

SIEMENS



DUAL LAMP

The "SIERAY-DUAL" Lamp differs from other types of Electric Discharge Lamp in two important respects:—

- (1) NO CHOKE or CONDENSER is necessary for its operation.
- (2) The light emitted is of a pleasing colour.

With the elimination of the Choke and Condenser no alteration to existing wiring is necessary and the "Sieray-Dual" Lamp can be screwed into the ordinary Goliath Holder to operate direct off the Supply Mains.

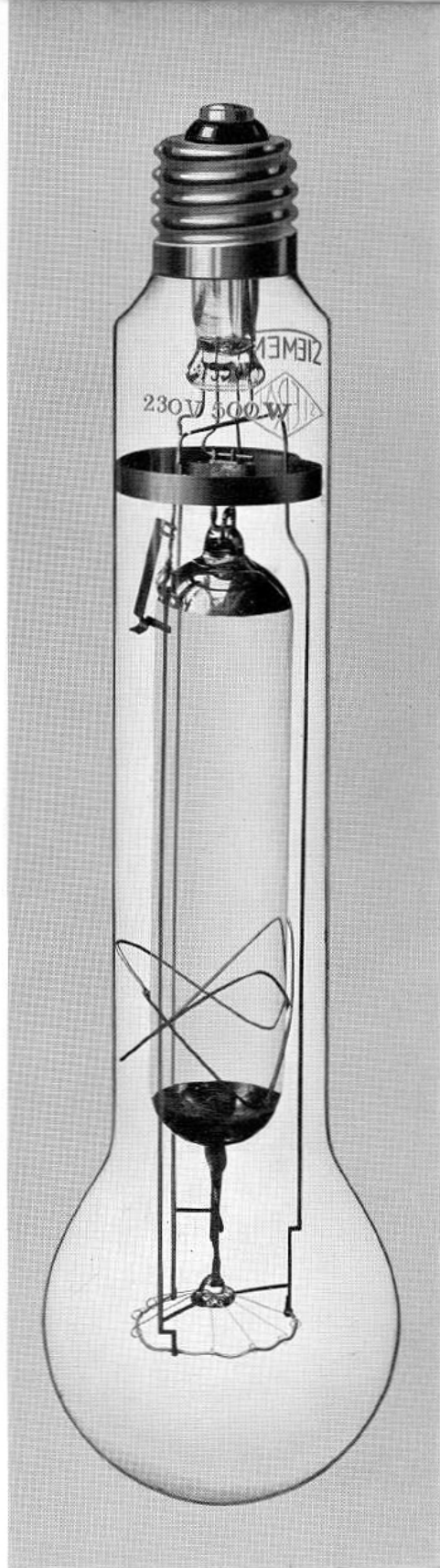
DESCRIPTION OF THE LAMP.

The "Sieray-Dual" Lamp consists essentially of a "Sieray" Mercury Vapour Discharge Lamp connected in series with a Tungsten Filament, the normal Tubular Outer Bulb of the Discharge Lamp being expanded at its lower end to accommodate the filament. The Tungsten Filament serves not only to stabilize the arc of the discharge, thus replacing the usual choke coil, but, operating at its normal efficiency, also acts as a supplementary light source emitting light in which a considerable proportion of red rays is present. The deficiency in red rays from the Discharge Tube is thereby rectified, the resultant light being of a very pleasing colour.

Undue overloading of the Tungsten Filament at switching on is obviated by the provision of an auxiliary filament which is automatically switched out of circuit by means of a thermal cut-out at a pre-determined time in the run-up characteristic of the discharge tube.

ELIMINATION OF THE CONDENSER.

The arc of the discharge being stabilized by a resistance (the Tungsten Filament) the power factor of the circuit is not upset as with choke control, consequently the use of a Condenser in the circuit is not required, the power factor of the "Sieray-Dual" Lamp being approximately 0.95.





“SIERAY-DUAL” LAMP—*continued.*

OPERATION.

Immediately the “Sieray-Dual” Lamp is switched on, a considerable amount of illumination is obtained and after about 10 minutes the lamp reaches its full luminous output, with both the filament and discharge operating at their correct efficiencies.

These lamps must only be installed Cap-up in the vertical position.

CONSUMPTION.

The “Sieray-Dual” Lamp is marketed in sizes with total consumptions rated at 300 watts and 500 watts in the case of A.C. lamps and 500 watts for use on D.C. supplies.

LIGHT OUTPUT.

The Electric Discharge Tubes and Tungsten filaments incorporated in the lamps operate at the normal efficiencies of their respective ratings.

The bulk of the light is emitted from the highly efficient Discharge Tube, whilst the light from the Tungsten filament is usefully employed not only to rectify the shortage of red rays in the light emitted from the Discharge Tube, but also to build up the total lumens output of the lamp.

The 300 w. “Sieray-Dual” Lamp gives approximately $33\frac{1}{3}\%$ more light than does a 300 w. Gasfilled Lamp and the 500 w. “Sieray-Dual” Lamp approximately 50% more than a 500 w. Gasfilled Lamp.

TYPE.	CURRENT.	WATTS.	CAP.	VOLTS.	LIST PRICE.
“SIERAY-DUAL”	A.C.	300	G.E.S.	200/260	42/6
“SIERAY-DUAL”	A.C.	500	G.E.S.	200/260	50/-
“SIERAY-DUAL”	D.C.	500	G.E.S.	230/260	50/-

STATE EXACT VOLTAGE
WHEN ORDERING.