



D-Vo Light

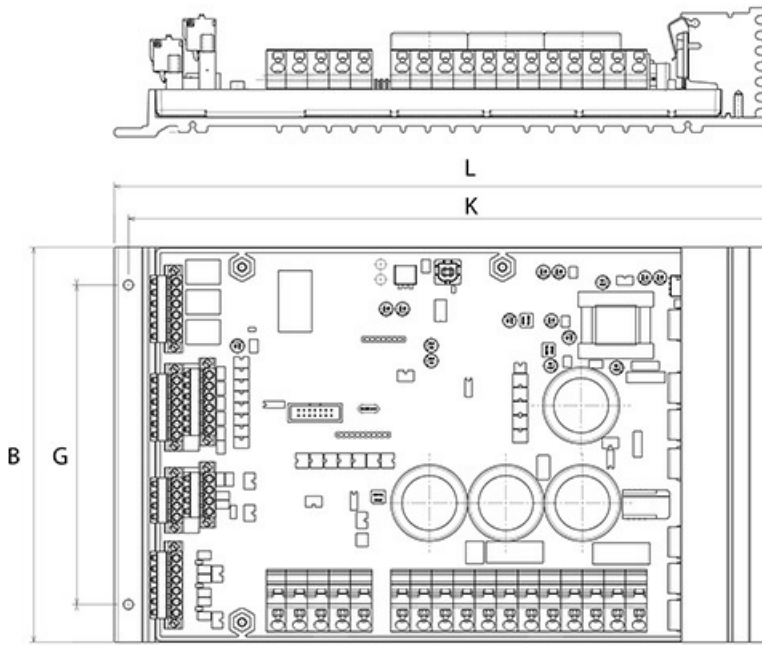
Model	D-Vo Light
Frame size	400 ÷ 900
Regulator	D-Vo Light
Part number	10024471
Compliance	CE DNV / GL type approved

Main Data

Generator frame size	<p>Standard: all marine generators</p> <p>On request: any Marelli Motori generator from 160 frame size</p>
AVR supply	<p>Auxiliary winding</p> <p>PMG</p> <p>Mains</p>
Voltage sensing	Single phase 3-phase
Voltage remote control	Arrangement
Radio interference suppressor	Arrangement for external filters
Over-excitation device	Arrangement for varicomp PMG
Parallel operation with the mains	Internal

Parallel operation with similar generators	Arrangement
Standard protections	Field over-current, field over-voltage, generator over/under voltage, generator over-current, loss of sensing, Diode monitoring (DMS)
Limiters	Under-frequency, over/under-excitation
Function	PC interface, Modbus TCP/IP, FRT detection, soft start, 9 digital input, 3 digital outputs, 3 analogue inputs, external potentiometer
Electrical characteristics	
Power supply voltage	Up to 250Vac @ 50 ÷ 400Hz - 1-ph/3-ph Control power supply 24 ÷ 250 Vac @ 50 ÷ 400 Hz - 1-ph/3-ph
Power supply source	Auxiliary windings, mains, PMG
Voltage sensing type	1-phase / 3-phase
Voltage sensing range	100 ÷ 480 Vac
Current sensing type	1-phase / 3-phase
Current sensing range	1A
Maximum continuative field current	0 ÷ 10 Adc
Maximum forcing field current	0 ÷ 20 Adc
Maximum field voltage	200 Vdc

Field resistance	3 Ω ÷ 20 Ω
Regulation accuracy from no load to full load	±0.25% of rated voltage
Steady state accuracy	±0.1 % of rated voltage
Accuracy with ±4% engine governing	±1 % of rated voltage
PF / VAR / FCR modes	<p>PF mode: ±0.005PF(with PF between 0.9 lagging and 0.9 leading)</p> <p>VAR mode: ±2% of rated power</p> <p>FCR mode: ±2% of rated exciter current</p>
Voltage matching	±2% of rated voltage
Thermal Drift	±0.5 % of rated voltage
Response time	1 cycle
Operating temperature	-30°C ÷ +70°C
Storage temperature	-40°C ÷ +80°C
Features	
Interface	D-Vo Dashboard
Function	<p>Droop compensation</p> <p>Soft start</p> <p>Voltage matching</p>
Protection	<p>Under-frequency limiter</p> <p>Over-excitation limiter</p> <p>Under-excitation limiter</p> <p>Field over-voltage</p> <p>Field over-current</p> <p>Generator over-voltage</p> <p>Generator under-voltage</p> <p>Generator over-current</p> <p>Loss of sensing</p> <p>Diode monitoring</p>

Control	<p>2 current inputs (4/20mA) 1 voltage input (+/-10V) connection to external potentiometer 100kOhm available 9 digital contact inputs (8 programmable) 3 digital outputs</p>
Dimensions and weight	
L	335 mm
B	183,5 mm
K	322 mm
J	148,5 mm
H	60 mm
Weight	3000g
Drawing	 <p>The drawing consists of two views: a side view and a top view. The side view shows the physical profile of the control unit, with dimension 'L' indicating the total length and 'K' indicating the depth. The top view shows the internal layout of the control panel, with dimension 'B' indicating the width and 'G' indicating the height of the main component area. Various electrical components, connectors, and terminals are visible in the top view.</p>