

# TD SERIES 3-PHASE, 3-WIRE FILTERS

## COMPONENTS

PART NO.	C <sub>x</sub> (uF)	C <sub>y</sub> (pF)	L1 (uH)	L2 (mH)	R (KΩ)
10TDS6D	0.22	2200	122	2.8	500
20TDS6D			78	1.6	
30TDS6D			40	0.9	
40TDS6D			32	1.1	
50TDS6D			14	0.6	

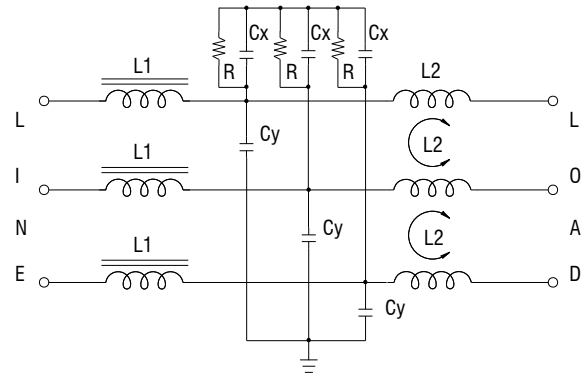
## INTRODUCTIONS

1. Applications: Electric equipment, UPS, machine tool, copy machine, automation equipment, robot, AC motor drive
2. Voltage rating: 440VAC
3. Operating frequency: 50/60Hz

## MINIMUM INSERTION LOSS IN dB

COMMON MODE (L-G) IN 50 OHM SYSTEM							
TYPE	CURRENT RATING	FREQUENCY – MHz					
		.15	.50	1.0	5.0	10	30
10TDS6D	10A	25	35	40	40	40	25
20TDS6D	20A	15	30	30	35	25	20
30TDS6D	30A	20	30	30	40	40	30
40TDS6D	40A	20	25	30	35	40	30
50TDS6D	50A	10	20	20	35	35	35
DIFFERENTIAL MODE (L-L) IN 50 OHM SYSTEM							
10TDS6D	10A	25	35	45	45	45	30
20TDS6D	20A	10	30	40	40	30	20
30TDS6D	30A	10	20	30	40	40	30
40TDS6D	40A	10	20	30	35	40	25
50TDS6D	50A	8	20	30	35	35	35

## ELECTRICAL SCHEMATIC

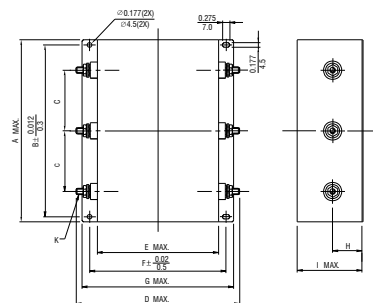
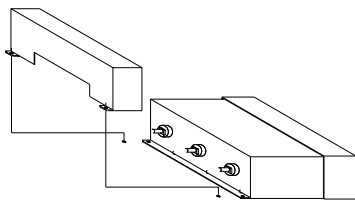


## SERIES DIMENSIONS

DIM. TYPE	A	B	C	D	E	F	G	H	I	K
10TDS6D	7.16	6.692	2.36	6.69	4.80	5.314	5.98	1.37	2.63	M4X0.7
	182.0	170.0	60.0	170.0	122.0	135.0	152.0	30.0	67.0	
20TDS6D	7.16	6.692	2.36	6.69	4.80	5.314	5.98	1.37	2.63	M6X1.0
30TDS6D	182.0	170.0	60.0	170.0	122.0	135.0	152.0	35.0	67.0	
40TDS6D	7.16	6.299	1.96	10.23	7.95	8.661	9.52	1.57	3.22	
50TDS6D	182.0	160.0	50.0	260.0	202.0	220.0	242.0	40.0	82.0	

## MECHANICAL CONSTRUCTION

Terminal cover: (Optional)



# TDH SERIES LOW VOLTAGE 3-PHASE, 3-WIRE FILTERS

## COMPONENTS

PART NO.	L (mH)	Cx (uF)	Cy (pF)	R (KΩ)
10TDHG6	2.3	0.22	4700	680
20TDHG6	0.5			
30TDHS6	0.5			
40TDHS6	1.1	0.47		
50TDHS6	0.7	0.68		

## MINIMUM INSERTION LOSS IN dB

COMMON MODE (L-G) IN 50 OHM SYSTEM							
TYPE	CURRENT RATING	FREQUENCY- MHz					
		.15	.50	1.0	5.0	10	30
10TDHG6	10A	25	40	40	40	40	35
20TDHG6	20A	15	25	28	38	45	35
30TDHS6	30A	10	25	25	35	30	20
40TDHS6	40A	18	30	30	35	40	25
50TDHS6	50A	15	28	28	35	40	35

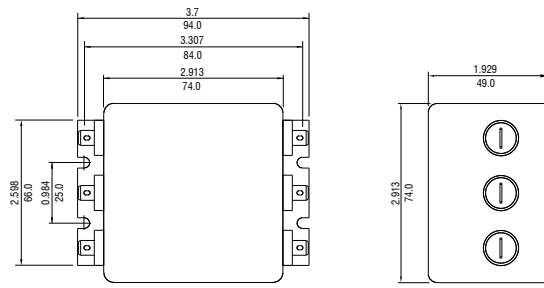
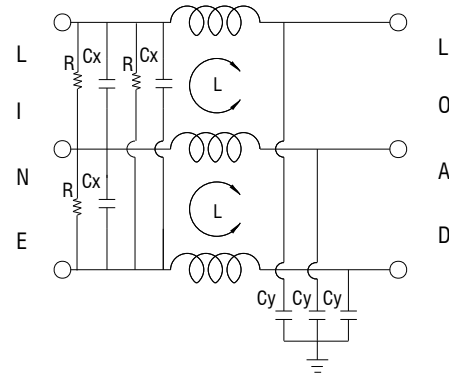
  

DIFFERENTIAL MODE (L-L) IN 50 OHM SYSTEM							
TYPE	CURRENT RATING	FREQUENCY- MHz					
		.15	.50	1.0	5.0	10	30
10TDHG6	10A	15	28	40	40	45	40
20TDHG6	20A	15	25	28	50	55	40
30TDHS6	30A	15	25	35	35	35	40
40TDHS6	40A	18	28	35	45	50	35
50TDHS6	50A	20	30	35	40	45	45

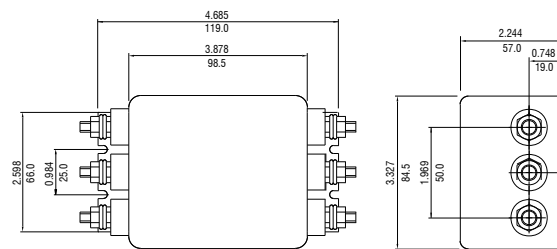
## INTRODUCTIONS

1. Applications: Electric equipment, UPS, machine tool, copy machine, automation equipment, robot, AC motor drive
2. Voltage rating: 250VAC
3. Operating frequency: 50/60Hz

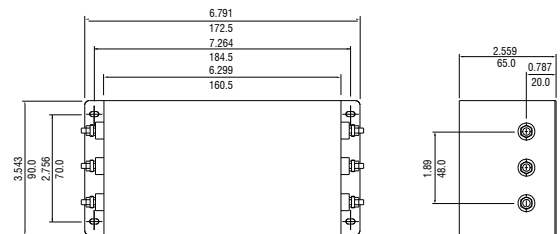
## ELECTRICAL SCHEMATIC



10/20TDHG6



30TDHS6



40/50TDHS6



10/20TDHG6

UNIT:  $\frac{\text{INCH}}{\text{mm}}$

THREE-PHASE FILTERS

# TDR SERIES

## VERTICAL 3-PHASE, 3-WIRE FILTERS

### COMPONENTS

PART NO.	$\Sigma C_x$ (uF)	$\Sigma C_y$ (uF)	L (mH)	R1 (M $\Omega$ )	R2 (M $\Omega$ )
07TDRT1W4	4	1.5	4.5	1.5	0.68
16TDRT1W4	5.9		3.0		
30TDRT1W4	6.6	2.2	2.0		
42TDRT1W4		2.3	1.5		
55TDRT1W4			1.1		

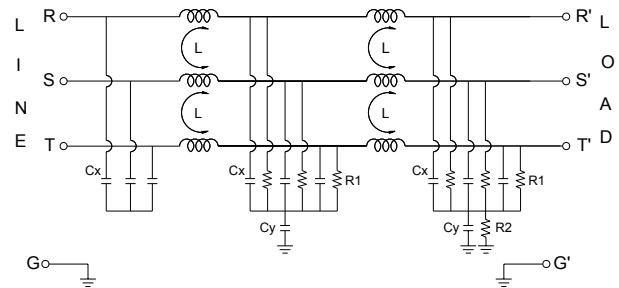
### INTRODUCTIONS

1. Applications: Electric equipment, UPS, machine tool, copy machine, automation equipment, robot, AC motor drive
2. Voltage rating: 480VAC
3. Operating frequency: 50/60Hz

### MINIMUM INSERTION LOSS IN dB

COMMON MODE (L-G) IN 50 OHM SYSTEM						
PART NO.	FREQUENCY-MHz					
	.15	.50	1.0	5.0	10	30
07TDRT1W4	25	60	60	60	55	35
16TDRT1W4	20	60	60	60	55	35
30TDRT1W4	20	55	55	55	50	35
42TDRT1W4	20	55	55	55	50	35
55TDRT1W4	20	55	55	55	50	35
DIFFERENTIAL MODE (L-L) IN 50 OHM SYSTEM						
07TDRT1W4	35	65	65	65	60	40
16TDRT1W4	35	65	65	65	60	40
30TDRT1W4	35	65	65	65	60	40
42TDRT1W4	30	60	60	60	50	40
55TDRT1W4	30	60	60	60	50	40

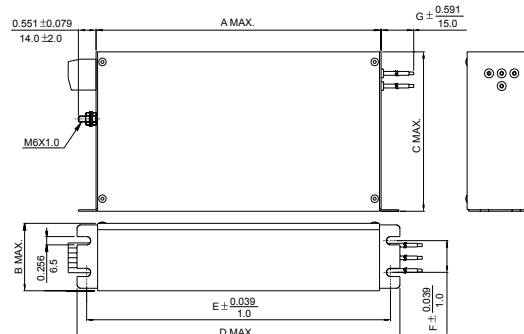
### ELECTRICAL SCHEMATIC



### SERIES DIMENSIONS

PART NO.	DIMENSIONS IN INCHES/mm								
	A	B	C	D	E	F	G		
07TDRT1W4	8.937 227.0	2.047 52.0	5.039 128.0	10.118 257.0	9.449 240.0	0.984 25.0	11.811	AWG18	
16TDRT1W4	10.906 277.0	2.244 57.0	5.669 144.0	12.087 307.0	11.417 290.0	1.181 30.0	300.0	AWG14	
30TDRT1W4	12.087 307.0	2.362 60.0	5.984 152.0	13.268 337.0	12.598 320.0	1.378 35.0	15.748	AWG12	
42TDRT1W4	11.890	2.835 72.0	7.362	13.031	12.362	1.772 45.0	19.685	AWG10	
55TDRT1W4	302.0	3.228 82.0	187.0	331.0	314.0	2.165 55.0	500.0		

### MECHANICAL CONSTRUCTION



UNIT: INCH  
mm

# TDR SERIES

## VERTICAL 3-PHASE, 3-WIRE FILTERS

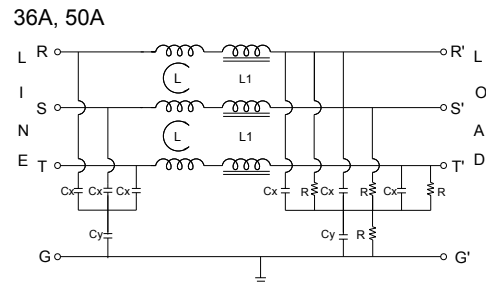
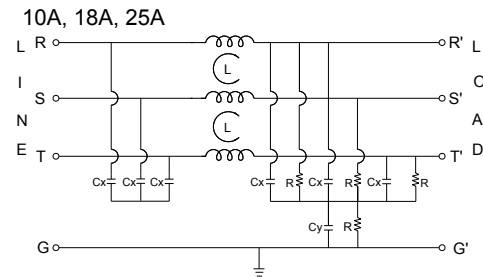
### COMPONENTS

PART NO.	$\Sigma C_x(\mu F)$	$\Sigma C_y(\mu F)$	L(mH)	L1( $\mu H$ )	R(M $\Omega$ )
10TDRT2	1.0	0.47	2.8	-	1.0
18TDRT2		0.68	2.9		
25TDRT2	2.2	1.0	1.9		
36TDRT2	1.0	0.47	0.396	7.0	
50TDRT2	2.2	1.0	0.275	5.1	

### INTRODUCTIONS

1. Applications: Electric equipment, UPS, machine tool, copy machine, automation equipment, robot, AC motor drive
2. Voltage rating: 500VAC
3. Operating frequency: 50/60Hz

### ELECTRICAL SCHEMATIC



### MINIMUM INSERTION LOSS IN dB

PART NO.	COMMON MODE (L-G) IN 50 OHM SYSTEM								
	FREQUENCY-MHz								
	.01	.05	.10	.15	.50	1.0	5.0	10	30
10TDRT2	5	25	40	45	55	50	40	30	30
18TDRT2	10	30	40	50	50	50	40	35	20
25TDRT2	10	30	45	55	45	45	40	30	20
36TDRT2	5	25	45	55	50	45	40	35	35
50TDRT2	5	30	55	55	50	45	40	40	30

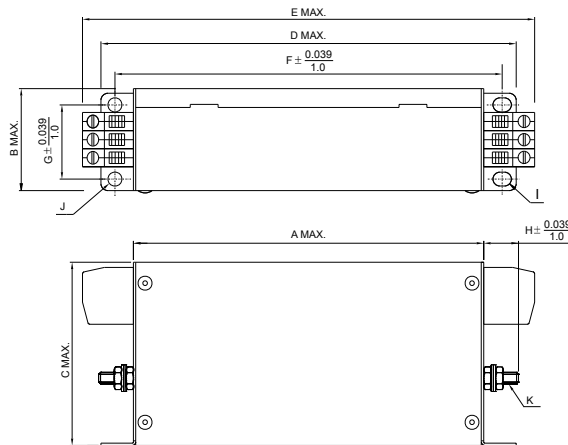
  

PART NO.	DIFFERENTIAL MODE (L-L) IN 50 OHM SYSTEM								
	FREQUENCY-MHz								
	.01	.05	.10	.15	.50	1.0	5.0	10	30
10TDRT2	5	15	10	30	55	50	40	30	30
18TDRT2	5	12	25	35	50	50	50	40	25
25TDRT2	10	10	40	45	45	45	40	35	25
36TDRT2	5	10	20	30	50	45	40	40	40
50TDRT2	5	10	35	45	50	45	40	40	30

### SERIES DIMENSIONS

PART NO.	DIMENSIONS IN INCHES/mm										
	A	B	C	D	E	F	G	H	I	J	K
10TDRT2	6.024	1.772	3.189	7.087	7.756	6.575	1.260	0.591	0.236 x 0.315	0.236	M5
	153.0	46.0	81.0	180.0	197.0	167.0	32.0	15.0			
18TDRT2	7.992	2.205	4.567	9.016	9.724	8.622	1.655	0.551	6.0 x 8.0	Ø6.0	M5
	203.0	56.0	116.0	229.0	247.0	219.0	42.0	14.0			
36TDRT2	9.528	2.953	6.417	10.709	11.496	10.236	2.362	0.787	0.276 x 0.394	0.276	M6
	242.0	75.0	163.0	272.0	292.0	260.0	60.0	20.0			
50TDRT2									7.0 x 10.0	Ø7.0	

### MECHANICAL CONSTRUCTION



UNIT: INCH/mm

THREE-PHASE FILTERS

# TDS SERIES GENERAL 3-PHASE, 3-WIRE FILTERS

## COMPONENTS

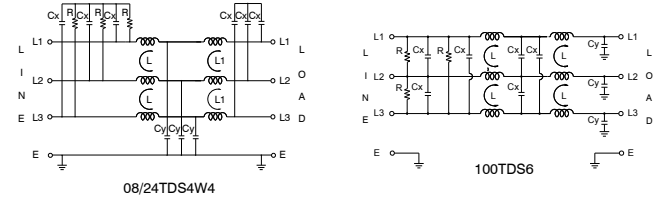
PART NO.	Leakage current max mA	L (mH)	L1 (mH)	Cx (uF)	Cy (nF)	R (KΩ)	UL
• 08TDS4W4	6.5	4.2	1.5	1	15	470	✓
• 24TDS4W4		1	0.5				
100TDS6	30	0.3	—	4.7	100	200	
•• 50TDS4W4	50	0.5	0.2	6.6	100	100	✓
••• 100TDS8A	200	0.3	—		470	200	
PART NO.	Leakage current max mA	L (mH)	ΣCx (uF)	ΣCy (uF)	R1 (MΩ)	R2 (MΩ)	
08TDS8	14.5	7.6	1.6	0.17	2	—	
16TDS8		5.2	3.4		1.5	1.1	
36TDS8	160	1.3	4.4	1.8			

- UL, VDE & CE approved
- Lg: 500uH; UL & CE approved
- Lg: 100uH; Cx1: 2.2uF

## INTRODUCTIONS

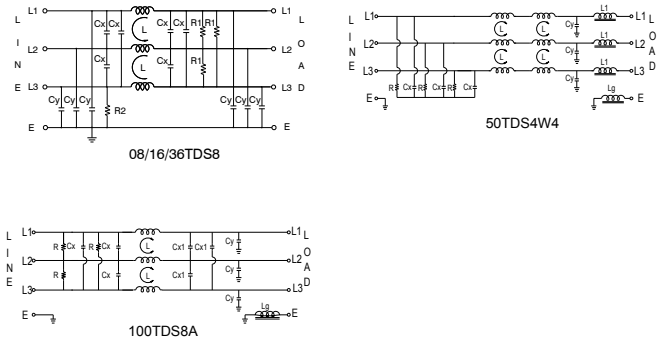
1. Applications: Electric equipment, UPS, machine tool, copy machine, automation equipment, robot, AC motor drive
2. Voltage rating: 480VAC (08/24/50 TDS4W4)  
250VAC (100TDS6, 08/16/36TDS8, 100TDS8A)
3. Operating frequency: 50/60Hz

## ELECTRICAL SCHEMATIC



## MINIMUM INSERTION LOSS IN dB

COMMON MODE (L-G) IN 50 OHM SYSTEM							
TYPE	CURRENT RATING	FREQUENCY - MHz					
		.15	.50	1.0	5.0	10	30
08TDS4W4	8A	70	65	60	50	40	30
24TDS4W4	24A	40	65	70	70	60	35
100TDS6	100A	25	40	50	60	50	40
08TDS8	8A	50	65	65	55	50	50
16TDS8	16A	45	70	65	55	50	50
36TDS8	36A	60	70	65	55	50	55
50TDS4W4	5A	40	65	65	45	35	5
100TDS8A	100A	30	50	40	20	10	5
DIFFERENTIAL MODE (L-L) IN 50 OHM SYSTEM							
08TDS4W4	8A	35	65	70	55	50	35
24TDS4W4	24A	15	60	65	65	60	40
100TDS6	100A	40	50	50	60	50	50
08TDS8	8A	50	65	60	55	50	50
16TDS8	16A	50	70	65	55	55	50
36TDS8	36A	50	70	65	55	50	45
50TDS4W4	5A	30	40	30	25	25	5
100TDS8A	100A	35	30	25	20	10	10



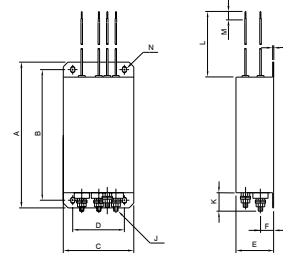
## SERIES DIMENSIONS

	08TDS4W4	24TDS4W4	08TDS8	16TDS8	36TDS8	100TDS6	50TDS4W4	100TDS8A
A	145	180		200		390	322	252
B	135		115			370	92	
C	75	115		150		352	152	122
D	55	100		136		202	340	270
E	45	60		65		150	60	220
F	16		18			430	300	292
H			6.4			122	∅7.0	∅7.5
I		85		120		12.5 X 7.5	7.0 X 10.0	7.5 X 12.5
J	M4 X 0.7		M6 X 1.0				M8 X 1.25	M6 X
1.0	M8 X 1.25							
K	15		20			75	363	330
L	300					60		
M	6							
N	7 X 5.3							
T			0.8					

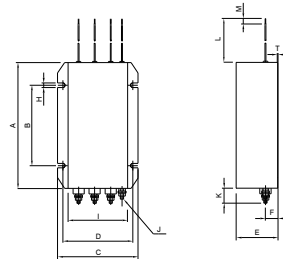
**MECHANICAL CONSTRUCTION**

THREE-PHASE FILTERS

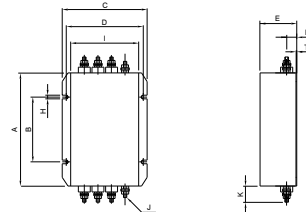
08TDS4W4



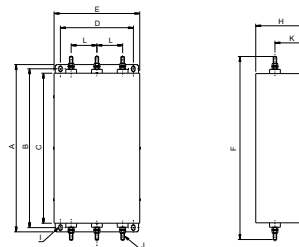
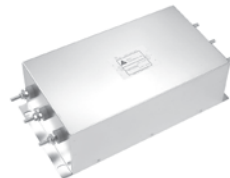
24TDS4W4



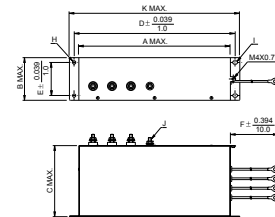
08/16/36TDS8



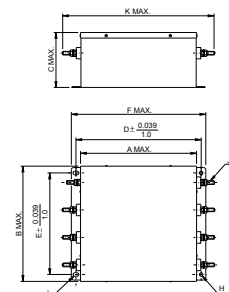
100TDS6



50TDS4W4



100TDS8A



UNIT:  $\frac{\text{INCH}}{\text{mm}}$

# TDS SERIES HIGH CURRENT 3-PHASE, 3-WIRE FILTERS

## COMPONENTS

PART NO.	$\Sigma C_x(\mu F)$	$\Sigma C_y(\mu F)$	L(uH)	R(uH)	R1(K $\Omega$ )
200TDSS84	4.7	1.0	90	680	1.0
300TDSS84	10.0	2.2	2.0		
400TDSS84	12.2				
500TDSS84	14.7				
600TDSS84	20.0	4.7	1.4		

## MINIMUM INSERTION LOSS IN dB

PART NO.	COMMON MODE (L-G) IN 50 OHM SYSTEM								
	FREQUENCY-MHz								
	.01	.05	.10	.15	.50	1.0	5.0	10	30
200TDSS84	5	20	30	35	50	45	25	20	10
300TDSS84	10	25	30	30	40	40	25	20	15
400TDSS84	5	10	25	25	35	30	20	20	10
500TDSS84	-	10	25	25	30	30	20	15	10
600TDSS84	-	10	25	25	25	25	15	15	10

PART NO.	DIFFERENTIAL MODE (L-L) IN 50 OHM SYSTEM								
	FREQUENCY-MHz								
	.01	.05	.10	.15	.50	1.0	5.0	10	30
200TDSS84	20	30	40	40	50	45	25	20	15
300TDSS84	25	35	35	40	40	50	35	30	20
400TDSS84	20	20	40	40	35	35	20	15	10
500TDSS84	10	15	30	30	30	30	20	15	10
600TDSS84	10	15	25	25	25	25	15	10	10

## SERIES DIMENSIONS

PART NO.	DIMENSIONS IN INCHES/mm												
	A	B	C	D	E	F	G	H	I	J	K	L	M
200TDSS84	16.929 430.0	15.433 392.0	13.071 332.0	8.346 212.0	4.528 115.0	14.370 365.0	7.087 180.0	0.315x0.551 8.0X14.0	0.118 3.0	0.315 8.0	Ø0.472 Ø12.0	Ø1.024 Ø26.0	-
300TDSS84	20.669	18.800	15.827	9.528	5.591	17.717	2.362	2.765	0.256x0.315	0.118	Ø0.236	Ø0.591	1.772
400TDSS84	525.0	477.0	402.0	242.0	142.0	450.0	60.0	70.0	6.5X8.0	3.0	Ø6.0	Ø15.0	45.0
500TDSS84	26.772	22.520	19.764	10.709	7.165	21.457	2.953	2.953	0.295x0.374	0.236	Ø0.295	Ø0.591	2.165
600TDSS84	680.0	572.0	502.0	272.0	182.0	545.0	75.0	75.0	7.5X9.5	6.0	Ø7.5	Ø15.0	55.0

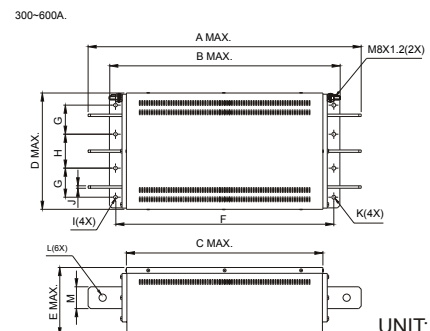
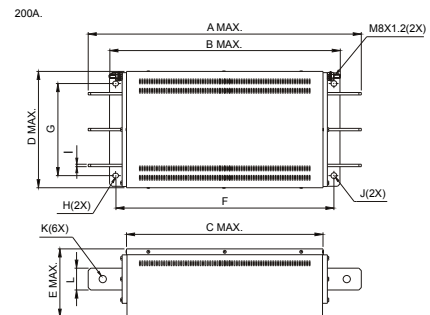
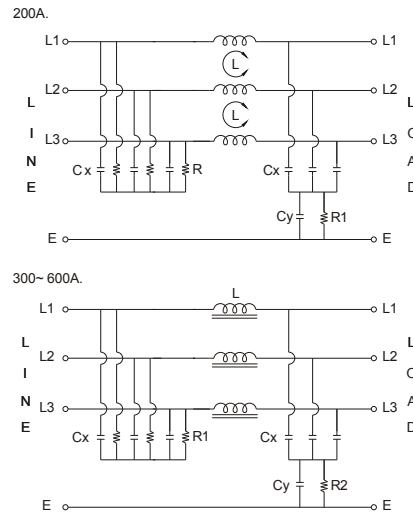
## MECHANICAL CONSTRUCTION



## INTRODUCTIONS

1. Applications: Electric equipment, UPS, machine tool, copy machine, automation equipment, robot, AC motor drive
2. Voltage rating: 480VAC
3. Operating frequency: 50/60Hz

## ELECTRICAL SCHEMATIC



UNIT: INCH/mm

# TDT SERIES HIGH PERFORMANCE 3-PHASE, 3-WIRE FILTERS

## COMPONENTS

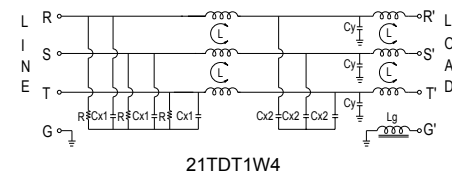
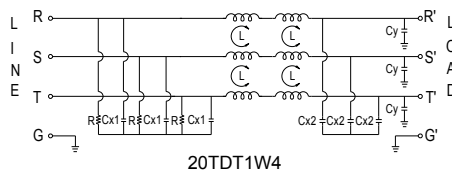
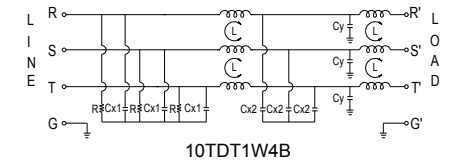
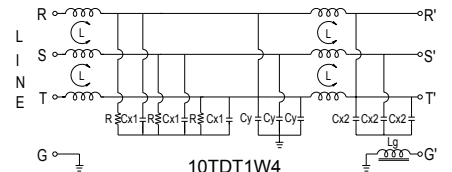
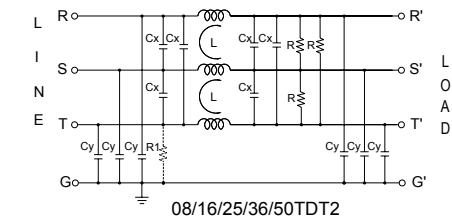
PART NO.	$\Sigma C_x$ (uF)	$\Sigma C_y$ (uF)	L (mH)	R (M $\Omega$ )	R1 (M $\Omega$ )	
08TDT2	1.6	0.17	7.6	2.0	-	
16TDT2	3.4		5.2	1.5	1.1	
25TDT2	4.4	1.8	2.2			
36TDT2		1.3				
50TDT2	2.0	0.8				
PART NO.	Cx1 (uF)	Cx2 (uF)	Cy (nF)	L (mH)	Lg (uH)	R (K $\Omega$ )
10TDT1W4	0.68	-	10	23	5.2	560
10TDT1W4B	4.4	0.68	200	1.5	-	100
20TDT1W4		0.08	20			
21TDT1W4		1.0	47			

· UL approved

## INTRODUCTIONS

1. Applications: Electric equipment, UPS, machine tool, copy machine, automation equipment, robot, AC motor drive
2. Voltage rating: 480VAC
3. Operating frequency: 50/60Hz

## ELECTRICAL SCHEMATIC



## MINIMUM INSERTION LOSS IN dB

PART NO.	COMMON MODE (L-G) IN 50 OHM SYSTEM								
	FREQUENCY-MHz								
	.01	.05	.10	.15	.50	1.0	5.0	10	30
08TDT2	20	30	40	50	65	65	55	50	50
16TDT2	15	25	35	45	70	65	55	50	50
25TDT2	15	25	35	40	50	50	50	40	30
36TDT2	10	35	50	50	60	60	50	40	55
50TDT2	5	30	50	50	50	50	50	50	50
10TDT1W4	10	10	15	40	65	65	65	50	45
10TDT1W4B	5	35	50	60	60	60	60	40	35
20TDT1W4	5	10	15	25	35	40	50	40	25
21TDT1W4	2	25	35	45	65	65	60	30	15
PART NO.	DIFFERENTIAL MODE (L-L) IN 50 OHM SYSTEM								
	FREQUENCY-MHz								
	.01	.05	.10	.15	.50	1.0	5.0	10	30
08TDT2	10	10	20	50	65	65	55	50	50
16TDT2	10	10	40	50	70	65	55	50	50
25TDT2	10	10	40	45	50	50	50	40	30
36TDT2	10	20	40	50	60	60	50	45	45
50TDT2	5	20	40	45	50	50	50	50	50
10TDT1W4	-	5	5	10	40	50	45	45	50
10TDT1W4B	5	10	15	35	40	40	40	40	35
20TDT1W4	5	10	15	30	60	60	50	40	40
21TDT1W4	5	10	15	35	45	45	40	40	30

## SERIES DIMENSIONS

PART NO.	DIMENSIONS IN INCHES/mm							
	A	B	C	D	E	F	G	H
08TDT2	7.165	3.425	2.40	4.606	4.528	3.937	8.898	-
	182.0	87.0	61.0	117.0		100.0	226.0	
16TDT2	7.953	4.803	2.598	5.984	115.0	5.354	9.646	-
25TDT2								
36TDT2								
50TDT2								
10TDT1W4	8.740	5.197	1.654	7.795	3.397	9.843	7.795	0.787
	222.0	132.0	42.0	198.0	100.0	250.0	198.0	20.0
10TDT1W4B	10.906	7.956	2.047	9.961	6.693	7.874	9.961	0.984
20TDT1W4								
21TDT1W4								
	277.0	202.0	52.0	253.0	170.0	200.0	253.0	25.0

THREE-PHASE FILTERS





