

Enphase Three-Phase Network Protection Relay

(NPR-3P-208-NA)

The **Enphase Three-Phase Network Protection Relay™** with Enphase IQ Envoy™ gateway and Enphase Mobile Connect™ modem consolidates three-phase interconnection equipment into a single enclosure and streamlines installations by providing a consistent, pre-wired solution for three-phase commercial 208 VAC applications.



Smart

- Compatible with single-phase Enphase IQ 7™ Series Microinverter-based, three-phase commercial 208 VAC PV systems
- Includes IQ Envoy for PV system communication and control
- CTs for phase-wise production monitoring (optional)
- Flexible networking supports Wi-Fi, Ethernet, or cellular (standard)

Simple

- Built-in network protection relay and contactor
- Compact enclosure with pre-wired system components
- Backplate for easy mounting
- Customizable cable entry/exit options for quicker installation
- Can accommodate 200A three-phase AC input

Reliable

- Durable NEMA type 3R enclosure
- Five-year warranty
- Compliant with UL 1741 SA



Enphase Three-Phase Network Protection Relay

MODEL NUMBER	
Three-Phase Network Protection Relay (NPR-3P-208-NA)	Three-Phase Network Protection Relay with Enphase IQ Envoy™ gateway and Enphase Mobile Connect modem and contactor for three-phase network monitoring
ENPHASE ACCESSORIES and REPLACEMENT PARTS	
Enphase Mobile Connect™ CELLMODEM-M1 (4G based LTE-M)	Plug and play industrial grade cellular modem with data plan options ¹ (available in the US, Canada, Mexico, Puerto Rico, and the US Virgin Islands, where there is adequate cellular service in the installation area)
Enphase IQ Envoy™ ENV-IQ-AM3-3P	Three-phase communications gateway with integrated PV production metering (+/- 0.5%) and optional consumption monitoring (+/- 2.5%). Includes three 200A continuous rated production CTs.
Consumption Monitoring* CT CT-200-SPLIT (not included - three needed)	Split core current transformers enable consumption metering (+/- 2.5%)
COMPONENTS	
Relay, SEL-547	Distributed generator interconnection relay with essential network protection and control elements for three-phase commercial solar PV systems
Contactor, AF190 or AF205	Minimum: AC-1, 200 A, 3P, NO MAIN + 1 NO and 1 NC AUX, 24-60 VAC/DC coil
Distribution Block, L1, L2, L3	3-P, (2) 250 kcmil – 1/0 AWG
Distribution Block, Neutral	1-P, (2) 250 kcmil – 1/0 AWG
Ground Lug, Grid and Array	(1) 250 kcmil - #6 AWG
Interconnections	Pre-wired internal interconnections
ELECTRICAL SPECIFICATIONS	
Rating	Continuous operation at 100% of rating
Rated voltage	Three-phase 208/120 VAC, 60 Hz
Rated current	200 A
Rated breaker size	250 A maximum
PV array conductors	L1, L2, L3, N, 250 kcmil – 1/0 AWG and G, 250 kcmil - #6 AWG
Grid conductors	L1, L2, L3, N, 250 kcmil – 1/0 AWG and G, 250 kcmil - #6 AWG
MECHANICAL DATA	
Enclosure dimensions	610 mm x 762 mm x 254 mm (24" x 30" x 10")
Weight	34.5 kg (76 lbs)
Ambient temperature range	-25° C to +50° C (-13° to 122° F)
Enclosure environmental rating	Outdoor, NEMA type 3R
INTERNET CONNECTION OPTIONS	
Integrated Wi-Fi	802.11b/g/n
Cellular (standard)	CELLMODEM-M1 (4G based LTE-M) with data plan options ¹
Ethernet	Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included)
COMPLIANCE	
Loss of phase	IEEE 1547:2018; CA Rule 21, HI Rule 14h, LVRT up to 2 seconds
Safety	UL 1741

1. Contact Enphase for data plan options.