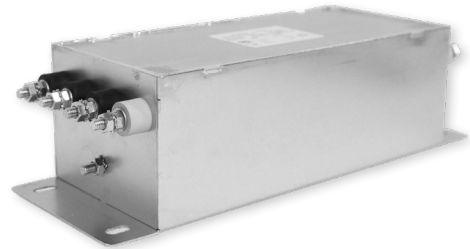


# RP420

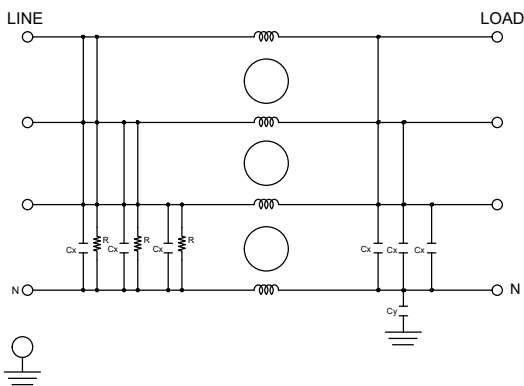
## 3-PHASE WYE DUAL STAGE POWER LINE FILTER

### FEATURES

- » Rated currents include **15A, 30A, 50A, 80A, 100A, 150A, 200A, and 300A**
- » Dual Stage Line Filter
- » Available with **W** (wires), **S** (studs) and **C** (connectors) option
- » Agency Approved to UL1283 / 60929, CSA C22.2, EN 60939
- » Y-cap value can be adjusted to fit specification

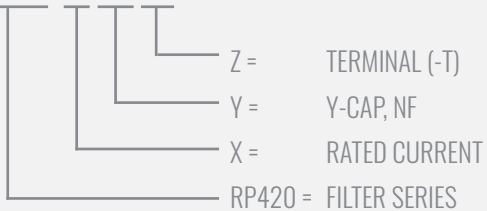


### ELECTRICAL SCHEMATIC



### HOW TO ORDER

RP420-X-Y-Z



**NOTE:** USE ANY COMBINATION OF -X (AMPS) WITH ANY -Y RATINGS  
E.G. **RP420-50-1000-S** (50AMPS WITH 1000 NF YCAP)

For **X, Y** and **Z** options see product specification table.

### SPECIFICATIONS

OPERATING FREQUENCY	50/60Hz
USABLE FREQUENCY	DC - 400 Hz
MAX. OPERATING VOLTAGE	480V +10%
AMBIENT TEMPERATURE	-25 TO 50°C
CLIMATIC CATEGORY	25/100/21
TERMINALS (-T)	WIRE LEADS
	STUDS 15-50A (M5)
	80-100A (M6)
	150-200A(M10),
	300A (M12)
	CONNECTORS

TYP. WEIGHT, LBS (KG) 8.0 - 35.0 (3.6 - 15.9)

### TYPICAL LEAKAGE CURRENT

@ 480 VAC 60 Hz 0 - 20.0 mA Max.

### HIPOT RATINGS

LINE TO GROUND 3500 VDC

### TYPICAL APPLICATIONS

- ✓ Power conversion systems
- ✓ Processing equipment
- ✓ Alternative energy equipment (EV charging & solar)
- ✓ Factory Machinery

# RP420

## 3-PHASE WYE DUAL STAGE POWER LINE FILTER

MODEL NO.	RATED CURRENT, A @ 40° C	Y-CAP, nF	LEAKAGE CURRENT mA, @ 480V AC/60 Hz	TERMINAL OPTIONS			MAX. DIMENSIONS" (MM)		
				(W) INPUT/ OUTPUT	(S) INPUT/ OUTPUT	(C) INPUT/ OUTPUT	WIDTH	(LENGTH)	HEIGHT
RP420-15-0-S	15	0	-		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-15-0-W	15	0	-	✓			*	*	*
RP420-15-10-S	15	10	0.10		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-15-10-W	15	10	0.10	✓			*	*	*
RP420-15-100-S	15	100	1.00		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-15-100-W	15	100	1.00	✓			*	*	*
RP420-15-1000-S	15	1000	10.00		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-15-1000-W	15	1000	10.00	✓			*	*	*
RP420-15-2000-S	15	2000	20.00		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-15-2000-W	15	2000	20.00	✓			*	*	*
RP420-30-0-C	30	0	-			✓	5.75"(146)	9.93"(252)	2.25"(57)
RP420-30-0-S	30	0	-		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-30-0-W	30	0	-	✓			*	*	*
RP420-30-10-C	30	10	0.10			✓	5.75"(146)	9.93"(252)	2.25"(57)
RP420-30-10-S	30	10	0.10		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-30-10-W	30	10	0.10	✓			*	*	*
RP420-30-100-C	30	100	1.00			✓	5.75"(146)	9.93"(252)	2.25"(57)
RP420-30-100-S	30	100	1.00		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-30-100-W	30	100	1.00	✓			*	*	*
RP420-30-1000-C	30	1000	10.00			✓	5.75"(146)	9.93"(252)	2.25"(57)
RP420-30-1000-S	30	1000	10.00		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-30-1000-W	30	1000	10.00	✓			*	*	*
RP420-30-2000-C	30	2000	20.00			✓	5.75"(146)	9.93"(252)	2.25"(57)
RP420-30-2000-S	30	2000	20.00		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-30-2000-W	30	2000	20.00	✓			*	*	*
RP420-50-0-C	50	0	-			✓	5.75"(146)	9.93"(252)	2.25"(57)
RP420-50-0-S	50	0	-		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-50-0-W	50	0	-	✓			*	*	*
RP420-50-10-C	50	10	0.10			✓	5.75"(146)	9.93"(252)	2.25"(57)
RP420-50-10-S	50	10	0.10		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-50-10-W	50	10	0.10	✓			*	*	*
RP420-50-100-C	50	100	1.00			✓	5.75"(146)	9.93"(252)	2.25"(57)
RP420-50-100-S	50	100	1.00		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-50-100-W	50	100	1.00	✓			*	*	*

**ADDITIONAL MODEL NO. >>**

# RP420

## 3-PHASE WYE DUAL STAGE POWER LINE FILTER

MODEL NO.	RATED CURRENT, A @ 40° C	Y-CAP, nF	LEAKAGE CURRENT mA, @ 480V AC/60 Hz	TERMINAL OPTIONS			MAX. DIMENSIONS" (MM)		
				(W) INPUT/OUTPUT	(S) INPUT/OUTPUT	(C) INPUT/OUTPUT	WIDTH	(LENGTH)	HEIGHT
RP420-50-1000-C	50	1000	10.00			✓	5.75"(146)	9.93"(252)	2.25"(57)
RP420-50-1000-S	50	1000	10.00		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-50-1000-W	50	1000	10.00	✓			*	*	*
RP420-50-2000-C	50	2000	20.00			✓	5.75"(146)	9.93"(252)	2.25"(57)
RP420-50-2000-S	50	2000	20.00		✓		3.50"(89)	10.00"(254)	2.75"(70)
RP420-50-2000-W	50	2000	20.00	✓			*	*	*
RP420-80-0-C	80	0	-			✓	*	*	*
RP420-80-0-S	80	0	-		✓		3.90"(99)	12.36"(314)	3.25"(83)
RP420-80-0-W	80	0	-	✓			*	*	*
RP420-80-10-C	80	10	0.10			✓	*	*	*
RP420-80-10-S	80	10	0.10		✓		3.90"(99)	12.36"(314)	3.25"(83)
RP420-80-10-W	80	10	0.10	✓			*	*	*
RP420-80-100-C	80	100	1.00			✓	*	*	*
RP420-80-100-S	80	100	1.00		✓		3.90"(99)	12.36"(314)	3.25"(83)
RP420-80-100-W	80	100	1.00	✓			*	*	*
RP420-80-1000-C	80	1000	10.00			✓	*	*	*
RP420-80-1000-S	80	1000	10.00		✓		3.90"(99)	12.36"(314)	3.25"(83)
RP420-80-1000-W	80	1000	10.00	✓			*	*	*
RP420-80-2000-C	80	2000	20.00			✓	*	*	*
RP420-80-2000-S	80	2000	20.00		✓		3.90"(99)	12.36"(314)	3.25"(83)
RP420-80-2000-W	80	2000	20.00	✓			*	*	*
RP420-100-0-C	100	0	-			✓	*	*	*
RP420-100-0-S	100	0	-		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-100-0-W	100	0	-	✓			*	*	*
RP420-100-10-C	100	10	0.10			✓	*	*	*
RP420-100-10-S	100	10	0.10		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-100-10-W	100	10	0.10	✓			*	*	*
RP420-100-100-C	100	100	1.00			✓	*	*	*
RP420-100-100-S	100	100	1.00		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-100-100-W	100	100	1.00	✓			*	*	*
RP420-100-1000-C	100	1000	10.00			✓	*	*	*
RP420-100-1000-S	100	1000	10.00		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-100-1000-W	100	1000	10.00	✓			*	*	*
RP420-100-2000-C	100	2000	20.00			✓	*	*	*

**ADDITIONAL MODEL NO. >>**

# RP420

## 3-PHASE WYE DUAL STAGE POWER LINE FILTER

MODEL NO.	RATED CURRENT, A @ 40° C	Y-CAP, nF	LEAKAGE CURRENT mA, @ 480V AC/60 Hz	TERMINAL OPTIONS			MAX. DIMENSIONS" (MM)		
				(W) INPUT/OUTPUT	(S) INPUT/OUTPUT	(C) INPUT/OUTPUT	WIDTH	(LENGTH)	HEIGHT
RP420-100-2000-S	100	2000	20.00		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-100-2000-W	100	2000	20.00	✓			*	*	*
RP420-150-0-C	150	0	-			✓	*	*	*
RP420-150-0-S	150	0	-		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-150-0-W	150	0	-	✓			*	*	*
RP420-150-10-C	150	10	0.10			✓	*	*	*
RP420-150-10-S	150	10	0.10		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-150-10-W	150	10	0.10	✓			*	*	*
RP420-150-100-C	150	100	1.00			✓	*	*	*
RP420-150-100-S	150	100	1.00		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-150-100-W	150	100	1.00	✓			*	*	*
RP420-150-1000-C	150	1000	10.00			✓	*	*	*
RP420-150-1000-S	150	1000	10.00		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-150-1000-W	150	1000	10.00	✓			*	*	*
RP420-150-2000-C	150	2000	20.00			✓	*	*	*
RP420-150-2000-S	150	2000	20.00		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-150-2000-W	150	2000	20.00	✓			*	*	*
RP420-200-0-C	200	0	-			✓	*	*	*
RP420-200-0-S	200	0	-		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-200-0-W	200	0	-	✓			*	*	*
RP420-200-10-C	200	10	0.10			✓	*	*	*
RP420-200-10-S	200	10	0.10		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-200-10-W	200	10	0.10	✓			*	*	*
RP420-200-100-C	200	100	1.00			✓	*	*	*
RP420-200-100-S	200	100	1.00		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-200-100-W	200	100	1.00	✓			*	*	*
RP420-200-1000-C	200	1000	10.00			✓	*	*	*
RP420-200-1000-S	200	1000	10.00		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-200-1000-W	200	1000	10.00	✓			*	*	*
RP420-200-2000-C	200	2000	20.00			✓	*	*	*
RP420-200-2000-S	200	2000	20.00		✓		6.40"(163)	15.75"(400)	4.50"(114)
RP420-200-2000-W	200	2000	20.00	✓			*	*	*
RP420-300-0-S	300	0	-		✓		7.00"(178)	21.53"(547)	5.00"(127)
RP420-300-10-S	300	10	0.10		✓		7.00"(178)	21.53"(547)	5.00"(127)

**ADDITIONAL MODEL NO. >>**

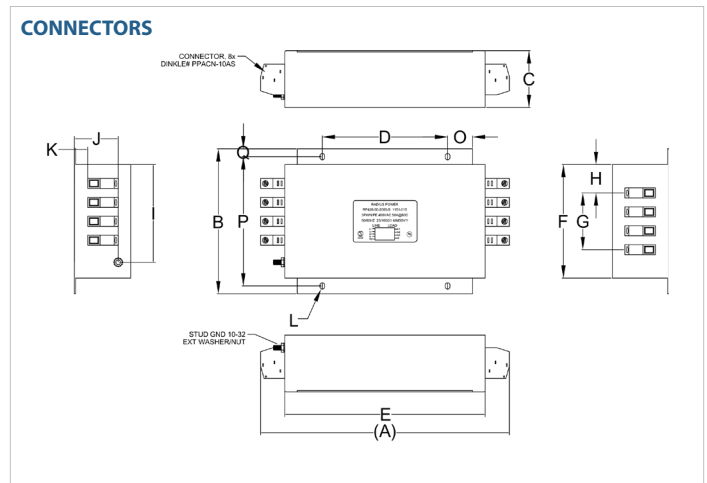
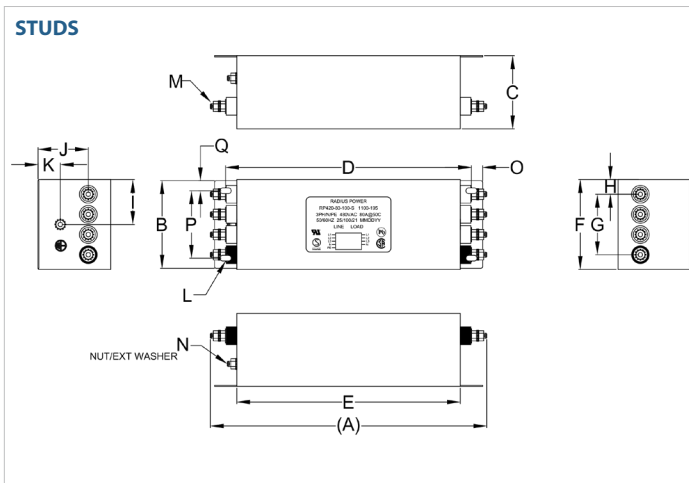
# RP420

## 3-PHASE WYE DUAL STAGE POWER LINE FILTER

MODEL NO.	RATED CURRENT, A @ 40° C	Y-CAP, nF	LEAKAGE CURRENT mA, @ 480V AC/60 Hz	TERMINAL OPTIONS			MAX. DIMENSIONS" (MM)		
				(W) INPUT/OUTPUT	(S) INPUT/OUTPUT	(C) INPUT/OUTPUT	WIDTH	(LENGTH)	HEIGHT
RP420-300-100-S	300	100	1.00		✓		7.00"(178)	21.53"(547)	5.00"(127)
RP420-300-1000-S	300	1000	10.00		✓		7.00"(178)	21.53"(547)	5.00"(127)
RP420-300-2000-S	300	2000	20.00		✓		7.00"(178)	21.53"(547)	5.00"(127)

\*Contact factory for dimensions.

### RP420 MECHANICAL OUTLINES (MM)



SERIES	(A)	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
<b>STUDS (15/30/50A)</b>	10.00" (254)	3.50" (89)	2.75" (70)	9.00" (229)	8.00" (203)	3.50" (89)	2.55" (65)	0.48" (12)	1.75" (45)	2.00" (51)	0.75" (19)	Ø 0.47x0.25" 4x (Ø 12.2x6.5, 4x)	STUD, M5, 8x	STUD, GND, M5	0.50" (13)	2.50" (64)	0.50" (13)
<b>CONNECT. (15/30/50A)</b>	9.93" (252)	5.75" (146)	2.25" (57)	5.00" (127)	8.00" (203)	4.50" (114)	2.25" (57)	1.13" (29)	3.88" (98)	1.75" (44)	0.53" (14)	(Ø 0.25x0.19, 4x)	N/A	N/A	1.00" (25)	5.13" (130)	0.31" (8)
<b>STUDS (80A)</b>	12.36" (314)	3.90" (99)	3.25" (83)	11.00" (279)	10.00" (254)	4.00" (102)	2.69" (68)	0.65" (17)	2.00" (51)	2.25" (57)	1.00" (25)	Ø 0.5x0.25" 4x (Ø 12.7x6.4, 4x)	STUD, M6, 8x	STUD, GND, M6	0.50" (13)	3.00" (76)	0.45" (11)
<b>STUDS (100/150/200A)</b>	15.75" (400)	6.40" (163)	4.50" (114)	14.69" (373)	13.00" (330)	6.60" (168)	4.60" (117)	1.00" (25)	3.30" (84)	3.50" (89)	1.00" (25)	Ø 0.59x0.25" 4x (Ø 15.2x6.5, 4x)	STUD, M6, 8x	STUD, GND, M6	0.53" (14)	5.12" (130)	0.64" (16)
<b>STUDS (300A)</b>	21.53" (547)	7.00" (178)	5.00" (127)	19.00" (483)	18.00" (457)	7.00" (178)	4.80" (122)	1.10" (28)	3.50" (89)	4.00" (102)	1.00" (25)	Ø 0.59x0.25" 4x (Ø 15.2x6.5, 4x)	STUD, M6, 8x	STUD, GND, M6	0.50" (13)	6.00" (152)	0.50" (13)

TYPICAL TOLERANCE: +/-0.02" (0.50MM)

# RP420

## 3-PHASE **WYE** DUAL STAGE POWER LINE FILTER

### TYPICAL INSERTION LOSS, dB (50/50 Ohm)

Amps	Freq (MHz)	0.15	0.5	1.0	10	30
15	CM (dB)	60	70	70	58	40
	DM (dB)	60	70	70	70	70
30	CM (dB)	60	70	70	58	40
	DM (dB)	60	70	70	70	70
50	CM (dB)	55	70	70	58	40
	DM (dB)	55	65	70	70	60
80	CM (dB)	50	60	60	55	40
	DM (dB)	55	60	60	50	38
100	CM (dB)	65	70	70	58	30
	DM (dB)	52	65	65	60	30
150	CM (dB)	60	65	65	55	30
	DM (dB)	50	62	65	60	30
200	CM (dB)	55	60	60	50	35
	DM (dB)	50	60	60	60	30
300	CM (dB)	56	60	60	48	40
	DM (dB)	50	55	55	50	30