PRODUCT DATA SHEET

EVAR POWER FACTOR CORRECTION EQUIPMENT (LV)

PQ30-90EVAR

- Master-slave concept
- Compact design
- Flexible solutions



CERTIFICATIONS







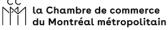






Our EVAR series is certified as being approved by RoHS, CETL and CUL.







PowerQ is member of Greener Canada, AQME and the Chamber of Commerce.



INNOVATION AND PERFORMANCE

The PQ30-90EVAR series offered by PowerQ, comprises capacitor banks with automatic control in steps of up to 6 levels, adapting the reactive power to the installation's fluctuations. Control is typically carried out by an electronic device (power factor controller) that monitors the actual power factor and commands the connection or disconnection of capacitors in predetermined steps, as required by the load, to achieve the targeted power factor. Our PQ30-90EVAR series is compatible with the DCRL 3/5 controller, which continuously monitors the reactive power drawn from the electrical network and automatically switches the capacitors as needed.

FEATURES

REAL-TIME COMPENSATION

 RISKS OF OVERCOMPENSATION AVOIDED WHILE ENSURING FUNCTIONAL AUTONOMY

FLEXIBILITY

DIFFERENT CUSTOMIZED OPTIONS ARE AVAILABLE (MASTER/SECONDARY BOX MODELS – 30 KVAR, 45 KVAR, 60 KVAR, 75 KVAR AND 90 KVAR)

SAFETY

IN THE CASE OF DEFECTS OF THE NETWORK OR EQUIPMENT, THIS WILL BE INDICATED BY AN ALARM ON THE DISPLAY PANEL

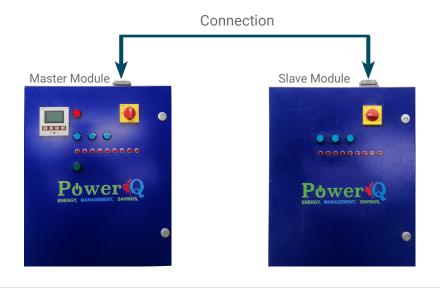
COMPACT DESIGN

 PROVIDES THE IDEAL POWER FACTOR CORRECTION SOLUTION FOR INDUSTRIAL AND COMMERCIAL NETWORKS

MODULAR CONCEPT

PowerQ brings you a master-slave concept that evolves along with your company:

EVAR allows a 3kvar or a 45kvar to become a 60kvar, 75kvar or 90kvar, **just by adding a new module**





SPECIFICATIONS

MAIN		
Nominal voltage	600V AC 60Hz (480V AC upon request)	
Reactive power ratings	30kvar and 45kvar (either Master or Slave)	
Mode of operation	Automatic	
Equipment name	Automatic capacitor bank	
Type of product or equipment	Capacitor bank	

COMPLEMENTARY		
Reactive power in steps of	15kvar	
No. of steps	6	
Cable entry	Right side (plug-in type)	
Type of controller	DCRL series (Lovato)	
Capacitor technology	Inert gas filled PFC capacitors	
No. of poles	3	
Capacity tolerance	-5% to 10%	
Insulation voltage	690V	
Shock voltage	8kV	
Overvoltages for capacitors	1.1 x Un (8 hours daily) 1.15 x Un (30 min. daily) 1.2 x Un (5 min. daily) conform to IEC 60831	
Overcurrent for capacitors	1.5 x In (including harmonics) conform to IEC 60831	
Main incomer	Switch disconnector UL/CSA/EAC	
Protection by step	Fuse	
Accessible	Front door	
Colour	RAL 5002	
Height	600mm	
Width	500mm	
Depth	250mm	
Equipment include	Auxilliary transformer for control	
Voltage internal transformer	600/120V 100VA/350VA	
Power supply	AC/DC, 10W, 24Vcc, 0.42A	
Capacitors (life expectancy)	135,000 hrs 5000 switchings per year	

More options:

Add Inductance Box to be used as harmonic filter

- Fast switching: optional solid-state relay (SSR) that react in 1 to 2 seconds
- Remote communication using USB key or Wi-Fi with your PC

POWER FACTOR CONTROLLER

DCRL SERIES:

- 3 STEPS IN 96X96MM HOUSING, EXPANDABLE UP TO 6 STEPS MAX.
- EXPANDABLE WITH EXP MODULES SUCH AS INPUTS AND OUTPUTS, STEP INCREMENT AND COMMUNICATION PORTS (OPTIONAL)
- BACKLIGHT ICON DISPLAY
- OPTIC INTERFACE PORT FOR PROGRAMMING, DATA DOWNLOAD AND DIAGNOSTICS (OPTIONAL)
- INDEPENDENT VOLTAGE MEASUREMENT INPUT
- CAPACITOR OVERLOAD PROTECTION
- INTERNAL PANEL TEMPERATURE SENSOR
- CONFIGURABLE ALARMS
- VOLTAGE AND CURRENT HARMONIC-CONTENT MEASUREMENT







DCRL Rear view

Supply voltage	From 100Vac to 440Vac
Rated frequency	50Hz / 60Hz
Front plate protection	IP54
Certifications and compliance	CEI/EN 61010-1 CEI/EN 61000-6-2 CEI/EN 61010-1 CEI/EN 61000-6-2 CEI/EN 61000-6-3 UL 508 CSA C22.2 No.14

QUALITY AND TESTING

ENVIRONMENT		
Norms	CEI/EN 60831-1/2 CEI/EN 60947-1 CEI/EN 60947-4-1 K60947 UL 810	
Product certificates	CE, TÜV, UL, EAC, EX	
Installation	Interior	
IP rating	IP43 NEMA 4/12 (IP55 NEMA 3R available)	
IK rating	IK10	
Temperature range	-5° to 45°C	

WARRANTY	
Capacitor only	5 years
Equipment and parts	12 months

ORDERING INFORMATION

600V / 60Hz / 3 phases

EVAR Model	kvar rating	Qty / kvar
PQEVAR Master 30	30	1/30 Master
PQEVAR Master 45	45	1/45 Master
PQEVAR 60	60	1/30 Master + 1/30 Slave
PQEVAR 75	75	1/45 Master + 1/30 Slave
PQEVAR 90	90	1/45 Master + 1/45 Slave
PQEVAR Slave 30	30	1/30 Slave
PQEVAR Slave 45	45	1/45 Slave