

# PE3P Series 3 PHASE, 3 WIRE, CHASSIS MOUNT EMI/RFI LINE FILTER.



CE

## FEATURES

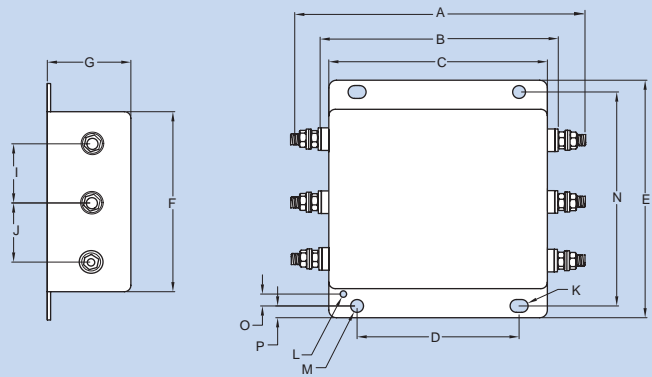
The PE3P series filters offer good noise attenuation in both forward and reverse directions for common mode and differential mode. These filters are designed with high reliability for industrial equipment. This series of filters offer up to 100A at 250VAC/500VAC with suppression from 100KHz to 50MHz.

## APPLICATIONS

Heavy Industry equipment, Measuring & control equipment, Power supplies, other electronic/electrical equipment.

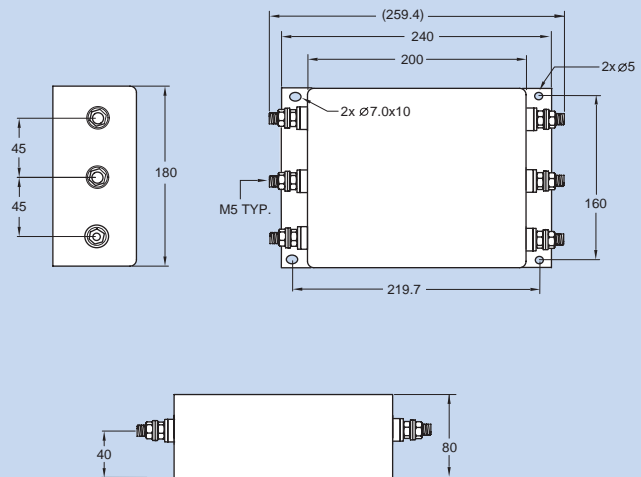
PDI can custom design any single or multi-stage, 3 phase filter to meet your requirements.

## MECHANICAL DIMENSIONS (Unit: mm) G2, G3, G4



See Dimensional table on page # 52

## C6



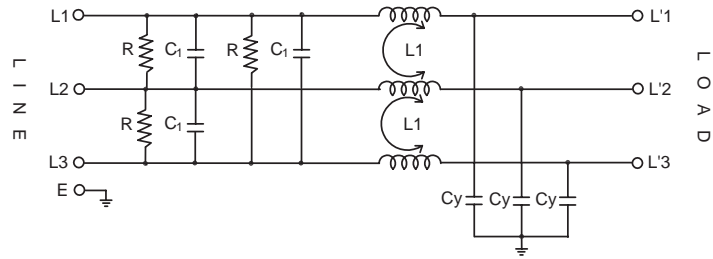
Specifications subject to change without notice. Dimensions (mm). See Appendix A for recommended power cord. See PDI full line catalog for detailed specifications on power cords.

# PE3P Series

## SCHEMATIC 1; CASE G2, G3

### TECHNICAL DATA

- Rated Voltage: 250/500VAC
- Rated Current: 10A, 20A, 30A, 40A, 50A
- Power Line Frequency: 50/60Hz
- Max. Leakage Current each  
Line to Ground:  
@ 250VAC, 50/60Hz: 0.9mA
- Hipot Rating (one minute)  
Line to Ground: 2250VDC  
Line to Line: 1450VDC
- Temperature Range: -25C to +85C



### Non-Medical Applications

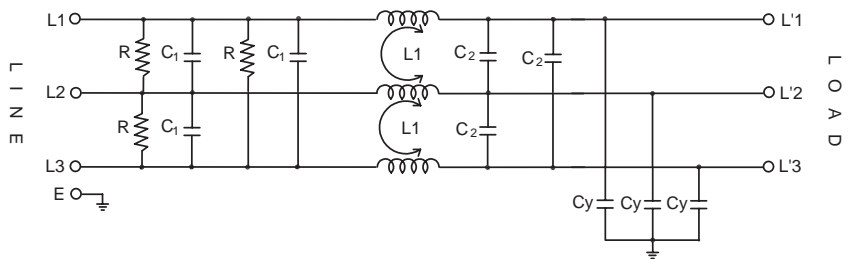
Insertion loss in dB (50 Ohm circuit)

PDI P/N	Current Rating (A)	R (Ohms)	Cx (uF)	Cy (pF)	L (uH x 2)	Comm. Mode (L-G) in MHz						Diff. Mode (L-L) in MHz					
						.15	.5	1	5	10	30	.15	.5	1	5	10	30
PE3P10PS-1-G2	10	680K	0.22	4700	2.3	27	42	42	43	41	36	16	28	41	41	46	42
PE3P20PS-1-G2	20				0.5	16	27	30	40	46	37	16	26	29	52	55	42
PE3P30PS-1-G2	30		0.47	12	27	27	35	31	20	16	25	36	37	37	42		
PE3P40PS-1-G3	40		1.1	20	31	32	36	29	36	20	30	36	46	52	37		
PE3P50PS-1-G3	50		0.68	0.6	17	30	30	37	40	36	22	32	36	40	46	46	

## SCHEMATIC 2; CASE G2, G3, G4

### TECHNICAL DATA

- Rated Voltage: 500VAC
- Rated Current: 10A, 20A, 30A, 40A, 50A, 75A, 100A
- Power Line Frequency: 60Hz
- Max. Leakage Current each  
Line to Ground:  
@ 250VAC, 60Hz: 2mA
- Hipot Rating (one minute)  
Line to Ground: 2250VDC  
Line to Line: 1450VDC
- Temperature Range: -25C to +85C



### Non-Medical Applications

Insertion loss in dB (50 Ohm circuit)

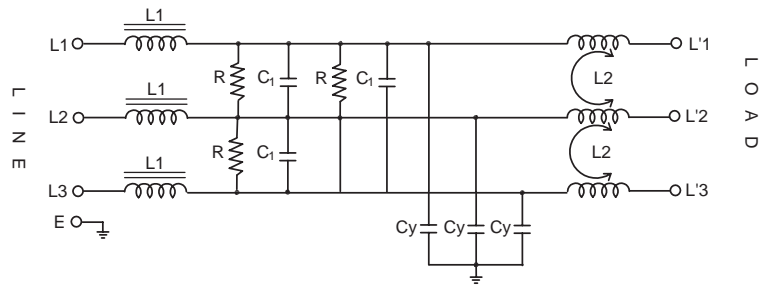
PDI P/N	Current Rating (A)	R (Ohms)	Cx (uF)	Cy (pF)	L (uH x 2)	Comm. Mode (L-G) in MHz						Diff. Mode (L-L) in MHz					
						.15	.5	1	5	10	30	.15	.5	1	5	10	30
PE3P10PS-2-G2	10	470K	0.22	3300	2.3	49	70	70	65	40	26	37	42	47	52	47	31
PE3P20PS-2-G2	20				0.5	45	65	65	60	30	15	32	37	42	47	45	28
PE3P30PS-2-G2	30		0.47	35	42	51	48	52	32	29	35	39	42	39	26		
PE3P40PS-2-G3	40		1.1	32	28	36	42	47	23	31	37	42	46	41	25		
PE3P50PS-2-G3	50		0.68	0.6	32	37	45	47	38	21	27	33	39	44	38	21	
PE3P75PS-2-G4	75	1.00	0.4	28	33	43	52	43	26	31	35	44	52	47	19		
PE3P100PS-2-G4	100	2.20	0.3	29	46	57	53	45	28	29	34	47	51	46	22		

# PE3P Series

## SCHEMATIC 3; CASE G2, G3

### TECHNICAL DATA

- Rated Voltage: 500VAC
- Rated Current: 10A, 20A, 30A, 40A, 50A, 60A
- Power Line Frequency: 50/60Hz
- Max. Leakage Current each  
Line to Ground:  
@ 500VAC, 60Hz: 1.3mA (10A ~ 30A)  
@ 500VAC, 60Hz: 2.0mA (40A ~ 60A)
- Hipot Rating (one minute)  
Line to Ground: 2250VDC  
Line to Line: 1450VDC
- Temperature Range: -25C to +50C



### Non-Medical Applications

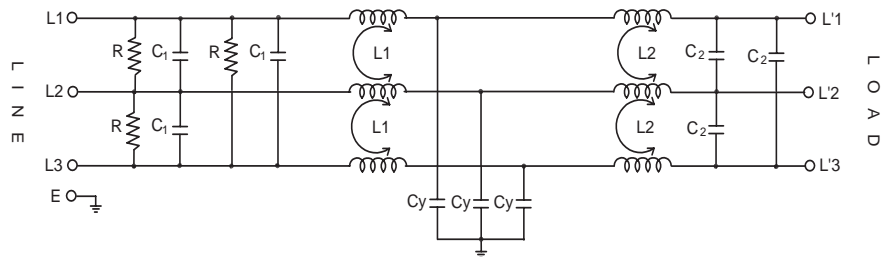
Insertion loss in dB (50 Ohm circuit)

PDI P/N	Current Rating (A)	R (Ohms)	Cx (uF)	Cy (pF)	L1 (uH x 2)	L2 (uH x 2)	Comm. Mode (L-G) in MHz						Diff. Mode (L-L) in MHz					
							.15	.5	1	5	10	30	.15	.5	1	5	10	30
PE3P10PS-3-G2	10	550K	0.22	2200	200	2.8	25	35	40	40	39	31	15	34	46	46	46	32
PE3P20PS-3-G2	20				90	1.6	20	31	40	39	39	31	10	32	42	42	42	31
PE3P30PS-3-G2	30				52	0.9	20	30	30	40	40	30	10	25	31	42	42	31
PE3P40PS-3-G3	40			3300	130	1.1	22	32	32	35	41	30	10	26	31	37	42	37
PE3P50PS-3-G3	50				75	0.6	20	31	31	38	42	36	10	25	32	37	42	38
PE3P60PS-3-G3	60				25	0.4	20	30	30	40	40	35	10	23	28	32	32	39

## SCHEMATIC 4; CASE G2, G3, G4

### TECHNICAL DATA

- Rated Voltage: 500VAC
- Rated Current: 10A, 20A, 30A, 40A, 50A, 60A
- Power Line Frequency: 50/60Hz
- Max. Leakage Current each  
Line to Ground:  
@ 500VAC, 60Hz: 1.3mA (10A ~ 30A)  
@ 500VAC, 60Hz: 2.0mA (40A ~ 60A)
- Hipot Rating (one minute)  
Line to Ground: 2250VDC  
Line to Line: 1450VDC
- Temperature Range: -25C to +50C



### Non-Medical Applications

Insertion loss in dB (50 Ohm circuit)

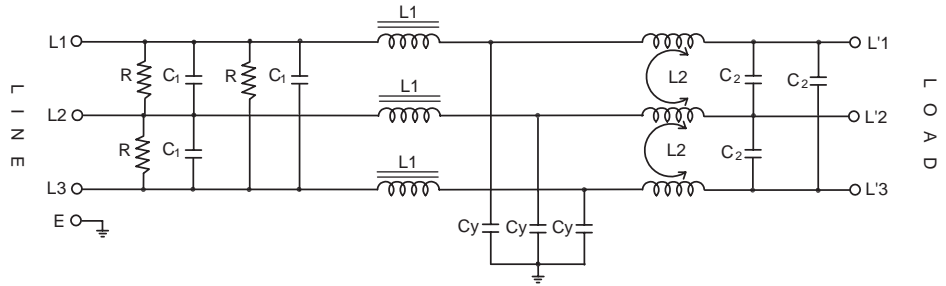
PDI P/N	Current Rating (A)	R (Ohms)	Cx (1, 2) (uF)	Cy (pF)	L1,2 (uH x 2)	Comm. Mode (L-G) in MHz						Diff. Mode (L-L) in MHz						
						.15	.5	1	5	10	30	.15	.5	1	5	10	30	
PE3P10PS-4-G2	10	550K	0.47	2200	2.8	22	55	58	58	55	33	32	62	62	62	54	42	
PE3P20PS-4-G2	20				1.6	21	58	58	58	56	32	35	65	66	66	66	56	42
PE3P30PS-4-G3	30				0.9	20	55	56	56	52	32	35	66	66	66	66	56	42
PE3P40PS-4-G4	40		0.68	3300	1.1	21	56	55	55	52	32	30	61	61	61	52	42	
PE3P50PS-4-G4	50				0.6	21	55	55	55	52	32	30	61	61	61	61	52	42
PE3P60PS-4-G4	60				0.4	21	54	52	52	50	30	28	58	58	58	58	47	42

# PE3P Series

## SCHEMATIC 5; CASE C6

### TECHNICAL DATA

- Rated Voltage: 500VAC
- Rated Current: 10A, 20A, 30A, 40A, 50A
- Power Line Frequency: 50/60Hz
- Max. Leakage Current each Line to Ground:  
@ 500VAC, 60Hz: 2.0mA
- Hipot Rating (one minute)  
Line to Ground: 2250VDC  
Line to Line: 1450VDC
- Temperature Range: -25C to +50C



### Non-Medical Applications

Insertion loss in dB (50 Ohm circuit)

PDI P/N	Current Rating (A)	R (Ohms)	Cx1 (uF)	Cx2 (pF)	Cy (pF)	L1 (uH x 2)	L2 (uH x 2)	Comm. Mode (L-G) in MHz						Diff. Mode (L-L) in MHz					
								.15	.5	1	5	10	30	.15	0.5	1	5	10	30
PE3P10PS-5-C6	10	430K	3.3	2.2	3300	5.0	10.0	36	42	53	58	62	32	56	63	65	53	45	31
PE3P20PS-5-C6	20					2.0	3.5	32	38	43	51	54	31	59	65	68	54	39	28
PE3P30PS-5-C6	30					1.0	2.5	38	43	46	52	51	28	48	57	53	56	42	34
PE3P40PS-5-C6	40					0.5	1.1	35	46	49	53	47	25	45	56	51	53	47	25
PE3P50PS-5-C6	50					0.5	0.9	29	37	42	51	52	23	37	42	53	51	42	27

### Dimensional Table

CASE	DIMENSIONS															
	A	B	C	D	E	F	G	(H)	I	J	K	L	M	N	O	P
G2	143	122	112	84	100	77	54	34	23	23	2x ∅6x10	2x ∅5	∅2.8	90.6	4.4	5.0
G3	201	180	170	126	184	140	65	35	46	46	2x ∅10x14	2x ∅10	∅5	166	6.4	10.0
G4	237	212	200	159	240	180	80	50	70	70	2x ∅10x16	2x ∅12	∅2.8	210	8.7	15.0