# 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 in series 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 O-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 IQ Microinverters supported	Up to 19 Enphase IQ 7 Microinverters or 16 Enphase IQ 7+ Microinverters
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