

POWER SUPPLY 1-PHASE, 24 V DC PIANO, 5A

PIC120.241D

PSU 100-120/200-240V ac I/P 24V dc 5A 120W O/P

- Output current of 5 A
- Up to 90.5% efficiency
- Only 39 mm wide
- Very affordable
- DC OK relay output



PRODUCT DESCRIPTION

Pulse Piano Series is very compact unit that meets the essential industrial demands of today's applications. With the excellent relationship between price and performance gives Piano Series new opportunities without compromising on quality or reliability.

Life expectancy is remarkably high compared to similar products on the market. The long lifetime is achieved through the efficient and sophisticated thermal design, but also through the sole use of detailed quality components. The unit has a MTBF values over 1.7 million hours and a service life of 47,000 hours at 40 ° C.

The powerful house of molded polycarbonate with a clever circuit design and low weight gives great advantages in shock- and vibration-rich environments. In addition, the units very little space in the cabinet and gives a stylish impression.

PIC120.241C the DC-OK relay outputs for status indication of 24 V DC.

Many industrial applications require no more clamping alternative, the reduction of the input voltage is only 230 V AC circuits simplifies and gives significant cost advantages.

A global version of the 115/230 V AC is available, PIC120.241D, for applications where multi voltage required.

TECHNICAL DATA

INPUT DATA

Input voltage ac	100-120, 200-240 V
Input voltage ac min	90 V AC
Input voltage ac max	264 V AC
Inrush current at 120 V ac typical	22 A
Inrush current at 230 V ac typical	33 A
Input voltage range	Auto-select
Power factor at 120 V ac, full load. Typical	0.64

Power factor at 230 V ac, full load. Typical	0.54
Number of phases	1

OUTPUT DATA

Output voltage	24 V DC
Output voltage min	24 V DC
Output voltage max	28 V DC
Output current	5 A
Power	120 W

EFFICIENCY / LIFETIME / MTBF

Efficiency at 120 V ac, full load, typical	91.2 %
Efficiency at 230 V ac, typical	90.6 %
Efficiency at 230 V ac, full load, typical	92.3 %
Lifetime at 120 V ac, full load and +40 ° C	68000 h
Lifetime at 230 V ac, full load and +40 ° C	83000 h
MTBF (IEC 61709) 230 V ac, max load, 40 ° C	1379000 h

DIMENSIONS

Width	39 mm
Height	124 mm
Depth	124 mm
Weight	0.37 kg

OTHER

Approvals	CB, CE, cRUus, cULus
Hold time at 120 V ac, typical full load	51 ms
Hold time at 230 V ac, typical full load	50 ms
IP class	IP20
Clamp type	Screw
Cable connection	Screw max 6 mm ² solid, 4 mm ² stranded
Load regulation	<150 mV (0-5 A)
Material protection	Polycarbonate
Supply frequency	50-60 ±6 %
Parallel connection for increased current	Not allowed
PFA (EN61000-3-2)	Fulfilled (Class A)

Primary fuse	Min 10A B type or 6A C type
Ripple max	100 mV pp
Series	Piano
Series connection for increased voltage	Yes
Power consumption 120 V ac	1.72 A
Power consumption 230 V ac	1.05 A
Power drop from +60 °C to + 70 °C	3 W/°C
Temperature min without derating	-10 °C
Temperature max without derating	55 °C
Transient	VDE 0160 (750 V, 1,3 ms)

Type Power Supply	AC-DC
DC relay output	Yes

Fig. 9-1 Efficiency vs. output current at 24V, typ.

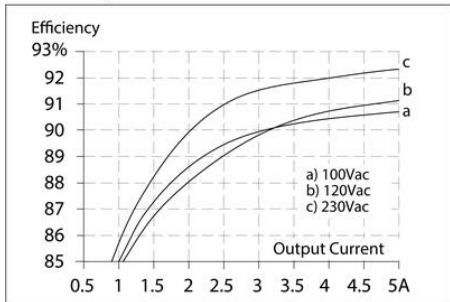


Fig. 15-1 Output current vs. ambient temp.

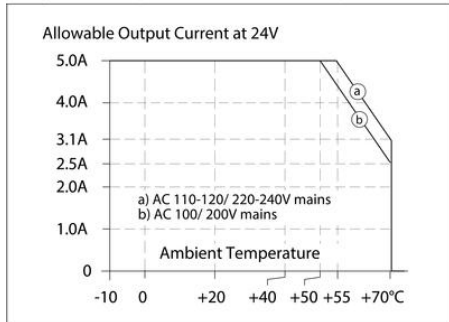


Fig. 6-1 Output voltage vs. output current, RMS current, typ.

