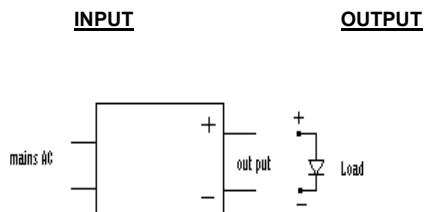


# PHILIPS

|                 |                              |
|-----------------|------------------------------|
| Ordering 12 NC  | 9290 033 88506               |
| Brand Name      | PHILIPS                      |
| Description     | CertaDrive 21W 500mA 42V     |
| Model Number    | C021C050V042FNM1AI           |
| Input Voltage   | 220 - 240V                   |
| Input Frequency | 50 Hz                        |
| RoHS            | Yes                          |
| Approbations    | IS 15885 ( Part 2 / Sec 13 ) |
| Status          | BIS Approved                 |

| Input Power (W) | Input Current (Arms) | Power Factor @Max Load | THD @ Max Load (%) | Surge Protection Diff.(KV) | Output Power (W) | Output Voltage (VDC) | Output Current (A) | Efficiency at Max Load (%) | Max Case Temp (°C) | Weight (Kg) | Envir. Protection Rating |
|-----------------|----------------------|------------------------|--------------------|----------------------------|------------------|----------------------|--------------------|----------------------------|--------------------|-------------|--------------------------|
| 24              | 240V                 | ≥ 0.85                 | ≤ 55 Load          | 3                          | 21               | 30-42                | 0.5                | 240V                       | 75                 | 0.062       | Dry and Damp             |
|                 | 0.130                |                        |                    |                            |                  |                      |                    | ≥ 85                       |                    |             |                          |

## Wire Diagram



### Input Connector

|               |        |
|---------------|--------|
| Mains ( L-N ) | Orange |
|---------------|--------|

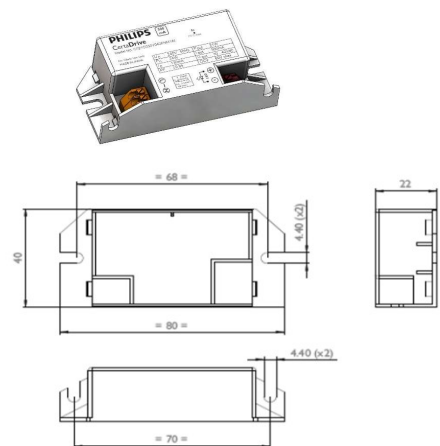
### Output Connector

|         |       |
|---------|-------|
| LED +ve | Red   |
| LED -ve | Black |

### Wire to Use

|                         |   |   |
|-------------------------|---|---|
| 9 - 10mm Strip          | → | ← |
|                         |   |   |
| Wire : 0.5 - 1.5 Sq. mm |   |   |

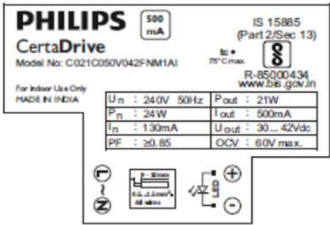
## Enclosure



|                 | (mm ) |
|-----------------|-------|
| Case Length     | 80    |
| Case Width      | 40    |
| Case Height     | 22    |
| Mounting Length | 68    |



|                 |                              |
|-----------------|------------------------------|
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| Status          | BIS Approved                 |



| Product Data                             |  |
|--|--|
| Full product code                        | 9290 033 88506   |
| Full product name                        | CertaDrive 21W 500mA 42V   |
| Net weight per piece                     | 62 gms   |
| Dimming                                  | None ( FIXED )   |
| Ambient Temp. Range                      | -10C to +50C   |
| AC Input Voltage ( Performance range )   | Typical 230V ( Min- 220V , Max - 240V )  |
| AC Input Voltage ( Operating range )     | Typical 240V ( Min- 170V , Max - 270V )  |
| Line Current                             | 0.130A @ 240V  |
| Line Frequency                           | 50 Hz  |
| Envir. Protection Rating                 | Dry and Damp   |
| Life at Tc 75 degree C                   | 30000 hrs ( nom. )   |
| Suitable For Outdoor Use                 | No   |
| Tc - Max.                                | 75°C   |
| Max. Driver number on MCB 16A ( Type B ) | 40 ( max. )  |
| Input Over Voltage                       | Can Survive input Voltage Stress of 320V for 48 hours<br>Can Survive input Voltage Stress of 360V for 12 hours |
| EMI (CISPR15)                            | No   |
| Output Current Tolerance                 | +/- 10% of Imax  |
| Output Ripple Current                    | ≤ 30% ( ripple = pk / avg. )   |
| THD Total                                | ≤ 55% @ Full Load @ 240V Supply  |
| P.F. at Max. Load                        | ≥ 0.85   |
| Isolation ( Input - Output )             | Basic Isolation  |
| Protection                               | Short Circuit and Open Circuit Protection for LED + and LED -  |



|                 |                              |
|-----------------|------------------------------|
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| Input Voltage   | 220 - 240V                   |
| Input Frequency | 50 Hz                        |
| RoHS            | Yes                          |
| Approbations    | IS 15885 ( Part 2 / Sec 13 ) |
| Status          | BIS Approved                 |

## Installation & Application Notes :

### Section I - Physical Characteristics

- 1.1 LED Driver shall be installed inside / outside an electrical enclosure.
- 1.2 Wiring inside electrical enclosure shall comply with 600V/105°C rating or higher

### Section II - Performance

- 2.1 LED Driver has a rated lifetime of 30,000 hours @  $T_c \leq 75^\circ\text{C}$
- 2.2 LED Driver tolerates sustained open circuit and short circuit output conditions without damage
- 2.3 LED Driver maximum allowable case temperature is  $75^\circ\text{C}$  - see product label for measurement location
- 2.4 LED Driver complies with the requirements of IS 15885 ( Part 2 / Sec 13 )

### ELECTRICAL RATINGS :

| Model                    | Input, 50 Hz |      | Output ( nominal ) |      |       |
|--------------------------|--------------|------|--------------------|------|-------|
|                          | V            | A    | V DC               | A DC | Watts |
| CertaDrive 21W 500mA 42V | 220 - 240    | 0.13 | 42                 | 0.5  | 21    |

### TECHNICAL CONSIDERATIONS ( NOT FOR FIELD REPRESENTATIVES USE ) :

#### Section III - Conditions of acceptability

When installed in the end-use equipment, the following are among the considerations to be made :

- 3.1 The equipment shall be installed in compliance with the enclosure, mounting, spacing, casualty and segregation requirements of the ultimate application.
- 3.2 The driver is suitable for indoor LED Lighting application.
- 3.3 The driver is suitable for use in Dry & Damp locations.
- 3.4 When the drivers are installed in the end-use application, the case temperature should not exceed the temperature limits specified in the following table:

| Model                    | Input Voltage, Hz | Max Case @ $T_C$ , $^\circ\text{C}$ |
|--------------------------|-------------------|-------------------------------------|
| CertaDrive 21W 500mA 42V | 220 - 240 , 50    | 75                                  |



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