

## POWER SUPPLY 1-PHASE, MINILINE SERIES 2

ML15.051

PSU 100-240V ac I/P 5V dc 3A 15W O/P

- Output current 0.63 A to 4.5 A
- Up to 90.4% efficiency
- AC and DC input voltage
- Width from 22.5mm
- 5 V, 12 V and 24 V DC options



### PRODUCT DESCRIPTION

3 A model included in Pulse series Mini Line 2 is the latest development series of small power supplies with very compact dimensions and low weight. The units have high efficiency, low EMC interference and good protection against mains transients. This makes them useful in almost all electrical environments and are a great addition to the earlier Mini Line series.

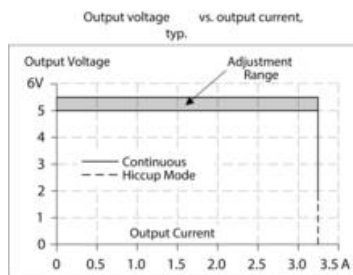
Very low quiescent current and high efficiency even at loads down to 60% makes the aggregates at a good energy and environmental choices.

5 A model is included in the earlier series Miniline having a very proven design and spring terminals for the best connection.

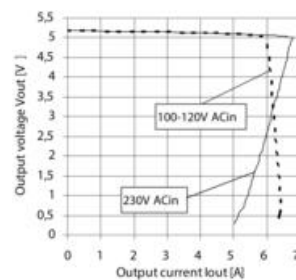
For good cooling free space of 40 mm above and 20 mm under the power supply is recommended. The sides 0 mm unless neighbouring products are a heat source, for example, a power supply unit. Leave then a 15 mm air gap

#### Output characteristics

ML15.051 (3 A)



ML30.101 (5A)



## TECHNICAL DATA

### INPUT DATA

Input voltage ac	100-240 V
Input voltage ac min	85 V AC
Input voltage ac max	264 V AC
Input voltage dc	110-300 V

Input voltage dc min	88 V DC
Input voltage dc max	375 V DC
Inrush current at 120 V ac typical	13 A
Inrush current at 230 V ac typical	26 A
Input voltage range	Wide-range
Power factor at 120 V ac, full load. Typical	0,51
Power factor at 230 V ac, full load. Typical	0,44
Number of phases	1

## OUTPUT DATA

Output voltage	5 V DC
Output voltage min	5 V DC
Output voltage max	5,5 V DC
Output current	3 A
Power	15 W

## EFFICIENCY / LIFETIME / MTBF

Efficiency at 120 V ac, full load, typical	76,8 %
Efficiency at 230 V ac, full load, typical	77,2 %
Lifetime at 120 V ac, full load and +40 ° C	70000 h
Lifetime at 230 V ac, full load and +40 ° C	93000 h
MTBF (IEC 61709) 230 V ac, max load, 40 ° C	2686000 h

## DIMENSIONS

Width	22,5 mm
Height	75 mm
Depth	91 mm
Weight	0,13 kg

## OTHER

Approvals	ABS, CB, CE, CSA, GL, NEC Class 2, UL
Hold time at 120 V ac, typical full load	45 ms
Hold time at 230 V ac, typical full load	186 ms
IP class	IP20
Clamp type	Screw on
Load regulation	<100 mV (0-3 A)
Material protection	ABS plastic

<b>Supply frequency</b>	50-60 $\pm 6$ %
<b>Parallel connection for increased current</b>	Yes. See manufacturers datasheet or contact OEM Automatic for more details.
<b>Ripple max</b>	50 mV pp
<b>Series</b>	Miniline
<b>Series connection for increased voltage</b>	Yes. See manufacturers datasheet or contact OEM Automatic for more details.
<b>Power consumption 120 V ac</b>	0,28 A
<b>Power consumption 230 V ac</b>	0,17 A
<b>Power drop from +60 °C to + 70 °C</b>	0,4 W/°C
<b>Temperature min without derating</b>	-10 °C
<b>Temperature max without derating</b>	60 °C
<b>Type Power Supply</b>	AC-DC

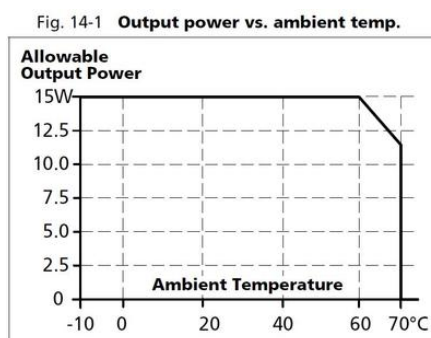
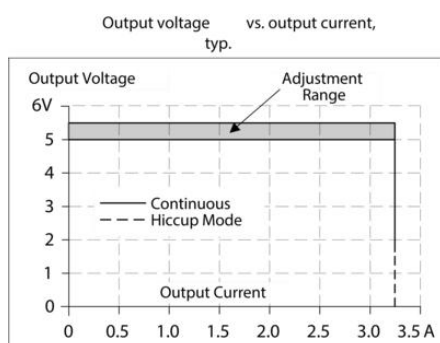


Fig. 8-1 **Efficiency vs. output current at 5V, typ.**

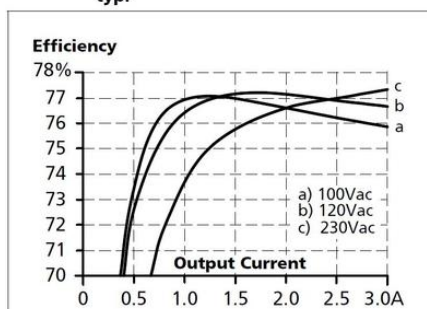


Fig. 8-2 **Losses vs. output current at 5V, typ.**

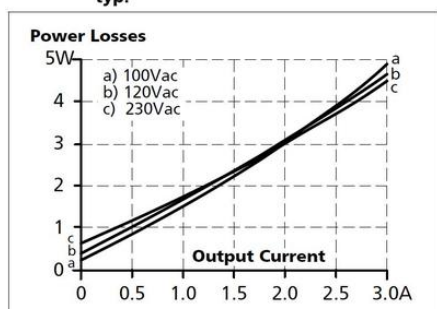


Fig. 6-2 **Hiccup mode; output current at shorted output, 230Vac, typ.**

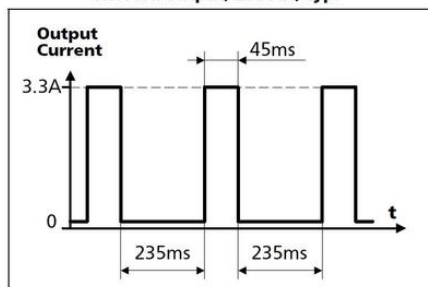


Fig. 10-1 **Front side**

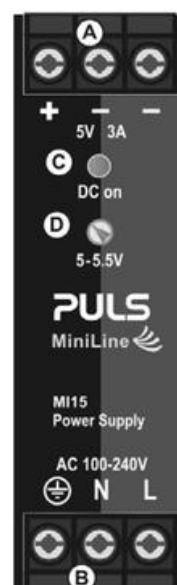


Fig. 20-1 **Front view**

