

NPR-C control relay

Unbalance protection - MV Capacitor banks



Unbalanced relay protection for Shunt Capacitor Bank application



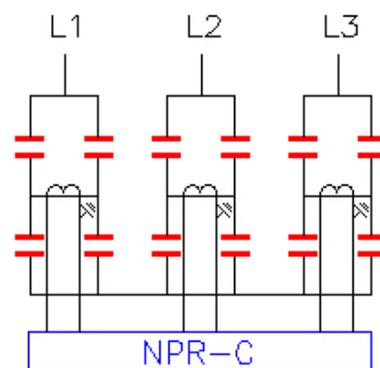
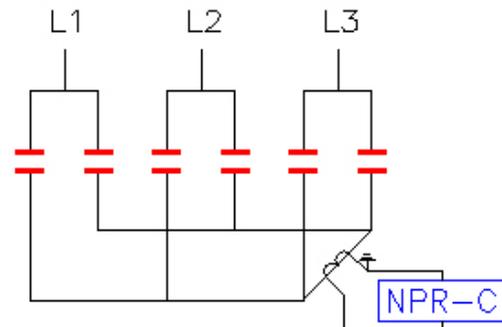
- Measuring of electrical values
- Supervision of electrical values
- Wide range of power supply voltages
- Wide graphical LCD screen with backlight
- Easy operation due to full text menus
- Simple commissioning
- Reliability in operation
- Calculated values are true RMS values
- Up to 32 configurable alarms
- Includes over-temperature protection

(optional)

- Data communication by RS485 Modbus

NPR-C relay

- Overcurrent / Earth Fault
- Overvoltage / Undervoltage
- Current unbalance
 - Double-star connected capacitor banks (1 to 4 steps)
 - H connected capacitor banks (1 step)
- Over-temperature



Electrical features

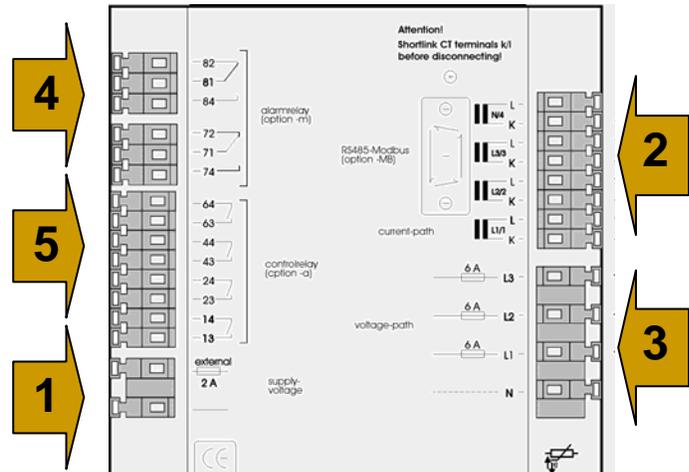
- Power supply voltage:
 - 99-121 VAC, 198-253 VAC, 45-65 Hz, 8W, max. fuse gL 2A
 - 20.4-28.8 VDC, 40.8-57.6 VDC, 80-132 VDC
- Measuring voltage: OV/UV: 55/95V - 318/550V, 45-65 Hz, PT-ratio 1-4000
Unbalance (NPR-V): 0V - 20V, 45-65 Hz
- Measuring current: 0 - 5A, minimum sensitivity 25mA, burden 15mOhm
CT-ratio 1-10000.

Overload: 20% continuous

- Relay outputs: 4 N/O, voltage-free, max. fuse gL 6A 2 C/O, voltage-free, max. fuse gL 6A
- Break: 250V AC / 5A, 30VDC / 5A (ohmic) 110V DC / 0,4A (ohmic), 110V DC / 0,3A (inductive)
Individual parametring of output-relays is possible
- Interface: Service-interface + RS485 with Modbus-protocol (optional)
- Overvoltage category: II, pollution degree 3 (IEC 60664-1)
- Standards: IEC 60664-1, IEC 61010-1, IEC 61326
- Conformity: CE, UL, cUL

Mechanical features

- IP class: Front IP50, Back IP20
- Terminals: Plug terminals, screw-type, max. 2.5mm²
- Ambient temperature: Operating: 0°C ... +70°C, storing: -20°C ... +85°C
- Humidity: 0% - 95%, without moisture condensation



Necessary connections:

- 1- 24V-240V AC/DC voltage for internal power supply
- 2- Current/voltage measurement via CTs or VTs
- 3- Voltage measurement L1, L2, L3, (N)

Optional connections:

- 4- Two voltage-free change-over contacts
- 5- Four voltage-free NO/NC contacts

Note :
For more information contact factory