

MODEL	LFA10F-3R3-Y	LFA10F-5	LFA10F-12	LFA10F-15	LFA10F-24	
MAX OUTPUT WATTAGE[W]	6.6	10	10.8	10.5	12	
DC OUTPUT	3.3V 2A	5V 2A	12V 0.9A	15V 0.7A	24V 0.5A	

SPECIFICATIONS

LFA

M	IODEL		LFA10F-3R3-Y	LFA10F-5	LFA10F-12	LFA10F-15	LFA10F-24			
VC	OLTAGE[V]		AC85 - 264 1 ¢ (Refe	r to Instruction Manual	1.1 and 3.2) *3					
	URRENT[A]	ACIN 100V	0.18typ (lo=100%)	0.26typ (lo=100%)						
		ACIN 200V	0.11typ (lo=100%) 0.16typ (lo=100%)							
FF	REQUENCY[Hz]		50 / 60 (47 - 440)							
	FFICIENCY[%]	ACIN 100V	68.0typ	74.0typ	76.5typ	77.5typ	79.5typ			
		ACIN 200V	68.5typ	76.0typ	79.0typ	80.0typ	83.0typ			
IN	INRUSH CURRENT[A]		15typ (lo=100%)							
		ACIN 200V	30typ (lo=100%)							
LE	EAKAGE CURRENT	[mA]	0.15/0.30max (ACIN *	100V / 240V 60Hz, Io=	100%, According to I	EC60950-1 and DEN-A				
VC	OLTAGE[V]		3.3	5	12	15	24			
CI	URRENT[A]		2.0	2.0	0.9	0.7				
	INE REGULATION[m	-	20max	20max	48max	60max				
LC	OAD REGULATION[40max	40max	100max	120max				
RIPPLE[mVp-p]	IPPI E[mVn-n]	0 to +50℃	80max	80max	120max	120max	120max			
	*1 *1		140max	140max	160max	160max	160max			
			190max	160max	240max	240max				
	IPPLE NOISE[mVp-p]		120max	120max	150max	150max				
	*1		160max	160max	180max	180max	79.5typ 83.0typ 0.5 96max 150max 120max 160max 280max 150max 180max 290max 96max 120max 160max 280max 190max 96max 290max 96max 10%) 23.00 to 25.00 27.60 to 33.60 (10,000 feet) max *3			
			240max	240max	300max	300max				
TEN	MPERATURE REGULATION[mV]	0 to +50℃		50max	120max	150max				
	• •	-10 to +50℃	60max	60max	150max	180max				
	RIFT[mV]	*2	20max	20max	48max	60max				
н	START-UP TIME[ms]		200typ (ACIN 100V, lo=100%) *Start-up time is 700ms typ for less than 1 minute of applying input again from turning off the input voltage.							
	HOLD-UP TIME[ms]		20typ (ACIN 100V, Io=100%) 2.85 to 3.63 Fixed ("Y" option is available for adjusting output voltage between ±10%)							
	JTPUT VOLTAGE ADJUSTMENT R		2.85 to 3.63				, ,			
	UTPUT VOLTAGE SETTI		3.30 to 3.40	4.90 to 5.30	11.50 to 12.50	14.40 to 15.60	23.00 to 25.00			
	VERCURRENT PROTE			rating and recovers aut		47.05 1.04.00	07.001.00.00			
	VERVOLTAGE PROTEC		4.00 to 5.25	5.75 to 7.00	13.80 to 16.80	17.25 to 21.00	27.60 to 33.60			
	PERATING INDICAT	IUN	Not provided							
_ · · ·	EMOTE SENSING		Not provided							
	EMOTE ON/OFF		Not provided	utoff current = 10mA,						
	IPUT-FG		, , ,	utoff current = 10mA, 1 utoff current = 10mA, 1	· · · · · · · · · · · · · · · · · · ·					
	UTPUT-FG			off current = 25mA, D	· · · · · · · · · · · · · · · · · · ·	1 /				
	PERATING TEMP., HUMID. AND A		,	,	· · · ·	1 /	000 feet) may *3			
ST	FORAGE TEMP., HUMID. AND A		,	%RH (Non condensing	/ (,, , , , , , , , , , , , , , , , , , ,	000 1661) IIIax *3			
ENVIRONMENT —	IBRATION		,	2G), 3minutes period,	,, , , , ,					
	IPACT		, , ,	ns, once each X, Y and	Ũ	Λ, Τ απα 2 αλισ				
	GENCY APPROVALS (At onl	v AC input)		A60950-1), EN60950-		with DEN-AN				
SAFETY AND CO	ONDUCTED NOISE	, no input)		VCCI-B, CISPR-B, EN						
NOISE	E MARKING		Low Voltage Directive							
REGULATIONS -	ARMONIC ATTENUA	TOR		000-3-2 (Not built-in to	active filter *4)					
C	ASE SIZE/WEIGHT			×H×D) / 55g max (wi		er)				
OTHERS -	OOLING METHOD		Convection							
	value that measured on r	manaurine		tor Io=0-35% is different.		comply with the IEC610	10.2.2			

capacitor of 22 µ F at 150mm from output terminal. Please refer to the Instruction Manual 1.7. Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM103). *2 A circuit reducing standby power is built in this unit. Therefore, the internal switch element is intermittent operated, and the Ripple/Ripple Noise specification in *3

Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

Derating is required.

When two or more units are operating it may not *4

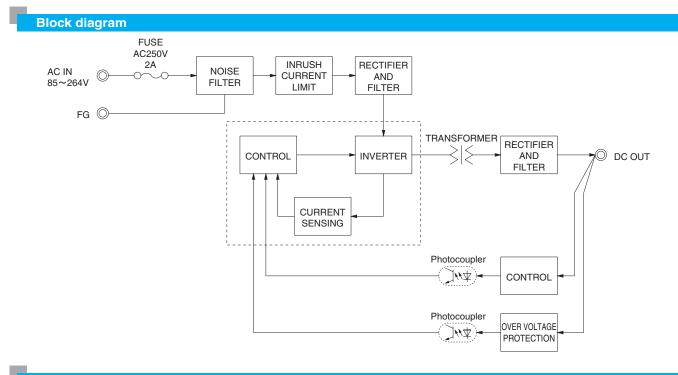
Please contact us for details.

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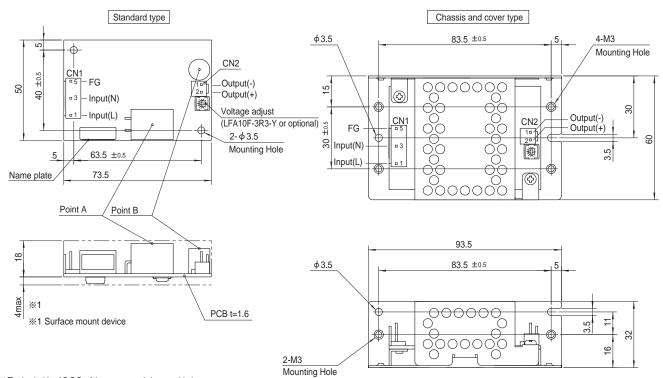
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- To meet the specifications. Do not operate over-loaded condition. Parallel operation is not possible.
- Derating is required when operated with chassis and cover. Sound noise may be generated by power supply in case of pulse load.





External view



- % The back side of P.C.B. of the power supply is assembled some SMDs. Be attention not to bump against the attached area by vibration.
- ※ Use the spacer of 8mm length or more regarding insulation. And do not use press-fitting bush.
- % Point A, Point B are thermometry points. Please refer to Instruction Manual 3.

I/C	Connector	Mating connector	T	erminal		
0.14	1-1123724-3	1-1123722-5	Chain	1123721-1		
CINT	1-1123724-3	1-1123722-5	Loose	1318912-1		
CNID	4 4400700 0	1-1123722-2	Chain	1123721-1		
CNZ	1-1123723-2	1-1123722-2	Loose	1318912-1		
(Mfr:Tyco Electronics AMP)						

% I/O Connector is Mfr. Tyco Electronics AMP

% Option:-J1:(J.S.T) connector type. Refer to Instruction Manual 5.

<PIN CONNECTION>

CN1		CN	2		
Pin No.	Input	Pin	No.	Output	
1	AC(L)		4	-V	
2				-v	
3	AC(N)		2	+V	
4			2	+v	
5	FG				

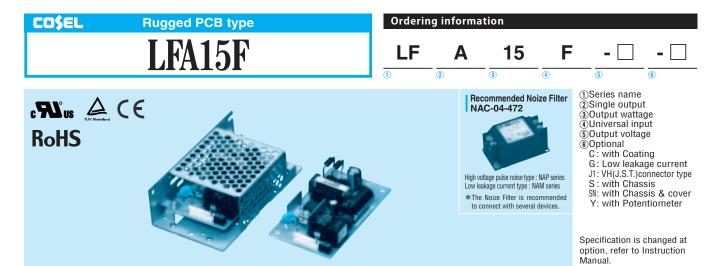
% Tolerance : ±1

% Weight : 55g max (without chassis and cover)

* PCB material / thickness : CEM3 / 1.6mm

% Optional chassis and cover material : Electric galvanizing steel board. % Dimensions in mm

% Mounting torque (Mounting hole of chassis) : 0.6N • m (6.3kgf • cm) max



MODEL			LFA15F-3R3-Y	LFA15F-5	LFA15F-12	LFA15F-15	LFA15F-24			
MAX OUTPL	JT WATTAGE[W]		9.9	15	15.6	15	16.8			
DC OUTPUT	Г		3.3V 3A	5V 3A	12V 1.3A	15V 1A	24V 0.7A			
SPECIF	ICATIONS									
	MODEL		LFA15F-3R3-Y	LFA15F-5	LFA15F-12	LFA15F-15	LFA15F-24			
	VOLTAGE[V]	_	AC85 - 264 1 ¢ (Refe	r to Instruction Man	ual 1.1 and 3.2) *3					
	CURRENT[A]	ACIN 100V	0.24typ (lo=100%)	0.35typ (lo=100%)						
	CORRENT[A] ACIN 200V		0.15typ (lo=100%)	0.20typ (lo=100%)						
	FREQUENCY[Hz]		50 / 60 (47 - 440)							
INPUT	EFFICIENCY[%]	ACIN 100V	68.0typ	73.0typ	76.0typ	77.0typ	78.0typ			
	EFFICIENCI[%]	ACIN 200V	69.0typ	76.0typ	78.5typ	80.0typ	81.5typ			
	INRUSH CURRENT[A]		15typ (Io=100%) (At cold start) (Ta=25°C)							
		ACIN 200V	30typ (lo=100%) (At	cold start) (Ta=25℃)		-AN)			
	LEAKAGE CURRENT	[mA]	0.15/0.30max (ACIN	100V / 240V 60Hz, I	o=100%, According	to IEC60950-1 and DE	N-AN)			
	VOLTAGE[V]		3.3	5	12	15	24			
	CURRENT[A]		3.0	3.0	1.3	1.0	0.7			
	LINE REGULATION[m	ηV]	20max	20max	48max	60max	96max			
	LOAD REGULATION[mV]	40max	40max	100max	120max	150max			
		0 to +50℃	80max	80max	120max	120max	120max			
	RIPPLE[mVp-p]	-10 - 0℃	140max	140max	160max	160max	160max			
	*1	lo=0 - 35%	190max	160max	240max	240max	280max			
		0 to +50℃	120max	120max	150max	150max	150max			
OUTPUT	RIPPLE NOISE[mVp-p]		160max	160max	180max	180max	180max			
		lo=0 - 35%	240max	240max	300max	300max	280max 150max 180max 320max			
	TEMPERATURE REGULATION[mV]	0 to +50℃	50max	50max	120max	150max	240max			
		-10 to +50℃	60max	60max	150max	180max	81.5typ 24 0.7 96max 150max 120max 160max 280max 150max 180max 320max 240max 96max 96max			
	DRIFT[mV]	*2	20max	20max	48max	60max				
	START-UP TIME[ms]		200typ (ACIN 100V, Io=100%	%) *Start-up time is 700r	ns typ for less than 1 minut	e of applying input again from	turning off the input voltage.			
	HOLD-UP TIME[ms]		20typ (ACIN 100V, Io	=100%)						
	OUTPUT VOLTAGE ADJUSTMENT F		2.85 to 3.63				veen ±10%)			

	HOLD-OF HME[IIIS]	2000 (AGIN 1000, 10=100.%)							
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	2.85 to 3.63	Fixed ("Y" option is a	available for adjust	ing output voltage betwe	en ±10%)			
	OUTPUT VOLTAGE SETTING[V]	3.30 to 3.40	4.90 to 5.30	11.50 to 12.50	14.40 to 15.60	23.00 to 25.00			
	OVERCURRENT PROTECTION	Works over 105% of r	rating and recovers aut	omatically					
PROTECTION	OVERVOLTAGE PROTECTION	4.00 to 5.25	5.75 to 7.00	13.80 to 16.80	17.25 to 21.00	27.60 to 33.60			
CIRCUIT AND	OPERATING INDICATION	Not provided	ot provided						
OTHERS	REMOTE SENSING	Not provided							
	REMOTE ON/OFF	Not provided							
	INPUT-OUTPUT	AC3,000V 1minute, C	utoff current = 10mA, [000000000000000000000000000000000000	n (At Room Temperature))			
ISOLATION	n (At Room Temperature))							
	OUTPUT-FG	AC500V 1minute, Cutoff current = 25mA, DC500V 50M Ω min (At Room Temperature)							
	OPERATING TEMP., HUMID. AND ALTITUDE	-10 to +70°C, 20 - 90%	%RH (Non condensing)	(Refer to DERATI	NG CURVE), 3,000m (10	,000 feet) max *3			
ENVIRONMENT	STORAGE TEMP., HUMID. AND ALTITUDE	-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000 feet) max							
ENVIRONMENT	VIBRATION	10 - 55Hz, 19.6m/s ² (2	2G), 3minutes period, 6	60minutes each al	ong X, Y and Z axis				
	IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis							
SAFETY AND	AGENCY APPROVALS (At only AC input)	UL60950-1, C-UL (CS	A60950-1), EN60950-	1, EN50178 Comp	lies with DEN-AN				
NOISE	CONDUCTED NOISE	Complies with FCC-B,	VCCI-B, CISPR-B, EN5	5011-B, EN55022	-В				
REGULATIONS	CE MARKING	Low Voltage Directive	, EMC Directive						
	HARMONIC ATTENUATOR	Complies with IEC610	00-3-2 (Not built-in to	active filter *4)					
OTHERS	CASE SIZE/WEIGHT	50×22×87.5mm (W	×H×D) / 80g max (wit	hout chassis and	cover)				
OTTIENS	COOLING METHOD	Convection							
capacito Measur	the value that measured on measuring or of 22µF at 150mm from output term red by 20MHz oscilloscope or Ripple- (Equivalent to KEISOKU-GIKEN: RM10	inal. Please re Noise * 2 Drift is tl	tor lo=0-35% is different. efer to the Instruction Manu he change in DC output for fter a half-hour warm-up at	an eight hour	comply with the IEC610 Please contact us for de To meet the specifications. I Parallel operation is not	etails. Do not operate over-loaded condition			

input voltage held constant at the rated input/output.

When two or more units are operating it may not

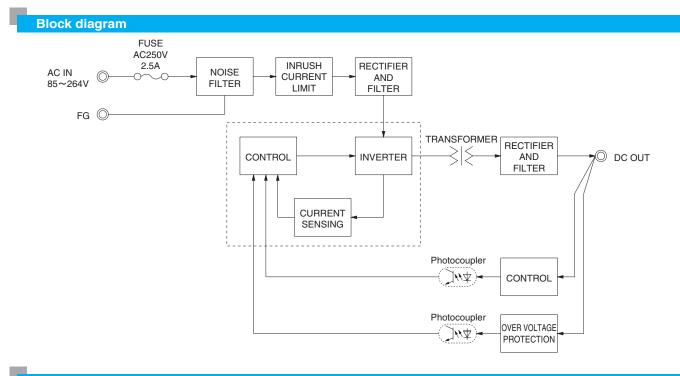
Derating is required.

meter (Equivalent to KEISOKU-GIKEN: RM103). A circuit reducing standby power is built in this unit. Therefore, the internal switch element is intermittent operated, and the Ripple/Ripple Noise specification in *3 *4

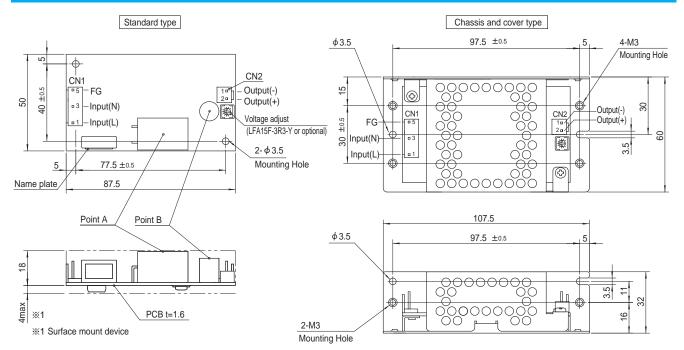
LFA

* *





External view



Be attention not to bump against the attached area by vibration. % Use the spacer of 8mm length or more regarding insulation. And do not use press-fitting bush.

% Point A, Point B are thermometry points. Please refer to Instruction Manual 3.

I/C	Connector	Mating connector	T	erminal			
0.14		4 4 4 9 9 7 9 9 5	Chain	1123721-1			
CN1	1-1123724-3	1-1123722-5	Loose	1318912-1			
010	4 4400700 0	1-1123722-2	Chain	1123721-1			
CNZ	1-1123723-2	1-1123722-2	Loose	1318912-1			
(Mfr:Tyco Electronics AMP)							

% I/O Connector is Mfr. Tyco Electronics AMP

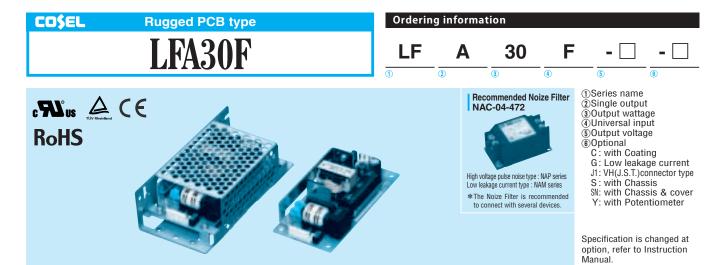
% Option:-J1:(J.S.T) connector type. Refer to Instruction Manual 5.

<PIN CONNECTION>

CN1		CN2	
Pin No.	Input	Pin No.	Output
1	AC(L)	1	-V
2			-v
3	AC(N)	2	+V
4		2	+v
5	FG		

% Tolerance : ±1

- Weight : 80g max (without chassis and cover)
- * PCB material / thickness : CEM3 / 1.6mm
- % Optional chassis and cover material : Electric galvanizing steel board.
 % Dimensions in mm
- % Mounting torque (Mounting hole of chassis) : 0.6N $\,\cdot\,$ m (6.3kgf $\,\cdot\,$ cm) max



MODEL			LFA30F-3R3-Y	LFA30F-5	LFA30F-12	LFA30F-15	LFA30F-24				
MAX OUTPU	JT WATTAGE[W]		19.8	30.0	30.0	30.0	31.2				
DC OUTPUT	Г		3.3V 6A	5V 6A	12V 2.5A	15V 2A	24V 1.3A				
SPECIF	ICATIONS										
	MODEL		LFA30F-3R3-Y	LFA30F-5	LFA30F-12	LFA30F-15	LFA30F-24				
	VOLTAGE[V]		AC85 - 264 1 φ (Ref	er to Instruction Mai	nual 1.1 and 3.2) *3						
	CURRENT[A]	ACIN 100V	0.50typ (lo=100%) 0.65typ (lo=100%)								
	CONNENT[A]	ACIN 200V	0.30typ (lo=100%)	0.35typ (lo=100%)							
	FREQUENCY[Hz]		50 / 60 (47 - 440)		_						
INPUT		ACIN 100V	73typ	76typ	79typ	81typ	82typ				
	EFFICIENCY[%]	ACIN 200V	75typ	79typ	81typ	83typ	84typ				
		ACIN 100V	15typ (Io=100%) (At	t cold start) (Ta=25℃)						
	INRUSH CURRENT[A]	ACIN 200V	30typ (Io=100%) (At								
	LEAKAGE CURREN	Γ[mA]	0.30 / 0.65max (ACI	N 100V / 240V 60H	z, Io=100%, Accordin	g to IEC60950-1 and	60950-1 and DEN-AN)				
	VOLTAGE[V]		3.3	5	12	15	24				
	CURRENT[A]		6.0	6.0	2.5	2.0	1.3				
	LINE REGULATION[I	mV]	20max	20max	48max	60max	96max				
	LOAD REGULATION	[mV]	40max	40max	100max	120max	150max				
		0 to +50°C *1	80max	80max	120max	120max	120max				
	RIPPLE[mVp-p]	-10-0°C *1	140max	140max	160max	160max	160max				
		0 to +50°C *1	120max	120max	150max	150max	150max				
OUTPUT	RIPPLE NOISE[mVp-p]	-10-0°C *1	160max	160max	180max	180max	180max				
		0 to +50℃	50max	50max	120max	150max	240max				
	TEMPERATURE REGULATION[mV]		60max	60max	150max	180max	290max				
	DRIFT[mV]	*2	20max	20max	48max	60max	96max				
	START-UP TIME[ms]		150typ (ACIN 100V, Io=100%)								
	HOLD-UP TIME[ms]		20typ (ACIN 100V, Io=100%)								
		OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		· · · ·	s available for adjusting	g output voltage betwe	en +10%)				
	OUTPUT VOLTAGE SET		2.85 to 3.63 3.30 to 3.40	4.90 to 5.30	11.50 to 12.50	14.40 to 15.60	23.00 to 25.00				
	OVERCURRENT PROT						20100 10 20100				
PROTECTION	OVERVOLTAGE PROTE		4.00 to 5.25	5.75 to 7.00	13.80 to 16.80	17.25 to 21.00	27.60 to 33.60				
	OPERATING INDICA		Not provided	0.10 10 1.00	10.00 10 10.00	11.20 10 21.00	27.00 10 00.00				
OTHERS	REMOTE SENSING		Not provided								
	REMOTE ON/OFF		Not provided								
	INPUT-OUTPUT			Cutoff current – 10m		in (At Room Tempera	ature)				
SOLATION	INPUT-FG		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature) AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)								
SOLATION	OUTPUT-FG		AC2,000V Thinute, Cutoff current = 10ffA, DC500V 50M Ω min (At Room Temperature) AC500V 1 minute, Cutoff current = 25mA, DC500V 50M Ω min (At Room Temperature)								
	OPERATING TEMP., HUMID.AND					TING CURVE), 3,000m					
	STORAGE TEMP.,HUMID.AND				sing), 9,000m (30,000		i (i0,000iccl) iiidX *				
ENVIRONMENT	VIBRATION	ALITIODE		· · ·	od, 60minutes each a	,					
	IMPACT		196.1m/s ² (20G), 11			iony A, i anu Z axis					
	AGENCY APPROVALS (At onl	v AC input)			50-1, EN50178 Com	lies with DEN-AN					
SAFETY AND	CONDUCTED NOISE	• • •		· · · · · · · · · · · · · · · · · · ·							
NOISE					EN55011-B, EN5502	2 - D					
REGULATIONS	CE MARKING	ATOD	Low Voltage Directiv		a to potivo filtor to						
	HARMONIC ATTENU		Complies with IEC61		/	nd aquar)					
OTHERS	CASE SIZE/WEIGHT			vv < n < u) / 130g m	ax (without chassis a	nu cover)					
	COOLING METHOD		Convection								

This is the value that measured on measuring board with capacitor of 22 $\mu\,F$ at 150mm *1 from output terminal. Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN:

RM103). *2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at

25°C, with the input voltage held constant at the rated input/output. Derating is required. *3

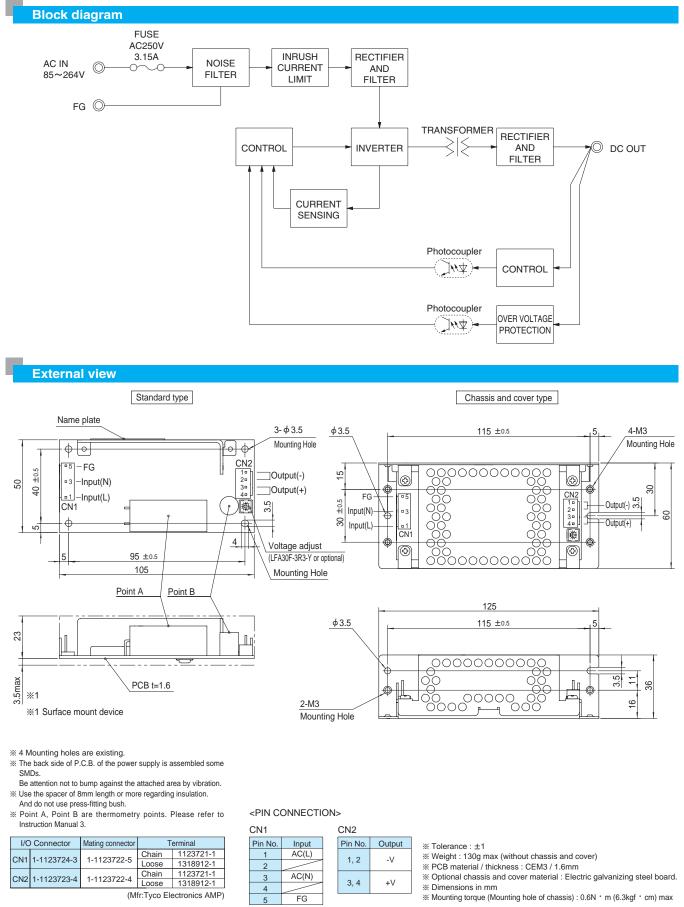
To meet the specifications. Do not operate over-loaded condition.

Please contact us for details. * Parallel operation is not possible.

IEC61000-3-2.

Derating is required when operated with chassis and cover. Sound noise may be generated by power supply in case of pulse load. *

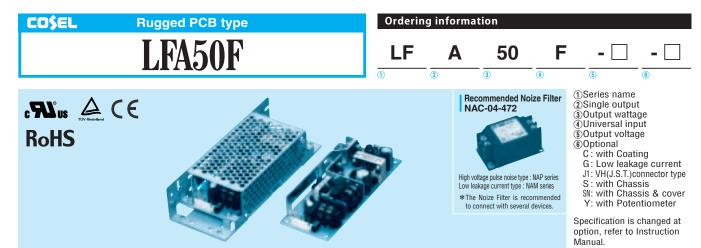




% I/O Connector is Mfr. Tyco Electronics AMP

% Option:-J1:(J.S.T) connector type. Refer to Instruction Manual 5.

% Keep drawing current per pin below 5A for CN2.



MODEL	LFA50F-3R3-Y	LFA50F-5	LFA50F-12	LFA50F-15	LFA50F-24	LFA50F-36	LFA50F-48
MAX OUTPUT WATTAGE[W]	33	50	51.6	52.5	50.4	50.4	52.8
DC OUTPUT	3.3V 10A	5V 10A	12V 4.3A	15V 3.5A	24V 2.1A	36V 1.4A	48V 1.1A
SPECIFICATIONS							

M	ODEL		LFA50F-3R3-Y	LFA50F-5	LFA50F-12	LFA50F-15	LFA50F-24	LFA50F-36	LFA50F-48		
VC	OLTAGE[V]		AC85 - 264 1¢	(Refer to Inst	ruction Manual	1.1 and 3.2) *3					
0	URRENT[A]	ACIN 100V	0.47typ (lo=100%) 0.67typ (lo=100%)								
	URRENT[A]	ACIN 200V	0.27typ (lo=100%) 0.36typ (lo=100%)								
FF	REQUENCY[Hz]		50 / 60 (47 - 6	50 / 60 (47 - 63)							
		ACIN 100V	73.5typ	77.5typ	80.0typ	80.5typ	81.5typ	82.0typ	81.0typ		
	FFICIENCY[%]	ACIN 200V	74.0typ	79.0typ	81.5typ	81.5typ	83.0typ	83.5typ	82.5typ		
-	ACIN 1		0.96typ	0.97typ							
PO	WER FACTOR (lo=100%)	ACIN 200V	0.83typ	0.90typ							
		ACIN 100V	15typ (lo=100	typ (lo=100%) (At cold start) (Ta=25 $^{\circ}$ C)							
IN		ACIN 200V	30typ (lo=100								
LE	LEAKAGE CURRENT[mA]					=100%, Accordi	ng to IEC60950	-1 and DEN-AN)		
	OLTAGE[V]		3.3	5	12	15	24	36	48		
			10.0	10.0	4.3	3.5	2.1	1.4	1.1		
	NE REGULATION[r	mV]	20max	20max	48max	60max	96max	144max	192max		
	DAD REGULATION		40max	40max	100max	120max	150max	240max	240max		
		0 to +50℃ *1	80max	80max	120max	120max	120max	150max	150max		
RI	IPPLE[mVp-p]	-10-0°C *1	140max	140max	160max	160max	160max	200max	200max		
		0 to +50°C *1	120max	120max	150max	150max	150max	250max	250max		
	RIPPLE NOISE[mVp-p]	-10-0°C *1	160max	160max	180max	180max	180max	300max	300max		
			50max	50max	120max	150max	240max	360max	480max		
TEM	MPERATURE REGULATION[mV]		60max	60max	150max	180max	290max	450max	600max		
DB	RIFT[mV]	*2	20max	20max	48max	60max	96max	144max	192max		
	TART-UP TIME[ms]	350typ (ACIN ⁻			oomax	Joinax	Тяяних	TOZINAX			
	OLD-UP TIME[ms]		20typ (ACIN 100V, Io=100%)								
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		2.85 to 3.63 Fixed ("Y" option is available for adjusting output voltage between ±10%)								
	UTPUT VOLTAGE SETT		3.30 to 3.40	4.90 to 5.30		14.40 to 15.60			46.00 to 50.00		
	VERCURRENT PROT		Works over 10				20.00 10 20.00	04.00 10 07.00	40.00 10 00.00		
	VERVOLTAGE PROTE		4.00 to 5.25	5.75 to 7.00		17.25 to 21.00	27 60 to 33 60	41.40 to 50.40	55.20 to 67.20		
	PERATING INDICAT		Not provided	0.70 10 7.00	10.00 10 10.00	17.20 to 21.00	27.00 10 00.00	11.40 10 00.40	00.20 10 07.20		
	EMOTE SENSING		Not provided								
	EMOTE ON/OFF		Not provided								
				aute Cutoff cu	rrent – 10mA F	0C500V 50MΩ r	min (Δt Room T	emperature)			
	IPUT-FG					0C500V 50MΩ r					
	UTPUT-FG		,	,	,	500V 50MΩ mi	`	1 /			
	ERATING TEMP., HUMID.AND							3,000m (10,000)feet) may *3		
	ORAGE TEMPHUMID.AND			(0)	, 9,000m (30,00		3,000111 (10,000			
	BRATION	ALIIIODL	,	```	0,	Ominutes each	/	7 avie			
			,	(),	each X, Y and		along A, T allu A				
	ENCY APPROVALS (At only	v AC input)				, EN50178 Com	nlies with DEN	-AN			
	ONDUCTED NOISE					5011-B, EN550					
NOISE	E MARKING		Low Voltage D			5011-D, EN350	22-0				
REGULATIONS		ATOP		,	IIECLIVE						
			Complies with) / 165a max ()	without chassis	and aquar)				
OTHERS -	ASE SIZE/WEIGHT)/ noby max (\	without chassis	anu cover)				
	OOLING METHOD		Convection								

*3

*

*

*

Derating is required. To meet the specifications. Do not operate over-loaded condition.

Derating is required when operated with chassis and cover. Sound noise may be generated by power supply in case of pulse load.

Parallel operation is not possible.

This is the value that measured on measuring board with capacitor of 22 $\mu\,F$ at 150mm *1 from output terminal. Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN:

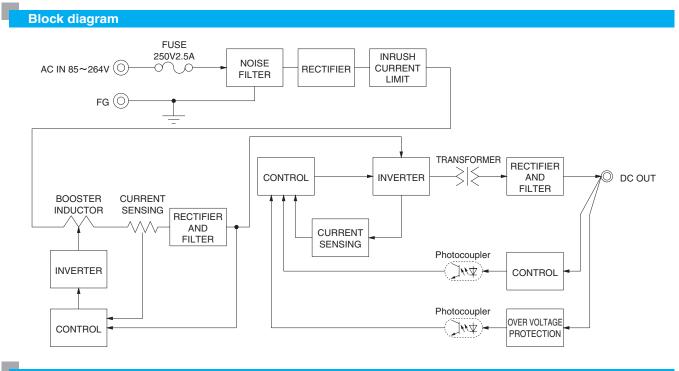
RM103). Drift is the change in DC output for an eight hour period after a half-hour warm-up at *2

25°C, with the input voltage held constant at the rated input/output.

LFA

E-10

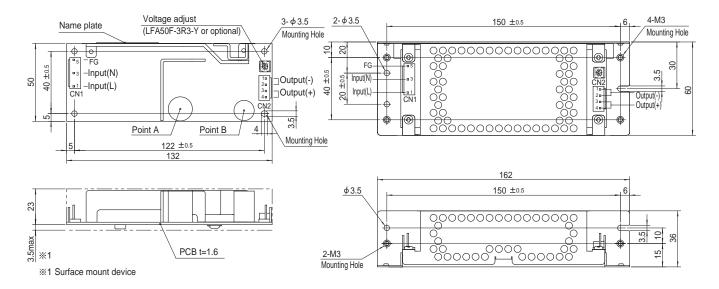
LFA50F | CO\$EL



External view

Standard type

Chassis and cover type



% 4 Mounting holes are existing.

% The back side of P.C.B. of the power supply is assembled some SMDs.

Be attention not to bump against the attached area by vibration. % Use the spacer of 8mm length or more regarding insulation.

And do not use press-fitting bush.

Point A, Point B are thermometry points. Please refer to Instruction Manual 3.

I/C	Connector	Mating connector	Т	erminal		
014	4 4400704 0	1-1123722-5	Chain	1123721-1		
CINT	1-1123724-3	1-1123722-5	Loose	1318912-1		
0.10	4 4400700 4	4 4400700 4	Chain	1123721-1		
CINZ	1-1123723-4	3723-4 1-1123722-4	Loose	1318912-1		
(Mfr:Tvco Electronics AMP)						

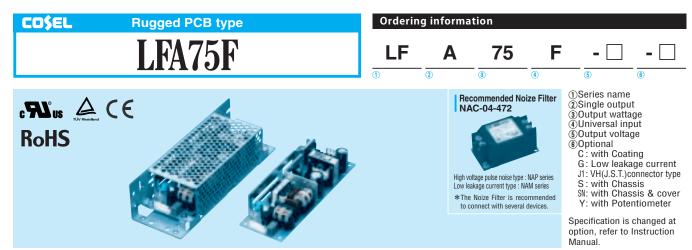
<PIN CONNECTION>

CN1		CN2		
Pin No.	Input	Pin No.	Output	% Tolerance : ±1
1	AC(L)	1.2	-V	Weight : 165g max (without chassis and cover)
2		1, 2	- v	% PCB material / thickness : CEM3 / 1.6mm
3	AC(N)	3.4	+V	※ Optional chassis and cover material : Electric galvanizing steel board.
4		3,4	+v	※ Dimensions in mm ※ Mounting torque (Mounting hole of chassis) : 0.6N • m (6.3kgf • cm) max
5	FG			* wounting torque (mounting note of chassis) : 0.6N * In (6.5kgi * chi) max

※ I/O Connector is Mfr. Tyco Electronics AMP

% Option:-J1:(J.S.T) connector type. Refer to Instruction Manual 5.

% Keep drawing current per pin below 5A for CN2.



IMAX OUTPUT Watch and the second secon	This power su	pply is manufactured by	y SIVID Let	intology. The stre	55 LU P.C.D IIKE U	wishing of Denain	y causes the dele	ict of the utilt, so	nanule the unit w	illi Gale.	
DC OUTPUT 3.3V 15A 5V 15A 12V 6.3A 15V 5A 24V 3.2A 36V 2.1A 48V 1.6A SPECIFICATIONS MODEL LFA75F-383-Y LFA75F-3 LFA75F-15 LFA75F-24 LFA75F-36 LFA75F-24 LFA75F-24 LFA75F-36 LFA75F-36 <t< th=""><th colspan="3">MODEL</th><th>LFA75F-3R3-Y</th><th>LFA75F-5</th><th>LFA75F-12</th><th>LFA75F-15</th><th>LFA75F-24</th><th>LFA75F-36</th><th>LFA75F-48</th></t<>	MODEL			LFA75F-3R3-Y	LFA75F-5	LFA75F-12	LFA75F-15	LFA75F-24	LFA75F-36	LFA75F-48	
SPECIFICATIONS IFA75F-3R3-Y IFA75F-3R3-Y IFA75F-12 IFA75F-13 IFA75F-36 IFA75F-36 <td colspan="3">MAX OUTPUT WATTAGE[W]</td> <td>49.5</td> <td>75</td> <td>75.6</td> <td>75</td> <td>76.8</td> <td>75.6</td> <td>76.8</td>	MAX OUTPUT WATTAGE[W]			49.5	75	75.6	75	76.8	75.6	76.8	
MODEL LFA75F-3R3-Y LFA75F-12 LFA75F-12 LFA75F-12 LFA75F-24 LFA75F-26 LFA75F-26 VOLTAGE(V) AC85 - 264 1 4 (Refer to Instruction Manual 1.1 and 3.2) ** CURRENT[A] AC80 000 (0-000%) AC80 0000 AC80 0000 (0-000%) AC80 000 (0-000%)	DC OUTPUT			3.3V 15A	5V 15A	12V 6.3A	15V 5A	24V 3.2A	36V 2.1A	48V 1.6A	
VOLTAGE[V] ACB 1280 ACB 1080 ACB 10800 ACB 1080 ACB 1080	SPECIFI	CATIONS									
INPUT Image: Strate Strat		MODEL		LFA75F-3R3-Y	LFA75F-5	LFA75F-12	LFA75F-15	LFA75F-24	LFA75F-36	LFA75F-48	
CURRENT[A] KCN 200 0.400p (0=100%) 0.500yp (10=100%) FREQUENCY[H2] 50 / 60 (47 - 63) 51.51yp 81.51yp 82.51yp		VOLTAGE[V]		AC85 - 264 1 ¢	(Refer to Instr	uction Manual	1.1 and 3.2) *3				
INPUT [Autwaw] Lutwyw] [Lotwyw] [Lotwyw] <t< td=""><td></td><td></td><td>ACIN 100V</td><td>0.70typ (lo=100%)</td><td colspan="7"></td></t<>			ACIN 100V	0.70typ (lo=100%)							
INPUT EFFICIENCY[%] ADD 2007 73.5byp ADD 2007 78.0byp 80.0byp 81.5byp 83.0byp 81.5byp 83.0byp 82.5byp 84.5byp 82.5byp 84.5byp POWER FACTOR (0=100%) ADD 2007 ADD 1000 ADD 2007 0.90typ 0.90typ 0.90typ NRUSH CURRENT(A) ADD 2007 ADD 1000 ADD 2007 0.90typ 0.90typ 0.90typ NRUSH CURRENT(A) ADD 2007 ADD 1000 (1.5byp (0=100%) (At cold start) (Ta=25 C)		CURRENT[A]	ACIN 200V			0%)					
INPUT EFF(C)ENCY[%] POWER FACTOR (lo=100%) ACM 2007 R0.01 x007 P3.01 xp B3.01 xp B4.51 xp <thb4.51 th="" xp<=""> B4.51 xp B4.51 xp<!--</td--><td></td><td colspan="2">FREQUENCY[Hz]</td><td colspan="8">50 / 60 (47 - 63)</td></thb4.51>		FREQUENCY[Hz]		50 / 60 (47 - 63)							
INPUT Interface β3.01 yrg 83.01 yrg		EFFICIENCY[%]	ACIN 100V	73.5typ	78.0typ	81.5typ	81.5typ	82.5typ	82.5typ	82.5typ	
POWER FACTOR (0=100%) ACM 200V 0.83 typ 0.90 typ INRUSH CURRENT[A] ACM 100V 15 typ (0=100%) (At cold start) (Ta=25 °C) LEAKAGE CURRENT[MA] 0.40 / 0.75max (ACIN 100V / 240V 60Hz, 10=100%, According to IEC60950-1 and DEN-AN) VOLTAGE[V] 3.3 5 12 15 24 36 48 CURRENT[MA] 0.40 / 0.75max (ACIN 100V / 240V 60Hz, 10=100%, According to IEC60950-1 and DEN-AN) VOLTAGE[V] 3.3 5 12 15 24 36 48 CURRENT[MA] 0.40 / 0.75max (ACIN 100V / 240V 60Hz, 10=100%, According to IEC60950-1 and DEN-AN) VOLTAGE[V] 240max 150max 150max 144max 192max LINE REGULATION[mV] 20max 20max 40max 100max 120max 120max 120max 120max 120max 20max 20max 20max 20max 20max 20max 20max 300max 30max 120max 160max 160max	INPUT		ACIN 200V	75.0typ	80.0typ	83.0typ	83.0typ	84.5typ	84.5typ	84.5typ	
INPUT 10.93/UP 10.93/UP INRUSH CURRENT[A] ACN 100/ ACN 200/ ACN 200/ 30/UP (10=100%) (At cold start) (Ta=25°C) LEAKAGE CURRENT[A] 0.40 / 0.75max (ACIN 100V / 240V 60Hz, Io=100%, According to IEC60950-1 and DEN-AN) VOLTAGE[V] 3.3 5 12 15 24 36 48 CURRENT[A] 15.0 6.3 5.0 3.2 2.1 1.6 LOAD REGULATION[mV] 20max 20max 48max 60max 96max 144max 192max LOAD REGULATION[mV] 40max 40max 100max 120max 120max <td></td> <td></td> <td>ACIN 100V</td> <td>0.96typ</td> <td>0.97typ</td> <td></td> <td></td> <td></td> <td></td> <td></td>			ACIN 100V	0.96typ	0.97typ						
INRUSH COMMENT[A] AGN 2007 30 typ (10=100%) (At cold start) (Ta=25C) LEAKAGE CURRENT[MA] 0.40 / 0.75max (ACIN 100V / 240V 60Hz, lo=100%, According to IEC60950-1 and DEN-AN) OUTAGE[V] 3.3 5 12 15 24 36 48 CURRENT[A] 15.0 15.0 6.3 5.0 3.2 2.1 1.6 LINE REGULATION[mV] 20max 40max 100max 120max 150max 240max 120max 150max 150max 240max 200max 300max		POWER FACTOR (IO=100%)	ACIN 200V	0.83typ	0.90typ						
LEAKAGE CURRENT[mA] Outpy (10=100%) (14 cold star) (14=25.5) VOLTAGE[V] 0.340 0.75max (ACIN 100V/240V 604L, lo=100%, According to IEC60950-1 and DEN-AN) VOLTAGE[V] 3.3 5 12 15 24 36 48 CURRENT[A] 15.0 15.0 6.3 2.2 2.1 1.6 LINE REGULATION[mV] 20max 20max 48max 60max 96max 144max 192max LOAD REGULATION[mV] 40max 20max 120max 120max 150max 240max 240max RIPPLE[mVp-p] 0=90°C* 80max 140max 160max 160max 160max 200max 200max 200max 200max 200max 200max 200max 200max 200max 300max			ACIN 100V	15typ (Io=100%) (At cold start) (Ta=25°C)							
VOLTAGE[V] 3.3 5 12 15 24 36 48 CURRENT[A] 15.0 15.0 15.0 3.2 2.1 1.6 LINE REGULATION[mV] 20max 20max 48max 60max 96max 144max 192max LOAD REGULATION[mV] 40max 40max 120max 150max 240max 240max 240max 240max 240max 240max 240max 120max 150max 150max 120max 150max 120max 150max 120max 150max 120max 150max 150max 150max 150max 150max 150max 300max 200max 200max 200max 300max 140max 190max 140max 190max 120max 150max 150max 120max 120max 120max 120max 120max 120max 120max 120max 120max		INRUSH CURRENT[A]	ACIN 200V								
CURRENT[A] 15.0 15.0 6.3 5.0 3.2 2.1 1.6 LINE REGULATION[mV] 20max 48max 60max 96max 144max 192max LOAD REGULATION[mV] 40max 40max 100max 120max 150max 240max 240max RIPPLE[mVp-p] [0+400:+ 80max 80max 120max 150max 150max 200max 300max 180max 180max <td></td> <td colspan="2"></td> <td colspan="7"></td>											
LINE REGULATION[mV] 20max 20max 48max 60max 96max 144max 192max OUTPUT LOAD REGULATION[mV] 40max 40max 100max 120max 120max 120max 240max 240max 240max 240max 240max 240max 150max 150max 150max 150max 120max 300max		VOLTAGE[V]		3.3	5	12	15	24	36	48	
OUTPUT LOAD REGULATION[mV] 40max 40max 100max 120max 150max 240max 240max RIPPLE [mVp-p] 00+40C+8 80max 120max 120max 120max 120max 200max 300max 120max 140max 192max 300max 300max 300max 120max 140max 192max 300max 120max 140max 140max 192max 300max 130max 140max 140max 140max 140max				15.0	15.0	6.3	5.0	3.2	2.1	1.6	
OUTPUT 120max 120max 120max 150max 150max 200max 300max 30max		LINE REGULATION	mV]	20max	20max	48max	60max	96max	144max	192max	
NUTPUT HIPPLE[mVp-p] -i0-0 * i 140 max 140 max 160 max 160 max 150 max 250 max 250 max 250 max 250 max 300 max		LOAD REGULATION	[mV]	40max	40max	100max	120max	150max	240max	240max	
OUTPUT Hubitation <			0 to +50℃ *1	80max	80max	120max	120max	120max	150max	150max	
OUTPUT RIPPLE NOISE[mVp-p] -10-0C *I 160max 160max 180max 180max 180max 300max 300max TEMPERATURE REGULATION[mV] -10-0C *I 160max 50max 50max 120max 150max 240max 360max 480max DRIFT[mV] *2 20max 20max 48max 60max 60max 60max 60max 60max 60max 60max 96max 144max 192max START-UP TIME[ms] 350typ (ACIN 100V, Io=100%)		RIPPLE[mvp-p]	-10-0°C *1	140max	140max	160max	160max	160max	200max	200max	
OUTPUT Interface			0 to +50℃*1	120max	120max	150max	150max	150max	250max	250max	
Implementation Interfactor	OUTPUT	RIPPLE NOISE[mvp-p]	-10-0°C *1	160max	160max	180max	180max	180max	300max	300max	
Image: http://without.com/image: http://withou		TEMPERATURE REGULATION[mV]	0 to +50℃	50max	50max	120max	150max	240max	360max	480max	
START-UP TIME[ms] 350typ (ACIN 100V, lo=100%) HOLD-UP TIME[ms] 20typ (ACIN 100V, lo=100%) OUTPUTVOLTAGE AUUSTINENT RANCE[V] 2.85 to 3.63 Fixed ("Y" option is available for adjusting output voltage between ±10%) OUTPUT VOLTAGE SETTING(V) 3.30 to 3.40 4.90 to 5.30 11.50 to 12.50 14.40 to 15.60 23.00 to 25.00 34.50 to 37.50 46.00 to 5.0 OVERCURRENT PROTECTION Works over 105% of rating and recovers automatically OVERCURRENT PROTECTION 4.00 to 5.25 5.75 to 7.00 13.80 to 16.80 17.25 to 21.00 27.60 to 33.60 41.40 to 50.40 55.20 to 67 CIRCUIT AND OVERVOLTAGE PROTECTION Mort provided REMOTE SENSING Not provided REMOTE ON/OFF Not provided REMOTE ON/OFF Not provided REMOTE CON/OFF Not provided Not provided INPUT-FG AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature) OUTPUT-FG AC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature) 0UFRATING TEMP,HUMIDAND ALITIVE -20 to +75°C, 20 - 90% RH (Non condensing), 9,000m (30,000feet) max *3 ENVIRONMENT STRAGE TEMP,HUMIDAND ALITIVE -20 to +75°C, 20 - 90% RH (Non condensing), 9,000m (30,000feet) max			-10 to +50℃	60max	60max	150max	180max	290max	450max	600max	
HOLD-UP TIME[ms] 20typ (ACIN 10V, lo=100%) 0UTPUT VOLTAGE ADJUSTMENT RANGE[V] 2.85 to 3.63 Fixed ("Y" option is available for adjusting output voltage between ±10%) 0UTPUT VOLTAGE SETTING[V] 3.30 to 3.40 4.90 to 5.30 11.50 to 12.50 14.40 to 15.60 23.00 to 25.00 34.50 to 37.50 46.00 to 5.00 PROTECTION VCRCURRENT PROTECTION Works over 105% of rating and recovers automatically		DRIFT[mV]	*2	20max	20max	48max	60max	96max	144max	192max	
HOLD-UP TIME[ms] 20typ (ACIN 10V, lo=100%) 0UTPUT VOLTAGE ADJUSTMENT RANGE[V] 2.85 to 3.63 Fixed ("Y" option is available for adjusting output voltage between ±10%) 0UTPUT VOLTAGE SETTING[V] 3.30 to 3.40 4.90 to 5.30 11.50 to 12.50 14.40 to 15.60 23.00 to 25.00 34.50 to 37.50 46.00 to 5.00 PROTECTION VCRCURRENT PROTECTION Works over 105% of rating and recovers automatically		START-UP TIME[ms]									
OUTPUT VOLTAGE SETTING[V] 3.30 to 3.40 4.90 to 5.30 11.50 to 12.50 14.40 to 15.60 23.00 to 25.00 34.50 to 37.50 46.00 to 5.00 OVERCURRENT PROTECTION Works over 105% of rating and recovers automatically OVERCURRENT PROTECTION 4.00 to 5.25 5.75 to 7.00 13.80 to 16.80 17.25 to 21.00 27.60 to 33.60 41.40 to 50.40 55.20 to 67. CIRCUIT AND OTHERS OPERATING INDICATION Not provided REMOTE SENSING Not provided REMOTE SENSING Not provided REMOTE SENSING Not provided REMOTE ON/OFF Not provided INPUT-UTPUT AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature) INPUT-FG AC2,000V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature) OUTPUT-FG INPUT-FG AC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature) -20 to +75°C, 20 - 90% RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max *3 STORAGE TEMP,HUMID.AND ALTITUDE -20 to +75°C, 20 - 90% RH (Non condensing), 9,000m (30,000feet) max *3 STORAGE TEMP,HUMID.AND ALTITUDE -20 to +75°C, 20 - 90% RH (Non condensing), 9,000m (30,000feet) max *3 STORAGE TEMP,HUMID.AND ALTITUDE -20 to +75°C, 20 - 90% RH (Non condensing),		HOLD-UP TIME[ms]		20typ (ACIN 100V, Io=100%)							
OVERCURRENT PROTECTION Works over 105% of rating and recovers automatically PROTECTION OVERVOLTAGE PROTECTION 4.00 to 5.25 5.75 to 7.00 13.80 to 16.80 17.25 to 21.00 27.60 to 33.60 41.40 to 50.40 55.20 to 67. CIRCUIT AND OTHERS OPERATING INDICATION Not provided INDUT-OUTPUT AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature) INPUT-OUTPUT AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature) INPUT-FG AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature) INPUT-FG AC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature) INPUT-FG INPUT-FG AC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature) INPOTEONIC CURVE), 3,000m (10,000feet) max *3 ENVIRONMENT STORAGE TEMP,HUMIDAND ALTITUDE -10 to +70°C, 20 - 90% RH (Non condensing), 9,000m (30,000feet) max *3 SAFETY AND NOISE MPACT 196.1m/s² (20G), 11ms, once each X, Y and Z axis IMPACT 196.1m/s² (20G), 11ms, once each X, Y and Z axis SAFETY AND NOISE ConDUCTED NOISE Complies with FCC-B, VCCI-B, CISPR-B, EN55011-B, EN55022-B ConDUCTED NOISE Complies with IEC61000-3-2		OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		2.85 to 3.63 Fixed ("Y" option is available for adjusting output voltage between ±10%)							
PROTECTION CIRCUIT AND OTHERSOVERVOLTAGE PROTECTION4.00 to 5.255.75 to 7.0013.80 to 16.8017.25 to 21.0027.60 to 33.6041.40 to 50.4055.20 to 67.OPERATING INDICATION OTHERSNot providedREMOTE SENSINGNot providedREMOTE ON/OFFNot providedISOLATIONINPUT-OUTPUTAC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)OUTPUT-FGAC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)OUTPUT-FGAC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)OUTPUT-FGAC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)OPERATING TEMP,HUMID.AND ALTITUDE-10 to +70°C, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max *3STORAGE TEMP,HUMID.AND ALTITUDE-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000feet) maxVIBRATION10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axisIMPACT196.1m/s² (20G), 11ms, once each X, Y and Z axisNOISEConDUCTED NOISEComplies with FCC-B, VCCI-B, CISPR-B, EN55011-B, EN55022-BCE MARKINGLow Voltage Directive, EMC DirectiveHARMONIC ATTENUATORComplies with IEC61000-3-2		OUTPUT VOLTAGE SET	TING[V]	3.30 to 3.40	4.90 to 5.30	11.50 to 12.50	14.40 to 15.60	23.00 to 25.00	34.50 to 37.50	46.00 to 50.00	
CIRCUIT AND OTHERSOPERATING INDICATIONNot providedREMOTE SENSINGNot providedREMOTE SENSINGNot providedREMOTE ON/OFFNot providedISOLATIONINPUT-OUTPUTAC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)OUTPUT-FGAC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)OUTPUT-FGAC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)OUTPUT-FGAC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)OPERATING TEMP,HUMID.AND ALTITUDE-10 to +70°C, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max *3STORAGE TEMP,HUMID.AND ALTITUDE-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000feet) maxVIBRATION10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axisIMPACT196.1m/s² (20G), 11ms, once each X, Y and Z axisNOISEConDUCTED NOISEComplies with FCC-B, VCCI-B, CISPR-B, EN55011-B, EN55022-BCE MARKINGLow Voltage Directive, EMC DirectiveHARMONIC ATTENUATORComplies with IEC61000-3-2		OVERCURRENT PROT	ECTION	Works over 10	5% of rating an	d recovers auto	matically				
OTHERSREMOTE SENSINGNot providedREMOTE ON/OFFNot providedISOLATIONINPUT-OUTPUTAC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)ISOLATIONINPUT-FGAC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)OUTPUT-FGAC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)OUTPUT-FGAC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)OPERATING TEMP,HUMID.AND ALTITUDE-10 to +70°C, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max *3STORAGE TEMP,HUMID.AND ALTITUDE-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000feet) maxVIBRATION10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axisIMPACT196.1m/s² (20G), 11ms, once each X, Y and Z axisNOISEConducted NoiseREGULATIONSComplies with FCC-B, VCCI-B, CISPR-B, EN55011-B, EN55022-BCE MARKINGLow Voltage Directive, EMC DirectiveHARMONIC ATTENUATORComplies with IEC61000-3-2	PROTECTION	OVERVOLTAGE PROTE	ECTION	4.00 to 5.25	5.75 to 7.00	13.80 to 16.80	17.25 to 21.00	27.60 to 33.60	41.40 to 50.40	55.20 to 67.20	
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HARMONIC ATTENUATOR Complies with IEC61000-3-2		CE MARKING									
CASE SIZE/WEICHT 50X225X150mm (WXHXD) (220g may (without chassis and cover)		HARMONIC ATTENU	JATOR	Complies with IEC61000-3-2							
OTHERS		CASE SIZE/WEIGHT		50×33.5×150mm (W×H×D) / 230g max (without chassis and cover)							
COOLING METHOD Convection											

This is the value that measured on measuring board with capacitor of 22 $\mu\,F$ at 150mm *1 from output terminal. Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN:

RM103). *2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at

25°C, with the input voltage held constant at the rated input/output.

LFA

*3 Derating is required.

To meet the specifications. Do not operate over-loaded condition. *

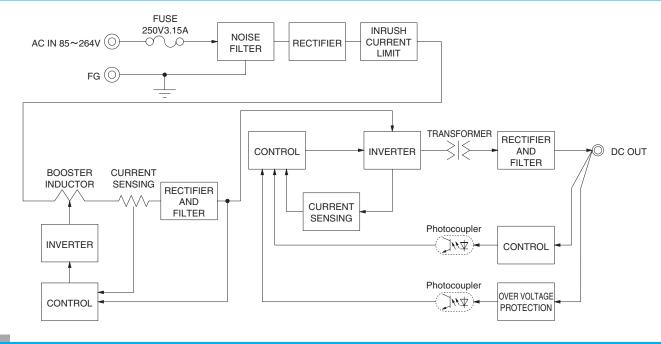
Parallel operation is not possible.

* *

Derating is required when operated with chassis and cover. Sound noise may be generated by power supply in case of pulse load.



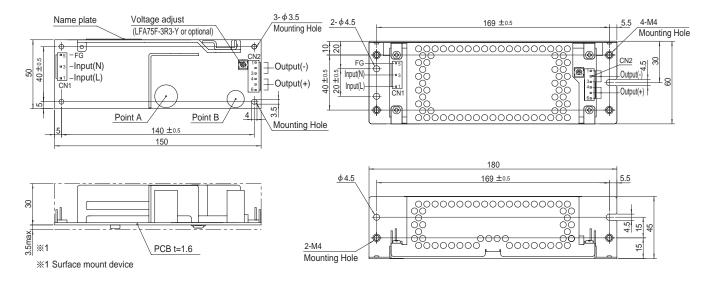




External view

Standard type

Chassis and cover type



% 4 Mounting holes are existing.

- % The back side of P.C.B. of the power supply is assembled some SMDs.
- Be attention not to bump against the attached area by vibration. % Use the spacer of 8mm length or more regarding insulation.
- Solution of the spacer of 8mm length or more regarding insulat And do not use press-fitting bush.
- ※ Point A, Point B are thermometry points. Please refer to Instruction Manual 3.

I/C	Connector	Mating connector	Terminal		
CNIA	4 4400704 0	1-1123722-5	Chain	1123721-1	
CINT	1-1123724-3	1-1123722-5	Loose	1318912-1	
CNID	1-1123723-6	1-1123722-6	Chain	1123721-1	
CINZ	1-1123723-6		Loose	1318912-1	
(Mfr:Tvco Electronics AMP)					

% I/O Connector is Mfr. Tyco Electronics AMP % Option:-J1:(J.S.T) connector type. Refer to Instruction Manual 5.

<PIN CONNECTION>

CN1			CN2		
Pin No.	Input		Pin No.	Output	ЖТ
1	AC(L)		1 40 2	V	* W
2		1	1 to 3	-V	Ж P
3	AC(N)		1 40 0		× 0
4			4 to 6	+V	× D × M
5	FG				× W

※ Tolerance	e:±1
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- % Weight : 230g max (without chassis and cover)
- % PCB material / thickness : CEM3 / 1.6mm
- % Optional chassis and cover material : Electric galvanizing steel board.
 % Dimensions in mm
- ※ Mounting torque (Mounting hole of chassis) :1.5N m (16kgf cm) max

% Keep drawing current per pin below 5A for CN2.