HYTRONIK®

HEM02 / HEM07

Applications

Emergency conversion units to provide constant power output in emergency mode. 2 case sizes - insulated terminal cover with cord restraint for external mounting, suitable for LED panels etc. and aluminium housing giving excellent thermal properties for built-in to fixture applications.

- LED panels and downlights
- Bulkhead / Utilty luminaires
- IP65 / Tri-proof
- Decorative / linear systems

Use for retrofit upgrades & new luminaire designs.

Features

- Emergency
- Active PFC Design
- Over-heat Protection
- Short Circuit Protection
- Over-load Protection

} All with Auto-restart

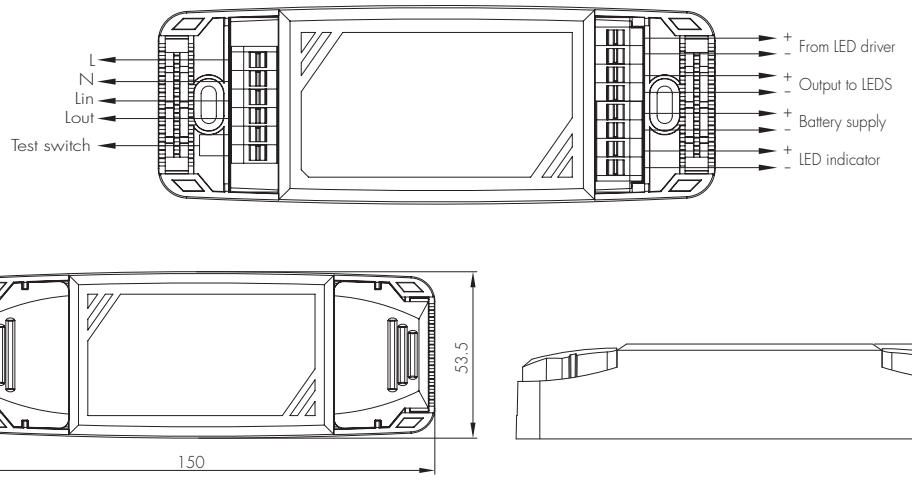
5 Year, 50,000hr Warranty (driver only)

- Automatic output current adjustment
- Wide range of LEDs in series (8~60V)
- Good compatibility with various brands of LED in the market
- Deep discharge protection
- Constant current charger
- High temperature NiMH/Nicd cells

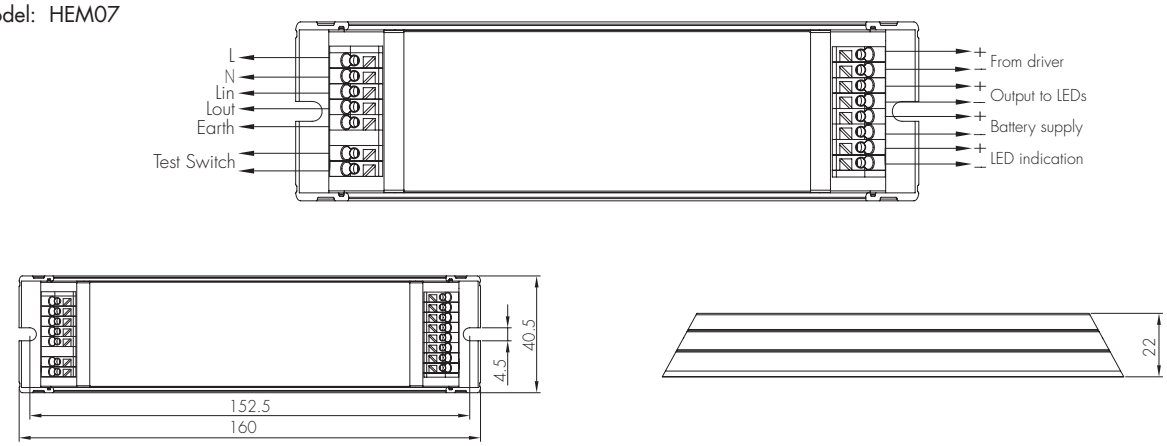
Model No.	HEM02	HEM07
Mains voltage	220~240VAC 50/60Hz	220~240VAC 50/60Hz
Mains current	19mA - 21mA	16mA - 18mA
Mains power	4.5W	4W
Output voltage(U-out Max.)	68VDC	68VDC
Power factor	0.85	0.75
Operation temperature	Ta: 0~+50℃	0~+50℃
Battery charge voltage	3V~4.5V	3V~4.3V
Battery charge current	200mA (Max.)	200mA (Max.)
Battery pack	BPC01, BPC02, BPC10, BPC11	BPC01,BPC10, BPC11
Mains Switch-over voltage range	120VAC~180VAC	155VAC~180VAC
Output LED current	40mA (60VDC)~320mA (8VDC)	40mA (60VDC)~300mA (9VDC)
Charge period	24 hours	
Max. case temp.	75℃	
Battery duration	Min. 3 hours	
Over-heat protection	Over-heat protection with auto-reset.	
EMC standard	EN55015, EN61547, EN61000-3-2, EN61000-3-3	
Safety standard	EN61347-1,EN62493,EN61347-2-7	
Certifications	Semko, CB, RCM, CE , EMC	
Dielectric strength	Input→output: 3000VAC	
IP grade	IP20	

Dimensions and Terminals

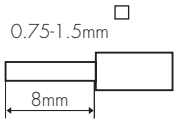
Model: HEM02



Model: HEM07



Wire Preparation



Solid or Stranded wire type 0.75 - 1.5mm²
To make or release the wire from the terminal, use a screwdriver to push down the button.

Loading and In-rush Current

Model	HEM02	HEM07
In-rush Current (Imax.)	2.2A	2A
Pulse Time	356μs	260μs

Number of Drivers Based upon 16A Circuit Breaker

Cct Breaker Type	HEM02	HEM07
Type B	100	100

Conversion table for max. quantities of drivers on other types of Miniature Circuit Breaker

MCB Type	Rating	Relative number of drivers
B	16A	100% (see table above)
B	10A	63%
B	13A	81%
B	20A	125%
B	25A	156%

MCB Type	Rating	Relative number of drivers
C	10A	104%
C	13A	135%
C	16A	170%
C	20A	208%
C	25A	260%

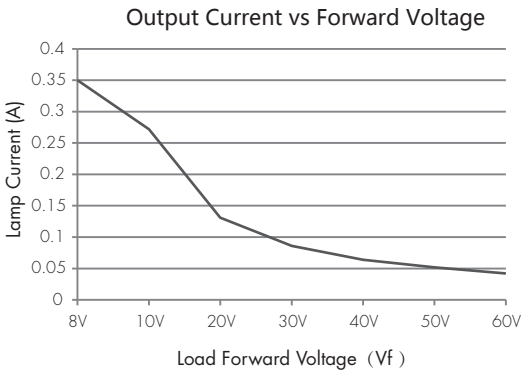
* Environmental factors (such as temperature) will also influence the maximum number of the drivers. Please refer to the MCB manufactures datasheet for loading and derating factors.

Ballast Lumen Factor %:

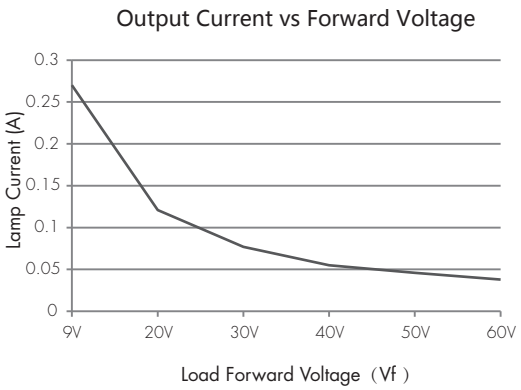
Luminaire Power	5W	7W	10W	12W	15W	20W	25W	30W	35W	40W	45W	50W
	60%	43%	30%	25%	20%	15%	12%	10%	9%	8%	7%	6%

Performance Characteristics

HEM02

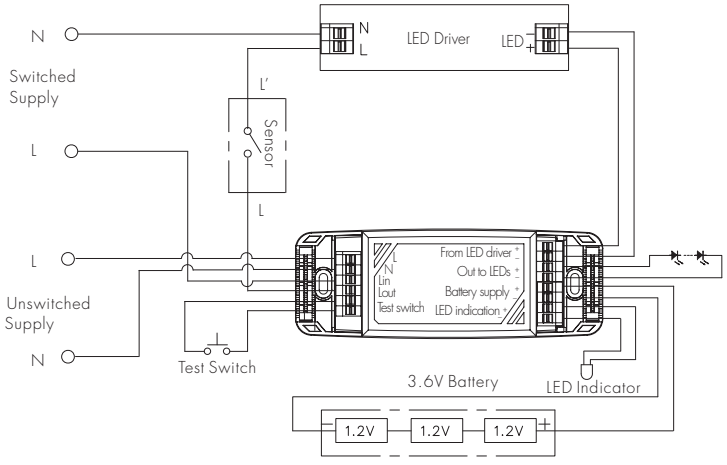


HEM07

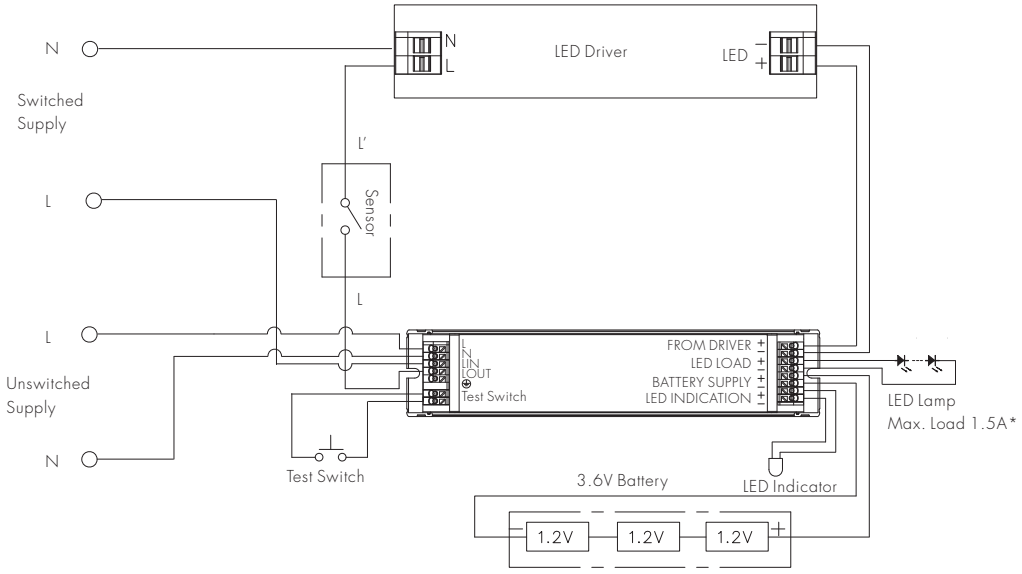


Wiring Diagram

Model: HEM02

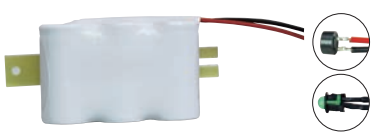


Model: HEM07



*Higher Loads may be attached by making a common connection of LED driver and Emergency Driver Outputs to the LED Lamp (relay by-pass). Compatibility of the LED driver to work with HEM07-T or HEM06-T MUST be checked first. Please contact our technical department for further information.

Battery options

Package code	Picture	Spec.	Size(mm)	Duration	Accessories
BPC01		3 cells, C type, high temperature NiMH battery, 3.6V, 4.0AH	155x31x31	3 hours	battery bracket, green LED indicator, test switch (optional)
BPC02		3 cells, C type, high temperature NiMH battery, 3.6V, 4.0AH	77x50x28	3 hours	battery bracket, green LED indicator, test switch (optional)
BPC10		3 cells, D type, D4000, high temperature Nicd battery, 3.6V, 4.0AH	215x37x37.5	3 hours	battery bracket, green LED indicator, test switch (optional)
BPC11		3 cells, D type, D4000, high temperature Nicd battery, 3.6V, 4.0AH	100x65x36	3 hours	battery bracket, green LED indicator, test switch (optional)

NiCd - Continuously rated 55 degrees for 4 years design life
NiMH - Continuously rated 40 degrees for 4 years design life
Charge new battery for 24hours before use.
In compliance with IEC61951-1 (Nicd type), IEC61951-2 (NiMH type).