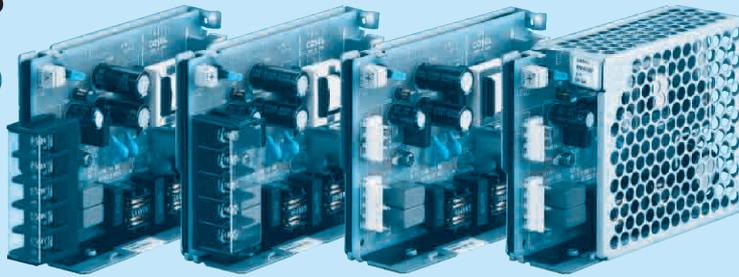


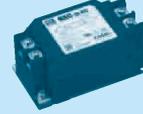
PMA15F

① PM ② A ③ 15 ④ F ⑤ -□ ⑥ -□



Horizontal terminal block (option : -T1) Vertical terminal block (option : -T) Standard type with Cover (option : -N)

Recommended EMI/EMC Filter
NAM-04-000



Low leakage current type : NAM series
*The EMI/EMC Filter is recommended to connect with several devices.

- ① Series name
- ② Single output
- ③ Output wattage
- ④ Universal input
- ⑤ Output voltage
- ⑥ Optional *5
- T : Vertical terminal block
- T1: Horizontal terminal block
- N: with Cover
- J1: VH(J.S.T.)connector type

Specification is changed at option, refer to Instruction Manual.

MODEL	PMA15F-3R3	PMA15F-5	PMA15F-12	PMA15F-15	PMA15F-24
MAX OUTPUT WATTAGE[W]	9.9	15	15.6	15	16.8
DC OUTPUT	3.3V 3A	5V 3A	12V 1.3A	15V 1A	24V 0.7A

SPECIFICATIONS

	MODEL	PMA15F-3R3	PMA15F-5	PMA15F-12	PMA15F-15	PMA15F-24	
INPUT	VOLTAGE[V]	AC85 - 264 1ϕ (Refer to the Instruction Manual 1.1 and 3.2) *3					
	CURRENT[A]	ACIN 100V	0.30typ (Io=100%)	0.40typ (Io=100%)			
		ACIN 200V	0.15typ (Io=100%)	0.20typ (Io=100%)			
	FREQUENCY[Hz]	50 / 60 (47 - 440)					
	EFFICIENCY[%]	ACIN 100V	66typ	70typ	74typ	76typ	76typ
		ACIN 200V	67typ	74typ	78typ	79typ	79typ
INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%) (At cold start)					
	ACIN 200V	30typ (Io=100%) (At cold start)					
LEAKAGE CURRENT[ma]	0.05/0.10max (ACIN 100V / 240V 60Hz, Io=100%, According to IEC60601-1)						
OUTPUT	VOLTAGE[V]	3.3	5	12	15	24	
	CURRENT[A]	3.0	3.0	1.3	1.0	0.7	
	LINE REGULATION[mV]	20max	20max	48max	60max	96max	
	LOAD REGULATION[mV]	40max	40max	100max	120max	150max	
		RIPPLE[mVp-p]	80max	80max	120max	120max	120max
	RIPPLE NOISE[mVp-p]	0 to +50°C	140max	140max	160max	160max	160max
		-10 - 0°C	120max	120max	150max	150max	150max
	TEMPERATURE REGULATION[mV]	0 to +50°C	160max	160max	180max	180max	180max
		-10 to +50°C	50max	50max	120max	150max	240max
	DRIFT[mV]	60max	60max	150max	180max	290max	
	START-UP TIME[ms]	200typ (ACIN 100V, Io=100%) *Start-up time is 700ms typ for less than 1minute of applying input again from turning off the input voltage.					
HOLD-UP TIME[ms]	20typ (ACIN 100V, Io=100%)						
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	2.85 to 3.60	4.50 to 5.50	10.00 to 13.20	13.20 to 18.00	19.20 to 27.00		
OUTPUT VOLTAGE SETTING[V]	3.30 to 3.40	5.00 to 5.15	12.00 to 12.48	15.00 to 15.60	24.00 to 24.96		
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically					
	OVERVOLTAGE PROTECTION[V]	4.00 to 5.25	5.75 to 7.00	15.00 to 18.00	20.00 to 25.00	30.00 to 37.00	
	OPERATING INDICATION	LED (Green)					
	REMOTE ON/OFF	Not provided					
ISOLATION	INPUT-OUTPUT	AC4,000V 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 = 25mA, DC500V 50MΩ min (At Room Temperature)					
ENVIRONMENT	OPERATING TEMP., HUMID. AND ALTITUDE	-10 to +70°C, 20 - 90%RH (Non condensing), 3,000m (10,000 feet) max *3					
	STORAGE TEMP., HUMID. AND ALTITUDE	-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000 feet) max					
	VIBRATION	10 - 55Hz, 19.6m/s ² (2G), 3minutes period, 60minutes each along X, Y and Z axis					
	IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis					
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS	UL60601-1, C-UL (CSA-C22.2 No.601.1), EN60601-1					
	CONDUCTED NOISE	Complies with FCC-B, VCCI-B, CISPR11-B, CISPR22-B, EN55011-B, EN55022-B					
	HARMONIC ATTENUATOR	Complies with IEC61000-3-2 (Class A) *6 (Not built-in to active filter *4)					
OTHERS	CASE SIZE/WEIGHT	31 X 78 X 103mm [1.22 X 3.07 X 4.06 inches] (W X H X D) / 230g max (with cover : 265g 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.
 *3 Derating is required.
 *4 When two or more units are used, they may not comply with the harmonic attenuator. Please contact us for details.

*5 Please contact us about safety approvals for the model with option.
 *6 Please contact us about another class.
 * 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.