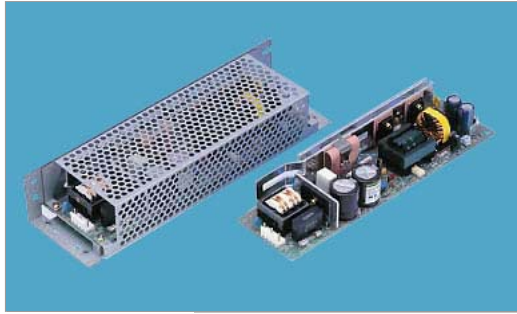


## LCA100S



### Features

- Small and compact PCB construction
- UL recognized, CSA certified
- Built-in Inrush Current Protection
- RoHS Compliant

### Safety Agency Approvals

- Complies with DEN-AN
- UL1950, CSA C22.2 No.234

### EMI Compliance

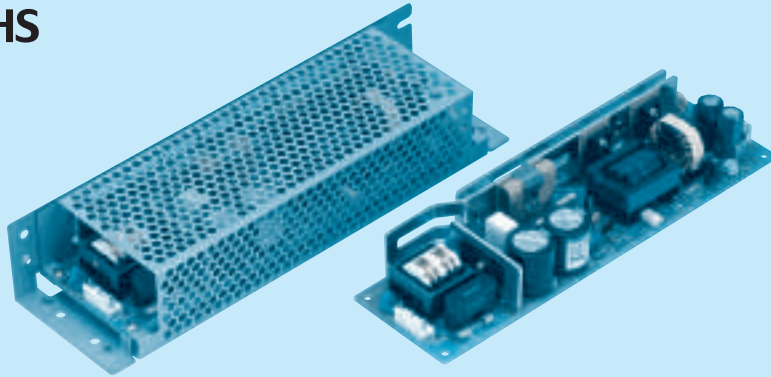
- FCC-B
- VCCI-B

**2 year warranty(refer to Instruction Manual)**

Model	Input Voltage [V]	Output Wattage [W]	DC Output [V/A]
LCA100S-3	DC 110 - 170 AC 85 - 132	60	3V 20A
LCA100S-5	DC 110 - 170 AC 85 - 132	100	5V 20A
LCA100S-12	DC 110 - 170 AC 85 - 132	102	12V 8.5A
LCA100S-15	DC 110 - 170 AC 85 - 132	105	15V 7A
LCA100S-24	DC 110 - 170 AC 85 - 132	103.2	24V 4.3A
LCA100S-24-H	DC 110 - 170 AC 85 - 132	103.2 (peak 168)	24V 4.3A (peak 7A)
LCA100S-36	DC 110 - 170 AC 85 - 132	108	36V 3A
LCA100S-48	DC 110 - 170 AC 85 - 132	105.6	48V 2.2A

LC A 100 S -5 -□

① ② ③ ④ ⑤ ⑥



Recommended Noise Filter  
NAC-06-472



High voltage pulse noise type : NAP series  
Low leakage current type : NAM series  
\*The Noise Filter is recommended to connect with several devices.

- ① Series name
- ② 100/120V input
- ③ Output wattage
- ④ Single output
- ⑤ Output voltage
- ⑥ Optional
- C :with Coating
- G :Low leakage current
- S :with Chassis
- SN :with Chassis & cover
- Y :with Potentiometer

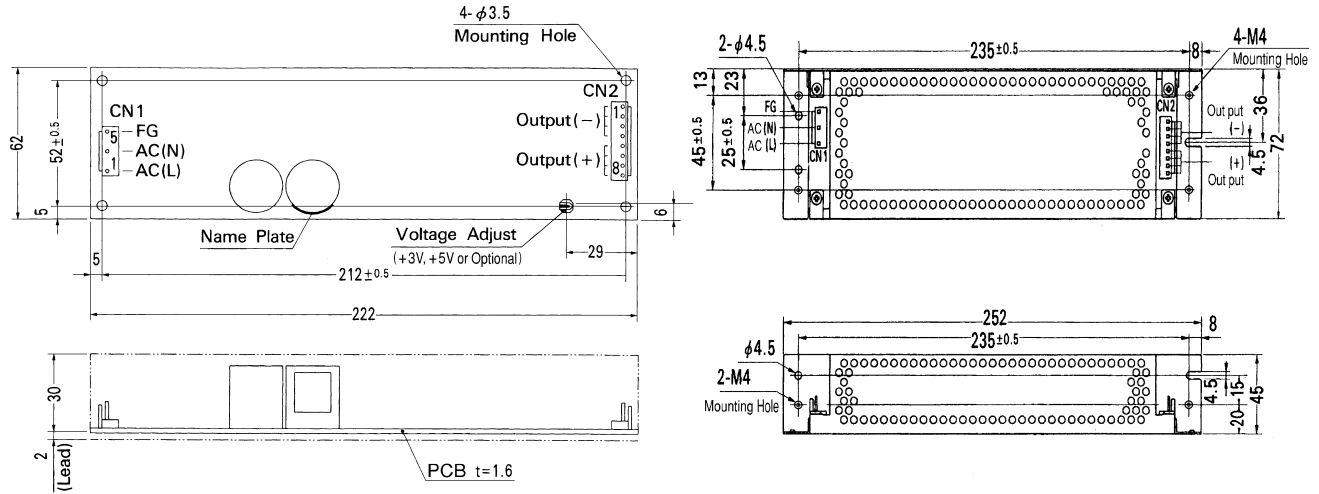
MODEL	LCA100S-3	LCA100S-5	LCA100S-12	LCA100S-15	LCA100S-24	LCA100S-24-H	LCA100S-36	LCA100S-48
MAX OUTPUT WATTAGE[W]	60	100	102	105	103.2	103.2	108	105.6
DC OUTPUT	3V 20A	5V 20A	12V 8.5A	15V 7A	24V 4.3A	24V 4.3A	36V 3A	48V 2.2A

## SPECIFICATIONS

	MODEL	LCA100S-3	LCA100S-5	LCA100S-12	LCA100S-15	LCA100S-24	LCA100S-24-H	LCA100S-36	LCA100S-48
INPUT	VOLTAGE[V]	AC85 - 132 1 φ or DC110 - 170							
	CURRENT[A]	2.5typ (Io=100%)							
	FREQUENCY[Hz]	47 - 440 or DC							
	EFFICIENCY[%]	74typ	79typ	83typ	84typ	85typ	85typ	85typ	85typ
	INRUSH CURRENT[A]	15typ (Io=100%)							
	LEAKAGE CURRENT[ma]	0.5max (60Hz, According to UL, CSA and DEN-AN)							
OUTPUT	VOLTAGE[V]	3	5	12	15	24	24	36	48
	CURRENT[A]	20	20	8.5	7	4.3	4.3 (Peak 7)	3	2.2
	LINE REGULATION[mV]	20max	20max	48max	60max	96max	96max	144max	192max
	LOAD REGULATION[mV]	40max	40max	100max	120max	150max	150max	240max	300max
	RIPPLE[mVp-p]	80max	80max	120max	120max	120max	120max	150max	150max
	RIPPLE NOISE[mVp-p]	140max	140max	160max	160max	160max	160max	200max	200max
	TEMPERATURE REGULATION[mV]	120max	120max	150max	150max	150max	250max	250max	350max
	DRIFT[mV]	160max	160max	180max	180max	180max	280max	300max	400max
	START-UP TIME[ms]	50max	50max	120max	150max	240max	240max	360max	480max
	HOLD-UP TIME[ms]	60max	60max	150max	180max	290max	290max	450max	600max
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	20max	20max	48max	60max	96max	96max	144max	192max
	OUTPUT VOLTAGE SETTING[V]	2.85 - 3.6   4.5 - 5.5   Fixed ("Y"which can be adjusted the output is available as optional: 12, 15, 24, 36, 48V ±10%)							
	PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating (works over 105% of peak current at option -H) and recovers automatically						
OVERVOLTAGE PROTECTION		4.00 - 5.25V   Works at 115 - 140% of rating							
OPERATING INDICATION		Not provided							
REMOTE SENSING		Not provided							
ISOLATION	INPUT-OUTPUT	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)							
	INPUT-FG	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)							
	OUTPUT-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-10 to +60°C, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max							
	STORAGE TEMP.,HUMID.AND ALTITUDE	-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max							
	VIBRATION	10 - 55Hz, 19.6m/s <sup>2</sup> (2G), 3minutes period, 60minutes each along X, Y and Z axis							
	IMPACT	196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis							
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS	UL60950-1, CSA C22.2 No.234 Complies with DEN-AN							
	CONDUCTED NOISE	Complies with FCC-B, VCCI-B							
OTHERS	CASE SIZE/WEIGHT	62 x 32 x 222mm (W x H x D) / 370g max (without chassis and cover)							
	COOLING METHOD	Convection							

\*1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN : RM101).  
 \*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.  
 \*3 Peak load for 20 sec. or less is acceptable(The average current has to be less than the rated current).  
 \* Derating is required when operated with chassis and cover.

External view



<PIN CONNECTION>

I/O Connector	Mating Connector	Terminal
CN1	B3P5-VH	VHR-5N
CN2	B8P-VH	VHR-8N

Pin No.	Input
1	AC(L)
2	AC(N)
3	AC(N)
4	AC(N)
5	FG

Pin No.	Output
1~4	-V
5~8	+V

(Mfr.: J.S.T.)

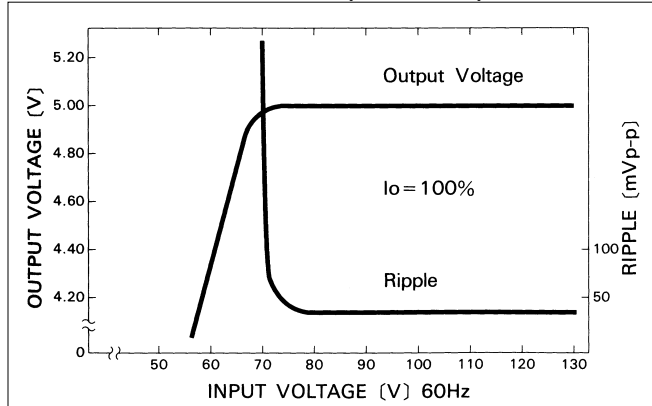
※ Maximum 5A per pin of CN2 can be applied.

- ※ Weight : 370g or less (without chassis and cover)
- ※ Tolerance : ±1
- ※ Dimensions in mm.
- ※ PCB Material : Glass composite (CEM3)
- ※ Chassis and cover is optional
- ※ Mounting torque : 1.5N·m (16kgf·cm) max

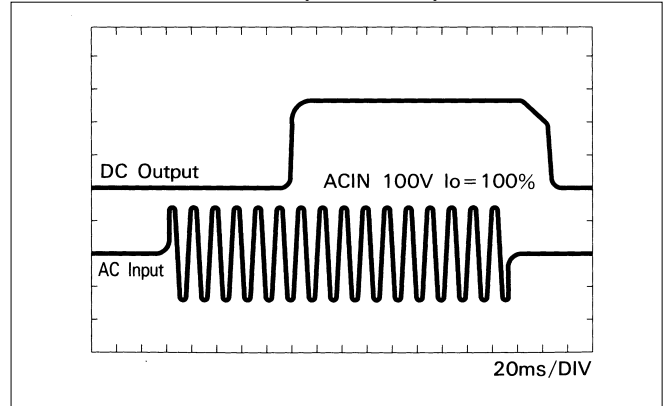
LCA

Performance data

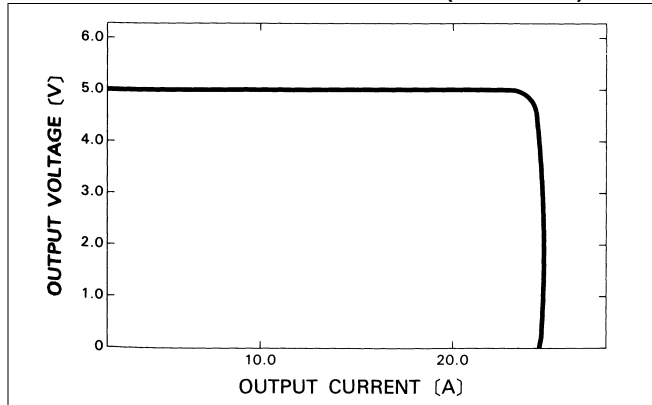
■ STATIC CHARACTERISTICS (LCA100S-5)



■ RISE TIME & FALL TIME (LCA100S-5)



■ OVERCURRENT CHARACTERISTICS (LCA100S-5)



■ DERATING CURVE

