AC Input/Compact Size
MU Series

For detailed information about regulations and standards, please see the Oriental Motor website.

These compact AC axial flow fans are available in frame sizes ranging from 80 mm (3.15 in.) to 119 mm (4.69 in.) and conform to major safety standards.

Depending on the frame size, different speed types are available, from Low Speed, Middle Speed to Standard Speed.

Features
Axial Flow Fans
Axial flow fans use a propeller to generate airflow in the direction of the axis of rotation. Capable of generating a large air flow, axial flow fans are suited for applications requiring ventilation cooling.

Device Ventilation and Cooling
The large airflow of axial flow fans is suitable for ventilation and cooling inside electronic devices.

Product Line
A product line of 4 fan sizes are available, with frame sizes from 80 mm (3.15 in.) to 119 mm (4.69 in.).

<table>
<thead>
<tr>
<th>Frame Size</th>
<th>MU825</th>
<th>MU925</th>
<th>MU1225</th>
<th>MU1238</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 mm – 25 mm thick</td>
<td>80 mm – 25 mm thick</td>
<td>119 mm – 25 mm thick</td>
<td>119 mm – 38 mm thick</td>
<td></td>
</tr>
<tr>
<td>92 mm – 25 mm thick</td>
<td>92 mm – 25 mm thick</td>
<td>119 mm – 25 mm thick</td>
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<tr>
<td>119 mm – 25 mm thick</td>
<td>119 mm – 25 mm thick</td>
<td>119 mm – 25 mm thick</td>
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</tr>
<tr>
<td>119 mm – 38 mm thick</td>
<td>119 mm – 38 mm thick</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Power Supply Voltage
- 115 VAC
- 220/230 VAC

Speed Type
- Standard Speed
- Middle Speed
- Low Speed
### System Configuration

**MU Series**

#### Accessories (Sold separately)
- Finger Guards
- Filters
- Screens
- Plug Cords

#### Peripheral Equipment (Sold separately)
- AC Power Supply (Main power supply)
  - Not supplied
- Thermostat AM2-XA1

#### Example of System Configuration

<table>
<thead>
<tr>
<th>Fan</th>
<th>Thermostat</th>
<th>Finger Guard</th>
<th>Plug Cord</th>
<th>Sold Separately</th>
</tr>
</thead>
<tbody>
<tr>
<td>MU1238A-21B</td>
<td>AM2-XA1</td>
<td>FG12D</td>
<td>PCA2B</td>
<td>$28.00  $35.00  $6.00  $6.00</td>
</tr>
</tbody>
</table>

The system configuration shown above is an example. Other combinations are also available.

### Product Number

#### Fan Only

**MU** 12 **38 A - 21 B**

1. **Series**
2. **Frame Size**
3. **Frame Thickness**
4. **Speed Type**
5. **Power Supply Voltage**
6. **Power Connection**
7. **Reference Number**

#### Fan Kit

**T - MU1238A-21B - GP**

1. **Fan Kit Order Code**
2. **Fan Product Name**
3. **Model Configuration**
   - **G**: With finger guard and installation screws
   - **GP**: With finger guard, plug cord and installation screws

---

**Overview, Product Series**
- Axial Flow Fans
- Centrifugal Blowers
- Cross Flow Fans
- DC Input Blowers
- Enclosure Fan Modules
- Thermostat
- Accessories
- Installation

**www.orientalmotor.com**
**TEL: (800) 468-3982**
**E-mail: techsupport@orientalmotor.com**
MU Series

80 mm – 25 mm Thick
(3.15 in. – 0.98 in. Thick)

Specifications

<table>
<thead>
<tr>
<th>Speed Type</th>
<th>Product Name</th>
<th>Voltage VAC</th>
<th>Frequency Hz</th>
<th>Current A</th>
<th>Input W</th>
<th>Speed r/min</th>
<th>Max. Air Flow m³/min</th>
<th>CFM</th>
<th>Max. Static Pressure Pa</th>
<th>Noise Level dB (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Speed</td>
<td>MU825S-23</td>
<td>Single-Phase 115</td>
<td>50</td>
<td>0.11</td>
<td>9.5</td>
<td>2750</td>
<td>0.45</td>
<td>15.9</td>
<td>34</td>
<td>0.137</td>
</tr>
<tr>
<td></td>
<td>MU825S-53</td>
<td>Single-Phase 220</td>
<td>50</td>
<td>0.06</td>
<td>8.5</td>
<td>2750</td>
<td>0.45</td>
<td>15.9</td>
<td>34</td>
<td>0.137</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Single-Phase 230</td>
<td>60</td>
<td>0.07</td>
<td>10.5</td>
<td>3250</td>
<td>0.55</td>
<td>19.4</td>
<td>49</td>
<td>0.196</td>
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Details of regulations and standards ➜ Page I-2

Product Line

Fan Only

<table>
<thead>
<tr>
<th>Product Name</th>
<th>List Price</th>
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<tbody>
<tr>
<td>MU825S-23</td>
<td>$28.00</td>
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<tr>
<td>MU825S-53</td>
<td>$29.00</td>
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</tbody>
</table>

Fan Kit

<table>
<thead>
<tr>
<th>Product Name</th>
<th>List Price</th>
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</thead>
<tbody>
<tr>
<td>T-MU825S-23-G</td>
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<tr>
<td>T-MU825S-53-G</td>
<td>$34.00</td>
</tr>
</tbody>
</table>

The following items are included in each kit:

- Fan
- Operating Manual
- Finger Guard
- Installation Screws [M4×40 mm (1.57 in.)]

Air Flow – Static Pressure Characteristics
## Dimensions

**Unit = mm (in.)**

Mass: 0.25 kg (0.55 lb.)

---

### Connection Diagram

---

### Accessories

<table>
<thead>
<tr>
<th>Product</th>
<th>Product Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finger Guard</td>
<td>FG8D</td>
<td>G-108</td>
</tr>
<tr>
<td>Filter</td>
<td>FL8</td>
<td>G-110</td>
</tr>
<tr>
<td>Screen</td>
<td>FS8S</td>
<td>G-113</td>
</tr>
</tbody>
</table>

---

### Thermostat

The thermostat automatically controls the operation of the fan in accordance with temperature fluctuations inside the equipment. This helps improve the equipment’s “environmental” performance relative to energy savings, noise reduction, etc.

**Thermostat AM2-XA1**

Number of Connectable Fans: 9

- Connect the power-supply lead wire by relaying to AWG 18–13.
- Page ➜ G-104
### MU Series

#### 92 mm – 25 mm Thick

(3.62 in. – 0.98 in. Thick)

#### Specifications

<table>
<thead>
<tr>
<th>Speed Type</th>
<th>Product Name</th>
<th>Voltage</th>
<th>Frequency Hz</th>
<th>Current A</th>
<th>Input W</th>
<th>Speed r/min</th>
<th>Max. Air Flow m³/min</th>
<th>Max. Static Pressure Pa</th>
<th>Noise Level dB (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard Speed</strong></td>
<td>MU925S-21</td>
<td>Single-Phase 115</td>
<td>50</td>
<td>0.11</td>
<td>9.5</td>
<td>2600</td>
<td>0.95</td>
<td>33.5</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>MU925S-51</td>
<td>Single-Phase 220</td>
<td>50</td>
<td>0.06</td>
<td>8.5</td>
<td>2600</td>
<td>0.95</td>
<td>33.5</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Single-Phase 230</td>
<td>50</td>
<td>0.07</td>
<td>10.5</td>
<td>2600</td>
<td>0.95</td>
<td>33.5</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Single-Phase 230</td>
<td>60</td>
<td>0.06</td>
<td>8.0</td>
<td>3000</td>
<td>1.10</td>
<td>38.8</td>
<td>59</td>
</tr>
<tr>
<td><strong>Middle Speed</strong></td>
<td>MU925M-21</td>
<td>Single-Phase 115</td>
<td>50</td>
<td>0.11</td>
<td>9.0</td>
<td>2300</td>
<td>0.85</td>
<td>30.0</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>MU925M-51</td>
<td>Single-Phase 220</td>
<td>50</td>
<td>0.06</td>
<td>8.5</td>
<td>2300</td>
<td>0.85</td>
<td>30.0</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Single-Phase 230</td>
<td>50</td>
<td>0.06</td>
<td>9.5</td>
<td>2300</td>
<td>0.85</td>
<td>30.0</td>
<td>34</td>
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<tr>
<td></td>
<td></td>
<td>Single-Phase 230</td>
<td>60</td>
<td>0.06</td>
<td>8.0</td>
<td>2700</td>
<td>1.00</td>
<td>35.8</td>
<td>59</td>
</tr>
</tbody>
</table>

#### Air Flow – Static Pressure Characteristics

- **MU925S**
  - [Graph Image]
  - Operating Voltage Range: ±10%
  - Overheat Protection: Impedance Protected
  - Color: Frame: Unpainted (Aluminum) Blades: Black
  - Materials: Frame: Die Cast Aluminum Blades: Polycarbonate (Flammability grade V-0)

- **MU925M**
  - [Graph Image]
### Dimensions
Unit = mm (in.)

**Mass:** 0.27 kg (0.59 lb.)

**Dimensions**

<table>
<thead>
<tr>
<th>Input Terminals</th>
<th>25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective Earth Terminal M4</td>
<td></td>
</tr>
</tbody>
</table>

**Rotation Direction**

8×Ø3.7 (Ø0.146)

**Air Flow**

4 (0.16)

**Outlet Side**

82.5 (3.248) x 82.5 (3.248)

**Intake Side**

82.5 (3.248) x 82.5 (3.248)

**PE**

**Connection Diagram**

**Accessories**

<table>
<thead>
<tr>
<th>Product</th>
<th>Product Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finger Guard</td>
<td>FG9D</td>
<td>G-108</td>
</tr>
<tr>
<td>Filter</td>
<td>FL9</td>
<td>G-111</td>
</tr>
<tr>
<td>Screen</td>
<td>FS9S</td>
<td>G-113</td>
</tr>
<tr>
<td>Plug Cord</td>
<td>PCA2B [1 m (3.3 ft.)]</td>
<td>G-114</td>
</tr>
<tr>
<td></td>
<td>PCA2B2 [2 m (6.6 ft.)]</td>
<td></td>
</tr>
</tbody>
</table>

**Thermostat**

The thermostat automatically controls the operation of the fan in accordance with temperature fluctuations inside the equipment. This helps improve the equipment’s “environmental” performance relative to energy savings, noise reduction, etc.

![Thermostat AM2-XA1](image)

**Thermostat AM2-XA1**

Number of Connectable Fans: 9

*Page ➔ G-104*

**Enclosure Fan Modules ➔ G-96**

This product integrates the **MU** Series fan with peripheral equipment such as the cover, filter media, frame and finger guard. Optimized cooling for control boxes.

- **Dust and Water Resistant**
- **IP43-IP55 Type**

*Page ➔ G-101*
MU Series

119 mm – 25 mm Thick
(4.69 in. – 0.98 in. Thick)

Specifications

<table>
<thead>
<tr>
<th>Speed Type</th>
<th>Product Name</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Current</th>
<th>Input</th>
<th>Speed</th>
<th>Max. Air Flow</th>
<th>Max. Static Pressure</th>
<th>Noise Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MU1225S-21</td>
<td>VAC 115</td>
<td>Hz 50</td>
<td>A 0.14</td>
<td>W 11.0</td>
<td>r/min 2500</td>
<td>m³/min 1.6</td>
<td>Pa 56.5</td>
<td>49 dB (A)</td>
</tr>
<tr>
<td></td>
<td>MU1225S-51</td>
<td>Single-Phase 115</td>
<td>60</td>
<td>0.12</td>
<td>9.5</td>
<td>2950</td>
<td>1.9</td>
<td>67.1</td>
<td>44 dB (A)</td>
</tr>
<tr>
<td></td>
<td>MU1225M-21</td>
<td>Single-Phase 220</td>
<td>50</td>
<td>0.07</td>
<td>10.5</td>
<td>2500</td>
<td>1.6</td>
<td>56.5</td>
<td>49 dB (A)</td>
</tr>
<tr>
<td></td>
<td>MU1225M-51</td>
<td>Single-Phase 230</td>
<td>50</td>
<td>0.08</td>
<td>12.0</td>
<td>2500</td>
<td>1.6</td>
<td>56.5</td>
<td>49 dB (A)</td>
</tr>
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</table>

Middle Speed

<table>
<thead>
<tr>
<th>Product Line</th>
<th>Fan Only</th>
<th>Fan Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Name</td>
<td>List Price</td>
<td>T-MU1225S-21-GP</td>
</tr>
<tr>
<td>MU1225S-21</td>
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<td>$40.00</td>
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<td>$29.00</td>
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<td>MU1225M-21</td>
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<td>$40.00</td>
</tr>
<tr>
<td>MU1225M-51</td>
<td>$29.00</td>
<td>$41.00</td>
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</table>

Air Flow – Static Pressure Characteristics

<table>
<thead>
<tr>
<th>MU1225S</th>
<th>MU1225M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Flow [m³/min]</td>
<td>Air Flow [CFM]</td>
</tr>
<tr>
<td>0.4 to 2.4</td>
<td>0.9 to 4.8</td>
</tr>
</tbody>
</table>

 Details of regulations and standards → Page I-2

Product Line

- Fan Only
- Fan Kit

The following items are included with each product:
- Fan
- Operating Manual
- Finger Guard
- Installation Screws [M4×40 mm (1.57 in.)]
- Plug Cord

The following items are included in each kit:
- Fan
- Finger Guard
- Plug Cord
Dimensions

Unit = mm (in.)

Mass: 0.31 kg (0.68 lb.)

Connection Diagram

Input Terminals

Accessories

<table>
<thead>
<tr>
<th>Product</th>
<th>Product Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finger Guard</td>
<td>FG12D</td>
<td>G-108</td>
</tr>
<tr>
<td>Filter</td>
<td>FL12</td>
<td>G-111</td>
</tr>
<tr>
<td>Screen</td>
<td>FS12S</td>
<td>G-113</td>
</tr>
<tr>
<td>Plug Cord</td>
<td>PCA2B</td>
<td>G-114</td>
</tr>
<tr>
<td></td>
<td>PCA2B2</td>
<td></td>
</tr>
</tbody>
</table>

Thermostat

The thermostat automatically controls the operation of the fan in accordance with temperature fluctuations inside the equipment. This helps improve the equipment’s “environmental” performance relative to energy savings, noise reduction, etc.

Thermostat AM2-XA1
Number of Connectable Fans: 9

Enclosure Fan Modules

This product integrates the MU Series fan with peripheral equipment such as the cover, filter media, frame and finger guard. Optimized cooling for control boxes.

- Slit Metal Plate
  IP4X Type
MU Series

119 mm – 38 mm Thick (4.69 in. – 1.50 in. Thick)

Specifications

<table>
<thead>
<tr>
<th>Speed Type</th>
<th>Product Name</th>
<th>Voltage VAC</th>
<th>Frequency Hz</th>
<th>Current A</th>
<th>Input W</th>
<th>Speed r/min</th>
<th>Max. Air Flow m³/min</th>
<th>Max. Static Pressure Pa</th>
<th>Noise Level dB (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Speed</td>
<td>MU1238A-21B</td>
<td>50</td>
<td>0.20</td>
<td>14.0</td>
<td>2800</td>
<td>2.7</td>
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<td>0.325</td>
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<tr>
<td></td>
<td>MU1238A-51B</td>
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<td>0.18</td>
<td>13.0</td>
<td>3250</td>
<td>3.0</td>
<td>106</td>
<td>81</td>
<td>0.325</td>
</tr>
<tr>
<td>Middle Speed</td>
<td>MU1238B-21B</td>
<td>50</td>
<td>0.10</td>
<td>13.5</td>
<td>2800</td>
<td>2.7</td>
<td>95.3</td>
<td>81</td>
<td>0.325</td>
</tr>
<tr>
<td></td>
<td>MU1238B-51B</td>
<td>60</td>
<td>0.11</td>
<td>16.0</td>
<td>2800</td>
<td>2.7</td>
<td>95.3</td>
<td>81</td>
<td>0.325</td>
</tr>
<tr>
<td>Low Speed</td>
<td>MU1238L-21B</td>
<td>50</td>
<td>0.10</td>
<td>11.5</td>
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<td>2800</td>
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<td>88.3</td>
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<td>0.209</td>
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</table>

Details of regulations and standards ➜ Page I-2

Product Line

Fan Only

<table>
<thead>
<tr>
<th>Product Name</th>
<th>List Price</th>
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<tbody>
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<td>MU1238A-51B</td>
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<td></td>
</tr>
<tr>
<td>MU1238B-21B</td>
<td>$28.00</td>
<td></td>
</tr>
<tr>
<td>MU1238B-51B</td>
<td>$29.00</td>
<td></td>
</tr>
<tr>
<td>MU1238L-21B</td>
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<td></td>
</tr>
<tr>
<td>MU1238L-51B</td>
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<td></td>
</tr>
</tbody>
</table>

The following items are included with each product:
- Fan
- Operating Manual

Fan Kit

<table>
<thead>
<tr>
<th>Product Name</th>
<th>List Price</th>
<th></th>
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</thead>
<tbody>
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<tr>
<td>T-MU1238B-21-GP</td>
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<tr>
<td>T-MU1238B-51-GP</td>
<td>$41.00</td>
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<td>T-MU1238L-21-GP</td>
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<tr>
<td>T-MU1238L-51-GP</td>
<td>$41.00</td>
<td></td>
</tr>
</tbody>
</table>

The following items are included in each kit:
- Fan
- Finger Guard
- Installation Screws [M4×55 mm (2.17 in.)]
- Plug Cord
- Fan Kit
- Finger Guard
- Plug Cord

Air Flow – Static Pressure Characteristics

MU1238A

MU1238B

MU1238L

Operating Voltage Range: ±10%
Overheat Protection: Impedance Protected
Color:
- Frame: Unpainted (Aluminum)
- Blades: Black
Materials:
- Frame: Die Cast Aluminum
- Blades: Polycarbonate (Flammability grade V-0)
Cooling Fans

Overview, Product Series
Axial Flow Fans
AC Input Low-Power Consumption EMU
AC Input Compact Size MU
AC Input Large Size, Large Air Flow MRS
AC Input Long-Life MRE
DC Input MDS MD
DC Input Alarm MDA
DC Input Variable Flow MDV
DC Input Long-Life MDE
DC Input Splash Proof MDP
Centrifugal Blowers
AC Input MB DC Input MBD
Cross Flow Fans
AC Input MF DC Input MFD
Enclosure Fan Modules
Thermostat
Accessories
Installation

G-35

Dimensions Unit = mm (in.)
Mass: 0.53 kg (1.2 lbs.)

Connection Diagram

Accessories

<table>
<thead>
<tr>
<th>Product</th>
<th>Product Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finger Guard</td>
<td>FG12D</td>
<td>G-108</td>
</tr>
<tr>
<td>Filter</td>
<td>FL12</td>
<td>G-111</td>
</tr>
<tr>
<td>Screen</td>
<td>FS125</td>
<td>G-113</td>
</tr>
<tr>
<td>Plug Cord</td>
<td>PCA2B</td>
<td>G-114</td>
</tr>
<tr>
<td></td>
<td>[1 m (3.3 ft)]</td>
<td></td>
</tr>
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<td>PCA2B2</td>
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<td>[2 m (6.6 ft)]</td>
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Thermostat
The thermostat automatically controls the operation of the fan in accordance with temperature fluctuations inside the equipment. This helps improve the equipment’s “environmental” performance relative to energy savings, noise reduction, etc.

Thermostat AM2-XA1
Number of Connectable Fans: 9

Enclosure Fan Modules
This product integrates the MU Series fan with peripheral equipment such as the cover, filter media, frame and finger guard. Optimized cooling for control boxes.

Finger Guard
IP2X Type

Slit Metal Plate
IP4X Type

Dust and Water Resistant
IP43-IP55 Type

Outlet Side
Intake Side

Panel Cut-Out Unit = mm (in.)

Dimensions  Unit = mm (in.)

Protective Earth Terminal M4
Rotation Direction
Air Flow
Input Terminals

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