

isurki

AT220

Surge arrester /
protector for 230Vac
single phase power
mains, DIN rail
mounted, according to
EN-61000-4-5 Class 4



0.- INTRODUCTION

AT220 provides surge protection in single phase AC power mains supply to control devices such as PLCs, industrial controllers, power supplies, instrumentation,.. It includes an internal 3 stage based protection system with to earth drainage fast response devices. Manufactured by ISURKI since 1997, AT220 offers a reliable and cost-effective protection for industrial control devices.

1.- WORKING RATES

- nominal working voltage: 230 Vrms + 6% (according to IEC38) = 244 Vrms
- maximum working voltage: 250 Vrms.
- Maximum output current: 1.25 amps
- Inner resistance: 4 $\Omega \pm 5\%$.

2.- TRANSIENT RESPONSE

2.1. Main protection

- DC breaking voltage (incremental slope of 100 V/s.):
 - typical: 500 V.minimum: 400 V.maximum: 600 V.
- AC breaking voltage (incremental slope of 1 kV/μsec.): 1000 V.
- 8/20 μsec curve maximum current (according to IEC 801-5): 5 kA.
- AC discharge (5 discharges at 3 minute intervals during 1 sec.): 5 A.
- Isolation resistance: 1000 MΩ.
 Maximum capacitance: < 1'5 pF

2.3. Fine protection

- Nominal voltage: 342'0 V
- · Breaking voltage:
 - typical: 400'0 V.minimum: 380'0 V.maximum: 420'0 V.
- response time: 5 nsec. maximum

2.2. Medium protection

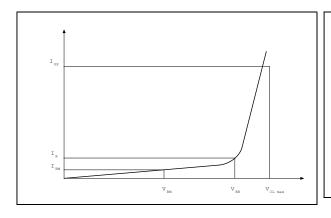
- Maximum working voltage: 250 Vrms
- Maximum transient disipation (10/1000 μsec curve): 40 jules
- Maximum transient current (8/20 μsec curve): 2500 A
- 8/20 µsec curve: VCLmax=650 V and Ippmax=25 A.

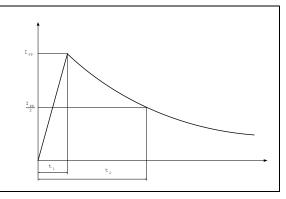
Curve (t1/t2)	VCL max (v)	lpp max (amp)
10/1000 μsec	548	4
8/20 μsec	706	37





3.- CURVES





4.- INSTALLATION

- AT220 does not replace the protection devices required to comply with local electric safety regulations.
- 1 A gL fuses at the unit inputs should be installed to provide protection in case of unit short circuiting.
- For rail mounting inside a cabinet or box with the required IP protection. Not for outdoor installation.
- input (D, A), output (E, H) and ground terminals (C, B, F or G) connection: screwed.
- External dimmensions (mm.): 64(length) x 64(heigth) x 28(width).
- Weight (gr.): 100 aprox.

