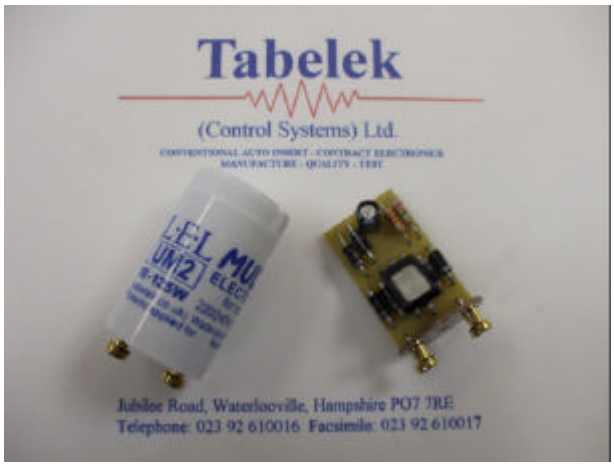
RoHS Compliant

L·E·L
Lighting ElectronicsLimited

UM2 and UM3 Multipulse Electronic Fluorescent Starters



- Reliable Starting at lower supply voltages and operating temperatures.
- All 18-125W linear and 8-36W compact lamps covered by one product.
- Longer Lamp Life.
- Automatic failed lamp cut-off.

The patented LEL Multipulse system produces timed heating followed by high energy,highvoltageignition to give very reliable starting even under conditions of low temperatures.

The soft start of UM2 and UM3 give greatly reduced cathode wear and end blackening and therefore significantly enhances lamp life. There is an automatic failed tube cut-off which avoids continuous flashing and ballastoverheating.

Data and Specifications

FULL RANGE OF LAMPS WITH ONE STARTER

The UM2 electronic starter is the only one which will soft start the full range of linear fluorescent lamps from 600mm 18W to 2400mm 125W, including 100W Krypton energy saver types, as well as most compact lamps.

The UM2 is compatible with standard, low loss and extra low loss ballasts.

TWIN LAMP STARTING

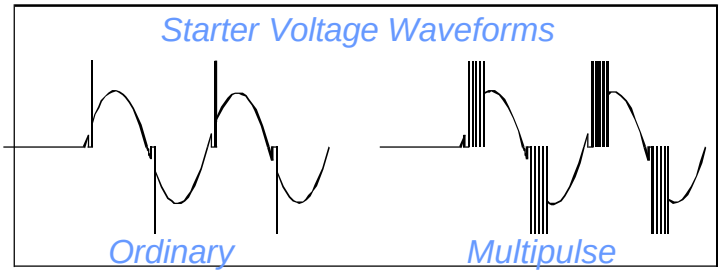
The UM3 is for twin lamps, operating in series from one ballast and will start lamps in the twin configuration even at -30°C and with a supply voltage down to -10% (both conditions applying together). Them UM3 is also suitable for 4W to 22W single circuits on 115 to 240V supplies.

CONVENTIONAL CANISTERS

Both the UM2 and UM3 are housed in conventional starter canisters. They have an operating life equal to that of a luminaire and can be retrofitted into existing installations of factory fitted into new luminaires.

MULTIPULSE SYSTEM

LEL's patented Multipulse circuit used in the UM type starters represents a significant advance in electronic starter performance.
Ordinary electronic starters provide for lamp striking with one high voltage pulse each half cycle of the supply frequency. LEL's Multipulse starters provide several high voltage pulses in each half cycle.



Under normal conditions a lamp will strike, after heating, on the first pulse received and further pulses are inhibited - so the Multipulse starter provides a positive soft start typical of a single pulse starter. The Multipulse advantage becomes evident under limit conditions of low ambient temperature and low supply voltage.

Where those apply the higher energy available from the Multipulse system is far more effective than a single pulse. With 2400mm Krypton lamps (100W) the higher energy Multipulse system is essential for reliable starting below +10°C, and for 1800mm slimline (70W) lamps the Multipulse starter has been shown to overcome problems encountered with ordinary electronic starters in outdoor situations.
With all lamps the low temperature and low supply voltage limits are greater than those applying to single pulse types. This also means that heating times can be optimised for normal rather than extreme conditions, thereby providing a faster start.

SPECIFICATIONS	UM2	UM3
Lamp Types	18-125W, T8 - T12 600mm - 2400mm, linear 10-28W 2D, 8-36W Compacts	4-20W Series Pair and 4-22W Single T5, T8, T12 linear or Compacts
Start Time	2.4 secs nominal	2.4secs nominal
Supply	220-240V nominal +/-10%, 50-60Hz (UM3 single, 115-240V nominal +/-10%)	
Multipulse Voltage	1.3kv minimum	
Reset Time	Zero (normal operation)	
Shut-down Time (failed lamp)	4 secs maximum	
Temperature Operating Ranges	Starter and Lamp -10% supply voltage 4-125W, -30ºC to +80ºC. 18-65W, -40ºC to +80ºC	
Ballast Types	Lagging or leading, standard, low loss or extra low loss	
Canister	Standard switch-start type as defined in BS 3772/IEC 155	
Standards	Performance to IEC927 - BS EN60927 General and Safety to IEC 926 - BS EN 60926, certified by BSI Testing	

All Products CE marked

MULTIPULSE™
Electronic Fluorescent Starters
Made in Great Britan

All Products CE marked

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