OPTOTRONIC[®] OTe 90/220-240/4x350 E 4x350mA/ 2x700mA Outdoor Constant Current LED Power Supply

Information Edition: March 2012 subject to change

Technical

Technical data

For LED modules:350 mA / 700 mA LEDNominal Voltage:220 - 240 V_{AC} Line current, nominal:0,4 A @ 230 V_{AC} Mains frequency:50/60 HzProtection Class:1Output current:350 mA / 700 mA(Remark)4 channels / 2 channels, Tolerance: +/- 10%Output voltage: \leq 58 V_{DC} (Remark)maximum $60V_{DC}$ Output Power:81 W(Remark)Partial Load 36W 81WRated Power factor: \geq 0,95 (> 50W total output power) @ 230 V_{AC} Power loss:< 15 Watt max.ECG efficiency: \geq 87 %(Remark)full load at 230VPower Loss in no load condition:< 4 W (4 channels)Input Voltage:198 - 264 VAC(Remark)Permitted voltage rangeDC Voltage:NoDimmable:NoNo-load proof:YesShort circuit protection:Automatic, reversibleOverload protection:Automatic, reversibleOverload protection:Automatic, reversibleOverload protection:No(Remark)only for AA3132200DG VersionMax. case temperature range, ta:-25 °C to +55 °CMax. case temperature at tc point.70°CECG Lifetime:50.000h(Remark)at tease = 65 °C at tc point and 10% failure rateMaximum casing temperature in case of fault130 °Conly for AA3132200DGonly for AA3132200DG	Reference:	OTe 90/220-240/4x350 E
Line current, nominal: $0,4 A @ 230V_{AC}$ Mains frequency: $50/60 Hz$ Protection Class:IOutput current: $350 mA / 700 mA$ $(Remark)$ $4 channels / 2 channels, Tolerance: +/- 10%$ Output voltage: $\leq 58 V_{DC}$ $(Remark)$ maximum $60V_{DC}$ Output Power: $81 W$ $(Remark)$ Partial Load $36W 81W$ Rated Power factor: $\geq 0,95 (> 50W total output power) @ 230V_{AC}$ $\geq 0,90 (> 36W total input power) @ 230V_{AC}$ Power loss: $< 15 Watt max.$ ECG efficiency: $\geq 87 \%$ $(Remark)$ full load at 230VPower Loss in no load condition: $< 4 W (4 channels)$ Input Voltage: $198 - 264 VAC$ $(Remark)$ Permitted voltage rangeDC Voltage:NoDimmable:NoNo-load proof:YesShort circuit protection:Automatic, reversibleOverload protection:Automatic, reversibleOvertemperature protection:NoMax. case temperature at tc point: $70^{\circ}C$ ECG Lifetime: $50.000h$ (Remark)at tcase = 65 °C at tc point and 10% failure rateMaxinum casing temperature in case of fault $130^{\circ}C$	For LED modules:	350 mA / 700 mA LED
Mains frequency: $50/60 \text{ Hz}$ Protection Class:IOutput current: $350 \text{ mA} / 700 \text{ mA}$ $(Remark)$ $4 \text{ channels / 2 channels, Tolerance: +/- 10%}$ Output voltage: $\leq 58 \text{ V}_{DC}$ $(Remark)$ maximum 60V_{DC} Output Power: 81 W $(Remark)$ Partial Load $36W 81W$ Rated Power factor: $\geq 0.95 (> 50W \text{ total output power}) @ 230V_{AC}$ $\geq 0.90 (> 36W \text{ total input power}) @ 230V_{AC}$ Power loss: $< 15 \text{ Watt max}.$ ECG efficiency: $\geq 87 \%$ $(Remark)$ full load at 230VPower Loss in no load condition: $< 4 W (4 \text{ channels})$ Input Voltage: $198 - 264 \text{ VAC}$ $(Remark)$ Permitted voltage rangeDC Voltage:NoDimmable:NoNo-load proof:YesShort circuit protection:Automatic, reversibleOverload protection:NuAmbient temperature protection:NoMax. case temperature at tc point: 70° CECG Lifetime: $50.000h$ $(Remark)$ at tcase = 65 °C at tc point and 10% failure rateMaxinum casing temperature in case of fault 130° C	Nominal Voltage:	220 – 240 V _{AC}
Protection Class:IOutput current: $350 \text{ mA} / 700 \text{ mA}$ $(Remark)$ 4 channels / 2 channels, Tolerance: +/- 10%Output voltage: $\leq 58 \text{ V}_{DC}$ $(Remark)$ maximum $60V_{DC}$ Output Power: 81 W $(Remark)$ Partial Load $36W 81W$ Rated Power factor: $\geq 0.95 (> 50W \text{ total output power}) @ 230\text{ V}_{AC}\geq 0.90 (> 36W \text{ total input power}) @ 230\text{ V}_{AC}Power loss:< 15 \text{ Watt max.}ECG efficiency:\geq 87 \%(Remark)full load at 230VPower Loss in no load condition:< 4 \text{ W} (4 channels)Input Voltage:198 - 264 \text{ VAC}(Remark)Permitted voltage rangeDC Voltage:NoDimmable:NoNo-load proof:YesShort circuit protection:Automatic, reversibleOverload protection:Automatic, reversibleOvertemperature protection:NoAmbient temperature range, t_a:-25 \ ^{\circ}C to +55 \ ^{\circ}CMax. case temperature at t_c point:70\ ^{\circ}CECG Lifetime:50.000h(Remark)at t_{case} = 65\ ^{\circ}C at tc point and 10\% failure rateMaximum casing temperature in case of fault130\ ^{\circ}C$	Line current, nominal:	0,4 A @ 230V _{AC}
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Rated Power factor. $\geq 0,90 (> 36W \text{ total input power)} @ 230V_{AC}$ Power loss:< 15 Watt max.	(Remark)	Partial Load 36W 81W
ECG efficiency: $\geq 87 \%$ full load at 230VPower Loss in no load condition: $< 4 W (4 \text{ channels})$ Input Voltage: $198 - 264 \text{ VAC}$ (Remark)DE Voltage:NoDimmable:NoDimmable:NoOverload proof:YesShort circuit protection:Automatic, reversibleOverload protection:NoOverlemperature protection:No(Remark)only for AA3132200DG VersionAmbient temperature range, t_a : $-25 \ ^{\circ}C$ to $+55 \ ^{\circ}C$ Max. case temperature at t_c point: $70\ ^{\circ}C$ ECG Lifetime: $50.000h$ (Remark)(Remark)at $t_{case} = 65\ ^{\circ}C$ at t_c point and 10% failure rateMaximum casing temperature in case of fault $130\ ^{\circ}C$	Rated Power factor:	· · · / •
(Remark)full load at 230VPower Loss in no load condition:< 4 W (4 channels)	Power loss:	< 15 Watt max.
Power Loss in no load condition: < 4 W (4 channels)	ECG efficiency:	≥ 87 %
Input Voltage: $198 - 264$ VAC(Remark)Permitted voltage rangeDC Voltage:NoDimmable:NoDimmable:NoNo-load proof:YesShort circuit protection:Automatic, reversibleOverload protection:Automatic, reversibleOverload protection:No(Remark)only for AA3132200DG VersionAmbient temperature range, t_a : -25 °C to $+55$ °CMax. case temperature at t_c point:70°CECG Lifetime:50.000h(Remark)at $t_{case} = 65$ °C at t_c point and 10% failure rateMaximum casing temperature in case of fault130 °C	(Remark)	full load at 230V
(Remark)Permitted voltage rangeDC Voltage:NoDimmable:NoDimmable:NoNo-load proof:YesShort circuit protection:Automatic, reversibleOverload protection:Automatic, reversibleOverload protection:No(Remark)only for AA3132200DG VersionAmbient temperature range, t_a :-25 °C to +55 °CMax. case temperature at t_c point:70°CECG Lifetime:50.000h(Remark)at t_case = 65 °C at t_c point and 10% failure rateMaximum casing temperature in case of fault130 °C	Power Loss in no load condition:	< 4 W (4 channels)
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Short circuit protection:Automatic, reversibleOverload protection:Automatic, reversibleOvertemperature protection:No $(Remark)$ only for AA3132200DG VersionAmbient temperature range, t_a :-25 °C to +55 °CMax. case temperature at t_c point:70°CECG Lifetime:50.000h $(Remark)$ at $t_{case} = 65 °C$ at t_c point and 10% failure rateMaximum casing temperature in case of fault130 °C		
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Overtemperature protection: (Remark)No only for AA3132200DG VersionAmbient temperature range, t_a : -25 °C to +55 °CAmbient temperature at t_c point: TO°CECG Lifetime: (Remark)50.000h (Remark)Maximum casing temperature in case of fault130 °C		
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(Remark)at $t_{case} = 65 \degree C$ at t_c point and 10% failure rateMaximum casing temperature in case of fault130 \degree C	Max. case temperature at t _c point:	70°C
Maximum casing temperature in 130 °C	ECG Lifetime:	50.000h
case of fault	(Remark)	at t _{case} = 65 °C at t _c point and 10% failure rate
		130 °C
	(Remark)	only for AA3132200DG



OPTOTRONIC[®] OTe 90/220-240/4x350 E 4x350mA/ 2x700mA Outdoor Constant Current LED Power Supply

Technical Information

Edition: March 2012 subject to change

Inrush current: ≤ 40A twidth @ 300µs (Remark) 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 mm² / Output: ~ 0,33 mm² input side / output side: Input: 18 AWG / Output: 22 AWG (Remark) Flexible Cable length ~ 35cm / ~ 30cm Input side / output side: Wire preparation length 7 - 9 mm / 7 - 9 mm Input side / output side: 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 ~ 1,8 kg Weight: IP Code: IP64 Safety: IEC 61347-1, IEC 61347-2-13 Performance: IEC 62384 Radio interference: CISPR 15 IEC 61000-3-2 Harmonic content: 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 3,75 kVrms primary/secondary : (Remark) SELV-equivalent CE Approvals:

OPTOTRONIC[®] **Technical** Information OTe 90/220-240/4x350 E 4x350mA/ 2x700mA Edition: March 2012 subject to change **Outdoor Constant Current LED Power Supply** Geometry 207.40 80 46. Ð Œ 쉭 226 8 3 88 Ð 3 2.50 221 238 **Ordering information** Version EAN 10 (1pcs) EAN 40 (6pcs)

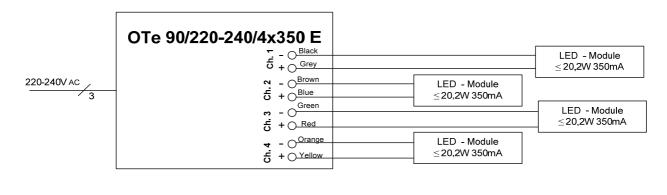
Wiring diagram

4008321637345

AA31322

4 Channels (350mA)

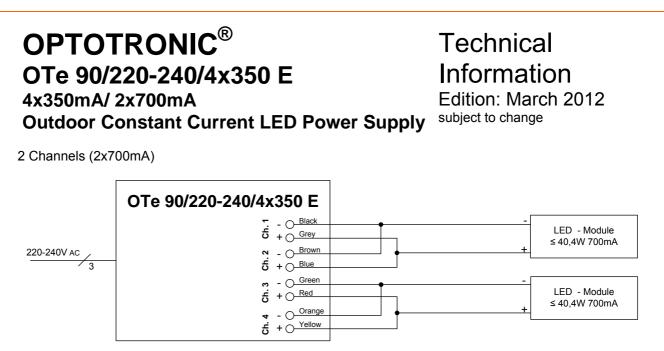
OTe 90/220-240/4x350 E



2012-03-02 AA3132200DG



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Cable must connect according to above color pair.

Installation notes

- 1. 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 90/220-240/4x350 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.

