AC-DC Chassis Mount

50-150 Watts
PBA Series

THE XPERTS IN POWER



- Universal PFC Input
- Convection Cooled
- Low Profile <1U
- Adjustable Output Voltage
- Optional Remote On/Off
- Optional Din Rail Mount
- High Efficiency

Specification

Input

Input Voltage	*85-264 VAC (120-370 VDC)* *50 VAC (70 VDC) (Optional, contact sales)*
Input Frequency	*47-63 Hz*
Input Current	*2/1 A max at 115/230 VAC*
Inrush Current	*20/40 A max at 115/230 VAC*
Power Factor	*EN61000-3-2 compliant*
Leakage Current	*0.75 mA max, optional 0.15 mA - add suffix "-G" to model numbers*

Output

Output Voltage	*3.3 VDC to 48 VDC*
Output Voltage Adjustment	*+10/-15%*
Output Voltage Set Point	*±3% Vnom*
Minimum Load	*No minimum load required*
Start-Up Time	*350 ms typical*
Drift	*±0.6% max*
Line Regulation	*±1% max*
Load Regulation	*±2% max*
Hold-up Time	*15 ms typical*
Output Ripple & Noise	*1% of Vn pk-pk*
Overvoltage Protection	*operates at 120-140% of Vnom*
Overload Protection	*Operates at 105% of rated current, autorecovery*
Remote ON/OFF	*Optional. Add suffix "-R" to model number*

General

Efficiency	*85% typical*
Isolation	*3000 VAC Input to Output* *2000 VAC Input to Ground* *500 VAC Output to Ground*
Switching Frequency	*60-550 kHz PFC, 130kHz PWM*
Indications	*Green LED for unit operating*

Environmental

Operating Temperature	*-10 °C to +70 °C, see derating curve*
Storage Temperature	*-20 °C to +75 °C*
Relative Humidity	*20-90% non-condensing*
Shock	*20 G 11 ms,once each x, y and z axis*
Vibration	*2 G 10-55Hz for 3 min periods for 60 min along each x, y and z axis*

EMC & Safety

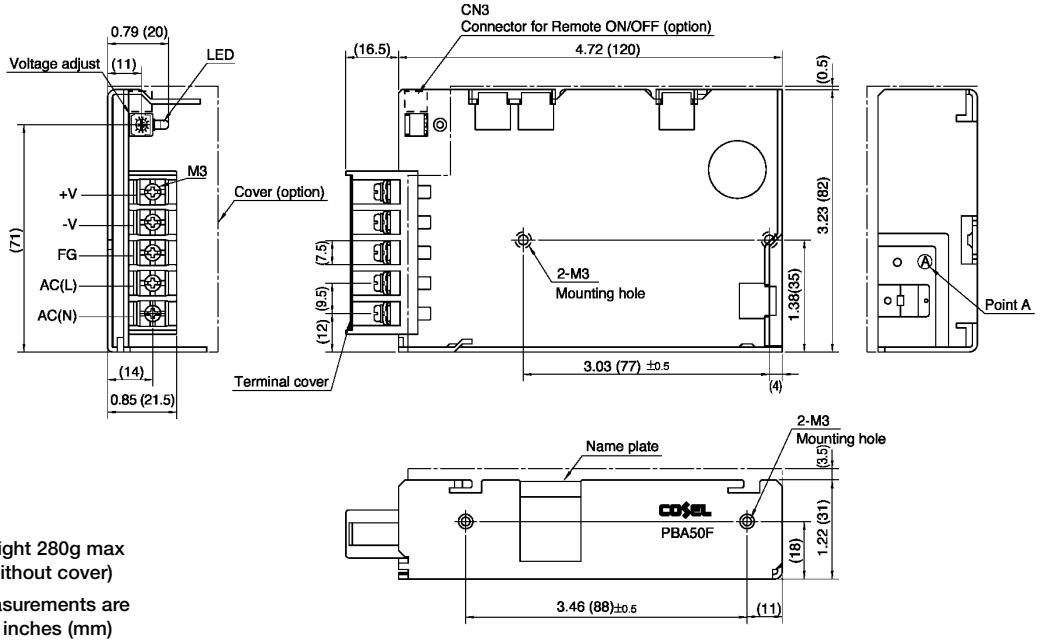
Emissions	*EN55022 Level B conducted* *EN55022 Level B radiated*
ESD Susceptibility	*EN61000-4-2 Level 4*
Radiated Susceptibility	*EN61000-4-3 Level 3*
EFT/Burst	*EN61000-4-4 Level 4*
Surge	*EN61000-4-5 Level 3 line to line* *EN61000-4-5 Level 4 line to earth*
Voltage dips and interruptions	*EN61000-4-11*
Safety Approvals	*UL60950, CSA 60950* *EN60950, EN50178*

OUTPUT VOLTAGE & CURRENT RATINGS						PBA50F
Output Voltage	Output Current	Regulation		Rippled Noise[1]	Efficiency[2]	Model
		Line	Load			
3.3 V (2.85-3.63)	10 A	±20 mV	±40 mV	120 mV	76%	PBA50F-3
5.0 V (4.00-5.50)	10 A	±20 mV	±40 mV	120 mV	82%	PBA50F-5
9.0 V (7.50-10.00)	5.6 A	±36 mV	±100 mV	150 mV	81%	PBA50F-9
12.0 V (10.0-13.2)	4.3 A	±48 mV	±100 mV	150 mV	82%	PBA50F-12
15.0 V (13.2-18.0)	3.5 A	±60 mV	±120 mV	150 mV	83%	PBA50F-15
24.0 V (19.2-27.0)	2.2 A	±96 mV	±150 mV	150 mV	84%	PBA50F-24
36.0 V (28.8-39.6)	1.4 A	±144 mV	±240 mV	250 mV	85%	PBA50F-36
48.0 V (39.0-53.0)	1.1 A	±192 mV	±240 mV	250 mV	85%	PBA50F-48

Notes

1. Measured over a 20 MHz bandwidth and from 0 °C to +50 °C.
2. Measured at 230 VAC and 100% load.

Mechanical Details



Weight 280g max
(without cover)

Measurements are
in inches (mm)

Options available:

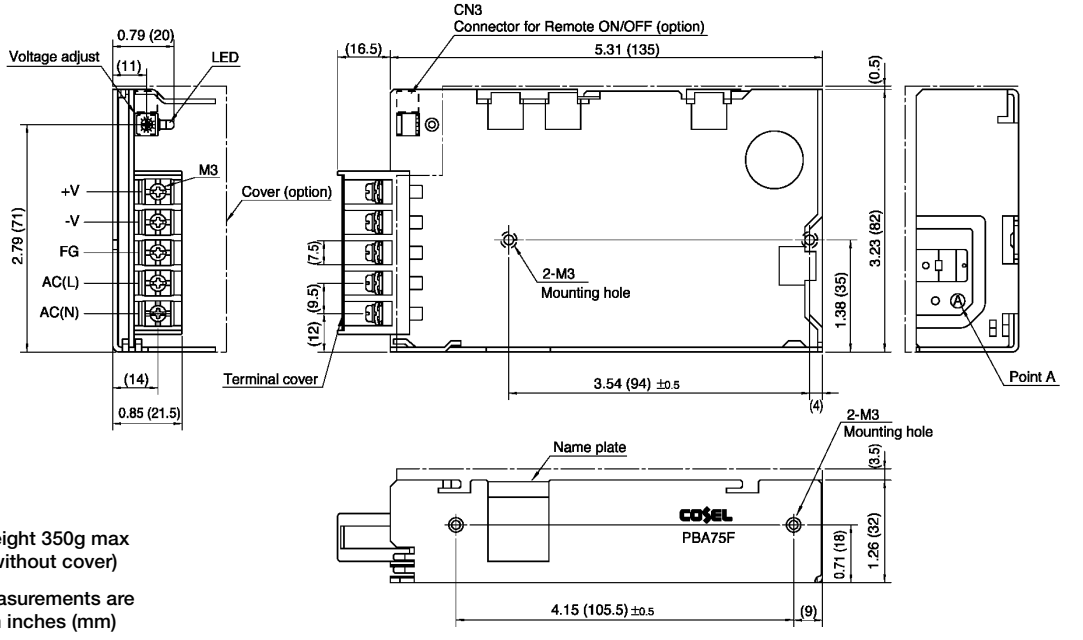
Conformal coating: add suffix "-C "
Low leakage current: add suffix "-G" (0.15 mA max)
add suffix "-E" (0.5 mA max)
Vertical screw terminal blocks: add suffix "-T"
Cover Fitted: add suffix "-N"
Remote ON/OFF: add suffix "-R"
DIN rail mount: add suffix "-N1"
Remote output voltage adjustment potentiometer: add suffix "-V"

OUTPUT VOLTAGE & CURRENT RATINGS						PBA75F
Output Voltage	Output Current	Regulation		Rippled Noise[1]	Efficiency[2]	Model
		Line	Load			
3.3 V (2.85-3.63)	15 A	±20 mV	±40 mV	120 mV	78%	PBA75F-3
5.0 V (4.00-5.50)	15 A	±20 mV	±40 mV	120 mV	83%	PBA75F-5
9.0 V (7.50-10.00)	8.4 A	±36 mV	±100 mV	150 mV	82%	PBA75F-9
12.0 V (10.0-13.2)	6.3 A	±48 mV	±100 mV	150 mV	83%	PBA75F-12
15.0 V (13.2-18.0)	5 A	±60 mV	±120 mV	150 mV	84%	PBA75F-15
24.0 V (19.2-27.0)	3.2 A	±96 mV	±150 mV	150 mV	85%	PBA75F-24
36.0 V (28.8-39.6)	2.1 A	±144 mV	±240 mV	250 mV	86%	PBA75F-36
48.0 V (39.0-53.0)	1.6 A	±192 mV	±240 mV	250 mV	86%	PBA75F-48

Notes

1. *Measured over a 20 MHz bandwidth and from 0 °C to +50 °C.*
2. *Measured at 230 VAC and 100% load.*

Mechanical Details



Weight 350g max
(without cover)

Measurements are
in inches (mm)

Options available:

Conformal coating: add suffix "-C "
Low leakage current: add suffix "-G" (0.15 mA max)
add suffix "-E" (0.5 mA max)
Vertical screw terminal blocks: add suffix "-T"
Cover Fitted: add suffix "-N"
Remote ON/OFF: add suffix "-R"
DIN rail mount: add suffix "-N1"
Remote output voltage adjustment potentiometer: add suffix "-V"

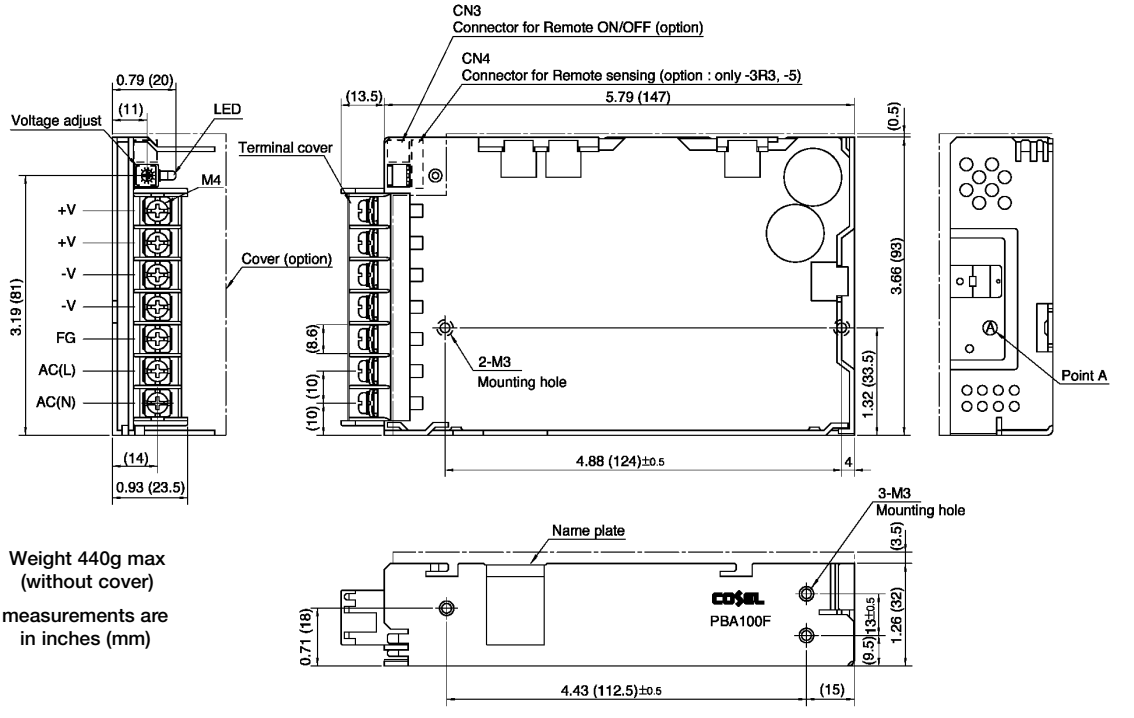
OUTPUT VOLTAGE & CURRENT RATINGS — PBA100F

Output Voltage	Output Current	Regulation		Rippled Noise[1]	Efficiency[2]	Model
		Line	Load			
3.3 V (2.85-3.63)	20 A	±20 mV	±40 mV	120 mV	79%	PBA100F-3
5.0 V (4.00-5.50)	20 A	±20 mV	±40 mV	120 mV	84%	PBA100F-5
9.0 V (7.50-10.00)	10.5 A	±36 mV	±100 mV	150 mV	82%	PBA100F-9
12.0 V (10.0-13.2)	8.5 A	±48 mV	±100 mV	150 mV	83%	PBA100F-12
15.0 V (13.2-18.0)	7 A	±60 mV	±120 mV	150 mV	86%	PBA100F-15
24.0 V (19.2-27.0)	4.5 A	±96 mV	±150 mV	150 mV	86%	PBA100F-24
36.0 V (28.8-39.6)	2.8 A	±144 mV	±240 mV	250 mV	86%	PBA100F-36
48.0 V (39.0-53.0)	2.1 A	±192 mV	±240 mV	250 mV	86%	PBA100F-48

Notes

1. *Measured over a 20 MHz bandwidth and from 0 °C to +50 °C.*
2. *Measured at 230 VAC and 100% load.*

Mechanical Details



Weight 440g max
(without cover)

measurements are
in inches (mm)

Options available:

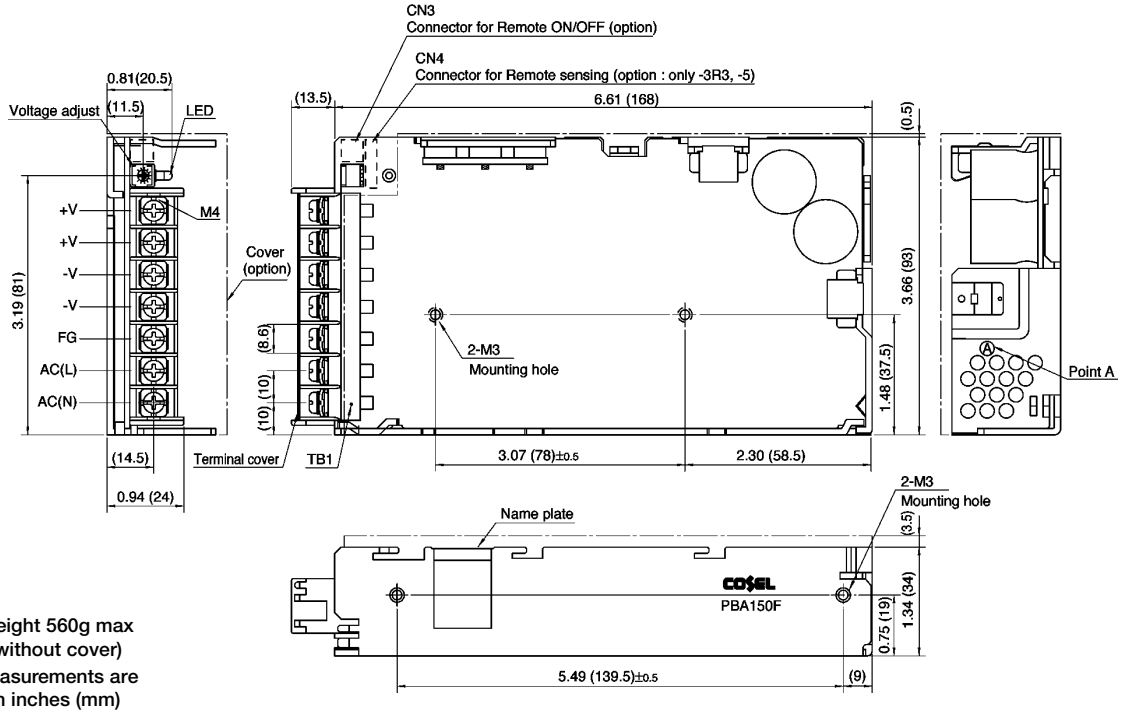
Conformal coating: add suffix "-C "
Low leakage current: add suffix "-G" (0.15 mA max)
add suffix "-E" (0.5 mA max)
Vertical screw terminal blocks: add suffix "-T"
Cover Fitted: add suffix "-N"
Remote ON/OFF: add suffix "-R"
DIN rail mount: add suffix "-N1"
Remote output voltage adjustment potentiometer: add suffix "-V"

OUTPUT VOLTAGE & CURRENT RATINGS						PBA150F
Output Voltage	Output Current	Regulation		Rippled Noise[1]	Efficiency[2]	Model
		Line	Load			
3.3 V (2.85-3.63)	30 A	±20 mV	±40 mV	120 mV	82%	PBA150F-3
5.0 V (4.00-5.50)	30 A	±20 mV	±40 mV	120 mV	86%	PBA150F-5
9.0 V (7.50-10.00)	16.7 A	±36 mV	±100 mV	150 mV	85%	PBA150F-9
12.0 V (10.0-13.2)	13 A	±48 mV	±100 mV	150 mV	86%	PBA150F-12
15.0 V (13.2-18.0)	10 A	±60 mV	±120 mV	150 mV	87%	PBA150F-15
24.0 V (19.2-27.0)	6.5 A	±96 mV	±150 mV	150 mV	88%	PBA150F-24
36.0 V (28.8-39.6)	4.3 A	±144 mV	±240 mV	250 mV	88%	PBA150F-36
48.0 V (39.0-53.0)	3.3 A	±192 mV	±240 mV	250 mV	88%	PBA150F-48

Notes

1. *Measured over a 20 MHz bandwidth and from 0 °C to +50 °C.*
2. *Measured at 230 VAC and 100% load.*

Mechanical Details



Weight 560g max
(without cover)
measurements are
in inches (mm)

Options available:

Conformal coating: add suffix "-C "
Low leakage current: add suffix "-G" (0.15 mA max)
add suffix "-E" (0.5 mA max)
Vertical screw terminal blocks: add suffix "-T"
Cover Fitted: add suffix "-N"
Remote ON/OFF: add suffix "-R"
DIN rail mount: add suffix "-N1"
Remote output voltage adjustment potentiometer: add suffix "-V"