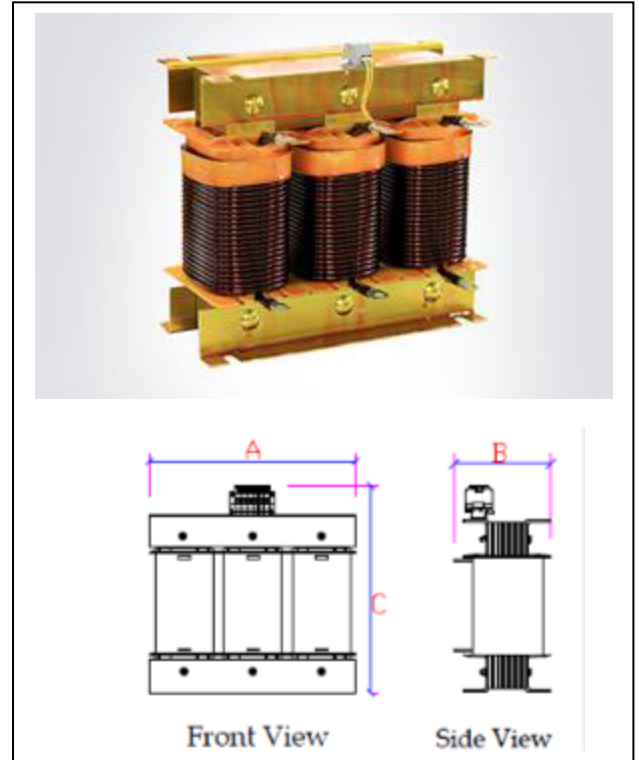


## Transformer bushings (Porcelain)

# Harmonic filter Reactor (Iron Core)

### SPECIFICATIONS

- VPI, Single Phase or Three Phase, Iron Core, Double air gap
- Rated Voltage: 230 V to 690 V
- Rated (Base) Frequency: 50 Hz
- Detuning (Filtering Factor) ,  $p$  : 5.67%, 7%, 14% etc.
- Corresponding Resonance Frequency: 210 Hz, 189 Hz, 134 Hz etc.
- Inductance Tolerance:  $\pm 3\%$
- Taps: Provided as required
- Fundamental Harmonic Current:  $I_1 = \dots$ (Ref. to following Table)
- Maximum Harmonic Current:  $I_h = 0.3 I_1$
- Heating Limit Current:  $I_{th} = 1.1 I_1 (p=7\%)$  ,  $1.2 I_1 (p=5.67\%)$
- Saturation Current (Linearity) :  $I_{Lin} = 1.75 I_1$
- Maximum Current :  $I_{max} = 2 I_1$
- Altitude: Under 1000 m
- Ambient Temperature:  $+50^\circ\text{C}$
- Thermal Isolation: Class F/ $155^\circ\text{C}$
- Insulation Withstand Voltage: 4000 volts for 1 minute or equivalent
- Cooling Method: Air Natural Convection
- Noise Level: Below 40db
- Degree of Protection: IP-00 (Open Construction)  
IP-23, IP-44, IP-65 etc. (Enclosure Type)
- Standards/Directives : IEC 61558-2-20



Model	Rated Capacitor Output (kVAR)	Rated Current, $I_n$ , (A)	Typical Power Loss (W)	Dimensions (mm) for $U_r = 3 \times 400 \text{ V}, 50\text{Hz}, p = 7\% (189\text{Hz})$ , Open Construction			Weight (kg)
				Width, A	Depth, B	Height, C	
HR3-12A-10KO	10	12	80	210	130	225	10
HR3-17A-15KO	15	17	108	210	133	225	12.5
HR3-22A-20KO	20	22	117	210	138	225	13.5
HR3-27A-25KO	25	27	120	210	140	225	15
HR3-33A-30KO	30	33	155	240	140	200	18
HR3-44A-40KO	40	44	160	240	145	200	24
HR3-55A-50KO	50	55	170	240	155	200	32
HR3-67A/60KO	60	67	175	306	210	255	36
HR3-76A-70KO	70	76	180	306	235	255	40
HR3-89A-80KO	80	89	185	306	245	255	53
HR3-110A-100KO	100	110	205	306	260	255	61
HR3-133A-120KO	120	133	220	306	290	255	67
HR3-165A-150KO	150	165	240	306	330	310	75
HR3-220A/200KO	200	220	280	380	330	335	90

Note: All dimensions are in mm, Tolerance:  $\pm 2\%$ . Specification subject to change without prior notice.

Customized Harmonic Filter reactors with different electrical and mechanical specifications are available on request.