

Lamps, LEDs and Circuits

8.10 Lamp coding systems – LBS/ILCOS

ILCOS lamp code

To support the worldwide identification of compatible lamp types the IEC has produced a generic lamp coding system standard, called the International Lamp Coding System or ILCOS, published in 1993 as IEC TS 61231. The system is directly linked to the IEC standard for specific lamps. The lamp standard has data sheets that are identified by the ILCOS code. ILCOS offers a short code “ILCOS L” that can be expanded, in code, to cover several features of the lamp. The standard code “ILCOS D” gives the complete designation of the lamp. All lamp manufacturers made a direct link between their private brand code and the ILCOS system. The responsibility for maintaining the ILCOS system is with the IEC lamp technical committee.

LBS lamp code system

In 1994 the Zentralverband Elektrotechnik und Elektronikindustrie, better known as ZVEI, the Industry Federation in Germany, produced a lamp coding system called Lampenbezeichnungssystem or LBS for short. The codes are widely used by luminaire makers and clients in Europe. The system is of simple codes and has short descriptions and is maintained by ZVEI, but it is not supported by all lamp-makers or by international standards.

A selection of ILCOS and equivalent LBS codes with their meanings are given in Table 8.3.



Fig. 8.16 LED lighting providing a distinctive atmosphere to a space

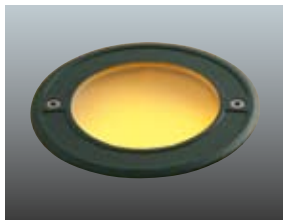


Fig. 8.17 An LED ground recessed luminaire

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LBS (ZVEI)	ILCOS	Description
A	IA	General purpose incandescent lamp
R	IRR	Reflector lamps
QT	HSG	Halogen incandescent lamps
QT-DE	HDG	Halogen incandescent lamps, linear double-ended
QPAR	HA	Halogen incandescent lamps for mains voltage with reflector
QR	HAG / HMG	Low voltage halogen incandescent lamps with reflector
QR-CBC	HRG	Low voltage halogen incandescent lamp with dichroic reflector and glass cover
T16	FDH	Fluorescent lamps Ø16mm
T26	FD	Fluorescent lamps Ø26mm
T16-R	FSC	Circular fluorescent lamps Ø16mm
TC-S	FSD	Compact fluorescent lamps (1 tube)
TC-SEL	FSDH	Compact fluorescent lamps (1 tube) for electronic ballast up to 80W
TC-L	FSD	Compact fluorescent lamps (1 tube) up to 36W
TC-D	FSQ	Compact fluorescent lamps (2 tubes)
TC-DEL	FSQH	Compact fluorescent lamps (2 tubes) for electronic ballast
TC-T	FSM	Compact fluorescent lamps (3 tubes) up to 36W
TC-TEL	FSMH	Compact fluorescent lamps (3 tubes) for electronic ballast up to 120W
TC-DD	FSS	Compact fluorescent lamps (double D)
LMG-IHF	FSS	Induction lamps (Philips QL type)
HIT-DE	MD	Double ended tubular metal halide lamp
HIT-DE-CE	MT	Double ended tubular metal halide lamp with ceramic burner
HIT	MT	Single ended tubular metal halide lamp
HIE	ME	Single ended elliptical metal halide lamp
HIE-CE	ME	Single ended elliptical metal halide lamp with ceramic burner
HME	QE	High pressure mercury discharge lamp
HSE	SE	Single ended elliptical high pressure sodium lamp
HSE-I	SE/I	Single ended elliptical high pressure sodium lamp with internal ignitor
HST	ST	Single ended tubular high pressure sodium lamp
HSE-MF	SE	Single ended elliptical high pressure sodium lamp, increased light output (MF = more luminous flux)
HST-MF	ST	Single ended tubular high pressure sodium lamp, increased light output (MF = more luminous flux)
HSE-CRI	SEM	Single ended elliptical high pressure sodium lamp improved colour rendering (Philips SON Comfort Pro type)
HST-CRI	STH	Single ended tubular high pressure sodium lamp improved colour rendering (Philips SON-T Comfort Pro type)
HST	STH	Single ended tubular high pressure sodium lamp with high colour rendering (e.g. Philips SDW-T, Iwasaki NHT-SDX)
HST-DE	SD	Double ended tubular high pressure sodium lamp
LST	LS	Single ended tubular low pressure sodium lamp

Table 8.3 Selection of LBS and ILCOS lamp coding systems