Phoenix QUINT-PS-3x400-500AC/24DC/40-2938646

Power Supply

Phoenix QUINT-PS-3x400-500AC/24DC/40-2938646 is a three-phase, primary-switched DIN-rail power supply that converts a 400–500 V AC nominal input to an adjustable 24 V DC output rated at 40 A.

Job objective

Replace, install or verify the exact unit while preserving unrelated wiring, configuration, dimensions, weight and stored product data.

Safe-work boundary

Identify Match the complete model and every suffix to the physical unit.	**Isolate** Apply the plant-approved electrical, process and stored-energy isolation.
Preserve Back up configuration and photograph all connections and settings.	**Control** Use ESD protection and revision-controlled documentation.

Product-specific hazards and controls

1 Confirm the complete Phoenix QUINT-PS-3x400-500AC/24DC/40-2938646 identity before installation.	**2** Isolate and verify the absence of hazardous voltage on all three input phases and the DC output before wiring.
3 Use only the documented 3 × 320–575 V AC or 450–800 V DC input range and maintain protective earth continuity.	**4** Observe the specified conductor cross-sections and terminal torque for the installed wiring method.

Required evidence before work

Nameplate photo, installed-position record, connection map, configuration or jumper record, fault history and approved acceptance plan.

Readiness and interface checklist

Exact identity	QUINT-PS-3x400-500AC/24DC/40-2938646 matches the work order and physical unit
Installed position	Rack, slot, panel and functional assignment recorded
Configuration	Project data, jumpers, settings or calibration state captured
Connections	Every cable, terminal, shield and polarity labeled
Condition	Board, housing, connectors and packaging inspected
Test plan	Expected states, safe response and acceptance evidence agreed

Interface preparation

AC input	Three-phase L1/L2/L3 and PE connection within the documented input range
DC output	Regulated 24 V DC output adjustable from 22.5 V to 28.5 V
Diagnostics	DC OK LED, active switching output, and floating relay contact
Mechanical	NS 35 DIN-rail mounting with specified orientation and clearance

Pre-job evidence review

H1 Three-phase 400–500 V AC nominal input	**H2** Adjustable 22.5–28.5 V DC output
H3 40 A nominal current and 45 A POWER BOOST	**H4** DC OK LED, active output, and relay contact

03 / INSTALLATION SEQUENCE

Controlled replacement workflow

1	Confirm isolation and absence of hazardous energy
2	Compare removed and replacement identities and revisions
3	Photograph, label and verify all connections and settings
4	Remove the existing assembly using ESD-safe handling
5	Inspect mounting, connectors, grounding, ventilation and surrounding hardware
6	Install the exact replacement without forcing connections
7	Restore cables, jumpers and settings from the controlled record
8	Complete final visual, continuity and polarity checks before energization

STOP CONDITIONS

Identity

Stop if the complete model or revision does not match.

Connection

Stop if connector orientation, polarity or terminal mapping is unresolved.

Configuration

Stop if the as-found jumper, project or adjustment record is missing.

System

Stop if grounding, cooling or the safe-state assignment is uncertain.

Staged return to service

Stage 1	Visual inspection, isolation release and controlled power-ready state
Stage 2	Apply power under observation and stop on abnormal indicators, heat or sound
Stage 3	Confirm module recognition, status indications and surrounding-system health
Stage 4	Verify every affected connection, signal or relay path
Stage 5	Exercise the documented function and configured safe response
Stage 6	Archive measurements, settings, results and as-left configuration

Product-specific acceptance focus

5

Mount the unit on a horizontal NS 35 rail and maintain the documented clearances and airflow.

6

Set the output only within 22.5–28.5 V DC and verify the load’s permitted voltage before energization.

7

Engineer parallel units for the intended redundancy or capacity mode and verify current sharing before release.

8

Commission the DC OK LED, active signal, floating relay contact, and loaded output voltage before service.

Acceptance evidence

Identity

Photo and record show the exact installed model.

Connections

Terminal, cable and connector checks are complete.

Function

The affected command, indication or supply path has been exercised.

Safe state

Loss-of-power or loss-of-command behavior matches the approved design.

Fault isolation and final record

1	Unexpected state: stop and capture evidence
2	Recheck identity, power boundary, position and connections
3	Compare configuration and revision-controlled records
4	Test the surrounding system before condemning the unit
5	Restore a safe state and document the verified outcome

Apter Power handover record

Model identity	Keep the complete Phoenix QUINT-PS-3x400-500AC/24DC/40-2938646 identity in purchasing, installation, and acceptance records.
Verification boundary	Confirm the physical nameplate, installed position, and revision-controlled project documents before field work.
Apter Power support	Use the contact details and Apter Power website links in this document for product and sourcing support.

Related Apter Power references

Related Apter Power references	Scope note
Phoenix FL SWITCH SF 14TX/2FX 2832593	Portfolio reference only; verify compatibility independently.
Phoenix QUINT-PS/3AC/24DC/40 2866802	Portfolio reference only; verify compatibility independently.
Phoenix QUINT4-PS/1AC/12DC/15	Portfolio reference only; verify compatibility independently.

	Apter Power technical support sales13@apterpower.com +86 180 3023 5313 www.apterpower.com	Model record Phoenix QUINT-PS-3x400-500AC/24DC/40-2938646 Power Supply Verify the complete nameplate before installation.