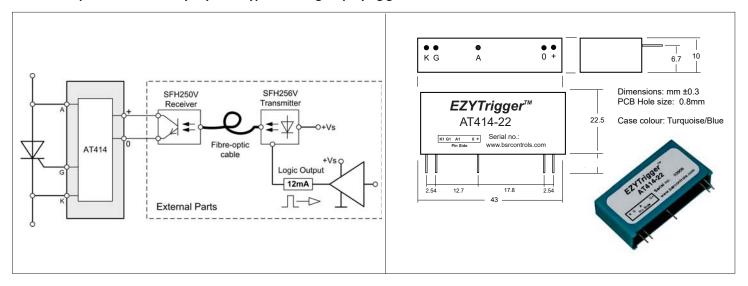


## Active trigger units for firing Power Thyristors

## **Applications:**

- o Trigger signal input designed for optical receiver device
- Optical control of a single thyristor with up to 25m fibre-optic cable
- Optical control of any thyristor type including amplifying gate devices



## **Absolute Maximum Ratings**

			_	
F7Y	Tri	gger	Tν	ne

Parameter	Symbol	AT414 – 22	
Peak voltage – positive and negative	Vp	2200 V	
Nominal mains voltage	Vm	690 V	
Continuous DC voltage	V=	690 V	
Turn-on delay for gate current >1A	tgd	5 μs	
Input-Output isolation	Vi	6000Vrms 50Hz 1min VDE0884	
Input-Output transient immunity	(dv/dt)c	5000 V/μs	
Device transient immunity	(dv/dt)d	2000 V/μs	
Ambient temperature range	Та	-20°C to +85°C	

## Technical Data at 25°C

200mA gate current threshold		Vgtl	16 V	
1.8A gate current threshold		Vgth	36 V	
Gate current rise time ⇒ anode voltage	⇒ 100V	(di/dt)g	1.2 A/μs	
	⇒ 200V	(di/dt)g	2 A/μs	
	⇒ 400V	(di/dt)g	2.5 A/μs	
	⇒ 800V	(di/dt)g	3 A/μs	
	⇒ 1200V	(di/dt)g	4 A/μs	
Peak gate current		lp	1.8 A	
Anode-cathoden current at peak voltage Vp		In	5.8 mA	
Maximum off-state gate current		lo	2 μΑ	
Minimum control current		lcm	7 mA	
Recommended control current		lc	12 mA	
Control input voltage drop at 12mA gate current Vin		Vin	Typ 1.2 < 1.5V	
Maximum reverse control input voltage		Vinr	6 V	
Turn-on delay time at Icontrol = 12mA		tdi	25 μs	