


DATASHEET
**SINGLE LINE AC REACTOR-
SPQR-4**

These series range of Single Line AC reactors serves to filter out spikes of current and reduce injection of harmonic currents and protect Variable Frequency Drives and motors.

Technical Specifications:

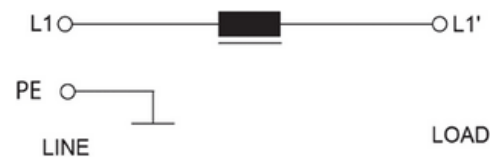
Maximum Continuous Operating Voltage	:250 VAC \pm 10%
Operating Frequency	:50/60Hz
Current ratings	:2A to 1000A @45°C
Impedance	:4% at 230 VAC, 50 Hz at rated current
High Potential test voltage	:2000 VAC for 2 sec
Overload Capability	:1.6 times of rated current for 1 Min/Hr
Design Corresponding to	:EN 61558-2-20,EN 60076-6,UL 508
Temperature range	:-45°C to +100°C
Climatic Category	:45/100/21
Type of Cooling	:Natural Cooling AN
Protection Category	:IP 00
Insulation Class	:Class F
Voltage Drop	:9.2V (\pm 20%)

Features:

- Reduction of main harmonics
- Impedance at 4%
- Protection of motor drive electronics
- Limitations of inrush Currents
- Prevention from nuisance tripping caused by power line voltage spikes
- Low Ripple

Applications:

- Power Quality applications.
- Motor Drives and Various adjustable speed drive systems
- Process Automation Equipment.
- Harmonics Reduction

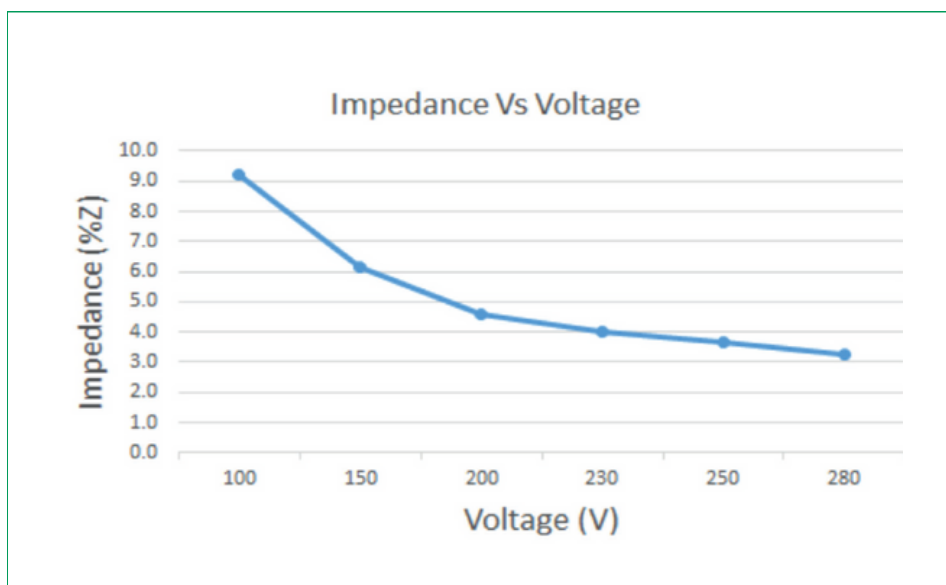
Type Circuit Diagram:


Ordering Information

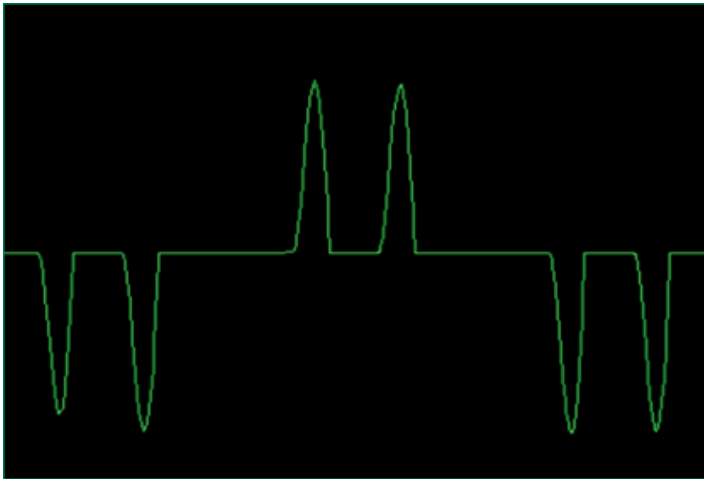
Model Number	Part Number	Rated Current@45°C (A)	Rated Power@250V (KW)	Rated Power (HP)	Inductance (mH)	Termination	Min.Weight (Kgs)
SPQR-41250-2-L3	E104271-1	2	0.45	0.6	14.64	Cable Lugs - 1.5mm2	1.2
SPQR-41250-4-L3	E104272-1	4	0.9	1.21	7.32	Cable Lugs -1.5mm2	1.3
SPQR-41250-6-L3	E104275-1	6	1.35	1.81	4.8	Cable Lugs -1.5mm2	1.3
SPQR-41250-8-L3	E104276-1	8	1.8	2.41	3.66	Cable Lugs -2.5mm2	1.6
SPQR-41250-10-L3	E104288-1	10	2.25	3.02	2.92	Cable Lugs -2.5mm2	1.6
SPQR-41250-16-L3	E104293-1	16	3.6	4.83	1.83	Cable Lugs -4.6mm2	2.2
SPQR-41250-20-L3	E104296-1	20	4.5	6.03	1.46	Cable Lugs -4.6mm2	2.4
SPQR-41250-25-L3	E104297-1	25	5.63	7.54	1.17	Cable Lugs -4.6mm2	2.4
SPQR-41250-30-L3	E104299-1	30	6.75	9.05	0.97	Cable Lugs -4.6mm2	2.4
SPQR-41250-35-L3	E104307-1	35	7.88	10.56	0.83	Cable Lugs -16mm2	4
SPQR-41250-40-L3	E104318-1	40	9	12.07	0.73	Cable Lugs -16mm2	4.2
SPQR-41250-45-L3	E104320-1	45	10.13	13.58	0.65	Cable Lugs -16mm2	4.2
SPQR-41250-50-L3	E104327-1	50	11.25	15.09	0.58	Cable Lugs -16mm2	4.2
SPQR-41250-63-L3	E104328-1	63	14.18	19.01	0.48	Cable Lugs -35mm2	5.6
SPQR-41250-75-L3	E104329-1	75	16.88	22.63	0.39	Cable Lugs -35mm2	5.6
SPQR-41250-100-B3	E104331-1	100	22.5	30.17	0.29	Busbar - 20x4	12
SPQR-41250-125-B3	E104332-1	125	28.13	37.72	0.23	Busbar - 25x4	12
SPQR-41250-150-B3	E104339-1	150	33.75	45.26	0.19	Busbar - 25x4	24
SPQR-41250-200-B3	E104340-1	200	45	60.35	0.14	Busbar - 30x5	24
SPQR-41250-300-B3	E104344-1	300	67.5	90.52	0.09	Busbar - 40x5	25
SPQR-41250-500-B3	E104348-1	500	112.5	150.86	0.05	Busbar - 50x5	32
SPQR-41250-800-B3	E104353-1	800	180	241.38	0.03	Busbar - 50x8	40
SPQR-41250-1000-B3	E104354-1	1000	225	301.73	0.02	Busbar - 50x8	48

Note: Rated Power (KW) is calculated for rated current, 250VAC and $\text{Cos}\phi = 0.9$

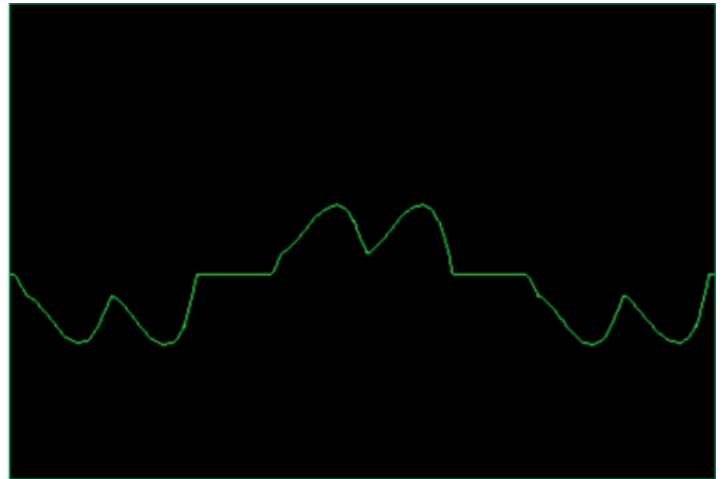
Impedance versus Voltage Plot



Advantages of having Line Reactor

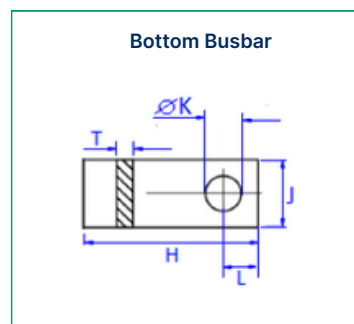
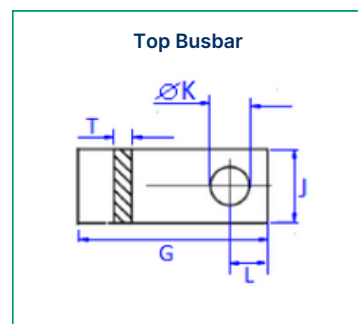
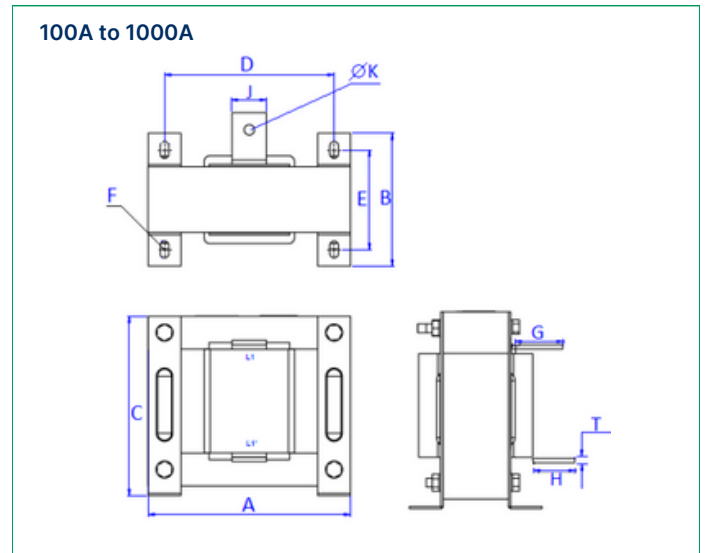
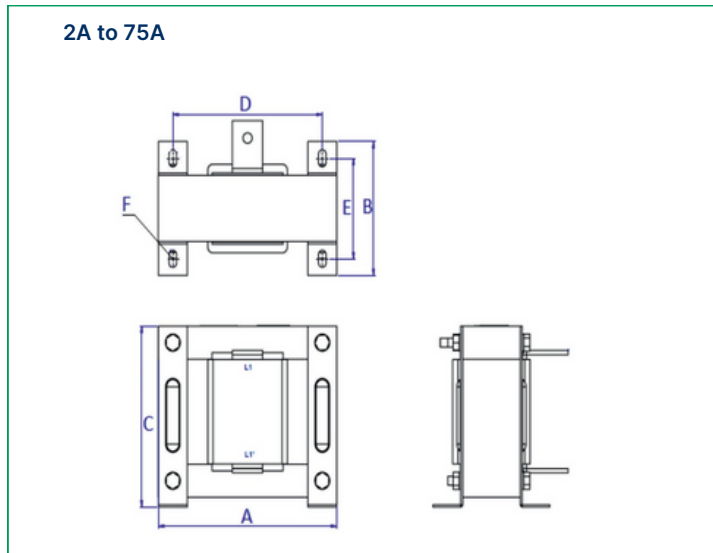


Without Line Reactor



With Line Reactor

Mechanical Dimensions



Termination Details

Cable Lugs			
Rated Current (A)	mm ²	Hole Ø (mm)	Termination Lead Length (mm)
2A to 6A	1.5	4.2	100
8A & 10A	2.5	5.2	100
16A to 30A	4.6	6.4	100
35A to 50A	16	8.2	100
63A & 75A	35	10.2	100

Termination Details

Model Number	A	B	C	D	E	F	G	H	J	T	L	ØK
SPQR-41250-2-L3	60	75	52	50	61	8 x 5	-	-	-	-	-	-
SPQR-41250-4-L3	60	75	52	50	61	8 x 5	-	-	-	-	-	-
SPQR-41250-6-L3	60	75	52	50	61	8 x 5	-	-	-	-	-	-
SPQR-41250-8-L3	76	70	65	63	55	10 x 6	-	-	-	-	-	-
SPQR-41250-10-L3	76	70	65	63	55	10 x 6	-	-	-	-	-	-
SPQR-41250-16-L3	76	89	65	63	75	10 x 6	-	-	-	-	-	-
SPQR-41250-20-L3	76	89	65	63	75	10 x 6	-	-	-	-	-	-
SPQR-41250-25-L3	76	89	65	63	75	10 x 6	-	-	-	-	-	-
SPQR-41250-30-L3	76	89	65	63	75	10 x 6	-	-	-	-	-	-
SPQR-41250-35-L3	114	107	98	95	80	12.5 x 7.9	-	-	-	-	-	-
SPQR-41250-40-L3	114	107	98	95	80	12.5 x 7.9	-	-	-	-	-	-
SPQR-41250-45-L3	114	107	98	95	80	12.5 x 7.9	-	-	-	-	-	-
SPQR-41250-50-L3	114	107	98	95	80	12.5 x 7.9	-	-	-	-	-	-
SPQR-41250-63-L3	114	120	98	95	93	12.5 x 7.9	-	-	-	-	-	-
SPQR-41250-75-L3	114	120	98	95	93	12.5 x 7.9	-	-	-	-	-	-
SPQR-41250-100-B3	180	129	156	150	95	20 x 10	60	40	20	4	15	8
SPQR-41250-125-B3	180	129	156	150	95	20 x 10	60	40	25	4	15	10
SPQR-41250-150-B3	235	154	208	196	115	19.5 x 10	60	40	25	4	15	10
SPQR-41250-200-B3	235	154	208	196	115	19.5 x 10	60	40	30	5	15	10
SPQR-41250-300-B3	235	154	208	196	115	19.5 x 10	60	40	40	5	20	12
SPQR-41250-500-B3	235	180	208	196	141	19.5 x 10	60	40	50	5	20	12
SPQR-41250-800-B3	235	205	208	196	166	19.5 x 10	60	40	50	8	20	12
SPQR-41250-1000-B3	235	230	208	196	192	19.5 x 10	60	40	50	8	20	12

Note: All dimensions are in mm. Tolerance Applicable for A,B,C,D,E,G,H (± 5 mm).