



## 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
- 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

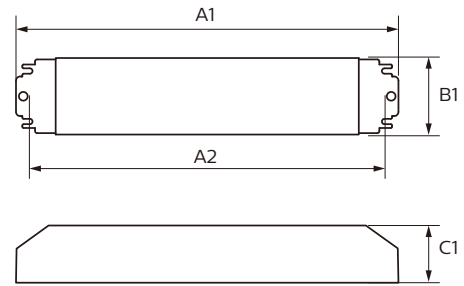
#### Quality

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	CISPR15 Ed 7.1
• RFI > 30 MHz	CISPR15 Ed 7.1
• Harmonics	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	ISO9001
• Environmental 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

Type	Voltage (Volt)	Frequency (Hz)	Power factor	Max. output power (Watt)	Max. output current (Amp )	Output voltage (Volt)	Tc ( °C )	Ta ( °C )	Dimmable (Y/N)
Dimmable LED Transformer 75W 24VDC	220-240	50/60	0.95	75	3.12	24 VDC	90	-20... 50	Yes, phase-cut
Dimmable LED Transformer 150W 24VDC	220-240	50/60	0.95	150	6.25	24 VDC	90	-20... 50	Yes, phase-cut

## Inrush current

Type	Max quantity of ballasts Per MCB Type B 16A	Inrush current ½Value time at typical mains Impedance
Dimmable LED Transformer 75W 24VDC	7	15A/1000us
Dimmable LED Transformer 150W 24VDC	3	28A/1250us

## Conversion table for max. quantities of ballasts on other types of Miniature Circuit Breaker

MCB type	Rating	Relative number of ballasts
B	16 A	100% (see table above)
B	10 A	63%
C	16 A	170%
C	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%

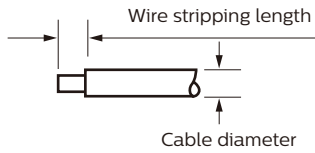
## Technical data for installation

### Mains operation

Rated mains voltage	220-240V
With tolerance for performance	202-254V
Lifetime	30,000 hours
Over voltage	Up to 276V (48 hours)
Tamb	-20°C ~ +50°C
Max Tcase	90°C

### Protection

Short circuit protection	Yes
Overload protection	Yes
Overheating protection	Yes



### Wire cross-section:

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

### Wire stripping length:

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

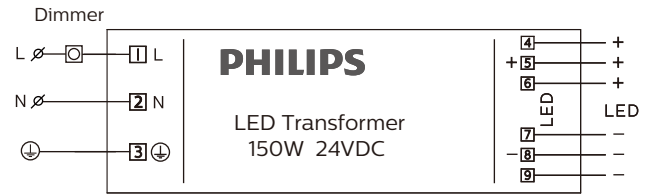
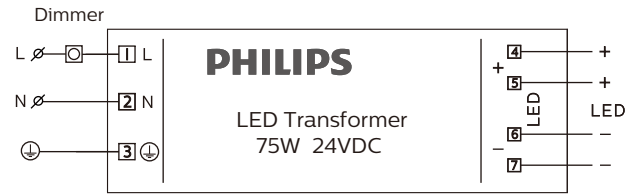
### Cable diameter:

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

### Minimum installation distance:

between transformer	50 mm
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## Wiring Diagram:



## Ordering and packing data

Transformer	12NC	Carton		Pallet	
		Carton packing Qty pcs	Dimensions L x W x H cm	Cartons-per pallet pcs	Qty-per pallet 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

## Dimmer compatibility

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

Lamp & transformer combinations		Dimmer			Dimming range (%) <sup>*2</sup>	
System Description	q'ty per dimmer	Brand	Model	Phase cut	Min	Max
Dimmable LED Transformer 75W 24VDC With 75W LED strips	1 Transformer	ABB	AE412	Leading edge	14%	100%
		Philips	Q8-2-M11	Leading edge	16%	100%
			DDLE802-MO	Trailing edge	3%	100%
		Siemens	5UH88223NC01	Leading edge	8%	100%
		Simon	45E101	Leading edge	14%	100%
		Panasonic	WMS541	Trailing edge	2%	100%
		CHNT	NEW7-30540	Leading edge	14%	100%
		Oppl	KO38102/630W	Leading edge	15%	100%
SOBEN	650W	<del>Trailing edge</del>	12%	100%		

Leading edge

Lamp & transformer combinations		Dimmer			Dimming range (%) <sup>*2</sup>	
System Description	q'ty per dimmer	Brand	Model	Phase cut	Min	Max
Dimmable LED Transformer 150W 24VDC With 150W LED strips	1 Transformer	ABB	AE412	Leading edge	10%	100%
		Philips	Q8-2-M11	Leading edge	8%	100%
			DDLE802-MO	Trailing edge	2%	100%
		Siemens	5UH88223NC01	Leading edge	8%	100%
		Simon	45E101	Leading edge	14%	100%
		Panasonic	WMS541	Trailing edge	2%	100%
		CHNT	NEW7-30540	Leading edge	8%	100%
		Oppl	KO38102/630W	Leading edge	8%	100%
SOBEN	650W	<del>Trailing edge</del>	8%	100%		

Leading edge

### Note:

\*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.

LED

(<20%)



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