The EL320.240.36 is a QVGA-display for use in extreme operating conditions. Lumineq’s Thin Film Electroluminescence (TFEL) displays have the widest operating temperature range of commercially available technology.

TFEL displays are ideal for use in industrial, medical, transportation, military, public safety and other demanding applications.

### Lumineq Thin Film Electroluminescent Display

#### Product highlights:
- Wide temperature range from -40 to +65 °C
- Standard quarter-VGA
- Locking connector and analog dimming options

#### General TFEL features and benefits:
- Instant ON in cold and hot temperatures
- No need for heating and cooling
- Very long lifetime
- Extremely stable brightness – measured 100,000 hours with > 85% left of initial luminance
- TFEL display brightness, contrast, viewing angle and response time are the same across the entire operating temperature range
- Wide viewing angle > 179° with crisp and clear image
- Very fast response time, < 1 ms
- Extremely rugged and solid TFEL display structure
- Very long production life time

#### Technical specifications:
- Technology: Thin Film Electroluminescence
- Color: Amber
- Viewing angle: 179°, any viewing directions
- Response time: < 1 ms
- Luminance: 50 cd/m² typical areal @ 120 Hz
- Contrast: 31:1 typical at 500 lux
- Resolution: 320 × 240 pixels
- Pixel pitch: 0.36 × 0.36 mm
- Weight: 183 g
- Display size: 148 × 105 × 19 mm
- Active area: 115 × 86 mm
- Supply voltages: 5 and 12 VDC
- Power: 7.0 W typical @ 120 Hz
- MTBF: > 50,000 hours
- Temperature: Operating: -40 to +65 °C (ET) Operating: -25 to +65 °C (IN) Operating: 0 to +65 °C (standard) Storage: -40 to +85 °C
- Humidity: 93% RH, oper., IEC 68-2-3
- Altitude: 18,000 m, oper., IEC 68-2-13
- Shock: 100 g-force, 6 ms, IEC 68-2-27
- Vibration: 5 to 500 Hz, 0.02 g²/Hz random IEC 68-2-36, test Fdb
- Interface: 4-bit LCD-type timing
- Options: Anti-glare film, conformal coating, locking connectors, dimming

#### Ordering Information:

<table>
<thead>
<tr>
<th>Product</th>
<th>Part number</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL320.240.36</td>
<td>996-0273-01LF</td>
<td>Standard</td>
</tr>
<tr>
<td>EL320.240.36 AG</td>
<td>996-0273-60LF</td>
<td>Anti-glare film</td>
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<tr>
<td>EL320.240.36 AGL</td>
<td>996-0273-62LF</td>
<td>AG + locking connector</td>
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<tr>
<td>EL320.240.36 IN</td>
<td>996-0273-02LF</td>
<td>Industrial product, dimming</td>
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<tr>
<td>EL320.240.36 IN AG</td>
<td>996-0273-61LF</td>
<td>IN + anti-glare film</td>
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<tr>
<td>EL320.240.36 ET</td>
<td>996-0273-03LF</td>
<td>Extended temperature range</td>
</tr>
<tr>
<td>EL320.240.36 ET CC</td>
<td>996-0273-30LF</td>
<td>ET + conformal coating</td>
</tr>
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