5.3 PS740

5.3.1 Technical Data

Module ID	PS740
Model Number	2PS740.9
Description	2010 Power Supply Module, 100-240 VAC, 100 W
C-UL-US Listed	Yes
Base Plate Module	BP200, BP201, BP210
Input Voltage Minimum Nominal Maximum	 90 VAC 100 ... 240 VAC 270 VAC
Input Voltage Frequency	47 to 63 Hz
Overvoltage Peak Value Half Value duration	 750 V 1.3 msec non-periodic
Output Power	see Diagram "Output Power"
Current Requirements	Max. 1.1 A
Protective Measures Fuse 1,6 A slow-blow / 250 V Thermal Overload Protection Current Limitation	 Monitors housing temperature Monitors output power
Status Display	LEDs
READY Relay Switching Voltage Max. Load on Contact Transient Voltage Protection	N.O. Nom. 24 VDC / 230 VAC 2 A 2.5 kV External
Dimensions (H, W, D) [mm]	285, 40, 185

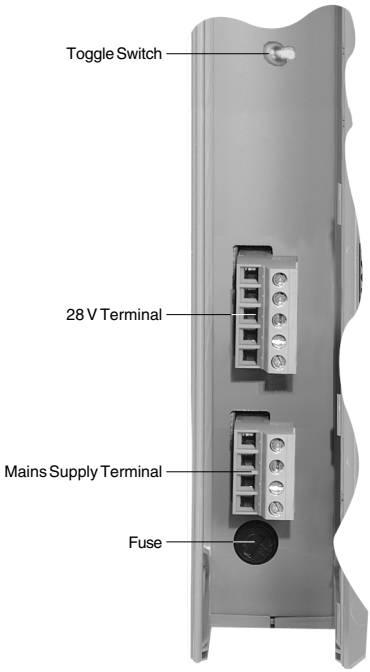
5.3.2 Status LEDs

DC The secondary power supplied is OK.

OL This LED (OVERLOAD) lights if the current limitation is activated. Possible causes are:

- The temperature within the housing is too high.
- More power is required by the PCCs than the power supply can deliver (Maximum output power is exceeded).

5.3.3 Connection

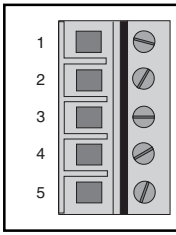


The secondary voltage produced (28 V) can be switched as required to either the I/O bus (PCC system) or to the 28 Volt terminal block by means of the **Toggle Switch**. This makes it possible to supply external I/O components with the same power supply:

Toggle Switch	Secondary voltage
Left	28 V to I/O bus
Right	28 V to 5 pin PHOENIX connector

The toggle cannot be switched while the power supply is supplied with power. Using the toggle switch to switch off the PCC is not allowed.

28 V Terminal Block

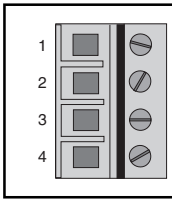


Pin	Termination
1	+28 V
2	GND
3	
4	4 Normally open
5	5 READY contact

The **28 V Supply** which is available through this 5 pin terminal block is also overload protected. If this protection is active, the power supply must cool down with the power off for a few minutes until it can be put into operation again.

The **READY Contact** is closed if the power supply is operating normally. If the power supply is overloaded, the contact is opened. This makes it possible to put an external monitor on the current supply.

Supply Voltage Terminal Block



Pin	Termination	
1	PE	Shield Ground
2		
3	N	Neutral
4	L1	Line

Fuse

The power supply is equipped with a **fuse** on the primary side.

Glass Fuse 5 * 20 mm: 1.6 A slow blow / 250 V

The supply voltage to the power supply must be removed before changing the fuse.

Procedure to change a fuse:

1) Remove supply voltage to power supply
2) Discharge electrostatic by touching the mounting rail or ground connection (not in the power supply!).
3) Open module door
4) Loosen fuse holder using a screwdriver
5) Remove fuse holder
6) Remove old fuse from fuse holder
7) Place new fuse in the fuse holder
8) Place fuse holder into the power supply module
9) Tighten fuse holder using a screwdriver in the direction of the arrow
10) Close module door
11) Replace supply voltage to power supply

5.3.4 Overload Protection

The following are monitored during operation:

- ❍ The temperature inside the power supply housing (thermal overload protection)
- ❍ Power supplied to the PCC (current limitation)

If either the thermal overload protection or current limitation is active, ...

... a power failure for the entire PCC system occurs

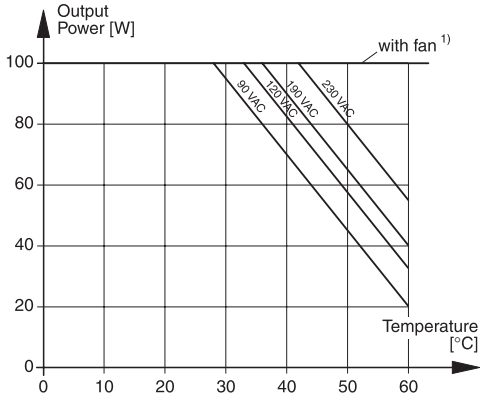
... the **OL** (OVERLOAD) LED is lit

... the READY contact is opened

Only when the power consumption drops below the maximum output power of the power supply again or the temperature drops into the range permitted within the power supply housing is the current supply reactivated.

5.3.5 Output Power

The output power of the PS740 power supply sinks with falling input voltage or increasing operating temperature (because of the internal temperature monitor). This must be taken into account while planning for power requirements.



1) With fan: The air outlet temperature on the top of the housing is not allowed to exceed 85 °C!