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

PIC120.241C
PSU 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.

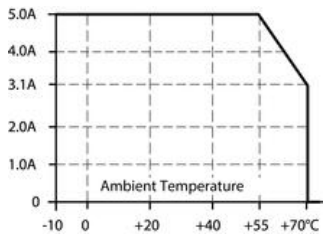
A global version of the 115/230 V AC is available, PIC120.241D, for applications where multi voltage required.

TECHNICAL DATA

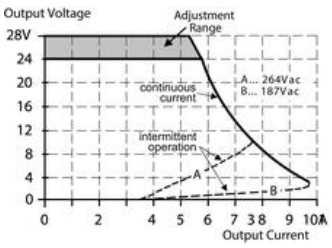
Input	
Supply voltage AC	180-264 V AC
Supply voltage DC	Not available
Power consumption at 230 V AC	1.12 A
Supply frequency	47-63 Hz
Holding time at 230 V AC	33 ms
Protection from mains transients VDE0160	Yes
Output	
Output voltage, adjustable	24-28 V DC

Load regulation 0 A to max load	150 mV
Voltage regulation	10 mV
Ripple	Max. 100 mVpp
Output current, nominal	5 A (120 W)
Max short circuit	See diagram below
Other data	
Efficiency at 230 V AC/max. load	90.5 %
Power loss 230 V AC/max. load	12.6 W
Power loss at 0 A No load current	0.6 W
Cable connections	Screw connection
Cable size stranded	0.5-4 mm^2
Working temperature without power reduction	-10 to +55 °C
Power reduction over +55 to +70 °C	3 W/°C
IP Class	IP20
MTBF (IEC 61709) 230 V AC, Max. load, +40 °C	1 720 000 h
Shock and vibration	30 g 6 ms / 20 g 11 ms
Approvals	UL60950-1, UL508 Listed
EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4 Class B
Compliant standards	EN60950-1, EN60204-1, EN50178, IEC62103, IEC60364-4-41

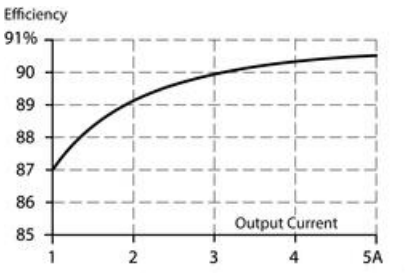
Power reduction at high temperatures



Output characteristics



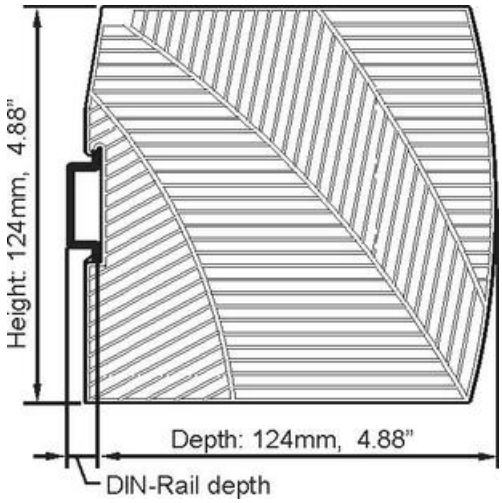
Efficiency



DIMENSIONS

Front	Side





For good cooling recommended free space of 40 mm above and 20 mm below the unit. Pages 5 mm when the unit is charged continuously with more than 50% of the rated current. Increase the distance to 15 mm on nearby products emit heat.

WIRING



A = Primary side. 230 V AC
B = Secondary side. 24-28 V DC
C = Potentiometer for voltage output
D = DC-OK Led. Lights green when the output voltage is over 18 V DC
E = OD-OK output relay (PIC120.241C)

PART NUMBERS

Order number	Input voltage	Output data

PIC120.242C	180-264 V AC	24-28 V DC / 5 A
PIC120.241C	180-264 V AC	24-28 V DC / 5 A. DC-OK output relay
PIC120.241D	100-120/200-240 V AC	24-28 V DC / 5 A. DC-OK output relay

SPECIFICATIONS

Approvals	CB, CE, cRUus, cULus, GL
Cable Connection	Screw max 6 mm² solid, 4 mm² stranded
DC relay output	Yes
Depth	124
Effect	120
Efficiency At 230 V AC, full load. Typical	90.5
Efficiency At 230 V AC. Typical	89.5
Height	124
Hold-up time at 230 V AC, full load. Typical.	33
Input voltage AC	200-240 V
Input voltage ac max	264
Input voltage ac min	180
Inrush current at 230 V ac typical	28
IP Class	IP20
Lifetime at 230 V ac, full load and +40 ° C	47000
Load Regulation	<150 mV (0-5 A)
MTBF (IEC 61709) 230 V AC, Maximum Load, 40 ° C	1720000
Number of phases	1
Output Current	5
Output voltage	24
Output voltage max	28
Output voltage min	24
Parallel Connection For Increased Power	Not allowed
PFA (EN61000-3-2)	Fulfilled (Class A)
Power Consumption At 230 V AC	1.06
Power Factor at 230 V AC, full load. Typical	0.54
Power Reduction Of 60 To 70 ° C	3
Primary Fuse	Min 10A B type or 6A C type

Ripple. max	100
Series	Piano
Series Connection For Increased Tension	Yes
Supply Frequency	50-60 ±6 %
Temperature Range Without Derating From	-10
Temperature Range Without Derating To	55
Transient	VDE 0160 (750 V, 1,3 ms)
Weight	0.35
Width	39

