

Neon Convertors

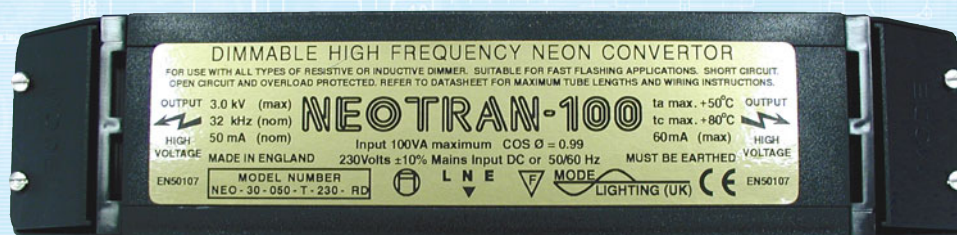
NEOTRAN-100



Fixing centers:-277mm x 48mm



- NEO-60-025-T-RD
- NEO-30-050-T-RD
- NEO-20-075-T-RD
- NEO-10-150-T-RD



NEOTRAN-100

Dimmable...

- Dimmable with all types of dimmer.
- Earth leakage protection.
- Constant current High Frequency output.
- No minimum length of tubing.
- Open circuit, short circuit and overload protected.
- Lightweight and compact size.
- Complies with EC EMC and Low Voltage Directives (CE).
- Designed to meet EN 61050 and EN 50107/EN61347-2-10 (Draft)
- Terminal covers with cable clamps.
- Fitted mains input cable.
- Mode products are guaranteed for two years.

TECHNICAL DATA		NEO-60-025-T	NEO-30-050-T	NEO-20-075-T	NEO-10-150-T
INPUT	Voltage Power Power Factor Frequency Fitted Cable	* 230 Volts +/-10% 100 watts maximum 0.99 DC or 50/60 Hz 0.75mm ² x 1.5 metres	* 230 Volts +/-10% 100 watts maximum 0.99 DC or 50/60 Hz 0.75mm ² x 1.5 metres	* 230 Volts +/-10% 100 watts maximum 0.99 DC or 50/60 Hz 0.75mm ² x 1.5 metres	* 230 Volts +/-10% 100 watts maximum 0.99 DC or 50/60 Hz 0.75mm ² x 1.5 metres
OUTPUT	Voltage Current S/C Current Frequency Connection	6000V maximum 25mA nominal 30mA maximum 32kHz Brass terminals	3000V maximum 50mA nominal 60mA maximum 32kHz Brass terminals	2000V maximum 75mA nominal 90mA maximum 32kHz Brass terminals	995V maximum 150mA nominal 180mA maximum 32kHz Brass terminals
EFFICIENCY		92% typical	92% typical	92% typical	92% typical
REGULATION		5% typical	5% typical	5% typical	5% typical
ISOLATION		4240 volt to EN 60065	4240 volt to EN 60065	4240 volt to EN 60065	4240 volt to EN 60065
TEMPERATURE	Ambient Case	-20°C to +50°C maximum. +80°C maximum	-20°C to +50°C maximum. +80°C maximum	-20°C to +50°C maximum. +80°C maximum	-20°C to +50°C maximum. +80°C maximum
DIMENSIONS		296mm x 65mm x 42mm	296mm x 65mm x 42mm	296mm x 65mm x 42mm	296mm x 65mm x 42mm
FIXING CENTRES		277mm x 48mm	277mm x 48mm	277mm x 48mm	277mm x 48mm
WEIGHT		500 grammes	500 grammes	500 grammes	500 grammes
PROTECTION	Open Circuit Overload Earth Leakage	Shut down Shut down Short circuit proof Shut down	Shut down Shut down Short circuit proof Shut down	Shut down Shut down Short circuit proof Shut down	Shut down Shut down Short circuit proof Shut down
FUSING	Primary	Fusible PCB link	Fusible PCB link	Fusible PCB link	Fusible PCB link
EMC EMISSION		EN 55015	EN 55015	EN 55015	EN 55015
EMC IMMUNITY		EN 61547	EN 61547	EN 61547	EN 61547
HARMONICS		EN 61000-3-2	EN 61000-3-2	EN 61000-3-2	EN 61000-3-2
SAFETY		EN 61050 EN 50107 (Draft) EN 61347-2-10 (Draft)	EN 61050 EN 50107 (Draft) EN 61347-2-10 (Draft)	EN 61050 EN 50107 (Draft) EN 61347-2-10 (Draft)	EN 61050 EN 50107 (Draft) EN 61347-2-10 (Draft)
CASE MATERIAL		Flame retardant to UL94 - V0	Flame retardant to UL94 - V0	Flame retardant to UL94 - V0	Flame retardant to UL94 - V0
CASE COLOUR		Black	Black	Black	White

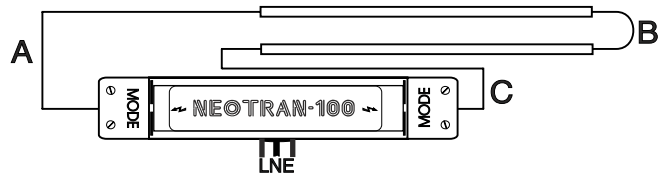
* 115 Volts ±10% versions available to special order.

DESCRIPTION

Mode NEOTRAN High Frequency Electronic Neon and Argon Convertors have unique circuitry for fast flashing and smooth dimming with all types of dimmer. They are an ideal choice for static or animated displays, all types of interior signs, cornice lighting and discotheque lighting. They have a considerable weight and size advantage over similarly rated wirewound transformers.

Under load fault conditions the NEOTRAN will shut down requiring the mains supply to be switched off for ten seconds to reset the convertor.

CONNECTION



INSTALLATION INSTRUCTIONS

The NEOTRAN operates at high frequency (32kHz) and it is important that the HT lead capacitance is kept to a minimum. Observe the following:-

- Leads A and C must be as short as possible and within 10% of each other in length. See maximum cable length chart below.
- Use the correct type of HT cable. Do not use screened HT cable types A, D, or E. For HT wiring use either of these low capacitance cables:
 - i) Type C - 8.0 mm PVC sheathed silicone with a minimum silicone diameter of 6.5 mm.
 - ii) Type H - 6.5 mm PVC sheathed polyethylene with a minimum polyethylene diameter of 3.0 mm.
- Separate all HT cables and tubes of different circuits by at least 30 mm.
- Observe the maximum total tube length as specified in the loading charts as below.

The Mode NEOTRAN should be mounted in a well ventilated position and should not be covered by insulation materials. It can be safely mounted onto any metal surface. Ensure that all cables are secured by the cable clamps and that the terminal covers are correctly fitted.

Installation should be in accordance with the relevant National Wiring Regulations and other applicable Regulations. Compliance with the EC EMC and Low Voltage Directives may be invalidated if not used or installed according to the published specification.

H.T. (OUTPUT) CABLE LENGTHS

MAXIMUM CABLE LENGTH: A + B + C (see connection diagram)				
MOUNTING SURFACE	NEOTRAN 60-025-T	NEOTRAN 30-050-T	NEOTRAN 20-075-T	NEOTRAN 10-150-T
Mounted directly onto Metal. Use only type C cable.	4m	8m	12m	12m
Mounted directly onto Brick or Concrete	5m	10m	15m	15m
Mounted on 35 mm supports above any surface	10m	20m	30m	30m

LOADING CHARTS (100VA)

All tubes must be connected in series up to the total maximum tube length as detailed below. All tube lengths are in metres and are measured between electrodes.

MODEL 60-025	ARGON GAS (BLUE)					MODEL 30-050	ARGON GAS (BLUE)					MODEL 20-075	ARGON GAS (BLUE)					MODEL 10-150	ARGON GAS (BLUE)																
ømm	N° OF TUBES					ømm	N° OF TUBES					ømm	N° OF TUBES					ømm	N° OF TUBES																
	Total length (metres)						Total length (metres)						Total length (metres)						Total length (metres)																
20	12.8	12.6	12.4	12.2	12.0	20	6.4	6.2	6.1	6.0	5.9	25	4.6	4.5	4.4	4.3	4.2	25	2.3	2.2	2.1	2.0	1.9	20	2.1	2.0	1.9	1.8	1.7	18	1.8	1.7	1.6	1.5	1.4
18	11.0	10.8	10.6	10.4	10.2	18	5.6	5.4	5.3	5.2	5.1	20	4.2	4.1	4.0	3.9	3.8	20	2.1	2.0	1.9	1.8	1.7	18	1.8	1.7	1.6	1.5	1.4						
15	9.2	9.0	8.8	8.6	8.4	15	4.4	4.3	4.2	4.1	4.0	18	3.6	3.5	3.4	3.3	3.2	18	1.8	1.7	1.6	1.5	1.4	15	2.9	2.8	2.7	2.6	2.5						
12	7.4	7.2	7.0	6.8	6.6							15	2.9	2.8	2.7	2.6	2.5																		
10	6.4	6.2	6.0	5.8	5.6																														

MODEL 60-025	NEON GAS (RED)					MODEL 30-050	NEON GAS (RED)					MODEL 20-075	NEON GAS (RED)					MODEL 10-150	NEON GAS (RED)																
ømm	N° OF TUBES					ømm	N° OF TUBES					ømm	N° OF TUBES					ømm	N° OF TUBES																
	Total length (metres)						Total length (metres)						Total length (metres)						Total length (metres)																
20	10.6	10.4	10.2	10.0	9.8	20	5.4	5.3	5.2	5.1	5.0	25	3.8	3.7	3.6	3.5	3.4	25	1.9	1.8	1.7	1.6	1.5	20	1.8	1.7	1.6	1.5	1.4	18	1.5	1.4	1.3	1.2	1.1
18	9.0	8.8	8.6	8.4	8.2	18	4.6	4.5	4.4	4.3	4.2	20	3.6	3.5	3.4	3.3	3.2	20	1.8	1.7	1.6	1.5	1.4	18	1.5	1.4	1.3	1.2	1.1						
15	7.6	7.4	7.2	7.0	6.8	15	3.8	3.7	3.6	3.5	3.4	18	3.0	2.9	2.8	2.7	2.6	18	1.5	1.4	1.3	1.2	1.1	15	2.4	2.3	2.2	2.1	2.0						
12	6.0	5.8	5.4	5.2	5.0							15	2.4	2.3	2.2	2.1	2.0																		
10	5.4	5.2	5.0	4.8	4.2																														