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## Crane Classifications

### Overview

Crane Classifications are based on the Crane Manufacturer's Association of America (CMAA) specification No. 70. There are six crane classifications which depend on the cranes duty cycle. Please see the crane classifications describe below to determine the classification your crane.

Crane Class is very important when sizing VFD regeneration resistors. For more severe duty classes, larger resistors are needed to ensure that the heat from the braking energy is dissipated quickly. If incorrect braking resistors are used, the VFD can be damaged by overvoltage and overcurrent. It is best to oversize the resistors for the next higher crane classification.

### Classifications

#### **Class A (Standby or Infrequent Service)**

Use Class C VFD components for Class A cranes

#### **Class B (Light Service)**

Use Class C VFD components for Class B cranes

#### **Class C (Moderate Service)**

10 Cycles per Hour

Average Load = 50%

Traverse Deceleration time = 5 Seconds

Max Retarding Torque = 120%

#### **Class D (Heavy Service)**

20 Cycles per Hour

Average Load = 65%

Traverse Deceleration time = 3 Seconds

Max Retarding Torque = 150%

#### **Class E (Severe Service)**

25 Cycles per Hour

Average Load = 100%

Traverse Deceleration time = 3 Seconds

Max Retarding Torque = 160%

#### **Class F (Continuous Severe Service)**

Continuous Severe Service

Average Load = Approaching Capacity

Traverse Deceleration time = 2 Seconds

Max Retarding Torque = 175%

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**If you have any questions, please contact us:**

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