

## DESCRIPTION

Acrison's Model 060 is an industrial-duty, variable speed SCR-DC motor controller providing accurate and dependable speed control of direct current (DC) motors used primarily as variable speed drives for Acrison's various model feeders.

## Standard Features

- Full wave rectification
- Three digit digital thumbwheel speed selector
- Current limiting (power-on indicator blinks whenever current limiting is activated)
- Adjustable minimum and maximum speed settings
- Adjustable IR compensation (for armature feedback)
- Circuit breaker On/Off switch
- Remote run dry contact closure input
- Standard enclosure is dust-tight/water-tight

## Specifications

- Speed range (from maximum speed):
  - 30:1 with armature feedback
    - Speed regulation:  $\pm 2$  percent of selected speed
    - Linearity:  $\pm 2$  percent of maximum speed (1800 RPM)
    - Repeatability:  $\pm 0.5$  percent of set point
  - 50:1 with digital tachometer feedback
    - Speed regulation:  $\pm 0.5$  percent of selected speed
    - Linearity:  $\pm 0.25$  percent of maximum speed (1800 RPM)
    - Repeatability:  $\pm 0.1$  percent of set point
- Ambient temperature range:
  - In standard enclosure:  $-20^{\circ}$  to  $40^{\circ}$  C
  - Plate mounted or in optional enclosure:  $-20^{\circ}$  to  $50^{\circ}$  C
- Input voltage: 115/230 VAC ( $\pm 10\%$ ), 50/60 Hertz, single phase
  - Armature voltage: 0–90/0–180 VDC
  - Field voltage: 100/200 VDC, 3 amps maximum

## Options

- Digital speed indicator (3 digit)
- Plate mounting
- JIC or NEMA enclosures
- Isolated run and alarm SSR outputs, rated 24–280 VAC, 4 amps with 4,000 volt isolation, fused at 1 ampere
- Direct or ratio set point select
- External Inputs:
  - 4–20 mA (250  $\Omega$ )
  - 10–50 mA (100  $\Omega$ )
  - 0–6 VDC (600 K $\Omega$ )
  - 0–10 VDC (200 K $\Omega$ )
- Output Signals:
  - 4–20 mA (250  $\Omega$ , maximum)
  - 10–50 mA (100  $\Omega$ , maximum)
  - 0–6 VDC (2 K $\Omega$ , minimum)
  - 0–10 VDC (2 K $\Omega$ , minimum)
- RS-422 or current loop Serial communication. Protocols available include Modbus RTU, Modbus ASCII, Allen Bradley DH/DHP, ASCII DB, Siemens 3694R, Honeywell TDC-3000 PLCG/DHP/SI and Fisher EIC. Ethernet and Profibus network capability also available.

# Acrison®

## Model 060 Variable Speed SCR-DC Motor Controllers



## Enclosures

- For 1/8 to 1 horsepower DC motors:
  - Standard enclosure measures 11.8 x 6.7 x 4.7 inches including heatsink
  - Weight: 5 lbs.
- For 2 to 5 horsepower DC motors:
  - Standard enclosure measures 11.8 x 11.4 x 6.1 inches including heatsink
  - Weight: 15 lbs.

— **acrison**,<sup>®</sup> INC. —