ACT COMMUNICATIONS™

222 North Center Street
Bonham, TX 75418
(903) 583-8097

ACT 471 Panelboard Extension SPD

PB/PBF Primary Surge Protection/Filter Device

Power quality is more important today than ever before and that means not just any surge protector can be relied on to protect your sensitive equipment. The ACT 471 Surge Seeker Family is the perfect design to protect your sensitive electrical and electronic environments.

This full-featured panelboard extension protects all phases and modes against transient surges and, with the filter option, is able to reduce induced noise by over 40 dB.

RECOMMENDED LOCATION

- Building Entrance / Cat C
- Primary Surge Protection for a Facility
- Switch Gear
- Motor Control Center

FEATURES AND BENEFITS

- Listed to Type 1 and Type 2
- 200 kAIC rated optional fuse
- Up to 100,000 amps per mode modular protection (200,000 per Phase)
- **BEST** built in filter options in the market – EMI filter targets
- Connected Surge Module
- 10 Modes of Protection (L-N, L-G, N-G, L-L) – 7 Modes Discrete (L-N, L-G, N-G)
- Surge Counter Option (Resettable)
- Diagnostic board
- Dual NO / NC Form C Dry Contacts - For remote monitoring & control (250V 5A rating)
- Individually Fused and Protected MOV Technology
- NEMA 1 Steel Enclosure
- 10 Year Standard Warranty – Options with extended warranty card

MOST ADVANCED MONITORING SYSTEM ON THE MARKET

- Lights (LED) – Green per phase, Red - Alarm
- Audible Alarms
- Relay Dual NO / NC Form C Dry Contacts
- Surge Counters (optional)

STANDARDS MET

- Listed by ETL for UL 1449 5th Edition
- Noise Filtering – UL 1283
- ANSI/NFPA 70 National Electrical Code

3RD PARTY TESTED

- ACT 471 is tested in all modes at rated currents by independent testing facilities
- Repetitive surge testing per IEEE C62.41.2 C3 combination without any degradation of more than 10% deviation. Greater than 17,000 impulses*

ACT471PBExt: 23 05 10

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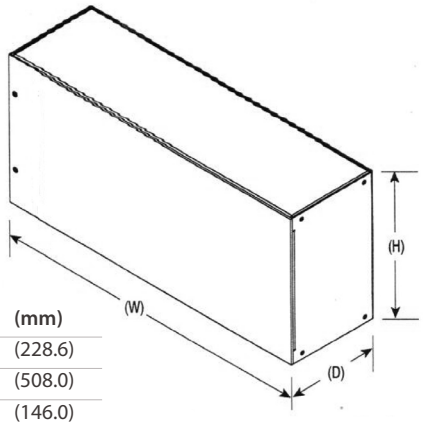
ACT 471-277Y-100-F-C1-PBF



471PB	inches	(mm)
H	9.00	(228.6)
W	20.00	(508.0)
D	5.75	(146.0)

TECHNICAL INFORMATION

MECHANICAL SPECIFICATIONS

Dimensions	20x9x5.81 (in)
Weight (determined by option)	Up to 20 lbs.
Enclosure	NEMA 3R/12 Painted Steel
Operating Temp	-40°F to +140°F -40°C to +65°C
Non-condensing Humidity	5% to 95%

ELECTRICAL SPECIFICATIONS

UL Type 1	with Fuse Option
Connection Method	Parallel
Descrete Protection Modes (7 Modes)	L-N, L-G, N-G
Wired Lugs	Up to 2 AWG
Status Indicators	Working - Green LED's Alarm - Red LED
Dual Alarm Relay Contacts	Form C NC & NO (240V 5A)
Audible Alarm	Turn On/Off Switch
Surge Counter	Resettable
Filter (3kHz – MHz)	>-40dB

Part Number	Configuration	MCOV	VPR (Voltage Protection Rating) – IEEE C62 UL 1449 4th Edition			
			L-N	L-G	N-G	L-L
471-120S-XXX-YY	120/240 Vac 3W+G	150V	700	700	700	1000
471-120Y-XXX-YY	120/208 Vac 4W+G	150V	700	700	700	1000
471-277Y-XXX-YY	277/480 Vac 4W+G	320V	1000	1000	1000	1800
471-240D-XXX-YY	240 Vac 3W+G, delta	320V	-	1000	-	1800
471-240H-XXX-YY	120/240 Vac 4W+G, delta HL PHB	150V/320V	700/1000	700/1000	1000	1000/1800
471-480D-XXX-YY	480 Vac 3W+G, delta	600V	-	1800	-	3000

EXAMPLE: **ACT 471-277Y-100-F-C1-PBFLUSH**

OPTIONS:

XXX	Surge Rating (kA) by Mode:	050, 080, 100
YY	Enclosure Type:	MEMA 1 (Standard)
	Metal Options:	Stainless Steel - **SS**
	Fuse:	100 AMP 200kAIC Fuse-FS
	Filter:	EMI/Noise Filter - **F**
	Counter:	Surge Counter - **CI** (Resettable)
	Cover Style:	Surface Mount – **PB** Flush Mount – **PB Flush**

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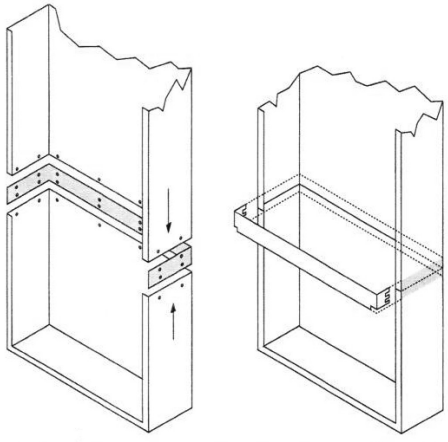
PRODUCT SURGE TEST DATA

Voltage Configuartion	Protection Mode	MCOV	A1 Ring Wave	B3 Ring Wave	B3/C1 Combo	C3 Combo	UL1449 4th edition
			2kV/67A	6kV/500A	6kV/3kA	20kV/10kA	6kV/ 3kA
1P 240V	L-N	320V	46.7	460	932V	1100V	1000 V
	L-G	320V	46.5	472	950V	1200V	1000 V
	N-G	320V	52	468	950V	1150V	1000 V
120/240	L-N	150V	46	460	528V	1000V	700V
	L-G	150V	46.5	472	534V	1050V	700V
	N-G	150V	52	468	580V	1075V	700V
120/240 with 240V High Leg	L-N	150V	46	460	528V	1000V	700V
	L-N High	320V	46.7	547	932V	1100V	1000 V
	N-G	150V	52	468	580V	1075V	700V
120/208	L-N	150V	46	460	528V	1000V	700V
	L-G	150V	46.5	472	534V	1050V	700V
	N-G	150V	52	468	580V	1075V	700V
220/380	L-N	320V	46.7	547	932V	1100V	1000 V
	L-G	320V	47.2	520	950V	1200V	1000 V
	N-G	320V	53	560	950V	1150V	1000 V
277/480	L-N	320V	46.7	547	932V	1100V	1000 V
	L-G	320V	46.5	520	950V	1200V	1000 V
	N-G	320V	52	560	950V	1150V	1000 V
240D	L-G	320V	58	547	950V	1105V	1000 V
	L-L	640V	64	1100	1820V	2390V	1800V
380D	L-G	550V	58	1058	1741V	1924V	1800V
	L-L	1100V	82	2100	2331V	3250V	2500V
480D	L-G	550V	58	1058	1741V	1924V	1800V
	L-L	1100V	82	2100	2331V	3250V	2500V



Attach the 471PB to the panelboard using the supplied collar hardware and screws. Refer to the illustration showing the unit being mounted to the bottom of a panelboard.

Tip: Use of small C-clamps helps hold the parts in place while the screws are inserted and tightened.

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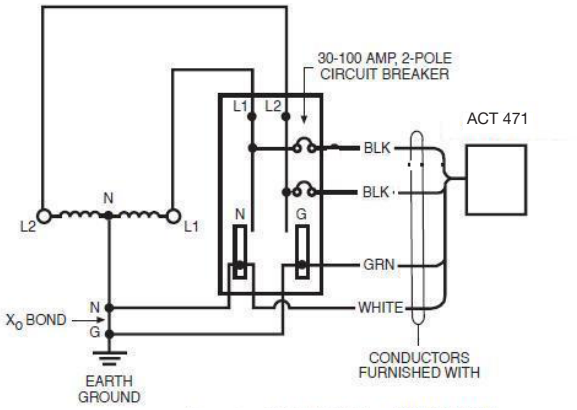
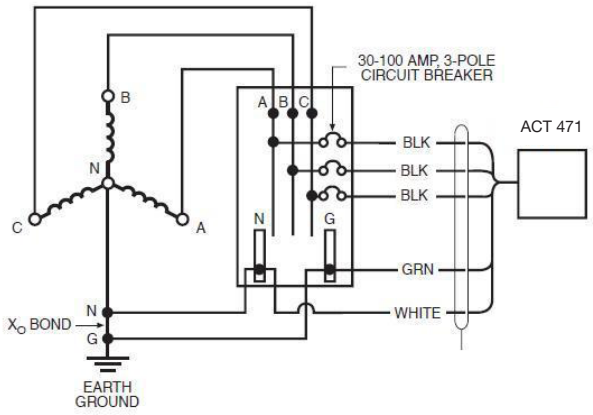
COMMON ELECTRICAL APPLICATIONS

Single Phase, 3-Wire (with Neutral)



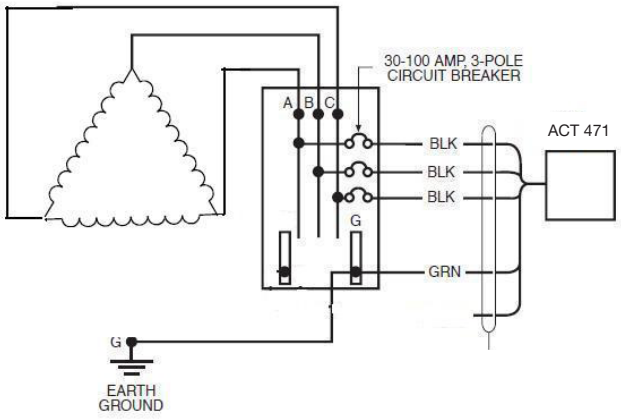
120/240 VRMS

3-Phase, 4-Wire WYE



277/480 VRMS

3-Phase, 3-Wire +Ground DELTA



480V DELTA - No Neutral

CAUTION:

It is extremely important to know the true voltage on any power panel that a Surge Protection Device is being specified for. If Electrical 1 – Lines do not exist, then it is important for an electrician to verify if the power panel to be protected is 277/480V 4W+G verses 480V 3W+G. While both products look similar, they will only operate correctly if installed in its intended voltage application. Placing any SPD on a 480V Delta system that is not designed for it can cause serious damage to both power filters and SPD devices.