

## POWER SUPPLY 1-PHASE, 24 V DC PIANO, 10A

PIC240.241C

PSU 200-240V ac I/P 24V dc 10A 240W O/P

- Output current of 10 A
- Up to 91.4% efficiency
- Only 49 mm wide
- DC-OK relay output



### PRODUCT DESCRIPTION

These PIANO series units are extraordinarily compact, industrial grade power supplies that focus on the essential features required in today's industrial applications. The excellent cost/performance ratio presents many new and exciting opportunities without compromising quality or reliability.

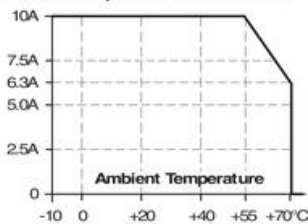
The mechanically robust housing is made of a high-grade, reinforced molded material, which permits the units to be used in surrounding temperatures up to +70°C.

Since typical industrial applications do not require multiple mains inputs, the reduction to a regional input voltage range (AC 200 240V) simplifies the circuitry and has significant advantages for reliability, efficiency and cost.

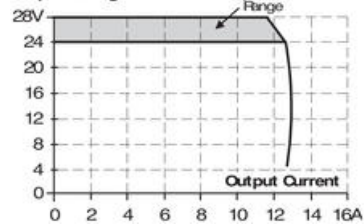
The integrated DC-OK signal makes the unit suitable for many industry applications, such as process, automation and many other critical applications where preventive function monitoring can help to avoid long downtimes.

#### Output characteristics

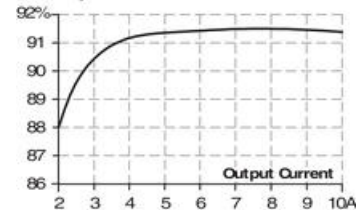
Allowable Output Current at 24V



Output Voltage



Efficiency



#### 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 = DC-OK output relay

## TECHNICAL DATA

### INPUT DATA

Input voltage ac	200-240 V
Input voltage ac min	180 V AC
Input voltage ac max	264 V AC
Inrush current at 230 V ac typical	48 A
Power factor at 230 V ac, full load. Typical	0,52
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	10 A
Power	240 W

### EFFICIENCY / LIFETIME / MTBF

Efficiency at 230 V ac, typical	90,9 %
Efficiency at 230 V ac, full load, typical	91,4 %
Lifetime at 230 V ac, full load and +40 ° C	38000 h
MTBF (IEC 61709) 230 V ac, max load, 40 ° C	791000 h

## DIMENSIONS

Width	49 mm
Height	124 mm
Depth	124 mm
Weight	0,55 kg

## OTHER

Approvals	CB, CE, cRUus, cULus, GL
Hold time at 230 V ac, typical full load	33 ms
IP class	IP20
Clamp type	Screw
Cable connection	Screw max 6 mm <sup>2</sup> solid, 4 mm <sup>2</sup> stranded
Load regulation	<150 mV (0-10 A)
Material protection	Polycarbonate
Supply frequency	50-60 ±6 %
Parallel connection for increased current	Not allowed
PFA (EN61000-3-2)	Not met
Primary fuse	Min 16A B type or 10A C type
Ripple max	100 mV pp
Series	Piano
Series connection for increased voltage	Yes
Power consumption 230 V ac	2,2 A
Power drop from +60 °C to + 70 °C	6 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

