

GS/DURApulse Drives Accessories – Line/Load Reactors

LR Series Line Reactors

Input line reactors protect the AC drive from transient overvoltage conditions typically caused by utility capacitor switching. Input line reactors 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 exceeds 75 feet.

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
- 10-year warranty

Agency Approvals:

- cUL_{US} listed (E197592)
- CE marked
- RoHS

Line/Load Reactors for GS1, GS2, GS3/DURAPULSE AC Drives – Selection Specifications

Line/Load Reactors – LR Series – for GS1, GS2, GS3/DURAPULSE								
Part Number	Rated Amps	Impedance	Inductance	Watt Loss	System Voltage	Phase – Use (1)	GS Drive Model	Drive hp
1) Use (side of drive): In = input only; Out = output only; I/O = input or output.								
2) Single-phase line reactors should NOT be installed on the output side of AC drives.								
LR-20P5	2.4	3%	4.2 mH	7	208/240	3 – I/O	GS1-20P2	0.25
LR-21P0-1PH (2)	8		2.29 mH	15.9	115	1 – In	GS1-21P0	0.33
LR-22P0-1PH (2)	12		1.53 mH	24.3	115	1 – In 1 – In	GS2-22P0	0.5
LR-23P0-1PH (2)	17		1.08 mH	27.3	115	1 – In 1 – In	GS2-23P0 GS3-23P0	1 1
LR-23P0	10.6		0.97 mH	38	208/240	3 – I/O 3 – I/O	GS2-23P0 GS3-23P0	3 3
LR-25P0	16.7		0.626 mH	48		3 – I/O 3 – I/O	GS3-25P0 GS2-25P0	5 5
LR-27P5	24.2		0.434 mH	65		3 – I/O 3 – I/O	GS2-27P5 GS3-27P5	7.5 7.5
LR-2010	30.8		0.342 mH	96	208/240	3 – I/O	GS3-2010	10
LR-2015	46.2		0.22 mH	64			GS3-2015	15
LR-2020	59.4		0.172 mH	85			GS3-2020	20
LR-2030	88		0.116 mH	135			GS3-2030	30
LR-2040	114		0.0886 mH	149			GS3-2040	40
LR-2050	143		0.0699 mH	154			GS3-2050	50
<i>(table continued next page)</i>								

GS/DURApulse Drives Accessories – Line/Load Reactors

Line/Load Reactors for GS1, GS2, GS3/DURAPULSE AC Drives – Selection Specifications

Line/Load Reactors – LR Series – for GS1, GS2, GS3/DURAPULSE								
Part Number	Rated Amps	Impedance	Inductance	Watt Loss	System Voltage	Phase – Use ⁽¹⁾	GS Drive Model	Drive hp
1) Use (side of drive): In = input only; Out = output only; I/O = input or output.								
2) Single-phase line reactors should NOT be installed on the output side of AC drives.								
LR-20P5	2.4		4.2 mH	7	208/240	3 – I/O	GS1-20P2	0.25
LR-21P0-1PH ⁽²⁾	8		2.29 mH	15.9	115	1 – In	GS1-21P0	0.33
LR-23P0-1PH ⁽²⁾	17		1.08 mH	27.3	115	1 – In	GS3-23P0	1
LR-23P0	10.6		0.97 mH	38	208/240	3 – I/O	GS3-23P0	3
LR-25P0	16.7		0.626 mH	48		3 – I/O	GS3-25P0	5
LR-27P5	24.2		0.434 mH	65		3 – I/O	GS3-27P5	7.5
LR-2010	30.8		0.342 mH	96	208/240	3 – I/O	GS3-2010	10
LR-2015	46.2		0.22 mH	64			GS3-2015	15
LR-2020	59.4		0.172 mH	85			GS3-2020	20
LR-2030	88		0.116 mH	135			GS3-2030	30
LR-2040	114		0.0886 mH	149			GS3-2040	40
LR-2050	143		0.0699 mH	154			GS3-2050	50
LR-4010	14		1.29 mH	64			480	GS3-4010
LR-4020	27		0.694 mH	79	GS3-4020	20		
LR-4040	52		0.387 mH	114	GS3-4040	40		
LR-4060	77		0.227 mH	169	GS3-4060	60		
LR-4100	124		0.152 mH	225	GS3-4100	100		
LR-4125	156		0.117 mH	254	-	125		
LR-4150	180		0.103 mH	299		150		
LR-4200	240		0.0839 mH	280		200		
LR-4250	302		0.0654 mH	337		250		
LR-4300	361		0.0565 mH	381		300		
LR-5010	11		2.47 mH	43.8	575/600	-		7.5
1) Use (side of drive): In = input only; Out = output only; I/O = input or output.								
2) Single-phase line reactors should NOT be installed on the output side of AC drives.								