

# PBA300F

## Ordering information

**PBA 300 F -5 -O**

1 2 3 4 5

- 1 Series name
  - 2 Output wattage
  - 3 Universal input
  - 4 Output voltage
  - 5 Optional
- C :with Coating  
G :Low leakage current  
U :Operation stop voltage is set at a lower value  
F3 :Reverse air exhaust type  
F4 :Low speed fan

Refer to instruction manual 7.1

| MODEL                 | PBA300F-3R3 | PBA300F-5 | PBA300F-7R5 | PBA300F-12 | PBA300F-15 | PBA300F-24 | PBA300F-36    | PBA300F-48 |
|-----------------------|-------------|-----------|-------------|------------|------------|------------|---------------|------------|
| MAX OUTPUT WATTAGE[W] | 198         | 300       | 300         | 324        | 330        | 336        | 324           | 336        |
| DC OUTPUT             | ACIN 100V   | 3.3V 60A  | 5V 60A      | 7.5V 40A   | 12V 27A    | 15V 22A    | 24V 14A       | 36V 9A     |
|                       | ACIN 200V   | 3.3V 60A  | 5V 60A      | 7.5V 40A   | 12V 27A    | 15V 22A    | 24V 14(16.5)A | 36V 9A     |

## SPECIFICATIONS

|                               | MODEL                              | PBA300F-3R3                                                                                                                                                                                                                      | PBA300F-5        | PBA300F-7R5      | PBA300F-12       | PBA300F-15       | PBA300F-24       | PBA300F-36       | PBA300F-48       |
|-------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| INPUT                         | VOLTAGE[V]                         | AC85 - 264 1 <sup>★1</sup> or DC120 - 350 (AC50 or DC70 optionally available <sup>★4</sup> )                                                                                                                                     |                  |                  |                  |                  |                  |                  |                  |
|                               | CURRENT[A]                         | ACIN 100V 3typ<br>ACIN 200V 1.6typ                                                                                                                                                                                               | 4.1typ<br>2typ   |                  |                  |                  |                  |                  |                  |
|                               | FREQUENCY[Hz]                      | 50/60 (47 - 63)                                                                                                                                                                                                                  |                  |                  |                  |                  |                  |                  |                  |
|                               | EFFICIENCY[%]                      | ACIN 100V 68typ<br>ACIN 200V 71typ                                                                                                                                                                                               | 74typ<br>77typ   | 76typ<br>79typ   | 78typ<br>81typ   | 78typ<br>81typ   | 79typ<br>82typ   | 81typ<br>84typ   | 79typ<br>82typ   |
|                               | POWER FACTOR                       | ACIN 100V 0.98typ (lo=100%)<br>ACIN 200V 0.95typ (lo=100%)                                                                                                                                                                       |                  |                  |                  |                  |                  |                  |                  |
|                               | INRUSH CURRENT[A]                  | ACIN 100V 20/40typ (lo=100%) (Primary inrush current /Secondary inrush current) (More then 3 sec. to re-start)<br>ACIN 200V 40/40typ (lo=100%) (Primary inrush current /Secondary inrush current) (More then 3 sec. to re-start) |                  |                  |                  |                  |                  |                  |                  |
|                               | LEAKAGE CURRENT[mA]                | 0.45/0.75max (ACIN 100V/240V 60Hz, lo=100%, According to IEC60950-1)                                                                                                                                                             |                  |                  |                  |                  |                  |                  |                  |
| OUTPUT                        | VOLTAGE[V]                         | 3.3                                                                                                                                                                                                                              | 5                | 7.5              | 12               | 15               | 24               | 36               | 48               |
|                               | CURRENT[A]                         | ACIN 100V 60<br>ACIN 200V <sup>★3</sup> 60                                                                                                                                                                                       | 60<br>60         | 40<br>40         | 27<br>27         | 22<br>22         | 14<br>14(16.5)   | 9<br>9           | 7<br>7           |
|                               | LINE REGULATION[mV]                | 20max                                                                                                                                                                                                                            | 20max            | 36max            | 48max            | 60max            | 96max            | 144max           | 192max           |
|                               | LOAD REGULATION[mV]                | 40max                                                                                                                                                                                                                            | 40max            | 60max            | 100max           | 120max           | 150max           | 150max           | 300max           |
|                               | RIPPLE[mVp-p]                      | 0 to +50C <sup>★1</sup> 80max<br>-20 - 0C <sup>★1</sup> 140max                                                                                                                                                                   | 80max<br>140max  | 120max<br>160max | 120max<br>160max | 120max<br>160max | 120max<br>160max | 150max<br>160max | 150max<br>400max |
|                               | RIPPLE NOISE[mVp-p]                | 0 to +50C <sup>★1</sup> 120max<br>-20 - 0C <sup>★1</sup> 160max                                                                                                                                                                  | 120max<br>160max | 150max<br>180max | 150max<br>180max | 150max<br>180max | 150max<br>180max | 200max<br>240max | 200max<br>500max |
|                               | TEMPERATURE REGULATION[mV]         | 0 to +50C <sup>★1</sup> 40max<br>20 to +50C <sup>★1</sup> 60max                                                                                                                                                                  | 50max<br>75max   | 75max<br>120max  | 120max<br>180max | 150max<br>180max | 240max<br>290max | 360max<br>440max | 480max<br>600max |
|                               | DRIFT[mV]                          | <sup>★2</sup> 12max                                                                                                                                                                                                              | 20max            | 30max            | 48max            | 60max            | 96max            | 144max           | 192max           |
|                               | START-UP TIME[ms]                  | 300typ(ACIN 100/200V, lo=100%) Start-up time is 500ms typ for less than 1minute of applying input again from turning off the input voltage.                                                                                      |                  |                  |                  |                  |                  |                  |                  |
|                               | HOLD-UP TIME[ms]                   | 20typ (ACIN 100/200V, lo=100%)                                                                                                                                                                                                   |                  |                  |                  |                  |                  |                  |                  |
|                               | OUTPUT VOLTAGE ADJUSTMENT RANGE[V] | 2.64 - 3.96                                                                                                                                                                                                                      | 3.96 - 6.00      | 5.25 - 8.25      | 8.25 - 13.20     | 10.50 - 16.50    | 16.50 - 26.40    | 25.20 - 39.60    | 38.40 - 56.00    |
|                               | OUTPUT VOLTAGE SETTING[V]          | 3.30 - 3.40                                                                                                                                                                                                                      | 5.00 - 5.15      | 7.50 - 7.80      | 12.00 - 12.48    | 15.00 - 15.60    | 24.00 - 24.96    | 36.00 - 37.44    | 48.00 - 49.92    |
| PROTECTION CIRCUIT AND OTHERS | OVERCURRENT PROTECTION             | Works over 105% of rated current or 101% of peak current and recovers automatically                                                                                                                                              |                  |                  |                  |                  |                  |                  |                  |
|                               | OVERVOLTAGE PROTECTION[V]          | 4.3 - 6.3                                                                                                                                                                                                                        | 6.5 - 8.0        | 9.0 - 11.6       | 14.4 - 18.6      | 18.0 - 23.3      | 28.8 - 37.2      | 43.2 - 54.0      | 57.6 - 80.0      |
|                               | OPERATING INDICATION               | LED (Green)                                                                                                                                                                                                                      |                  |                  |                  |                  |                  |                  |                  |
|                               | REMOTE SENSING                     | Provided                                                                                                                                                                                                                         |                  |                  |                  |                  |                  |                  |                  |
| ISOLATION                     | REMOTE ON/OFF                      | Provided                                                                                                                                                                                                                         |                  |                  |                  |                  |                  |                  |                  |
|                               | INPUT-OUTPUT — RC                  | AC3.000V 1minute. Cutoff current = 10mA. DC500V 50MW/min (At Room Temperature)                                                                                                                                                   |                  |                  |                  |                  |                  |                  |                  |
|                               | INPUT-FG                           | AC2.000V 1minute. Cutoff current = 10mA. DC500V 50MW/min (At Room Temperature)                                                                                                                                                   |                  |                  |                  |                  |                  |                  |                  |
|                               | OUTPUT — RC — AUX-FG               | AC500V 1minute. Cutoff current = 100mA. DC500V 50MW/min (At Room Temperature)                                                                                                                                                    |                  |                  |                  |                  |                  |                  |                  |
| ENVIRONMENT                   | OUTPUT-RC — AUX                    | AC100V 1minute. Cutoff current = 100mA. DC100V 50MW/min (At Room Temperature)                                                                                                                                                    |                  |                  |                  |                  |                  |                  |                  |
|                               | OPERATING TEMP.HUMID.AND ALTITUDE  | -20 to +71C. 20 - 90%RH (Non condensing) 3.000m (10.000feet) max                                                                                                                                                                 |                  |                  |                  |                  |                  |                  |                  |
|                               | STORAGE TEMP.HUMID.AND ALTITUDE    | 20 to +75C. 20 - 90%RH (Non condensing) 3.000m (10.000feet) max                                                                                                                                                                  |                  |                  |                  |                  |                  |                  |                  |
|                               | VIBRATION                          | 19.6m/s <sup>2</sup> (2G), 10 - 55Hz, 3minutes period, 60minutes each along X, Y and Z axis                                                                                                                                      |                  |                  |                  |                  |                  |                  |                  |
| SAFETY AND NOISE REGULATIONS  | IMPACT                             | 196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis                                                                                                                                                                     |                  |                  |                  |                  |                  |                  |                  |
|                               | AGENCY APPROVALS                   | UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN (At only AC input)                                                                                                                                          |                  |                  |                  |                  |                  |                  |                  |
|                               | CONDUCTED NOISE                    | Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B                                                                                                                                                         |                  |                  |                  |                  |                  |                  |                  |
|                               | CE MARKING                         | Low Voltage Directive, EMC Directive                                                                                                                                                                                             |                  |                  |                  |                  |                  |                  |                  |
| OTHERS                        | HARMONIC ATTENUATOR                | Complies with IEC61000-3-2                                                                                                                                                                                                       |                  |                  |                  |                  |                  |                  |                  |
|                               | CASE SIZE/WEIGHT                   | 102X42X170mm (without terminal block and screw) (WXHXD) /1.0kg max                                                                                                                                                               |                  |                  |                  |                  |                  |                  |                  |
|                               | COOLING METHOD                     | Forced cooling (internal fan)                                                                                                                                                                                                    |                  |                  |                  |                  |                  |                  |                  |

<sup>★1</sup> 1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN : RM101).

<sup>★2</sup> 2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25C.

<sup>★3</sup> 3 ( ) means peak current. Peak loading for 10s. And Duty 35% max, refer to Instruction manual in detail.

<sup>★4</sup> 4 Derating is required.Consult us for details.

<sup>★</sup> A sound may occur from power supply at pulse loading.