DS3

## SERVICING TUNGSTEN HALOGEN LAMPS

## CAUTION

STRICT OBSERVANCE OF THE FOLLOWING CONDITIONS IS NECESSARY FOR SAFE SERVICE OF TUNGSTEN HALOGEN LAMPS.

- 1. Before removing or replacing lamp or fuse, the equipment must be disconnected from the power supply.
- 2. Any article fabricated from quartz or glass, in certain circumstances, may shatter, insertion of the lamp into the holder by holding the bulb may cause mechanical breakage of the envelope and/or seal. For safety installation by holding lamp cap or protective sleeve and use eye protection where appropriate.
- 3. Do not handle the quartz envelope with bare hands. Oil or grease may contaminate the surface of the bulb and in operation cause reduced performance and premature failure. If the quartz is accidentally handled, clean before operation with a cloth moistened with alcohol or Methylated Spirit.
- 4. Avoid improper operation of the lamp, e.g. at over voltage or in equipment or at burning angles not designed for the lamp type or rating. Operate in series with a rapid acting, high breaking capacity fuse of suitable voltage, rated as given in the table below. Non-observance of these points may damage the lamp or equipment.
- 5. (a) In use the lamp develops high internal pressure and could in certain circumstances shatter.
  - (b) A high amount of radiant heat is produced and high surface temperatures are developed. Avoid operation in close proximity to combustibles. Allow the lamp to cool before attempting replacement.

(c) Direct exposure may cause ultra-violet irritation to skin and eyes. The use of glass or other UV filters is advised if the lamp is used in close proximity or for a prolonged period. When reflectors are used to concentrate the light the safe exposure period will be reduced.

Appropriate screening for people and surroundings must be provided.

6. At end of service life, lamps should be broken in a suitable robust container or wrapping to retain quartz fragments. The gas fill has a slight toxic content and large quantities of lamps should only be broken in a well ventilated area.

Lamp Power Fu	use	(rated	current)
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	<u>115-130 V</u>	220-250 V
150-300W 420W	3.15A (4.0A UK) 4.0A	2.0A
500-650W 750W	6.3A (6.0A UK)	4 • O A
800-1250W	10.0A 10.0A	4.0A 6.3A (6.0A UK)
1500	16.0A (15.0A UK)	10.0A
2000M	25.0A (30.0A UK)	10.0A
2500W	25.0A (30.0A UKO	16.0A (15.0A UK)
5000W	50.0A	25.0A (30.0A UK)
10000W	100.0A	50.0A