



3-Phase RFI Filters

3-Phase Radio Frequency Interference (RFI) filters are available with current ratings from 3A to 400A. These filters help equipment comply with international requirements for conducted emissions, and they aid in immunity/susceptibility compliance. Products include both Delta and wye wiring configurations. Filter circuits are optimized for general purpose and clean-up applications, frequency converters, and motor control devices. Customizations are also available.



3-Phase RFI filters

Features ▶

- 3A to 400A rating
- Delta or wye wiring
- Safety agency approvals—see table
- Voltage ratings 277/480 and 250/440
- Various termination options

Benefits ▶

- Helps protect electronic equipment in industrial applications
- Enables equipment to meet strict international emissions standards
- Optimized circuit for various applications
- Minimized package size to fit specific applications
- Sample availability

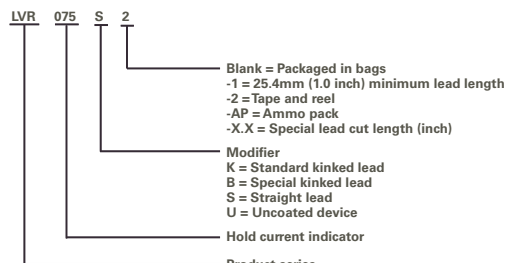
Applications ▶

- Factory automation
- HVAC systems
- Heavy equipment
- Packaging equipment
- Motor manufacturers
- Food processing equipment
- Elevators

Product Specifications ▶

Part Number	Wiring Type	Current Rating (A)	Rated Voltage (VAC max.) Phase-Neutral/Phase-Phase	Length (inches)	Width (inches)	Height (inches)	Insertion Loss (dB Line-Ground) at 500 kHz	Insertion Loss (dB Line-Line) at 500 kHz	Safety Agency Approvals
6FCD10	Delta	6	277/480	6.0	4.3	2.30	56	62	UL
16FCD10	Delta	16	277/480	7.2	5.48	2.55	75	75	UL
25FCD10	Delta	25	277/480	9.69	6.3	2.55	75	75	UL
36FCD10	Delta	36	277/480	9.69	6.3	2.55	75	75	UL
50FCD10	Delta	50	277/480	10.5	6.3	2.54	75	75	UL
63ADT6	Delta	63	277/480	14	10	3.50	85	100	UL
63ADT6S	Delta	63	277/480	19	10	4.50	45	100	UL
100ADT6	Delta	100	277/480	19	10	4.50	85	100	UL
100ADT6S	Delta	100	277/480	19	10	4.50	60	100	UL
160ADT6	Delta	160	277/480	19	10	4.50	80	100	UL
160ADT6S	Delta	160	277/480	22	13	4.50	58	100	UL
200ADT6	Delta	200	277/480	19	10	4.50	77	100	UL
200ADT6S	Delta	200	277/480	22	13	4.50	54	100	UL
3AYO1	Delta or wye	3	250/440	3.37	2.07	1.53	23	12	UL, CSA, VDE
6AYO1	Delta or wye	6	250/440	3.37	2.07	1.53	23	18	UL, CSA, VDE
10AYO1	Delta or wye	10	250/440	3.37	2.07	1.53	1	18	UL, CSA, VDE
20AYO1	Delta or wye	20	250/440	3.37	2.07	1.53	7	82	UL, CSA, VDE
16AYA6A	Delta or wye	16	250/440	7.91	4.37	1.97	52	85	UL
25AYA6A	Delta or wye	25	250/440	7.91	4.37	1.97	46	86	UL
36AYA6A	Delta or wye	36	250/440	7.91	4.37	2.56	49	85	UL
50AYA6A	Delta or wye	50	250/440	7.91	4.37	2.56	43	82	UL
16AYC10B	Delta or wye	16	277/480	6.69	4.37	2.56	88	90	UL
25AYC10B	Delta or wye	25	277/480	9.96	5.08	2.52	96	95	UL
36AYC10B	Delta or wye	36	277/480	10.35	5.08	2.52	90	87	UL
63AYC10B	Delta or wye	63	277/480	10.89	5.08	2.52	88	77	UL
80AYC10B	Delta or wye	80	277/480	12.09	5.55	5.55	88	77	UL
110AYC10B	Delta or wye	110	277/480	12.09	5.55	5.55	85	72	UL
150AYC10B	Delta or wye	150	277/480	12.09	5.55	5.55	97	66	UL
150AYC10B-95	Delta or wye	150	277/480	12.09	5.55	5.55	100	67	UL
180AYC10B	Delta or wye	180	277/480	15.71	5.55	5.55	94	64	UL
20AYP6C	Delta or wye	20	250/440	8.82	5.57	2.56	55	65	UL, CSA, VDE
30AYP6C	Delta or wye	30	250/440	8.82	5.57	2.56	55	65	UL, CSA, VDE
45AYPC	Delta or wye	45	250/440	9.43	6.92	4.82	49	60	UL, CSA, VDE
60AYP6C	Delta or wye	60	250/440	9.43	6.92	4.82	50	60	UL, CSA, VDE
20AYT6C	Delta or wye	20	250/440	13.82	5.57	2.56	75	70	UL, CSA, VDE
30AYT6C	Delta or wye	30	250/440	13.82	5.57	2.56	75	75	UL, CSA, VDE
45AYT6C	Delta or wye	45	250/440	13.83	6.92	4.82	75	75	UL, CSA, VDE
60AYT6C	Delta or wye	60	250/440	13.83	6.92	4.82	75	75	UL, CSA, VDE
400CFN12	Delta	400	277/480	25	12	6.5	82	66	UL

Arrow Industrial Selector Guide



Part numbering system for PolySwitch LVR devices

LVR Series—Line Voltage PPTC (Polymeric Positive-Temperature Coefficient) Devices for up to 265 VAC

PolySwitch™ LVR devices help protect electric motors and transformers used in commercial and home appliances from failures caused by mechanical overload, overheating, stall, lost neutral, and other potentially damaging conditions. This series includes components that are rated for line voltages of 120 VAC and 240 VAC, and up to 2A of operating current at +20 degrees Celsius.

Features ▶

- Polymeric positive-temperature coefficient (PPTC) device
- Solid-state construction
- Line voltage rated up to 265 VAC
- RoHS compliant
- UL/CSA/TUV recognition

Benefits ▶

- Resettable device helps reduce repair cost
- Senses both current and temperature
- Low initial inline resistance
- No cycling in tripped state
- Rugged handling

Applications ▶

- Motor and compressor-winding protection
- Primary-side overcurrent protection for transformers
- Secondary-side protection for specific components on printed circuit boards
- MOSFET protection
- Replaces bi-metal breakers in certain applications

Product Specifications ▶

Part Number	I_{HOLD} (A)	I_{TRIP} (A)	V_{max} (V)	V_{max} Interrupt (VAC)	I_{max} (A)	PD Typical (W)	Maximum Time-to-Trip (A)	Maximum Time-to-Trip (s)	R_{min} (Ω)	R_{max} (Ω)	R1 Maximum (Ω)
LVR005K	0.05	0.12	240	265	1.0	0.7	0.25	15.0	18.50	31.00	65.00
LVR005S	0.05	0.12	240	265	1.0	0.7	0.25	15.0	18.50	31.00	65.00
LVR008K	0.08	0.19	240	265	1.2	0.8	0.40	15.0	7.40	12.00	26.00
LVR008S	0.08	0.19	240	265	1.2	0.8	0.40	15.0	7.40	12.00	26.00
LVR012K	0.12	0.30	240	265	1.2	1.0	0.60	15.0	3.00	6.50	12.00
LVR012S	0.12	0.30	240	265	1.2	1.0	0.60	15.0	3.00	6.50	12.00
LVR016K	0.16	0.37	240	265	2.0	1.4	0.80	15.0	2.50	4.10	7.80
LVR016S	0.16	0.37	240	265	2.0	1.4	0.80	15.0	2.50	4.10	7.80
LVR025K	0.25	0.56	240	265	3.5	1.5	1.25	18.5	1.30	2.10	3.80
LVR025S	0.25	0.56	240	265	3.5	1.5	1.25	18.5	1.30	2.10	3.80
LVR033S	0.33	0.74	240	265	4.5	1.7	1.65	21.0	0.77	1.24	2.60
LVR033K	0.33	0.74	240	265	4.5	1.7	1.65	21.0	0.77	1.24	2.60
LVR040K	0.40	0.90	240	265	5.5	2.0	2.00	24.0	0.60	0.97	1.90
LVR040S	0.40	0.90	240	265	5.5	2.0	2.00	24.0	0.60	0.97	1.90
LVR055K	0.55	1.25	240	265	7.0	3.4	2.75	26.0	0.45	0.73	1.45
LVR055S	0.55	1.25	240	265	7.0	3.4	2.75	26.0	0.45	0.73	1.45
LVR075S	0.75	1.5	240	265	7.5	2.6	3.75	18.0	0.32	0.48	0.84
LVR100S	1.00	2.00	240	265	10.0	2.9	5.00	21.0	0.22	0.33	0.58
LVR125S	1.25	2.50	240	265	12.5	3.3	6.25	23.0	0.17	0.18	0.44
LVR200S	2.00	4.00	240	265	20.0	4.5	10.00	28.0	0.09	0.13	0.22
LVRL075S	0.75	1.52	120	135	7.5	1.8	3.75	14.0	0.25	0.40	0.69
LVRL100S	1.00	2.00	120	135	10.0	2.2	5.00	13.6	0.18	0.27	0.47
LVRL125S	1.25	2.50	120	135	12.5	2.0	6.25	18.0	0.12	0.18	0.32
LVRL135S	1.35	2.70	120	135	13.5	2.8	6.75	20.0	0.11	0.17	0.30
LVRL200S	2.00	4.00	120	135	20.0	3.9	10.00	36.0	0.08	0.12	0.21



Raychem Metal Oxide Varistors

Tyco Electronics' Raychem Metal Oxide Varistor (MOV) devices help provide protection against over-voltage faults such as lightning, power contact, and power induction, for a wide variety of power systems. Suitable for a broad range of applications, these devices help protect valuable equipment from potential power surge damage by clamping high-energy, short-duration impulses. Their high current handling, energy absorption capability, and fast response times help protect against transient faults.



Features ▶

- Diameter sizes: 5 mm, 7 mm, 10 mm, 14 mm, 20 mm
- Broad varistor voltage range: 18V to 1800V
- Surge capabilities: standard, high surge, extra-high surge
- Lead types: straight, kinked, other special lead types
- Packaging options: bulk, tape and reel, ammo pack

Benefits ▶

- Helps provide over-voltage fault protection for a wide variety of power systems
- Assists designers to meet UL, CSA, and VDE standards
- Helps reduce warranty and service costs

Applications ▶

- Power systems
- Surge strips
- Security systems
- Motor protection
- Household appliances

Product Specifications ▶

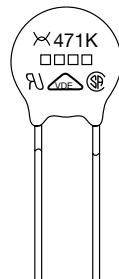
Product Series	Diameter of Disc (mm)	Surge Series	Maximum Surge Current (8 x 20 μ s) Standard	Maximum Surge Current (8 x 20 μ s) High	Maximum Surge Current (8 x 20 μ s) Extra High	Varistor Voltage Tolerance (%)	Varistor Voltage V@1 mA	Maximum Voltage AC (VRMS)	Maximum Voltage DC (V)
ROV05	05	Standard/High	100/400	250/800	NA	10/15/20	18-750 V@0.1mA	11-460	14-615
ROV07	07	Standard/High	250/1200	500/1750	NA	10/15/20	18-820	11-510	14-670
ROV10	10	Standard/High	500/2500	1000/3500	NA	10/15/20	18-1800	11-1000	14-1465
ROV14	14	Standard/High/Extra High	1000/4500	2000/6000	6500	10/15/20	18-1800	11-1000	14-1465
ROV20	20	Standard/High/Extra High	2000/6500	3000/10000	12500	10/15/20	18-1800	14-1000	18-1465

Agency Recognition for Radial-Leaded Metal Oxide Varistors*	Standard	Title	File Number
	UL1414**	Across-the-line components	E223034
	UL1449** (2nd Edition)	Transient voltage surge suppressors	E223033
	CSA	NA	NA
	VDE	Accessories and parts for electronic equipment	220978
		Varistors for use in electronic equipment	40006997

*Each part will meet different certifications. To determine which certifications a part meets please refer to the Standard Series Specifications in the ROV Devices Datasheet (PDF).

**For UL 1449 (2nd edition), the maximum clamping voltage is measured at 500A.

Related Information ▶



- ⊗ : Manufacturer's Mark
- 471 : Varistor Voltage Indicator
- K : Varistor Voltage Tolerance
- : Lot Identification