

AC Input Conformity to RoHS Directive

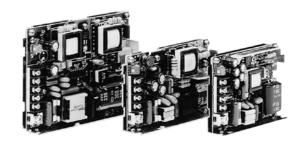
Single Output, General-Purpose, UL/C-UL Approved

F Series FAK(25 to 150W)

The F series FAK is a device-embedded type power supply that has realized a thin type having a thickness of 25 to 40mm. This series of products satisfy various requirements such as low price, safety standards, and EMI countermeasures as well as the thin and compact configuration.

FEATURES

- AC.100V input thin-type single output power supply.
- Compact open frame type (A cover is available as option).
- · Low price.
- · LED indicator display function.
- Low noise (FCC class B compliant).
- Remote sensing function (100W, 150W).
- It is a product conforming to RoHS directive.



PART NUMBERS AND RATINGS

Output	25W Type		50W Type		100W Type		150W Type	
voltage(V)	Current(A)	Part No.						
5	5	FAK05-5R0	10	FAK05-10R	20	FAK05-20R	30	FAK05-30R
12	2.1	FAK12-2R1	4.2	FAK12-4R2	8.3	FAK12-8R3	12	FAK12-12R
15	1.7	FAK15-1R7	3.4	FAK15-3R4	6.6	FAK15-6R6	10	FAK15-10R
24	1.1	FAK24-1R1	2.1	FAK24-2R1	4.2	FAK24-4R2	6	FAK24-6R0
48					2	FAK48-2R0	3	FAK48-3R0

[•] Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.



FAK25W Type

Part No.			FAK05-5R0*4	FAK12-2R1	FAK15-1R7	FAK24-1R1		
Rated output voltage and current*1			5V • 5A	12V • 2.1A	15V • 1.7A	24V • 1.1A		
Maximum output power W			25	25.2	25.5	26.4		
Input cor	nditions		1					
Input vol	tage	V	Eac: 85 to 132V[Rating	: 100 to 120] /Edc: 110 to	175V			
Input free	quency	Hz	47 to 66[Rating: 50 to 6	0](Single phase)				
Input cur	rent	Α	0.65max.[AC.100/120V]					
Fuse rati	ng	Α	2.5[Built-in]					
Surge cu	ırrent*2	Α	36 to 43max.[AC.100 to	120V, 25°C, cold start]				
Leakage	current	mA	0.5max.[Input and outpo	ut ratings]				
Efficienc	у	%	70typ.[Input and output	ratings]				
Output c	haracteristics							
Output v	oltage Edc	V	5	12	15	24		
Voltage v	ariable range Edc	V	4.5 to 5.5	10.8 to 13.2	13.5 to 16.5	21.6 to 26.4		
Maximur	n output current	Α	5	2.1	1.7	1		
Overvoltage threshold Edc V			6 to 6.9	13.7 to 15.7	17 to 19	27 to 30.5		
Overcurrent threshold A			5.5 to 7.5	2.3 to 3.3	1.9 to 2.8	1.2 to 1.8		
Source effect %			±1max.(±0.3typ.)[Within	the input voltage range]				
Load effect %			±1.5max.(±0.6typ.)[10 to 100% load] Total effect ±3max.(±1typ.)					
Voltage	Temperature effect	%	±1.5max.(±0.3typ.)[Ambient temperature: 0 to +60°C]					
stability Drift(Time effect)		%	0.5max.[25°C, input and output ratings, after input voltage ON for 30min to 8h]					
	Recovery	%/ms	±4max./1max.[50 to 100% sudden load change]					
Ripple Ep-p mV			80max.	80max.	80max.	100max.		
Ripple no	oise Ep-p	mV	120max.	190max.	220max.	310max.		
Start up	time	ms	100max.					
Hold up 1	time	ms	20min.					
Auxiliary	functions							
Indicator	display		LED(Green) indicates w	vhen voltage output is ON	١.			
Overvolta	age protection		Voltage shut-down type, recovers upon reset, set value fixed(interval approx. 40s).					
	ent protection		Fixed threshold, higher overcurrent detection point at low load, automatic recovery.					
Remote	ON-OFF		No					
Remote	sensing		No					
Current b	palance		No					
Standard	ls		•					
Safety st	andards		UL1950, CSA C22.2 No.950-95(C-UL) approved.					
Noise ter	rminal voltage		FCC class B meet.					
Construc	ctions							
External	dimensions	mm	25×70×115[H×W×L] /	With cover(Option)*3: 28.	.5×70×115[H×W×L]			
Weight		g	220max.					
Mounting	g method		Can be attached to 2 si	des.				
Case ma	ıterial		Frame: Aluminum / Cov	er(Option: 2JC0ZB146-F	AK25CA): Iron			
*1 0	at matinar/manyimarina aritar	ıt ourront	\ in alatawasia ad fau O ta . [TOOC Devetion is require	d when used outside this ten			

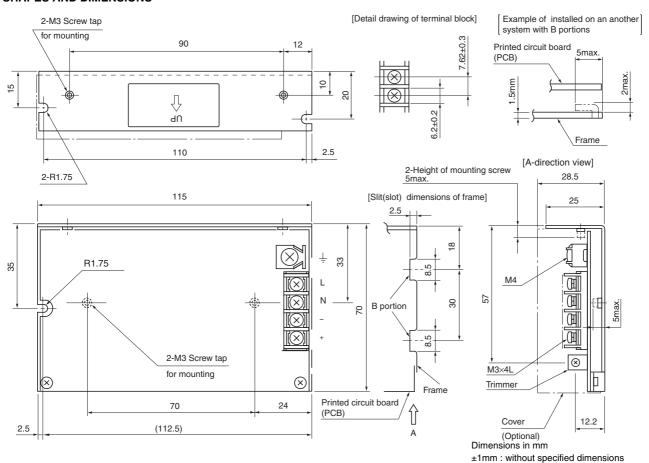
^{*1} Current rating(maximum output current) is determined for 0 to +50°C. Derating is required when used outside this temperature range.

^{*2} The surge current suppression element is a power thermistor.

^{*3} Derating is required when the optional cover is attached.
*4 Output may fail to come on when operated in series.

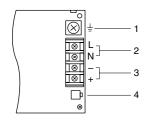
FAK25W Type

SHAPES AND DIMENSIONS



• Do not insert M3 tap installation screws more than 5mm from the surface of power supply.

TERMINAL DESIGNATIONS AND FUNCTIONS





Terminal No.	Designations and functions	
1	Frame ground terminal(G)	Connect to earth ground. This is connected to the case.
2	AC input terminals(L, N)	Connect to AC.100 to 120V single phase input line.
3	DC output terminals(+, -)	Connect to load. Connected to a load line.
4	Output voltage adjustment trim(V.ADJ)	Adjusts output voltage. The output voltage increases by rotating it clockwise.

[•] All specifications are subject to change without notice.



FAK50W Type

Part No.			FAK05-10R	FAK12-4R2	FAK15-3R4	FAK24-2R1			
Rated output voltage and current*1			5V • 10A	12V • 4.2A	15V • 3.4A	24V • 2.1A			
Maximum output power W			50	50.4	51	50.4			
Input con	ditions			•					
Input volt	age	V	Eac: 85 to 132V[Ra	ting: 100 to 120] /Edc: 110 to	175V				
Input fred	quency	Hz	47 to 66[Rating: 50	to 60](Single phase)					
Input cur	rent	Α	1.2max.[AC.100/12	1.2max.[AC.100/120V]					
Fuse ration	ng	Α	3.15[Built-in]						
Surge cu		Α	36 to 43max.[AC.10	00 to 120V, 25°C, cold start]					
Leakage	current	mA	0.5max.[Input and o	output ratings]					
Efficiency	/	%	80typ.[Input and ou	tput ratings]					
Output ch	naracteristics								
Output vo	oltage Edc	V	5	12	15	24			
Voltage v	ariable range Edc	V	4.5 to 5.5	10.8 to 13.2	13.5 to 16.5	21.6 to 26.4			
	n output current	Α	10	4.2	3.4	2.1			
Overvoltage threshold Edc V			6 to 6.9	13.7 to 15.7	17 to 19	27 to 30.5			
Overcurre	ent threshold	Α	10.5 to 12	4.4 to 5.1	3.6 to 4.1	2.2 to 2.6			
Source effect %			±1max.(±0.3typ.)[W	±1max.(±0.3typ.)[Within the input voltage range]					
Voltage Load effect		%	±1.5max.(±0.6typ.)[10 to 100% load] Total effect ±3max.(±1typ.)						
stability [Temperature effect	%	±1max.(±0.3typ.)[A	mbient temperature: 0 to +60	°C]				
	Drift(Time effect)	%	0.5max.[25°C, input and output ratings, after input voltage ON for 30min to 8h]						
Recovery %/ms			±4max./1max.[50 to	100% sudden load change]					
Ripple Ep-p mV			60max.	80max.	80max.	100max.			
Ripple no	oise Ep-p	mV	120max.	190max.	220max.	310max.			
Start up t	ime	ms	100max.						
Hold up t	ime	ms	20min.						
Auxiliary	functions								
Indicator				es when voltage output is ON					
Overvolta	age protection		Voltage shut-down type, recovers upon reset, set value fixed(interval approx. 40s).						
	ent protection		Fixed current and voltage threshold type, automatic recovery, set value fixed.						
Remote (ON-OFF		No						
Remote	sensing		No						
Current b	palance		No						
Standards									
Safety standards			UL1950, CSA C22.2 No.950-95(C-UL) approved.						
Noise terminal voltage			FCC class B meet.						
Construc	tions								
External	dimensions	mm	25×95×130[H×W×	L] / With cover(Option)*3: 28.	.5×95× 130[H×W×L]				
Weight		g	300max.						
Mounting	method		Can be attached to	2 sides.					
Case ma	terial		Frame: Aluminum /	Cover(Option: 2JC00B147-F	AK50CA): Iron				
*1 Curren	it rating(maximum outo	ut current) is determined for 0 t	o +50°C. Derating is require	d when used outside this ter	mnerature range			

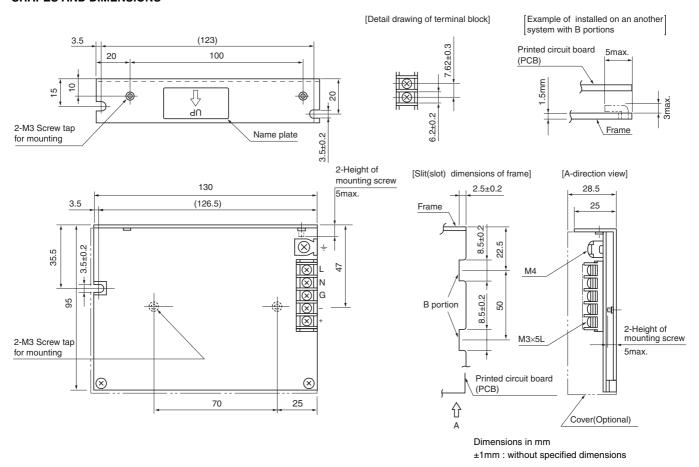
^{*1} Current rating(maximum output current) is determined for 0 to +50°C. Derating is required when used outside this temperature range.

 $^{^{*2}}$ The surge current suppression element is a power thermistor.

^{*3} Derating is required when the optional cover is attached.

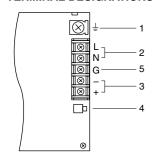
FAK50W Type

SHAPES AND DIMENSIONS



• Do not insert M3 tap installation screws more than 5mm from the surface of power supply.

TERMINAL DESIGNATIONS AND FUNCTIONS





Terminal No.	Designations and functions	
1	Frame ground terminal(G)	Connect to earth ground. This is connected to the case.
2	AC input terminals(L, N)	Connect to AC.100 to 120V single phase input line.
3	DC output terminals(+, -)	Connect to load. Connected to a load line.
4	Output voltage adjustment trim(V.ADJ)	Adjusts output voltage. The output voltage increases by rotating it clockwise.
5	Ground terminal(G)	Connected to the frame ground terminal 1.

[•] All specifications are subject to change without notice.



FAK100W Type

Maximum output power W 100 99.6 99 100.8 96	rt No.			FAK05-20R	FAK12-8R3	FAK15-6R6	FAK24-4R2	FAK48-2R0		
Input conditions	Rated output voltage and current*1		5V • 20A	12V • 8.3A	15V • 6.6A	24V • 4.2A	48V • 2A			
Input voltage Eac	ximum outpu	ut power	W	100	99.6	99	100.8	96		
Input frequency	ut conditions	S				<u> </u>		<u>.</u>		
Input current	ut voltage E	ac	V	85 to 132[Rating:	100 to 120]					
Fuse rating A 5 Built-in Surge current A 25max_[Input and output ratings, 1st surge current, reset after 30s minimum.]	ut frequency	у	Hz	47 to 66[Rating: 5	0 to 60](Single phase))				
Surge current A 25max.[Input and output ratings, 1st surge current, reset after 30s minimum.] Leakage current mA 0.5max.[Input and output ratings] Efficiency % 82typ. 84typ. 85typ. 86typ. 87typ. Output characteristics Output voltage Edc V 5 12 15 24 48 Voltage variable range Edc V 4.5 to 5.5 10.8 to 13.2 13.5 to 16.5 21.6 to 26.4 43.2 to Maximum output current A 20 8.3 6.6 4.2 2 Overvoltage threshold Edc V 6 to 6.9 13.7 to 15.7 17 to 19 27 to 30.5 53.5 to Overcurrent threshold A 21 to 24 8.7 to 10 7 to 8 4.4 to 5.2 2.1 to 5 Voltage stability Load effect % 2max.(1typ.)[Within the input voltage range] 2max.(1typ.)[The to 100% load] Total effect ±2max.(±1typ.) Temperature effect % 2max.(1typ.)[25°C, input and output ratings, after input voltage ON for 30min to 8h] Recovery %/ms ±4max./1max.[50 to 100% su	ut current		Α	2.5max.[AC.100/1	20V]					
Leakage current mA 0.5max.[Input and output ratings] Efficiency % 82typ. 84typ. 85typ. 86typ. 87typ. Output voltage Edc V 5 12 15 24 48 Voltage variable range Edc V 4.5 to 5.5 10.8 to 13.2 13.5 to 16.5 21.6 to 26.4 43.2 to 43.2 to 43.2 to 42 Maximum output current A 20 8.3 6.6 4.2 2 Overvoltage threshold Edc V 6 to 6.9 13.7 to 15.7 17 to 19 27 to 30.5 53.5 to 5.5 to 7.5 to 10.5 Overcurrent threshold A 21 to 24 8.7 to 10 7 to 8 4.4 to 5.2 2.1 to 2.5 Voltage stability Source effect % 2max.(1typ.)[Within the input voltage range] Load effect % 2max.(1typ.)[Almbient temperature: 0 to +50°C] Total effect ±2max.(±1typ.) Drift(Time effect) % 2max.(1typ.)[25°C, input and output ratings, after input voltage ON for 30min to 8h] 4.4 to 5.2 2.1 to 7.2 to 10.2 t	se rating		Α	5[Built-in]						
Efficiency % 82typ. 84typ. 85typ. 86typ. 87typ. Output voltage Edc V 5 12 15 24 48 Voltage variable range Edc V 4.5 to 5.5 10.8 to 13.2 13.5 to 16.5 21.6 to 26.4 43.2 to 43.2 to 43.2 to 42 Maximum output current A 20 8.3 6.6 4.2 2 Overvoltage threshold Edc V 6 to 6.9 13.7 to 15.7 17 to 19 27 to 30.5 53.5 to 5.5 to 5.5 Overcurrent threshold A 21 to 24 8.7 to 10 7 to 8 4.4 to 5.2 2.1 to 2.0 Voltage stability Source effect % 2max.(1typ.)[Within the input voltage range] Load effect % 2max.(1typ.)[Within the input voltage range] Total effect ±2max.(±1typ.) Load effect % 2max.(1typ.)[Ambient temperature: 0 to +50°C] Total effect ±2max.(±1typ.) Drift(Time effect) % 2max.(1typ.)[25°C, input and output ratings, after input voltage ON for 30min to 8h] Ripple Ep-p mV 60max. 80max. 80max. 100max. </td <td>rge current</td> <td></td> <td>Α</td> <td>25max.[Input and</td> <td>output ratings, 1st sur</td> <td>ge current, reset after</td> <td>30s minimum.]</td> <td></td>	rge current		Α	25max.[Input and	output ratings, 1st sur	ge current, reset after	30s minimum.]			
Output voltage Edc V 5 12 15 24 48 Voltage variable range Edc V 4.5 to 5.5 10.8 to 13.2 13.5 to 16.5 21.6 to 26.4 43.2 to Maximum output current A 20 8.3 6.6 4.2 2 Overvoltage threshold Edc V 6 to 6.9 13.7 to 15.7 17 to 19 27 to 30.5 53.5 to Overcurrent threshold A 21 to 24 8.7 to 10 7 to 8 4.4 to 5.2 2.1 to 2. Voltage stability Source effect % 2max.(1typ.)[Within the input voltage range] Total effect ±2max.(±1typ.) Load effect % 2max.(1typ.)[10 to 100% load] Total effect ±2max.(±1typ.) Temperature effect % 2max.(1typ.)[25°C, input and output ratings, after input voltage ON for 30min to 8h] Recovery %/ms ±4max./1max.[50 to 100% sudden load change] Ripple Ep-p mV 60max. 80max. 80max. 100max. 200max. Start up time ms 200max. 190max. 220max. 310max. 400ma										
Output voltage Edc	iciency		%	82typ.	84typ.	85typ.	86typ.	87typ.		
Voltage variable range Edc V 4.5 to 5.5 10.8 to 13.2 13.5 to 16.5 21.6 to 26.4 43.2 to 2 Maximum output current A 20 8.3 6.6 4.2 2 Overvoltage threshold Edc V 6 to 6.9 13.7 to 15.7 17 to 19 27 to 30.5 53.5 to 53.5										
Maximum output current A 20 8.3 6.6 4.2 2 Overvoltage threshold Edc V 6 to 6.9 13.7 to 15.7 17 to 19 27 to 30.5 53.5 to 5.5	tput voltage	Edc	V	5	12	15	24	48		
Overvoltage threshold Edc V 6 to 6.9 13.7 to 15.7 17 to 19 27 to 30.5 53.5 to 53	tage variable	e range Edc	V	4.5 to 5.5	10.8 to 13.2	13.5 to 16.5	21.6 to 26.4	43.2 to 52.8		
Overcurrent threshold A 21 to 24 8.7 to 10 7 to 8 4.4 to 5.2 2.1 to 2.1 to 2.1 to 2.2 to 2.			Α	20	8.3	6.6	4.2	2		
Voltage stability Source effect % 2max.(1typ.)[Within the input voltage range]	ervoltage thr	reshold Edc	V	6 to 6.9			27 to 30.5	53.5 to 60		
Voltage stability Load effect % 2max.(1typ.)[10 to 100% load] Total effect ±2max.(±1typ.)	ercurrent thre	reshold		21 to 24	8.7 to 10	7 to 8	4.4 to 5.2	2.1 to 2.4		
Voltage stability Temperature effect				2max.(1typ.)[With	2max.(1typ.)[Within the input voltage range]					
Stability Drift(Time effect) Secondary Seconda	Load	d effect	%	2max.(1typ.)[10 to 100% load] Total effect ±2max.(±1typ.)						
Britt(Time effect) % 0.5max.(0.1typ.)[25°C, input and output ratings, after input voltage ON for 30min to 8h]	Y I IAMI	perature effect	%							
Ripple Ep-p mV 60max. 80max. 100max. 200ma Ripple noise Ep-p mV 120max. 190max. 220max. 310max. 400ma Start up time ms 200max. Hold up time ms 20min. Auxiliary functions Indicator display LED(Green) indicates when voltage output is ON. Overvoltage protection Voltage shut-down type, recovers upon reset(interval approx. 40s). Overcurrent protection Fixed current and voltage threshold type, automatic recovery. Remote ON-OFF No	Drift((Time effect)	%							
Ripple noise Ep-p mV 120max. 190max. 220max. 310max. 400ma Start up time ms 200max. Hold up time ms 20min. Auxiliary functions Indicator display LED(Green) indicates when voltage output is ON. Overvoltage protection Voltage shut-down type, recovers upon reset(interval approx. 40s). Overcurrent protection Fixed current and voltage threshold type, automatic recovery. Remote ON-OFF No	stability Imperature effect 2max.(1typ.)[Ambient temperature: 0 to 4-50°C]									
Start up time ms 200max. Hold up time ms 20min. Auxiliary functions Indicator display LED(Green) indicates when voltage output is ON. Overvoltage protection Voltage shut-down type, recovers upon reset(interval approx. 40s). Overcurrent protection Fixed current and voltage threshold type, automatic recovery. Remote ON-OFF No	ple Ep-p		mV	60max.	80max.	80max.	100max.	200max.		
Hold up time ms 20min. Auxiliary functions Indicator display LED(Green) indicates when voltage output is ON. Overvoltage protection Voltage shut-down type, recovers upon reset(interval approx. 40s). Overcurrent protection Fixed current and voltage threshold type, automatic recovery. Remote ON-OFF No	ple noise Ep	р-р	mV	120max.	190max.	220max.	310max.	400max.		
Auxiliary functions Indicator display LED(Green) indicates when voltage output is ON. Overvoltage protection Voltage shut-down type, recovers upon reset(interval approx. 40s). Overcurrent protection Fixed current and voltage threshold type, automatic recovery. Remote ON-OFF No	art up time		ms	200max.						
Indicator display LED(Green) indicates when voltage output is ON. Overvoltage protection Voltage shut-down type, recovers upon reset(interval approx. 40s). Overcurrent protection Fixed current and voltage threshold type, automatic recovery. No	ld up time		ms	20min.						
Overvoltage protection Voltage shut-down type, recovers upon reset(interval approx. 40s). Overcurrent protection Fixed current and voltage threshold type, automatic recovery. No	xiliary function	ons								
Overcurrent protection Fixed current and voltage threshold type, automatic recovery. Remote ON-OFF No	licator displa	ay		LED(Green) indic	ates when voltage out	put is ON.				
Remote ON-OFF No	ervoltage pro	otection		Voltage shut-down type, recovers upon reset(interval approx. 40s).						
	ercurrent pro	otection		Fixed current and voltage threshold type, automatic recovery.						
Remote sensing Yes	mote ON-OF	FF								
	mote sensing	ng								
Output voltage external variable function No	tput voltage	external variable	function	No						
Standards	andards									
Safety standards UL1950, CSA C22.2 No.950-95(C-UL) approved.	fety standard	ds		UL1950, CSA C22.2 No.950-95(C-UL) approved.						
Noise terminal voltage FCC class B meet.	ise terminal	voltage		FCC class B meet.						
Constructions										
External dimensions mm $35 \times 95 \times 165[H \times W \times L] / With cover(Option)^{*2}: 40 \times 95 \times 165[H \times W \times L]$	ternal dimen	nsions	mm	35×95×165[H×W	/×L] / With cover(Option	on)*2: 40×9 5×165[H×V	V×L]			
Weight g 600max.			g	600max.						
Mounting method Can be attached to 2 sides.				Can be attached	to 2 sides.					
Case material Frame: Aluminum / Cover(Option: 2JC0ZB390-FAK100CA): Iron	unting methor	100								

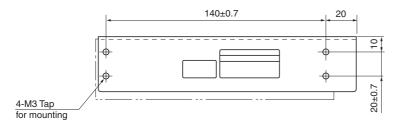
^{*1} Current rating(maximum output current) is determined for 0 to +50°C. Derating is required when used outside this temperature range.

^{*2} Derating is required when the optional cover is attached.



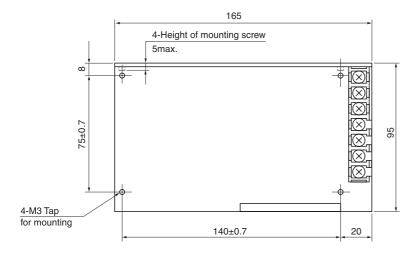
FAK100W Type

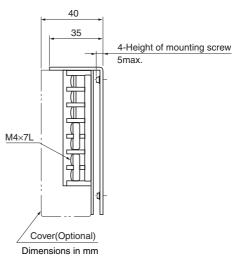
SHAPES AND DIMENSIONS







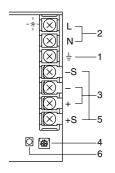




±1mm: without specified dimensions

• Do not insert M3 tap installation screws more than 5mm from the surface of power supply.

TERMINAL DESIGNATIONS AND FUNCTIONS





Terminal No.	Designations and functions	
1	Frame ground terminal(G)	Connect to earth ground. This is connected to the case.
2	AC input terminals(L, N)	Connect to AC.100 to 120V single phase input line.
3	DC output terminals(+, -)	Connect to load. Connected to a load line.
4	Output voltage adjustment trim(V.ADJ)	Adjusts output voltage. The output voltage increases by rotating it clockwise.
5	Remote sensing terminals(+S, -S)	These terminals are used to compensate voltage loss from the output terminal to a load. Normally they are shorted with a metal bar.
6	Operation indicator LED	This Green LED becomes indicated when voltage is output.

[•] All specifications are subject to change without notice.



FAK150W Type

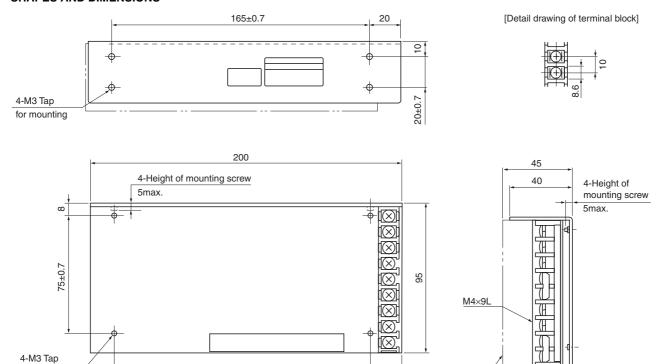
Part No.			FAK05-30R	FAK12-12R	FAK15-10R	FAK24-6R0	FAK48-3R0			
Rated output voltage and current*1			5V • 30A	12V • 12A	15V • 10A	24V • 6A	48V • 3A			
Maximum output power W			150	144	150	144	144			
Input con	ditions		1	1	*	•				
Input volt	age Eac	V	85 to 132[Rating:	85 to 132[Rating: 100 to 120]						
Input fred	quency	Hz	47 to 66[Rating: 50	0 to 60](Single phase))					
Input cur	rent	Α	3.5max.[AC.100/1	20V]						
Fuse ration	ng	Α	6.3[Built-in]							
Surge cu	rrent	Α	25max.[Input and	output ratings, 1st sur	rge current, reset after	30s minimum.]				
Leakage	current	mA	0.5max.[Input and	output ratings]						
Efficiency	/	%	82typ.	84typ.	85typ.	86typ.	88typ.			
Output ch	naracteristics						·			
Output vo	oltage Edc	V	5	12	15	24	48			
Voltage v	ariable range Edc	V	4.5 to 5.5	10.8 to 13.2	13.5 to 16.5	21.6 to 26.4	43.2 to 52.8			
Maximun	n output current	Α	30	12	10	6	3			
Overvoltage threshold Edc V			6 to 6.9	13.7 to 15.7	17 to 19	27 to 30.5	53.5 to 60			
Overcurre	ent threshold	Α	32 to 36	13 to 15	11 to 13	6.3 to 7.5	3.3 to 3.7			
Source effect %			2max.(1typ.)[Withi	2max.(1typ.)[Within the input voltage range]						
Load effect		%	2max.(1typ.)[10 to 100% load] Total effect ±2max.(±1typ.)							
stability	Temperature effect	%	2max.(1typ.)[Ambient temperature: 0 to +50°C]							
	Drift(Time effect)	%	0.5max.(0.1typ.)[25°C, input and output ratings, after input voltage ON for 30min to 8h]							
	Recovery	%/ms	±4max./1max.[50	to 100% sudden load	change]					
Ripple Ep-p mV			60max.	80max.	80max.	100max.	200max.			
Ripple noise Ep-p mV			120max.	190max.	220max.	310max.	400max.			
Start up t	ime	ms	200max.							
Hold up t	ime	ms	20min.							
Auxiliary	functions									
Indicator	display		LED(Green) indica	ates when voltage out	put is ON.					
Overvolta	age protection		Voltage shut-down type, recovers upon reset(interval approx. 40s).							
	ent protection		Fixed current and voltage threshold type, automatic recovery.							
Remote (No							
Remote			Yes							
Output vo	oltage external variable	function	No							
Standard	s									
Safety sta			UL1950, CSA C22.2 No.950-95(C-UL) approved.							
Noise ter	minal voltage		FCC class B compliant.							
Construc	tions									
External	dimensions	mm	40×95×200[H×W	×L] / With cover(Option	on)*2: 45×95×200[H×V	V×L]				
Weight		kg	1max.							
Mounting	method		Can be attached to							
Case ma	terial		Frame: Aluminum	/ Cover(Option: 2JC0	ZB391-FAK150CA): Iro	on				
*1 Curren	t rating(maximum outp	ut current) is determined for 0	to +50°C. Derating is	s required when used o	outside this temperatur	e range			

^{*1} Current rating(maximum output current) is determined for 0 to +50°C. Derating is required when used outside this temperature range.

^{*2} Derating is required when the optional cover is attached.

FAK150W Type

SHAPES AND DIMENSIONS



20

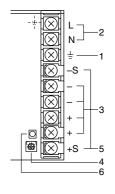
±1mm: without specified dimensions

Cover(Optional)

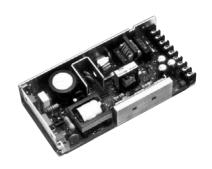
• Do not insert M3 tap installation screws more than 5mm from the surface of power supply.

165±0.7

TERMINAL DESIGNATIONS AND FUNCTIONS



for mounting



Terminal No.	Designations and functions	
1	Frame ground terminal(G)	Connect to earth ground. This is connected to the case.
2	AC input terminals(L, N)	Connect to AC.100 to 120V single phase input line.
3	DC output terminals(+, -)	Connect to load. Connected to a load line (Allowable current for a single pin of the 20A max.).
4	Output voltage adjustment trim(V.ADJ)	Adjusts output voltage. The output voltage increases by rotating it clockwise.
E	Remote sensing terminals(+S, -S)	These terminals are used to compensate voltage loss from the output terminal to a load.
5	nemote sensing terminals(+5, -5)	Normally they are shorted with a metal bar.
6	Operation indicator LED	This Green LED becomes indicated when voltage is output.

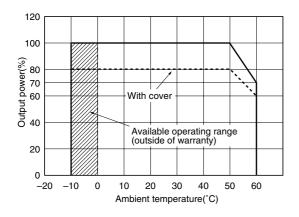
[•] All specifications are subject to change without notice.



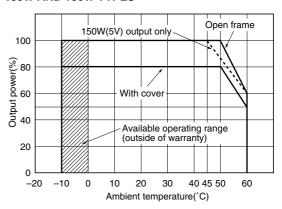
COMMON SPECIFICATIONS

Temperature and hum	idity			
Tomporoture renge	Operating(°C)	0 to +60[Derating is necessary when operating environment temperature exceed 50°C.]		
Temperature range	Storage(°C)	-25 to +75		
Lumidity range	Operating(%)RH	20 to 05[Maximum wat hulb tamparatura; 25°C, without daying]		
Humidity range	Storage(%)RH	 20 to 95[Maximum wet-bulb temperature: 35°C, without dewing] 		
Vibration and shock				
	5 to 10Hz	All amplitude 10mm[3 directions, each 1h]		
Vibration		Acceleration 19.6m/s ² (2G)[3 directions, each 1h](25W and 50W Types)		
VIDIALIOII	10 to 55Hz	Acceleration 29.4m/s ² (3G)[3 directions, each 1h]		
		(100W and 150W Types, 19.6m/s ² (2G) for installation with angle bracket downward.)		
		196m/s ² (20G)[3 directions, each 3 times] (25W and 50W Types)		
Shock	Acceleration	588m/s ² (60G)[3 directions, each 3 times]		
SHOCK		(100W and 150W Types, 19.6m/s ² (2G) for installation with angle bracket downward.)		
	Pulse duration	11±5ms		
Withstand voltage and	l insulation resistance			
Withstand voltage	Input terminal to ground terminal(G)	Fac: 2kV 1 min[Narmal tamparature, narmal humidity output ourrent 10mA]		
willistand voitage	Input terminal to output terminal	 Eac: 2kV, 1min[Normal temperature, normal humidity, cutout current 10mA] 		
	Input terminal to ground terminal(G)			
Insulation resistance	Input terminal to output terminal	Edc: 500V, $100M\Omega$ min. [Normal temperature, normal humidity]		
	Output terminal to ground terminal(G)	<u>. </u>		

OUTPUT POWER-AMBIENT TEMPERATURE(DERATINGS) 25W AND 50W TYPES



100W AND 150W TYPES

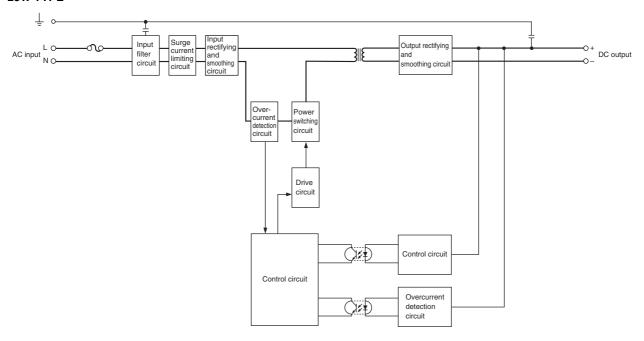


[•] All specifications are subject to change without notice.

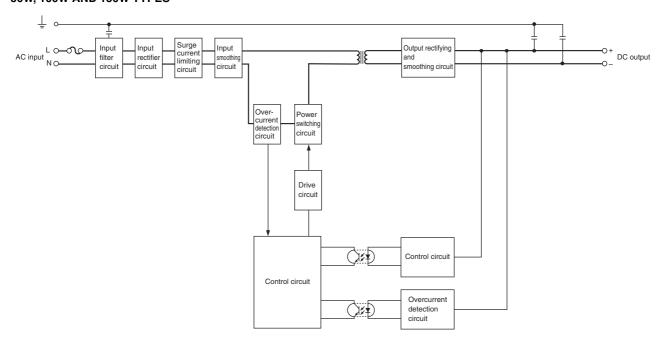


BLOCK DIAGRAMS

25W TYPE



50W, 100W AND 150W TYPES



[•] All specifications are subject to change without notice.



INSTALLATION

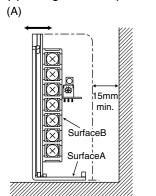
For natural cooling, apply either of the following installation methods so as to provide a thermal convection:

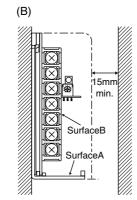
- (1) Standard installation
- (2) Other installations on component surface (upward).

In addition, maintain a 15mm min. distance between the component (cover) surface and surrounding equipment, etc.

(1) Standard Installation

(1)-1. Angle bracket (downward)



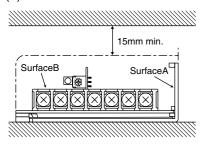


 For the installation in (A), arrange a bearer for preventing vibrations on the surface B of the angle bracket or in a direction indicated by an arrow.

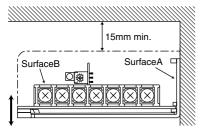
(2) Other Installations

(2)-1. Component surface (upward)

(A)



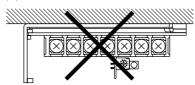
(B)



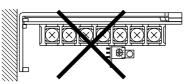
 For the installation in (B), arrange a bearer for preventing vibrations on the surface B of the angle bracket or in a direction indicated by an arrow.

(2)-2. Component surface (downward)

(A)



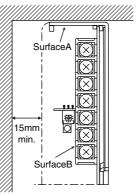


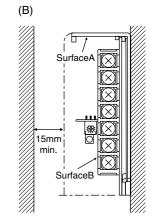


 This type of installation is inhibited due to a difficulty of the thermal convection.

(2)-3. Angle bracket (upward)

(A)





 This type of installation is inhibited due to a difficulty of the thermal convection.

COVER

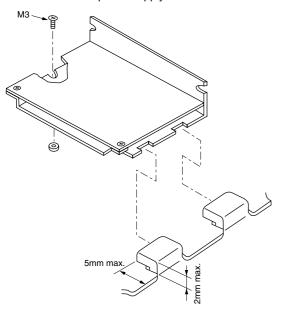
The cover is separately available. Please order it with the following model names:

Туре	Cover model No.	
25W	2JC0ZB146-FAK25CA	
50W	2JC00B147-FAK50CA	
100W	2JC0ZB390-FAK100CA	
150W	2JC0ZB391-FAK150CA	



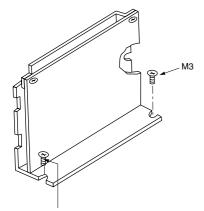
HANGING INSTALLATION (applicable to 25W and 50W types)

Recesses are provided at two places on an L-shaped frame. Use them to mount the power supply from its surface.



• Install carefully so that there is no wobbling.

Use the notched and mounting holes for stand-up installation of the power supply.



A screwdriver may touch a component on the PC board when rotating the M3 screw.

Be careful not to apply any excessive force.

OTHER CONDITIONS

- Unless conditions are otherwise specified in the specifications or standards, 25°C and rated input-output should be applied.
- Ripple and noise (50MHz max.) were determined for 0 to +50°C temperature range and 10 to 100% load.