

CORCOM RPQ SERIES

SINGLE PHASE LINE REACTOR

TE Connectivity (TE)'s Corcom RPQ series line reactors are designed to help protect motor drives from power line disturbances and disruptions from the line side as well as the harmonics distortions from AC/DC motor drives. The single-phase line reactors cover a very broad rating from 2A up to 1000A with max voltage up to 250V.

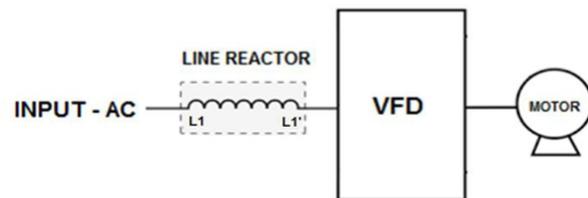


FEATURES

- Copper windings
- Impedance at 4%
- Helps protect motor drive electronics
- Limitations of inrush currents
- Reduction of nuisance tripping caused by power line voltage spikes
- Low ripple

APPLICATION

- Power quality applications
- Motor drives and various adjustable speed drive system
- Harmonic reduction
- Process automation equipment



APPROVALS

- Design in accordance with UL 508



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PRODUCT SPECIFICATIONS

ELECTRICAL CHARACTERISTICS

Nominal / Rated Voltage	230 / 250VAC
Current Ratings	2A to 1000A @45°C
Operating Frequency	50Hz
Impedance	4% of 230VAC at rated current, 50Hz frequency
High potential Test Voltage	2000VAC
Overload Capability	1.6 times of rated current for 1 minute, every hour

FUNCTIONAL CHARACTERISTICS

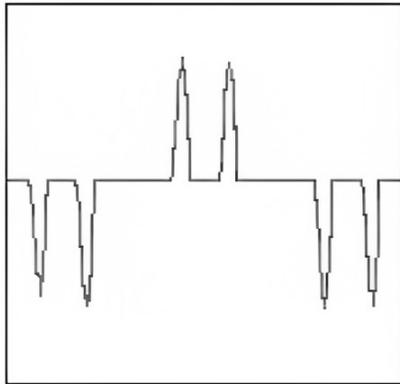
Operating Temperature Range	-45°C to 100°C
Climatic Category	45/100/21
Type of Cooling	Natural cooling, AN
Protection category	IP00
Insulation Class	Class N
Pollution Degree	PD2

REFERENCE STANDARDS

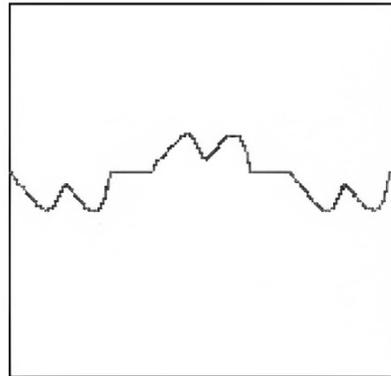
Design Corresponding to	EN61558-2-20, EN60076-6, UL61800-5-1
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ADVANTAGES OF HAVING LINE REACTOR

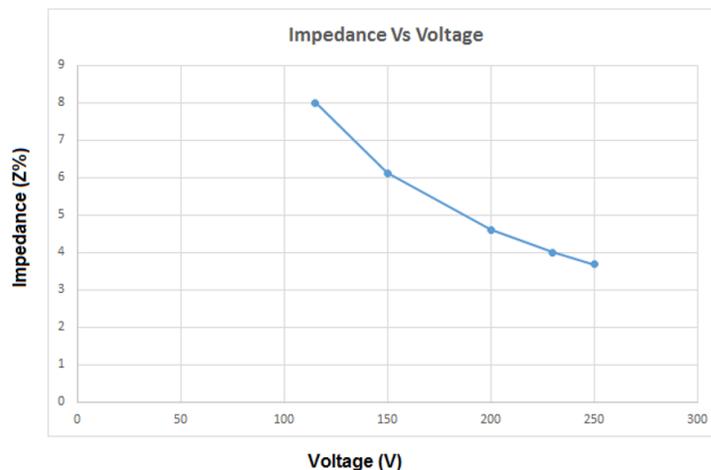
WAVEFORM WITHOUT LINE REACTOR



WAVEFORM WITH LINE REACTOR



IMPEDANCE VERSUS VOLTAGE PLOT

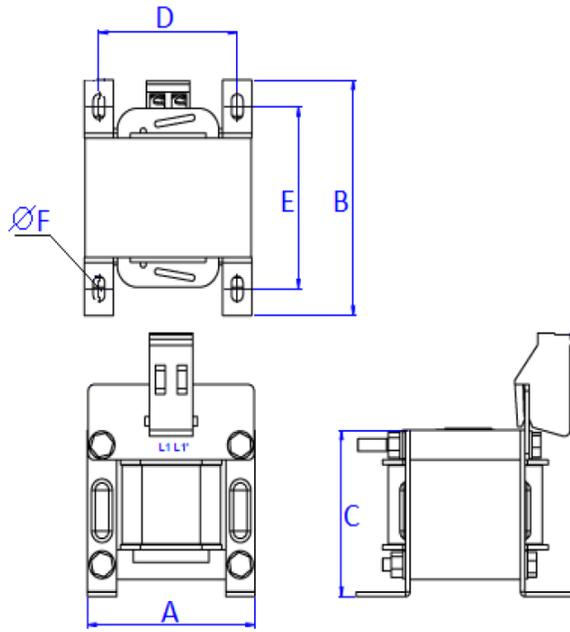


CORCOM RPQ SERIES

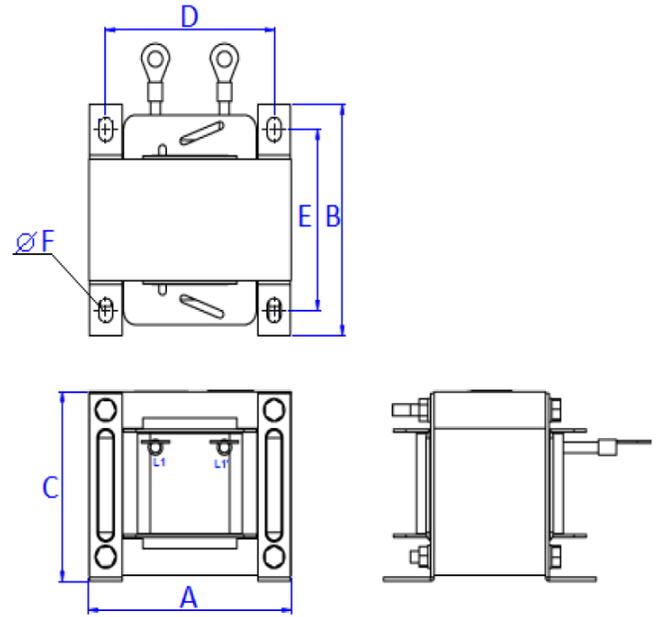
SINGLE PHASE LINE REACTOR

CASE DIMENSIONS

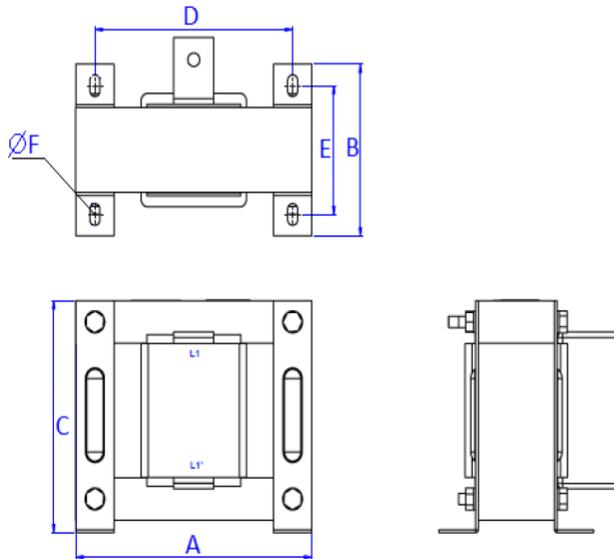
2A TO 30A



35A TO 100A



125A TO 1000A



CORCOM RPQ SERIES

SINGLE PHASE LINE REACTOR

MECHANICAL DIMENSIONS

TE Part Number	Part Description	A	B	C	D	E	F
2432408-1	RPQ-1-2	57.6	75	53	47.6	58	8 x 4
2432408-2	RPQ-1-4	57.6	75	53	47.6	58	8 x 4
2432408-3	RPQ-1-6	76	72.5	67.5	63.5	57	10 x 6
2432408-4	RPQ-1-8	76	72.5	67.5	63.5	57	10 x 6
2432408-5	RPQ-1-10	76	93	67.5	63.5	78	10 x 6
2432408-6	RPQ-1-16	76	93	67.5	63.5	78	10 x 6
2432408-7	RPQ-1-20	96	83	82.5	80	61.5	11.8 x 6
2432408-8	RPQ-1-25	96	96	82.5	80	80	11.8 x 6
2432408-9	RPQ-1-30	96	96	82.5	80	80	11.8 x 6
1-2432408-0	RPQ-1-35	114.3	107	98.4	95.2	80.1	12.5 x 7.9
1-2432408-1	RPQ-1-40	114.3	120	98.4	95.2	94	12.5 x 7.9
1-2432408-2	RPQ-1-45	114.3	120	98.4	95.2	94	12.5 x 7.9
1-2432408-3	RPQ-1-50	114.3	120	98.4	95.2	94	12.5 x 7.9
1-2432408-4	RPQ-1-63	114.3	120	98.4	95.2	94	12.5 x 7.9
1-2432408-5	RPQ-1-75	152.4	114	132	127	83.5	15.5 x 8
1-2432408-6	RPQ-1-100	152.4	114	132	127	83.5	15.5 x 8
1-2432408-7	RPQ-1-125	152.4	140	132	127	115.5	15.5 x 8
1-2432408-8	RPQ-1-150	180	129	156.3	150	95	20 x 10
1-2432408-9	RPQ-1-200	235	154	208	197	115.5	19.5 x 10
2-2432408-0	RPQ-1-300	235	154	208	197	115.5	19.5 x 10
2-2432408-1	RPQ-1-500	235	179.5	208	197	142	19.5 x 10
2-2432408-2	RPQ-1-800	235	205	208	197	167.5	19.5 x 10
2-2432408-3	RPQ-1-1000	235	205	208	197	167.5	19.5 x 10

Note: All dimensions are in mm. Tolerance applicable (+/- 5mm)

PART NUMBER LIST

SELECTION TABLE - RPQ SERIES

TE Part Number	Part Description	Rated Current (Amps)	Rated Power @230V (KW)	Rated Power (HP)	Inductance (mH)	Weight (Kgs)	Termination
2432408-1	RPQ-1-2	2	0.4	0.6	14.642	2.5	Connector
2432408-2	RPQ-1-4	4	0.8	1.1	7.321	2.8	Connector
2432408-3	RPQ-1-6	6	1.2	1.7	4.881	3	Connector
2432408-4	RPQ-1-8	8	1.7	2.2	3.661	3	Connector
2432408-5	RPQ-1-10	10	2.1	2.8	2.928	3.2	Connector
2432408-6	RPQ-1-16	16	3.3	4.4	1.830	3.5	Connector
2432408-7	RPQ-1-20	20	4.1	5.6	1.464	3.8	Connector
2432408-8	RPQ-1-25	25	5.2	6.9	1.171	4.5	Connector
2432408-9	RPQ-1-30	30	6.2	8.3	0.976	5	Connector
1-2432408-0	RPQ-1-35	35	7.3	9.7	0.837	20	Cable Lugs
1-2432408-1	RPQ-1-40	40	8.3	11.1	0.732	22	Cable Lugs
1-2432408-2	RPQ-1-45	45	9.3	12.5	0.651	22	Cable Lugs
1-2432408-3	RPQ-1-50	50	10.4	13.9	0.586	23	Cable Lugs
1-2432408-4	RPQ-1-63	63	13	17.5	0.465	24	Cable Lugs
1-2432408-5	RPQ-1-75	75	15.5	20.8	0.390	28	Cable Lugs
1-2432408-6	RPQ-1-100	100	20.7	27.8	0.293	31	Cable Lugs
1-2432408-7	RPQ-1-125	125	25.9	34.7	0.234	35	Busbar
1-2432408-8	RPQ-1-150	150	31.1	41.6	0.195	38	Busbar
1-2432408-9	RPQ-1-200	200	41.4	55.5	0.146	63	Busbar
2-2432408-0	RPQ-1-300	300	62.1	83.2	0.098	65	Busbar
2-2432408-1	RPQ-1-500	500	103.5	138.7	0.059	75	Busbar
2-2432408-2	RPQ-1-800	800	165.6	222	0.037	80	Busbar
2-2432408-3	RPQ-1-1000	1000	207	277.5	0.029	80	Busbar

Notes:

- Rated Power (KW) is calculated for rated current, 230VAC $\cos\phi=0.9$
- Weight values shows the weight of the shipping carton.

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