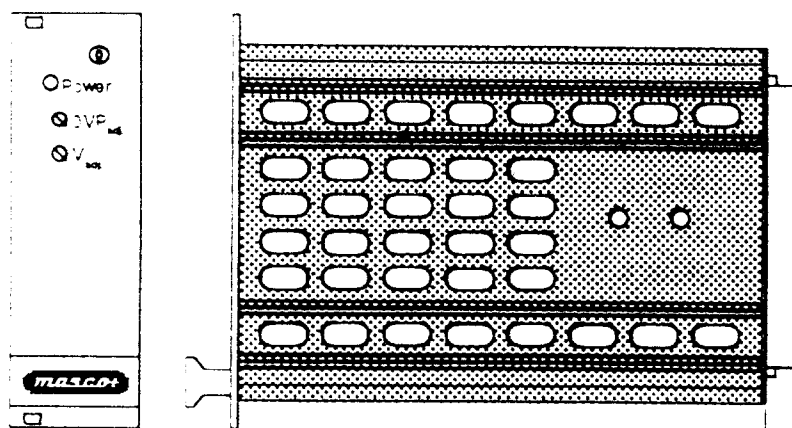


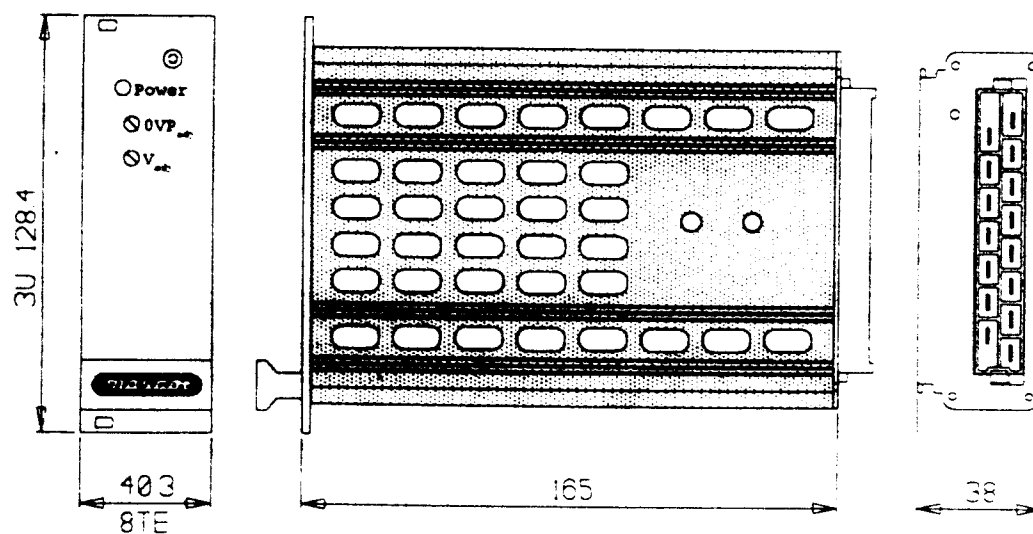


60W EURO CASSETTE POWER SUPPLY

FOR 3U EURO RACK SYSTEMS
Type SEE 60 - 08TE
Operating instructions

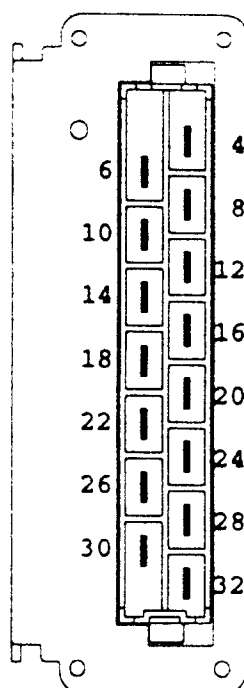


DIMENSIONS



CONNECTOR PIN ASSIGNMENT

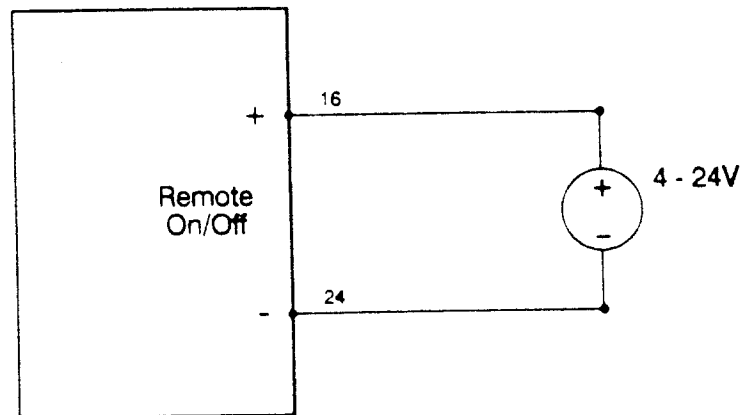
DIN 41612 (male) H15



- 4 + Output
- 6 + Output
- 8 - Output
- 10 - Output
- 12 + Sense
- 14 - Sense
- 16 + Remote on/off
- 24 - Remote on/off
- 28 Mains in
- 30 Mains in
- 32 Safety earth

REMOTE ON/OFF

Output voltage is switched off when a voltage (4 - 24V) is applied between terminals 16 and 24.
(Input impedance > 1,8K ohm).



PRODUCT PROGRAM

Model	Output
SEE60-08TE-5V	5V/12A
SEE60-08TE-12V	12V/5A
SEE60-08TE-15V	15V/4A
SEE60-08TE-24V	24V/2.5A

FEATURES

- * 100KHz mosfet design.
- * High efficiency.
- * MTBF at $T_A = 30^{\circ}\text{C}$: 250 000 h.
- * Adjustable Overvoltage protection.
- * Remote ON/OFF.
- * LED power-on indicator.
- * 105° electrolytic capacitors.
- * Electric safety: Meets standard EN 60950.
- * Emission: Meets EN 50081-1 (standards EN 55022 B, EN 60555-2,-3) and VDE 0871 B.
- * Immunity: Meets EN 50082-1, (standards IEC 801-2,-3,-4).

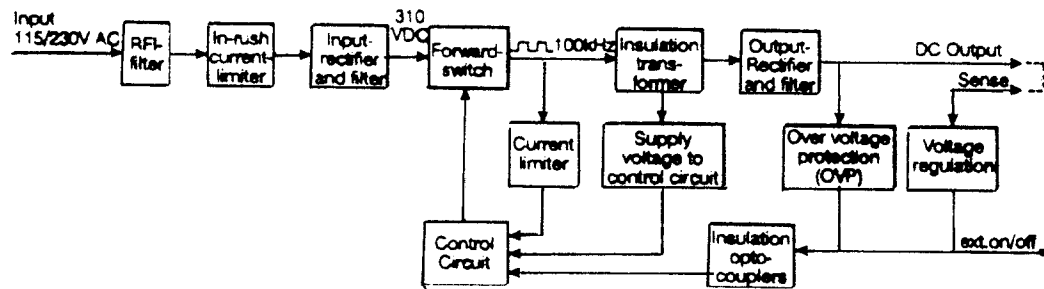
APPLICATIONS

- * Industrial control.
- * Data communications.
- * Telecommunications.
- * Process control.

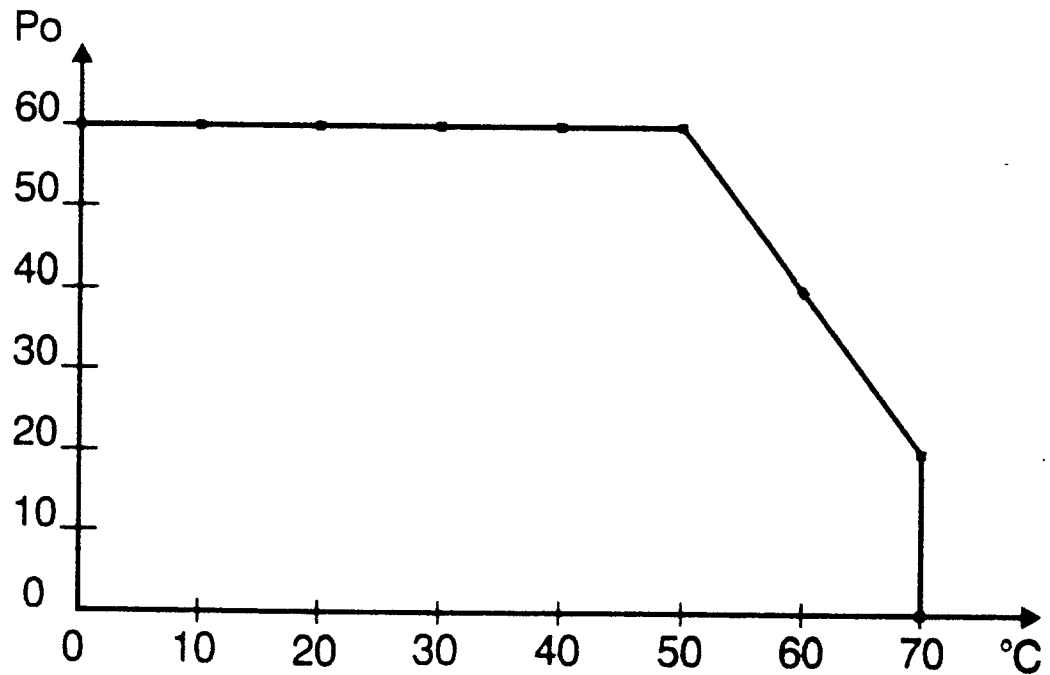
TECHNICAL DATA

	VOLTAGE VERSIONS			
	5V	12V	15V	24V
Input voltage 230V:	187 - 264VAC	187 - 264VAC	187 - 264VAC	187 - 264VAC
Input voltage 115V:	93,5 - 132VAC	93,5 - 132VAC	93,5 - 132VAC	93,5 - 132VAC
Switchable between 115/230V by connecting / disconnecting P2	115VAC P2 short circuit	115VAC P2 short circuit	115VAC P2 short circuit	115VAC P2 short circuit
Line frequency:	47 - 63Hz	47 - 63Hz	47 - 63Hz	47 - 63Hz
Output voltage, nominal:	5V	12V	15V	24V
Output voltage, adjustable	4.5 - 5.5V	11 - 13.5V	13 - 16.5V	21 - 26V
Max. output current:	12A	5A	4A	2.5A
Min. output current:	0A	0A	0A	0A
Load regulation (0 - 100% load):	0.2%	0.2%	0.2%	0.2%
Mains regulation: (Mains variation 187 - 264V, 100% load)	0.1%	0.1%	0.1%	0.1%
Ripple:	< 40mV p-p	< 60mV p-p	< 60mV p-p	< 60mV p-p
Efficiency (at 100% load) approx	79%	83%	85%	87%
Switch frequency approx.:	100kHz	100kHz	100kHz	100kHz
Overshoot (90 - 10% load variation):	< 150mV	< 150mV	< 150mV	< 150mV
Undershoot (10 - 90% load variation):	< 150mV	< 150mV	< 150mV	< 150mV
Regulation time:	0.5ms	0.5ms	1ms	1ms
Compensates for load cable drop of max:	0.5V	0.5V	0.5V	0.5V
Current limitation at approx.:	110%	110%	110%	110%
Overvoltage protection at output (OVP):	6.5V	15V	18V	28V
Adjustable in range:	5.5 - 7V	13.5 - 15.5V	16 - 18.5V	24 - 32V
Input surge current limitation	< 30A	< 30A	< 30A	< 30A
Hold up time:	> 20ms	> 20ms	> 20ms	> 20ms
Temperature coefficient:	±0.02%/°C	±0.02%/°C	±0.02%/°C	±0.02%/°C
Temperature range				
*Operating:	0 - +50°C	0 - +50°C	0 - +50°C	0 - +50°C
*With derating:	+70°C	+70°C	+70°C	+70°C
*Storage	-25 - +85°C	-25 - +85°C	-25 - +85°C	-25 - +85°C
Derating: (see diagram)	2W/°C above 50°C	2W/°C above 50°C	2W/°C above 50°C	2W/°C above 50°C
Safety:	EN 60950	EN 60950	EN 60950	EN 60950
Insulation class:	class I	class I	class I	class I
Insulation voltage:				
Primary - secondary:	3750V	3750V	3750V	3750V
Primary - Earth:	1500V	1500V	1500V	1500V
Secondary - Earth:	500V	500V	500V	500V
Interference standards	EN - 55022 B VDE 0871 B	EN - 55022 B VDE 0871 B	EN - 55022 B VDE 0871 B	EN - 55022 B VDE 0871 B
MTBF at full load, TA= 30°C According to MIL-HDBK-217F	>250 000h	>250 000h	>250 000h	>250 000h
Weight:	0.55kg	0.55kg	0.55kg	0.55kg

BLOCK DIAGRAM



DERATING CURVE



INSTALLATION INSTRUCTIONS (EN 60 950)

This power supply unit is designed to be mounted in a 19" rack system.

In order to achieve the required protection against hazards the following must be considered:

- * The rack must provide a satisfactory electrical- and fire-enclosure according to EN 60 950 or it must be located in restricted access area (e.g. a locked room or the like) providing the same degree of protection.
- * The rack-connector must provide safety earth on pin 32.
- * To disconnect the power supply from the mains the unit must be removed from the rack or the rack must provide a readily accessible disconnect device (a plug or a switch providing min. 3mm separation from the mains).

The SEE60-08TE is also designed for connection to an IT-power system.

Please also consider the national wiring rules of your country before installation.

115/230V OPERATION

Switchable between 115/230V by connecting/disconnecting solder point P2.

For 115V AC operation solder a jumper between the three pads at P2 on the PCB. See fig.

