

# **LED Transformer**

# Electronic Transformers for low-voltage LED application



#### **Product Description**

Dimmable (phase cut) function, high frequency, compact size and Long lifetime LED Transformer, operation with 24VDC LED module, LED Strip and other LED application where need 24VDC constant voltage.

#### **Product Features and Benefits**

- Optimal performance thanks to the dedicated LED solution
- · Long lifetime, 30,000 hours
- $\cdot$  Safe operation, SELV compliant, CB
- Safety protections including overload protection and short circuit protection
- Installation friendly, Independent and Class II
- · ENEC, CCC, CE, CB certificate

### **Applications**

 Hotel, Partially light the space, Living rooms, Corridors

- Retail & Shopping Mall, Cabinet or shelf lighting
- Restaurant, Enhance the ambience, create the mood
- Decoration, Create space and layers, light sculpture

#### Quality

We ensure optimum quality regarding:

System supplier

As manufactures of lamps and gear, Philips ensures that, from the earliest development stage, optimum LED light source and gear performance is designed

 International supplier
 Philips LED transformer fully comply with SELV standards, IEC 61347-1,
 IEC 61347-2-13

#### Compliances and approvals

Safety IEC61347-1, IEC61347-2-13
 Performance EN62384

RFI < 30 MHz</li>
 RFI > 30 MHz
 CISPR15 Ed 7.1
 Harmonics
 Harmonity
 EN 61000-3-2
 Immunity
 EN61547

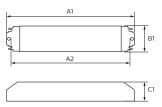
· Vibration & bump tests IEC 60068-2-6 Fc

IEC 60068-2-29 Eb

· Approval marks SELV, CB, CE, CCC, ENEC

Quality standard ISO9001Environmental standard ISO14001

RoHS compliance



#### Dimensions in mm

Type	A1	A2	B1	C1
Dimmable LED Transformer 75W 24VDC	212.5	191.9	53.9	33
Dimmable LED Transformer 150W 24VDC	300.0	278.2	60.0	45

#### Technical data

Туре	Voltage	Frequency	Power	Max. output	Max. output	Output			Dimmable
			factor	power	current	voltage			
	(Volt)	(Hz)		(Watt)	(Amp)	(Volt)	(℃)	(°C)	(Y/N)
Dimmable LED Transformer 75W 24VDC	220-240	50/60	0.95	75	3.12	24 VDC	90	-2050	Yes, phase-cut
Dimmable LED Transformer 150W 24VDC	220-240	50/60	0.95	150	6.25	24 VDC	90	-2050	Yes, phase-cut

#### Inrush current

Max quantity	Inrush current
of ballasts	½Value time at
Per MCB	typical mains
Type B 16A	Impedance
7	15A/1000us
3	28A /1250us
	of ballasts Per MCB Type B 16A



MCB type	Rating	Relative number of ballasts					
В	16 A	100% (see table above)					
В	10 A	63%					
С	16 A	170%					
С	10 A	104%					
L, I	10 A	65%					
G, U, II	16 A	212%					
G, U, II	10 A	127%					
K, III	16 A	254%					
K, III	10 A	154%					



#### Technical data for installation

#### Mains operation

Rated mains voltage 220-240V With tolerance for performance 202-254V Lifetime 30.000 hours

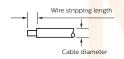
Over voltage Up to 276V (48 hours) -20°C ~ +50°C

Tamb

Max Tcase 90°C

#### Protection

Short circuit protection Yes Overload protection Yes Overheating protection Yes



#### Wire cross-section:

0.75 ... 1.5 mm<sup>2</sup> Input side Output side 0.75 ... 1.5 mm<sup>2</sup>

#### Wire stripping length:

Input side 6 ... 7 mm 6 ... 7 mm Output side

#### Cable diameter:

Input side 1.7 ... 6 mm Output side 1.7 ... 5 mm

#### Minimum installation distance:

between transformer 50 mm

#### Wiring Diagram:





## Dimmer compatibility

Dimming behaviour with tested lamp and dimmers: (all typical values\*1 at Vmains = 230V/50Hz)

Lamp & transformer combinations			Dimmer	Dimming range (%)*2		
System Description	q'ty per dimmer	Brand	Model	Phase cut	Min	Max
		ABB	AE412	Leading edge	14%	100%
	75W 24VDC 1 Transformer	Philips	Q8-2-M11	Leading edge	16%	100%
Dimmable LED		Tillips	DDLE802-MO	Trailing edge	3%	100%
Transformer 75W 24VDC		Siemens	5UH88223NC01	Leading edge	8%	100%
With 75W LED strips			Simon	45E101	Leading edge	14%
		Panasonic	WMS541	Trailing edge	2%	100%
		CHNT	NEW7-30540	Leading edge	14%	100%
		Opple	K038102/630W	Leading edge	15%	100%
		SOBEN	650W	Trailing edge	12%	100%

Lamp & transformer	combinations		Dimmer	Dimmin		nge (%)*²		
System Description	q'ty per dimmer	Brand	Model	Phase cut	Min	Max		
	ansforme <mark>r 150</mark> W 24VDC 1 Transformer	ABB	AE412	Leading edge	10%	100%		
		Philips	Q8-2-M11	Leading edge	8%	100%		
Dimmable LED		Filitips	DDLE802-MO	Trailing edge	2%	100%		
Transformer 150W 24VDC		Siemens	5UH88223NC01	Leading edge	8%	100%		
With 150W LED strips				Simon	45E101	Leading edge	14%	100%
		Panasonic	WMS541	Trailing edge	2%	100%		
		CHNT	NEW7-30540	Leading edge	8%	100%		
		Opple	K038102/630W	Leading edge	8%	100%		
			650W	Trailing edge	8%	100%		

\*1 The test results reflect the measurement of the individual devices that were used in tests. Philips does not take any responsibility, warranty or liability that these results can be achieved by using the dimmers or lamps under other conditions or when using successor models of the tested devices or different models of the same manufacturer.

\*2 Lamp may flicker in lower dimming range.

Data in the table above is for reference purpose and is subject to change without notification.



## Ordering and packing data

Transformer	12NC	Carton		Palle	et
		Carton packing	Dimensions	Cartons-per pallet	Qty-per pallet
		Qty	LxWxH		
		pcs		pcs	pcs
Dimmable LED Transformer 75W 24VDC	913710033880	20	26.0 x 24.0 x 21.4	120	2400
Dimmable LED Transformer 150W 24VDC	913710033980	10	32.4 x 27.4 x 15.1	108	1080

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3