

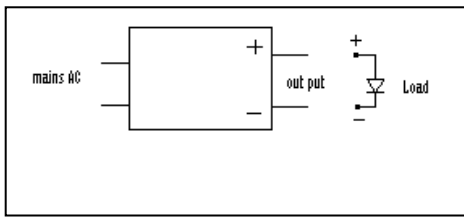
## CertaDrive LED 20W 700mA 240V - For Indoor Applications

929000900214	
Brand Name	PHILIPS LED
Description	CertaDrive LED Driver 20W 700mA 240V
Input Voltage	140-280V
Input Frequency	50/60 Hz

### Electrical Specifications

Input Voltage (V AC)	Input Power (W)	Output current (mA)	Output Voltage (V DC)	Max T Case (Deg C)	T ambient ( Deg C )	Output Power (Max)	Max THD(%)*	Efficiency %	Min Power Factor	Ripple current Pk / Avg	Surge protection (KV)	IP	Application	Wt. (gm)
220 - 240	23	700	20 - 30	75	-20 to +50	20	≤ 10	85	0.94	45%	1.7	20	Indoor	95

### Wiring Diagram LED Driver

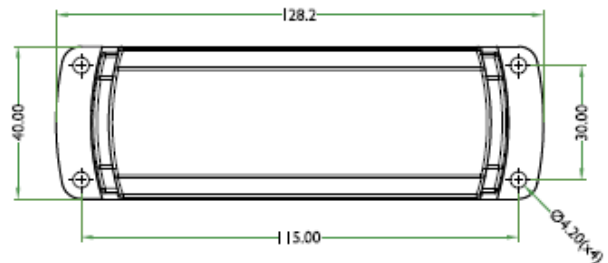
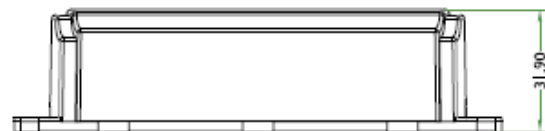


### Features

Overvoltage Protection	Shutdown @ 300V
Short circuit Protection	Yes
Open circuit protection	Yes
LED Reverse protection	Yes
ROHS compliance	Yes
Isolation between Input and output	3.7 KV
Expected Life @ Tc 75	30000 hours (nominal)
Mounting Foot Holes	115mm X 30mm

### Dimension Figures

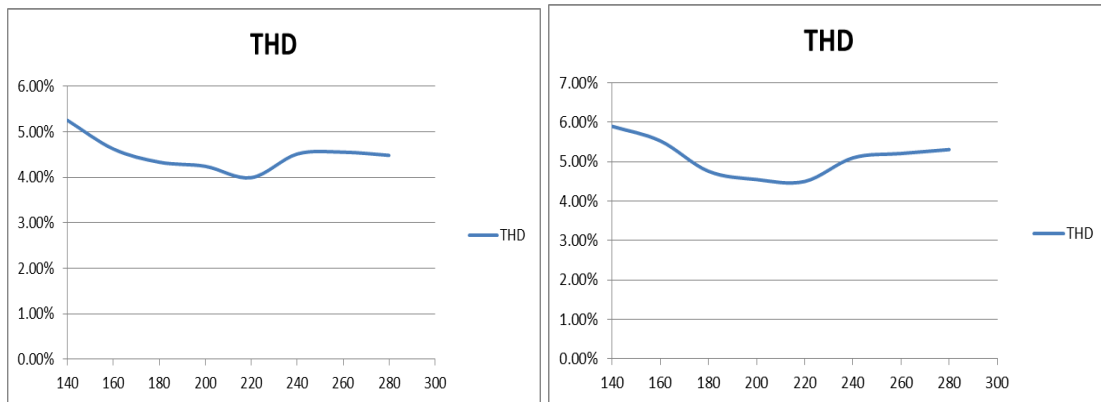
Dimensions	128mmx40mmx32mm	
Fixing	Suitable for M4 Screws	
Connector(Wire Assembly)	Mains	2 wires
	Output	2 wires
	Black	Negative
	Red	Positive



CertaDrive LED Driver 20W 700mA 240V		
<b>Input:</b>	Voltage	220V ~ 280V ( $\pm 10\%$ )
	Current	100mA max at 240V Full Load condition
	Power	23W max (at full load)
	Power Factor	> 0.94 (140-280Vac), full Load
	Frequency	50/60 Hz ( $\pm 10\%$ )
	THD	$\leq 10\%$
	Inrush current	16A , 1 $\mu$ S @ 50% Ipeak
	Connection	2 Wire (Black & white, 150 mm length each)
<b>Output:</b>	Current (nom, tol)	700mA dc Tol = $\pm 5\%$
	Min current (Nom)	665 mA
	Voltage (operation)	20-30V
	Voltage (max)	40V OCV max.
	Power	20W max
	Connection	2 Wire (Red & Black, 300mm each ). positive- RED, Negative-BLACK
<b>Surge protection</b>		1.7KV, L - N No latch shutdown
<b>Efficiency</b>		>85% @ full load
<b>Line Regulation</b>		140V ~ 280V ( $\pm 10\%$ ) over input voltage
<b>Load regulation</b>		$\pm 10\%$ from minimum load to full load
<b>Output Ripple</b>		45% pk / avg
<b>Isolation</b>		(input to output = 3.7 KV 50/60Hz, 1 min Hi-pot withstand, All lead wires to housing = 2KV 50/60Hz/1 min)
<b>Temperature:</b>	<b>Tcase</b>	ambient : -20°C to 50°C Tcase max corresponding to 50°C amb = 75°C
<b>Protection:</b>	<b>Short Circuit</b>	Yes
	<b>Overload</b>	Yes
<b>Protection: Fusing:</b>	<b>Over Voltage</b>	Yes @ 300V $\pm 10$ V ( auto-recovery )
	<b>No-load</b>	Yes
	<b>Primary</b>	Fused
	<b>Secondary</b>	Not required
<b>Reliability</b>		Can survive Input Voltage stress of 320V for 48 hours
		Can survive Input Voltage stress of 350V for 2 hours
<b>Safety:</b>		As per IEC 61347-2-13
<b>Op. Environment:</b>		ROHS compliant
<b>EMI:</b>		CISPR15 Compliance
<b>Leakage current:</b>		$\leq 0.7$ mApk
<b>Case Material:</b>		Plastic Housing
<b>Life</b>		30 K Hrs at Tcase = 75°C
<b>Failure rate</b>		$\leq 0.1\%$ per 1 kHr @ $\leq$ Tcase 75° C
<b>Packaging:</b>		10 pcs. Per box
<b>Mounting:</b>		Mounting screw M4 ( 4 nos. )
<b>Weight, dimensions</b>		116 gms, 129x40x33 mm
<b>Application</b>		Indoor , office Lighting

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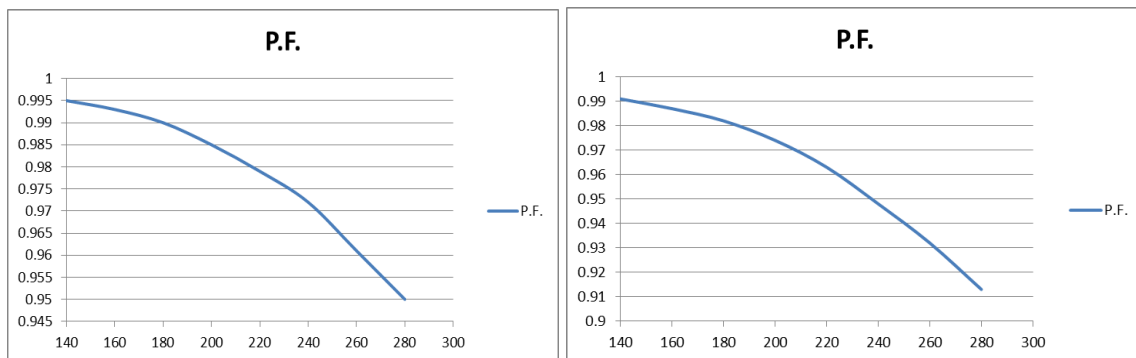
### THD vs Supply Voltage variation at full Load and 70% of Full Load /min. Load.



THD vs Supply Voltage at full Load

THD vs Supply Voltage at 70% of full Load

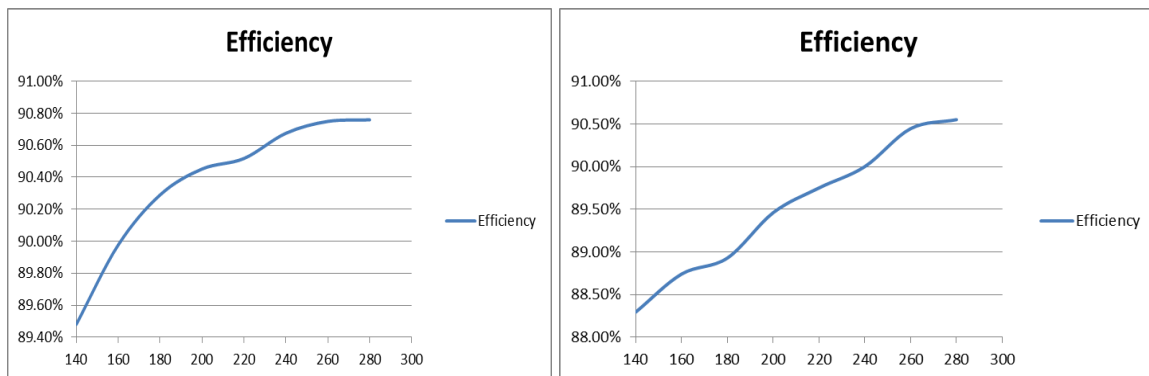
### Power Factor vs Supply Voltage variation at full Load and 70% of Full Load/min. Load.



P.F. vs Supply Voltage at full Load

P.F. vs Supply Voltage at 70% of full Load

### Efficiency vs Supply Voltage variation at full Load and 70% of Full Load/min. Load.



Efficiency vs Supply Voltage at full Load

Efficiency vs Supply Voltage at 70% of full Load