

The background of the page is a collage of industrial and power-related images. On the left, there's a vertical strip showing an oil pumpjack at night. The top left shows a close-up of a pumpjack. The top center shows an industrial building at night with lights. The top right shows a power transmission tower against a blue sky. The bottom left shows a tall industrial distillation column with lights.

VArComp® Q-VAr

Real-time Power Factor Correction Dynamic Voltage Control

The VArComp® Q-VAr is a dynamic microprocessor controlled zero-latency reactive power compensation system used for real-time power factor correction applications and/or power system voltage control.

The Q-VAr can be manufactured to any kVAr/MVAr output to match system reactive power demand and is designed for use on power systems with dynamic or rapidly changing loads such as wind turbines, welding plants, cranes, lifts, roller coasters, etc.

Power electronic SCR thyristor-switched capacitor banks respond to system reactive power demand from zero to full kVAr/MVAr output or any step value in between within one mains cycle (20ms at 50Hz; 16ms at 60Hz).

VArComp® Q-VAr is manufactured for use on power systems up to and including 690V in both detuned and non-detuned topology depending upon system impedance and harmonics at the point of connection.

Application of the latest technology and highest quality components is ensured with every VArComp® product. Inherently low losses and the compact footprint of the Q-VAr enable easy installation within existing switchrooms and substations.

The versatile modular design also provides ample incoming cable make-off space with a choice of top or bottom cable entry locations.

Enspec Power can provide a turnkey solution to all of your reactive power requirements, from initial feasibility studies through to load surveys, system modelling, design, manufacture and installation.

Please see the reverse for summary specification or contact one of our technical sales engineers for assistance. We will be pleased to help, whatever your reactive power requirements.



Voltage (Un):	400 – 690Vac
Q Output:	Q-VAr® systems can be manufactured to any kVAr/MVAr output
System response time:	≤ one cycle (20ms @ 50Hz; 16.6ms @ 60Hz)
Switching transient:	Zero capacitor inrush current
Capacitor dielectric voltage:	440Vac; 525Vac; 690Vac; 816Vac (other voltages available on request)
Rated frequency:	50/60Hz
Capacitance tolerance:	-5% +10%
Discharge resistors:	≤ 50V within 60secs (UL standard 810)
Losses (@ 400V):	Approx 3.0W/kVAr (non-detuned); Approx 6.5W/kVAr (detuned)
Ambient temp. category:	-25/D; -25°C + 55°C (max); highest mean: 45°C/24hrs; 35°C/1yr
Safety features:	Self-healing dielectric; overpressure tear-off fuse
Impregnating agent:	ESTAprop® mineral oil, non-toxic biodegradable(non- PCB) ESTAdry® dry/gas filled on request
Statistical life expectancy:	>150,000 operating hours (ESTAprop®) >130,000 operating hours (ESTAdry®)
Capacitor standards:	IEC 831-1+2; VDE 0560-46+47; EN 60831-1+2; 89/336/EWG; 92/31/EWG;93/68/EWG; UL & ULc; CE
Current measurement:	L1. x/5A or x/1A. Class 1 min
Voltage measurement:	L1-N or L2-L3 (other phase connections possible)
User interface:	Graphical LCD with membrane keyboard. Browser interface available.*
Modbus interface:	RS485 Modbus RTU (slave) available upon request. * <i>Modbus required for browser interface.</i>
Datalogger:	2MB datalogger available upon request

Other voltages and outputs are available upon request. Please contact one of our technical sales engineers for assistance. We will be pleased to help, whatever your capacitor requirements.

Contact Enspect Power

T: +44 (0) 845 057 1188
F: +44 (0) 174 463 4795
E: info@enspecpower.com
W: www.enspecpower.com

North East Offices
Glover Network Centre • Spire Road
Washington • Tyne & Wear • NE37 3HB
United Kingdom

North West Offices
29-31 Shaw Street • St. Helens
Merseyside • WA10 1DG
United Kingdom

All details correct at time of print. In the interest of ongoing product development, we reserve the right to alter specification without prior notice.