

100% simplicity



- large, easy to read backlit display
- easy to use, intuitive menus
- direct display of main measurements
- a special menu allows controller self-configuration

100% safety



- individual protection and isolation of each capacitor step
- clear plastic shielding covering main busbar
- MCCB protection enhances system performance at co-ordination level



100% reliability

- 15 year (130,000 hour) service life
- maintenance free static capacitors

100% performance

- 10% lower power consumption than the previous VARPLUS M capacitor range
- controlled thermal withstand
- simulation on each panel at maximum power
- thermal cooling optimisation
- above standards requirements taken into account (continuous 35°C ambient temperature + maximum in-service power)
- thermal testing in the most severe conditions



100% green

- Varplus² capacitors comply with ROHS (Restriction Of Hazardous Substances) circular
- Varplus² capacitors contain no liquid substances
- Schneider Electric is ISO 9001 and ISO 14001 certified



Schneider Electric power factor correction and filtering

- Innovation
- Performance
- Service
- Quality

An industrial unit at the cutting edge of technology

To produce high quality products and equipment, particularly in a context where the safety of property and people is at stake, only the best is good enough.

Due to the strength of that conviction, dozens of years of experience and all the quality management work carried out by the Schneider Electric Group, RECTIPHASE has acquired an industrial site (ANNECY - France) at the cutting edge of technology, because Safety begins at the production stage.

Being part of an international group, the flexibility of a small team and the experience of tens of MVAR installed in all possible environments over the last 40 years are assurance that each installation is fitted with the best possible equipment.

By improving your Power Factor you can save money, be more efficient and even extend the capacity of your energy supply.

To get our **Free Power Factor audit** please call 0800 652 999.

Some or all of the following information from your power bill will be helpful:

- Demand/Maximum Demand (kVar)
- Charge per kVar (\$)
- Current Power Factor for your site
- Penalty charge for kVar (\$)
- Current retailer and line company

With the Power Factor Correction offer from Schneider Electric it is easy to improve the efficiency of your electrical supply and reduce your energy bill.

For assistance in determining your needs and potential savings, more information and a full range of our Power Factor Correction product offer please visit www.schneider-electric.co.nz and click on What's New, Varsset Power Factor Correction or call us on 0800 652 999.

Note:

Harmonics are a major growing concern in polluting low voltage networks. If you know or are unsure your network has a large percentage of harmonic generating loads (Variable Speed Drives, Rectifiers, AC power controllers, welders, arc furnaces, discharge lamps etc.) that equate to more than 50% of the total connected load, then we recommend getting a Schneider Engineered Services power quality study.

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Varplus² capacitor assembly line

VARSET Power factor correction

Give oxygen to your electrical network



NZSEVARSET0108



Give oxygen to your electrical network

Energy efficiency is vital for everybody...

Improving the quality and availability of electric power and reducing its cost

Shared by all energy producers, engineers, installers and maintenance teams on industrial or service industry sites.

This problem is becoming increasingly acute due to:

- the huge increase in devices generating pollution in all kinds of installations (electronic equipment, variable speed drives, etc.)
- the increasingly unacceptable economic impacts of these phenomena in terms of manufacturing process efficiency
- the increasing pressure from the economic environment, with the emergence of sustainable development, the opening up of the energy market, and the scarcity of fossil fuel raw materials combined with New Zealand's determination to steadily increase our energy independence.

Optimisation is therefore no longer an empty word; it is a requirement that is imposing itself and will continue to do so for all those who use electric power.

LISTEN, UNDERSTAND, ACT

For optimisation to succeed, it must go through three stages:

- **LISTEN:** this means collecting information, about symptoms and other difficulties concerning the operation of the installation. It requires an audit, specific measurements, and recording of the characteristic parameters of the network's key points.
- **UNDERSTAND:** once this information has been collected, the diagnosis must be drawn up, and the corrective actions must be identified and determined.
- **ACT:** this is the decisive phase... removal of network pollution, correction of the power factor, installation of standby or battery back-up networks... and it is also the heart of our expertise.

In all cases, the ideal solution is to correct, but also and above all to monitor the effectiveness of the installed solutions over a period of time; an installation is alive, and like any living thing its characteristics change over time.

LISTEN, UNDERSTAND, ACT guarantees you the energy efficiency you need.

What are the differences between a new or existing installation?

In fact there are very few. Optimisation of the installation must be thought through as early as possible, and ideally at the design stage.

Why wait to pay the bill caused by an installation's deficiency before reacting? It's always easier and more advantageous economically to put in the network measurement and monitoring instruments when the installation is set up.

Varset fully assembled (APFC) automatic power factor correction board



Wall mounted unblocked

kVar	Type	Incomer size	Reference
30	+ NS Breaker without protection	80	65500 65501
45	+ NS Breaker without protection	100	65502 65503
60	+ NS Breaker without protection	100	65504 65505
75	+ NS Breaker without protection	125	65506 65507
90	+ NS Breaker without protection	160	65508 65509

Floor standing unblocked

kVar	Type	Incomer size	Reference
120	without protection + NS Breaker + INS Isolator	N/A 250 250	65512P 65512PCB 65512PI
150	without protection + NS Breaker + INS Isolator	N/A 400 400	65514P 65514PCB 65514PI
180	without protection + NS Breaker + INS Isolator	N/A 400 400	65516P 65516PCB 65516PI
210	without protection + NS Breaker + INS Isolator	N/A 400 400	65518P 65518PCB 65518PI
240	without protection + NS Breaker + INS Isolator	N/A 630 630	65520P 65520PCB 65520PI
270	without protection + NS Breaker + INS Isolator	N/A 630 630	65522P 65522PCB 65522PI
315	without protection + NS Breaker + INS Isolator	N/A 630 630	65524P 65524PCB 65524PI

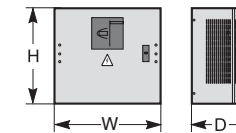
Floor standing blocked (190Hz)

kVar	Type	Incomer size	Reference
100	without protection + NS Breaker + INS Isolator	N/A 250 250	65715P 65715PCB 65715PI
125	without protection + NS Breaker + INS Isolator	N/A 250 250	65719P 65719PCB 65719PI
150	without protection + NS Breaker + INS Isolator	N/A 400 400	65723P 65723PCB 65723PI
175	without protection + NS Breaker + INS Isolator	N/A 400 400	65727P 65727PCB 65727PI
200	without protection + NS Breaker + INS Isolator	N/A 400 400	65729P 65729PCB 65729PI
200	without protection + NS Breaker + INS Isolator	N/A 400 400	65729P2 65729PCB2 65729PI2
225	without protection + NS Breaker + INS Isolator	N/A 630 630	65731P 65731PCB 65731PI
250	without protection + NS Breaker + INS Isolator	N/A 630 630	65733P 65733PCB 65733PI

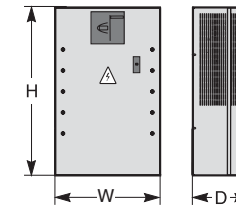
with the ultimate capacitor



Varset dimensions and stepping arrangement



Enclosure C1



Enclosure C2



Prisma Plus Enclosure

Wall mounted unblocked

kVar	Stepping	Type	Dimension H x W x D
30			
45	4 x 7.5kVar	Enclosure C1	450 x 500 x 275
60	6 x 7.5kVar	Enclosure C2	800 x 500 x 275
75	8 x 7.5kVar	Enclosure C2	800 x 500 x 275
90	5 x 15kVar	Enclosure C2	800 x 500 x 275
90	6 x 15kVar	Enclosure C2	800 x 500 x 275

Floor standing unblocked

kVar	Stepping	Type	Dimension H x W x D
120			
150	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655
180	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655
210	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655
240	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655
270	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655
315	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655

Floor standing blocked (190Hz)

kVar	Stepping	Type	Dimension H x W x D
100	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655
125	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655
150	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655
175	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655
200	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655
200	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655
225	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655
250	15+15,30+30,30kVar	Enclosure C3	2200 x 700 x 655