

OPERATION

The AC-301 and AC-302 continuously monitor three-phase power for phase loss, undervoltage, phase reversal, power failure, and thermostat interruptions, de-energizing the control relay if a fault is detected. The AC-301 applies an adjustable on-delay (0.2 to 8 minutes) after conditions return to normal to allow system pressures to equalize and to help stagger restarts across multiple units. The AC-302 uses an adjustable off-delay (0.2 to 5 minutes) that begins when the relay drops out and is not extended by additional interruptions. After the delay, the relay re-energizes only if all three-phase conditions are correct and the thermostat circuit is closed.

SPECIFICATIONS

RELAY	Automatic after delay period
POWER CONSUMPTION	Approximately 3 watts
PHASE SEQUENCE	ABC (unit will not operate on CBA)
INDICATORS	Green LED: Normal voltage Red LED: Relay energized
RELAY OUTPUT	10 A at 120 VAC
STORAGE TEMP.	-40°F to +190°F (-40°C to +88°C)
OPERATION TEMP.	-40°F to +150°F (-40°C to +66°C)
TIME DELAY	AC-301: 0.2-8 minutes, adjustable, On-Delay AC-302: 0.2-5 minutes, adjustable, Off-Delay
OPERATING VOLTAGE (LINE)	230V models: 190-270 VAC 380V models: 350-440 VAC 440V models: 430-480 VAC
POWER FREQUENCY	50/60 Hz
DROPOUT VOLTAGE RANGE	1Ø Low: 83% of adjustment setting 3Ø Low: 90% of adjustment setting
TERMINATIONS	#8-32 screw terminals
TRANSIENT PROTECTION	1000 V for 8 milliseconds
ENCLOSURE (DIMENSIONS)	Style E (4 in × 4 in × 3.6 in)



AC-301/AC-302

The AC-301 and AC-302 continuously monitor three-phase power lines for abnormal conditions, including phase loss (single phasing), undervoltage (brownout), and phase reversal (incorrect phase sequence). They also detect power failures and thermostat interruptions. If any of these conditions occur, the control relay de-energizes.

FEATURES

- Comprehensive Three-Phase Protection
- Adjustable Restart Time Delay
- Universal Control Voltage Output
- Built-In Thermostat Bypass Circuit
- Status LED Indicators
- Heavy-Duty Relay Output

MODEL NUMBER	OPERATING VOLTAGE	DROP OUT		PICK UP	DELAY ON DROP OUT
		1Ø Low	3Ø Low		
AC-301-230	190-270	158-224	171-243	1 VOLT ABOVE DROPOUT	0.5 SECONDS
AC-301-380	350-440	290-365	315-396		2.0 SECONDS
AC-301-440	430-480	357-398	387-432		2.0 SECONDS
AC-302-230	190-270	171-243	171-243		0.5 SECONDS
AC-302-380	350-440	315-396	315-396		2.0 SECONDS
AC-302-440	430-480	357-398	387-432		2.0 SECONDS

