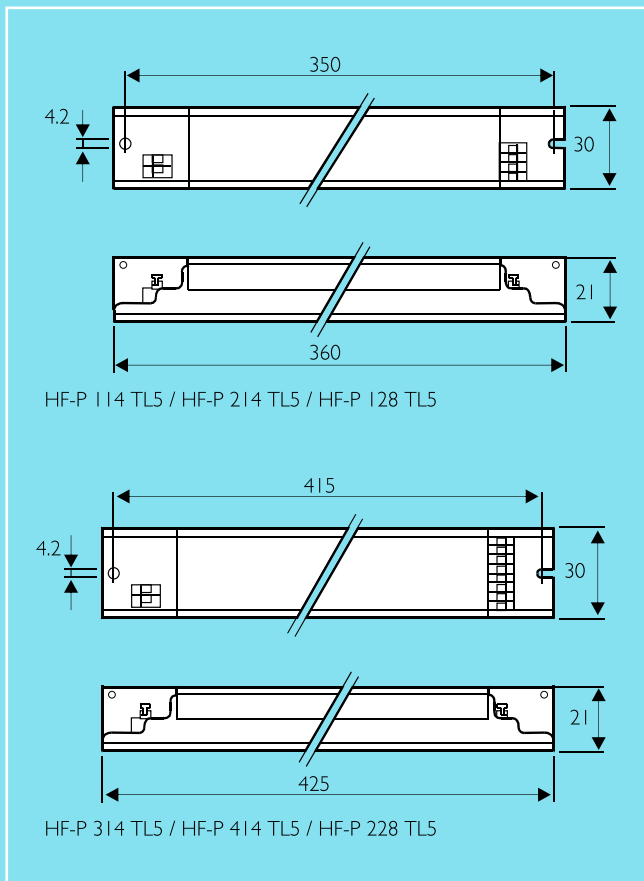


# Electronics : TL5 Lamps



HF-P (Flat) TL5 EII



Dimensions in mm

## HF-PERFORMER (Flat) TL5 EII

Light weight, high frequency electronic ballasts for TL5 fluorescent lamps.

### Features and Benefits

- The combination of HF-PERFORMER and TL5 lamps offers opportunities for miniaturisation and reduces cost of ownership, thanks to the limited dimensions and high system efficacy
- Warm start circuit enables the lamps to be switched on and off without reducing useful life
- Low energy consumption
- Unit is protected against excessive mains voltages and incorrect connections with uniform light independent of mains voltage fluctuations
- Automatic stop circuit is activated within five seconds in case of lamp failure (safety stop); once the lamp has been replaced, the ballast resets automatically.

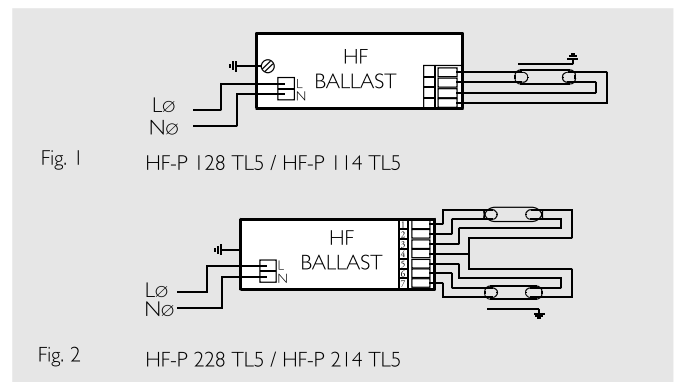
### Applications

- Departmental stores, shops, supermarkets
- Suitable for use with infrared remote control systems
- Airports, railway stations
- Office buildings, hospitals, hotels
- Emergency installations with VDE 0108 with re-ignition <0.5s
- Suitable for use with infrared remote control systems.

### Installation

- Connection wiring is greatly simplified by the use of insert contacts.

### Circuit Diagram



### Compliances and Approvals

|  |                              |
|--|------------------------------|
| RFI <30 Mhz                              | EN 55015                     |
| RFI >30MHz                               | EN 55022 A                   |
| Harmonics                                | EN 61000-3-2                 |
| Immunity                                 | EN 61547                     |
| Safety                                   | EN 61347-2-3                 |
| Performance                              | EN 60929-IE                  |
| Vibration and bump tests                 | IEC 68-2-6 FC IEC 68-2-29 Eb |
| Quality standard                         | ISO 9000-2000                |
| Environmental standard                   | ISO 14001                    |
| Approval marks                           | ENEC<br>VDE-EMV              |
| CE marking                               |                              |
| Temperature declared thermally protected | IEC 61347-1                  |

# Fluorescent Electronic Ballasts HF-PERFORMER (Flat)

## Technical Data

| Ballast                 | Qty. of Lamps | Lamp Type   | System Power W | Input Current A | Lamp Power W | Ballast Losses | Power Factor W | EEL |
|-------------------------|---------------|-------------|----------------|-----------------|--------------|----------------|----------------|-----|
| HF-P 1 14-35 TL5 HE EII | 1             | TL5 HE 14 W | 18             | 0.08            | 15           | 2.6            | 0.91           | A2  |
| HF-P 2 14-35 TL5 HE EII | 2             | TL5 HE 14 W | 32             | 0.15            | 15           | 2.8            | 0.95           | A2  |
| HF-P 1 14-35 TL5 HE EII | 1             | TL5 HE 28 W | 33             | 0.15            | 30           | 3.5            | 0.98           | A2  |
| HF-P 2 14-35 TL5 HE EII | 2             | TL5 HE 28 W | 62             | 0.27            | 29           | 5.0            | 0.99           | A2  |

## Ordering Data

| Ballast                 | Weight Net kg. | Qty. per Box | Dimensions l x w x h mm | Volume m <sup>3</sup> | Weight Gross kg. |
|-------------------------|----------------|--------------|-------------------------|-----------------------|------------------|
| HF-P 1 14-35 TL5 HE EII | 0.25           | 12           | 408 x 208 x 87          | 0.0074                | 3.3              |
| HF-P 2 14-35 TL5 HE EII | 0.31           | 12           | 462 x 208 x 87          | 0.0090                | 4.0              |

## Technical Data for Installation

Mains operation

Rated mains voltage

220 - 240 V

(230 - 240 V)\*

with tolerances for safety  $\pm 10\%$

198 - 264 V

(207 - 264 V)\*

with tolerances for performance +6% -8%

202 - 254 V

(212 - 254 V)\*

Mains frequency

50/60 Hz

Operating frequency

24 - 31 kHz

(33 - 43 kHz)\*\*

Power factor

0.93 typical

(0.93 typical)\*\*

DC voltage operation during emergency back-up

Required battery voltage for

guaranteed ignition

198 - 254 V

Required battery voltage for burning lamps

176 - 254 V

Earth leakage current

<0.5 mA per ballast

Ignition time

<2 s

Constant light operation

In case of mains voltage

fluctuations within

202 - 254 V, the luminous

flux changes by a maximum

of  $\pm 2\%$

(not applicable to 2 x 14 W)

Dual fixture; master-slave operation

Not advisable

Lamp wiring for HF-P 128 TL5

It is advised to use 500 V

rated

Components with HF

Performer TL5

Overvoltage protection

48 hrs. at 320 VAC

2 hrs. at 350 VAC

(2 x 14 W: ballast

switches off at

320 V without damages;

higher voltages will

damage the ballast)

Automatic restart after lamp

replacement or voltage dip

Yes: tested with a dip

down to 30%

with a duration of

10 mains cycles

Insulation resistance test

500 V DC from

Line/Neutral to Earth

(not between Line and

Neutral)

Note: Ensure that the Neutral is reconnected again after above-mentioned test is carried out and before the installation is put into operation.

\*Values for 2 x 14 W

