

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

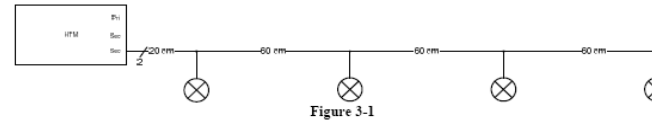


Figure 3-1

Parallel Circuit

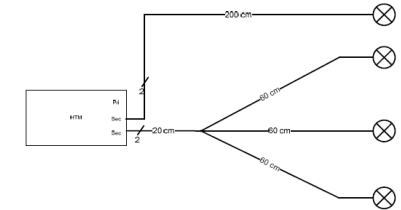


Figure 3-3

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 | 4058075448882 / AC24554 | 4058075448964 / AC24547 | 4058075263925 / AC07359 | 405807595957 / AC08768 |
| EAN/Basic Code | | 4058075448485 / AC24549 | 4058075448902 / AC24554 | 4058075448903 / AC24555 | 4058075448940 / AC24550 | | 405807595956 / AC08769 |
| EAN/Basic Code | | 4058075448486 / AC24552 | 4058075448841 / AC24556 | 4058075448845 / AC24556 | | | |
| EAN/Basic Code | | 4058075448487 / AC24551 | 4058075448886 / AC24551 | | | | |
| 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 | IZ-HALDS6/220-240 | ET | 220-240, 50-60Hz | 20-50W | 1-4 | 1-2 | 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 | 1-2 | 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 | 1-3 |
| OSRAM | OT 30/220-240/12 P | OT | 220-240, 50-60Hz | 30W | 1-2 | 1-2 | 1-2 |
| 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

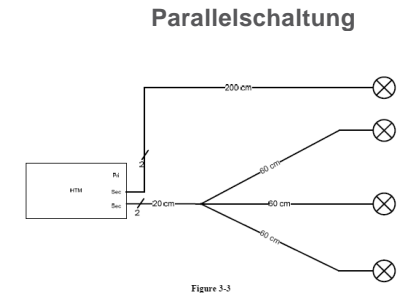
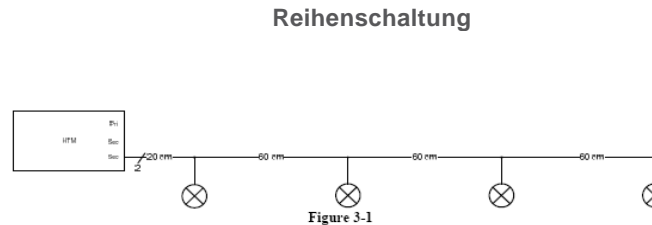
BASISINFORMATIONEN:

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.



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



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-MA0/220-240 | 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 | 1 | 1-2 | 1-2 | 1-4 | 1-4 |
| OSRAM | OT 30/220-240/12 P | OT | 220-240, 50-60Hz | 30W | 1-2 | 1 | 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 | | | | | SUPERSTAR MR16 20 36° | SUPERSTAR MR16 35 36° | SUPERSTAR MR16 50 36° | STAR MR16 20 36° NON DIM | STAR MR16 35 36° NON DIM | STAR MR16 50 36° 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 |
| Undesired compatibility | | | | | | | | | | |
| Not tested | | | | | | | | | | |
| | | | | | 4058075796690 / AC42767 | 4058075796713 / AC42773 4058075796737 / AC42775 | 4058075433724 / AC32712 4058075433748 / AC32714 | 4058075796751 / AC42770 4099854048074 / AC42770 4099854048050 / AC42770 4058075796775 / AC42772 | 4058075796836 / AC42776 4058075796799 / AC42776 4099854048098 / AC42776 4058075796812 / AC42778 | 4058075433762 / AC32715 4058075617728 / AC32715 4058075626485 / AC32715 4058075433786 / AC32717 |
| 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 |
| Brand | Model | Type | Voltage | Wattage | | | | | | |
| OSRAM | HTM 70/230-240 | ET | 230-240, 50-60Hz | 20-70W | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 |
| OSRAM | HTM 105/230-240 | ET | 230-240, 50-60Hz | 35-105W | 1-4 | 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 |
| OSRAM | ET-Parrot 105/220-240 I | ET APAC | 220-240, 50-60Hz | 35-105W | 2-4 | 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 | 1-4 | 1-4 |
| OSRAM | ET-L 30/220-240 | ET APAC | 220-240, 50-60Hz | 2-30W | 1-4 | 1-4 | 1-3 | 1-4 | 1-4 | 1-3 |
| OSRAM | HTB 70/220-240 | ET | 220-240, 50-60Hz | 20-70W | 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 | 1-4 | 1-4 | 1-4 | 1 | 1-4 | 1-4 |
| OSRAM | HTM 150/230-240 | ET | 230-240, 50-60Hz | 50-150W | 2-4 | 2-4 | 2-4 | 1-4 | 1 | 2-4 |
| OSRAM | H TL105/230-240 | ET | 230-240, 50-60Hz | 35-105W | 2-4 | 2-4 | 3-4 | 1-4 | 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 |
| 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 |
| OSRAM | HTB 105/220-240 | ET | 220-240, 50-60Hz | 35-105W | 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 | 2-4 | 1-4 | 2-4 | 1-4 | 1-4 | 2-4 |
| OSRAM | ET-ZE 60/220-240 | ET | 220-240, 50-60Hz | 20-60W | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 |
| OSRAM | HTL225 | ET | 220-240,50-60Hz | 50-225W | 2-4 | 3-4 | 2-4 | 1-4 | 1-4 | 2-4 |
| OSRAM | OT 15/220-240/12 P | OT | 220-240,50-60Hz | 15W | 1-4 | 1-4 | | 1-4 | 1-4 | |
| OSRAM | OT 30/220-240/12 P | OT | 220-240,50-60Hz | 30W | 1-4 | 1-4 | 1-3 | 1-4 | 1-4 | 1-3 |
| OSRAM | OT 60/220-240/12 P | OT | 220-240,50-60Hz | 60W | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 |
| SLV | 461060 | ET | 230,50-60Hz | 10-60W | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 |
| BLOCK | HES 70K | ET | 230-240,50-60Hz | 20-70W | 1-4 | 1-4 | | 1-4 | 1-4 | |
| BLOCK | HES 105K | ET | 230-240,50-60Hz | 35-105W | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 |
| EVN | TAB 70 (3310) | ET | 230,50-60Hz | 20-70W | 1-4 | 1-4 | 2-4 | 1 | no | 2-4 |
| EVN | MINIJOKER 70(T27/10) | ET | 230-240,50-60Hz | 10-60W | 2-4 | 2-4 | | 1-4 | 1-4 | |
| EVN | CLOU 60(T41/09) | ET | 230-240,50-60Hz | 10-70W | 2-4 | 2-4 | | 1-4 | 1-4 | 1-4 |
| Berker | Igel 20-105w 2921 | ET | 230-240,50-60Hz | 20-105W | 2-4 | 2-4 | 1-4 | 1-4 | 1-4 | 1-4 |
| Berker | SNT 70/QU 2918 | ET | 230,50-60Hz | 20-70W | 1-4 | 1-3 | 1-4 | 1-4 | 1-3 | 1-4 |
| Berker | SNTF II 35-105W 2927 | ET | 230,50-60Hz | 35-105W | 4 | 3-4 | 2-4 | 1-2 | 1 | 2-4 |
| TCI | SHARK60 | EU | 220-240,50-60Hz | 10-60W | | | | | | |
| TCI | PUMA 105 | EU | 230-240,50-60Hz | 20-105W | | | | | | |
| TCI | ROUND 70 | EU | 230,50-60Hz | 20-70W | | | | | | |
| TCI | MW70 LED | ET | 220-240,50-60Hz | 10-60W | | | 1-4 | | | 1-4 |
| Paulmann | Disc electronic S 70 | ET | 230,50-60Hz | 20-70W | | | no | | | no |
| Paulmann | Profi 80 | ET | 220-240,50Hz | 20-80W | | | 2-4 | | | 2-4 |
| Paulmann | Mipro 70 | ET | 230,50-60Hz | 20-70W | 1-4 | 2-4 | 2-4 | 1-4 | 1-4 | 2-4 |
| JUNG | SNT 70 F | ET | 230,50-60Hz | 20-70W | 1-4 | 2-4 | 1-4 | 1-4 | 1-4 | 1-4 |
| JUNG | SNT 105 F | ET | 230,50-60Hz | 20-105W | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 |
| nobile | EN-80F | ET | 230,50-60Hz | 20-80W | 1-4 | 1-4 | 2-4 | 1-4 | 1-4 | 2-4 |
| nobile | EN-60D2 | ET | 230,50-60Hz | 20-60W | 1-4 | 1-4 | 2-4 | 1-4 | 1-4 | 2-4 |
| FN LIGHT | TL105S 20-105W 461107 | ET | 230-240,50-60Hz | 20-105W | 1-2 | 1 | 1-4 | 1-4 | 1-4 | 1-4 |
| goodbay | SET110LV(35-110W) | ET | 220-240,50Hz | 35-110W | 1-4 | 1-4 | 1-4 | 4 | 1-4 | 1-4 |
| PHILIPS | Primaline 70 230-240 | ET | 230-240,50-60Hz | 20-70W | 1-4 | 1-4 | 2-4 | 1-4 | 1-4 | 2-4 |
| abi | SET210(50-210VA) AL50476 | ET | 220-240V, 50Hz | 50-210VA | 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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