POWER SUPPLY 1-PHASE, 24 V DC MINILINE 2 SERIES

ML60.242
PULS PSU 60W 24-28VDC LOW TEMP

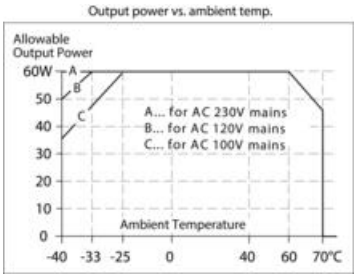
- Output current 2.5 A
- Up to 90.4% efficiency
- Working temp. -40 to +60°C
- ac and dc input voltage

PRODUCT DESCRIPTION

A compact size, light weight, simple mounting onto the DIN-rail and the utilization of only quality components are what makes the MiniLine power supplies so easy to use and install within seconds.
A rugged electrical and mechanical design as well as a high immunity against electrical disturbances on the mains provides reliable output power. This offers superior protection for equipment which is connected to the public mains network or is exposed to a critical industrial environment.
The specialty of the ML60.242 is the electronic inrush current limitation and the suitability for very low ambient temperatures. The unit is fully specified down to -40°C.
The supplementary MiniLine decoupling diode module MLY10.241 allows building of redundant systems or to protect against back-feeding voltages.

Operating temperature is the same as the ambient temperature and the air temperature is defined as 2 cm below the unit.

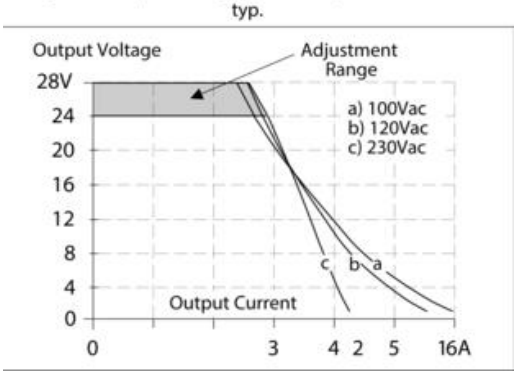
Output power vs ambient temperature



Operating temperature is the same as the ambient temperature
and the air temperature is defined as 2 cm below the unit.

Output characteristic

Fig. 5-1 Output voltage vs. output current, typ.



SPECIFICATIONS

Input voltage range	Wide-range
Number of phases	1
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	6 A
Inrush current at 230 V ac typical	6 A
Power Factor at 120 V AC, full load. Typical	0,54
Power Factor at 230 V AC, full load. Typical	0,44
Supply Frequency	50-60 ±6 %
Power Consumption At 120 V AC	1,05 A
Power Consumption At 230 V AC	0,66 A
Type Power Supply	AC-DC
Output voltage	24 V DC
Output voltage min	24 V DC
Output voltage max	28 V DC
Output Current	2,5 A
Effect	60 W
Power Reduction Of 60 To 70 ° C	1,5 W/°C
Ripple. max	50 mV pp
Temperature Range Without Derating From	-40 °C
Temperature Range Without Derating To	60 °C
Efficiency At 120 V AC, full load. Typical	88,5 %
Efficiency At 230 V AC, full load. Typical	90,4 %

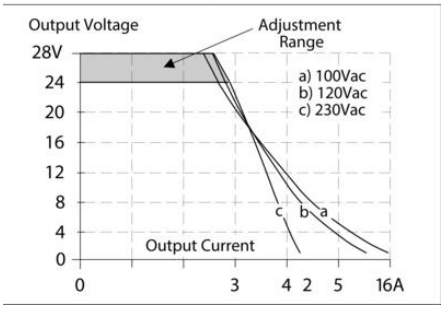
Lifetime at 120 V ac, full load and +40 ° C	66000 h
Lifetime at 230 V ac, full load and +40 ° C	90000 h
MTBF (IEC 61709) 230 V AC, Maximum Load, 40 ° C	1866000 h

Width	45 mm
Height	75 mm
Depth	91 mm
Weight	0,25 kg

Clamp type	Screw on

Series	Miniline
Approvals	ABS, CB, CE, CSA, GL, NEC Class 2, UL
Material Protection	ABS plastic
Hold-up time at 120 V AC, full load. Typical.	24 ms
Hold-up time at 230 V AC, full load. Typical.	107 ms
IP Class	IP20

Fig. 5-1 Output voltage vs. output current, typ.



Output power vs. ambient temp.

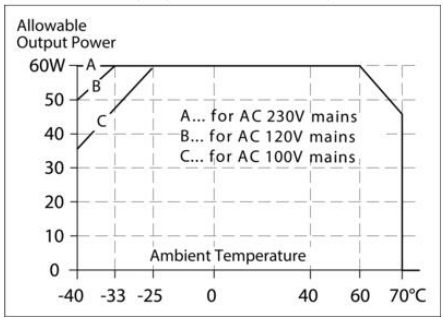


Fig. 8-1 Efficiency vs. output current at 24V, typ.

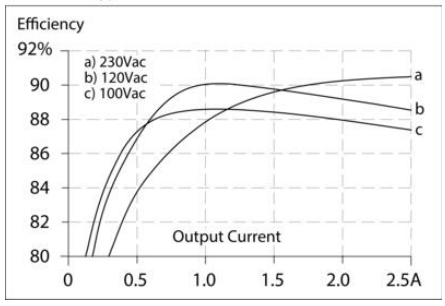
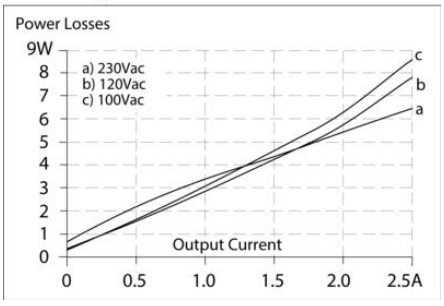
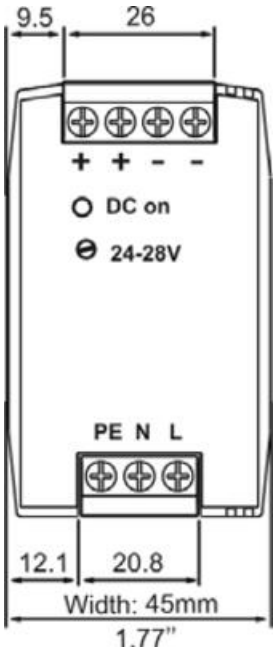
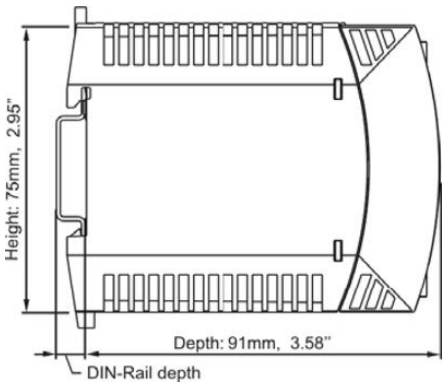


Fig. 8-2 Losses vs. output current at 24V, typ.




9.5
26
+ + - -
DC on
24-28V
PE N L
12.1
20.8
Width: 45mm
1.77"


Height: 75mm, 2.95"
Depth: 91mm, 3.58"
DIN-Rail depth