

Light is OSRAM

OSRAM

Product data sheet: ICUTRONIC IT FIT 4/220-240/400 CS I

Compact constant current LED driver

Suitable for single LEDs or small LED arrays

Compact SELV on/off driver
Very compact housing and integrated cable clamps

Benefits

Low output voltage starting at 2.5V
Dipswitches for 4 output currents
High light quality with very low ripple
Integrated cable clamps for independent installation

Applications

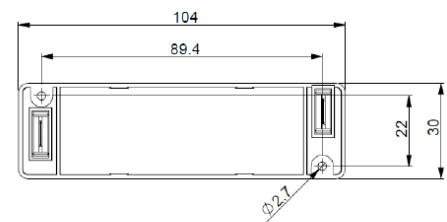
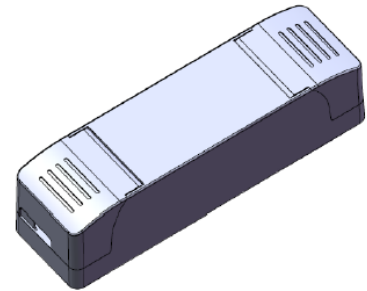
Spots and downlights
Hospitality – Shop

Approbations & Certifications

CE, ENEC, CCC, RCM, EAC, BIS

In preparation, if not already printed on the label

Housing material: plastic, white.



Product Features

- Output currents 100/200/300/400mA
- Output voltage 2.5 – 10V
- Output power 0.25 – 4W
- Fixed output (no dimming)
- Extra compact housing
- Integrated cable clamps
- Low THD, high PF
- Low LF-ripple < 5%
- Typical efficiency 75%
- Up to 50,000h lifetime
- 5 years guarantee
- Suitable for class I and II luminaires

Electrical Specifications

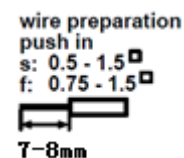
	Item	Value	Unit	Remarks
INPUT	Nominal voltage	220 – 240	V	
	Nominal frequency	50 / 60	Hz	
	AC voltage range	198 – 264	V	
	DC voltage range		V	DC or RAC
	Maximum voltage	275	Vac	2 h maximum, unit might not operate in this abnormal condition
	Nominal current	0.027	A	
	Total Harmonic Distortion (THD)	< 10	%	Full load, 230 V, 50 Hz
	Power factor	0.8		Full load, 230 V, 50 Hz
	Efficiency	75	%	Full load, 230 V, 50 Hz
	No-load power	< 0.5	W	230 V, typical
	Power loss	1.3	W	Full load, Max power, 230 V, 50 Hz , typical
	Protection class	II		
	Inrush current	<10	A pk	th = 100 µs (measured at 50% Ipeak)
	Max. units per circuit breaker	B16: 213 B10: 133		
OUTPUT	Leakage current	< 0.7	mA	Output floating
	Nominal voltage range	2.5 – 10	V	
	Maximum voltage	< 60	Vdc	w/ Open Circuit
	Nominal current range	100/200/300/ 400	mA	
	Current accuracy	±10	%	
	Current ripple 100Hz	< 5	%	
	Pst LM	≤ 1.0		Full Load
	SVM	≤ 0.4		Full Load
	Nominal power range	0.25 – 4	W	
	Maximum power	4	W	
Dimming	Galvanic isolation	SELV		
	Dimming control	n.a		
	Dimming method	n.a		
	Dimming range	n.a	%	
	Dimming Standard	n.a		
ENVIRONMENT	Ambient temperature range ta	-20 ...+55	°C	
	Maximum case temperature tc	70	°C	Measured on tc point indicated of the product label
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-20 ...+80	°C	Cool down before operating
	Relative humidity	5 ... 85	%	Not condensing
	Surge transient protection	1 2	kV	L/N LN/PE acc. IEC 61000-3-2
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 100'000		
	Expected lifetime	50'000	h	tc max 10% failure rate

Protections

Overtemperature, Overload, No load, Short-circuit, Input overvoltage, Output overvoltage, Output undervoltage

Wiring Information

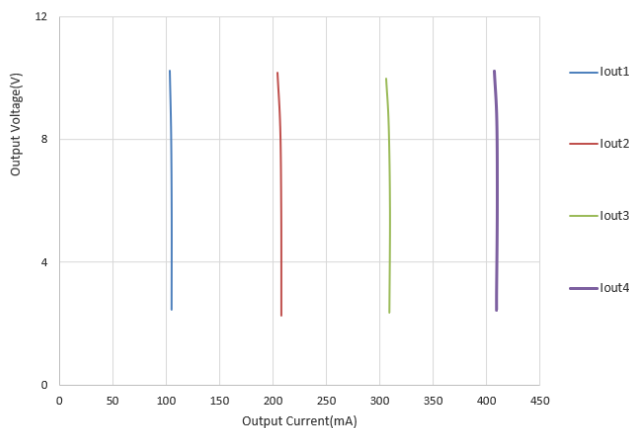
Terminal	Push in
Max cable length	2m
Dimensions	104x30x26mm
Weight	54g



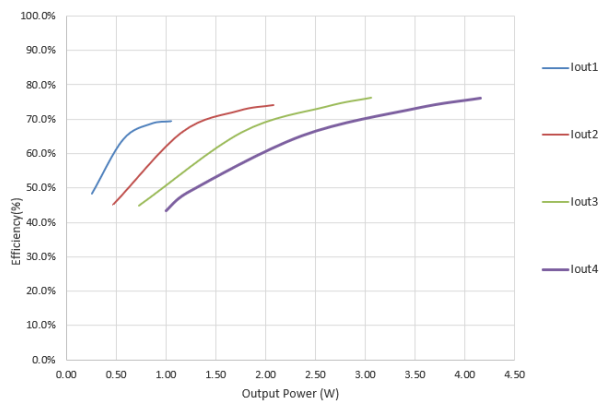
For independent: 0.75-1.5 mm² H03VVH2-F 2*0.75 mm²; H05VVH2-F 2*1.0 mm²

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.

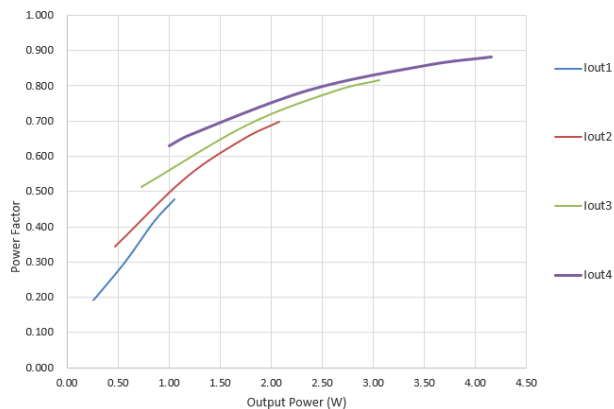
Typical Operating window



Typical Efficiency vs Load (230V/ 50Hz,)



Typical Powerfactor vs Load



Typical THD vs Load

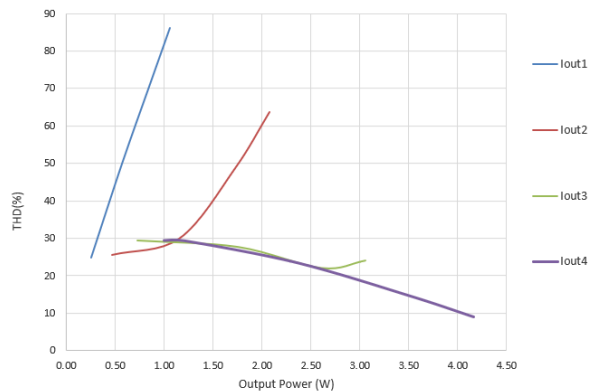


Table 1 - Rated output power and current sets				
I out (mA)	100	200	300	400
U min [V]	2.5	2.5	2.5	2.5
U max [V]	10	10	10	10
P min [W]	0.25	0.5	0.75	1
P max [W]	1	2	3	4
Ta [°C]	55	55	55	55
Tc [°C]	70	70	70	70
Line Current, nominal@230V	18	21	22	27
Max Power Loss@230V [W]	0.5	0.8	1	1.3
Input Power @230V [W]	1.5	2.8	4	5.3

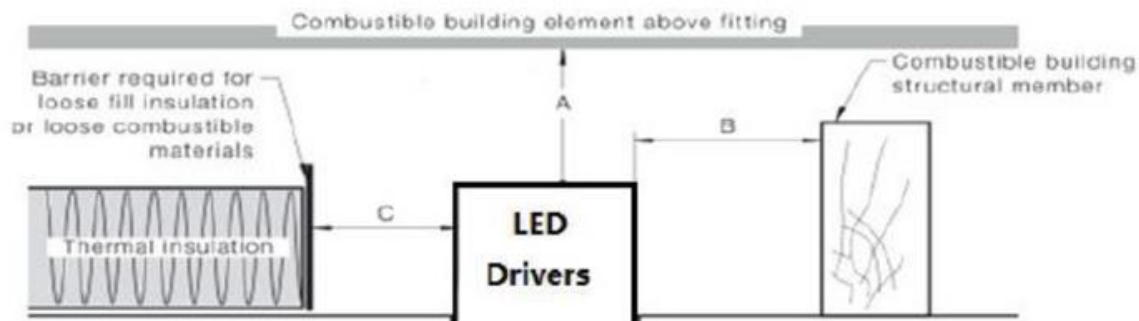
Pin1	Pin2	Current
ON	ON	400
ON	OFF	300
OFF	ON	200
OFF	OFF	100

Current selection by DIP-switch

Product type	EAN10
IT FIT 4/220-240/400 CS I	4062172199261

Remarks

- **Input over voltage protection:** mains up to 275 Vac, for 2 hours maximum, will not destroy both the unit and the load; shut down of load might occur in this condition.
- **Output short circuit / under voltage protection:** automatic reversible
- **Output overload protection:** automatic reversible
- **Output over voltage protection:** limitation of output voltage <60V
- **No load operation:** limitation of output voltage <60V. Do not put a switch between load and unit.
- **Over temperature protection:** automatic reversible
- **Touch current:** lower than 0.7 mA, according to EN 60598-1 ann. G and EN 61347-1 annex A
- The LED control gear cannot be abutted against or covered by normally flammable materials or used in installations where building insulation or debris is, or may be, present in normal use.
- The minimum clearance distance from the top and sides of the controlgear to normally flammable building elements is A=B=C=Min.10mm, this clause does not apply when the LED driver is built-in the luminares (for Australia and New Zealand).



Standards

IEC 61347-1; IEC 61347-2-13; IEC 62384; EN 55015; IEC 61000-3-2; IEC 61000-3-3
IEC 61547: CISPR 15

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