

DATASHEET

Power Factor Correction – Varmatic Senator

Automatically-controlled 3-phase Power Factor Correction Unit

Rating: **300 KVAR (6 stages of 50 KVAR) 415V 50Hz**

Equipped with: 6 stage Regulator, Isolator and Red-Phase Split-Core Multi-Tapped Current Transformer (supplied loose)

The new generation of Varmatic power factor correction equipment incorporates the latest standards for capacitor manufacture (IEC 831/1 BS EN 60831, IEC 70/70A).

The Varmatic Senator offers a high specification of equipment with an extensive range of options, in order to specifically cater for individual site requirements together with value for money which makes the Varmatic range unparalleled in today's marketplace.

The basic package includes:

- Door interlocked triple pole isolator (circuit breaker will be used in units of 2 stage 50KVAR or less)
- Set of terminals for incoming/outgoing control cables from master regulator/unit
- Stage switching contactors
- 500V ac HRC fuses complete with triple pole fuse bases (not if 2 stage 50KVAR or less)
- Hand-off-auto selector switches with stage on indication
- Red-Phase Split-Core Multi-Tapped Current Transformer (supplied loose)
- Control MCBs/fuses
- Where a power factor controller is fitted there is integral power factor indication.

Enclosed in a free-standing, beige RAL 7035, indoor cubicle, suitable for an ambient temperature between 0-35°C, with heat resistant cabling used throughout.

The Varmatic Senator contains SDC Industries' own Varcap capacitors with many features, ie self-healing metallised polypropylene dielectric, two-part electrical and mechanical protection for element fault conditions and internal discharge resistors.

The various optional extras available with the Varmatic Senator include:

- Circuit breaker in lieu of isolator (for units exceeding 50KVAR)
- Stage off indication
- Thermal cut-out/reset facility with indication
- Automatic loss of voltage reset (to be used with above option)
- Voltmeter
- Ammeter with own current transformer
- Mains healthy indication
- Remote stage indication facility
- Forced air ventilation system
- Anti-condensation heater system
- Different paint specification available
- Cubicle size and cable entry box position available to customer specification
- Service/maintenance contract
- Commissioning (UK mainland only)

If any of the above options are required, please specify at time of ordering.

SAVINGS ON CO2 EMISSIONS

EXAMPLE : Based on typical operational hours of 300 per month (savings will obviously increase if your monthly usage is higher than average), your CO₂ savings will be as follows :

Amount of hours in use x months per year x kw losses x CO₂ for each kWh generated*
300 x 12 x 0.05962W* x 0.537kg* = 115.26kg/CO₂ per kvar per annum

Multiply this amount by the amount of KVA_r on the unit supplied
300KVA_r x 115.26

TOTAL CO₂ SAVINGS PER ANNUM = 34,578kg

*Constant, as per DETR calculation

<p>Remote Alarm/ Alert Function</p>	<p>The unit has the option to include a TX-SMS remote alarm/ alert function. This device, which is included within the unit itself, will send automatic alerts to your mobile phone (by SMS), instantaneously indicating and alerting the user of any faults or issues which have occurred. Up to 4 separate faults/warnings can be sent.</p> <p>Features include :</p> <ul style="list-style-type: none"> - 4 inputs report user definable SMS messages (2 x standard DC and 2 x optically isolated) - Full Contact ID reporting to your mobile phone - 2 relay outputs – SPDT relays - 16 independent daily timers for relay operations - Missed call function for relay operation (500 numbers) - Programmable unit with PC software or by SMS - Low voltage AC monitoring - Power monitoring with warnings and restorals - Battery backed time and date - Dual SIM support - Vibration-tamper monitoring. <p>Alternatively, remote monitoring can be set up here at SDC Industries, whereby any fault or issue code alerts will appear directly on your specified Project Engineer's PC or mobile phone.</p>
--------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------