Service Type CV5998

ABRIDGED DATA

External-anode Rectifier for charging diode or overswing diode service in high power pulse modulators.
Peak Inverse Anode Voltage ........... 40 kV Max
Peak Anode Current ............. 75 A Max
Mean Anode Current ........... 1.5 A Max

GENERAL

Electrical
Cathode.................. Indirectly Heated
Heater Voltage ........ 12 V
Heater Current .......... 14±1 A

Mechanical
Overall Length .......... 16-250 inches (412-8 mm) Max
Overall Diameter ...... 2-133 inches (54-18 mm) Max
Net Weight .............. 5½ pounds (2·4 kg) Approx
Mounting Position .... Any
Cooling (See Note 4) ................ Water or forced-air

MAXIMUM AND MINIMUM RATINGS
(Absolute Values)

Heater Voltage ........... 11·4 12·6 V
Heater Starting Current (Peak) .................. 40 A
Cathode Heating Time ........ 6·0 — minutes
Peak Inverse Anode Voltage (See Note 1) .... — 40 kV
Anode Current:
Peak (See Note 2) ........ — 75 A
Mean (See Note 3) ........ — 1·5 A
Anode Dissipation (See Note 4) ........ — 2·0 kW
Anode Temperature (See Note 5) ........ — 150 °C
Cathode Terminal Temperature (See Note 5) ... — 150 °C

NOTES

1. The cathode terminal must be fitted with a corona shield as described on page 3.
2. For overswing diode service.
3. For charging diode service.
4. The anode must be fitted in a cooling cylinder as described on page 3.
5. Measured at the point specified on page 3.
OUTLINE

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Inches</th>
<th>Millimetres</th>
<th>Ref.</th>
<th>Inches</th>
<th>Millimetres</th>
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<tbody>
<tr>
<td>A</td>
<td>9.500 Max</td>
<td>241.3 Max</td>
<td>H</td>
<td>1.550 Max</td>
<td>39.37 Max</td>
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<tr>
<td>B</td>
<td>6.750 Max</td>
<td>171.5 Max</td>
<td>J</td>
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<td>C</td>
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<td>49.43 Max</td>
<td>K</td>
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<td>D</td>
<td>0.375 Min</td>
<td>9.53 Min</td>
<td>L</td>
<td>1.937 Max</td>
<td>49.20 Max</td>
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<td>E</td>
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<td>38.10</td>
<td>M</td>
<td>0.125 ± 0.005</td>
<td>3.18 ± 0.13</td>
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<tr>
<td>F</td>
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<td>77.80 Max</td>
<td>N</td>
<td>1.820 Max</td>
<td>46.23 Max</td>
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<td>G</td>
<td>3.563 Min</td>
<td>90.50 Min</td>
<td>P</td>
<td>2.125 ± 0.008</td>
<td>53.98 ± 0.20</td>
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Millimetre dimensions have been derived from inches.
COOLING CYLINDER AND CORONA SHIELD

Points at which temperature is to be measured

Air or liquid cooled cylinder whose temperature is maintained at less than 80°C at maximum mean dissipation

Any clamps used to hold the valve in position shall not project any further than necessary and all corners and edges shall be rounded.

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<td>6.750</td>
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</table>

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ENGLISH ELECTRIC VALVE CO. LTD.

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