



Drive Isolation and AC Line Reactors

Section

5




Specifically designed to accommodate the special voltage and kVA sizes unique to AC and DC drive applications. Shielded for extra protection from supply line transients.



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AC Line Reactors are designed to protect DC motor drives, AC variable frequency drives and the motors they power.

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DRIVE ISOLATION TRANSFORMERS

The Acme Drive Isolation Transformers are specifically designed to accommodate the special voltages and kVA sizes unique to AC and DC motor drive applications.

Features

- UL Type 3R Enclosures with Weather Shield on Ventilated Units (above 20 kVA). Type 2 Enclosure without weather shield. UL Listed and CSA certified. 7.5–20.0 kVA are encapsulated, UL 3R.
- 3-Phase 60 Hertz.
- 180°C and 220°C insulation systems.
- Encapsulated and ventilated designs. All ventilated units, are of strip wound construction. Acme’s reinforced core assemblies enhance quiet operation.
- Nominally 6% impedance.
- Designed for use with AC, adjustable frequency or DC drives.
- Full capacity taps are featured on all units. On 7.5 through 20 kVA units, taps are 1-5% ANFC and 1-5% BNFC. On 27 through 880 kVA units, taps are 2-2 1/2% ANFC and 2-2 1/2% BNFC.
- Full range of kVA ratings cover all standard drive systems.
- Ample wiring compartment for easy cable entry.
- Optional wall mounting brackets for certain sizes.

Stress relief

Acme uses strip conductors (above 7.5 kVA) instead of wire for a DIT series that easily accommodates the severe electrical and mechanical stresses found in today’s AC & DC motor drives. The inherent excellent line isolation of these transformers is further enhanced with the extra protection of Acme’s Electrostatic Shield — free in all DIT’s.

Lower losses

The harmonic currents generated by AC & DC drives increase eddy current losses (heat) in transformer windings. The thicker the winding conductor, the greater the losses. Acme uses one turn per layer of thin strip conductor which provides lower eddy current losses than comparable wire wound units. Lower losses = cooler operation and longer transformer life.

Reduced short circuit forces

Strip windings minimize axial short circuit forces that can cause mechanical displacement of the windings under fault conditions. For extra protection all designs 7.5 kVA and above use primary and secondary coils of equal axial length. This feature tends to negate axial short circuit forces, further improving transformer life expectancy.

Selection instructions

If you know the motor horse-power, simply follow the drive system manufacturer’s recommendation.

Or, select the corresponding kVA from the chart on the right.

For example, a 40 Hp motor requires a 51 kVA DIT.

H.P.	kVA
5.0	7.5
7.5	11.0
10.0	14.0
15.0	20.0
20.0	27.0
25.0	34.0
30.0	40.0
40.0	51.0
50.0	63.0
60.0	75.0
75.0	93.0
100.0	118.0
125.0	145.0
150.0	175.0
200.0	220.0
250.0	275.0
300.0	330.0
400.0	440.0
500.0	550.0
600.0	660.0



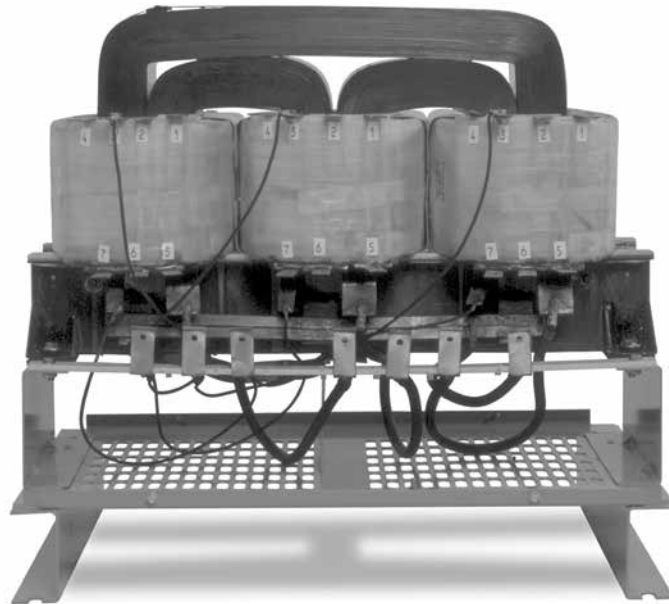
ACME ADVANTAGE

Wound Cores and Strip Winding mean lower losses

All Acme DITs above 7.5 kVA are wound with strip windings to ensure the lowest possible eddy current losses. All our DITs 440 kVA and larger use stacked core. This superior design has very low losses and quiet operation. Both of these features combine to significantly reduce losses and operating costs compared to other types of constructions.

Copper terminations provide trouble-free operation

All Acme DITs up to and including 220 kVA have copper terminations. The transition from aluminum strip coil conductors to copper terminations is accomplished by a bonding process known as “Koldwelding™”. This process has been used by Acme for over 25 years to provide a trouble-free, permanent bonding of the two metals.



Wound core construction showing all copper terminations



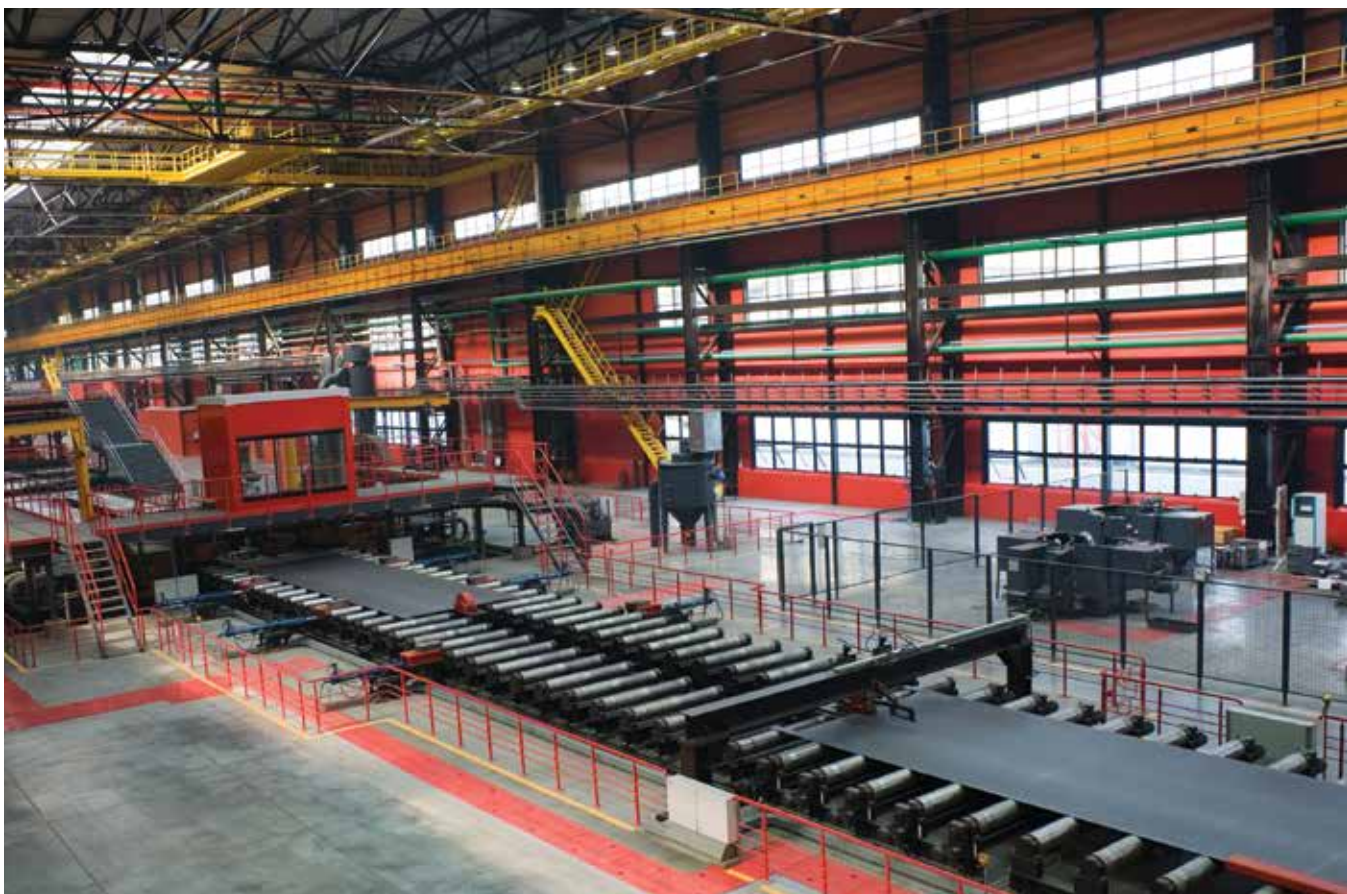


kVA	Primary 230V Delta Secondary 230Y/133 Catalog Number	Height ^③ (Inches)(Cm.)	Width ^③ (Inches)(Cm.)	Depth ^③ (Inches)(Cm.)	Weight (Lbs.)(Kg.)	Mounting Type (Wall)(Floor)	Weather Shield	Dimension Drawing		
7.5	DTFA72S	(62)	15.21 (38.6)	19.25 (48.9)	7.37 (18.7)	180 (81.6)	W	NA	F	
11.0	DTFA0112S	↓	18.86 (48.0)	20.30 (51.6)	9.03 (22.9)	265 (120.0)	F ①	NA	I	
14.0	DTFA0142S		18.86 (48.0)	20.30 (51.6)	9.03 (22.9)	265 (120.0)	F ①	NA	I	
20.0	DTFA0202S		20.77 (52.8)	20.94 (53.2)	10.18 (25.9)	435 (197.0)	F ①	NA	I	
27.0	DTFA0274S		(59)	25.48 (64.8)	24.39 (62.0)	19.40 (49.3)	302 (137.0)	F ②	WSA1	E
34.0	DTFA0344S		25.48 (64.8)	24.39 (62.0)	19.40 (49.3)	330 (150.0)	F ②	WSA1	E	
40.0	DTFA0404S		25.48 (64.8)	24.39 (62.0)	19.40 (49.3)	370 (168.0)	F ②	WSA1	E	
51.0	DTFA0514S		29.40 (74.7)	28.15 (71.5)	22.40 (56.9)	375 (170.0)	F ②	WSA2	E	
63.0	DTFA0634S		29.40 (74.7)	28.15 (71.5)	22.40 (56.9)	495 (225.0)	F ②	WSA2	E	
75.0	DTFA0754S		29.40 (74.7)	28.15 (71.5)	22.40 (56.9)	525 (238.0)	F ②	WSA2	E	
93.0	DTFA0934S		35.40 (89.9)	31.90 (81.0)	26.90 (68.3)	685 (311.0)	F	WSA3	E	
118.0	DTFA01184S	35.40 (89.9)	31.90 (81.0)	26.90 (68.3)	710 (322.0)	F	WSA3	E		
145.0	DTFA01454S	41.52 (105.5)	32.90 (83.6)	29.90 (75.9)	980 (445.0)	F	WSA4	E		
175.0	DTFA01754S	41.52 (105.5)	32.90 (83.6)	29.90 (75.9)	1110 (504.0)	F	WSA4	E		
220.0	DTFA02204S	↓	41.52 (105.5)	32.90 (83.6)	29.90 (75.9)	1120 (508.0)	F	WSA4	E	

① Optional wall mounting kits – part # PL 79911 refer to page 217.

② Optional wall mounting kits – part # PL 79912 refer to page 217.

The number in ()'s following the catalog number is the electrical wiring diagram number beginning on page 209.





kVA	Primary 460V Delta Secondary 230Y/133		Primary 460V Delta Secondary 460Y/266		Height ^③ (Inches)(Cm.)	Width ^③ (Inches)(Cm.)	Depth ^③ (Inches)(Cm.)	Weight (Lbs.)(Kg.)	Mounting Type (Wall/Floor)	Weather Shield	Dimension Drawing
	Catalog Number		Catalog Number								
7.5	DTGA72S	(37)	DTGB72S	(34)	15.21 (38.6)	19.25 (48.9)	7.37 (18.7)	180 (81.6)	W	NA	F
11.0	DTGA0112S		DTGB0112S		18.86 (47.9)	20.30 (51.6)	9.03 (22.9)	265 (120.0)	F ①	NA	I
14.0	DTGA0142S		DTGB0142S		18.86 (47.9)	20.30 (51.6)	9.03 (22.9)	270 (123.0)	F ①	NA	I
20.0	DTGA0202S		DTGB0202S		20.77 (52.8)	20.94 (53.2)	10.18 (25.9)	435 (197.0)	F ①	NA	I
27.0	DTGA0274S	(38)	DTGB0274S	(35)	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	320 (145.0)	F ②	WSA1	E
34.0	DTGA0344S		DTGB0344S		25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	340 (154.0)	F ②	WSA1	E
40.0	DTGA0404S		DTGB0404S		25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	395 (179.0)	F ②	WSA1	E
51.0	DTGA0514S		DTGB0514S		29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	400 (181.0)	F ②	WSA2	E
63.0	DTGA0634S		DTGB0634S		29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	550 (250.0)	F ②	WSA2	E
75.0	DTGA0754S		DTGB0754S		29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	570 (259.0)	F ②	WSA2	E
93.0	DTGA0934S		DTGB0934S		35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	685 (311.0)	F	WSA3	E
118.0	DTGA01184S		DTGB01184S		35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	765 (347.0)	F	WSA3	E
145.0	DTGA01454S		DTGB01454S		41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	990 (449.0)	F	WSA4	E
175.0	DTGA01754S		DTGB01754S		41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1100 (499.0)	F	WSA4	E
220.0	DTGA02204S		DTGB02204S		41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1120 (508.0)	F	WSA4	E
275.0	DTGA002754S		DTGB002754S		45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	2090 (948.0)	F	WSA5	E
330.0	DTGA03304S		DTGB03304S		45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	2090 (948.0)	F	WSA5	G
440.0			DTGB04404S		57.84 (146.9)	45.50 (115.6)	41.49 (105.4)	2295 (1043.2)	F	WSA7	G
550.0			DTGB05504S		57.84 (146.9)	45.50 (115.6)	41.49 (105.4)	2580 (1172.7)	F	WSA7	G
660.0			DTGB06604S		62.84 (159.6)	54.00 (137.2)	41.49 (105.4)	3700 (1678.3)	F	WSA6	G
770.0			DTGB07704S		62.84 (159.6)	54.00 (137.2)	41.49 (105.4)	4044 (1838.2)	F	WSA6	G
880.0			DTGB008804S		62.84 (159.6)	54.00 (137.2)	41.49 (105.4)	4230 (1922.7)	F	WSA6	G
990.0			DTGB9902S		62.84 (159.6)	54.00 (137.2)	41.49 (105.4)	4285 (1947.7)	F	WSA6	G

① Optional wall mounting kits-part # PL79911, refer to page 209.

② Optional wall mounting kits-part # PL79912, refer to page 209.

③ Dimensions may change and are not to be used for detailed construction purposes. Please contact the factory for certified dimensional drawings.

The number in ()'s following the catalog number is the electrical wiring diagram number beginning on page 209.





kVA	Primary 575V Delta Secondary 230Y/133 Catalog Number	Primary 575V Delta Secondary 460Y/266 Catalog Number	Height ^③ (Inches)(Cm.)	Width ^③ (Inches)(Cm.)	Depth ^③ (Inches)(Cm.)	Weight (Lbs.)(Kg.)	Mounting Type (Wall)(Floor)	Weather Shield	Dimension Drawing
7.5	DTHA72S	(40) DTHB72S	(43) 15.21 (38.6)	19.25 (48.9)	7.37 (18.7)	180 (81.6)	W	NA	F
11.0	DTHA0112S	DTHB0112S	18.86 (47.9)	20.30 (51.6)	9.03 (22.9)	265 (120.0)	F ①	NA	I
14.0	DTHA0142S	DTHB0142S	18.86 (47.9)	20.30 (51.6)	9.03 (22.9)	270 (123.0)	F ①	NA	I
20.0	DTHA0202S	DTHB0202S	20.77 (52.8)	20.94 (53.2)	10.18 (25.9)	435 (197.0)	F ①	NA	I
27.0	DTHA0274S	(41) DTHB0274S	(44) 25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	320 (145.0)	F ②	WSA1	E
34.0	DTHA0344S	DTHB0344S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	340 (154.0)	F ②	WSA1	E
40.0	DTHA0404S	DTHB0404S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	395 (179.0)	F ②	WSA1	E
51.0	DTHA0514S	DTHB0514S	29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	400 (181.0)	F ②	WSA2	E
63.0	DTHA0634S	DTHB0634S	29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	550 (250.0)	F ②	WSA2	E
75.0	DTHA0754S	DTHB754S	29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	570 (259.0)	F ②	WSA2	E
93.0	DTHA0934S	DTHB0934S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	685 (311.0)	F	WSA3	E
118.0	DTHA01184S	DTHB01184S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	765 (347.0)	F	WSA3	E
145.0	DTHA01454S	DTHB01454S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	990 (449.0)	F	WSA4	E
175.0		DTHB01754S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1100 (499.0)	F	WSA4	E
220.0		DTHB02204S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1120 (508.0)	F	WSA4	E
275.0		DTHB002754S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	2090 (948.0)	F	WSA5	E
330.0		DTHB03304S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	2090 (948.0)	F	WSA5	G
440.0		DTHB04404S	57.84 (157.5)	45.50 (115.6)	41.49 (105.4)	2580 (1172.7)	F	WSA7	G
550.0		DTHB05504S	57.84 (157.5)	45.50 (115.6)	41.49 (105.4)	2640 (1200.0)	F	WSA7	G
660.0		DTHB006604S	62.84 (159.6)	54.00 (137.2)	41.49 (105.4)	3700 (1678.3)	F	WSA6	G

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② Optional wall mounting kits-part # PL79912, refer to page 217.

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Windings, Terminals and Construction

kVA	Primary Winding	Secondary Winding	Insulation System	Termination	Enclosure	Construction	Core
7.5	CU wire	CU wire	180°C	CU wire	Epoxy encapsulated		Wound/distributed gap
11-20	AL foil	AL foil	180°C	CU wire	Epoxy encapsulated		Wound/distributed gap
27-220	AL foil	AL foil	220°C	CU bus	Ventilated		Wound/distributed gap
275-330	AL foil	AL foil	220°C	AL bus	Ventilated		Wound/distributed gap
440-770	AL foil	AL foil	220°C	AL bus	Ventilated		Butt stacked/Step lap

Thermal Switch Kit - PL-79900

Acme Thermal Switch Kits are designed for use with single and three phase drive isolation and distribution transformers. Thermal switch kits are available for a one or three sensor system.

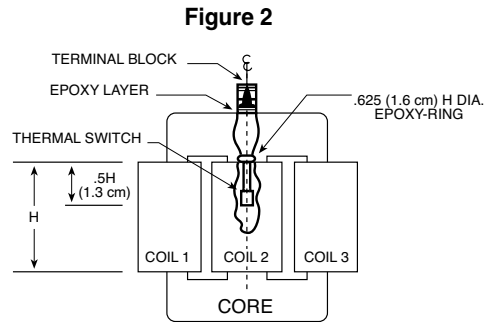
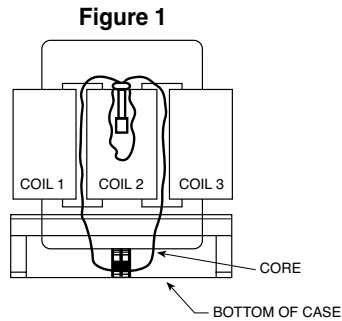
Thermal sensors can be field installed in the transformer winding ducts to detect abnormal temperatures. The thermal sensors are a normally closed contact that opens at 200°C ± 10°C and has a current capacity of 5 amps @ 120V or 2.5 amps @ 240V. This contact can activate any number of different types of alarms or mechanisms that could warn of a potential failure.



kVA	Mounting Position	Illustration
27.0-118.0	Bottom of the case	Figure 1
145-750	Top flange of the core bracket	Figure 2

For information on the following, please contact the factory

1. Transformers rated primary 230 volts delta, secondary 460Y/266 volts.
2. Low temperature rise units using class 220°C insulation with either 115°C or 80°C rise operating temperature.
3. Totally enclosed non-ventilated units.



AC LINE REACTORS

Protect your sensitive equipment from harmful line disturbances with Acme AC Line Reactors. AC Line Reactors help prevent equipment failure and downtime, and can add years to the life of your equipment.

Designed to protect DC motor drives, AC variable frequency drives and the motors they power. AC Line Reactors allow Acme to augment the Drive Isolation Transformer package to offer both line and load power quality protection for a wide range of applications.

Our product line features flexible design and ease of installation for use in a variety of applications such as paper machines, process lines, press controls and drive systems, along with tube mills and other sophisticated process equipment. These applications are found in such industries as food and beverage, paper, packaging systems and printing.

Features

- Gapped iron core inductor—designed for optimum performance while providing harmonics compensation.
- Precision wound copper coils—maximum protection from short-circuiting.
- Finger-safe terminal blocks (up to 60 HP).
- Compact design—allows for more flexible installation.
- Amperage ratings of 2 to 600 amps
- Available in 3% and 5% impedance
- Can be used with 208, 240, 480 and 600 volts.
- Covered under Acme's 10-year limited warranty.
- UR and cUR Recognized.
- CE Marked (up to 55 amps)

Benefits

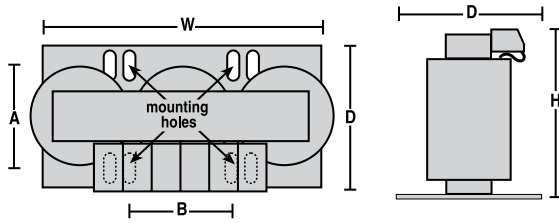
Protect your motors and motor drives from a variety of power conditioning problems while realizing the following benefits:

- Protection from damaging voltage drop.
- Elimination of nuisance tripping of drives or circuit breakers.
- Reduction of motor current surges and power line spike currents.
- Improvement in true power factor of capacitor input drives.
- Cooler, quieter operation.
- Reduction of harmonic distortion.
- Longer life for motors and solid state components.

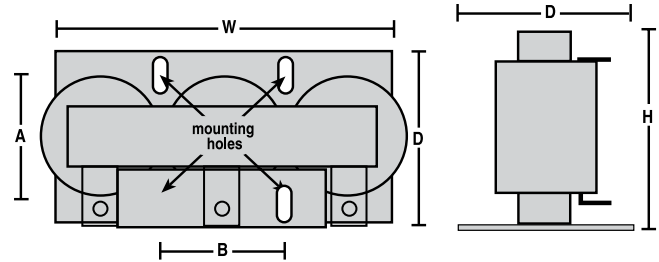


AC Line Reactors Dimensional Drawings

1-60 HP; 2-80 Amp

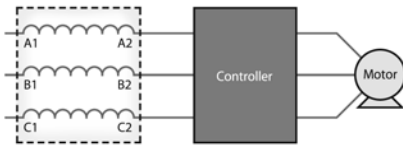


75-500 HP; 110-600 Amp



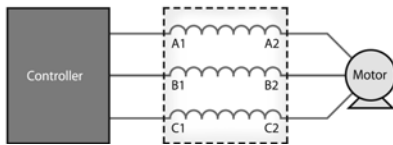
APPLYING AC LINE REACTORS

Acme’s three-phase AC Line Reactors can be used as an input filter for adjustable speed DC drives and as input or output filters for AC pulse width modulated variable frequency drives. They are bi-directional protective filtering devices and can be applied in a variety of configurations.



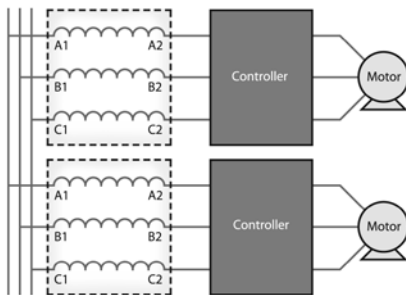
Input to Inverter/Drive

AC Line Reactors protect your sensitive equipment from noise generated by the drive or inverter. They protect the controller from power surges, spikes and harmonic distortion.



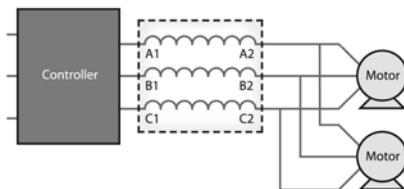
Output of Inverter/Drive (AC Drive only)

Motors run cooler and quieter with an AC Line Reactor placed between the inverter and motor. This application also reduces dv/dt and protects the controller from short circuits and surges.



Multiple Controllers on a Single Power Line

Each drive or inverter on a single power line requires its own AC Line Reactor in order to provide adequate surge protection, prevent crosstalk and reduce har-



Multiple Motors Controlled by a Single Drive (AC Drive only)

Multiple motors controlled by a single drive require only one AC Line Reactor between the controller and motors.



480 VOLTS, 3% Z, 60 Hz (600 VOLTS, 2.4% Z; 240 VOLTS, 6% Z)

Catalog Number	Motor*			uH	Dimensions			Mounting Dimensions		Weight (Lbs.)(Kg.)
	H.P.	Amp	Reactor Amp		Height (Inches)(Cm.)	Width (Inches)(Cm.)	Depth (Inches)(Cm.)	A (Depth)	B (Width)	
ALRB002TBC ①	1	2.1	2	11027	3.875 (9.8)	4.25 (10.8)	3.125 (7.90)	2.00 (5.1)	1.44 (3.7)	3 (1.4)
ALRB003TBC ①	1.5	3	3	7351	3.875 (9.8)	4.25 (10.8)	3.125 (7.90)	2.00 (5.1)	1.44 (3.7)	3 (1.4)
ALRB004TBC ①	2	3.4	4	5513	3.875 (9.8)	4.25 (10.8)	3.125 (7.90)	2.00 (5.1)	1.44 (3.7)	3 (1.4)
ALRB006TBC ①	3	4.8	6	3676	3.875 (9.8)	4.25 (10.8)	3.125 (7.90)	2.00 (5.1)	1.44 (3.7)	3 (1.4)
ALRB008TBC ①	5	7.6	8	2757	4.75 (12.1)	6.50 (16.5)	3.75 (9.50)	2.10 (5.3)	2.00 (5.1)	5 (2.3)
ALRB012TBC ①	7.5	11	12	1838	4.75 (12.1)	6.50 (16.5)	3.75 (9.50)	2.10 (5.3)	2.00 (5.1)	6 (2.7)
ALRB016TBC ①	10	14	16	1378	4.75 (12.1)	6.50 (16.5)	3.75 (9.50)	2.30 (5.8)	2.00 (5.1)	6 (2.7)
ALRB025TBC ①	15	21	25	882	4.75 (12.1)	6.50 (16.5)	4.00 (10.2)	2.60 (6.6)	2.50 (6.4)	9 (4.1)
ALRB027TBC ①	20	27	27	817	4.75 (12.1)	6.50 (16.5)	4.00 (10.2)	2.60 (6.6)	2.50 (6.4)	9 (4.1)
ALRB035TBC ①	25	34	35	630	4.75 (12.1)	6.50 (16.5)	4.50 (11.4)	3.20 (8.1)	2.50 (6.4)	13 (5.9)
ALRB045TBC ①	30	40	45	490	4.75 (12.1)	6.50 (16.5)	4.50 (11.4)	3.20 (8.1)	3.00 (7.6)	14 (6.4)
ALRB055TBC ①	40	52	55	401	7.00 (17.8)	9.00 (22.9)	4.50 (11.4)	3.50 (8.9)	3.60 (9.1)	22 (10.0)
ALRB080TBC	60	77	80	276	7.00 (17.8)	9.00 (22.9)	4.75 (12.1)	3.60 (9.1)	3.60 (9.1)	23 (10.4)
ALRB110CBC	75	96	110	200	7.00 (17.8)	9.00 (22.9)	5.50 (14.0)	3.60 (9.1)	3.60 (9.1)	27 (12.2)
ALRB130CBC	100	124	130	170	7.00 (17.8)	9.00 (22.9)	6.50 (16.5)	3.50 (8.9)	3.60 (9.1)	34 (15.4)
ALRB160CBC	125	156	160	138	7.00 (17.8)	9.00 (22.9)	6.50 (16.5)	4.20 (10.7)	3.60 (9.1)	36 (16.3)
ALRB200CBC	150	180	200	110	7.00 (17.8)	9.00 (22.9)	8.00 (20.3)	4.20 (10.7)	3.60 (9.1)	55 (24.9)
ALRB250CBC	200	240	250	88	8.50 (21.6)	10.80 (27.4)	8.00 (20.3)	5.70 (14.5)	4.60 (11.7)	74 (33.6)
ALRB300CBC	250	302	300	74	8.50 (21.6)	10.80 (27.4)	8.00 (20.3)	5.20 (13.2)	4.60 (11.7)	85 (38.6)
ALRB360CBC	300	361	360	61	8.50 (21.6)	10.80 (27.4)	8.00 (20.3)	6.20 (15.2)	4.60 (11.7)	105 (47.6)
ALRB420CBC	350	414	420	53	8.50 (21.6)	10.80 (27.4)	8.50 (21.6)	6.20 (15.2)	4.60 (11.7)	113 (51.3)
ALRB480CBC	400	477	480	46	8.50 (21.6)	10.80 (27.4)	8.50 (21.6)	6.70 (17.0)	4.60 (11.7)	119 (54.0)

* Motor HP and Amp rated at 480 volts.

① CE Marked





480 VOLTS, 5% Z, 60 Hz (600 VOLTS, 4% Z; 240 VOLTS, 10% Z)

Catalog Number	Motor*			uH	Dimensions			Mounting Dimensions		Weight (Lbs.)(Kg.)
	H.P.	Amp	Reactor Amp		Height (Inches)(Cm.)	Width (Inches)(Cm.)	Depth (Inches)(Cm.)	A (Depth)	B (Width)	
ALRC002TBC ①	1	2.1	2	18378	3.875 (9.8)	4.25 (10.8)	3.125 (7.9)	2.00 (5.1)	1.44 (3.7)	3 (1.4)
ALRC003TBC ①	1.5	3	3	12252	3.875 (9.8)	4.25 (10.8)	3.125 (7.9)	2.00 (5.1)	1.44 (3.7)	3 (1.4)
ALRC004TBC ①	2	3.4	4	9189	3.875 (9.8)	4.25 (10.8)	3.125 (7.9)	2.10 (5.3)	1.44 (3.7)	4 (1.8)
ALRC006TBC ①	3	4.8	6	6126	4.75 (12.1)	6.50 (16.5)	3.75 (9.5)	2.10 (5.3)	2.00 (5.1)	5 (2.3)
ALRC008TBC ①	5	7.6	8	4594	4.75 (12.1)	6.50 (16.5)	3.75 (9.5)	2.10 (5.3)	2.00 (5.1)	6 (2.7)
ALRC012TBC ①	7.5	11	12	3063	4.75 (12.1)	6.50 (16.5)	3.75 (9.5)	2.20 (5.6)	2.00 (5.1)	7 (3.2)
ALRC016TBC ①	10	14	16	2297	4.75 (12.1)	6.50 (16.5)	4.00 (10.2)	2.60 (6.6)	2.00 (5.1)	9 (4.1)
ALRC025TBC ①	15	21	25	1470	4.75 (12.1)	6.50 (16.5)	4.50 (11.4)	3.00 (7.6)	2.00 (5.1)	13 (5.9)
ALRC027TBC ①	20	27	27	1361	4.75 (12.1)	6.50 (16.5)	4.50 (11.4)	2.80 (7.1)	3.00 (7.6)	13 (5.9)
ALRC035TBC ①	25	34	35	1050	7.00 (17.8)	9.00 (22.9)	4.75 (12.1)	3.60 (9.1)	3.00 (7.6)	23 (10.4)
ALRC045TBC ①	30	40	45	817	7.00 (17.8)	9.00 (22.9)	4.75 (12.1)	3.60 (9.1)	3.00 (7.6)	23 (10.4)
ALRC055TBC ①	40	52	55	668	7.00 (17.8)	9.00 (22.9)	4.75 (12.1)	3.60 (9.1)	3.00 (7.6)	24 (10.9)
ALRC080TBC	60	77	80	459	7.00 (17.8)	9.00 (22.9)	5.75 (14.6)	4.60 (11.7)	3.60 (9.1)	34 (15.4)
ALRC110CBC	75	96	110	334	7.00 (17.8)	9.00 (22.9)	6.50 (16.5)	4.20 (10.7)	3.60 (9.1)	56 (25.4)
ALRC130CBC	100	124	130	283	7.00 (17.8)	9.00 (22.9)	6.50 (16.5)	4.20 (10.7)	3.60 (9.1)	56 (25.4)
ALRC160CBC	125	156	160	230	7.00 (17.8)	9.00 (22.9)	8.00 (20.3)	4.20 (10.7)	3.60 (9.1)	70 (31.8)
ALRC200CBC	150	180	200	184	8.50 (21.6)	10.80 (27.4)	8.25 (21.0)	5.90 (15.0)	3.60 (9.1)	76 (34.5)
ALRC250CBC	200	240	250	147	8.50 (21.6)	10.80 (27.4)	8.25 (21.0)	6.20 (15.7)	4.60 (11.7)	89 (40.4)
ALRC300CBC	250	302	300	123	10.93 (27.8)	16.50 (41.9)	8.13 (20.7)	6.20 (15.7)	4.60 (11.7)	106 (48.1)
ALRC360CBC	300	361	360	102	10.93 (27.8)	16.50 (41.9)	9.50 (24.1)	8.20 (20.8)	4.60 (11.7)	124 (56.2)
ALRC420CBC	350	414	420	88	10.93 (27.8)	16.50 (41.9)	9.50 (24.1)	8.20 (20.8)	4.60 (11.7)	124 (56.2)
ALRC480CBC	400	477	480	77	10.93 (27.8)	16.50 (41.9)	10.13 (25.7)	8.20 (20.8)	4.60 (11.7)	129 (58.5)
ALRC600CBC	500	590	600	61	10.93 (27.8)	16.50 (41.9)	10.13 (25.7)	8.20 (20.8)	7.20 (18.3)	190 (86.2)

* Motor HP and Amp rated at 480 volts.

① CE Marked



ENCAPSULATED LINE REACTORS



Acme's Encapsulated AC Line Reactors are designed to protect DC motor drives and AC variable frequency drives or motors—with one important difference. These line reactors are completely enclosed, so the unit can be mounted outside the control panel.

Ideal for applications such as process lines, paper machines, casters, tube mills, tire assembly, laminators, press controls and drive systems. Acme's Encapsulated AC Line Reactors immerse the core and coil assembly in an electrical grade silica and resin compound that seals out moisture and potential corrosives. These Line Reactors are housed in a NEMA 3R Enclosure suitable for indoor or outdoor applications. What's more, these encapsulated line reactors are extremely convenient to install. They can be floor or wall mounted and front access makes wiring easy.

Features

- UL Type 3R enclosure.
- Available with stainless steel enclosure.
- Versatile mounting options to meet special application requirements.
- Large wiring compartment remains cool.
- No conduit or pull boxes needed.
- Front access to compartment simplifies wiring.
- Flexible copper leadwire terminates outside wiring compartment for quick connections.
- Dual-size knockouts in both sides and bottom of compartment for added flexibility in wiring.
- Ground studs for use with non-metallic conduit.
- UL and cUL Listed, CE Marked.
- Backed by Acme's 10-year limited warranty

Benefits

- Completely enclosed design provides protection against corrosion and insulation deterioration in washdown and harsh environment.
- Easy to install and wire.
- Protects against a whole range of power conditioning problems.
- Eliminates motor failure due to poor power quality.
- Reduces downtime.
- Extends the life of your equipment.





480 VOLTS, 3% Z, 60 Hz (600 VOLTS, 2.4% Z; 240 VOLTS, 6% Z)

Catalog Number	Motor*				Dimensions			Dimensional Drawings	Weight (Lbs.)(Kg.)
	H.P.	Amp	Reactor Amp	uH	Height (Inches)(Cm.)	Width (Inches)(Cm.)	Depth (Inches)(Cm.)		
ALRB002LWE	1	2.1	2	11027	9.68 (24.6)	4.75 (12.1)	4.5 (11.4)	A	10 (4.5)
ALRB003LWE	1.5	3	3	7351	9.68 (24.6)	4.75 (12.1)	4.5 (11.4)	A	10 (4.5)
ALRB004LWE	2	3.4	4	5513	9.68 (24.6)	4.75 (12.1)	4.5 (11.4)	A	10 (4.5)
ALRB006LWE	3	4.8	6	3676	9.68 (24.6)	4.75 (12.1)	4.5 (11.4)	A	10 (4.5)
ALRB008LWE	5	7.6	8	2757	11.5 (29.2)	10.31 (26.2)	7.13 (18.1)	B	24 (10.9)
ALRB012LWE	7.5	11	12	1838	11.5 (29.2)	10.31 (26.2)	7.13 (18.1)	B	24 (10.9)
ALRB016LWE	10	14	16	1378	11.5 (29.2)	10.31 (26.2)	7.13 (18.1)	B	25 (11.3)
ALRB025LWE	15	21	25	882	11.5 (29.2)	10.31 (26.2)	7.13 (18.1)	B	28 (12.7)
ALRB027LWE	20	27	27	817	11.5 (29.2)	10.31 (26.2)	7.13 (18.1)	B	28 (12.7)
ALRB035LWE	25	34	35	630	11.5 (29.2)	10.31 (26.2)	7.13 (18.1)	B	32 (14.5)
ALRB045LWE	30	40	45	490	11.5 (29.2)	10.31 (26.2)	7.13 (18.1)	B	33 (15.0)
ALRB055LWE	40	52	55	401	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	C	73 (33.1)
ALRB080LWE	60	77	80	276	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	C	75 (34.0)
ALRB110LWE	75	96	110	200	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	C	78 (35.4)
ALRB130LWE	100	124	130	170	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	C	85 (38.6)
ALRB160LWE	125	156	160	138	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	C	87 (39.5)

* Motor HP and Amp rated at 480 volts.

480 VOLTS, 5% Z, 60 Hz (600 VOLTS, 4% Z; 240 VOLTS, 10% Z)

Catalog Number	Motor*				Dimensions			Dimensional Drawings	Weight (Lbs.)(Kg.)
	H.P.	Amp	Reactor Amp	uH	Height (Inches)(Cm.)	Width (Inches)(Cm.)	Depth (Inches)(Cm.)		
ALRC002LWE	1	2.1	2	18378	9.68 (24.6)	4.75 (12.1)	4.5 (11.4)	A	10 (4.5)
ALRC003LWE	1.5	3	3	12252	9.68 (24.6)	4.75 (12.1)	4.5 (11.4)	A	10 (4.5)
ALRC004LWE	2	3.4	4	9189	9.68 (24.6)	4.75 (12.1)	4.5 (11.4)	A	10 (4.5)
ALRC006LWE	3	4.8	6	6126	11.5 (29.2)	10.31 (26.2)	7.13 (18.1)	B	24 (10.9)
ALRC008LWE	5	7.6	8	4594	11.5 (29.2)	10.31 (26.2)	7.13 (18.1)	B	24 (10.9)
ALRC012LWE	7.5	11	12	3063	11.5 (29.2)	10.31 (26.2)	7.13 (18.1)	B	26 (11.8)
ALRC016LWE	10	14	16	2297	11.5 (29.2)	10.31 (26.2)	7.13 (18.1)	B	28 (12.7)
ALRC025LWE	15	21	25	1470	11.5 (29.2)	10.31 (26.2)	7.13 (18.1)	B	32 (14.5)
ALRC027LWE	20	27	27	1361	11.5 (29.2)	10.31 (26.2)	7.13 (18.1)	B	32 (14.5)
ALRC035LWE	25	34	35	1050	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	C	74 (33.6)
ALRC045LWE	30	40	45	817	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	C	75 (34.0)
ALRC055LWE	40	52	55	668	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	C	75 (34.0)
ALRC080LWE	60	77	80	459	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	C	85 (38.6)
ALRC110LWE	75	96	110	334	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	C	107 (48.5)
ALRC130LWE	100	124	130	263	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	C	107 (48.5)
ALRC160LWE	125	156	160	230	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	C	121 (54.9)

* Motor HP and Amp rated at 480 volts.

Diagram A

Diagram B

Diagram C

