

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.

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

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:

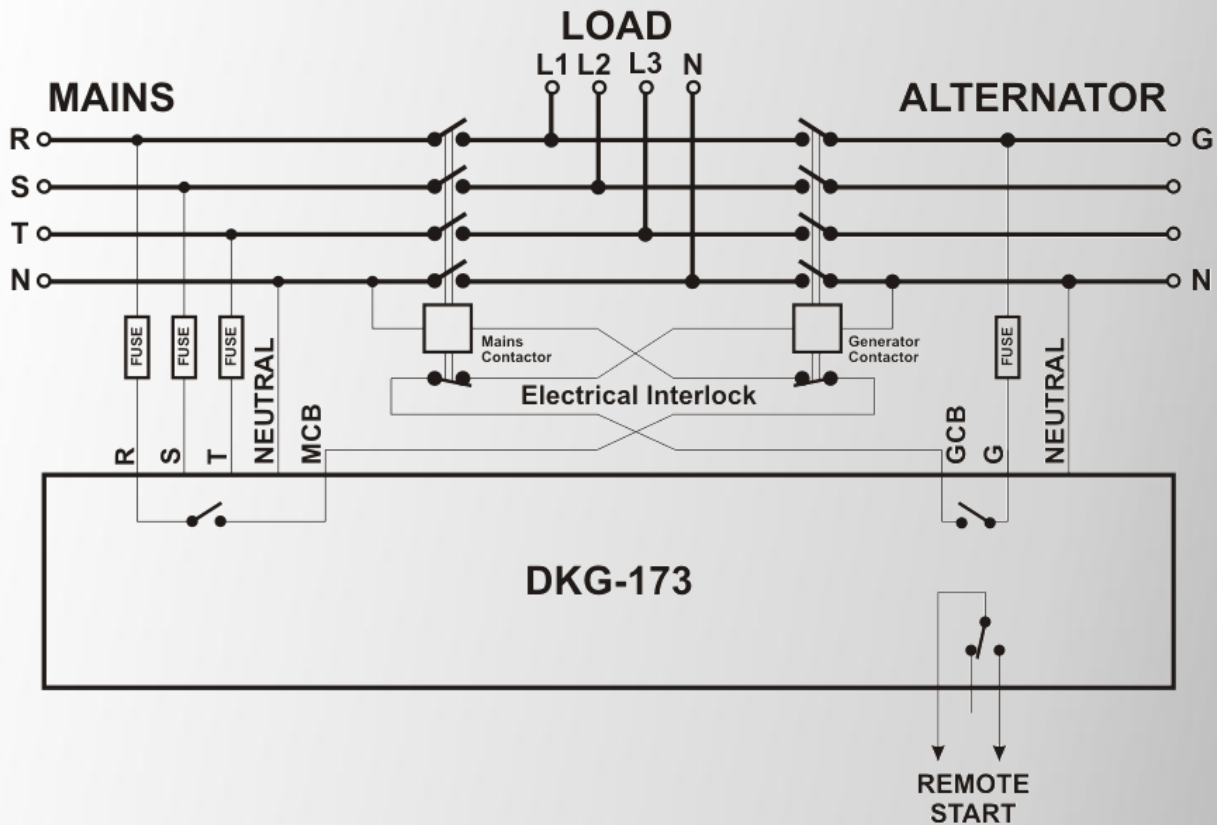
- The G led turns on.
- At the expiration of the genset contactor delay the GC led turns on and the GCB terminal is supplied with voltage G.

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.

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)

