

# Pin Indication Fuse and Actuator, and Limiters

## ANN & ANL Limiters

**Specifications**

Description: Circuit limiters.

ANN: Very fast-acting limiter.

ANL: Time-delay limiter.

Dimensions:  $\frac{7}{8}$ " x 3  $\frac{3}{16}$ "  
(22.2 x 81.0mm).

Ratings:

ANN:

- Volts — 125Vac
- 80Vdc

Amps — 10-800A

- IR — 2500A @ 125Vac
- 2700A @ 80Vdc

ANL:

Volts — 80Vdc

Amps — 35-750A

- IR — 2700A @ 80Vdc
- 6000A @ 32Vdc

Agency Information:

ANN: 35-400A @ 125Vac, IR=2500A and 500A @ 80Vdc, IR=2700A: UL Recognized Guide JFHR2, File E56412; CSA Certified Class 1422-30, File 53787, CE for 35-400A.

ANL: UL Recognized, CSA Certified, 35-750A @ 80Vdc, IR = 2700A, Guide JFHR2, File E56412, Class 1422-30, File 53787, SAE J1171.

**Features and Benefits**

- Fast-acting circuit protection (ANN).
- Time-delay sizing for inductive circuits (ANL).
- Small footprint saves space.
- Window shows limiter status.

**Typical Applications**

- Fork lifts, Marine, Aviation

**ANN Catalog Numbers (Amps)**

ANN-10	ANN-90	ANN-225	ANN-400
ANN-35	ANN-100	ANN-250	ANN-500
ANN-40	ANN-125	ANN-275	ANN-600
ANN-50	ANN-150	ANN-300	ANN-700
ANN-60	ANN-175	ANN-325	ANN-800
ANN-80	ANN-200	ANN-350	

**ANL Catalog Numbers (Amps)**

ANL-35	ANL-125	ANL-250	ANL-500
ANL-40	ANL-130	ANL-275	ANL-600
ANL-50	ANL-150	ANL-300	ANL-675
ANL-60	ANL-175	ANL-325	ANL-750
ANL-80	ANL-200	ANL-350	
ANL-100	ANL-225	ANL-400	



## MIS

**Specifications**

Class: Supplemental

Description: Non time-delay pin indication fuse.

Dimensions:  $\frac{1}{2}$ " x 2"  
(10.3 x 50.8mm).

Ratings:

- Volts — 600Vac
- Amps — 1-12A
- IR — 200kA

**Features and Benefits**

- Type MIS has a pin indicator providing visual identification of failed circuits, resulting in faster troubleshooting (reduced circuit downtime).
- Type MIS can be used in circuits rated 600V or less.
- Type MIS has an interrupting rating of 200kA.

**Typical Applications**

- 480V Control Circuits
- PLC Circuits

**Catalog Numbers (Amps)**

MIS-1	MIS-4	MIS-10
MIS-2	MIS-5	MIS-12
MIS-3	MIS-8	

**Test Specifications**

Fuse	Load	Opening Time
All	110%	0 4 hrs. (min.)
1-5A	150%	0 6 min. (max.)
6-12A	150%	12 min. (max.)

Recommended signal block for

$\frac{1}{2}$ " x 2" indicating fuses

- Page 45



## KAZ

**Specifications**

Description: Non-Fuse actuator.

Dimensions:  $\frac{1}{2}$ " x 2"  
(10.3 x 50.8mm).

Ratings:

- Volts — 600Vac
- Amps — N/A
- IR — 200kA

Agency Information: CE, UL Listed, Guide JDVS, File E58836.

**Features and Benefits**

- Bussmann signal blocks 2778, 2837 or 2838 with KAZ actuators mounted in parallel with fuses having a rating of 50A or larger to provide blown fuse dropout of shunt-trip fused switches.
- Type KAZ can be used in circuits rated 600V or less.
- Type KAZ has an interrupting rating of 200kA.

**Typical Applications**

- Large, Shunt-Trip Fused Switches
- Fuse Protected Circuits Rated 50A or Larger With Shunt-Trip Devices.

Catalog Number: KAZ

Recommended signal block for

$\frac{1}{2}$ " x 2" indicating fuses

- Page 45

Data Sheet: 2021



## 4164 & 4164-FR Limiter Blocks

**Specifications**

Description: Limiter fuse blocks for ANL & ANN.

- 4164 furnished with nylon inserted locknuts
- 4164-FR furnished with standard hex nuts

Dimensions: Length: 3.38"

Width: 0.95"

Height: 1.62"

Studs center to center: 2.43"



Ratings:

- Volts — 125Vac
- 80Vdc

Amps — 10-800A

Poles: 1 - stud terminal