Data Sheet Enphase Accessories REGION: APAC/EMEA

Enphase Q Relay (single phase)

In Enphase installations, the Q Relay (network system relay controller) acts as a physical disconnection device relay controller for single-phase installations.

During specified grid abnormalities, the Q Relay disconnects the Enphase Microinverters from the AC grid, and when the voltages return to normal and the grid frequency is in the acceptable range, the Q Relay reconnects the system.

The Q Relay works with the Envoy-S to break both line and neutral, when needed, per grid requirements.



Easy to Install

- · Lightweight and simple
- DIN rail mount for quick installation

Reliable

- Dependable load control
- Automatically resets when normal voltage resumes

Smart

- Performs voltage and frequency ride-through
- · Remote upgrade capability
- Easy to read LEDs



Enphase Q Relay

| SPECIFICATIONS Q-RELAY-1P-INT | Single-phase network system relay controller (50 Hz) with support for DC injection |
|---|---|
| Over voltage category | |
| Pollution degree | 2 |
| Nominal input voltage (Vnom) | 230 to 240 Vrms |
| Operating AC voltage range for power supply | 85 to 270 Vrms |
| Nominal input frequency | 50 Hz |
| Voltage and frequency acquisition time on valid input during normal operation | 100 ms (5 line cycles @ 50Hz) |
| Number of voltage inputs to monitor | 1 |
| Number of Q Relays per system | Limit of four active Q Relay devices per system |
| Output | Two single pole, single throw contacts, normally open (L1 and N) |
| Output power rating | 4.8kVA |
| Output rating (typical) | 230 to 240 Vrms, 20A |
| Power consumption | 10 VA |
| LEDs | Two red/green LEDs: one for under/over voltage trip, the other for under/over frequency and DCI |
| Mounting | 35 mm DIN rail (standard) |
| Width | 53 mm |
| Surge - L1 N output | Combination (1kV 2Ω) |
| Operating temperature range | -40 °C to 50 °C |
| IP rating | IP 20 (Must be used in a protected environment) |
| Relative humidity | 0 to 95 non-condensing |
| Compliance | IEC 61010 |
| Conducted and radiated EMI | IEC 61326-1, BS EN 61000-3-2, BS EN 61000-3-3, BS EN 50065-1, BS EN 50065-2-2 |
| Warranty | 5 years |

