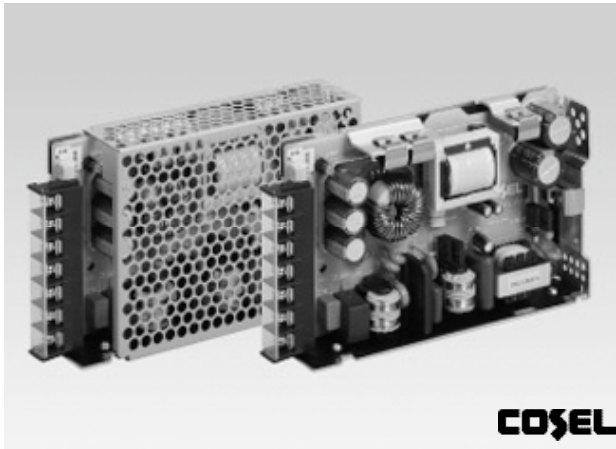


AC-DC Chassis Mount

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

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

Output

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

General

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

Environmental

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

EMC & Safety

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

OUTPUT VOLTAGE & CURRENT RATINGS

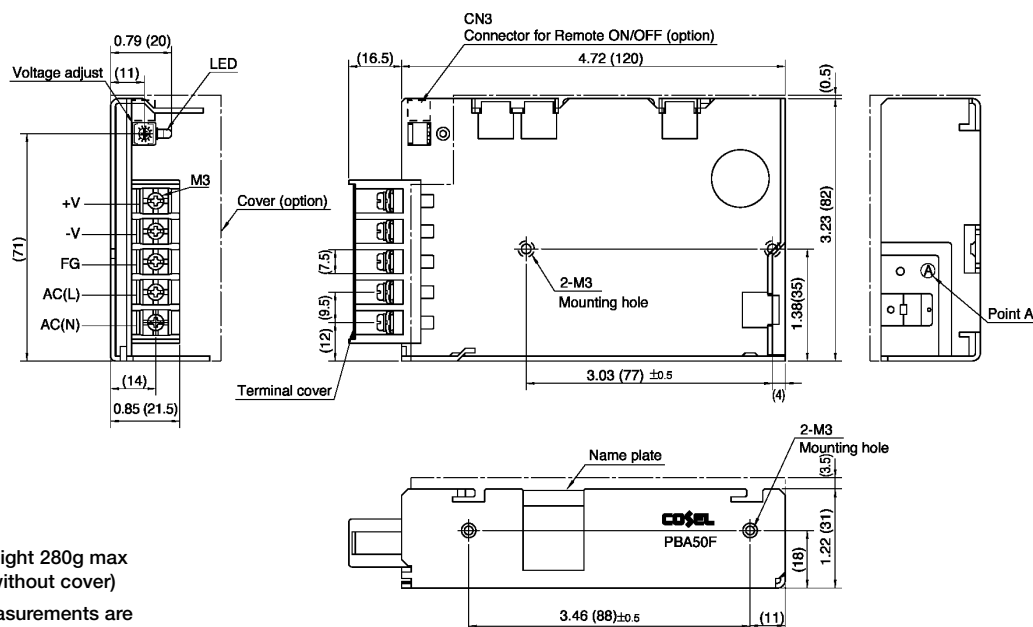
PBA50F

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



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

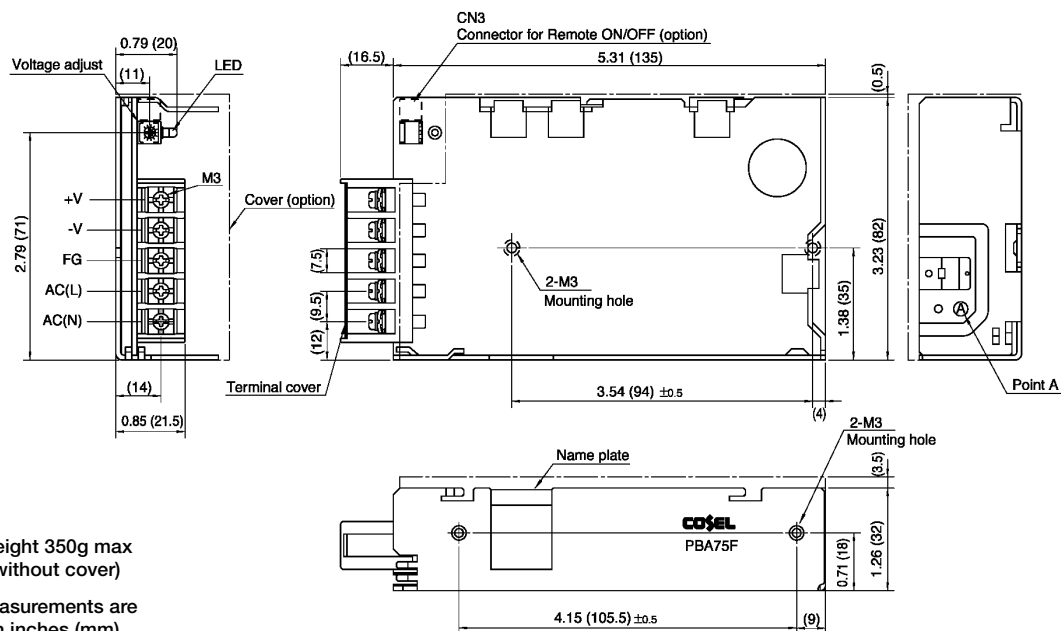
PBA75F

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



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

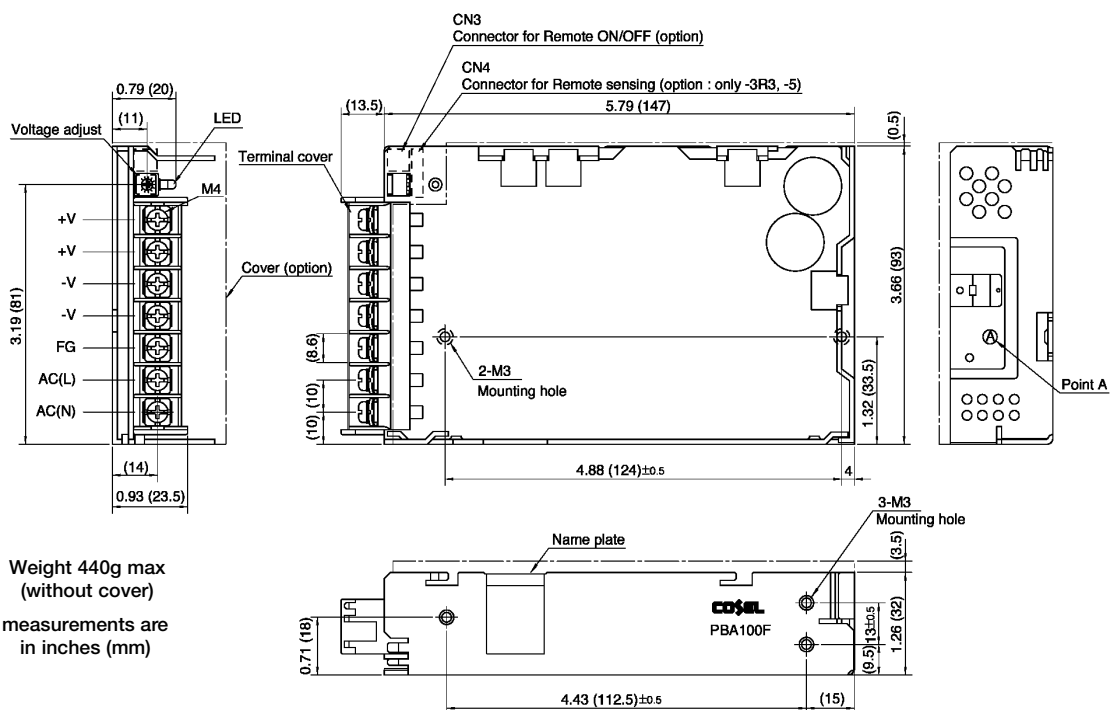
PBA100F

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



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

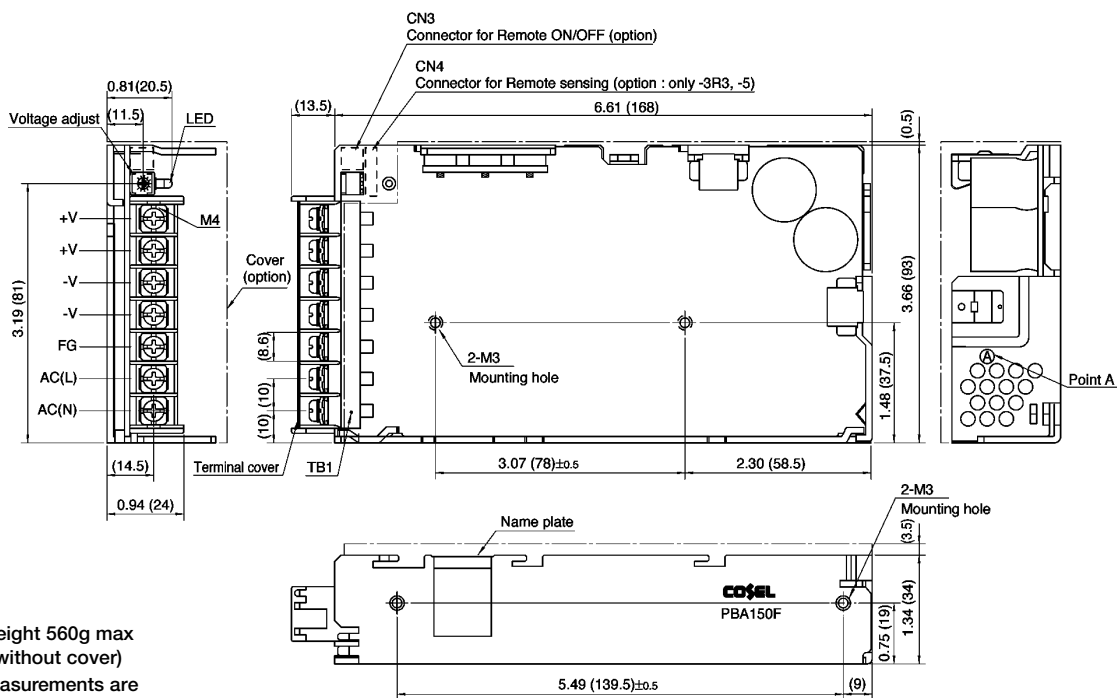
PBA150F

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



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