ENGLISH - DATASHEET

Impulse-X

BRAKING RESISTORS + STEEL CASED

SCIENCE DRIVING VALUE

Technology driving Quality at Low Cost!

Impulse-X

International Patent Pending. A technologically advanced range of flat, ultra-slim and shielded (completely insulated) braking resistors, heatsink mountable.

The Impulse-X has been developed specifically to handle Heavy Duty Cyclic Loads, for applications such as Lifts, Elevators and Escalators, it also boasts robust design, long-term reliability and great value for money.

Attention to every detail is at the core of the Impulse-X braking resistor, they are NiCr wire-wound, mica insulated and clad in strong **ALUMINIZED STEEL** (rust free and super heat radiation) allowing for easy customization. Different to many competitors this resistor has a strong steel case and **no fragile ceramic**. High temperature terminal cables (-60°C to 250°C), standard length 50cm. **NOISE FREE and no glowing**.

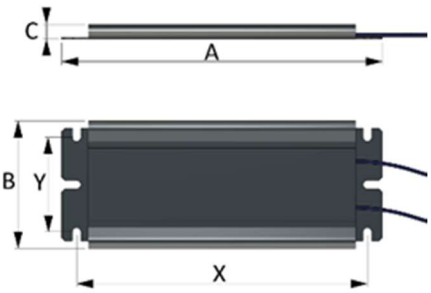
ASTON is committed to producing innovative products that are environmentally friendly made through an environmentally friendly process. **The Impulse-X Series is 95% recyclable.**

POWER RANGE:
500W to 1500W

The Impulse-X Series comes in 6 standard models, each of which is customizable to any specific resistance requirement. Put it on a heatsink and get more power!

DIMENSIONS

IMPULSE-X	Nominal Power (W)	Dimensions					Weight (kg)
		A	B	C	X	Y	
500	500	283	90	9	265	74	0,84
600	600	333	90	9	315	74	1,01
700	700	358	90	9	340	74	1,09
900	900	418	90	9	400	74	1,29
1000	1000	418	110	9	400	94	1,58
1500	1500	533	130	9	515	114	2,43



APPLICATIONS

- **Lifts, Elevators & Conveyors**
- Dynamic braking + Motor control + Motion control
- Cranes & Winches
- Safety braking
- Test loads
- Snubbers
- Current limiters
- Charge / discharge capacitor

OPERATIONAL BENEFITS

- ✓ Safe, shielded robust high electrical insulation
- ✓ High Short Circuit Protection
- ✓ Engineered for very high reliability
- ✓ Rated for repetitive duty
- ✓ Engineered for low thermal resistance, to speed up cooling
- ✓ Dissipates high dynamic loads fast;
- ✓ High Overload Capacity
- ✓ Very High Peak Load Capacity
- ✓ Very High Cyclic Load

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MADE IN ITALY

Aston Resistors S.r.l. – Via Pietro Verri, 27, 20090, Trezzano Sul Naviglio (Milano), Italia.
email: produzione@AstonR.com tel: +393355956453

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PRACTICAL FEATURES

- High Power Density – keeps it small
- Extremely robust construction – no fragile ceramic or aluminium
- Lightweight – easy mounting
- Low inductivity for reduced EMC
- IP52 for Resistor
- Noise FREE
- Temperature stable resistor element up to 1.200°C, NiCr 80/20 – NO RUST
- Close resistance tolerance (+10% - 0%) - never lower than expected – optional different tolerance.

TECHNICAL QUALITY

- High Electrical Insulation (Overvoltage Category - Creepage) – IEC Class III – Class IV Optional
- High Humidity Protection - Pollution Degree – IEC Class III - Class IV Optional

CUSTOM

The entire Impulse-X Series is fully and easily customizable for a continuous power range up to 1500W. That means we can supply customizable products both in size and electrical characteristics at highly competitive prices.

OPTIONS

- Thermal switch (to protect against overload)
- Heatsink mounting
- Terminal cables made to measure
- Easy Mounting Bracket
- Insulation Overvoltage Protection Class IV for the Resistors
- Pollution Degree Class IV for the Resistors
- Different tolerance on resistance on demand

Impulse-X CHART

	Min	Max	Unit	Conditions	Symbol
AC Resistor Max Voltage		1.000	V		Vac
DC Resistor Max Voltage		1.500	V		Vdc
Insulation Resistance	100		Mohm	1000 Vdc	
Dielectric Strength / Insulation Voltage		1	mA	3000V, 60 sec, 50Hz	
Thermal Derivative	<100		ppm/°C		
Thermal Time Constant	750		s		
Case Temperature Range - Operation	-55	670	°C	Floor Mounting	Tc
Ambient Temperature Range	-55	70	°C	Storage & Operation	
Clearance Distance in Air	5		mm	IEC 60664-1 and EN50124-1	Da
Surface Creepage Distance	5		mm	IEC 60664-1 and EN50124-1	Ds
Tollerance Class	J			For Resistance	
Overvoltage Category	III			IEC	
Pollution Degree	III			IEC	
Protection IMPULSE-X	IP52			IP of Resistor element	
Protection IMPULSE-X	IP00			IP of Terminals	

INSTALLATION ADVICE

- Units must be mounted with Terminals to the left or right or down, never facing up.
- **To avoid breakage never hold the resistor only by the cables.**

ASTON

A TECHNOLOGY STARTUP supported by over 30 years of practical experience in resistor design and production. ASTON strives to produce the best high technology dissipative devices setting new standards for volume and power density with high reliability all at unbeatable value.
Made with Pride in Italy.

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MARKING

The resistor is marked on the housing with a high temperature label.

PRECAUTIONS

- Maximum power cannot be applied to any resistor model for more than 60 minutes without interval.
- Max normal operating Temp 450°C – Peak Temp 670°C
- Tolerance on Size +/- 2%
- Tolerance on Weight +/- 10%
- Standard tolerance on resistance +10% - 0%

DECLARATION OF CONFORMITY

Aston Resistors Srl hereby declares, that the Impulse-X Series are in conformity with the provisions of:

- Council Directive 2014/30/UE (February 26, 2014) on Electromagnetic Compatibility.
- Council Directive 2014/35/UE (February 26, 2014) on Low Voltage Equipment Safety.
- RoHS Directive 2011/65/CE on Restriction of Hazardous Substances.
- REACH Regulation.

The Technical Construction File required by this Directive is maintained in the corporate headquarters of Aston Resistors Srl.

DISCLAIMER

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CALL US FOR ANY TECHNICAL QUERIES

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