

Power Supplies

EAK-G, EAK-HG Series

AC Input

Single Output, General-Purpose

FEATURES

- Operation indicator LED.
- Low cost.
- Compact(height 95mm).
- These low noise power supplies are FCC class B compliant.

PART NUMBERS AND RATINGS

EAK-G(AC.100V INPUT, UL RECOGNIZED)

Output voltage(V)	15W type		30W type		50W type		100W type		150W type	
	Current(A)	Part No.	Current(A)	Part No.	Current(A)	Part No.	Current(A)	Part No.	Current(A)	Part No.
5	3	EAK05-3R0G	6	EAK05-6R0G	10	EAK05-10RG	20	EAK05-20RG	30	EAK05-30RG
12	1.3	EAK12-1R3G	2.5	EAK12-2R5G	4.2	EAK12-4R2G	8.4	EAK12-8R3G	12.5	EAK12-12RG
15	1	EAK15-1R0G	2	EAK15-2R0G	3.4	EAK15-3R4G	6.7	EAK15-6R6G	10	EAK15-10RG
24	0.7	EAK24-0R7G	1.3	EAK24-1R3G	2.1	EAK24-2R1G	4.2	EAK24-4R2G	6.3	EAK24-6R0G

EAK-HG(AC.200V INPUT)

Output voltage(V)	15W type		30W type		50W type	
	Current(A)	Part No.	Current(A)	Part No.	Current(A)	Part No.
5	3	EAK05-3R0HG	6	EAK05-6R0HG	10	EAK05-10RHG
12	1.3	EAK12-1R3HG	2.5	EAK12-2R5HG	4.2	EAK12-4R2HG
15	1	EAK15-1R0HG	2	EAK15-2R0HG	3.4	EAK15-3R4HG
24	0.7	EAK24-0R7HG	1.3	EAK24-1R3HG	2.1	EAK24-2R1HG



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SPECIFICATIONS

15W TYPE

Part No.	AC.100V input		EAK05-3R0G	EAK12-1R3G	EAK15-1R0G	EAK24-0R7G
	AC.200V input		EAK05-3R0HG	EAK12-1R3HG	EAK15-1R0HG	EAK24-0R7HG
Output voltage, current*			5V • 3A	12V • 1.3A	15V • 1A	24V • 0.7A
Maximum output power		W	15	15.6	15	16.8
Input requirements						
Input voltage		EAK-G	V	85 to 132[Rating:100-115](DC.110 to 175V available)		
Eac	EAK-HG		V	170 to 264[Rating:200-230](DC.220 to 350V available)		
Input frequency		Hz	47 to 66[Rating:50-60](Single phase)			
Input current	EAK-G		A	0.6/0.5/0.4max.[85/100/115V]		
	EAK-HG		A	0.5/0.35/0.3max.[170/200/230V]		
Fuse rating	EAK-G		A	2[Internal]		
	EAK-HG		A	1[Internal]		
Surge current	EAK-G		A	8 to 9max.[100-115V]		
	EAK-HG		A	18 to 20max.[200-230V]		
Leakage current	EAK-G		mA	0.5max.[100/115V]		
	EAK-HG		mA	1max.[200/230V]		
Efficiency		%	71typ.	80typ.	80typ.	80typ.
			70typ.	78typ.	79typ.	81typ.
Output characteristics						
Output voltage		V	5	12	15	24
Voltage variable range		V	4.5 to 5.5	10.8 to 13.2	13.5 to 16.5	21.6 to 26.4
Maximum output current*		A	3	1.3	1	0.7
Overvoltage threshold		V	6 to 6.9	13.7 to 15.7	17 to 19	27 to 30.5
Overcurrent threshold		A	3.3 to 4.9	1.4 to 2.2	1.1 to 1.6	0.8 to 1.2
Voltage stability	Input variation		%	±1max.(±0.3typ.)[Within the input voltage range]		
	Load variation		%	±1.5max.(±0.6typ.)[10 to 100% load]		
	Temperature variation		%	±1max.(±0.3typ.)[−10 to +60°C]		
	Drift		%	1max.[25°C, input and output ratings, after input voltage ON for 30min to 8h]		
	Dynamic load		%/ms	±4max./1max.[50 to 100% sudden load change]		
Ripple Ep-p		mV	50max.(30typ.)	80max.(40typ.)	80max.(40typ.)	100max.(50typ.)
Ripple noise Ep-p		mV	120max.	190max.	220max.	310max.
Start up time		ms	100max.			
Hold up time		ms	20min.[0 to +60°C], 17min.[−10 to 0°C]			
Accessory equipment						
Operation indicator			LED(red) lights when voltage output is ON.			
Overvoltage protection			Voltage shielding type, recovers upon reset(interval approx. 30s).			
Overcurrent protection			Fixed current threshold type, automatic recovery.			
Remote ON-OFF			None			
Remote sensing			None			
Output voltage external variable function			None			
Standards						
Safety standards		EAK-G	UL1950 recognized.			
		EAK-HG	None			
Noise terminal voltage			FCC class B compliant.			
Construction						
External dimensions H×W×L		mm	95×35×90			
Weight		g	380max.			
Mounting method			Can be attached to 2 sides.			
Case material			Cover:Galvanized steel/mounting plate sold separately:L-shaped, zinc dichromate plated steel			

* Current rating(maximum output current) is determined for -10 to +40°C. Derating is required when used outside this temperature range.

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30W TYPE

Part No.	AC.100V input		EAK05-6R0G	EAK12-2R5G	EAK15-2R0G	EAK24-1R3G
	AC.200V input		EAK05-6R0HG	EAK12-2R5HG	EAK15-2R0HG	EAK24-1R3HG
Output voltage, current*			5V • 6A	12V • 2.5A	15V • 2A	24V • 1.3A
Maximum output power		W	30	30	30	31.2
Input requirements						
Input voltage		EAK-G	V	85 to 132[Rating:100-115](DC.110 to 175V available)		
Eac	EAK-HG		V	170 to 264[Rating:200-230](DC.220 to 350V available)		
Input frequency		Hz	47 to 66[Rating:50-60](Single phase)			
Input current	EAK-G		A	1/0.9/0.8max.[85/100/115V]		
	EAK-HG		A	0.6/0.5/0.45max.[170/200/230V]		
Fuse rating	EAK-G		A	2.5[Internal]		
	EAK-HG		A	1.6[Internal]		
Surge current	EAK-G		A	17 to 20max.[100-115V]		
	EAK-HG		A	35 to 40max.[200-230V]		
Leakage current	EAK-G		mA	0.5max.[100/115V]		
	EAK-HG		mA	1max.[200/230V]		
Efficiency		%	77typ.	81typ.	81typ.	84typ.
			76typ.	81typ.	81typ.	84typ.
Output characteristics						
Output voltage		V	5	12	15	24
Voltage variable range		V	4 to 5.5	10.8 to 13.2	13.5 to 16.5	21.6 to 26.4
Maximum output current*		A	6	1.3	1	0.7
Overvoltage threshold		V	6 to 6.9	13.7 to 15.7	17 to 19	27 to 30.5
Overcurrent threshold		A	6.5 to 8.5	2.7 to 4	2.2 to 3.3	1.4 to 2.1
Voltage stability	Input variation		%	±1max.(±0.3typ.)(Within the input voltage range]		
	Load variation		%	±1.5max.(±0.6typ.)(10 to 100% load]		
	Temperature variation		%	±1max.(±0.3typ.)(-10 to +60°C]		
	Drift		%	1max.[25°C, input and output ratings, after input voltage ON for 30min to 8h]		
	Dynamic load		%/ms	±4max./1max.[50 to 100% sudden load change]		
Ripple Ep-p		mV	50max.(30typ.)	80max.(40typ.)	80max.(40typ.)	100max.(50typ.)
Ripple noise Ep-p		mV	120max.	190max.	220max.	310max.
Start up time		ms	100max.			
Hold up time		ms	20min.[0 to +60°C], 17min.[-10 to 0°C]			
Accessory equipment						
Operation indicator			LED(red) lights when voltage output is ON.			
Overvoltage protection			Voltage shielding type, recovers upon reset(interval approx. 30s).			
Overcurrent protection			Fixed current and voltage threshold type, automatic recovery.			
Remote ON-OFF			None			
Remote sensing			None			
Output voltage external variable function			None			
Standards						
Safety standards		EAK-G	UL1950 recognized.			
		EAK-HG	None			
Noise terminal voltage			FCC class B compliant.			
Construction						
External dimensions H×W×L		mm	95×35×115			
Weight		g	380max.			
Mounting method			Can be attached to 2 sides.			
Case material			Cover:Galvanized steel/mounting plate sold separately:L-shaped, zinc dichromate plated steel			

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SPECIFICATIONS

50W TYPE

Part No.	AC.100V input		EAK05-10R0G	EAK12-4R2G	EAK15-3R4G	EAK24-2R1G
	AC.200V input		EAK05-10RHG	EAK12-4R2HG	EAK15-3R4HG	EAK24-2R1HG
Output voltage, current*			5V • 10A	12V • 4.2A	15V • 3.4A	24V • 2.1A
Maximum output power		W	50	50.4	51	50.4
Input requirements						
Input voltage		EAK-G	V	85 to 132[Rating:100-115](DC.110 to 175V available)		
Eac		EAK-HG	V	170 to 264[Rating:200-230](DC.220 to 350V available)		
Input frequency		Hz	47 to 66[Rating:50-60](Single phase)			
Input current	EAK-G	A	1.4/1.2/1.1max.[85/100/115V]			
	EAK-HG	A	0.75/0.65/0.6max.[170/200/230V]			
Fuse rating	EAK-G	A	3.15[Internal]			
	EAK-HG	A	2[Internal]			
Surge current	EAK-G	A	36 to 41max.[100-115V]			
	EAK-HG	A	36 to 41max.[200-230V] 25°C, cold start			
Leakage current	EAK-G	mA	0.5max.[100/115V]			
	EAK-HG	mA	1max.[200/230V]			
Efficiency	%		80typ.	83typ.	84typ.	85typ.
			79typ.	83typ.	84typ.	85typ.
Output characteristics						
Output voltage		V	5	12	15	24
Voltage variable range		V	4.5 to 5.5	10.8 to 13.2	13.5 to 16.5	21.6 to 26.4
Maximum output current*		A	6	1.3	1	0.7
Overvoltage threshold		V	6 to 6.9	13.7 to 15.7	17 to 19	27 to 30.5
Overcurrent threshold		A	11 to 13.5	4.6 to 5.7	3.7 to 4.6	2.3 to 2.9
Voltage stability	Input variation	%	±1max.(±0.3typ.)[Within the input voltage range]			
	Load variation	%	±1.5max.(±0.6typ.)[10 to 100% load]			
	Temperature variation	%	±1max.(±0.3typ.)[-10 to +60°C]			
	Drift	%	0.5max.[25°C, input and output ratings, after input voltage ON for 30min to 8h]			
	Dynamic load	%/ms	±4max./1max.[50 to 100% sudden load change]			
Ripple Ep-p		mV	50max.(30typ.)	80max.(40typ.)	80max.(40typ.)	100max.(50typ.)
Ripple noise Ep-p		mV	120max.	190max.	220max.	310max.
Start up time		ms	150max.			
Hold up time		ms	20min.[0 to +60°C], 17min.[-10 to 0°C]			
Accessory equipment						
Operation indicator			LED(red) illuminates when voltage output is ON.			
Overvoltage protection			Voltage shielding type, recovers upon reset(interval approx. 60s).			
Overcurrent protection			Fixed current and voltage threshold type, automatic recovery.			
Remote ON-OFF			None			
Remote sensing			None			
Output voltage external variable function			None			
Standards						
Safety standards		EAK-G	UL1950 recognized.			
		EAK-HG	None			
Noise terminal voltage			FCC class B compliant.			
Construction						
External dimensions H×W×L		mm	95×37×150			
Weight		g	510max.			
Mounting method			Can be attached to 2 sides.			
Case material			Cover:Galvanized steel/mounting plate sold separately:L-shaped, zinc dichromate plated steel			

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100W TYPE

Part No.		EAK05-20RG	EAK12-8R3G	EAK15-6R6G	EAK24-4R2G
Output voltage, current*		5V • 20A	12V • 8.4A	15V • 6.7A	24V • 4.2A
Maximum output power	W	100	100.8	100.5	100.8
Input requirements					
Input voltage Eac	V	85 to 132[Rating:100-115](DC.110 to 175V available)			
Input frequency	Hz	47 to 66[Rating:50-60](Single phase)			
Input current	A	2.9/2.5/2.2max.[85/100/115V]			
Fuse rating	A	4[Internal]			
Surge current	A	15 to 17max.[100 to 115V, 1st surge current, reset after roughly 30s min.]			
Leakage current	mA	0.5max.[100/115V]			
Efficiency	%	78typ.	80typ.	81typ.	82typ.
Output characteristics					
Output voltage	V	5	12	15	24
Voltage variable range	V	4.5 to 5.5	10.8 to 13.2	13.5 to 16.5	21.6 to 26.4
Maximum output current*	A	20	8.4	6.7	4.2
Overvoltage threshold	V	6 to 6.9	13.7 to 15.7	17 to 19	27 to 30.5
Overcurrent threshold	A	22 to 27	9.2 to 11.3	7.4 to 9.1	4.6 to 5.7
Voltage stability	Input variation	%	±1max.(±0.3typ.)[Within the input voltage range]		
	Load variation	%	±1.5max.(±0.6typ.)[10 to 100% load]		
	Temperature variation	%	±1max.(±0.3typ.)[-10 to +60°C]		
	Drift	%	0.5max.[25°C, input and output ratings, after input voltage ON for 30min to 8h]		
	Dynamic load	%/ms	±4max./1max.[50 to 100% sudden load change]		
Ripple Ep-p	mV	50max.(30typ.)	80max.(40typ.)	80max.(40typ.)	100max.(50typ.)
Ripple noise Ep-p	mV	120max.	190max.	220max.	310max.
Start up time	ms	150max.			
Hold up time	ms	20min.[0 to +60°C], 17min.[-10 to 0°C]			
Accessory equipment					
Operation indicator		LED(red) illuminates when voltage output is ON.			
Overvoltage protection		Voltage shielding type, recovers upon reset(interval approx. 60s).			
Overcurrent protection		Fixed current and voltage threshold type, automatic recovery.			
Remote ON-OFF		None			
Remote sensing		None			
Output voltage external variable function		None			
Standards					
Safety standards		UL1950 recognized.			
Noise terminal voltage		FCC class B compliant.			
Construction					
External dimensions H×W×L	mm	95×55×180			
Weight	g	900max.			
Mounting method		Can be attached to 2 sides.			
Case material of construction		Cover:Galvanized steel/mounting plate sold separately:L-shaped, zinc dichromate plated steel			

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AC Input

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SPECIFICATIONS

150W TYPE

Part No.		EAK05-30RG	EAK12-12RG	EAK15-10RG	EAK24-6R0G
Output voltage, current*		5V • 30A	12V • 12.5A	15V • 10A	24V • 6.3A
Maximum output power	W	150	150	150	151.2
Input requirements					
Input voltage Eac	V	85 to 132[Rating:100-115](DC.110 to 175V available)			
Input frequency	Hz	47 to 66[Rating:50-60](Single phase)			
Input current	A	4/3.3/2.9max.[85/100/115V]			
Fuse rating	A	6.3[Internal]			
Surge curren	A	15 to 17max.[100 to 115V, 1st surge current, reset after roughly 30s min.]			
Leakage current	mA	0.5max.[100/115V]			
Efficiency	%	78typ.	80typ.	81typ.	82typ.
Output characteristics					
Output voltage	V	5	12	15	24
Voltage variable range	V	4.5 to 5.5	10.8 to 13.2	13.5 to 16.5	21.6 to 26.4
Maximum output current*	A	30	12.5	10	6.3
Overvoltage threshold	V	6 to 6.9	13.7 to 15.7	17 to 19	27 to 30.5
Overcurrent threshold	A	33 to 40.5	13.7 to 16.8	11 to 13.5	6.9 to 8.5
Voltage stability	Input variation	±1max.(±0.3typ.)[Within the input voltage range]			Total variation ±3max.(±1typ.)
	Load variation	±1.5max.(±0.6typ.)[10 to 100% load]			
	Temperature variation	±1max.(±0.3typ.)[−10 to +60°C]			
	Drift	0.5max.[25°C, input and output ratings, after input voltage ON for 30min to 8h]			
	Dynamic load	±4max./1max.[50 to 100% sudden load change]			
Ripple Ep-p	mV	50max.(30typ.)	80max.(40typ.)	80max.(40typ.)	100max.(50typ.)
Ripple noise Ep-p	mV	120max.	190max.	220max.	310max.
Start up time	ms	150max.			
Hold up time	ms	20min.[0 to +60°C], 17min.[−10 to 0°C]			
Accessory equipment					
Operation indicator		LED(red) illuminates when voltage output is ON.			
Overvoltage protection		Voltage shielding type, recovers upon reset(interval approx. 70s).			
Overcurrent protection		Fixed current threshold type, automatic recovery.			
Open phase detector		Output voltage shielding type			
Remote ON-OFF		None			
Remote sensing		None			
Output voltage external variable function		None			
Standards					
Safety standards		UL1950 recognized.			
Noise terminal voltage		FCC class B compliant.			
Construction					
External dimensions	mm	95×65×220			
H×W×L					
Weight	kg	1.5max.			
Mounting method		Can be attached to 2 sides.			
Case material		Cover:Galvanized steel/mounting plate sold separately:L-shaped, zinc dichromate plated steel			

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Power Supplies

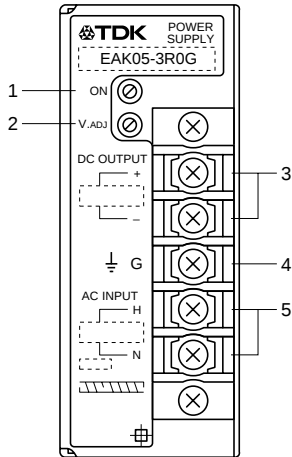
EAK-G, EAK-HG Series

AC Input

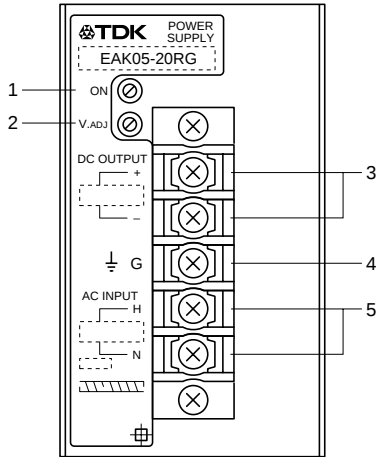
Single Output, General-Purpose

TERMINAL DESIGNATIONS AND FUNCTIONS

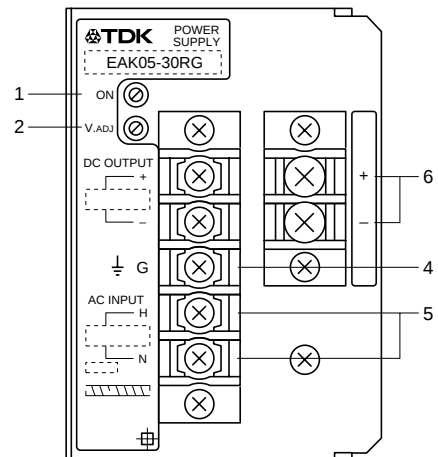
15W TYPE(30W, 50W)



100W TYPE



150W TYPE



Terminal No. 1: Operation indicator LED(ON)

Terminal No. 2: Output voltage adjustment trim(V.Adj)

Terminal No. 3: DC output terminals(DC OUTPUT +, -)

Terminal No. 4: Frame ground terminal(G)

Terminal No. 5: AC input terminals(H, N, AC INPUT)

Terminal No. 6: DC output terminals(DC OUTPUT +, -) 150W type

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微波光电部专业代理经销高频、微波、光纤、光电元器件、组件、部件、模块、整机；电磁兼容元器件、材料、设备；微波 CAD、EDA 软件、开发测试仿真工具；微波、光纤仪器仪表。欢迎国外高科技微波、光纤厂商将优秀产品介绍到中国、共同开拓市场。长期大量现货专业批发高频、微波、卫星、光纤、电视、CATV 器件：晶振、VCO、连接器、PIN 开关、变容二极管、开关二极管、低噪晶体管、功率电阻及电容、放大器、功率管、MMIC、混频器、耦合器、功分器、振荡器、合成器、衰减器、滤波器、隔离器、环行器、移相器、调制解调器；光电子元件和组件：红外发射管、红外接收管、光电开关、光敏管、发光二极管和发光二极管组件、半导体激光二极管和激光器组件、光电探测器和光接收组件、光发射接收模块、光纤激光器和光放大器、光调制器、光开关、DWDM 用光发射和接收器件、用户接入系统光收发器件与模块、光纤连接器、光纤跳线/尾纤、光衰减器、光纤适配器、光隔离器、光耦合器、光环行器、光复用器/转换器；无线收发芯片和模组、蓝牙芯片和模组。

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