

MASCOT

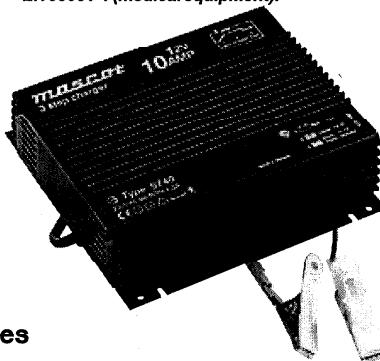
PRODUKT

Informasjon

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MODEL 9740

The 9740 is the ideal charger for both cyclic and standby charge of rechargeable Lead Acid Batteries. Meets the safety standards EN 60335-2-29 and EN60601-1 (medical equipment).



Features

- * 3-step charge control for safe, fast charging of Lead Acid Batteries
- * Two voltage levels, boost (eg. 14.7 V) and standby (eg. 13.7 V)
- * LED-indicator with three different colors shows the charge status
- * Built in timer for prolonged boost - «absorption charge»
- * Low leakage current from battery (< 2.5 mA) when mains is disconnected
- * Short circuit proof and reversed polarity protection
- * Automatic start of new charging cycle when battery voltage falls due to loading

LED indications

Quick Charge

The charger is in constant current mode.

Charge current is 10 A.

The battery capacity is something between 0 and 80%.

The battery voltage is lower than the cycle voltage level (< 14.7 V).



ORANGE

Absorption Charge

The charger is in timer/constant cycle voltage mode.

Charge current is less than 10 A.

The battery capacity is something between 80 and 90% fully charged when the LED-indicator changed to yellow.

The battery voltage is equal to the cycle voltage level (14.7 V).

The charger stays in this mode until the timer has runned out (eg. 2 h).



YELLOW

Float Charge

Charge current is normally very low (<< 10 A).

The battery is 100% fully charged.

The charge voltage is at float/standby level (13.7 V).

The battery can be left with the charger connected for years or months. This is float charge.

A new cycle starts if the battery is loaded.



GREEN

Voltage versions and diagram on the reverse.

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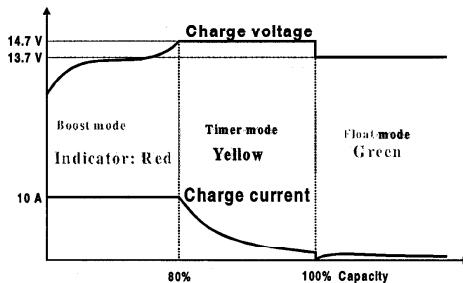
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pl9740-e / 230099 / 5.1/2

Survey of voltage versions model 9740

Data	Version	12 V	24 V
Input voltage	(VAC)	190-264	190-264
Charge voltage			
* Cycle mode	(V)	14,7	29,4
* Standby mode	(V)	13,7	27,4
Charge current	(A)	10 +0/-10%	5 +0/-10%
Switch frequency	(kHz)	63	63
Input surge current limitation	(A)	< 30	< 30
Leakage current (with mains disconnected)		< 2,5 mA, 12 V battery voltage	< 3,5 mA, 24 V battery voltage
Temperature range			
* Operating		-25°C - +40°C	
* Storage		-25°C - +85°C	
Ripple	(mV p-p)	< 100 mV p-p	
Efficiency (at 100% load)		83 %	85 %
Protection		Short circuit proof. Protected against reversed polarity.	
Insulation class		Class I	
Insulation voltage			
* Primary - ground	(VAC)	1500	
* Primary - secondary	(VAC)	4000	
* Secondary - ground	(VAC)	500	
Electrical safety		EN 60335-2-29, EN 60601-1	
EMC standards			
* Medical		EN 60601-1-2	
* Emission		EN 50081-1, EN 55014	
* Immunity		EN 50082-1	
Terminals		Leads with 6,3 mm push on terminals and battery clips.	
IP-grad		21 (Pcb with components are protected with coating)	
Indication			
* Orange (constant current mode)		10 A	5 A
* Yellow (constant voltage, timer mode)		14,7 V	29,4 V
* Green (constant voltage, standby mode)		13,7 V	27,4 V
Timer		2 t ± 30 min.	
Dimensions (LxWxH)	(mm)	184 x 171 x 54	
Weight	(g)	1,7 kg	

Charging diagram for model 9740 - 12 V version



The charger works in three different modes. An LED-indicator with three different colors shows the mode that the charger is in. Unlike the so called «taper chargers», this model charges with a constant current in the first mode. When the battery voltage during charging, rises to the maximum cycle voltage (eg. 14.7 V), the charger does not immediately change to standby mode. Instead the charger starts a timer and remains in constant voltage mode (eg.14.7 V) until the selected time (eg. 2 h) has elapsed. When the timer starts, the battery is already charged to 80 - 90% of full capacity and can be used at this point if desired. The time boost period ensures, however, that the battery will receive the remaining 10 to 20% capacity in a very short time compared to chargers not having this feature.

The LED-indicator changes from orange to yellow when the timer starts, and changes to green when the timer period is out. At this point the constant voltage level is reduced to a safe value where the battery can be left for an unlimited time without risk of overcharge (eg. 13.7 V). This is the float charge or standby mode.

A new charging cycle starts when the charging current rises to the constant current level (10 A). This will happen if the battery voltage drops because of a load on the battery. The charger will therefore automatically recharge batteries used in backup systems to their maximum capacity.