Kohler Decision-Maker™ 3+ Controller

Applicable to the following:
20RZ
20ROZJB
20-170ROZK
20-230REOZJB
30-125RZG
135-275RZD
200REOZP
230-400REOZD
400-800RZW
450REOZD-4
500-2000ROZD-4
600-2000ROZM

- Controller is compatible with 12- or 24-volt engine electrical systems.
- Controller with additional accessories meets the National Fire Protection Association requirements of NFPA 99 and NFPA 110. NFPA 110, Level 1 requirements typically apply to health care facilities; NFPA 110, Level 2 requirements apply to less-critical applications.
- Contains microcomputer-based logic with a ROM (read-only memory)-based control algorithm.
- Contains internal protection from electrical noise.
- Vibration isolated from the engine/generator.
- Can be mounted in several orientations on the generator set.
- Conformal coating protects circuit boards from environmental damage.
Decision-Maker™ 3+, 16-Light Controller for NFPA 110, Level 1 Requirements

**Standard Features**

- Dimensions, W x H x D, mm (in.):
  461 x 247 x 297 (18.15 x 9.71 x 11.68)
- Power source with circuit protection: 12 or 24 volt DC
- Operating temperature range:
  -40°C to 70°C (-40°F to 158°F)
- Storage temperature range:
  -40°C to 85°C (-40°F to 185°F)
- AC interlock to prevent starter reengagement with engine running
- DC circuit protection
- Error-proof wiring harness for electrical connections
- Panel lamps (2)
- Analog gauges, 51 mm (2 in.):
  - Pressure gauge, oil
  - Temperature gauge, engine cooling system
  - Voltmeter, DC battery
- Analog meters, 89 mm (3.5 in.):
  - AC ammeter, 2% of full-scale accuracy
  - AC voltmeter, 2% of full-scale accuracy
  - Frequency meter, 0.5% of full-scale accuracy
- Prealarm indicators:
  - Auxiliary (multiple function) (red)
  - Battery charger (red)*
  - Fuel, low—level or pressure (red)*
  - Pressure, low oil (yellow)*
  - Temperature, low engine (red)*
  - Temperature, high engine (yellow)*
  - Voltage, high battery (yellow)*
  - Voltage, low battery (red)*

* Requires optional kit or user-provided device to enable function and lamp indication.
Standard Features, continued

- Shutdown indicators:
  - Auxiliary (multiple function) (red)
  - Emergency stop (red)*
  - Low fuel (utilizes auxiliary indicator); 125RZG model only
  - Level, low coolant (utilizes auxiliary indicator)
  - Overcrank (red)
  - Overspeed (red)
  - Pressure, low oil (red)
  - Temperature, high engine (red)

- Status indicators:
  - Air damper (red) (200–1600 kW 2-cycle, Detroit Diesel-powered models only, if equipped)*
  - Generator switch not-in-auto (red)
  - System ready (green)

- Running time meter

- Switches and standard features:
  - Continuous or cyclic cranking. The cyclic cranking provides up to 45 seconds of continuous cranking or 75 seconds of cyclic cranking (crank 15 seconds, rest 15 seconds, crank 15 seconds, etc.). The crank disconnect speed is 390 rpm (13 Hz).
  - Horn, alarm (with silencing switch)
  - Mode, prime power
  - Potentiometer, generator output voltage-adjusting (front panel mounted, ±5% of nominal voltage) (350–2000 kW models have adjustment on voltage regulator in junction box)
  - Shutdown, overvoltage protection
  - Start, remote 2-wire start
  - Switch, emergency stop (standard on 200–2000 kW DDC- and Mitsubishi-powered models only)
  - Switch, lamp-test
  - Switch, meter range selector
  - Switch, run/off-reset/auto (engine start)
  - Timer, engine cooldown, (5-minute fixed)

* Requires optional kit or user-provided device to enable function and lamp indication.
Selected Decision-Maker™ 3 Accessories

- **Common Failure Relay** remotely signals auxiliary fault, emergency stop, high engine temperature, low oil pressure, overcrank, and overspeed via one single-pole, double-throw relay with 10 amp at 120 VAC, 10 amp at 28 VDC contacts.

- **Controller Cable**, 12 m (40 ft.), enables remote mounting of the controller.

- **Controller Connection Kit** provides a cable connecting the controller to a terminal strip in the junction box. Specify the controller connection kit for junction box remote device connections.

- **Dry Contact Kits** interface between the controller signals and customer-supplied accessories providing contact closure to activate warning devices such as lamps or horns. Kits are available in either one or ten single-pole, double-throw relays with 3 amp at 250 VAC contacts. A kit with twenty single-pole, double-throw relays with 3 amp at 250 VAC contacts is available on 450–2000 kW models.

- **FASTCHECK®** hand-held diagnostic fault detector activates controller circuits without operating engine/generator. Helps service or maintenance personnel quickly identify faults in controller and engine circuits.

- **Float/Equalize Battery Charger with Alarm Feature** warns controller of battery charger fault, high battery voltage, and low battery voltage.

- **Controller-Mounted Emergency Stop Switch** shuts down generator set immediately in emergency situations. Use the generator set master switch for normal shutdowns. Standard on 200–2000 kW DDC- and Mitsubishi-powered models only.

- **Prealarms** warn of low water temperature, approaching low oil pressure, and approaching high water temperature. Kits for gas-fueled models include a low fuel pressure switch.

- **Remote Annunciator Panel** enables the operator to monitor the status of the generator from a remote location. May be required for NFPA 99 and NFPA 110 installations. Kit includes separately mounted 14-relay dry contact kit.

- **Remote Audiovisual Panel** warns the operator of fault shutdowns and prealarm conditions. Common fault lamp and horn with silence switch.

- **Remote Emergency Stop Panel** immediately shuts the generator set down from a remote station.

- **Run Relay** provides a three-pole, double-throw relay with 10 amp at 250 VAC contacts for indicating that the generator set is running or shut down.

Availability is subject to change without notice. Kohler Co. reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. Contact your local Kohler® generator set distributor for availability.