OPTOTRONIC[®] OTe 90/220-240/4x500 E

4x500mA/ 2x1000mA Outdoor Constant Current LED Power Supply

Technical Information

Edition: March 2012

subject to change

Technical data

Reference:	OTe 90/220-240/4x500 E		
For LED modules:	500 mA / 1000mA LED		
Nominal Voltage:	220 – 240 V _{AC}		
Line current, nominal:	0,44 A @ 230V _{AC}		
Mains frequency:	50/60 Hz		
Protection Class:	I		
Output current:	500 mA / 1000 mA		
(Remark)	4 channels / 2 channels, Tolerance: +/- 10%		
Output voltage:	≤ 45 V _{DC}		
(Remark)	maximum 52V _{DC}		
Output Power:	90 W		
(Remark)	Partial Load 35W 90W		
Dated Davier factors	≥ 0,95 (> 50W total output power) @ 230V _{AC}		
Rated Power factor:	≥ 0,90 (> 36W total input power) @ 230V _{AC}		
Power loss:	< 15 Watt max.		
ECG efficiency:	≥ 87 %		
(Remark)	full load at 230V		
Power Loss in no load condition:	< 4 W (4 channels)		
Input Voltage:	198 – 264 VAC		
(Remark)	Permitted voltage range		
DC Voltage:	No		
Dimmable:	No		
No-load proof:	Yes		
Short circuit protection:	Automatic, reversible		
Overload protection:	Automatic, reversible		
Overtemperature protection:	No		
(Remark)	only for AA3132100DG		
	•		
Ambient temperature range, t _a :	-25 °C to +55 °C		
Max. case temperature at t _c point:	70°C		
ECG Lifetime:	50.000h		
(Remark)	at tcase = 65 °C at tc point and 10% failure rate		
Maximum casing temperature in case of fault	130 °C		
(Remark)			



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Inrush current:	≤ 40A		
(Remark)	t _{width} @ 300μs		
Max. no. of ECG @ circuit	3		
breakers 10 A (B type):			
Max. no. of ECG @ circuit	6		
breakers 16 A (B type):			
Max. no. of ECG @ circuit			
breakers 16 A (B type):	-		
In combination with EBN-OS			
Cable cross section	Input: ~ 0,83 mm ² / Output: ~ 0,33 mm ²		
input side / output side:	Input: 18 AWG / Output: 22 AWG		
(Remark)	Flexible		
Cable length	~ 35cm / ~ 30cm		
Input side / output side:	- 35cm / - 36cm		
Wire preparation length	7 - 9 mm / 7 - 9 mm		
Input side / output side:	7 - 9 111117 7 - 9 111111		
Max. cable length - system:	10 m		
Geometry (I x b x h):	238 x 89 x 46 mm		
Mounting hole spacing/length:	221 mm		
Mounting hole spacing/width:	62 mm		
Weight:	~ 1,8 kg		
IP Code:	IP64		
Safety:	IEC 61347-1, IEC 61347-2-13		
Performance:	IEC 62384		
Radio interference:	CISPR 15		
Harmonic content:	IEC 61000-3-2		
Voltage fluctuations:	IEC 61000-3-3		
Immunity:	IEC 61547		
Vibration tested:	5 -150 Hz sine sweep, 2g acceleration		
Surge capability:	L-N: 3kV, L/N – Ground: 3,5 kV;		
	(LED Module connected to PE)		
Galvanic isolation	2.75 kV/rmo		
primary/secondary:	3,75 kVrms		
(Remark)	SELV-equivalent		
Approvals:	CE		



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OTe 90/220-240/4x500 E

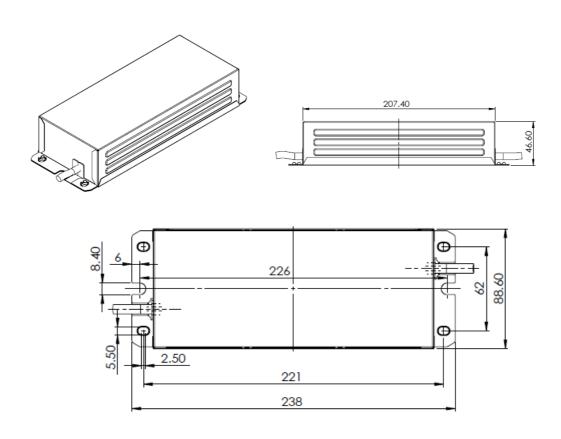
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Geometry

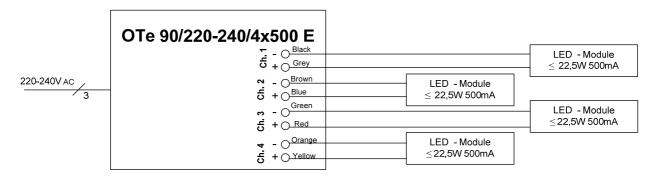


Ordering information

	Version	EAN 10 (1pcs)	EAN 40 (6pcs)
OTe 90/220-240/4x500 E	AA31321	4008321651600	4008321651617

Wiring diagram

4 Channels (500mA)





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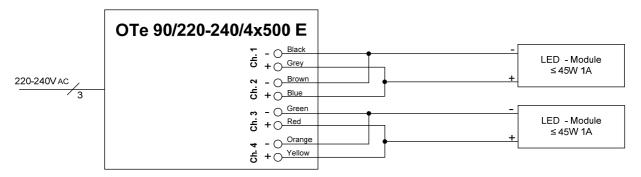
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2 Channels (2x1000mA)



Cable must connect according to above color pair.

Installation notes

- The luminaire manufacturer is responsible for providing the required clearences and creepage distances and also for the protection against electrical shock, especially for the line and load wires.
- 2. Ground connection of the OTe 90/220-240/4x500 E is mandatory for safety and EMC reasons. The ground connection could be done either with the input cable or via the housing case. If ground connection is done via the housing case, proper countersunk screws should be used.
- 3. Ballast losses and LED Module heat radiation can lead to heat accumulation in a complete closed case. Therefore it is necessary to ensure, that the temperature at the measuring point t_c does not exceed the maximum value.
- 4. Output current could be doubled by putting two channels together according the above color pairs
- 5. Can be treated as independent type for indoor application with respect of the relevant standard IEC 60598 and IEC 61347

Instruction sheet

Please consult the instruction sheet for further important information on e.g. wire stripping and wiring limitations in system installations. The instruction sheet is enclosed with the device or available upon request.

