limiter (ESB) DIN-Rail TS35mm
 - Designed for rough industrial environment
 - Strong unit for large 1-phase arrays up to 10.000uF load capacity
 - Built-in switch mode power supply
 - Advanced passive cooling and over dimensioned limiting resistors
- Einschaltstrombegrenzer (ESB) auf der Tragschiene TS35mm



Model	ESB00351
Limiting Peak current	35A for Ton=150ms
Limiting RMS-value	24,8A for Ton=150ms
Limiting Cycle Interval	60s
Low Voltage Detection	Toff=100ms
Input Voltage	184... 265Vac 47... 63Hz
Nominal voltage	220... 240Vac
AC Continuous Current	30A
Load capacity	10000uF
Connectors	Spring-type-terminal 0,5... 10mm ²
Ambient Opearting Temperature	-20°C... +70°C no derating
Cooling	Natural convection
Dimensions (WxHxD)	195 x 130 x 122mm
Special Features	Accuracy ±5%, independent from ambient temperature
	Capable of capacitive loads (no restrictions)
	Active & precise measuring circuit
	Bypass circuit
	Built in switch mode power supply

ESB00163A.T (3PH)

- Inrush Current Limiter (ESB) DIN-Rail TS35mm
 - Designed for rough industrial environment
 - Built-in switch mode power supply
 - Phase Monitor (under voltage / loss / asymmetry)
 - Ton limiting time & Toff low voltage delay time adjustable
 - Advanced passive cooling with over dimensioned limiting resistors
 - Limiting of each phase completely independent
- Einschaltstrombegrenzer (ESB) auf der Tragschiene TS35mm
 - Mit 3-Phasen-Überwachung



Model	ESB00163A.T (3PH)
Limiting Peak current	22,6A Ton adjustable 70 to 240ms
Limiting RMS-value	16A Ton adjustable 70 to 240ms
Limiting Cycle Interval	60s
Low Voltage Detection	Toff adjustable 60 to 170ms
Input Voltage	170... 575Vac 47... 63Hz 3PH
Nominal voltage	200/400/500Vac selectable
AC Continuous Current	3x 16A
Load capacity	1500uF
Connectors	Spring-type-terminal 0,5... 16mm ² , 22... 8AWG
Ambient Operating Temperature	-20°C... +45°C no derating
Cooling	Natural convection
Dimensions (WxHxD)	95 x 155 x 122mm
Special Features	Integrated & complete phase monitor
	Asymmetry, phase lost, phase sequence
	Accuracy ±6%, independent from ambient temperature
	Extending monitoring
	Each phase limited independently
	Ballast and capacitive loads
	Active & precise measuring circuit
	Bypass circuit each phase
	Built in switch mode power supply

ESB00163B.T (3PH)

Model	ESB00163B.T (3PH)
Limiting Peak current	22,6A Ton adjustable 70 to 240ms
Limiting RMS-value	16A Ton adjustable 70 to 240ms
Limiting Cycle Interval	60s
Low Voltage Detection	Toff adjustable 60 to 170ms
Input Voltage	170... 460Vac 47... 63Hz 3PH
Nominal voltage	200/400Vac selectable
AC Continuous Current	3x 16A
Load capacity	1500uF
Connectors	Spring-type-terminal 0,5... 16mm ² , 22... 8AWG
Ambient Opearting Temperature	-20°C... +60°C no derating
Cooling	Natural convection
Dimensions (WxHxD)	95 x 155 x 122mm
Special Features	Integrated & complete phase monitor
	Asymmetry, phase lost, phase sequence
	Accuracy ±6%, independent from ambient temperature
	Extending monitoring
	Each phase limited independently
	Ballast and capacitive loads
	Active & precise measuring circuit
	Bypass circuit each phase
	Built in switch mode power supply

ESB00323A.T (3PH)

Model	ESB00323A.T (3PH)
Limiting Peak current	68,6A Ton adjustable 70 to 240ms
Limiting RMS-value	48A Ton adjustable 70 to 240ms
Limiting Cycle Interval	60s
Low Voltage Detection	Toff adjustable 60 to 170ms
Input Voltage	170... 575Vac 47... 63Hz 3PH
Nominal voltage	200/400/500Vac selectable
AC Continuous Current	3x 32A
Load capacity	2000uF
Connectors	Spring-type-terminal 0,5... 16mm ² , 22... 8AWG
Ambient Opearting Temperature	-20°C... +45°C no derating
Cooling	Natural convection
Dimensions (WxHxD)	95 x 155 x 122mm
Special Features	Integrated & complete phase monitor
	Asymmetry, phase lost, phase sequence
	Accuracy ±6%, independent from ambient temperature
	Extending monitoring
	Each phase limited independently
	Ballast and capacitive loads
	Active & precise measuring circuit
	Bypass circuit each phase
	Built in switch mode power supply

ESB00323B.T (3PH)

Model	ESB00323B.T (3PH)
Limiting Peak current	68,6A Ton adjustable 70 to 240ms
Limiting RMS-value	48A Ton adjustable 70 to 240ms
Limiting Cycle Interval	60s
Low Voltage Detection	Toff adjustable 60 to 170ms
Input Voltage	170... 460Vac 47... 63Hz 3PH
Nominal voltage	200/400Vac selectable
AC Continuous Current	3x 32A
Load capacity	2000uF
Connectors	Spring-type-terminal 0,5... 16mm ² , 22... 8AWG
Ambient Opearting Temperature	-20°C... +60°C no derating
Cooling	Natural convection
Dimensions (WxHxD)	95 x 155 x 122mm
Special Features	Integrated & complete phase monitor
	Asymmetry, phase lost, phase sequence
	Accuracy ±6%, independent from ambient temperature
	Extending monitoring
	Each phase limited independently
	Ballast and capacitive loads
	Active & precise measuring circuit
	Bypass circuit each phase
	Built in switch mode power supply



UMS DC FET-Relay Wearless
UMS DC Halbleiterrelais verschleissfrei

UMS00025 600W

- DC Power Relay, DC Power Switch, Mosfet Relais
 - Nearly unlimited switching operations
 - Maintenance free
 - Sense Switched
 - Masterstop
 - Option Motor-Stop short circuit outputs
 - Parallel operation N+1 to extend the power load
-
- DC Lastrelais, DC Leistungsschalter, Mosfet Relais
 - Fast unendlich hohe Schaltleistung ohne Verschleiß
 - Senseumschaltung
 - Master Stop
 - Optional Motor Stop Signal (Ausgänge kurzgeschlossen)
 - Parallelbetrieb N+1 zur Leistungserhöhung



Model	UMS00025.20	UMS00025.30	UMS00025.40
Power	600W	600W	600W
DC voltage switching capability	0... 60Vdc	0... 40Vdc	0... 30Vdc
Current switching capability	10A	15A	20A
Surge current for 10ms	40A	60A	80A
Re-Routing	Left/right		
Output	Power MOSFETs		
Resistor	Low Rds-On		
Switching Operations	>100 Mio.		
Confirmation Control signal	left/right		
Cooling	Natural Convection		
Ambient Operating Temperature	-20°C up to +70°C		
Control Input-/output	I/Os galvanic insulated		
Connection	Spring-type-terminal up to 25mm ²		
Control Signal	Sub-D 15Pole. IEC807		
External Supply Voltage	19,2... 28,8Vdc		
Dimensions WxHxD	65 x 124 x 96mm		
Special Features	Programmable sense operation		
	Master stop		
	MosFET technology => no moved parts, >10 ⁹ cycles		
	Parallel operation N+1 power capability increase		
	Temperature monitoring		

UMS00050 1200W

- DC Power Relay, DC Power Switch, Mosfet Relais
 - Nearly unlimited switching operations
 - Maintenance free
 - Sense Switched
 - Masterstop
 - Option Motor-Stop short circuit outputs
 - Parallel operation N+1 to extend the power load
-
- DC Lastrelais, DC Leistungsschalter, Mosfet Relais
 - Fast unendlich hohe Schaltleistung ohne Verschleiß
 - Senseumschaltung
 - Master Stop
 - Optional Motor Stop Signal (Ausgänge kurzgeschlossen)
 - Parallelbetrieb N+1 zur Leistungserhöhung

Model	UMS00050.20	UMS00050.30	UMS00050.40
Power	1200W	1200W	1200W
DC voltage switching capability	0... 60Vdc	0... 40Vdc	0... 30Vdc
Current switching capability	20A	30A	40A
Surge current for 10ms	80A	120A	160A
Re-Routing	Left/right		
Output	Power MOSFETs		
Resistor	Low Rds-On		
Switching Operations	>100 Mio.		
Confirmation Control signal	left/right		
Cooling	Natural Convection		
Ambient Operating Temperature	-20°C up to +70°C		
Control Input-/output	I/Os galvanic insulated		
Connection	Spring-type-terminal up to 25mm ²		
Control Signal	Sub-D 15Pole. IEC807		
External Supply Voltage	19,2... 28,8Vdc		
Dimensions WxHxD	65 x 124 x 96mm		
Special Features	Programmable sense operation		
	Master stop		
	MosFET technology => no moved parts, >10 ⁹ cycles		
	Parallel operation N+1 power capability increase		
	Temperature monitoring		

UMS00100 2400W

- DC Power Relay, DC Power Switch, Mosfet Relais
 - Nearly unlimited switching operations
 - Maintenance free
 - Sense Switched
 - Masterstop
 - Option Motor-Stop short circuit outputs
 - Parallel operation N+1 to extend the power load
-
- DC Lastrelais, DC Leistungsschalter, Mosfet Relais
 - Fast unendlich hohe Schaltleistung ohne Verschleiß
 - Senseumschaltung
 - Master Stop
 - Optional Motor Stop Signal (Ausgänge kurzgeschlossen)
 - Parallelbetrieb N+1 zur Leistungserhöhung

Model	UMS00100.20	UMS00100.40	UMS00100.60	UMS00100.80
Power	2400W	2400W	2400W	2400W
DC voltage switching capability	0... 120Vdc	0... 60Vdc	0... 40Vdc	0... 30Vdc
Current switching capability	20A	40A	60A	80A
Surge current for 10ms	80A	100A	240A	320A
Re-Routing	Left/right			
Output	Power MOSFETs			
Resistor	Low Rds-On			
Switching Operations	>100 Mio.			
Confirmation Control signal	left/right			
Cooling	Natural Convection			
Ambient Operating Temperature	-20°C up to +70°C			
Control Input-/output	I/Os galvanic insulated			
Connection	Spring-type-terminal up to 25mm ²			
Control Signal	Sub-D 15Pole. IEC807			
External Supply Voltage	19,2... 28,8Vdc			
Dimensions WxHxD	65 x 124 x 96mm			
Special Features	Programmable sense operation			
	Master stop			
	MosFET technology => no moved parts, >10 ⁹ cycles			
	Parallel operation N+1 power capability increase			
	Temperature monitoring			

Table of Contents | Inhaltsverzeichnis

2	About Camtec Über Camtec
4	Product philosophy Produktphilosophie
8	AC/DC DIN-Rail Power Supplies 1phase AC/DC Hutschienen-Netzteile 1phasig
29	AC/DC DIN-Rail Power Supplies 3phase AC/DC Hutschienen-Netzteile 3phasig
33	AC/DC Programmable Laboratory Power Supply AC/DC Programmierbare Labornetzgeräte
47	AC/DC Embedded Power System AC/DC Embedded Power System
56	DC-UPS Battery Charger DC USV Ladegleichrichter
65	AC/DC 19" AC/DC 19 Zoll
70	AC/DC Chassis Mount Power Supply AC/DC Kassetten-Netzgerät
75	AC/DC Open Frame Power Supply AC/DC Open Frame Schaltnetzteil
80	ESB AC Inrush Current Limiter ESB AC Einschaltstrombegrenzer
88	UMS DC FET-Relay Wearless UMS DC Halbleiterrelais verschleißsfrei

Legal terms | Impressum

Camtec Power Supplies GmbH
Gewerbestraße 30
D 76327 Pfinztal (Berghausen)
Germany

Phone +49 (0) 721 - 4 65 96-0
Fax +49 (0) 721 - 4 65 96-77
info@camtec-gmbh.com
www.camtec-gmbh.com

CEO: Mr. Oliver Walter (MBA)
Registration Court Mannheim
Registration-No. 107345
VAT Reg.No. DE 811 970 218

©Fotolia.com: Background Page 1-79 ©E. Zacherl, Page 4-5 ©gilles lougassi, Page 7 ©Franz Metelec,
Page 8 ©kubais - Fotolia.com, Page 29 ©industrieblick, Page 33 ©artstudio_pro, Page 47 ©vichie81,
Page 56 ©ynamaku, Page 65 ©Petair, Page 70 ©Toenne, Page 75 ©tom, Page 80 ©efks, Page 88 ©Olga,
Page 91 ©yellowj, Background Products Page 1 ©bluebay2014 , further images ©Camtec GmbH / FOTOGRAFIC.de.

Version: 2017 Rev. 001 | Design ©FOTOGRAFIC.de
Any errors excepted. Technical changes reserved.



