

PK Series: Monovolt

VDE and UL* approved primary switched mode power supplies with front or rear heat sinks for use in 19" sub racks to DIN41494, single input and 30 to 240 Watt output.

Features

- Compact, rugged design
- Safety to approvals to UL, CUL and EN60950
- CE marked for compliance to EMC and Low Voltage Directives
- SENSE operation
- Overvoltage (OVP) and short circuit protected
- Powerfail signal
- Remote On/Off
- No minimum load required
- Coded H15 connector
- Standardized pinning
- Thermally optimised mechanical design
- **18 MONTH WARRANTY (60 MONTHS - PK60-R)**

Ordering information

Description: PK Series power supplies, 30 - 240 Watt output

Model	Output	Order code	
		Without powerfail	With powerfail
PK30 3Ux8HP	5V/6A	116-010016D*	-
PK30 3Ux8HP	12-15V/2A	116-010215H	-
PK30 3Ux8HP	24V/1,5A	116-010226E	-
PK30FKK 3Ux8HP	5V/6A	116-010111C	-

Description: PK Series power supplies, 60 Watt output

PK60 3Ux8HP	3,3V/15A	116-010196L	-
PK60 3Ux8HP	5V/12A	116-010063D*	116-010074H*
PK60 3Ux8HP	12V/5A	116-010064A*	-
PK60 3Ux8HP	15V/4A	116-010065J*	-
PK60 3Ux8HP	24V/2,5A	116-010066F*	116-010077K*
PK60FKK 3Ux8HP	5V/12A	116-010052L	-
PK60FKK 3Ux8HP	12V/5A	116-010053H	-
PK60FKK 3Ux8HP	15V/4A	116-010054E	-
PK60FKK 3Ux8HP	24V/2,5A	116-010055B	-
PK60-R 3Ux8HP	5V/6A	116-010128L#	-
PK60-R 3Ux8HP	12V/5A	116-010219G#	-
PK60-R 3Ux8HP	15V/4A	116-010220H#	-
PK60-R 3Ux8HP	24V/2,5A	116-010129H#	-

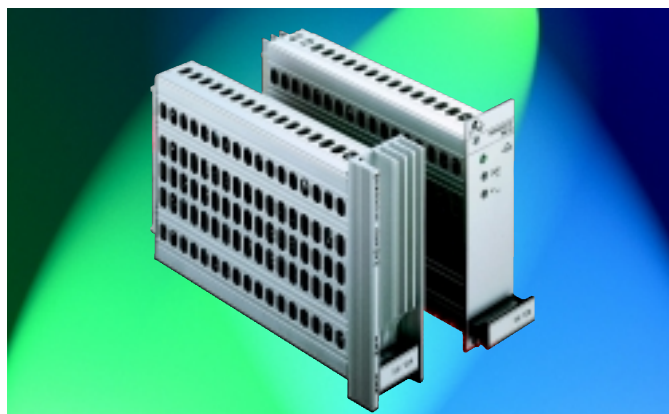
Description: PK Series power supplies, 120 Watt output

PK120 3Ux14HP	5V/20A	116-010069H	116-010081B
PK120 3Ux14HP	12V/10A	116-010070J	116-010082K
PK120 3Ux14HP	15V/8A	116-010071F	-
PK120 3Ux14HP	24V/5A	116-010072C	116-010084D

Description: PK Series power supplies, 240 Watt output

PK240 3Ux24HP	5V/45A	-	116-010163K
PK240 6Ux14HP	5V/45A	-	116-010125J
PK240 3Ux24HP	12V/20A	-	116-010164G
PK240 6Ux14HP	12V/20A	-	116-010126F
PK240 3Ux24HP	24V/10A	-	116-010165D
PK240 6Ux14HP	24V/10A	-	116-010127C
Reduced height front panel: PK30 (not FKK)			148-010012F
Reduced height front panel: PK60 (not FKK or R)			148-010021E
Reduced height front panel: PK120			148-010019G
Mating connector coded H15 to DIN 41612			017-010115K
Coding keys (pkt10)			017-010064F
Mating connector DIN 41612, H15 2HA/L Faston			017-010138K

Note: FKK = Front heat sink



PK Series Monovolt Plug-in Power Supplies

Technical Data PK Series: Monovolt

Input specification

Input voltage AC-DC switchable:	115/230VAC- see Note USA
Input frequency:	47-63Hz
Inrush surge current limitation:	by NTC resistor ≤20A (cold start)
Input overvoltage protection:	by VDR
Hold up time (Nominal V_{in} ; 100% I_{out}):	≥20ms
Efficiency:	typ. ≥80%

Safety (Compliant with Low Voltage Directive 73/23/EEC)

Certified to, or meets the requirement of: EN60950, UL1950

EMC (Compliant with EMC Directive 89/336/EEC)

Emmissions:	EN 55022/B (0,15-30Mhz); EN 55022/B (30-1000Mhz)
Immunity:	EN 50082-2
Electro Static Discharge:	EN 61000-4-2
Electrical fast transients/Burst:	EN 61000-4-4
RF Conducted disturbance:	EN 50141
RF Field susceptibility:	EN 50140

Environmental

Operating temperature:	0°C to +70°C
Storage temperature:	-25°C to +85°C
Relative humidity:	Non-condensing 5% - 95%

Physical

Case material/finish: Clear anodised, ventilated aluminium cassette with cooling cutouts and front or rear heat sinks as applicable.
DIN 41494 part 5 compatible

Note U.S.A.: Units supplied into the American market via VERO Electronics Inc. will have the input voltage set to 115 VAC.

- * EN60950 and UL certified
- # EN60950 and CUL certified

PK Series: Monovolt

Output specification

PK30 and PK30 FKK	V1	V1	V1
Output voltage:	5V	12V	24V
Output adjustment range:	4,8-5,5V	-	22-26V
Output current:	0-6A	0-2,5A	0-1,5A
Ripple:	$\leq 40\text{mV}_{\text{pp}}$	$\leq 20\text{mV}_{\text{pp}}$	$\leq 20\text{mV}_{\text{pp}}$
Line regulation (100% I_{OUT}): ΔV_{OUT}	$\leq 0,2\%$	$\leq 0,02\%$	$\leq 0,02\%$
Load regulation static (10...90% I_{OUT}): ΔV_{OUT}	$\leq 0,2\%$	$\leq 0,5\%$	$\leq 0,5\%$
Transient response (10...90% I_{OUT}):	1ms	10 μs	1ms
Switching frequency, converter type:	20-50kHz flyback converter		
Current limit:	$\geq 6,5\text{A}$	$\geq 2,2\text{A}$	$\geq 1,5\text{A}$
Short circuit protection:	continuous, automatic restart		
Overvoltage protection (OVP):	6-6,7V	-	-
Powerfail Signal (at full load) >6ms before V_{OUT} :	-	-	-
Temperature coefficient/ $^{\circ}\text{C}$:	0,02%		
Voltage compensation with SENSE max. <small>NOTE1</small> :	0,5V		
Derating:	1W/ $^{\circ}\text{C}$ from 55 $^{\circ}\text{C}$ (FKK version: no derating when front heat sink ambient temperature <30 $^{\circ}\text{C}$)		

PK60 and PK60 FKK	V1	V1	V1	V1	V1
Output voltage:	3,3V	5V	12V	15V	24V
Output adjustment range:	1,8-3,5V	4,5-5,5V	11-13V	13,5-16,5V	22-26V
Output current:	0-15A	0-12A	0-5A	0-4A	0-2,5A
Ripple:	$\leq 40\text{mV}_{\text{pp}}$				
Line regulation (100% I_{OUT}): ΔV_{OUT}	$\leq 0,3\%$	$\leq 0,3\%$	$\leq 0,2\%$	$\leq 0,2\%$	$\leq 0,2\%$
Load regulation static (10...90% I_{OUT}): ΔV_{OUT}	$\leq 0,2\%$				
Transient response (10...90% I_{OUT}):	1ms	0,8ms	0,5ms	0,5ms	0,5ms
Switching frequency, converter type:	100kHz forward converter				
Current limit:	$\geq 15,5\text{A}$	$\geq 12,5\text{A}$	$\geq 5,3\text{A}$	$\geq 4,3\text{A}$	$\geq 2,7\text{A}$
Short circuit protection:	continuous, automatic restart				
Overvoltage protection (OVP):	2,8-5,0V	5,5-6,0V	13,2-15,0V	16,5-18,0V	26,4-30,0V
Powerfail Signal (at full load) >6ms before V_{OUT} :	-				
Temperature coefficient/ $^{\circ}\text{C}$:	0,02%				
Voltage compensation with SENSE max. <small>NOTE1</small> :	0,5V				
Derating:	1,6W/ $^{\circ}\text{C}$ from 55 $^{\circ}\text{C}$ (FKK version: no derating when front heat sink ambient temperature <30 $^{\circ}\text{C}$)				

PK60-R	V1	V1	V1	V1
Output voltage (fixed):	5V$\pm 1\%$	12V$\pm 1\%$	15V$\pm 1\%$	24V$\pm 1\%$
Output current:	0-12A	0-5A	0-4A	0-2,5A
Ripple:	$\leq 40\text{mV}_{\text{pp}}$			
Line regulation (100% I_{OUT}): ΔV_{OUT}	$\leq 0,2\%$			
Load regulation static (10...90% I_{OUT}): ΔV_{OUT}	$\leq 0,2\%$			
Transient response (10...90% I_{OUT}):	1ms			
Switching frequency, converter type:	100kHz forward converter			
Current limit:	$\geq 12,5\text{A}$	$\geq 5,3\text{A}$	$\geq 4,3\text{A}$	$\geq 2,7\text{A}$
Short circuit protection:	continuous, automatic restart			
Overvoltage protection (OVP):	6,0-6,7V	13,2-15,0V	16,5-18,0V	27,0-29,0V
Temperature coefficient/ $^{\circ}\text{C}$:	0,02%			
Current sharing at redundant use with ASF signal:	$\geq 2,4\text{A}$	$\geq 1,0\text{A}$	$\geq 0,8\text{A}$	$\geq 0,5\text{A}$
Voltage compensation with SENSE max. <small>NOTE1</small> :	0,5V			
DC-FAIL signal:	Active low when unit fails (NPN-open collector signal; 20mA; <0,4A)			
Derating:	2W/ $^{\circ}\text{C}$ from 55 $^{\circ}\text{C}$ (no derating when front heat sink ambient temperature <30 $^{\circ}\text{C}$)			

PK Series: Monovolt

Output specification

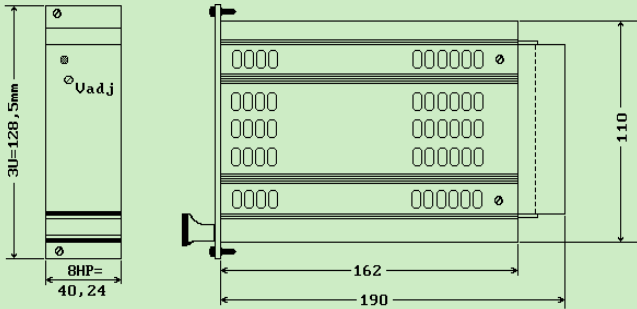
PK120	V1	V1	V1	V1
Output voltage:	5V	12V	15V	24V
Output adjustment range:	4,5-5,5V	10,8-13,2V	13,5-16,5V	21,6-26,4V
Output current:	0-20A	0-10A	0-8A	0-5A
Ripple:				≤40mV _{pp}
Line regulation (100% I _{OUT}): ΔV _{OUT}				≤0,2%
Load regulation static (10...90% I _{OUT}): ΔV _{OUT}				≤0,2%
Transient response (10...90% I _{OUT}):				0,5ms
Switching frequency, converter type:				100kHz forward converter
Current limit:	≥22A	≥11A	≥8,8A	≥5,5A
Short circuit protection:				continuous, automatic restart
Overvoltage protection (OVP):	5,0-7,0V	12,0-16,5V	15,0-21,0V	27,0-29,0V
Powerfail Signal (at full load) >6ms before V _{OUT} :	≤4,8V	≤11,5V	≤14,4V	≤23,0V
Temperature coefficient/°C:				0,02%
Voltage compensation with SENSE max. ^{NOTE1} :				0,5V
Derating:				2,4W/°C from 55°C

PK240	V1	V1	V1
Output voltage:	5V	12V	24V
Output adjustment range:	4,5-5,5V	11-13V	22-26V
Output current:	0-45A	0-20A	0-10A
Ripple:			≤40mV _{pp}
Line regulation (100% I _{OUT}): ΔV _{OUT}	≤0,2%	≤0,35%	≤0,5%
Load regulation static (10...90% I _{OUT}): ΔV _{OUT}			≤0,2%
Transient response (10...90% I _{OUT}):			0,5ms
Switching frequency, converter type:			45kHz push-pull converter
Current limit:	≥46A	≥22A	≥12A
Short circuit protection:			continuous, automatic restart
Overvoltage protection (OVP):	5,5-6,5V	14,0-18,0V	26,4-30,0V
Powerfail Signal (at full load) >6ms before V _{OUT} :	≤4,8V	≤11,5V	≤23V
Temperature coefficient/°C:			0,02%
Voltage compensation with SENSE max. ^{NOTE1} :			0,5V
Derating:			3U: 8W/°C from 55°C, 6U: 4W/°C from 55°C

PK Series: Monovolt

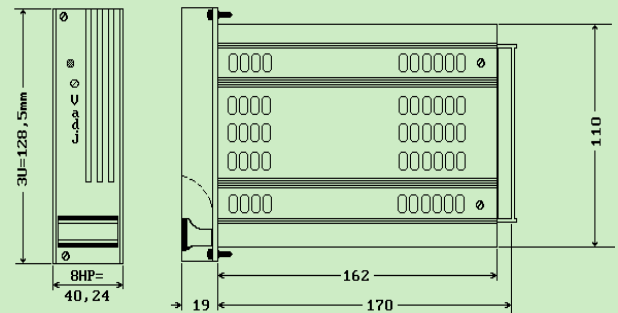
Mechanical details

PK30, PK60



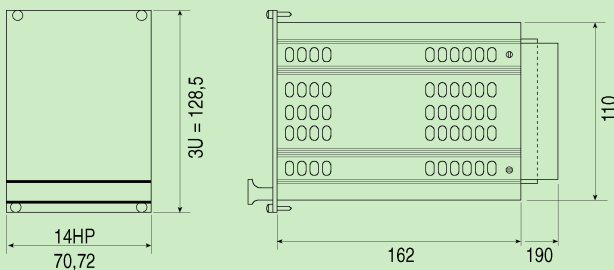
Weight: PK30, PK60 850g

PK60-R, PK30FKK, PK60FKK



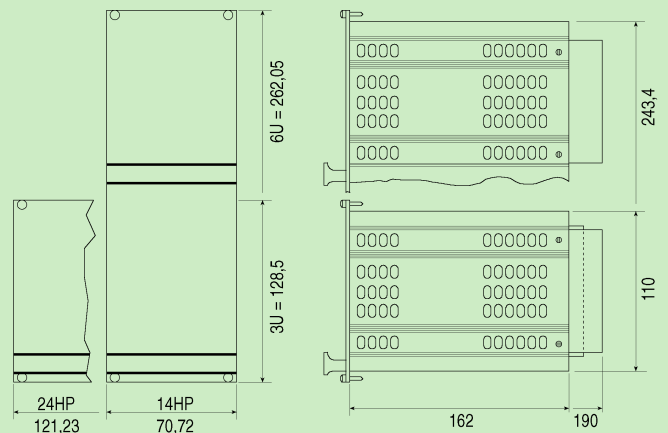
Weight: PK60-R 750g

PK120



Weight: PK120 1350g

PK240



Weight: PK240 2200g

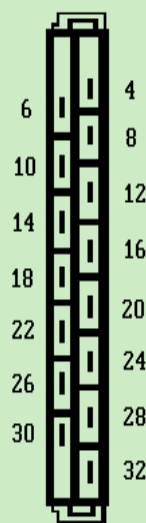
Pin allocation - H15 connector

PIN	Function PK30	Function PK60	Function PK60-R	Function PK120
4	+Vout	+Vout	+Vout	+Vout
6	+Vout	+Vout	+Vout	+Vout
8	-Vout	-Vout	-Vout	-Vout
10	-Vout	-Vout	-Vout	-Vout
12 <small>Note 1</small>	+SENSE	+SENSE	+SENSE	+SENSE
14 <small>Note 1</small>	-SENSE	-SENSE	-SENSE	-SENSE
16	---	Ext I/O+	---	Ext I/O+
18	---	PF ₀	DC FAIL	PF ₀
20	---	---	ASF	---
22	---	PF ₀	---	PF ₀
24	---	Ext I/O-	---	Ext I/O-
26	---	---	---	---
28	N	N	N	N
30	L	L	L	L
32	E	E	E	E

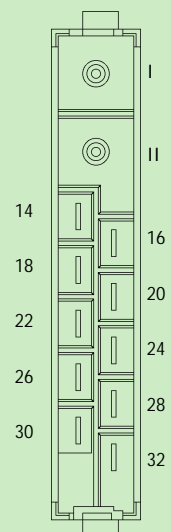
Pin allocation - H15+2HA connector

PIN	Function PK240
I	+Vout
II	-Vout
14 <small>Note 1</small>	+SENSE
16 <small>Note 1</small>	-SENSE
22	Ext on/off
24	PF ₀
28	N
30	L
32	E

H15 Connector



H15+2HA Connector



Note1: Sense lines must be connected. For maximum compensation for supply lead voltage drop they should be connected as close to the load as possible

PK Series: Bivolt

VDE and UL* approved primary switched mode power supplies with front or rear heat sinks for use in 19" subracks to DIN41494, dual input and 30 or 60 Watt output.

Features

- Compact, rugged design
- Safety approvals to UL, CUL and EN60950
- CE marked for compliance to EMC and Low Voltage Directives
- SENSE operation (5V output)
- Overvoltage (OVP) and short circuit protected
- Powerfail signal
- Remote On/Off
- No minimum load required
- Coded H15 connector
- Standardized pinning
- Thermally optimised mechanical design
- **18 MONTH WARRANTY**

Ordering information

Description: Bivolt PK30, PK60; 30 and 60 Watt outputs

Model	Output voltage	Order code
PK30 3U x 8HP	±12 - 15V/1A	116-010015G*
PK30-FKK 3U x 8HP	±12 - 15V/1A	116-010113H
PK60-A 3U x 8HP	±12-15V/2A	116-010022A#
PK60-A 3U x 8HP	5V/6A;12-15V/2A	116-010024F#
PK60-C 3U x 8HP	5V/6A;24V/1,5A	116-010025C#
PK60-D 3U x 8HP	12-15V/2A;24V/1,5A	116-010080E#
Reduced height front panel (PK30 - not FKK)		148-010013C
Reduced height front panel (PK60 - not FKK)		148-010011J
Mating connector coded H15 to DIN 41612		017-010115K
Coding keys (pkt 10)		017-010064F

Note: FKK = Front heat sink



PK Series Bivolt Plug-in Power Supplies

Technical Data PK Series: Bivolt

Input specification

Input voltage AC-DC switchable:	115/230VAC - see Note USA
Input frequency:	47-63Hz
Inrush surge current limitation:	by NTC resistor
Input overvoltage protection:	by VDR
Hold up time (Nominal V_{in} ; 100% I_{out}):	≥20ms
Efficiency:	typ. ≥75%

Safety (Compliant with Low Voltage Directive 73/23/EEC)

Certified to:	EN60950, UL1950
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EMC (Compliant with EMC Directive 89/336/EEC)

Emmissions:	EN 55022/B (0,15-30Mhz); EN 55022/B (30-1000Mhz)
Immunity:	EN 50082-2
Electro Static Discharge:	EN 61000-4-2
Electrical fast transients/Burst:	EN 61000-4-4
RF Conducted disturbance:	EN 50141
RF Field susceptibility:	EN 50140

Environmental

Operating temperature:	0°C to +70°C
Storage temperature:	-25°C to +85°C
Relative humidity:	Non-condensing 5% - 95%

Physical

Case material/finish:	Clear anodised, ventilated aluminium cassette with cooling cutouts and front or rear heat sinks as applicable. DIN 41494 part 5 compatible
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Note U.S.A.: Units supplied into the American market via VERO Electronics Inc. will have the input voltage set to 115 VAC.

* EN60950 and UL certified

EN60950

PK Series: Bivolt

Output specification

PK30 and PK30FKK	V1, V2
Output voltage:	$\pm 12V - 15V$
Output adjustment range:	-
Output current:	$\pm 0-1A$
Ripple:	$\leq 3mV_{PP}$
Line regulation (100% I _{OUT}): ΔV_{OUT}	$\leq 0,02\%$
Load regulation static (10...90% I _{OUT}): ΔV_{OUT}	$\leq 0,5\%$
Transient response (10...90% I _{OUT}):	10 μs
Switching frequency, converter type:	20-50kHz flyback converter
Current limit:	$\geq 2,2A$
Short circuit protection:	continuous, automatic restart
Oversvoltage protection (OVP):	-
Powerfail Signal (at full load) >6ms before V _{OUT} :	-
Temperature coefficient/°C:	0,02%
Voltage compensation with SENSE max. ^{NOTE1} :	0,5V
Derating:	1,3W/°C from 55°C
(FKK version: no derating when front heat sink ambient temperature <30°C)	

PK60	A:V1,V2	B:V1,V2	C:V1,V2	D:V1,V2
Output voltage:	$\pm 12-15V$	5V(4,5-5,5V)/12-15V	5V(4,5-5,5V)/24V(22-26V)	12-15V/24V(22-26V)
Output current:	$\pm 0-2A$	0-6/0-2A	0-6/0-1,5A	0-2/0-1,5A
Ripple:	$\leq 20mV_{PP}$	$\leq 40mV_{PP}$	$\leq 40mV_{PP}$	$\leq 40mV_{PP}$
Line regulation (100% I _{OUT}): ΔV_{OUT}			$\leq 0,2\%$	
Load regulation static (10...90% I _{OUT}): ΔV_{OUT}	$\leq 0,5\%$	$\leq 0,2\%/0,5\%$	$\leq 0,2\%/0,5\%$	$\leq 0,5\%$
Transient response (10...90% I _{OUT}):			1ms	
Switching frequency, converter type:			25-50kHz flyback converter	
Current limit:	$\geq 2,2A$	$\geq 6,5A/\geq 2,2A$	$\geq 6,5A/\geq 1,5A$	$\geq 2,2A/\geq 1,5A$
Short circuit protection:			continuous, automatic restart	
Oversvoltage protection (OVP):			fixed on 5V output, optional to special order on others	
Temperature coefficient/°C:			0,02%	
Voltage compensation with SENSE max. ^{NOTE1} :			0,5V maximum on 5V outputs	
Derating:			1,6W/°C from 55°C	

Mechanical details

PK30, PK60

3U=128,5mm

8HP=40,24

110

162

190

PK30 FKK

3U=128,5mm

8HP=40,24

110

162

170

Weight PK30, PK60: 850 g

Pin allocation - H15 Connector

PIN	Function	PK30	PK60	A	B	C	D
4	---	---	---	+5V	+5V	+5V	+12-15V
6	---	---	---	+5V	+5V	+5V	+12-15V
8	---	---	---	0V	0V	0V	0V
10	---	---	---	0V	0V	0V	0V
12	Note 1	---	---	+SENSE	+SENSE	+SENSE	---
14	Note 1	---	---	-SENSE	-SENSE	-SENSE	---
16	---	---	---	---	---	---	---
18	+12-15V	+12-15V	---	---	---	---	---
20	0V	0V	+12-15V	+24V	+24V	---	---
22	-12-15V	-12-15V	0V	0V	0V	---	---
24	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---
28	N	N	N	N	N	N	N
30	L	L	L	L	L	L	L
32	E	E	E	E	E	E	E

Note 1: Sense lines must be connected. For maximum compensation for supply lead voltage drop they should be connected as close to the load as possible.

PK Series: Trivolt

VDE and UL* approved primary switched mode power supplies with front or rear heat sinks for use in 19" subracks to DIN41494, single input and 60 to 250 Watt output.

Features

- Compact, rugged design
- Safety approvals to UL, CUL and EN60950
- CE marked for compliance to EMC and Low Voltage Directives
- SENSE operation (5V output)
- Overvoltage (OVP) protection (5V output)
- Short circuit protected
- Powerfail signal
- Remote On/Off
- No minimum load required
- Coded H15 connector
- Standardized pinning
- Thermally optimised mechanical design
- **18 MONTH WARRANTY**

Ordering information

Description: Trivolt PK60; 3U x 8HP, 60 Watt output

Model	Output			Order code
	V1	V2	V3	
PK60-A	5V/6A	+12-15V/1A	-12-15V/1A	116-10018J*
PK60-A FKK	5V/6A	+12-15V/1A	-12-15V/1A	116-10124A
PK60-A PF	5V/6A	+12-15V/1A	-12-15V/1A	116-10103A#
PK60-A PF FKK	5V/6A	+12-15V/1A	-12-15V/1A	116-10104J
PK60-B	5V/6A	+12-15V/2A	-12-15V/0,5A	116-10101G*
PK60-B FKK	5V/6A	+12-15V/2A	-12-15V/0,5A	116-10105F
PK60-B PF	5V/6A	+12-15V/2A	-12-15V/0,5A	116-10102D#
PK60-B PF FKK	5V/6A	+12-15V/2A	-12-15V/0,5A	116-10106C

Description: Trivolt PK120; 3U x 14HP, 6U x 8HP 120 Watt output

PK120 3U	V1:5V/12A	V2/V3:+12-15V/2A	116-10046C#
PK120 6U	V1:5V/12A	V2/V3: +12-15V/2A	116-10047L#
PK120 3U PF	V1:5V/12A	V2/V3: +12-15V/2A	116-10103A#
PK120 6U PF	V1:5V/12A	V2/V3: +12-15V/2A	116-10078G#

Description: Trivolt PK125; 6U x 8HP, 125 Watt output

	V1	V2	V3	
PK125	5V/13A	+12V/4A	-12V/1A	116-10182E

Description: Trivolt PK250; 6U x 14HP, 250 Watt output

	V1	V2	V3	
PK250 with VME signal	5V/30A	+12V/6A	-12V/3A	116-10115B#
PK250 without VME signal	5V/30A	+12V/6A	-12V/3A	116-10114E#

Description: Accessories

Reduced height front panel: PK60	148-10010A
Reduced height front panel: PK120, 3U	148-10020H
Mating connector coded H15 to DIN 41612	17-10115K
Mating connector coded H15+2HA faston to DIN 41612	17-10138K
Coding keys (pkt 10)	17-10064F

Note: PF = Powerfail
FKK = Front heat sink



PK Series Trivolt 3U and 6U plug-in power supplies

Technical Data PK Series: Trivolt

Input specification

Input voltage AC-DC switchable:	115/230VAC - see Note USA
Input frequency:	47-63Hz
Inrush surge current limitation:	by NTC resistor
Input overvoltage protection:	by VDR
Hold up time (Nominal V_{in} ; 100% I_{out}):	$\geq 20ms$
Efficiency:	typ. $\geq 75\%$

Safety (Compliant with Low Voltage Directive 73/23/EEC)

Certified to: EN60950, IEC 950, UL1950, VDE 0805 (not PK30 FKK)

EMC (Compliant with EMC Directive 89/336/EEC)

Emmissions:	EN 55022/B (0,15-30Mhz); EN 55022/B (30-1000Mhz)
Immunity:	EN 50082-2
Electro Static Discharge:	EN 61000-4-2
Electrical fast transients/Burst:	EN 61000-4-4
RF Conducted disturbance:	EN 50141
RF Field susceptibility:	EN 50140

Environmental

Operating temperature:	0°C to +70°C
Storage temperature:	-25°C to +85°C
Relative humidity:	Non-condensing 5% - 95%

Physical

Case material/finish: Clear anodised, ventilated aluminium cassette with cooling cutouts and front or rear heat sinks as applicable.
DIN 41494 part 5 compatible

Note U.S.A.: Units supplied into the American market via VERO Electronics Inc. will have the input voltage set to 115 VAC.

* EN60950 and UL certified

EN60950

PK Series: Trivolt

Output specification

PK60 and PK60FKK	V1	Version A: V2, V3	Version B: V2, V3
Output voltage:	5V	±12-15V	±12-15V
Output adjustment range:	4,5-5,5V	-	-
Output current:	0-6A	±0-1A	+2A/-0-0,5A
Ripple:	≤40mV _{pp}	≤3mV _{pp}	≤3mV _{pp}
Line regulation (100% I _{OUT}): ΔV _{OUT}	≤0,2%	≤0,2%	≤0,2%
Load regulation static (10...90% I _{OUT}): ΔV _{OUT}	≤0,2%	≤0,2% (0,75% FKK version)	≤0,5% (0,75% FKK version)
Transient response (10...90% I _{OUT}):	1ms	10μs	10μs
Switching frequency, converter type:		20-50kHz flyback converter	
Current limit:	≥6,5A	≥±1,1A	≥2,1A/0,6A
Short circuit protection:		continuous, automatic restart	
Overvoltage protection (OVP):	6-6,7V	-	-
Powerfail Signal (at full load) >6ms before V _{OUT} :	<4,8V	-	-
Temperature coefficient/°C:		0,02%	
Voltage compensation with SENSE max. _{NOTE1} :	0,5V	-	-
Derating:		1,6W/°C from 55°C	
		(FKK version: no derating when front heat sink ambient temperature <30°C)	

PK120	V1	V2, V3
Output voltage:	5V	±12-15V
Output adjustment range:	4,5-5,5V	-
Output current:	0-12A	0-2A
Ripple:	≤40mV _{pp}	≤20mV _{pp}
Line regulation (100% I _{OUT}): ΔV _{OUT}		≤0,2%
Load regulation static (10...90% I _{OUT}): ΔV _{OUT}		≤0,2%
Transient response (10...90% I _{OUT}):	≤0,2ms	≤0,5ms
Switching frequency, converter type:		25-100kHz flyback/forward converter
Current limit:	≥12,5A	≥2,2A
Short circuit protection:		continuous, automatic restart
Overvoltage protection (OVP):	5,5-6,0V	-
Powerfail Signal (at full load) >6ms before V _{OUT} :	<4,8V	-
Temperature coefficient/°C:		0,02%
Voltage compensation with SENSE max. _{NOTE1} :	0,5V	-
Derating:		4W/°C from 55°C

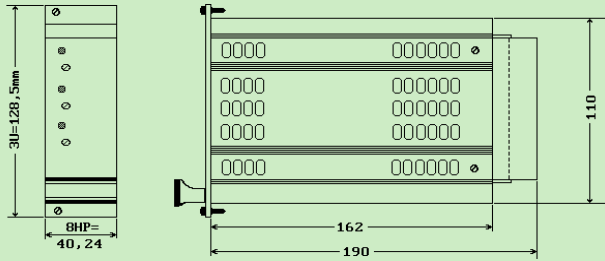
PK125	V1	V2	V3
Output voltage:	5V	12V	-12V
Output adjustment range:	4,5-5,5V	10,8-13,2V	-10,8-13,2V
Output current:	0-13A	0-4A	0-1A
Ripple:		≤40mV _{pp}	
Line regulation (100% I _{OUT}): ΔV _{OUT}	≤0,3%	≤0,2%	≤0,2%
Load regulation static (10...90% I _{OUT}): ΔV _{OUT}		≤0,2%	
Transient response (10...90% I _{OUT}):	1ms	1ms	1ms
Switching frequency, converter type:		50kHz forward converter	
Current limit:	≥14A	≥5A	≥1A
Short circuit protection:		continuous, automatic restart	
Overvoltage protection (OVP):	6,0-6,7V fixed	-	-
Powerfail Signal (at full load) >6ms before V _{OUT} :	ACFAIL and SYSRESET in accordance with VME spec. rev D		
Temperature coefficient/°C:		0,05%	
Voltage compensation with SENSE max. _{NOTE1} :	0,5V	-	-
Derating:		3W/°C from 55°C	

PK250	V1	V2	V3
Output voltage:	5V	12V	-12V
Output adjustment range:	4,5-5,5V	10,8-13,2V	-10,8-13,2V
Output current:	0-30A	0-6A	0-3A
Ripple:		≤40mV _{pp}	
Line regulation (100% I _{OUT}): ΔV _{OUT}		≤0,2%	
Load regulation static (10...90% I _{OUT}): ΔV _{OUT}	≤0,2%	≤1%	≤1%
Transient response (10...90% I _{OUT}):	1ms	2ms	2ms
Switching frequency, converter type:		50kHz halfbridge push-pull converter	
Current limit:	≥31A	≥6,5A	≥3,5A
Short circuit protection:		continuous, automatic restart	
Overvoltage protection (OVP):	5,5-7,0V adjustable	-	-
Powerfail Signal (at full load) >6ms before V _{OUT} :	ACFAIL and SYSRESET in accordance with VME spec. rev D		
Temperature coefficient/°C:		0,05%	
Voltage compensation with SENSE max. _{NOTE1} :	0,5V	-	-
Derating:		6W/°C from 55°C	

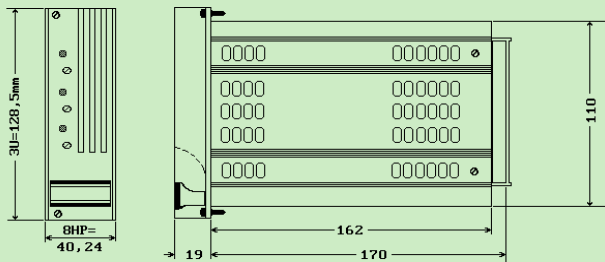
PK Series: Trivolt

Mechanical details

PK60

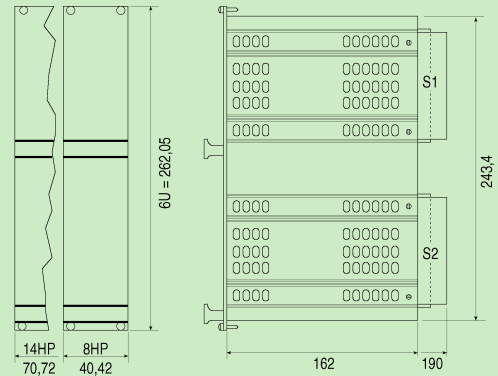


PK60 FKK



Weight: PK60: 850g

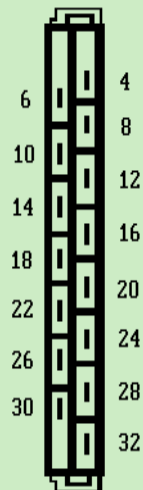
PK120, PK125, PK250



Weight: PK120, PK125: 1350g
Weight: PK250: 2500g

Pin allocation - H15 connector

PIN	Function	PK60	PK120
4	+5V		+5V
6	+5V		+5V
8	-Vout		-Vout
10	-Vout		-Vout
12	+SENSE		+SENSE
14	-SENSE		-SENSE
16	PF α		PF α
18	+12-15V		+12-15V
20	0V		0V
22	-12-15V		-12-15V
24	—		—
26	—		—
28	N		N
30	L		L
32	E		E



Pin allocation - H15+2HA connector

PIN	Function S2	PIN	Function S1 (DIN41612 - C96)
I	+5V	B3	ACFAIL
II	0V	C12	SYSRESET
14	+SENSE	C9	0V
16	-SENSE		
18	+12V		
20	0V ($\pm 12V$)		
22	-12V		
28	N		
30	L		
32	E		

