

# TRANSFORMER COMPATIBILITY MR16

## BASIC INFORMATION:

### 1. WHAT IS THE PRODUCT CODE AND WHERE DO I FIND IT?

The product code describes the lamp type. It contains 7 letters and digits and is starting with "A". Below an example for the product code of the stamp of the lamp:



220-240V **AC01770** 2700K  
13 W 50/60 Hz 27 mA  
Made in Germany XXX-XXXX

Series Circuit

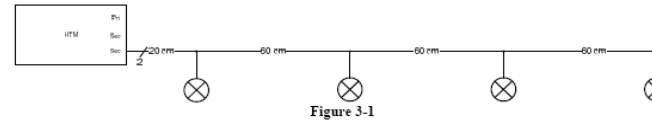


Figure 3-1

Parallel Circuit

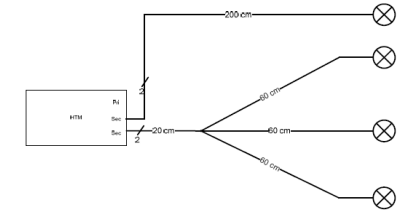


Figure 3-3

### 2. HOW MANY LAMPS CAN I INSTALL ON ONE TRANSFORMER?

For max. number of lamps on a transformer, please use the following rule of thumb:  
(Please note: Actual number may vary from calculated result)

$$\text{Max. number of lamps} = \frac{\text{Max. load of Transformer}}{\text{Equivalent Wattage (HAL/GLS)}}$$

### 3. HOW CAN I READ THE FOLLOWING CHARTS?

**Legend:**  
Information about the compatibility of the lamps. Green means good compatibility, yellow means limited compatibility and red means undesired compatibility.

List of transformers tested in laboratory conditions.

Legend		PARATHOM PRO AR111 50°	PARATHOM PRO AR111 75°	PARATHOM PRO AR111 100°	PARATHOM PRO AR111 GLOWdim	PARATHOM DIM MR11 20	PARATHOM MR11 20 non-dim
Good compatibility with indicated number of lamps							
Limited compatibility with indicated number of lamps							
Undesired compatibility							
Not tested							
EAN/Basic Code		4058075448489 / AC24544	4058075448889 / AC24553	4058075448742 / AC24558	4058075448964 / AC24547	4058075263925 / AC07359	405807595957 / AC08768
EAN/Basic Code		4058075448485 / AC24549	4058075448902 / AC24554	4058075448743 / AC24559	4058075448940 / AC24550		405807595956 / AC08769
EAN/Basic Code		4058075448446 / AC24552	4058075448903 / AC24555				
EAN/Basic Code		4058075448461 / AC24556	4058075448865 / AC24557				
Transformers		Number of Lamps on ET		Number of Lamps on ET		Number of Lamps on ET	
Brand	Model	Type	Voltage	Wattage	Number of Lamps on ET	Number of Lamps on ET	Number of Lamps on ET
OSRAM	HTM 70/220-240	HT	220-240, 50-60Hz	20-70W	1-4	1-2	1-4
OSRAM	HTM 105/230-240	HT	230-240, 50-60Hz	35-105W	1-4	1-2	1-4
OSRAM	ET-Parrot 70/220-240 I	ET	220-240, 50-60Hz	20-70W	1-4	1-2	1-4
OSRAM	ET-Parrot 105/220-240 I	ET	220-240, 50-60Hz	35-105W	1-4	1-2	1-4
OSRAM	ET-400/220-240	ET	220-240, 50-60Hz	20-60W	1-4	1-2	1-4
OSRAM	ET-430/220-240	ET	220-240, 50-60Hz	2-30W	1-4	1-2	1-4
OSRAM	HTB 70/220-240	HT	220-240, 50-60Hz	20-70W	1-4	1-2	1-4
OSRAM	HTM75/230-240 I	ET	230-240, 50-60Hz	20-75W	1-4	1-2	1-4
OSRAM	HTM 150/230-240	HT	230-240, 50-60Hz	50-150W	2-4	1-2	2-4
OSRAM	HTL105/230-240	HT	230-240, 50-60Hz	35-105W	3-4	1-2	3-4
OSRAM	LT-450/240	ET	240-50-60Hz	50W	1-4	1	1-4
OSRAM	LT-HALDS6/220-240	ET	220-240, 50-60Hz	20-50W	1-4	1-3	1-4
OSRAM	HTB 105/220-240	HT	220-240, 50-60Hz	35-105W	1-4	1-2	1-4
OSRAM	ET-Parrot 150/220-240 I	ET	220-240, 50-60Hz	50-150W	1-4	1-2	1-4
OSRAM	ET-25/60/220-240	ET	220-240, 50-60Hz	20-60W	3-4	1-3	1-4
OSRAM	HTL 225/230-240	HT	220-240, 50-60Hz	50-225W	3-4	1-2	3-4
OSRAM	OT 15/220-240/12 P	OT	220-240, 50-60Hz	15W	3	3	1-3
OSRAM	OT 30/220-240/12 P	OT	220-240, 50-60Hz	30W	1-2	1-2	1-4
OSRAM	OT 30/220-240/24 P	OT	220-240, 50-60Hz	30W	1-2	1	1-2

Information about the lamp type.

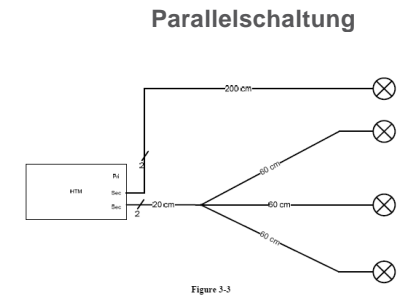
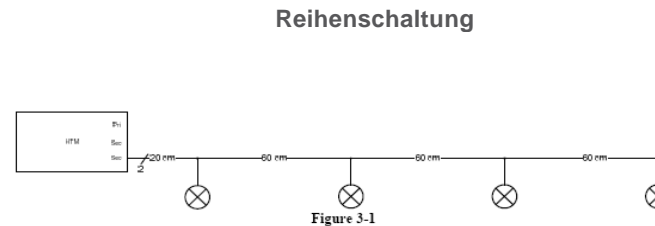
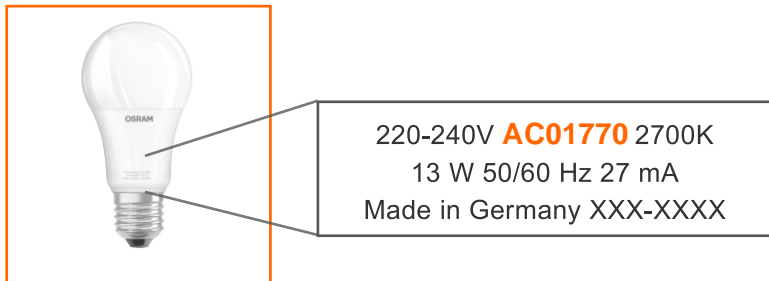
Assessment of the results into categories. Includes the number of lamps.

# TRANSFORMATOR KOMPATIBILITÄT MR16

## BASISINFORMATIONEN:

### 1. WAS IST DER PRODUKTCODE UND WO FINDE ICH IHN?

Der Produktcode beschreibt den Lampentyp. Er besteht aus sieben Buchstaben und Ziffern und beginnt mit einem "A". Nachfolgend ein Beispiel eines Produktcodes auf dem Aufdruck der Lampe.



### 2. WIE VIELE LAMPEN KANN ICH AN EINEN TRANSFORMATOR ANSCHLIEßEN?

Die max. Anzahl an Lampen, die Sie an einen Transformator anschließen können, ergibt sich aus der folgenden Faustregel:  
(Bitte beachten Sie: die tatsächliche Anzahl kann vom berechneten Ergebnis abweichen)

$$\text{Max. Anzahl von Lampen} = \frac{\text{Max. Last des Transformators}}{\text{Äquivalente Wattage (HAL/GLS)}}$$

### 3. WIE LESE ICH DIE FOLGENDEN TABELLEN?

Legende: Angaben zur Kompatibilität der Lampen. Grün bedeutet eine gute Eigenschaft mit der angegebenen Lampenanzahl, gelb eingeschränkte Eigenschaften und rot bedeutet eine teilweise kritische Kompatibilität.










Liste der getesteten Transformatoren

Legend					PARATHOM PRO AR111 50*	PARATHOM PRO AR111 75*	PARATHOM PRO AR111 100*	PARATHOM PRO AR111 GLOWdim	PARATHOM DIM MR16 20	PARATHOM MR16 20 non-dim
Good compatibility with indicated number of lamps										
Limited compatibility with indicated number of lamps										
Undesired compatibility										
Not tested										
Transformators										
Brand	Model	Type	Voltage	Wattage	Number of Lamps on ET	Number of Lamps on ET	Number of Lamps on ET	Number of Lamps on ET	Number of Lamps on ET	Number of Lamps on ET
OSRAM	HTM 70/230-240	HT	230-240, 50-60Hz	20-70W	1-4	1-2	1-2	1-4	1-4	1-4
OSRAM	HTM 105/220-240	HT	230-240, 50-60Hz	35-105W	1-4	1-2	1-2	1-4	1-4	1-4
OSRAM	ET-Parrot 70/220-240 I	ET	220-240, 50-60Hz	20-70W	1-4	1-3	1-2	1-4	1-4	1-4
OSRAM	ET-Parrot 105/220-240 I	ET	220-240, 50-60Hz	35-105W	1-4	1-3	1-2	1-4	1-4	1-4
OSRAM	ET-A 60/220-240	ET	230-240, 50-60Hz	20-60W	1-4	1-2	1-2	1-4	1-4	1-4
OSRAM	ET-L 30/220-240	ET	220-240, 50-60Hz	2-30W	1-4	1-3	1-2	1-4	1-4	1-4
OSRAM	HTB 70/220-240	HT	220-240, 50-60Hz	20-70W	1-4	1-3	1-2	1-4	1-4	1-4
OSRAM	HTN75/230-240 I	ET	230-240, 50-60Hz	20-75W	1-4	1-3	1-2	1-4	1-4	1-4
OSRAM	HTM 150/230-240	HT	230-240, 50-60Hz	50-150W	2-4	1-2	1-2	2-4	2-4	2-4
OSRAM	HTL105/230-240	HT	230-240, 50-60Hz	35-105W	1-4	1-3	1-2	1-4	1-4	1-4
OSRAM	12-AS0/240	ET	240, 50-60Hz	50W	1-4	1	1-2	1-4	1-4	1-4
OSRAM	12-MAS0/220-240	ET	220-240, 50-60Hz	20-50W	1-4	1-3	1-2	1-4	1-4	1-4
OSRAM	HTB 105/220-240	HT	220-240, 50-60Hz	35-105W	1-4	1-3	1-2	1-4	1-4	1-4
OSRAM	ET-Parrot 150/220-240 I	ET	220-240, 50-60Hz	50-150W	1-4	1-3	1-2	1-4	1-4	1-4
OSRAM	ET-B 60/220-240	ET	220-240, 50-60Hz	20-60W	1-4	1-3	1-2	1-4	1-4	1-4
OSRAM	HTL 225/230-240	HT	220-240, 50-60Hz	50-225W	1-4	1-2	1-2	1-4	1-4	1-4
OSRAM	OT 15/220-240/12 P	OT	220-240, 50-60Hz	15W	1-2	3	1-2	1-2	1-4	1-4
OSRAM	OT 30/220-240/12 P	OT	220-240, 50-60Hz	30W	1-2	1-2	1-2	1-2	1-4	1-4
OSRAM	OT 30/220-240/24 P	OT	220-240, 50-60Hz	30W	1-2	1	1-2	1-2	1-4	1-4

Angaben zum Lampentyp

Bewertung der Testergebnisse im Ampelsystem. Beinhaltet die Lampenanzahl für die angegebene Ampel-Kategorie.

## TRANSFORMER COMPATIBILITY MR16

Legend						PARATHOM PRO MR16 20 36°	PARATHOM PRO MR16 35 36°	PARATHOM PRO MR16 43 36°	PARATHOM DIM MR16 20 36°	PARATHOM DIM MR16 35 36°	PARATHOM DIM MR16 50 36°	PARATHOM MR 16 20 NON DIM	PARATHOM MR 16 35 NON DIM	PARATHOM MR 16 50 NON DIM
Good compatibility with indicated number of lamps														
Limited compatibility with indicated number of lamps						EAN/ Basic Code	EAN/ Basic Code	EAN/ Basic Code	EAN/ Basic Code	EAN/ Basic Code	EAN/ Basic Code	EAN/ Basic Code	EAN/ Basic Code	EAN/ Basic Code
Undesired compatibility						4058075431652 / AC33715 4058075431638 / AC33716 4058075431614 / AC33717	4058075609433 / AC32718 4058075609419 / AC32719 4058075609396 / AC32720	4058075609372 / AC32721 4058075609358 / AC32722 4058075609334 / AC32723	4058075796454 / AC42767 4058075796478 / AC42768 4058075796492 / AC42769	4058075796515 / AC42773 4058075796539 / AC42774 4058075796553 / AC42775	4058075609310 / AC32712 4058075609297 / AC32713 4058075609273 / AC32714	4058075796577 / AC42770 4058075796591 / AC42771 4058075796614 / AC42772	4058075796638 / AC42776 4058075796652 / AC42778 4058075796676 / AC42778	4058075609259 / AC32715 4058075609235 / AC32716 4058075609211 / AC32717
Not tested														
Electric Transformers						Number of Lamps on ET	Number of Lamps on ET	Number of Lamps on ET	Number of Lamps on ET	Number of Lamps on ET	Number of Lamps on ET	Number of Lamps on ET	Number of Lamps on ET	Number of Lamps on ET
Brand	Model	Type	Voltage	Wattage										
OSRAM	HTM 70/230-240	ET	230-240, 50-60Hz	20-70W	1-6	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
OSRAM	HTM 105/230-240	ET	230-240, 50-60Hz	35-105W	1-6	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
OSRAM	ET-Parrot 70/220-240 I	ET APAC	220-240, 50-60Hz	20-70W		1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
OSRAM	ET-Parrot 105/220-240 I	ET	220-240, 50-60Hz	35-105W		1-4	1-4	2-4	1-4	1-4	1-4	1-4	1-4	1-4
OSRAM	ET-A 60/220-240	ET APAC	220-240, 50-60Hz	20-60W		1-4	1-4	1-4	1-4	1-4	1	1-4	1-4	1-4
OSRAM	ET-L 30/220-240	ET APAC	220-240, 50-60Hz	2-30W		1-3	1-3	1-4	1-4	1-3	1-4	1-4	1-4	1-3
OSRAM	HTB 70/220-240	ET	220-240, 50-60Hz	20-70W	1-6	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
OSRAM	HALOTRNIC HTN75/230-240 I	ET	230-240, 50-60Hz	20-75W	1-6	1-4	1-4	1-4	1-4	1-4	1	1-4	1-4	1-4
OSRAM	HTM 150/230-240	ET	230-240, 50-60Hz	50-150W	2-6	2-4	2-4	2-4	2-4	2-4	1-4	1	1-4	2-4
OSRAM	HTL105/230-240	ET	230-240, 50-60Hz	35-105W	3-6	3-4	3-4	2-4	2-4	3-4	1-4	1	1-4	3-4
OSRAM	IZ-A50/240	ET India	240,50-60Hz	50W		1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
OSRAM	IZ-HALD50/220-240	ET APAC	220-240, 50-60Hz	20-50W		1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
OSRAM	HTB 105/220-240	ET	220-240, 50-60Hz	35-105W	1-6	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
OSRAM	ET-Parrot 150/220-240 I	ET	220-240, 50-60Hz	50-150W	no	2-4	2-4	2-4	2-4	2-4	1-4	1-4	1-4	2-4
OSRAM	ET-ZE 60/220-240	ET	220-240, 50-60Hz	20-60W	1-6	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
OSRAM	HTL225	ET	220-240,50-60Hz	50-225W	3-6	2-4	2-4	2-4	3-4	2-4	1-4	1-4	1-4	2-4
OSRAM	OT 15/220-240/12 P	OT	220-240,50-60Hz	15W	1-2			1-4	1-4			1-4	1-4	1-4
OSRAM	OT 30/220-240/12 P	OT	220-240,50-60Hz	30W	1-4	1-3	1-3	1-4	1-4	1-3	1-4	1-4	1-4	1-3
OSRAM	OT 60/220-240/12 P	OT	220-240,50-60Hz	60W	1-6	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
SLV	461060	ET	230,50-60Hz	10-60W	1-6	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
BLOCK	HES 70K	ET	230-240,50-60Hz	20-70W	1-6			1-4	1-4		1-4	1-4	1-4	
BLOCK	HES 105K	ET	230-240,50-60Hz	35-105W	1-6	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
EVN	TAB 70 (3310)	ET	230,50-60Hz	20-70W	2-6	2-4	2-4	1-4	1-4	2-4	1	no	1-4	2-4
EVN	MINIJOKER 70(T27/10)	ET	230-240,50-60Hz	10-60W	1-6			2-4	2-4		1-4	1-4	1-4	
EVN	CLOU 60(T41/09)	ET	230-240,50-60Hz	10-70W	3-6	1-4	1-4	2-4	2-4	1-4	1-4	1-4	1-4	1-4
Berker	Igel 20-105w 2921	ET	230-240,50-60Hz	20-105W	2-6	1-4	1-4	2-4	2-4	1-4	1-4	1-4	1-4	1-4
Berker	SNT 70/QU 2918	ET	230,50-60Hz	20-70W	3-6	1-4	1-4	1-4	1-3	1-4	1-4	1-3	1-4	1-4
Berker	SNTF II 35-105W 2927	ET	230,50-60Hz	35-105W	4-6	2-4	2-4	4	3-4	2-4	1-2	1	1-4	2-4
TCI	SHARK60	EU	220-240,50-60Hz	10-60W	2-6									
TCI	PUMA 105	EU	230-240,50-60Hz	20-105W	2-6									
TCI	ROUND 70	EU	230,50-60Hz	20-70W	2-6									
TCI	MW70 LED	ET	220-240,50-60Hz	10-60W		1-4	1-4			1-4				1-4
Paulmann	Disc electronic S 70	ET	230,50-60Hz	20-70W	3-6	no	no			no			no	no
Paulmann	Profi 80	ET	220-240,50Hz	20-80W	3-6	2-4	2-4			2-4				2-4
Paulmann	Mipro 70	ET	230,50-60Hz	20-70W	2-6	2-4	2-4		1-4	2-4	1-4	1-4	1-4	2-4
JUNG	SNT 70 F	ET	230,50-60Hz	20-70W	2-6	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
JUNG	SNT 105 F	ET	230,50-60Hz	20-105W	3-6	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
nobile	EN-80F	ET	230,50-60Hz	20-80W	1 & 3-6	2-4	2-4	1-4	1-4	2-4	1-4	1-4	1-4	2-4
nobile	EN-60D2	ET	230,50-60Hz	20-60W	2-6	2-4	2-4	1-4	1-4	2-4	1-4	1-4	1-4	2-4
FN LIGHT	TL105S 20-105W 461107	ET	230-240,50-60Hz	20-105W	1-6	1-4	1-4	1-2	1	1-4	1-4	1-4	1-4	1-4
goodbay	SET110LV(35-110W)	ET	220-240,50Hz	35-110W	2-6	1-4	1-4	1-4	1-4	1-4	4	1-4	1-4	1-4
PHILIPS	Primaline 70 230-240	ET	230-240,50-60Hz	20-70W	2-6	2-4	2-4	1-4	1-4	2-4	1-4	1-4	1-4	2-4
abi	SET210(50-210VA) ALS0476	ET	220-240V, 50Hz	50-210VA	1-6	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4

**Please Note:**

- The compatibility list is based upon testing conducted by the manufacturer in a lab simulated environment, and the results can vary in certain field applications due to a number of factors. LEDVANCE does not take over any responsibility, warranty or liability that this results can also achieved by using the devices under other conditions, or when using successor models of the tested devices, or different models of the same manufacturer, or when using other LED lamp types.
- The absence of a dimmer from this chart does not necessarily imply incompatibility.
- Please reference the dimmer manufacturer's instructions for installation.
- The operation of non-dimmable LED lamps on dimming devices is not permitted.
- LED lamps contain several electronic components. Under unfavourable conditions these can lead to acoustic noise. In case of resonance even low noise can cause audible effect. Possible factors influencing this are the installation, the design of the lamp holder and the luminaire (acoustic resonance effect) as well as the dimmer or the transformer (harmonic or electronic resonance).
- Subject to change without notice.
- Errors and omission excepted.
- Always make sure to use the most recent release.

**Bitte beachten:**

- Die Kompatibilitätsliste basiert auf Tests, die der Hersteller in einer im Labor simulierten Umgebung durchgeführt hat. Die Ergebnisse können aufgrund verschiedener Faktoren in manchen Praxisanwendungen abweichen. LEDVANCE übernimmt keinerlei Verantwortung, Garantie oder Haftung dafür, dass diese Ergebnisse tatsächlich mit den Geräten unter anderen Bedingungen, mit Nachfolgemodellen der getesteten Geräte, mit anderen Modellen desselben Herstellers oder bei Verwendung anderer LED-Lampentypen erreicht werden.
- Das Fehlen eines Dimmers in der Abbildung bedeutet nicht, dass ein Dimmer nicht kompatibel ist.
- Lesen Sie stets die Installationsanweisungen des Dimmerherstellers.
- Der Betrieb von nicht dimmbaren LED-Lampen an Dimmgeräten ist nicht zulässig.
- LED-Lampen bestehen aus mehreren elektronischen Komponenten. Unter ungünstigen Bedingungen können diese Störgeräusche erzeugen. Im Resonanzfall können selbst geringe Geräusche einen hörbaren Effekt hervorrufen. Einflussfaktoren können die Installation, die Gestaltung des Lampenträgers, die Leuchte (akustischer Resonanzeffekt), der Dimmer oder der Trafo (Oberschwingungen oder elektronische Resonanz) sein.
- Änderungen vorbehalten.
- Irrtümer und Auslassungen vorbehalten.

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