

Current Sensitive Relay

Class 97

General

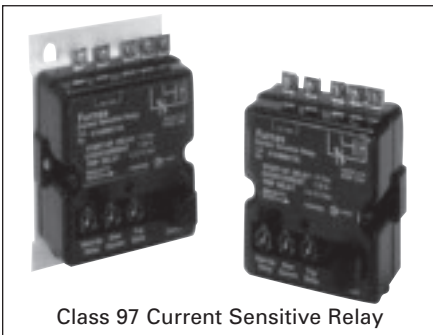
Features

- Start Up Delay
- Trip Delay
- Overcurrent or Undercurrent Trip Applications
- Manual or Automatic Reset

Start-up delay, trip delay and current trip (undercurrent trip on Model 97U and overcurrent trip on the Model 97A) adjustments are provided to match the current sensitive relay to a specific application. Reset can be switch selectable for manual or automatic.

Description

The Class 97 current sensitive relay is a device that monitors motor current and provides an instantaneous output if the motor current is over (Model 97A) or under (Model 97U) an adjustable set point. These over or under current conditions may be the result of a change in system status such as a jam, broken belt or dry well. Control voltage of 120V AC or 240V AC is required to operate the relay. An SPDT, 2.5 amp relay output contact is provided. No current transformers are required below 100 amps (56 amps for undercurrent relay).

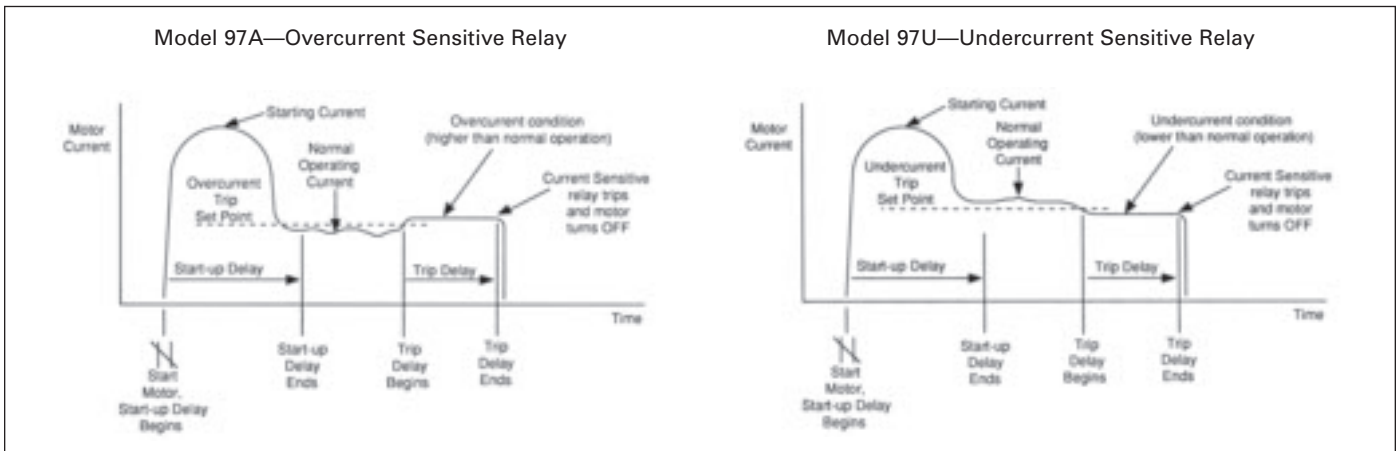



Class 97 Current Sensitive Relay

Electrical Data

Supply Voltage:	100–140VAC, 60Hz (240VAC available)												
Start Up Time Delay:	1–6 seconds. Begins when motor current is above 10% of current trip point. Output is inhibited if motor current is below 10% of current set point.												
Trip Time Delay:	Model 97U 0.5–2.5 seconds Model 97A 0.2–2.5 seconds												
Reset:	Manual or Automatic switch selectable												
Fault Indicator:	LED, ON during fault												
Contact Rating:	1 SPDT, 2.5 amp @ 250VAC (NEMA C300)												
Wire Termination:	Saddle clamp Wire range: Two #12 to #18 gauge												
Sensing Loop Wire Size:	6 gauge maximum except 97AAF3010 2/0 gauge maximum												
Operating Temperature Range:	–25°C to +60°C												
Set Point Repeatability:	±2% over temperature range of 0° to +60°C ±4% over temperature range of –25° to 0°C												
Current Transformers (Optional):	<table border="1"> <thead> <tr> <th>Rating</th> <th>Part Number</th> </tr> </thead> <tbody> <tr> <td>150:5</td> <td>97CT002</td> </tr> <tr> <td>200:5</td> <td>97CT003</td> </tr> <tr> <td>250:5</td> <td>97CT004</td> </tr> <tr> <td>300:5</td> <td>97CT005</td> </tr> <tr> <td>400:5</td> <td>97CT006</td> </tr> </tbody> </table>	Rating	Part Number	150:5	97CT002	200:5	97CT003	250:5	97CT004	300:5	97CT005	400:5	97CT006
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Operation



	<h3>Ordering Information</h3> <ul style="list-style-type: none"> ▶ Technical data see www.sea.siemens.com ▶ For Current Transformers refer to page 8/49.
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Undercurrent

Reset Type	Mounting	Control Voltage	Current Trip Amp Adjustment Range	Hp Range @ 460VAC ^①	Max Continuous Operation Current	Catalog Number	List Price \$
Man/ Auto	Panel Mount	120VAC	2-7	3-7½	125A	97UMM0207	347.00
			4-16	5-15	140A	97UMM0416	347.00
			7-28	10-30	140A	97UMM0728	347.00
			14-56	20-60	140A	97UMM1456	347.00
		240VAC	2-7	3-7½	125A	97UMM0207G	347.00
			4-16	5-15	140A	97UMM0416G	347.00
			7-28	10-30	140A	97UMM0728G	347.00
			14-56	20-60	140A	97UMM1456G	347.00
	Free Standing	120VAC	2-7	3-7½	125A	97UMF0207	315.00
			4-16	5-15	140A	97UMF0416	315.00
			7-28	10-30	140A	97UMF0728	315.00
			14-56	20-60	140A	97UMF1456	315.00
		240VAC	2-7	3-7½	125A	97UMF0207G	315.00
			4-16	5-15	140A	97UMF0416G	315.00
			7-28	10-30	140A	97UMF0728G	315.00
			14-56	20-60	140A	97UMF1456G	315.00

Overcurrent

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Man/ Auto	Panel Mount	120VAC	2-7	3-7½	125A	97AMM0207	347.00		
			4-16	5-15	140A	97AMM0416	347.00		
			7-28	10-30	140A	97AMM0728	347.00		
			14-56	20-60	140A	97AMM1456	347.00		
			30-100	30-75	140A	97AMM3010	347.00		
			2-7	3-7½	125A	97AMM0207G	347.00		
		240VAC	4-16	5-15	140A	97AMM0416G	347.00		
			7-28	10-30	140A	97AMM0728G	347.00		
			14-56	20-60	140A	97AMM1456G	347.00		
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			Free Standing	120VAC	2-7	3-7½	125A	97AMF0207	315.00
					4-16	5-15	140A	97AMF0416	315.00
	7-28	10-30			140A	97AMF0728	315.00		
	240VAC	14-56		20-60	140A	97AMF1456	315.00		
		30-100		30-75	140A	97AMF3010	315.00		
		2-7		3-7½	125A	97AMF0207G	315.00		
	Free Standing	120VAC	4-16	5-15	140A	97AMF0416G	315.00		
			7-28	10-30	140A	97AMF0728G	315.00		
			14-56	20-60	140A	97AMF1456G	315.00		
		240VAC	30-100	30-75	140A	97AMF3010G	315.00		
			2-7	3-7½	125A	97AMF0207G	315.00		
			4-16	5-15	140A	97AMF0416G	315.00		

① These catalog numbers can also be used on voltage systems other than 460VAC by changing the Hp range proportionally.