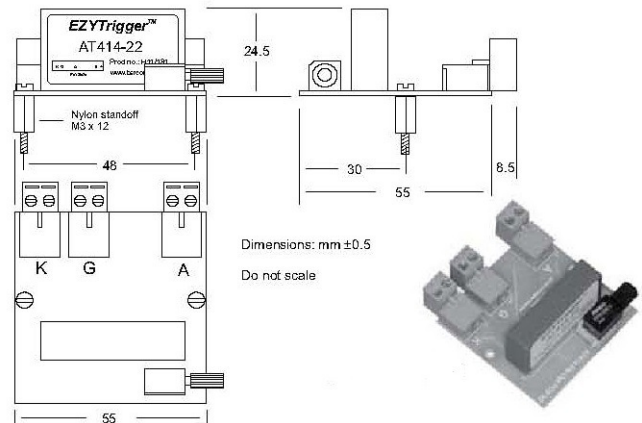
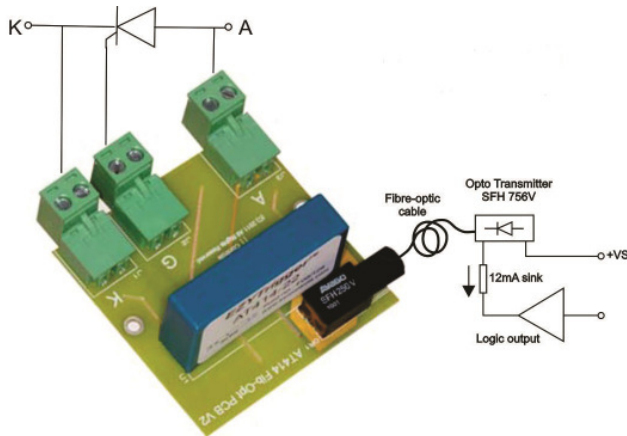


## BT 414

Line voltage 100 – 690V<sub>rms</sub>

### Applications:

- Ready for connection PCB Assembly with AT414-22 EZYTrigger and optical fibre receiver device
- Optical control of a single thyristor with up to 25m fibre-optic cable
- Optical control of any thyristor type including also with amplifying gate



### Absolute Maximum Ratings

### EZYTrigger Type

Parameter	Symbol	AT414 – 22
Peak voltage – positive and negative	V <sub>p</sub>	2200 V
Nominal mains voltage	V <sub>m</sub>	690 V
Continuous DC voltage	V <sub>=</sub>	690 V
Turn-on delay for gate current >1A	t <sub>gd</sub>	5 μs
Input-Output isolation	V <sub>i</sub>	6000V <sub>rms</sub> 50Hz 1min VDE0884
Input-Output transient immunity	(dv/dt) <sub>c</sub>	5000 V/μs
Device transient immunity	(dv/dt) <sub>d</sub>	2000 V/μs
Ambient temperature range	T <sub>a</sub>	-20°C to +85°C

### Technical Data at 25°C

200mA gate current threshold	V <sub>gtl</sub>	16 V
1.8A gate current threshold	V <sub>gth</sub>	36 V
Gate current rise time ⇒ anode voltage	⇒ 100V (di/dt) <sub>g</sub>	1.2 A/μs
	⇒ 200V (di/dt) <sub>g</sub>	2 A/μs
	⇒ 400V (di/dt) <sub>g</sub>	2.5 A/μs
	⇒ 800V (di/dt) <sub>g</sub>	3 A/μs
	⇒ 1200V (di/dt) <sub>g</sub>	4 A/μs
Peak gate current	I <sub>p</sub>	1.8 A
Anode-cathode current at peak voltage V <sub>p</sub>	I <sub>n</sub>	5.8 mA
Maximum off-state gate current	I <sub>o</sub>	2 μA
Minimum control current	I <sub>cm</sub>	7 mA
Recommended control current	I <sub>c</sub>	12 mA
Control input voltage drop at 12mA gate current	V <sub>in</sub>	Typ 1.2 < 1.5V
Maximum reverse control input voltage	V <sub>inr</sub>	6 V
Turn-on delay time at I <sub>control</sub> = 12mA	t <sub>di</sub>	25 μs

All components and parts used in these units have been certified by their manufacturers as RoHS Compliant.

Epoxy filler is RoHS Compliant (2011/65/EU) and UL Approval meets UL94 V-0.

The Optocoupler is approved for UL1577 File No. E52744 System Code H or J, Double Protection and DIN EN 60747-5-2 (VDE0884), RoHS 2002/96/EC and WEEE (2002/96/EC).

No warranty is given for the accuracy of information stated by the respective manufacturers.