



## TRANSFORMERS FOR HAZARDOUS LOCATIONS

- Class 1, Division 2 – Groups A, B, C, D
- Class 1, Zone 2 – Groups IIA, IIB, IIC
- Temperature Code T2C, T3, T3C

• *CSA Certified – File No. LR34493*



**Quality engineered power magnetic products since 1970.**



**Rex Power Magnetics** | Tel 905.695.8844 | Fax 905.695.8855 | Toll Free 1.800.387.2840  
www.RexPowerMagnetics.com | sales@RexPowerMagnetics.com  
65 Basaltic Road, Concord, Ontario, Canada. L4K1G4

## TRANSFORMERS FOR HAZARDOUS LOCATIONS ARE AVAILABLE FROM REX POWER MAGNETICS

Rex Power Magnetics, a CSA certified and UL listed technology and innovation driven, custom magnetics manufacturer, offers a new line of quality Dry Type Transformers built for Hazardous Locations and Harsh Industrial Environments.

For industrial applications where the common Epoxy Encapsulated transformer can be cost prohibitive or may otherwise be in-sufficient, Rex Power Magnetics now offer the HLA, HLB & HLC line of Dry Type Transformers specifically engineered for Hazardous Locations and Harsh Industrial Environments.

Hazardous Locations and Harsh Environments typically refer to areas which may contain dangerous and corrosive, explosive or combustible gases, liquids or dust. Typical applications include the mining, petrochemical, pulp and paper industries.

**The Rex Power Magnetics line of HLA, HLB & HLC transformers are made in accordance with applicable CSA Standard and the Canadian Electrical Code, and feature the following:**

### • CLASS I, DIVISION 2, GROUPS A, B, C & D

**Group A:** atmospheres containing acetylene;

**Group B:** atmospheres containing butadiene, ethylene oxide, hydrogen (or gases of vapors equivalent in hazard to hydrogen, such as manufactured gas) or propylene oxide

**Group C:** atmospheres containing acetaldehyde, cyclopropane, diethyl ether, ethylene, hydrogen sulphide, or unsymmetrical dimethyl hydrazine (UDHM), or other gases or vapors of equivalent hazard

**Group D:** atmospheres containing acetone, acrylonitrile, alcohol, ammonia, benzene, benzol, butane, ethylene, dichloride, gasoline, hexane, isoprene, lacquer solvent vapors, naphtha, natural gas, propane, propylene, styrene, vinyl acetate, vinyl chloride, xylenes, or other gases or vapors of equivalent hazard

### • CLASS I, ZONE 2, GROUPS IIA, II B, II C

**Group II A:** atmospheres containing acetaldehyde, acetone, cyclopropane, alcohol, ammonia, benzene, benzol, butane, ethylene, dichloride, gasoline, hexane, isoprene, lacquer solvent vapors, naphtha, natural gas, propane, propylene, styrene, vinyl acetate, vinyl chloride, xylenes, or other gases or vapors of equivalent hazard

**Group II B:** atmospheres containing acrylonitrile, butadiene, diethyle ether, ethylene, ethylene oxide, hydrogen sulphide, propylene oxide, or unsymmetrical dimethyl hydrazine (UDHM), or other gases or vapors of equivalent hazard

**Group II C:** atmospheres containing acetylene, carbon disulphide, or hydrogen or other gases or vapors of equivalent hazard.

TEMPERATURE RISE	TEMPERATURE CODE	MAXIMUM SURFACE TEMPERATURE
150°C	T2C	230°C
115°C	T3	200°C
80°C	T3C	160°C

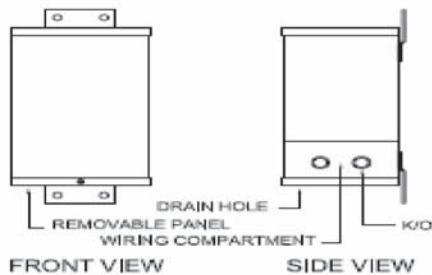
# REX TRANSFORMERS CONSTRUCTED FOR HAZARDOUS LOCATIONS

FEATURES	Type HLA	Type HLB	Type HLC
<b>Construction Features</b>	<ul style="list-style-type: none"> <li>• ANC Design</li> <li>• Epoxy Encapsulated</li> <li>• Bottom access (design 1)</li> <li>• Front access (design 2)</li> <li>• Conduit K/O on sides</li> <li>• Special nameplates</li> </ul>	<ul style="list-style-type: none"> <li>• ANC Design</li> <li>• Epoxy Encapsulated</li> <li>• Wiring/Tap leads brought out through threaded conduits for external connections</li> <li>• Special nameplates</li> </ul>	<ul style="list-style-type: none"> <li>• ANN Design</li> <li>• Natural self-cooled</li> <li>• Vacuum Pressure Impregnated</li> <li>• Core &amp; Coils varnished &amp; baked</li> <li>• Special nameplates</li> </ul>
<b>Insulation Class</b>	I85°C	I85°C	I85°C or 220°C
<b>Temperature Rise</b>	115°C Maximum	115°C Maximum	80°C; 115°C or 150°C
<b>Temperature Code</b>	T3C	T3C	T3C; T3 or T2C
<b>Enclosure</b>	<ul style="list-style-type: none"> <li>• ASA#61 Grey paint</li> <li>• Type 3R Outdoor</li> <li>• Type 4 Non-Vented*</li> </ul> <p>*when used with specified CSA certified watertight conduit hubs</p>	<ul style="list-style-type: none"> <li>• ASA#61 Grey paint</li> <li>• Type 3R Outdoor</li> <li>• Type 4 Non-Vented*</li> </ul> <p>*when used with specified CSA certified watertight conduit hubs</p>	<ul style="list-style-type: none"> <li>• Super White paint</li> <li>• Type 3R Outdoor</li> </ul>
<b>Certification</b>	CSA Approved	CSA Approved	CSA Approved

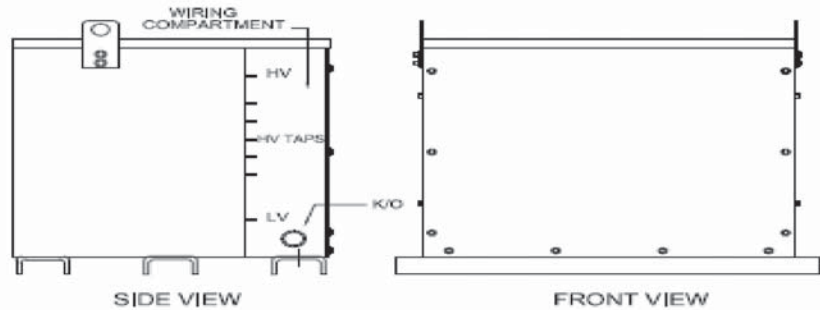
See next page for common voltages and part numbers available from Rex Power Magnetics

## TYPE HLA

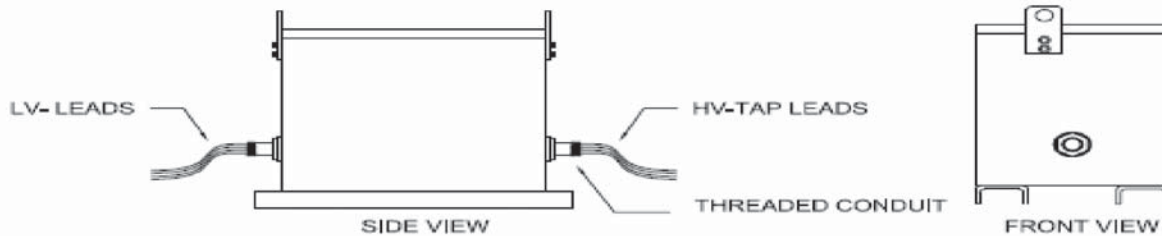
**DESIGN 1**  
(UP TO 3kVA 1-PH ONLY)



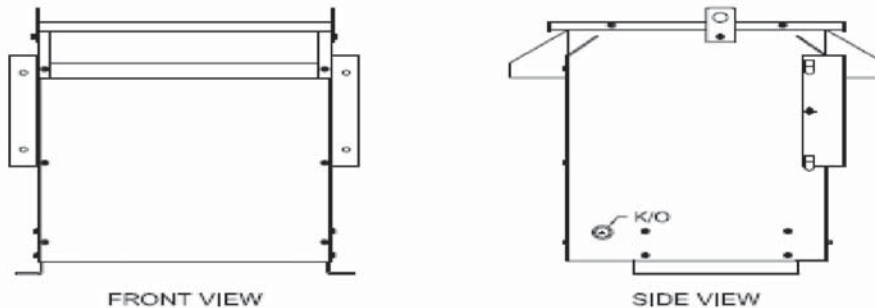
**DESIGN 2**  
(FRONT PANEL IS REMOVABLE TO GAIN ACCESS TO TERMINALS)



## TYPE HLB



## TYPE HLC



# REX POWER MAGNETICS – SINGLE PHASE TRANSFORMERS FOR HAZARDOUS LOCATIONS

Please refer to page 2 & 3 for design features and additional details.

## TYPE HLA – TYPICAL SINGLE PHASE VOLTAGES & PART NUMBERS

RATING	600-120/240 Volts	480-120/240 Volts	480-240/480 Volts	240/480-120/240 Volts
3KVA	SC3J-K/HLA	SC3H-K/HLA	SC3H-L/HLA	SC3L-K/HLA
5KVA	SC5J-K/HLA	SC5H-K/HLA	SC5H-L/HLA	SC5L-K/HLA
7½KVA	SC7JK/HLA	SC7H-K/HLA	SC7H-L/HLA	SC7L-K/HLA
10KVA	SC10J-K/HLA	SC10H-K/HLA	SC10H-L/HLA	SC10L-K/HLA
15KVA	SC15J-K/HLA	SC15H-K/HLA	SC15H-L/HLA	SC15L-K/HLA
25KVA	SC25J-K/HLA	SC25H-K/HLA	SC25H-L/HLA	SC25L-K/HLA
37½KVA	SC37J-K/HLA	SC37H-K/HLA	SC37HL/HLA	SC37L-K/HLA
50KVA	SC50J-K/HLA	SC50H-K/HLA	SC50H-L/HLA	SC50L-K/HLA
75KVA	SC75J-K/HLA	SC75H-K/HLA	SC75H-L/HLA	SC75L-K/HLA

Conforms to Nema-4 Outdoor rating when used with specified CSA certified watertight conduit hubs.

## TYPE HLB – TYPICAL SINGLE PHASE VOLTAGES & PART NUMBERS

RATING	600-120/240 Volts	480-120/240 Volts	480-240/480 Volts	240/480-120/240 Volts
3KVA	SC3J-K/HLB	SC3H-K/HLB	SC3H-L/HLB	SC3L-K/HLB
5KVA	SC5J-K/HLB	SC5H-K/HLB	SC5H-L/HLB	SC5L-K/HLB
7½KVA	SC7J-K/HLB	SC7H-K/HLB	SC7H-L/HLB	SC7L-K/HLB
10KVA	SC10J-K/HLB	SC10H-K/HLB	SC10H-L/HLB	SC10L-K/HLB
15KVA	SC15J-K/HLB	SC15H-K/HLB	SC15H-L/HLB	SC15L-K/HLB
25KVA	SC25J-K/HLB	SC25H-K/HLB	SC25H-L/HLB	SC25L-K/HLB
37½KVA	SC37J-K/HLB	SC37H-K/HLB	SC37H-L/HLB	SC37L-K/HLB
50KVA	SC50J-K/HLB	SC50H-K/HLB	SC50H-L/HLB	SC50L-K/HLB
75KVA	SC75J-K/HLB	SC75H-K/HLB	SC75H-L/HLB	SC75L-K/HLB

Conforms to Nema-4 Outdoor rating when used with specified CSA certified watertight conduit hubs.

## TYPE HLC – TYPICAL SINGLE PHASE VOLTAGES & PART NUMBERS

RATING	600-120/240 Volts	480-120/240 Volts	480-240/480 Volts	240/480-120/240 Volts
3KVA	SC3J-K/HLC	SC3H-K/HLC	SC3H-L/HLC	SC3L-K/HLC
5KVA	SC5J-K/HLC	SC5H-K/HLC	SC5H-L/HLC	SC5L-K/HLC
7½KVA	SC7J-K/HLC	SC7H-K/HLC	SC7H-L/HLC	SC7L-K/HLC
10KVA	SC10J-K/HLC	SC10H-K/HLC	SC10H-L/HLC	SC10L-K/HLC
15KVA	SC15J-K/HLC	SC15H-K/HLC	SC15H-L/HLC	SC15L-K/HLC
25KVA	SC25J-K/HLC	SC25H-K/HLC	SC25H-L/HLC	SC25L-K/HLC
37½KVA	SC37J-K/HLC	SC37H-K/HLC	SC37H-L/HLC	SC37L-K/HLC
50KVA	SC50J-K/HLC	SC50H-K/HLC	SC50H-L/HLC	SC50L-K/HLC
75KVA	SC75J-K/HLC	SC75H-K/HLC	SC75H-L/HLC	SC75L-K/HLC

# REX POWER MAGNETICS – SINGLE PHASE TRANSFORMERS FOR HAZARDOUS LOCATIONS

## Typical dimensions and weight information

600-120/240 Volt	KVA	Fig.	Mounting	Dimensions						Weight lbs.
				A		B		C		
				in.	mm.	in.	mm.	in.	mm.	
SC0.25J-K/HLA	0.25	1, 4	Wall/Floor	5¼	133	4½	114	9	229	17
SC0.50J-K/HLA	0.50	1, 4	Wall/Floor	5¼	133	4½	114	9	229	20
SC0.75J-K/HLA	0.75	1, 4	Wall/Floor	5¼	133	4½	114	9	229	23
SC1J-K/HLA	1.0	1, 4	Wall/Floor	6	152	5	127	10	254	27
SC1.5J-K/HLA	1.5	1, 4	Wall/Floor	7 ⅞	194	6½	165	11¼	286	40
SC2J-K/HLA	2	1, 4	Wall/Floor	7 ⅞	194	6½	165	11¼	286	45
SC3J-K/HLA	3	1, 4	Wall/Floor	7 ⅞	194	6½	165	11¼	286	100
SC5J-K/HLA	5	2, 5	Wall/Floor	12½	318	12½	318	15	381	170
SC7J-K/HLA	7½	2, 5	Wall/Floor	12½	318	12½	318	15	381	180
SC10J-K/HLA	10	3, 5	Wall/Floor	15	381	14¾	751	84	522	35
SC15J-K/HLA	15	3, 5	Wall/Floor	15	381	14¾	751	84	522	96
SC25J-K/HLA	25	3, 5	Wall/Floor	18	452	14	356	24¾	629	355
SC37J-K/HLA	37½	3, 6	Floor	19	483	16	404	30¾	781	395
SC50J-K/HLA	50	3, 6	Floor	19	483	16	404	30¾	781	430

Fig.1

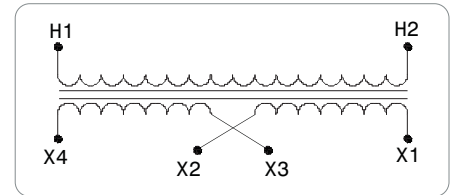


Fig.2

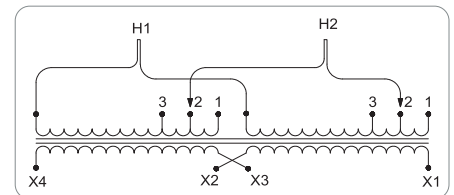


Fig.3

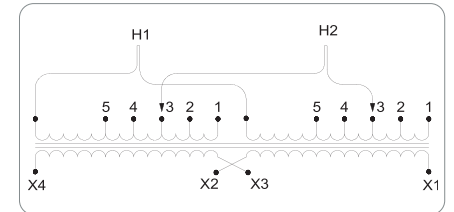


Fig.4

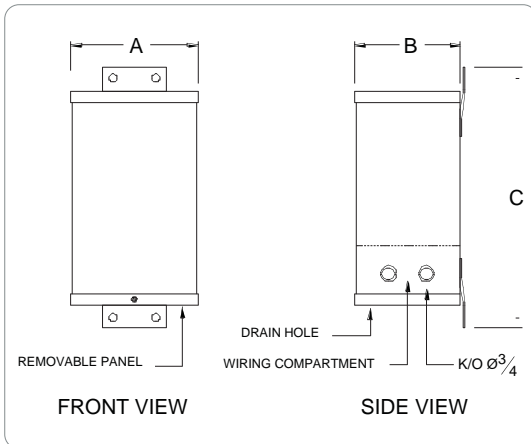


Fig.5

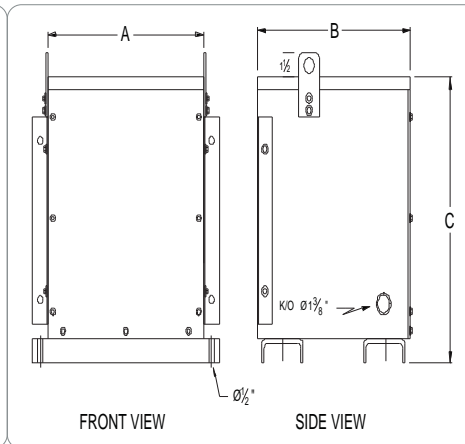
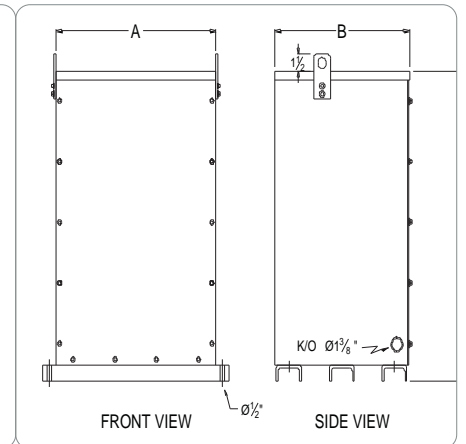


Fig.6



Information & design subject to change without notice.

REX POWER MAGNETICS

# REX POWER MAGNETICS – THREE PHASE TRANSFORMERS FOR HAZARDOUS LOCATIONS

Please refer to page 2 & 3 for design features and additional details.

## TYPE HLA – TYPICAL THREE PHASE VOLTAGES & PART NUMBERS

RATING	600Δ208Y120 Volts	480Δ208Y120 Volts	600Δ600Y347 Volts	480Δ480Y277 Volts
3KVA	BC3J-M/HLA	BC3H-M/HLA	BC3J-Q/HLA	BC3H-P/HLA
6KVA	BC6J-M/HLA	BC6H-M/HLA	BC6J-Q/HLA	BC6H-P/HLA
9KVA	BC9J-M/HLA	BC9H-M/HLA	BC9J-Q/HLA	BC9H-P/HLA
15KVA	BC15J-M/HLA	BC15H-M/HLA	BC15J-Q/HLA	BC15H-P/HLA
30KVA	BC30J-M/HLA	BC30H-M/HLA	BC30J-Q/HLA	BC30H-P/HLA
45KVA	BC45J-M/HLA	BC45H-M/HLA	BC45J-Q/HLA	BC45H-P/HLA
75KVA	BC75J-M/HLA	BC75H-M/HLA	BC75J-Q/HLA	BC75H-P/HLA

Conforms to Nema-4 Outdoor rating when used with specified CSA certified watertight conduit hubs.

## TYPE HLB – TYPICAL THREE PHASE VOLTAGES & PART NUMBERS

RATING	600Δ208Y120 Volts	480Δ208Y120 Volts	600Δ600Y347 Volts	480Δ480Y277 Volts
3KVA	BC3J-M/HLB	BC3H-M/HLB	BC3J-Q/HLB	BC3H-P/HLB
6KVA	BC6J-M/HLB	BC6H-M/HLB	BC6J-Q/HLB	BC6H-P/HLB
9KVA	BC9J-M/HLB	BC9H-M/HLB	BC9J-Q/HLB	BC9H-P/HLB
15KVA	BC15J-M/HLB	BC15H-M/HLB	BC15J-Q/HLB	BC15H-P/HLB
30KVA	BC30J-M/HLB	BC30H-M/HLB	BC30J-Q/HLB	BC30H-P/HLB
45KVA	BC45J-M/HLB	BC45H-M/HLB	BC45J-Q/HLB	BC45H-P/HLB
75KVA	BC75J-M/HLB	BC75H-M/HLB	BC75J-Q/HLB	BC75H-P/HLB

Conforms to Nema-4 Outdoor rating when used with specified CSA certified watertight conduit hubs.

## TYPE HLC – TYPICAL THREE PHASE VOLTAGES & PART NUMBERS

RATING	600Δ208Y120 Volts	480Δ208Y120 Volts	600Δ600Y347 Volts	480Δ480Y277 Volts
3KVA	BC3J-M/HLC	BC3H-M/HLC	BC3J-Q/HLC	BC3H-P/HLC
6KVA	BC6J-M/HLC	BC6H-M/HLC	BC6J-Q/HLC	BC6H-P/HLC
9KVA	BC9J-M/HLC	BC9H-M/HLC	BC9J-Q/HLC	BC9H-P/HLC
15KVA	BC15J-M/HLC	BC15H-M/HLC	BC15J-Q/HLC	BC15H-P/HLC
30KVA	BC30J-M/HLC	BC30H-M/HLC	BC30J-Q/HLC	BC30H-P/HLC
45KVA	BC45J-M/HLC	BC45H-M/HLC	BC45J-Q/HLC	BC45H-P/HLC
75KVA	BC75J-M/HLC	BC75H-M/HLC	BC75J-Q/HLC	BC75H-P/HLC

Model	kVA	Fig.	Mounting	Dimensions						Weight Lbs.
				A		B		C		
				in.	mm.	in.	mm.	in.	mm.	
BC3J-M/HLA	3	1	Wall/Floor	15	381	11	279	15 $\frac{1}{8}$	384	150
BC6J-M/HLA	6	1	Wall/Floor	15	381	11	279	15 $\frac{1}{8}$	384	210
BC9J-M/HLA	9	1	Wall/Floor	15	381	11	279	15 $\frac{1}{8}$	384	282
BC15J-M/HLA	15	1	Wall/Floor	21	533	14	356	17 $\frac{1}{2}$	445	380
BC30J-M/HLA	30	1	Wall/Floor	21	533	18	452	19 $\frac{7}{8}$	505	550
BC45J-M/HLA	45	1	Wall/Floor	21	533	18	452	19 $\frac{7}{8}$	505	670
BC75J-M/HLA	75	2	Floor	32	813	18	452	25	635	1200

Fig.1

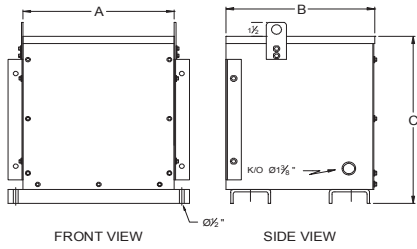
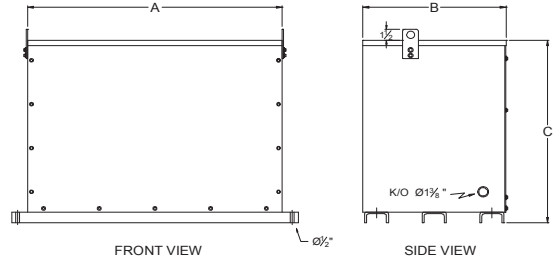


Fig.2



Model	kVA	Fig.	Mounting	Dimensions						Weight Lbs.
				A		B		C		
				in.	mm.	in.	mm.	in.	mm.	
BC3J-M/HLB	3	1	Floor	15	381	11	279	15 $\frac{1}{8}$	384	150
BC6J-M/HLB	6	1	Floor	15	381	11	279	15 $\frac{1}{8}$	384	210
BC9J-M/HLB	9	1	Floor	15	381	11	279	15 $\frac{1}{8}$	384	282
BC15J-M/HLB	15	1	Floor	21	533	14	356	17 $\frac{1}{2}$	445	380
BC30J-M/HLB	30	1	Floor	21	533	18	452	19 $\frac{7}{8}$	505	550
BC45J-M/HLB	45	1	Floor	21	533	18	452	19 $\frac{7}{8}$	505	670
BC75J-M/HLB	75	2	Floor	32	813	18	452	25	635	1200

Fig.1

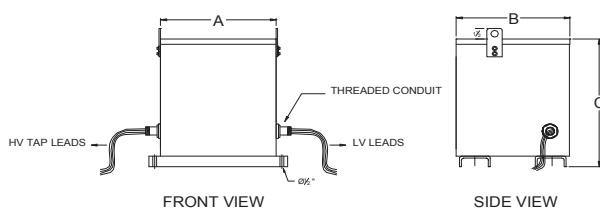
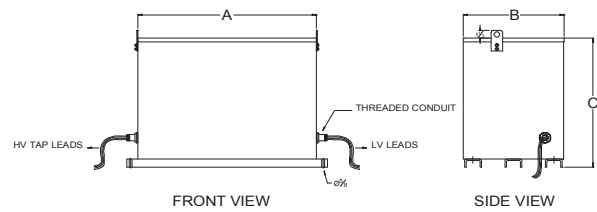


Fig.2



Model	kVA	Fig.	Mounting	Dimensions						Weight Lbs.
				A		B		C		
				in.	mm.	in.	mm.	in.	mm.	
BC15J-M/HLC	15	1	Floor/Wall	20 $\frac{1}{2}$	521	21 $\frac{3}{8}$	549	21	533	188
BC30J-M/HLC	30	1	Floor/Wall	20 $\frac{1}{2}$	521	26 $\frac{1}{4}$	667	26 $\frac{1}{4}$	667	285
BC45J-M/HLC	45	1	Floor/Wall	20 $\frac{1}{2}$	521	26 $\frac{1}{4}$	667	26 $\frac{1}{4}$	667	360
BC75J-M/HLC	75	1	Floor/Wall	24 $\frac{1}{2}$	622	29 $\frac{1}{4}$	743	31 $\frac{1}{2}$	800	540
BC112J-M/HLC	112.5	2	Floor	30 $\frac{3}{4}$	781	37 $\frac{1}{2}$	953	31 $\frac{3}{4}$	806	1085
BC150J-M/HLC	150	2	Floor	30 $\frac{3}{4}$	781	37 $\frac{1}{2}$	953	31 $\frac{3}{4}$	806	1150
BC225J-M/HLC	225	3	Floor	40	1016	39	990	46	1168	1600
BC300J-M/HLC	300	3	Floor	40	1016	39	990	46	1168	2100

Fig.1

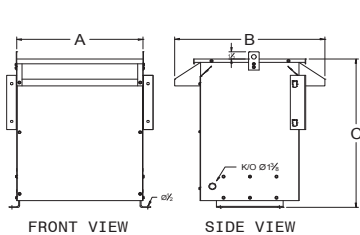


Fig.2

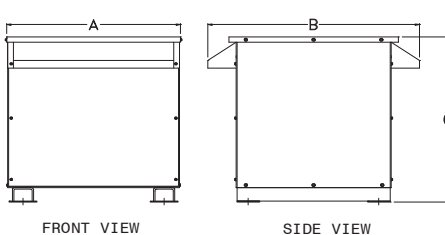
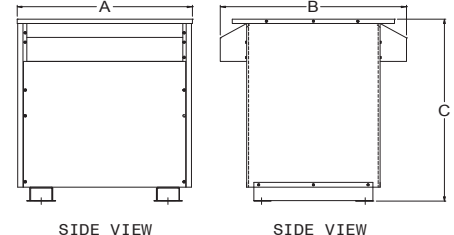
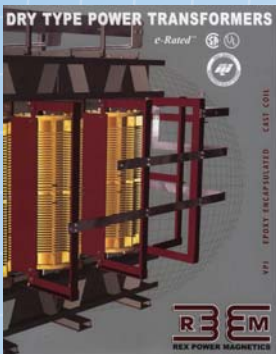


Fig.3



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