1-800-633-0405 **General Accessories for AC Drives Drives Accessories – Line/Load Reactors**

LR(2) Series Line Reactors

Input line reactors protect the AC drive from transient overvoltage conditions typically caused by utility capacitor switching. They also reduce the harmonics associated with AC drives and are recommended for all installations.

Output line (load) reactors protect the motor insulation against AC drive short circuits and IGBT reflective wave damage, and also allow the motor to run cooler by "smoothing" the motor current waveform. They are recommended for operating "non-inverter-duty" motors, and for any motors where the length of wiring between the AC drive and motor is less than 100 feet. For AC Drive-to-Motor wiring distances over 100 feet, use of the VTF series output filter is recommended.

Features:

- Universal mounting feet with multiple mounting slots; can replace most reactors using existing mounting holes
- Short-term overload rating: 200% of rated current for 3 minutes maximum
- Overload inductance: 95% @ 110% load; 80% @ 150% load
- Impedence: ~3%
- 10-year warranty

Agency Approvals:

- CULUS listed (E197592)
- CE marked
- RoHS



Typical Line Reactors

LR(2) Series Line/Load Reactors – Compatibility with AutomationDirect AC Drives

- For Reactor compatibility with CFW100 AC Drives, please refer to WEG CFW100 AC Drives Accessories: PDF.
- For Reactor compatibility with CFW300 AC Drives, please refer to WEG CFW300 AC Drives Accessories: PDF.
- For Reactor compatibility with CFW500 AC Drives, please refer to WEG CFW300 AC Drives Accessories: PDF.
- For Reactor compatibility with GS4 AC Drives, please refer to GS4 DURApulse Drives Accessories Line/Load Reactors: PDE.
- For Reactor compatibility with GS20(X) AC Drives, please refer to GS20(X) Optional Accessories Line Reactors/VTF Filters: PDF.
- For Reactor compatibility with GS30 AC Drives, please refer to GS20 Optional Accessories Line Reactors/VTF Filters: PDE.
- For Reactor compatibility with AS3 AC Drives, please refer to AS3 Optional Accessories Line Reactors/VTF Filters: PDF.

1-800-633-0405 **Drives Accessories – Line/Load Reactors**

Part Number1 Price Amps Mate Amps Induc- Amps Weigh Image Wire (b) Wire Amps Terminal Torque (b)-n) Operating Temperature Storage Temperature Environment Derwing Unks LR2-109-1PH-34 \$57.00 10A 1.37 27 1	Line/Load Reactors for AC Drives – LR(2) Series												
LR2:002-10H-43 ⁴ \$\$87.00 10A 1.37 27 LR2:002-10H-3 ⁴⁴ \$\$102.00 0.971 42 LR2:102-10H-3 ⁴⁵ \$\$06.00 167.A 1.33 2.13 2.14 18-12 AWG 10 180°C / 366°F -0.0 - 149°F Homidity: 95% PDE LR2:102-10H-3 \$\$20.00 3AA 6A 235 24.3 10 18-12 AWG 20 104°F [40°C] -0.0 - 149°F Homidity: 95% PDE PDE PDE PDE LR2:2092 ⁴ \$\$80.00 3AA 6A 235 39 14 18-12 AWG 20 104°F [40°C] -0.0 - 149°F Homidity: 95% PDE PDE LR2:2092 ⁴ \$\$100.00 5AA 46 30.6 38 22-12 AWG 9 122°F [60°C] -0.0 + 149°F Homidity: 95% PDE PDE LR2:2092 ⁴ \$\$100.00 76A 2.9 49 42 14 14 18-12 AWG 10 180°C / 366°F -0.0 + 160°F Homidity: 95% PDE	Part Number ¹	Price	Max Rated Amps	Induc- tance [mH]	Watt Loss	System Voltage	Weight (lb)	Wire Range	Terminal Torque (lb∙in)	Operating Temperature	Storage Temperature	Environment	Drawing Links
LR2-009-1PH_43 S102.00 12A 0.971 42 1.4 1.01 2 AWG 1.01 1.00<	LR2-10P2-1PH-A ³⁴	\$87.00	10A	1.37	27		1.4	18 12 AWG	10	180°C / 356°E	-40 – 104 °F	Humidity: 95%	PDF
LR.22P0-1PH ³ S66.00 12A 1.53 24.3 110 VAC 4.3 16-12 AWG 20 104''F [40''C] max 4.0 - 149 'F [40 - 40 'C] NEMA: open (moreive gases PDE LR2.11P5-1PH ²³ S207.00 16.7A 1.03 5.3 LR2.20P2 ⁴ \$83.00 3.4 6.4 25.5 1 1.4 1.	<u>LR2-10P5-1PH-A34</u>	\$102.00		0.971	42		1.4	10-12 AWG	10	100 C7 350 F	[-40 – 40 °C]	Non-condensing	<u>PDF</u>
IR2-11P0-1PH ²³ S207.00 16.7A 103 53 8 18-4 AWG 20 40 - 104 °F [40 - 60 °C] Induiting gasses PDF IR2-20P24 583.00 3A A 64 23.5 12 14-4 AWG 20 40 - 104 °F [40 - 60 °C] choose pDF PDF IR2-20P24 583.00 3A A 64 23.5 34 64 23.5 34 64 35.6 39 14.4 14 122°F [50°C] 40 - 104 °F 40 - 104 °F 40 - 104 °F 140 - 65 °C PDF	<u>LR-22P0-1PH³</u>	\$86.00	12A	1.53	24.3	110 VAC	4.3	18–12 AWG	00	104°F [40°C] max -40 – 104 °F	-40 – 149 °F [-40 – 65 °C]	NEMA: open IP00 no corrosive gases	PDF
IR2-109-104-30 IR2-2002-4 S221.00 34A 0.342 64 12 IO-AND IO-AND <th< th=""><th><u>LR2-11P0-1PH</u>23</th><th>\$207.00</th><th>16.7A</th><th>1.03</th><th>53</th><th>8</th><th></th><th>20</th><th><u>PDF</u></th></th<>	<u>LR2-11P0-1PH</u> 23	\$207.00	16.7A	1.03	53		8		20				<u>PDF</u>
IR2.20024 §83.00 3.4 7.4 26.4 IR2.2002.1PH ³⁴ \$30.00 3.4 6.4 23.5 IR2.2005.1PH ³⁴ \$100.00 6.2A 3.56 39 IR2.2007.4 \$102.00 7.6A 2.9 49 IR2.2019.4 \$114.00 11.A 2.9 49 IR2.2019.4 \$114.00 11.A 0.2 64 IR2.2019.4 \$114.00 11.A 0.2 64 IR2.2119.0.1PH.434 \$114.00 11.A 0.2 64 IR2.2190.4 \$100.00 12A 0.971 42 IR2.2190.4 \$104.00 16.7A 10.3 53 IR2.2390.4 \$104.00 16.7A 38	<u>LR2-11P5-1PH</u> 3	\$221.00	34A	0.342	64		12	10-4 /00		[-40 – 40 °C]		gaooo	PDF
LR2.20P2-1PH ³⁴ S84.00 3.4A 6.4 23.5 LR2.20P5 ⁴ \$100.00 6.2A 3.56 39 LR2.20P5 ⁴ \$100.00 6.2A 3.56 39 LR2.20P5 ⁴ \$100.00 7.6A 2.9 49 LR2.21P5 ⁴ \$114.00 11.A 2 40 122°F [50°C] 40 140°- 65°C 100° 10° 100° 10° 10° 10° 10° 10° <th>LR2-20P2⁴</th> <th>\$83.00</th> <th>3A</th> <th>7.4</th> <th>26.4</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>PDF</th>	LR2-20P2 ⁴	\$83.00	3A	7.4	26.4								PDF
LR2.20054 \$100.00 4.8A 4.6 30.6 LR2.2005-1PH ³⁴ \$100.00 6.2A 3.56 39 LR2.2005-1PH ³⁴ \$100.00 7.6A 2.9 49 LR2.20074 \$114.00 11A 2 64 LR2.2104 \$114.00 11A 2 64 LR2.2105-1PH.4 ³⁴ \$114.00 12 0.57 64 0.626 0 LR2.2105-1PH.4 ³⁴ \$102.00 12A 0.53 184 184 0 104 °F [40°C] -0.14 °F Humidity .55% 00 000 100 °C /36°F -0.14 °F Humidity .55% 00 000 100 °C /36°F -0.14 °F Humidity .55% 000 000 100 °C /36°F -0.14 °F Humidity .55% 000 100 °C /36°F -0.14 °F Humidity .55%	LR2-20P2-1PH ³⁴	\$84.00	3.4A	6.4	23.5	-	1.4 3	-				NEMA: open IP00 no corrosive gases	PDF
LR2-20P5-1PH ³⁴ \$100.00 6.2A 3.66 39 LR2-20P74 \$102.00 7.6A 2.9 49 LR2-21P04 \$114.00 1/A 2.9 49 LR2-21P04 \$114.00 1/A 2.9 49 122°F [50°C] 40149°F 1.4055°C 1.4055°C <th>LR2-20P5⁴</th> <th>\$100.00</th> <th>4.8A</th> <th>4.6</th> <th>30.6</th> <th rowspan="6">9</th> <th rowspan="5">122°F [50°C] max</th> <th rowspan="5">-40 – 149 °F [-40 – 65 °C]</th> <th>PDF</th>	LR2-20P5 ⁴	\$100.00	4.8A	4.6	30.6				9	122°F [50°C] max	-40 – 149 °F [-40 – 65 °C]		PDF
LR2.20P74 \$102.00 7.6A 2.9 49 LR2.21P04 \$114.00 14 2 64 16 <t< th=""><th>LR2-20P5-1PH³⁴</th><th>\$100.00</th><th>6.2A</th><th>3.56</th><th>39</th><th>PDF</th></t<>	LR2-20P5-1PH ³⁴	\$100.00	6.2A	3.56	39								PDF
LR2.21P04 \$114.00 11A 2 64 LR2.21P54 \$114.00 11A 2 64 LR2.21P54 \$114.00 11A 2 64 LR2.21P5.1PH.434 \$114.00 10 180°C / 356°F 40 - 104 °F Humidity 95% PDF LR2.21P5.1PH.434 \$112.00 12A 0.971 42 LR2.22P0.1PH/234 \$202.00 1A 48 18-12 AWG 10 180°C / 356°F 40 - 104 °F Humidity 95% PDF LR2.23P0.1PH/34 \$124.00 19A 65 48 18-4 AWG 104°F [40°C] 40 - 104 °F Humidity 95% PDF LR2.23P0.1PH/34 \$124.00 19A 65 38 20 VAC 18-4 AWG 104°F [40°C] 40 - 104 °F Humidity 95% PDF LR2.23P0.1PH/34 \$124.00 19A 62 38 20 VAC 18-4 AWG 104°F [40°C] 40 - 104 °F Humidity 95% PDF LR2.2010 \$242.00 30.8A 0.312 96 18-4 AWG	<u>LR2-20P7</u> ⁴	\$102.00	7.6A	2.9	49			22-12 AWG					PDF
LR2-21P54 \$114.00 11A 2 64 LR2-22P04 \$15.00 11.6A 2 64 3.2 PDE	<u>LR2-21P0</u> 4	\$114.00					3.2						PDF
LR2-22P04 \$115.00 C 04	<u>LR2-21P5</u> ⁴	\$114.00	11A	2	61								PDF
LR2.21P0_1PH_434 \$112.00 11.64 0.2 LR2.21P5_1PH_434 \$114.00 12.6 9.01 18.12 AWG 18.12 AWG 18.0° C / 356°F 40 - 104°F Humidity:96/6 PDE LR2.23P04 \$102.00 12.4 9.01 4.0 9.01 1.4 18.12 AWG 18.12 AWG 104°F [40°C] -40 - 149°F NEMA: open orosive gases PDE LR2.23P0.1PH434 \$124.00 19.4 19.4 4.8 4.8 18.4 AWG 18.4 AWG -40 - 104°F Humidity: 95% PDE LR2.23P0.1PH434 \$124.00 19.4 4.8 4.8 18.4 AWG 18.4 AWG -40 - 104°F Humidity: 95% PDE LR2.010 \$242.00 30.8 0.342 96 18.4 AWG 14.4 AWG 19.0 °F 14.4 ···································	LR2-22P0 ⁴	\$115.00			04	1.4							PDF
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	<u>LR2-21P0-1PH-A34</u>	\$112.00	11.6A	0.2				18-12 AWG	10	180°C / 356°F	-40 – 104 °F [-40 – 40 °C]		PDF
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	<u>LR2-21P5-1PH-A34</u>	\$114.00										Humidity: 95%	<u>PDF</u>
LR2-22P0-1PH234 \$202.00 1.03 53 1.03 53 1.03 53 $1.04^{\circ}F[40^{\circ}C]$ $40-149^{\circ}F[40^{\circ}C]$ $1.04^{\circ}F[40^{\circ}C]$ $1.04^$	LR2-23P0 ⁴	\$102.00	12A	0.971	42		1.4						PDF
LR-25P0 \$194.00 16.7A 0.626 48 LR-2:3P0-1PH ³⁴ \$124.00 19A 0.626 38 LR-2:7P5 \$206.00 24.2A 0.434 65 LR-2:010 \$242.00 30.8A 0.342 96 LR-2:020 \$312.00 \$9.4A 0.172 85 LR-2:020 \$312.00 \$9.4A 0.138 94 LR-2:020 \$3460.00 74.8A 0.138 94 LR-2:020 \$440.00 88A 0.116 135 LR-2:020 \$670.00 143A 0.0699 154 LR-2:050 \$670.00 143A 0.0699 154 LR-2:050 \$676.00 211A 0.0487 294 </th <th>LR2-22P0-1PH²³⁴</th> <th>\$202.00</th> <th rowspan="2">16.7A</th> <th rowspan="3">0.626</th> <th>53</th> <th rowspan="3">230 VAC</th> <th rowspan="8">AC 8 12 15</th> <th rowspan="2">18–4 AWG</th> <th></th> <th>104°F [40°C]</th> <th rowspan="2">-40 – 149 °F [-40 – 65 °C]</th> <th rowspan="2">NEMA: open IP00 no corrosive gases</th> <th>PDF</th>	LR2-22P0-1PH ²³⁴	\$202.00	16.7A	0.626	53	230 VAC	AC 8 12 15	18–4 AWG		104°F [40°C]	-40 – 149 °F [-40 – 65 °C]	NEMA: open IP00 no corrosive gases	PDF
LR2-23P0-1PH ³⁴ \$124.00 19A 0.026 38 230 VAC 6 18-4 AWG 20 180°C / 356°F -40 - 104°F Humidity: 95% PDE LR-2010 \$242.00 30.8A 0.342 96 -40 -20 -40 - 0°C] Non-condensing PDE LR-2015 \$285.00 46.2A 0.22 64 -12 18-4 AWG -40 - 149°F -40149°F PDE PDE LR-2020 \$312.00 59.4A 0.172 85 -15 -16 AWG: 25 14-6 AWG: 30 4 AWG: 35 -40149°F -40149°F PDE PDE LR-2020 \$460.00 74.8A 0.138 94 -15 -6AWG-2/0 (AL or CU) 120 104°F [40°C] -40149°F -149°F PDE LR-2030 \$490.00 88A 0.069 154 -6AWG-2/0 (AL or CU) 120 104°F [40°C] -40149°F -40149°F PDE LR-2050 \$670.00 143A 0.0699 154 -6AWG-2/0 (AL or CU) 275 -140 - 65°C	<u>LR-25P0</u>	\$194.00			48					max			PDF
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	<u>LR2-23P0-1PH³⁴</u>	\$124.00	19A		38			18-4 AWG	20	180°C / 356°F	-40 – 104 °F [-40 – 40 °C]	Humidity: 95% Non-condensing	<u>PDF</u>
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	LR-27P5	\$206.00	24.2A	0.434	65	1		2 18–4 AWG	- 20	104°F [40°C] max	-40 – 149 °F [-40 – 65 °C]	NEMA: open IP00 no corrosive gases	PDF
LR-2015 \$285.00 46.2A 0.22 64 LR-2020 \$312.00 59.4A 0.172 85 LR-2025 \$460.00 74.8A 0.138 94 LR-2030 \$490.00 88A 0.116 135 LR-2040 \$574.00 114A 0.0886 149 LR-2050 \$670.00 143A 0.0699 154 LR-2060 \$745.00 169A 0.0624 209 LR-2075 \$766.00 211A 0.0487 294 LR-2075 \$766.00 211A 0.0624 209 LR-2010 \$843.00 273A 0.0664 276	LR-2010	\$242.00	30.8A	0.342	96	1							PDF
LR-2020 \$312.00 59.4A 0.172 85 LR-2025 \$460.00 74.8A 0.138 94 LR-2030 \$490.00 88A 0.116 135 LR-2040 \$574.00 114A 0.0886 149 LR-2050 \$670.00 143A 0.0699 154 LR-2060 \$745.00 169A 0.0624 209 LR-2075 \$766.00 211A 0.0487 294 LR-2010 \$843.00 273A 0.0364 276	LR-2015	\$285.00	46.2A 59.4A	0.22	64								PDF
LR-2025 \$460.00 74.8A 0.138 94 LR-2030 \$490.00 88A 0.116 135 LR-2040 \$574.00 114A 0.0886 149 LR-2050 \$670.00 143A 0.0699 154 LR-2060 \$745.00 169A 0.0624 209 LR-2075 \$766.00 211A 0.0487 294 LR-2075 \$766.00 211A 0.0364 276	LR-2020	\$312.00		0.172	85								PDF
LR-2030 \$490.00 88A 0.116 135 LR-2040 \$574.00 114A 0.0886 149 LR-2050 \$670.00 143A 0.0699 154 LR-2060 \$745.00 169A 0.0624 209 LR-2075 \$766.00 211A 0.0487 294 LR-2075 \$843.00 273A 0.0364 276	<u>LR-2025</u>	\$460.00	74.8A	0.138	94	-			18–16 AWG: 25 14–6 AWG: 30 4 AWG: 35				PDF
LR-2040 \$574.00 114A 0.0886 149 LR-2050 \$670.00 143A 0.0699 154 LR-2060 \$745.00 169A 0.0624 209 LR-2075 \$766.00 211A 0.0487 294 LR-2000 \$843.00 273A 0.0364 276	LR-2030	\$490.00	88A	0.116	135		33 36	6AWG–2/0 (AL or CU) 6AWG– 250kcmil (AL or CU)	120 275				PDF
LR-2050 \$670.00 143A 0.0699 154 36 6AWG- 250kcmil (AL or CU) 275 Corrosive gases PDF LR-2060 \$745.00 169A 0.0624 209 46 6AWG- 250MCM 275 PDF PDF LR-2075 \$766.00 211A 0.0487 294 52 4AWG- 600MCM 500 500 500 PDF	LR-2040	\$574.00	114A		149								PDF
LR-2060 \$745.00 169A 0.0624 209 46 6AWG- 250MCM PDF LR-2075 \$766.00 211A 0.0487 294 52 4AWG- 600MCM 500 500 PDF	<u>LR-2050</u>	\$670.00	143A	0.0699	154								PDF
LR-2075 \$766.00 211A 0.0487 294 52 4AWG- 500 PDF LP-2100 \$843.00 2734 0.0364 276 52 600MCM 500 DDF	<u>LR-2060</u>	\$745.00	169A	0.0624	209		46	6AWG- 250MCM					PDF
	<u>LR-2075</u>	\$766.00	211A	0.0487	87 294		52	4AWG- 600MCM	500				PDF

1. Impedence = 3% for all reactors, except as otherwise noted.

Impedence = 5% for reactors marked with this note, but they function as 3% reactors in the ADC drive application.
 Single-phase line reactors are for use only with single-phase drive inputs. Single-phase line reactors should NOT be installed on the output side of AC drives.

4. Optional mounting accessories are available for these models. See "Line/Load Reactors – Mounting Accessories" section for details.

5. LR-4250 & LR-4300 have dual-connector lugs, and will require multiple conductors per phase of the appropriate size to fit the lugs.

1-800-633-0405 **Drives Accessories – Line/Load Reactors**

Line/Load Reactors for AC Drives – LR(2) Series												
Part Number ¹	Price	Max Rated Amps	Induc- tance [mH]	Watt Loss	System Voltage	Weight (lb)	Wire Range	Terminal Torque (Ib·in)	Operating Temperature	Storage Temperature	Environment	Drawing Links
<u>LR2-40P2</u> 4	\$60.00	0.7A	31.5	5							NEMA: open IP00 no corrosive gases	PDF
<u>LR2-40P3</u> 4	\$66.00	0.8A	27.6	6.2		13			122°F [50°C] max	-40 – 149 °F [-40 – 65 °C]		<u>PDF</u>
<u>LR2-40P5</u> ⁴	\$67.00	1.1A	20	9.7		1.5	 22–12 AWG 	9				<u>PDF</u>
<u>LR2-40P7</u> ⁴	\$67.00	1.6A	13.8	12.1								<u>PDF</u>
<u>LR2-41P0</u> ⁴	\$68.00	2.1A	10.5	25.2		1.2						PDF
<u>LR2-41P5</u> ⁴	\$82.00	3A	7.4	26.4		1.4						PDF
<u>LR2-42P0</u> 4	\$83.00	3.4A	6.5	23.5								PDF
<u>LR2-43P0</u> ⁴	\$99.00	4.8A	4.6	30.6								<u>PDF</u>
<u>LR2-44P0</u> ⁴	\$101.00	6.2A	3.56	39								<u>PDF</u>
<u>LR2-45P0</u> 4	\$101.00	7.6A	2.9	49								PDF
<u>LR2-47P5</u> ⁴	\$115.00	11A	2	64		3.2						PDF
<u>LR2-4010</u> 4	\$116.00	14A	1.58	77.7		3.3	18-12 AWG	10	180°C / 356°F	-40 – 104 °F [-40 – 40 °C]	Humidity: 95% Non-condensing	PDF
<u>LR-4015</u>	\$237.00	21A	0.912	65		8		20 22–16 AWG: 25 14–6		-40 – 149 °F [-40 – 65 °C]	NEMA: open IP00 no corrosive gases	PDF
<u>LR-4020</u>	\$276.00	27A	0.694	79	79 96 05 14 69 93 225 554 280	0	18–4 AWG					PDF
<u>LR-4025</u>	\$290.00	34A	0.569	96		10						PDF
<u>LR-4030</u>	\$347.00	40A	0.469	105		10						PDF
<u>LR-4040</u>	\$382.00	52A	0.387	111		15						PDF
<u>LR-4050</u>	\$448.00	65A	0.295	114		25 33	#22–4 AWG					PDF
<u>LR-4060</u>	\$462.00	77A	0.227	169				AWG: 30 4 AWG: 35				PDF
<u>LR-4075</u>	\$700.00	96A	0.196	193			2/0 – 6AWG (AL or CU)	120	104°F [40°C]			<u>PDF</u>
<u>LR-4100</u>	\$840.00	124A	0.152	225			250kcmil – 6AWG (AL or CU)	275	max			PDF
<u>LR-4125</u>	\$962.00	156A	0.117	254		46						PDF
<u>LR-4150</u>	\$1,114.00	180A	0.103	299								PDF
<u>LR-4200</u>	\$1,238.00	240A	0.0839	280		(1) 4 AWG – 600kcmil (2) 1/0 – 74 250kcmil (2)** 4 AWG	500				PDF	
<u>LR-4250</u> 5	\$1,403.00	302A	0.0654	337			(2)** 4 AWG - 350kcmil (AL or CU)	275				PDF
<u>LR-4300</u> 5	\$1,546.00	361A	0.0565	381								<u>PDF</u>
<u>LR2-51P0</u> 4	\$80.00	1.7A	16.2	16.2		1.3			122°F [50°C] max	-40 – 149 °F [-40 – 65 °C]		PDF
<u>LR2-51P5</u> ⁴	\$96.00	2.4A	11.5	17.2		1.4	1.4 1.5 3.5 2.9 22–12 AWG	9			NEMA: open	PDF
<u>LR2-52P0</u> 4	\$97.00	2.7A	10.2	20.5	0.5 30 600 VAC	1.5						<u>PDF</u>
<u>LR2-53P0</u> 4	\$99.00	3.9A	7.07	30		3.5					IP00 no	PDF
LR2-54P0 ⁴	\$105.00	4.9A	5.63	00		2.9					corrosive gases	PDF
LR2-55P0 ⁴	\$113.00	6.1A	4.52	44		3					PDF	
<u>LR2-57P5</u> 4	\$113.00	9A	3.1	57		3.2						PDF
<u>LR2-5010</u> 4	\$115.00	11A	2.454	52.6			18-12 AWG	10	180°C / 356°F	-40 – 104 °F [-40 – 40 °C]	Humidity: 95% Non-condensing	PDF

1. Impedence = 3% for all reactors, except as otherwise noted.

2. Impedence = 5% for reactors marked with this note, but they function as 3% reactors in the ADC drive application.

Single-phase line reactors are for use only with single-phase drive inputs. Single-phase line reactors should NOT be installed on the output side of AC drives.
 Optional mounting accessories are available for these models. See "Line/Load Reactors – Mounting Accessories" section for details.

5. LR-4250 & LR-4300 have dual-connector lugs, and will require multiple conductors per phase of the appropriate size to fit the lugs.

1-800-633-0405 **Drives Accessories – Line/Load Reactor Mounting Accessories**

LR(2) Series Line/Load Reactors – Mounting Accessories

LR(2) series reactors have different mounting options depending on the model. The models listed below have an integral two-bolt mounting method, and also offer optional mounting adapters that allow other mounting methods.

Adapter Plate Kits <u>LR2-AP1</u> and <u>LR2-AP2</u> allow for universal panel mounting with these models.

DIN Rail Mounting Kits LR2-DR1 and LR2-DR2 allow DIN rail mounting with these models.

LR2 Series Line Reactor Mounting Adapters									
Part Number	Price	Description	Drawing Links						
LR2-AP1	\$25.00	Adapter Plate Kit; includes 2 flange nuts (10-32); Dimensions 4.45" x 2.63"	PDF						
LR2-AP2	\$25.00	Adapter Plate Kit; includes 2 flange nuts (10-32); Dimensions 4.45" x 3.51"	PDF						
LR2-DR1	\$25.00	DIN Rail Mounting Clips and Hardware Kit; includes 2 screws (M5-0.8 x 8mm), 2 washers, 2 clips	PDF						
LR2-DR2	\$38.00	DIN Rail Mounting Plate and Hardware Kit; includes 4 bolts (0.25-20 x 0.50) and 4 flange nuts	PDF						



LR2-AP1



LR2-AP2



LR2-DR1



Adapter Plate Kits Part # DIN Rail Mount Kits Part # ADC Line Reactor Part # LR2-DR1 LR2-DR2 LR2-AP1 LR2-AP2 LR2-10P2-1PH-A • • • LR2-10P5-1PH-A ٠ LR2-20P2 • ٠ • LR2-20P2-1PH • . . LR2-20P5 • • • LR2-20P5-1PH • <u>LR2-20P7</u> • LR2-21P0 ٠ LR2-21P5 • <u>LR2-22P0</u> • <u>LR2-21P0-1PH-A</u> • LR2-21P5-1PH-A • LR2-23P0 . LR2-4010 • LR2-40P2 • • • <u>LR2-40P3</u> . • . LR2-40P5 ٠ ٠ ٠ LR2-40P7 • • • <u>LR2-41P0</u> • • • LR2-41P5 ٠ ٠ ٠ LR2-42P0 • • • LR2-43P0 • • • LR2-44P0 . LR2-45P0 • LR2-47P5 • LR2-51P0 • • • LR2-51P5 • • • <u>LR2-52P0</u> • • • LR2-53P0 ٠ LR2-54P0 • LR2-55P0 • LR2-57P5 ٠ <u>LR2-5010</u> •

LR2 Line Reactor Mounting Adapter Selection Table

LR2-DR2 www.automationdirect.com

1-800-633-0405 Drives Accessories – Line/Load Reactors One Line Line/Load Reactors for AC Drives – Generic One-Line Wiring Examples



WARNING: CONSULT THE APPLICABLE DRIVE USER MANUAL BEFORE ACTUALLY WIRING THE DRIVE!

Input side of the drive

When installed on the input side of the AC drive, line reactors will reduce line notching, as well as limit current and voltage spikes and surges from the incoming line. The line reactor will also reduce harmonic distortion from the drive onto the line. Units are installed in front of the AC drive as shown.





Output side of the drive

When installed on the output side of the drive, line reactors protect the drive from short circuits at the load. Voltage and current waveforms from the drive are enhanced, reducing motor overheating and noise emissions.

Note: If installing a line reactor on the output side of the drive, especially with motor lead lengths in excess of 75 feet, lower the drive PWM output carrier frequency to 4kHz in order to protect the line reactor from excess heating and possible damage.





Individual line reactors are recommended when installing multiple drives on the same power line. Individual line reactors eliminate crosstalk between multiple drives and provide isolated protection for each drive for its own specific load.



Single-phase applications

Some of the line reactors are listed for use with single-phase input power. Make sure that terminals B1 and B2, if present, are properly insulated before any connections are made.



WARNING: ENSURE THAT TERMINALS B1 AND B2 ARE PROPERLY INSULATED BEFORE MAKING ANY CONNECTIONS TO SINGLE-PHASE POWER.

Multiple motors

A single reactor can be used for multiple motors on the same drive, if the motors operate simultaneously. Size the reactor based upon the total horsepower of all the motors. Select a reactor with a current rating greater than the sum of the motor full-load currents. Separate thermal overloads for each motor are recommended for use in multi-motor applications.

Note: A single reactor should be used with multiple motors only when the motors will always operate simultaneously.



www.automationdirect.com

1-800-633-0405 **GS/DURAPULSE** Drives Accessories – Line/Load Reactors for GS/DURAPULSE AC Drives – Additional

Specifications

Line Reactors – LR Series – Additional Specifications											
De d Marchael	D. fac	Product	Win David	T	Temperature Range		.				
Part Number	Price	Weight	wire Range	Ierminal lorque	Operating	Storage	Environment				
<u>LR-20P5</u>	Retired	4.0 lb [1.8 kg]	#12–#18 AWG	10 lb∙in							
<u>LR-21P0-1PH</u>	\$78.00	2.8 lb [1.3 kg]	#12–#18 AWG	10 lb∙in							
<u>LR-22P0-1PH</u>	\$86.00	4.3 lb [2.0 kg]	#12–#18 AWG	20 lb∙in							
<u>LR-23P0-1PH</u>	\$187.00	4.3 lb [2.0 kg]	#12–#18 AWG	20 lb∙in							
<u>LR-23P0</u>	\$148.00	4.0 lb [1.8 kg]	#12–#18 AWG	10 lb∙in							
<u>LR-25P0</u>	\$194.00	8.0 lb [3.6 kg]	#18–#4 AWG	20 lb∙in	-		NEMA: open IP00 no corrosive gases				
<u>LR-27P5</u>	\$206.00	8.0 lb [3.6 kg]	#18–#4 AWG	20 lb∙in							
<u>LR-2010</u>	\$242.00	12 lb [5.4 kg]	#18–#4 AWG	20 lb∙in							
<u>LR-2015</u>	\$285.00	12 lb [5.4 kg]	#18–#4 AWG	20 lb∙in							
<u>LR-2020</u>	\$312.00	12 lb [5.4 kg]	#18–#4 AWG	20 lb∙in							
<u>LR-2025</u>	\$460.00	15 lb [6.8 kg]	#18–#4 AWG	#18–#16 AWG: 25 lb·in #14–#6 AWG: 30 lb·in #4 AWG: 35 lb·in		-40 – 149 °F [-40 – 65 °C]					
<u>LR-2030</u>	\$490.00	33 lb [15 kg]	2/0 – #6AWG (AL or CU)	120							
<u>LR-2040</u>	\$574.00	33 lb [15 kg]	2/0 – #6AWG (AL or CU)	120	-40 – 104 °F						
<u>LR-2050</u>	\$670.00	36 lb [16 kg]	250kcmil – #6AWG (AL or CU)	275							
<u>LR-4010</u>	\$196.00	4.0 lb [1.8 kg]	#12–#18 AWG	10 lb∙in							
<u>LR-4015</u>	\$237.00	8.0 lb [3.6 kg]	#18–#4 AWG	20 lb∙in							
<u>LR-4020</u>	\$276.00	8.0 lb [3.6 kg]	#18–#4 AWG	20 lb∙in							
<u>LR-4025</u>	\$290.00	10 lb [4.5 kg]	#18–#4 AWG	20 lb∙in							
<u>LR-4030</u>	\$347.00	10 lb [4.5 kg]	#18–#4 AWG	20 lb∙in							
<u>LR-4040</u>	\$382.00	15 lb [6.8 kg]	#18–#4 AWG	20 lb∙in							
<u>LR-4050</u>	\$448.00		"00 " <i>1</i> 000	#22-#16 AWG: 25 lb·in	_						
<u>LR-4060</u>	\$462.00	25 lb [11 kg]	#22-#4 AWG	#14–#6 AWG: 30 lb·in #4 AWG: 35 lb·in							
<u>LR-4075</u>	\$700.00	33 lb [15 kg]	2/0 – #6AWG (AL or CU)	120 lb·in							
<u>LR-4100</u>	\$840.00	46 lb [21 kg]	250kcmil – #6AWG (AL or CU)	275 lb∙in	-						
<u>LR-4125</u>	\$962.00	46 lb [21 kg]	250kcmil – #6AWG (AL or CU)	275 lb·in	-						
<u>LR-4150</u>	\$1,114.00	46 lb [21 kg]	250kcmil – #6AWG (AL or CU)	275 lb∙in							
<u>LR-4200</u>	\$1,238.00	74 lb [34 kg]	(1) 600kcmil – #4 AWG (2) 250kcmil – 1/0	500 lb∙in							
<u>LR-4250</u>	\$1,403.00	74 lb [34 kg]	(2)* 350kcmil – #4 AWG (AL or CU)	275 lb∙in							
<u>LR-4300</u>	\$1,546.00	74 lb [34 kg]	(2)* 350kcmil – #4 AWG (AL or CU)	275 lb∙in							
<u>LR-5010</u>	\$202.00	4.0 lb [1.8 kg]	#12–#18 AWG	10 lb∙in							
* LR-4250 & LR-4300	have dual-con	nector lugs, and will	require multiple conductors per phase	of the appropriate size to fit the	lugs.						