

# Miniature electronic ballasts for ConstantColor™ CMH lamps

## Product information

GE's range of electronic HID ballasts are designed to allow optimal performance of our range of ConstantColor™ CMH lamps, offering reduced power consumption, regulated power through life, simplified circuitry and more stable lamp operation compared to electromagnetic systems.

GE has upgraded its range which now includes a miniature range of 20-35 Watt ballasts in integral and remote versions to be compatible with all types of CMH 20-35 Watt lamps – 5 year warranties are available for all models.



## Advantages of electronic ballasts

- Good regulation against supply voltage variation
- Improved lamp colour consistency
- Elimination of lamp flicker
- Reduced weight of control gear
- Reduced electrical power losses
- Ballast noise reduced/eliminated
- Single piece compact unit
- Reduced wiring complexity in the luminaire

## Features

- Power Factor Correction
- Integral version with open terminals for embodiment into luminaire
- Remote versions with terminal cover and cable strain relief and also with lead for location outside the luminaire
- Remote version can be used up to 2 m away from lamp
- Automatic lamp failure shut-down

Description	Version	Product Code
<b>230V, Low Frequency Electronic Ballast for 20W CMH Lamp</b>		
OT BLS/E/20W/CMH 220-240V 12PK	Integral	78711
OT BLS/E/20W/CMH/R CC 220-240V 12PK	Remote, cable clamp	78712
OT BLS/E/20W/CMH/R LP 220-240V 12PK	Remote with lead	78713
<b>230V, Low Frequency Electronic Ballast for 35W CMH Lamp</b>		
OT BLS/E/35W/CMH 220-240V 12PK	Integral	78714
OT BLS/E/35W/CMH/R CC 220-240V 12PK	Remote, cable clamp	78715
OT BLS/E/35W/CMH/R LP 220-240V 12PK	Remote with lead	78716



## Technical data

Nominal Lamp Wattage [W]	Rated Lamp Wattage [W]	Product Code	Input Volts [V]	Input Wattage [W]	Input Current [A]	Input Power Factor
20	20	78711	220-240	23	0.10	0.95
20	20	78712	220-240	23	0.10	0.95
20	20	78713	220-240	23	0.10	0.95
35	39	78714	220-240	44	0.19	0.95
35	39	78715	220-240	44	0.19	0.95
35	39	78716	220-240	44	0.19	0.95

- Line voltage: 220-240Vac  $\pm$ 10%, 50/60Hz
- Lamp operating frequency: 130Hz
- OCV-400Vrms (Vpk-4.0kV)
- High power factor

Application and performance specification information subject to change without notice.

## Performance

- Meets EN61547 for EMC Immunity
- Meets EN55015 for Conducted EMI
- Meets EN61000-3-2 and EN61000-3-3 for EMC
- Peak current ratio <1.5
- Short circuit protection
- Low frequency square wave
- Lamp EOL shutdown
- Ignition time out

## Safety

- EN61347-1, EN61347-2-12
- RoHS compliant (reduction in hazardous substances)
- Housing meets UL94V0 flame retardant

## Application

- Minimum starting temperature: -4°F, -20°C
- Maximum ambient temperature: 131°F, 55°C (20W); 122°F, 50°C (35W)
- Maximum case temperature: 176°F, 80°C (20W); 185°F, 85°C (35W)

## Warranty

GE Lighting warrants to the purchaser that each electronic ballast will be free from defects in material or workmanship for a period of 5 years from date of manufacture when properly installed and under normal use conditions. 5 year warranty only applies for maximum case temperature of 80°C in case of 20W types and maximum case temperature of 85°C in case of 35W types.

## Terminal wire

- Cross-section: 0.75 to 1.5 mm<sup>2</sup>
- Strip length: 8.5-9.5 mm

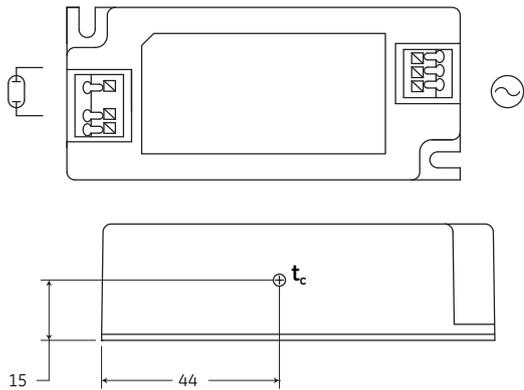
**Warning:** do not short output to ground or common.

## Physical parameters

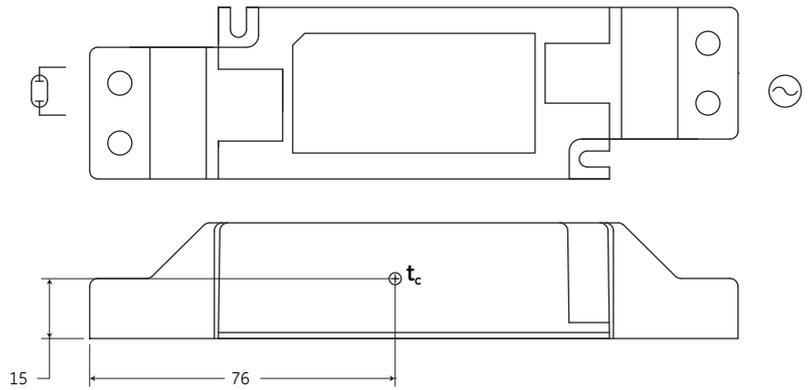
Product Codes	78711, 78714	78712, 78715	78713, 78716
Weight	165g	180g	240g
Case dimensions	97.3x43.3x30mm	162x43.3x30mm	162x43.3x30mm

## T<sub>c</sub> location (dimensions are in mm)

### Integral

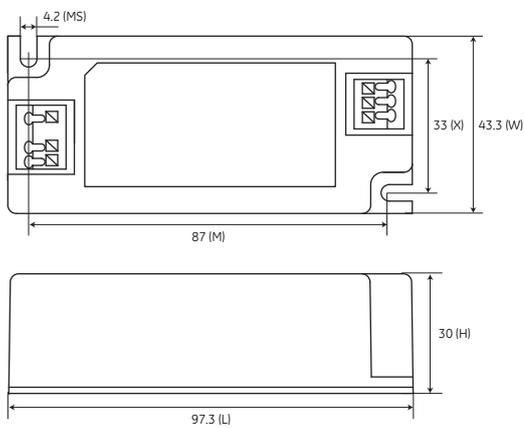


### Remote

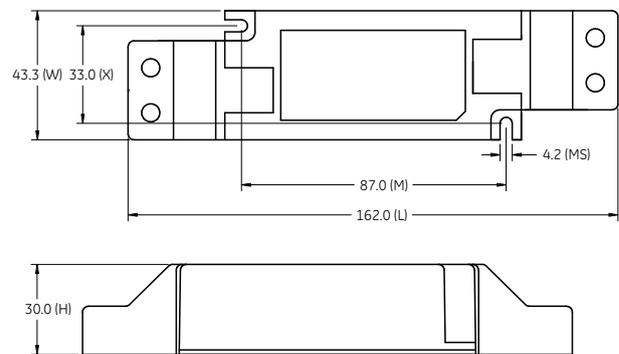


## Physical parameters (dimensions are in mm)

### Integral



### Remote



Product Code	Length [L]	Width [W]	Height [H]	Weight [g]	Mount Length [M]	Mount Width [X]	Mount Slot [MS]
78711	97.3	43.3	30	165	87	33	4.2
78712	162	43.3	30	180	87	33	4.2
78713	162	43.3	30	240	87	33	4.2
78714	97.3	43.3	30	165	87	33	4.2
78715	162	43.3	30	180	87	33	4.2
78716	162	43.3	30	240	87	33	4.2

## Wiring diagram

Wire cross section: 0.75...1.5mm<sup>2</sup>

