

DKG-173 DIN RAIL MOUNTED ATS CONTROLLER WITHOUT DC SUPPLY

DESCRIPTION

The DATAKOM model DKG-173 is a DIN Rail mounted ATS controller not requiring DC supply.

The unit monitors 3-phase mains voltages, sends remote start command to the generating set and performs changeover of both generator and mains contactors.

The front panel leds provide information about mains and generator power availability as well as contactor positions.

Mains return delay and genset contactor delays are adjustable between 1 and 40 seconds through front panel knobs.

OPERATION

When both mains voltages are over the limit:

- R, MC, RST leds are on.
- The **MCB** terminal is supplied with voltage **R**.
- The **REMOTE START** relay contact is open.

If any AC phase voltage goes below limit:

- R, MC, RST leds turn off.
- The **MCB** terminal is open.
- The **REMOTE START** relay contact closes.

The **REMOTE START** output is expected to provide a genset running condition.

When the genset voltage G is over the limit:

- The **G** led turns on.
- At the expiration of the genset contactor delay the **GC** led turns on and the **GCB** terminal is supplied with voltage **G**.

When both mains voltages are over the limit:

- R and RST leds turn on.
- At the expiration of the mains return delay the **MC** led turns on and the **MCB** terminal is supplied with voltage **R**.
- The **REMOTE START** relay contact opens.

The contactor delays for the genset and are manually adjusted via potentiometers situated on the front panel of the unit.



FEATURES

DIN Rail mounted

No DC supply required

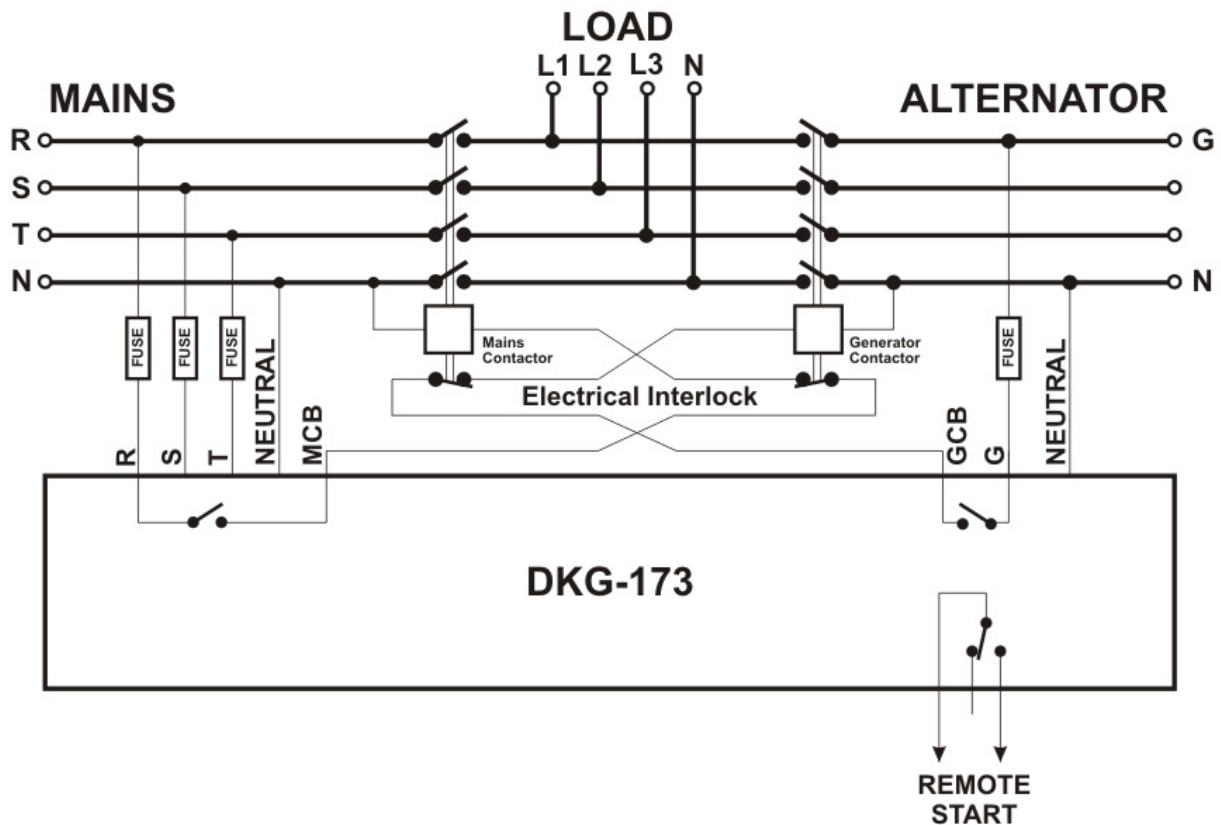
Adjustable MCB and GCB delays

10A/250VAC MCB and GCB outputs

10A/28VDC/250VAC remote start output

Isolated mains and genset inputs

TYPICAL CONNECTION DIAGRAM



INPUTS

- R-S-T:** Mains phase voltages.
- NEUT-MN:** Mains neutral terminal.
- G:** Generator phase voltage.
- NEUT-GN:** Generator neutral terminal.

OUTPUTS

- MCB-MAINS CONTACTOR:** Normally open relay output connecting the phase-R voltage to the terminal. (10A@250V-AC)
- GCB-GENERATOR CONTACTOR:** Normally open relay output connecting the phase-G voltage to the terminal. (10A@250V-AC)
- REMOTE START:** Normally open engine start request relay output. (10A@28V-DC/250V-AC)

LED INDICATORS

- G:** genset voltage present
- GC:** genset contactor closed
- R:** power supplied from mains
- RST:** mains voltages present
- MC:** mains contactor closed

TECHNICAL SPECIFICATIONS

- Alternator Voltage:** 170-300 V-AC (Ph-N)
- Mains voltages:** 170-300 V-AC (Ph-N)
- Generator Contactor Delay:** 1 to 40 sec. adjustable
- Mains Return Delay:** 1 to 40 sec. adjustable
- MCB Relay Output:** 10A @ 250V-AC
- GCB Relay Output:** 10A @ 250V-AC
- Remote Start Relay Output:** 10A @250V-AC/28V-DC
- Operating temp.:** -30°C (-22°F) to 70 °C (158°F).
- Storage temp.:** -30°C (-22°F) to 80 °C (176°F).
- Maximum humidity:** 95% non-condensing.
- Dimensions:** 70x115x66mm (WxHxD)
- Weight:** 180g (approx.)
- Installation:** DIN Rail mounted.
- Case Material:** High Temp. ABS/PC (UL94-V0)
- IP Protection:** IP20
- Conformity (EU directives)**
 - 2006/95/EC (low voltage)
 - 2004/108/EC (EMC)
- Norms of reference:**
 - EN 61010 (safety requirements)
 - EN 61326 (EMC requirements)



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