

PK-Series: MONOVOLT AC/DC

30 TO 120 WATT SWITCHED MODE AC/DC PLUG-IN POWER SUPPLIES WITH ONE OUTPUT IN 3U EURO CASSETTES FOR USE IN 19" SUBRACKS TO DIN 41494

FEATURES

- Compact rugged design in stable aluminium cassette
- High regulation accuracy
- Remote On/Off and Powerfail signal
- SENSE-operation and Overvoltage protection (OVP)
- PK60-R for redundant operation
- Convection cooling
- CE marked for compliance to EMC and Low Voltage Directives
- Safety according to EN60950, UL, cUL
- VERO standardised pinning
- 24 months warranty

SPECIFICATION

Input Data	
Input voltage (switchable)	115 / 230VAC
Input frequency	47-63Hz
Inrush surge current limit	by NTC
Input voltage spike limit	by VDR
Hold-up time	>20 msec (at nominal values) typ. > 80%
Efficiency	
Safety: CE marking according to	
low voltage directive 73/23/EEG	
Safety according to	EN60950, UL1950
EMC: CE marking according EMC directive 89/336/EEG	
EMI conducted & radiated emission	EN 55022/B (0,15-30MHz; 30-1000MHz)
EMI immunity	EN 50082-2
Operating temperature / Storage temperature	0°C...+70°C / -25°C...+85°C
Relative humidity	max.95% without condensation
Case material / finish	Clear anodised aluminium cassette with cooling cutouts



ORDER INFORMATION

MONOVOLT PK30: 30Watt			
Type	output	without Powerfail	with Powerfail
PK30	5V/6A	116-10016*	—
PK30	12-15V/2A	116-10215	—
PK30	24V/1,5A	116-10216	—

MONOVOLT PK60 und PK60-R = N+1 redundant: 60Watt			
Type	output	without Powerfail	with Powerfail
PK60	3,3V/15A	116-10196	—
PK60	5V/12A	116-10063*	116-10074*
PK60	12V/5A	116-10064*	—
PK60	15V/4A	116-10065*	—
PK60	24V/2,5A	116-10066*	116-10077*
PK60-R	5V/12A	116-10128*	—
PK60-R	12V/5A	116-10219*	—
PK60-R	15V/4A	116-10220*	—
PK60-R	24V/2,5A	116-10129*	—

* EN60950, UL und cUL zertifiziert - certified

MONOVOLT PK 120: 120Watt			
Type	output	without Powerfail	with Powerfail
PK120	5V/20A	116-10069	116-10081
PK120	12V/10A	116-10070	116-10082
PK120	15V/8A	116-10071	—
PK120	24V/5A	116-10072	116-10084

Accessoires	
reduced height front panel: PK30	148-11002
reduced height front panel: PK60	148-10021
reduced height front panel: PK120	148-10019
DIN 41612 - mating connector	17-10115
coding keys :pack10	17-10064

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TECHNICAL DATA

MONO PK30	30W Single output	V1	V1	V1
Output voltage		5V	12V	24V
Adjustment range		4,85–5,5V	12–15V	22–26V
Output nominal current		6A	2,5A	1,5A
Ripple at full load		<40m _{VPP}	<20m _{VPP}	<20m _{VPP}
Line regulation (100% IOU)		<0,2%	<0,02%	<0,02%
Load regulation static (10...90%IOU)		<0,2%	<0,5%	<0,5%
Response time (10...90%IOU)		<1ms	<1ms	<1ms
Output current limit		>6,5A	>2,6A	>1,5A
Short circuit protection		continuously, automatic restart		
Overvoltage protection (OVP)		6-6,7V	—	—
Powerfail signal (at full load >6ms)		—	—	—
Temperature coefficient		0,02%/°C	0,02%/°C	0,02%/°C
Output regulation with sense		0,5V max.	0,5V max.	0,5V max.
Derating		1W/°C ab 55°C	—	1W/°C above 55°C

TECHNICAL DATA

MONO PK60	60W Single output	V1	V1	V1	V1	V1
Output voltage		3,3V	5V	12V	15V	24V
Adjustment range		1,8-3,5V	4,5-5,5V	11-13V	13,5-16,5V	22-26V
Output nominal current		15A	12A	5A	4A	2,5A
Ripple at full load		<40m _{VPP}	<40m _{VPP}	<40m _{VPP}	<40m _{VPP}	<40m _{VPP}
Line regulation (100% IOU)		<0,3%	<0,3%	<0,2%	<0,2%	<0,2%
Load regulation static (10...90%IOU)		<0,2%	<0,2%	<0,2%	<0,2%	<0,2%
Response time (10...90%IOU)		<0,8ms	<0,5ms	<0,5ms	<0,5ms	<1ms
vOutput current limit		>15,5A	>12,5A	>5,3A	>4,3A	>2,7A
Short circuit protection		continuously, automatic restart				
Overvoltage protection (OVP) adjustable		2,8-5,0V	5,5-6,0V	13,2-15V	16,5-18V	26,4-30V
Powerfail signal (at full load >6ms)		—	V1<4,8V	—	—	V1<23V
Temperature coefficient		0,02%/°C	0,02%/°C	0,02%/°C	0,02%/°C	0,02%/°C
Output regulation with sense max.		0,5V max.	0,5V max.	0,5V max.	0,5V max.	0,5V max.
Derating		1,6W/°C ab 45°C - 1,6W/°C above 45°C				

MONO PK60-R FOR N+1 REDUNDANT SYSTEMS

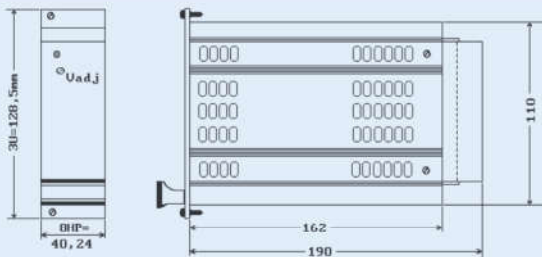
60W Single output redundant	V1	V1	V1	V1
Output voltage (fix)	5V±1%	12V±1%	15V±1%	24V±1%
Output nominal current	12A	5A	4A	2,5A
Ripple at full load	<40m _{VPP}	<40m _{VPP}	<40m _{VPP}	<40m _{VPP}
Output current limit	>12,5A	>5,3A	>4,3A	>2,7A
Short circuit protection		continuously, automatic restart		
Overvoltage protection (OVP)	6,0-6,7V	13,2-15V	16,5-18V	27-29V
DC-FAIL signal		at unit failure (open collector, 20mA, <0,4V)		
Line regulation (100% IOU)	<0,2%	<0,2%	<0,2%	<0,2%
Load regulation static (10...90%IOU)	<0,2%	<0,2%	<0,2%	<0,2%
Response time (10...90%IOU)	<1ms	<1ms	<1ms	<1ms
Temperature coefficient	0,02%/°C	0,02%/°C	0,02%/°C	0,02%/°C
Current share with ASF signal: ±5% @ IOU	>2,4A	>1,0A	>0,8A	>0,5A
Output regulation with sense max.	0,5V max.	0,5V max.	0,5V max.	0,5V max.
Derating		2W/°C ab 55°C - 2W/°C above 55°C		

PK-Series: MONOVOLT AC/DC

TECHNICAL DATA

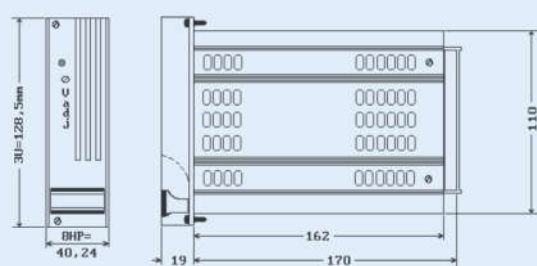
MONO PK120	120W Single output	V1	V1	V1	V1
Output voltage		5V	12V	15V	24V
Adjustment range		4,5-5,5V	10,8-13,2V	13,5-16,5V	21,6-26,4V
Output nominal current		20A	10A	8A	5A
Ripple at full load		<40m _{VPP}	<40m _{VPP}	<40m _{VPP}	<40m _{VPP}
Line regulation (100% IOU)		<0,2%	<0,2%	<0,2%	<0,2%
Load regulation static (10...90% IOU)		<0,2%	<0,2%	<0,2%	<0,2%
Response time (10...90% IOU)		<0,5ms	<0,5ms	<0,5ms	<0,5ms
Output current limit		>22A	>11A	>8,8A	>5,5A
Short circuit protection		continuously, automatic restart			
Overvoltage protection (OVP) adjustable		5,0-7,0V	12-16,5V	15-21V	27-29V
Powerfail signal (at full load >6ms)		>4,8V	>11,5V	>14,4V	>23,0V
Temperature coefficient		0,02%/°C	0,02%/°C	0,02%/°C	0,02%/°C
Output regulation with sense		0,5V max.	0,5V max.	0,5V max.	0,5V max.
Derating		2,4W/°C ab 55°C - 2,4W/°C above 55°C			

PK30, PK60

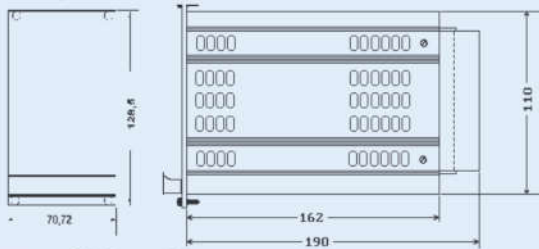


PK30, PK60, PK60R 850g

PK 60-R

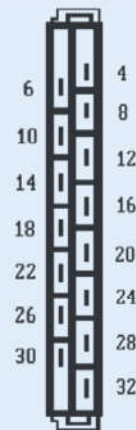


PK120



PK120 1350g

H15 connector



PIN	Function	PK60	PK60-R	PK120
4	+Vout	+Vout	+Vout	+Vout
6	+Vout	+Vout	+Vout	+Vout
8	-Vout	-Vout	-Vout	-Vout
10	-Vout	-Vout	-Vout	-Vout
12*	+SENSE	+SENSE	+SENSE	+SENSE
14*	-SENSE	-SENSE	-SENSE	-SENSE
16*	—	Ext I/O+	—	Ext I/O+
18	—	PF Q	DC FAIL/	PF Q
20	—	—	ASF	—
22	—	PF Q/	—	PF Q/
24	—	Ext I/O-	—	Ext I/O-
26	—	—	—	—
28	N	N	N	N
30	L	L	L	L
32	PE	PE	PE	PE

* Sense lines must be connected. For maximum compensation for supply lead voltage drop they should be connected as close to the load as possible