### Ordering information

# **PMA100F**

A 100 F s

Low leakage current type : NAM series

to connect with several devices.

\*The EMI/EMC Filter is recommended

CNUS & CE **RoHS** eco Horizontal terminal block Vertical terminal block Standard type with Cover (option:-T1) (option:-T) (option:-N)

 Series name
 Single output
 Output wattage Recommended EMI/EMC Filter NAM-06-000

4)Universal input

⑤Output voltage

Optional \*5
 T : Vertical terminal block
 T1: Horizontal terminal block

N: with Cover

J1: VH(J.S.T.)connector type

R: with Remote ON/OFF

Specification is changed at option, refer to Instruction Manual.

MODEL	PMA100F-3R3	PMA100F-5	PMA100F-12	PMA100F-24	PMA100F-48
MAX OUTPUT WATTAGE[W]	66	100	102	108	100.8
DC OUTPUT	3.3V 20A	5V 20A	12V 8.5A	24V 4.5A	48V 2.1A

### **SPECIFICATIONS**

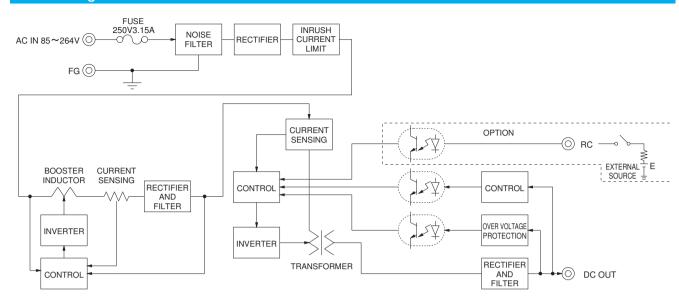
	MODEL		PMA100F-3R3	PMA100F-5	PMA100F-12	PMA100F-24	PMA100F-48	
	VOLTAGE[V]		AC85 - 264 1 φ (Refer to the Instruction Manual 1.1)					
	OUDDENITIAL	ACIN 100V	0.9typ (lo=100%)	1.3typ (lo=100%)				
	CURRENT[A]	ACIN 200V						
	FREQUENCY[Hz]		50 / 60 (47 - 63)					
	EEEICIENCVI9/1	ACIN 100V	77typ	81typ	82typ	84typ	84typ	
NPUT	EFFICIENCY[%]	ACIN 200V	78typ	83typ	83typ	86typ	86typ	
	POWER FACTOR	ACIN 100V	0.98typ					
	(lo=100%)	ACIN 200V	0.85typ 0.90typ					
	INDUCUI OUDDENITAL	ACIN 100V	20typ (lo=100%) (At cold start)					
	INRUSH CURRENT[A]	ACIN 200V	40typ (Io=100%) (At cold start)					
	LEAKAGE CURRENT[mA]		0.09 / 0.18max (ACIN 100V / 240V 60Hz, lo=100%, According to IEC60601-1)					
	VOLTAGE[V]		3.3	5	12	24	48	
	CURRENT[A]		20.0	20.0	8.5	4.5	2.1	
	LINE REGULATION[I	mV]	20max	20max	48max	96max	192max	
	LOAD REGULATION	[mV]	40max	40max	100max	150max	240max	
	RIPPLE[mVp-p]	0 to +50℃	80max	80max	120max	120max	150max	
	*1	-10 - 0℃	140max	140max	160max	160max	200max	
	RIPPLE NOISE[mVp-p]	0 to +50℃	120max	120max	150max	150max	250max	
UTPUT	*1	-10 - 0℃	160max	160max	180max	180max	300max	
	TEMPERATURE REGULATION[mV]	0 to +50°C	50max	50max	120max	240max	480max	
	TEMPERATORE REGULATION[IIV]	-10 to +50°C	60max	60max	150max	290max	600max	
	DRIFT[mV] *2		20max	20max	48max	96max	192max	
	START-UP TIME[ms]		250typ (ACIN 100V, Io=100%)					
	HOLD-UP TIME[ms]		20typ (ACIN 100V, lo=100%)					
	OUTPUT VOLTAGE ADJUSTMENT	RANGE[V]	2.85 to 3.60	4.50 to 5.50	10.00 to 13.20	19.20 to 27.00	39.00 to 53.00	
	OUTPUT VOLTAGE SET	TING[V]	3.30 to 3.40	5.00 to 5.15	12.00 to 12.48	24.00 to 24.96	48.00 to 49.92	
DOTEOTION	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically					
ROTECTION RCUIT AND	OVERVOLTAGE PROTECTION[V]		4.00 to 5.25	5.75 to 7.00	15.00 to 18.00	30.00 to 37.00	58.00 to 65.00	
THERS	OPERATING INDICATION		LED (Green)					
	REMOTE ON/OFF		Optional (Required external power source)					
	INPUT-OUTPUT-RC	*3	( (					
SOLATION			AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT-RC-FG		AC500V 1minute, Cutoff current = 25mA, DC500V 50M $\Omega$ min (At Room Temperature)					
				0 to +70°C, 20 - 90%RH (Non condensing), 3,000m (10,000feet) max ★4				
NVIRONMENT				90%RH (Non condensing), 9,000m (30,000feet) max				
			, ,	- 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					
AFETY AND			UL60601-1, C-UL (CSA-C22.2 No.601.1), EN60601-1					
OISE	CONDUCTED NOISE		Complies with FCC-B, VCCI-B, CISPR11-B, CISPR22-B, EN55011-B, EN55022-B					
EGULATIONS	HARMONIC ATTENU		Complies with IEC610					
THERS	CASE SIZE/WEIGHT		34×93×168mm [1.34×3.66×6.61 inches] (W×H×D) / 560g max (with cover : 625g max)					
	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.
- Applicable when Remote ON/OFF (optional) is added. RC is insulated with input, output and FG.
- \*4 Derating is required.
  \*5 Please contact us about safety approvals for the model with option.

- Please contact us about class C.
- Parallel operation with other model is not possible.
- Derating is required when operated with cover
- A sound may occur from power supply at peak loading.

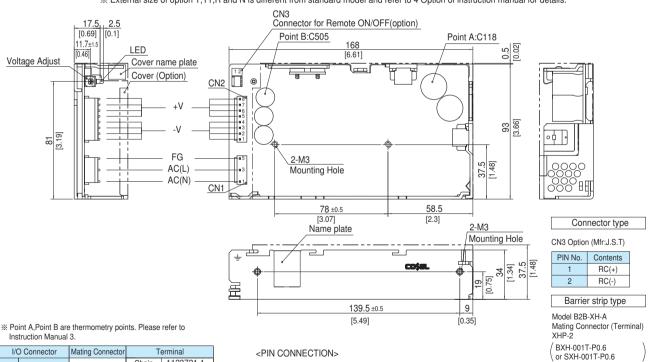
## PMA100F | COSEL

## Block diagram



#### **External view**

\*\* External size of option T,T1,R and N is different from standard model and refer to 4 Option of instruction manual for details.



	I/O Connector		Mating Connector	Terminal		
	CN1	1-1123724-3	1-1123722-5	Chain	1123721-1	
				Loose	1318912-1	
	CN2	1-1123723-8	1-1123722-8	Chain	1123721-1	
				Loose	1318912-1	

(Mfr : Tyco Electronics AMP)

- ※ I/O Connector is Mfr.Tyco Electronics AMP
- Option : -J1 : (J.S.T) connector type
   -T : Vertical terminal block type
- -T1 : Horizontal terminal block type Refer to Instruction Manual 4.

<pin< th=""><th>COMM</th><th>ECI</th><th>ION&gt;</th></pin<>	COMM	ECI	ION>

F

N1		CN2	
Pin No.	Input		Pin No.
1	AC(N)		1 - 4
2			1 - 4
3	AC(L)		5 - 8
4			5-8
5	FG		

- Output -V +V
- X Tolerance: ±1 [±0.04]
- Weight: 560g max (with cover: 625g max)
- ※ PCB Material/thickness: CEM-3 / 1.6mm [0.06inches]
- \* Chassis material : Aluminum
- ※ Keep drawing current per pin bellow 5A of CN2.
- \* Dimensions in mm, [ ]=inches
- ※ Mounting torque: 0.49N ⋅ m (5kgf ⋅ cm) max
- \* Please connect safety ground to the unit in 2-M3 holes.

**PMA**