

Introducing Fluke Electrical Measurement Windows

FLUKE®



Fluke PQ400 Electrical Measurement Window

Safe Electrical Power Measurements with minimal PPE—at any time

What is the PQ400?

- The Fluke PQ400 Electrical Measurement Window enables the connection of three phase measurement equipment to energized panels, without the need to open the panel door, or wear supplemental arc-flash PPE.
- Open the window cover to access the safety connections.
 - Users only have to install the voltage connections and current probes inside the panel one time.
- External voltage: standard 4mm voltage safety sockets.
- External current: Four pole connectors 173X and 174X compatible. Four pole to BNC adapter available.



- The PQ400 creates a permanent connection to your electrical system that can be accessed any time.
 - Avoids downtime to connect measurement equipment eliminating the cost of downtime.
 - Removes the need to suiting up in supplemental arc-flash PPE, saving time and cost.
 - Provides a faster response for troubleshooting to discover issues more rapidly to minimize the cost of system disruption.
 - Improves safety as no hazardous conductors are exposed.

- Decision makers
 - Owners of electrical panels who are concerned about electrical safety of personnel and equipment
 - Owners of equipment that is difficult to schedule downtime for
 - Consulting engineers and equipment manufacturers (panel builders) advising users on equipment installation.
 - Facility managers, safety engineers, design engineers, senior electrical engineers etc.
- Users
 - Electrical contractors, electrical technician, electricians etc.
 - Used to connect three phase measurement equipment.
 - Used in any electrical panel for connection of measurement equipment

Where will it be used?

- Large facilities
 - Datacenters
 - Waste water plants
 - Healthcare facilities
 - Plants which are heavily automated
 - Semiconductor manufacturing plants
 - Power utilities
 - Petrochemical plants and manufacturers with continuous processes
- Users
 - Electrical contractors, electrical technicians, electricians etc.
 - Used to connect three phase measurement equipment.
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Installation

The Tools

- Drill
- Punch
- Wrench
- Safety glasses



The Process

1. Drill a guide hole
2. Expand the hole
 - with Unibit (step bit) or hole saw tool or
 - by using a 4.5 inch/ 114.3 mm screw-type hydraulic hole punch
3. The hole is now ready to mount the PQ400



Connecting up inside the electrical panel



- Five four pole connectors for current probes
- Adapter (I17XX-BNC-M2F) available for four pole to BNC to accommodate products without the four pole (430-II series etc.)



- Five input connections for voltage striped back wire conductors

Connecting up outside the electrical panel

- *Five outputs of current (installed current sensor which the instrument automatically recognizes) via a four pole socket
- Short and long adapter cables from four pole connector to male BNC for analyzers without four pole connectors (430-II etc.)
- Five outputs of voltage three voltage phases, neutral and ground
- Voltage outputs via 4mm safety sockets

*174X instruments are connected to the front panel using the I17XX-FLEX2M-M2M male to male connectors.



- Fluke-PQ400, Power Quality Window*
 - PQ400 contents: PQ400 enclosure, 4 x Fluke-17XX IFLEX Male-Male Cable 2m, cable marker set 3P+N+PE, cable ties and instruction sheet.
- Fluke-PQ400/B, Power Quality Window Basic
 - PQ400 enclosure with no accessories

Accessories

- I17XX-FLEX2M-M2M4P, Fluke-17XX IFLEX Male-Male Cable 2m, (4pcs).
- I17XX-FLEX2M-M2M1P Fluke-17XX IFLEX Male-Male Cable 2m, (1pcs).
- I17XX-BNC-M2M, Fluke-17XX 4pin male to BNC male cable 2m (1pcs)
- I17XX-BNC-M2F, Fluke-17XX 4pin male to BNC female cable 0.1m (1pcs)
- Fluke-PQ-MARKER, cable marker set 3P+N+PE

Item	173X	174X	430-II
I17XX-FLEX2M-M2M4P, Fluke-17XX IFLEX Male-Male Cable 2m, (4pcs).	•	•	
I17XX-FLEX2M-M2M1P Fluke-17XX IFLEX Male-Male Cable 2m, (1pcs).	•	•	
I17XX-BNC-M2M, Fluke-17XX 4pin male to BNC male cable 2m (1pcs)			•
I17XX-BNC-M2F, Fluke-17XX 4pin male to BNC female cable 0.1m (1pcs)			•

* Also described as Electrical Measurement Window

- Permanently connected voltage and current sensors located inside the electrical panel allow you to make power quality and energy measurements using the external access points without opening the panel door, reducing operator risk
- Voltage and current connections for three-phase voltages, neutral and ground cover most measurement scenarios
- Automatic probe detection for Fluke 1740 and 1730 series power quality and energy loggers and compatible clamps, eliminates the need to open cabinet to check the clamp model
- Full 360 degree rotation allows the PQ400 window to be oriented in any direction
- Simple installation using a step drill bit and electro-hydraulic hole punch (114.3 mm, 4.5 inch diameter)
- CAT IV, 600V and CATIII 1,000V rating according to IEC61010-2-30
- Compatibility with standard 4mm shrouded safety-socket voltage test leads makes it easier to make voltage connections, increases safety by reducing the risk of accidentally touching live electrical components, and reduces the need for purchasing specialized voltage leads

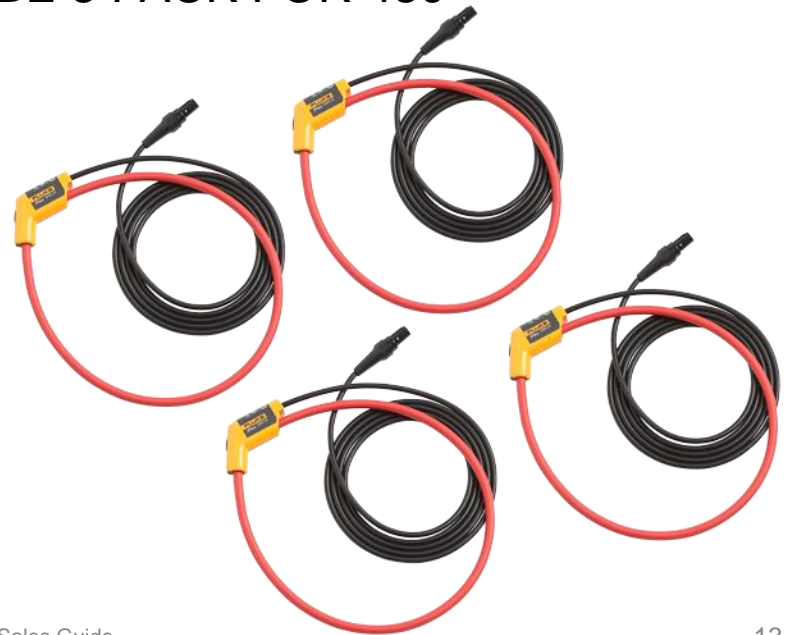
Additional accessories (173X and 174X)

- I17XX-FLEX1500 Fluke-17XX IFLEXI 1500A 12in
- I17XX-FLEX1500/3PK Fluke-17XX IFLEXI 1500A 12in, 3 pack
- I17XX-FLEX1500/4PK Fluke-17XX IFLEXI 1500A 12in, 4 pack
- I17XX-FLEX3000 Fluke-17XX IFLEXI 3000A 24in
- I17XX-FLEX3000/3PK Fluke-17XX IFLEXI 3000A 24in, 3 pack
- I17XX-FLEX3000/4PK Fluke-17XX IFLEXI 3000A 24 in, 4 pack
- I17XX-FLEX6000 Fluke-17XX IFLEXI 6000A 36in
- I17XX-FLEX6000/3PK Fluke-17XX IFLEXI 6000A 36in, 3 pack
- I17XX-FLEX6000/4PK Fluke-17XX IFLEXI 6000A 36in, 4 pack
- I40S-EL3X Fluke-17XX I40S-EL 40A clamp-on current transformer
- I40S-EL3X/3PK Fluke-17XX I40S-EL 40A clamp-on current transformer, 3 pack
- I400S-EL Fluke-17XX I400S-EL 400A clamp-on current transformer
- I400S/3PK Fluke-I400S-EL-3PK, 17XX 400A clamp-on current clamp, 3PACK

Additional accessories (430-II)

Fluke 430 Series

- I430-FLEXI-TF-II 6000A FLUKE 430 THIN FLEXI 61CM (24IN)
- I430-FLEXI-TFII-4P 6000A FLUKE 430 THIN FLEXI 61CM (24IN) 4 PACK
- I430-FLX-TFII-12 6000A FLK 430 THIN FLEXI 30CM (12IN)
- I430-FLX-TFII-48 6000A FLK 430 THIN FLEXI 122CM (48IN)
- I400S Fluke I400S-EL 400A clamp-on current transformer
- I5S 5A AC CURRENT PROBE
- I5SPQ3 5A AC CURRENT PROBE 3 PACK FOR 430



Summary

- Compliance without compromise. Safety without sacrifice.

