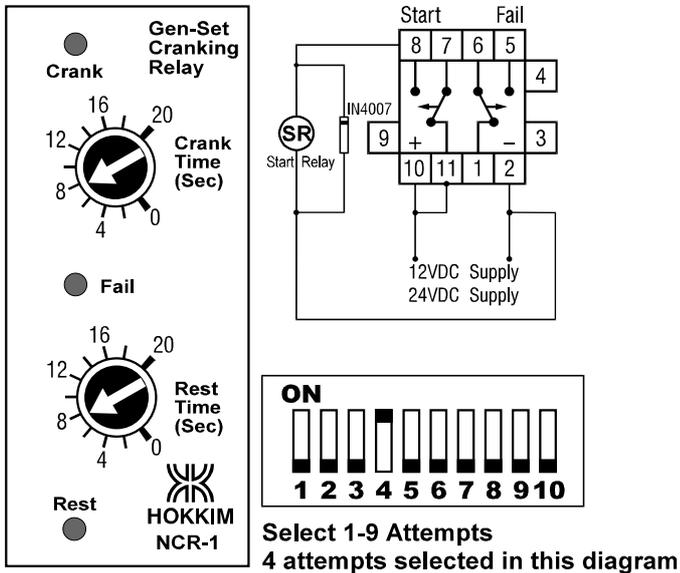


**Model** : NCR-1  
**Description** : Gen-Set Cranking Relay

## Utilization:

The NCR-1 Gen-set Cranking Relay is designed to crank start a generator with adjustable crank and rest periods. It has settings for 1-9 cranking attempts and a Fail relay. Upon connection of DC supply, the NCR-1 will start cranking by closing contacts 11-8 for an adjustable interval of 0 to 20 sec. After the crank period, the contacts 11-8 will open for a rest interval, also adjustable from 0 to 20 sec. The crank and rest periods together constitute one cranking attempt. You can set the NCR-1 to operate from 1 to 9 cranking attempts before indicating failure by setting the dip switch at the side of the unit.

If the NCR-1 is set to operate 4 attempt starts before indicating failure; then after the 4th crank and rest periods, the Start Relay (contacts 11-8) is disabled and the Fail Relay (contacts 1-5) will energize, closing contacts 1-5. Use this contact to trigger external alarms. There are 3 LEDs to indicate the Crank (amber), Rest (green) and Fail (red) states.



## Technical Data

Supply Voltage	:	12 or 24 VDC
Consumption	:	1 VA
No. of Attempts	:	1 to 9
Crank Period	:	0 - 20 s
Rest Period	:	0 - 20 s
Indications	:	Green LED - Rest Amber LED - Crank Red LED - Fail
Output Contacts	:	5A 240V 50Hz AC1 Crank: 11-8, 1-6 Close 11-7, 1-5 Open Rest: 11-7, 1-6 Close 11-8, 1-5 Open Fail: 11-7, 1-5 Close 11-8, 1-6 Open

