



Main

Range	PowerLogic
Product name	PowerLogic PFC Controller
Device short name	VPL6
Product or Component Type	Power factor controller

Complementary

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 Modbus RS485
Input function	Switch 1 x dry contact
Colour code	Front dark grey RAL 7016
Display Type	Backlit LCD
Display size	56 x 25 mm
Function Available	Automatic detection Advanced programming (expert) Manual programming Any step sequence 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	Ambient temperature inside the cubicle Tan ϕ Individual voltage harmonic Cos ϕ Operating time Power factor Capacitor current overload Irms/I1
Information Displayed	Number of switching cycles per step Remaining step capacity in % Individual step size in kVAR

Type of alarms	Step power loss < 75 %)message and alarm contact + step blocked Step faultymessage and alarm contact + step blocked High current > 6 A CT)message and alarm contact Hunting (unstable regulation)message and alarm contact + step blocked Low current < 15 mA CT)message and alarm contact Overcompensationmessage and alarm contact Capacitor current overload (I _{rms} /I ₁) > 130 % I ₁)message and alarm contact + step switched off Over Temperature 50 °C)message and alarm contact + step switched off Over Temperature 30 °C)fan switch Over Voltage +/- 10 %)message and alarm contact + control stopped Total harmonic distortion > 7 %)message and alarm contact + step switched off
Data recording	5 alarms
Operational Hours alarm	100000 h without maintenance
Operational counter alarm	65000 cycles without maintenance
Input type	Insensitive to phase rotation polarity Insensitive to CT polarity Phase to neutral Current input CT...X/5 A and X/1 A Phase to phase
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
Maximum at the common terminal	10 A
Settings operating mode	Manual Automatic
Type of setting	Choice of stepping programs auto Choice of stepping programs LIFO Choice of stepping programs linear Delay between 2 successive switch on the same step 5...1200 s Step configuration programming auto Step configuration programming off Step configuration programming fixed Target cos phi 0.7 inductive...0.7 capacitive Target cos phi dual cos φ
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)
Provided Equipment	User Manual
Mounting Mode	Flush-mounted
Mounting support	Panel 0.04...0.12 in (1...3 mm)
Mounting Location	In cabinet
Cut-out dimensions	138 x 138 mm
Height	5.67 in (144 mm)
Width	5.67 in (144 mm)
Depth	2.28 in (58 mm)
Net Weight	1.32 lb(US) (0.6 kg)

Environment

Standards	IEC 61000-6-2 EN 61010-1 IEC 61000-6-4 IEC 61326-1 UL 61010-1
Product Certifications	EAC NRTL CNRTL CE
IP degree of protection	Front face IP41 Rear face IP20
Operating altitude	<= 6561.68 ft (2000 m)
Ambient Air Temperature for Operation	-4...140 °F (-20...60 °C)
Ambient Air Temperature for Storage	-40...185 °F (-40...85 °C)

Ordering and shipping details

Category	00050-PWR FACT. CAP - AUTOMATIC
Discount Schedule	DE2C
GTIN	3606480800108
Returnability	No

Packing Units

Unit Type of Package 1	Db
Number of Units in Package 1	1
Package 1 Height	3.62 in (9.2 cm)
Package 1 Width	7.01 in (17.8 cm)
Package 1 Length	7.24 in (18.4 cm)
Package 1 Weight	24.55 oz (696 g)
Unit Type of Package 2	Doboz
Number of Units in Package 2	8
Package 2 Height	11.81 in (30 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	13.34 lb(US) (6.05 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	64
Package 3 Height	19.69 in (50 cm)
Package 3 Width	31.50 in (80 cm)
Package 3 Length	23.62 in (60 cm)
Package 3 Weight	133.04 lb(US) (60.348 kg)

Offer Sustainability

REACH Regulation	 REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant  EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.