Better informed

OSRAM statement on T5 adapters

Fig. 1. Principle of an adapter for T5 fluorescent lamps

Fact and fiction

Time and again, adapters are offered in Europe that are said to permit conversion of CCG luminaires with T12 or T8 lamps to modern T5 lamps (**Fig. 1**). However, this kind of conversion can lead to problems, as a number of users have in the meantime found. The sales arguments in favour of these adapters disregard a number of facts relevant to operation that can have a decidedly negative impact on the operation of a lighting installation. In many cases, the use of adapters led to such a deterioration in the illuminance of the rooms that the original lamps had to be reinstalled.

All the arguments at a glance

Arguments of adapter manufacturers	Largely unmentioned facts
• Energy consumption drops by 40% to 60%	• The luminous flux is up to 50% lower as a result
• Better light quality	• Standard DIN EN 12 464 (formerly DIN 5035) is not fulfilled due to substantially reduced luminous flux. In addition, colour appearance and colour rendering properties can change
• Hot lamp start or twice the lamp service life	• One lamp filament correctly heated, at most, meaning that lamp failure is possible after as few as roughly 2,000 switching operations; no OSRAM lamp guarantee
• Durable adapter and „End-of-Life“ shutdown	• OSRAM‘s information is that the T5 adapter also fails at the end of the lamp service life and has to be replaced
• Complies with relevant regulations	• Test certification relates only to the T5 adapter, or possibly to a randomly selected luminaire; the converted luminaire loses its approval (VDE) and the radio interference and harmonics limits are usually exceeded
• The luminaire manufacturer is still liable after installation of the T5 adapter	• The ZVEI has warned manufacturers of T5 adapters not to further disseminate this knowingly incorrect statement, since the operator of the installation alone is liable; any and all warranty claims on the luminaire manufacturer are invalidated due to incorrect operation of the converted luminaire

A check puts things into perspective

T5 adapters of this type have been checked in the OSRAM laboratories. The following statement regarding technical aspects and the comparison of sales arguments and misinformation (**see box**) are based on the results of these OSRAM tests.

Detailed information is available, and can be provided on request. There are examples of installations where the original lamps had to be reinstalled due to a drop in illuminance from 300 lx to 180 lx. In addition, there is a statement on this subject from the German Electrical and Electronic Manufacturers‘ Association (ZVEI) and information by the IEC Committee (IEC SC 34D).

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