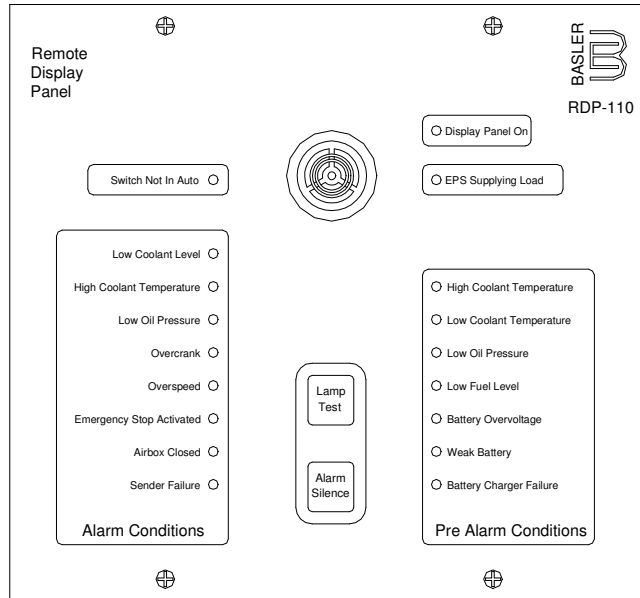


TAYLOR®

POWER SYSTEMS

RDP-110 REMOTE DISPLAY PANEL



The RDP-110 is used in conjunction with the DGC family of Digital Genset Controllers to provide remote annunciation of the emergency standby generator system. This panel complies with the requirements of NFPA 110. The DGC detects an alarm or pre-alarm condition and communicates via RS-485 to the RDP-110. The RDP-110 is available in two mounting configurations, surface and semi-flush mount.

FEATURES

- Annunciation of 17 alarms and pre-alarms as detected by the DGC
- Audible alarm horn
- Lamp Test and Alarm Silence Switches
- Power supply inputs for 12,24Vdc or 120Vac (at the RDP-110 location)
- RS-485 communications reduces the number of interconnection wires to four
- Two mounting configurations
- Conduit box included
- Designed for use in harsh environments

DESCRIPTION

The RDP-110 is a remote annunciation device used in conjunction with the DGC family of digital genset controllers, to meet the requirements of NFPA-110. The RDP-110 may be powered from the starter batteries at 12 or 24Vdc, or it may be powered with an ac source at 120Vac. The RDP-110 uses RS-485 communications between the RDP-110 and the DGC to limit to only four the number of wires required to activate all the alarms. The RS-485 communications can be used on remote displays up to 4000 feet away from the DGC. The RDP-110 has 18 LED's to indicate alarms, pre-alarms and operating conditions of the emergency standby generator system. It has an audible alarm horn rated at 80db (from a distance of two feet). The RDP-110 is available in two mounting configuration, semi-flush and surface mount. The RDP-110 also comes complete with a conduit box for easy installation.

SPECIFICATIONS

POWER INPUT

DC Voltage: 8-32Vdc (2.5W)

AC Voltage: 80-144Vac (5VA)

COMMUNICATIONS PORT

RS-485 interface with DGC

ISOLATION

1800Vdc for one minute between chassis ground and AC voltage input. 700Vdc for one minute between any of the following groups:

- Chassis ground
- Battery and RS-485 terminals
- AC voltage inputs

RFI (Radio Frequency Interference)

Type tested using 5 watt, hand-held transceiver operating at random frequencies centered around 144MHz and 440MHz with the antenna located within six inches (15 centimeters) of the device in both vertical and horizontal planes.

ENVIRONMENTAL AND PHYSICAL

Operating temperature: -40°C to +70°C (-40°F to +158°F)

Storage temperature: -40°C to +85°C (-40°F to +185°F)

Salt Fog: Qualified to ASTM B 117-1989

Vibration: The device withstands 2g in each of three mutually perpendicular planes, swept over the range of 10 to 500Hz for a total of six sweeps, 15 minutes each sweep, without structural damage or degradation of performance.

Shock: 15g

Weight: 6.5 pounds (3 kilograms)

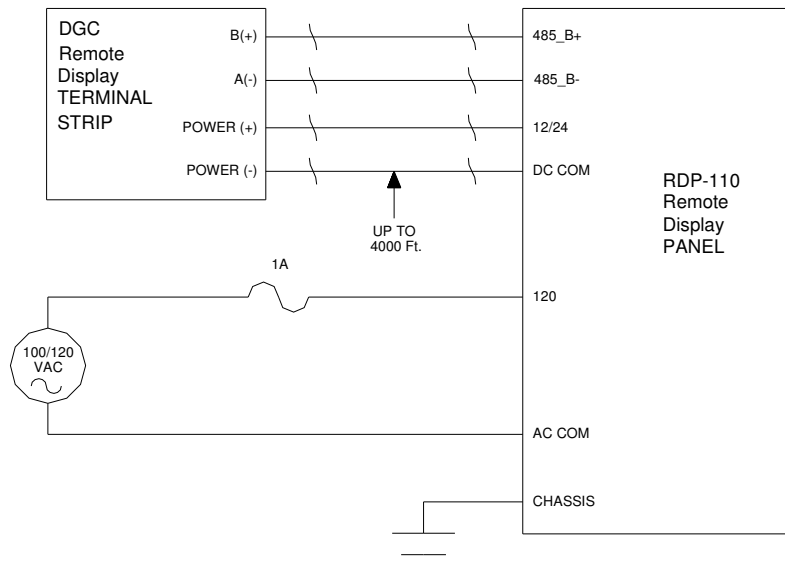


Figure 1 – Typical Interconnection Diagram

RDP-110 CONNECTIONS

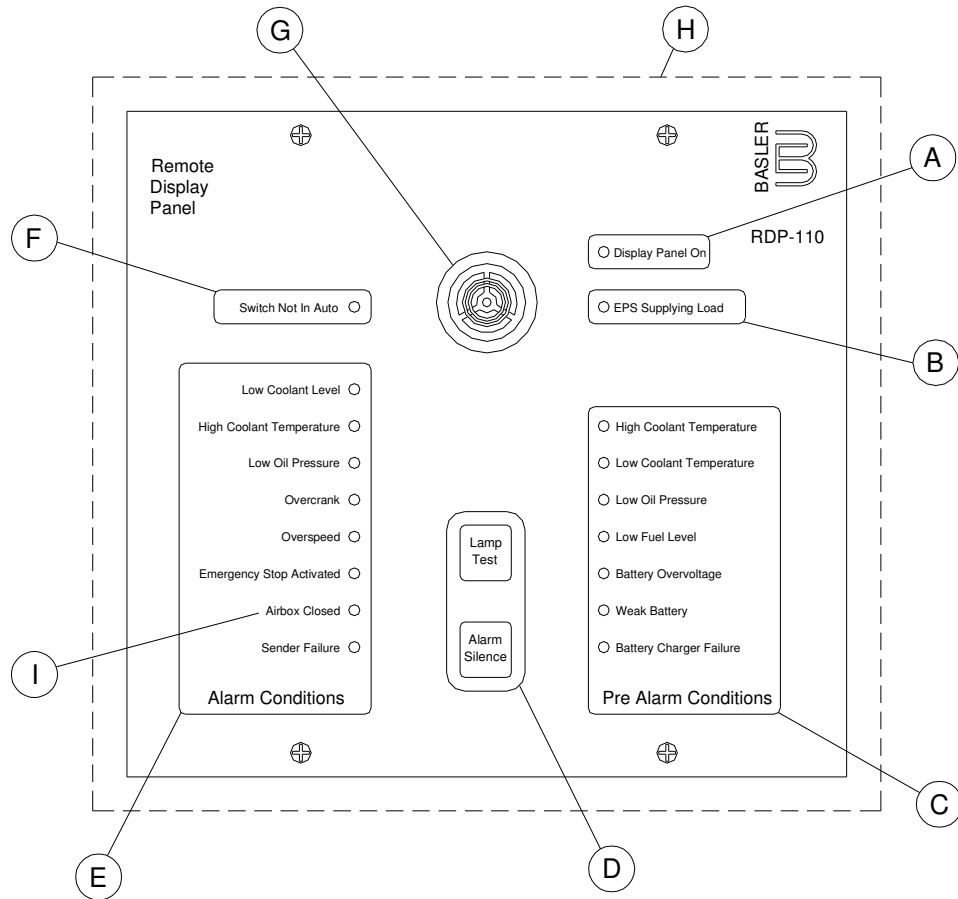


Figure 2 – Front panel controls and indicators

- A. LED illuminates when power is applied to the RDP-110.
- B. LED turns ON when the generator supplies more than two percent of rated current.
- C. Pre-Alarm Conditions
- D. Pushbuttons
Lamp Test Push-button exercises the audible alarm and tests all LED's.
Alarm Silence Push-button silences the audible alarm.
- E. Alarm Conditions
- F. LED illuminates when the DGC is not in AUTO.
- G. Audible alarm annunciates when DGC is not in AUTO and when alarms and pre-alarms occur.
- H. Dashed line indicates the front panel outside edges when semi-flush mounted.
- I. When an RDP-110-_1 is selected, this label indicates “fuel leak/fuel sender failed”.

