



Principal

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| Gama | VarPlus |
| Product name | VarPlus Logic |
| Device short name | VPL6 |
| Tipo de producto o componente | Power factor controller |

Complementos

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| Number of step output contacts | 6 |
| [Us] rated supply voltage | 90...550 V AC <= 999 kV AC with external VT |
| Measurement current | 0...5 A |
| Measurement voltage | 90...550 V AC 50/60 Hz |
| Operating mode | Manual or automatic |
| Number of quadrant operation for generator application | 4 |
| Device connection | Communication protocol: Modbus interface: RS485 |
| Input function | 1 dry contact (switch for cos phi 2. |
| Colour code | Front : dark grey (RAL 7016) |
| Display type | Backlit LCD |
| Display size | 56 x 25 mm |
| Function available | Automatic detection Manual programming Any step sequence Advanced programming (expert) Automatic initialisation |
| Metering type | Power factor and displacement PF (signed, four quadrant) Total current harmonic distortion THD (I) Power factor average over lifetime Temperature maximum Phase current I1, I2, I3 RMS on load Active power P, P1, P2, P3 on load Reactive power Q, Q1, Q2, Q3 on load Apparent power S, S1, S2, S3 on load Voltage U21, U32, U13, V1, V2, V3 on load |
| Type of measurement | Individual voltage harmonic Power factor Capacitor current overload Irms/I1 Cos φ Ambient temperature inside the cubicle Operating time Tan φ |
| Information displayed | Individual step size in kVAr Number of switching cycles per step Remaining step capacity in % |
| Data recording | 5 alarms |

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| Type of alarms | Step power loss (< 75 %) / Action: message and alarm contact + step blocked Step faulty / Action: message and alarm contact + step blocked High current (> 6 A CT) / Action: message and alarm contact Hunting (unstable regulation) / Action: message and alarm contact + step blocked Low current (< 15 mA CT) / Action: message and alarm contact Capacitor current overload (I _{rms} /I ₁) (> 130 % I ₁) / Action: message and alarm contact + step switched off Overtemperature (50 °C) / Action: message and alarm contact + step switched off Overtemperature (30 °C) / Action: fan switch Overvoltage (+/- 10 %) / Action: message and alarm contact + control stopped Total harmonic distortion (> 7 %) / Action: message and alarm contact + step switched off Overcompensation / Action: message and alarm contact |
| Service life in hours | 100000 h without maintenance |
| Mechanical durability | 65000 cycles without maintenance |
| Input type | Current input CT...X/5 A and X/1 A Phase to neutral Phase to phase Insensitive to CT polarity Insensitive to phase rotation polarity |
| Output type | Control relay : 0.2 A 110 V DC Control relay : 1 A 48 V DC Control relay : 2 A 400 V AC 50/60 Hz Control relay : 1 A 24 V DC Control relay : 5 A 250 V AC 50/60 Hz Control relay : 5 A 120 V AC 50/60 Hz Fan : 5 A 250 V AC 50/60 Hz Fan : 1 A 48 V DC Alarm relay : 5 A 250 V AC 50/60 Hz Alarm relay : 1 A 48 V DC |
| Current of common | 10 A |
| Settings operating mode | Manual Automatic |
| Type of setting | Choice of stepping programs : linear Step configuration programming : auto Step configuration programming : fixed Target cos phi : dual cos φ Choice of stepping programs : auto Choice of stepping programs : LIFO Delay between 2 successive switch on the same step : 5...1200 s Step configuration programming : off Target cos phi : 0.7 inductive...0.7 capacitive |
| Measurement accuracy | Voltage +/- 1 % Current +/- 1 % Frequency +/- 1 % Energy (P,Q,S) +/- 2 % Cos φ +/- 2 % Total voltage harmonic distortion THD (U) +/- 2 % Individual voltage harmonic +/- 3 % Temperature +/- 3 °C |
| Time delay range | 1...6500 s on reconnection 1...6500 s on response |
| Equipo suministrado | User manual |
| Mounting mode | Flush-mounted |
| Mounting support | 1...3 mm panel |
| Mounting location | In cabinet |
| Cut-out dimensions | 138 x 138 mm |
| Altura | 144 mm |
| Anchura | 144 mm |
| Profundidad | 58 mm |
| Peso del producto | 0.6 kg |

Ambiente

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| Normas | IEC 61000-6-2 EN 61010-1 IEC 61000-6-4 IEC 61326-1 UL 61010-1 |
| Certificaciones de producto | EAC CE CNRTL NRTL |
| IP degree of protection | Rear face : IP20 Front face : IP41 |
| Operating altitude | <= 2000 m |
| Temperatura ambiente de trabajo | -20...60 °C |
| Temperatura ambiente de almacenamiento | -40...85 °C |