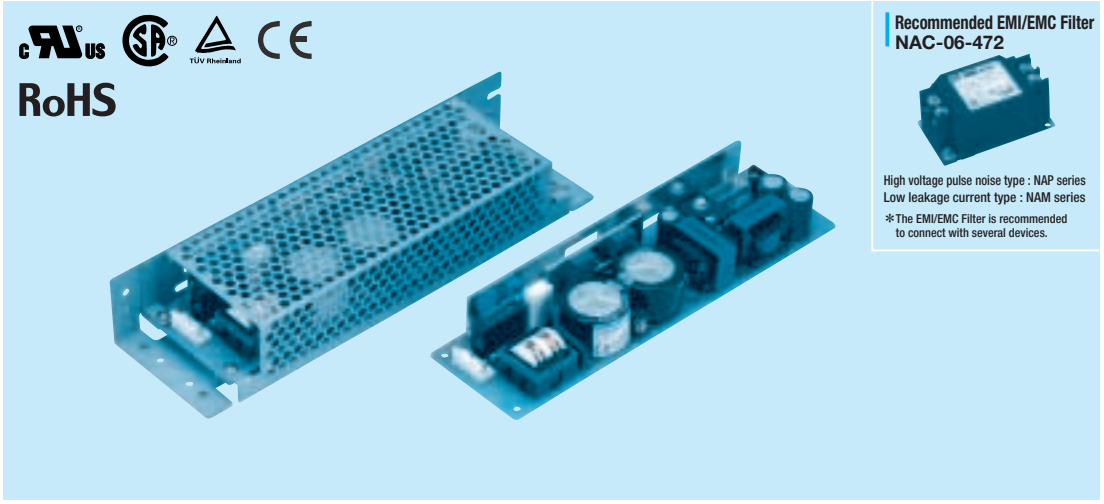
COSEL AC-DC Power Supplies Open Frame/Enclosed type

LDA50F

Ordering information

LDA 50 F -5 -□

① ② ③ ④ ⑤



Recommended EMI/EMC Filter
NAC-06-472

High voltage pulse noise type : NAP series
Low leakage current type : NAM series

*The EMI/EMC Filter is recommended to connect with several devices.

①Series name
②Output wattage
③Universal input
④Output voltage
⑤Optional *4
C :with Coating
G :Low leakage current
R :with Remote ON/OFF
S :with Chassis
SN:with Chassis & cover
Y :with Potentiometer

MODEL	LDA50F-3	LDA50F-5	LDA50F-9	LDA50F-12	LDA50F-15	LDA50F-18	LDA50F-24	LDA50F-24-H	LDA50F-24-HR	LDA50F-30
MAX OUTPUT WATTAGE[W]	30	50	50.4	51.6	52.5	50.4	50.4	50.4	50.4	51
DC OUTPUT *3	3V 10A	5V 10A	9V 5.6A	12V 4.3A	15V 3.5A	18V 2.8A	24V 2.1A	24V 2.1(3)A	24V 2.1(3)A	30V 1.7A

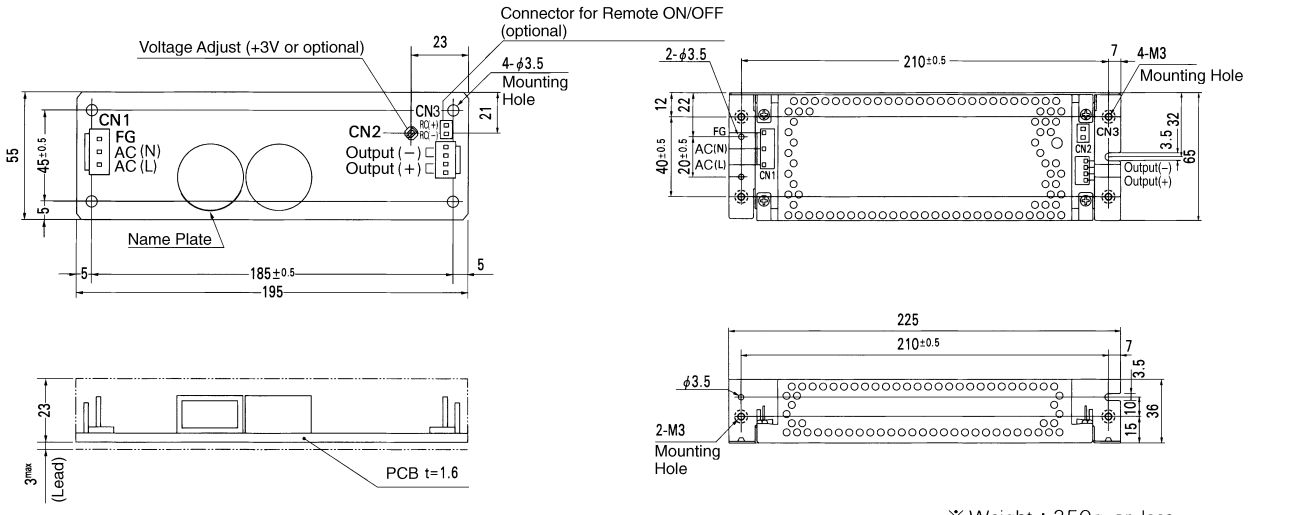
SPECIFICATIONS

	MODEL		LDA50F-3	LDA50F-5	LDA50F-9	LDA50F-12	LDA50F-15	LDA50F-18	LDA50F-24	LDA50F-24-H	LDA50F-24-HR	LDA50F-30
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC110 - 370									
	CURRENT[A]	ACIN 100V	1.3typ (Io=100%)									
		ACIN 200V	0.7typ (Io=100%)									
	FREQUENCY[Hz]		47 - 440 or DC									
	EFFICIENCY[%]		73typ	77typ	78typ	80typ	81typ	81typ	82typ	82typ	82typ	82typ
	INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%) (At cold start)									
		ACIN 200V	30typ (Io=100%) (At cold start)									
	LEAKAGE CURRENT[mA]		0.75max (60Hz, According to UL, CSA, VDE and DEN-AN)									
OUTPUT	VOLTAGE[V]		3	5	9	12	15	18	24	24	24	30
	CURRENT[A]	*1	10	10	5.6	4.3	3.5	2.8	2.1	2.1 (3)	2.1 (3)	1.7
	LINE REGULATION[mV]		20max	20max	36max	48max	60max	72max	96max	96max	96max	120max
	LOAD REGULATION[mV]		40max	40max	100max	100max	120max	120max	150max	150max	150max	180max
	RIPPLE[mVp-p]	0 to +50℃	80max	80max	120max	120max	120max	120max	120max	120max	120max	120max
		-10 - 0℃	140max	140max	160max	160max	160max	160max	160max	160max	160max	160max
	RIPPLE NOISE[mVp-p]	0 to +50℃	120max	120max	150max	150max	150max	150max	150max	250max	250max	150max
		-10 - 0℃	160max	160max	180max	180max	180max	180max	180max	280max	280max	180max
	TEMPERATURE REGULATION[mV]		60max	60max	120max	150max	180max	200max	290max	290max	290max	360max
	DRIFT[mV]	*2	20max	20max	36max	48max	60max	72max	96max	96max	96max	120max
	START-UP TIME[ms]		200max (ACIN 100V, Io=100%)									
	HOLD-UP TIME[ms]		10typ (ACIN 85V, Io=100%) 20typ (ACIN 100V, Io=100%)									
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		2.85 - 3.6	Fixed ("Y"which can be adjusted the output is available as option :5, 9, 12, 15, 18, 24, 30V ±10%)								
	OUTPUT VOLTAGE SETTING[V]		——	4.9 - 5.3	8.6 - 9.4	11.5 - 12.5	14.4 - 15.6	17.3 - 18.7	23.0 - 25.0	23.0 - 25.0	23.0 - 25.0	28.5 - 31.5
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating (-H : peak) and recovers automatically									
	OVERVOLTAGE PROTECTION		4.00 - 5.25V	Works at 115 - 140% of rating								
	OPERATING INDICATION		Not provided									
	REMOTE SENSING		Not provided									
	REMOTE ON/OFF		Option (Refer to Instruction Manual)									
ISOLATION	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)									
	OUTPUT-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)									
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +60℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE) 3,000m (10,000feet) max									
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 20 - 90%RH (Non condensing) 9,000m (30,000feet) max									
	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis									
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis									
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS		UL60950-1, EN60950-1, EN50178, CSA C22.2 No.60950-1 Complies with DEN-AN and IEC60950-1									
	CONDUCTED NOISE		Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B									
OTHERS	CASE SIZE/WEIGHT		55×26×195mm (W×H×D) /250g max (without chassis and cover)									
	COOLING METHOD		Convection									

*1 Peak load for 10sec. or less is acceptable if the total wattage is less than the rated wattage(24V:50.4W).
*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃,with the input voltage held constant at the rated input/output.
*3 ( ) : peak current
*4 Please contact us about safety approvals for the model with option.

* Avoid prolonged use under over-load.
* Parallel operation with other model is not possible.
* Derating is required when operated with chassis and cover.

External view



I/O Connector		Mating Connector	Terminal
CN1	B3P5-VH	VHR-5N	Chain: SVH-21T-P1.1
			Loose: BVH-21T-P1.1
CN2	B4P-VH	VHR-4N	Chain: SVH-21T-P1.1
			Loose: BVH-21T-P1.1
CN3	B2B-XH-A	XHP-2	Chain: SXH-001T-P0.6
			Loose: BXH-001T-P0.6

(Mfr : J.S.T.)

〈PIN CONNECTION〉

CN1 Pin No.	CN1 Input	CN2 Pin No.	CN2 Output	CN3 Pin No.	CN3 Remote ON/OFF
1	AC(L)	1	−V	1	RC(+)
2		2	−V	2	RC(−)
3	AC(N)	3	+V		
4		4	+V		
5	FG				

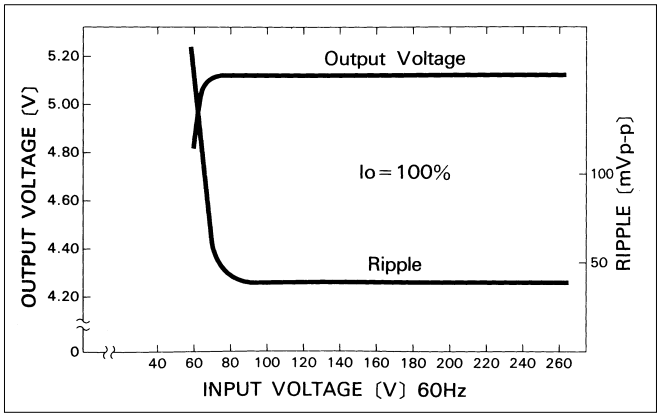
※ Keep drawing current per pin below 5A for CN2.

※ Weight : 250g or less (Without chassis and cover)
※ Tolerance : ±1
※ Dimensions in mm.
※ PCB Material : Glass composite (CEM3)
※ Chassis and cover is optional.
※ Mounting torque : 0.6N·m (6.3kgf·cm) max

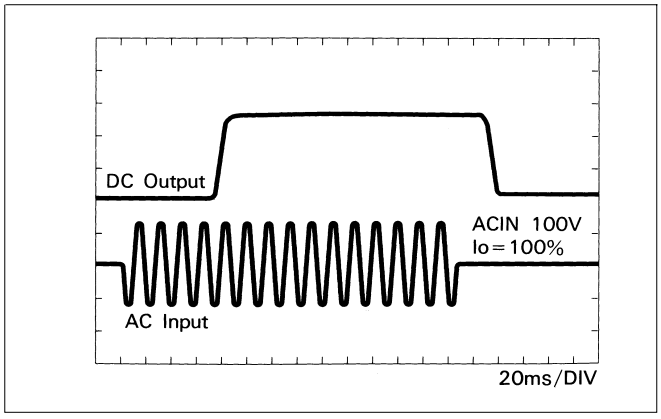
LDA

Performance data

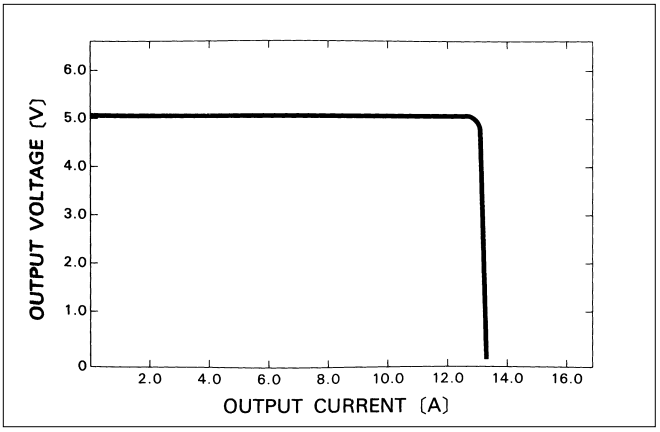
■STATIC CHARACTERISTICS (LDA50F-5)



■RISE TIME & FALL TIME (LDA50F-5)



■OVERCURRENT CHARACTERISTICS (LDA50F-5)



■DERATING CURVE