



SDSB80111

Surgebreaker Plus Whole House Surge Protective Device

The Surgebreaker Plus Whole House device is designed to deliver surge suppression that addresses the entire home. AC modules are connected to the circuit breaker load center and provide suppression for all equipment connected to the power system. This Whole House system incorporates AC modules as well as modules for other metallic lines coming into the home including telephone/DSL and coaxial video/data.

US and Canadian UL® Listed as Type 2 SPD to the UL 1449 standard. Complies with requirements of NEC® Article 285, CSA 233.1-87, and CSA C22.2 No. 8-M1986 as appropriate. Telephone and coaxial video modules US and Canadian UL® Recognized to UL 497A 4th Edition and UL 497B 4th Edition.

- 120/240 Vac, 80 kA/phase AC surge suppression
- LED status indicators for AC surge suppression
- Telephone surge suppression module supports one RJ45 cable up to four lines.
- Coaxial surge suppression module supports one line of video/data
- Network suppression module supports one RJ45 modem/fax/DSL

Table 6.10: Whole House Surge Protective Devices

Description	Included Modules	Cat. No.
Whole House NEMA 1	AC, Telephone, Coax, Network	SDSB80111

Table 6.11: SDSB80111 Replacement Modules

Description	Cat. No.
Telephone Suppression Module	PTEL2R
Video Suppression Module	PVR
Network Suppression Module	PNETR6
Home Electronics Protective Device	HEPD80

** To purchase Telephone, Video or Network Replacement Modules - go online to: <http://www.apc.com/products/family/index.cfm?id=219>

Surgebreaker Plus Whole House Accessories

Add additional surge suppression or replace existing modules in Whole House products.

Coaxial, telephone and network modules: US and Canadian UL® Recognized to UL 497A 4th Edition and UL 497B 4th Edition.



HEPD50



HEPD80



HEPD58MKF

Whole Home Surge Protection

HEPD Whole House devices are designed to deliver superior AC surge protection for the entire AC power system in a home. HEPDs are compact in size and are designed to protect AC wires in the home from surges that could affect home electronics and appliances not connected to surge strips.

cULus Listed to the latest UL 1449 standard, UL Type 1 SPD, CSA C22.2 No. *-M1986, C233.1-87.

- 120/240 Vac
- Max surge current ratings available: 50 and 80 kA
- NEMA 4X rate for indoor or outdoor applications
- LED status indicators
- Compatible with all brands of load centers
- Flush Mount Kit sold separately - see table below
- HEPD50: 3 year/\$50,000 connected equipment warranty
- HEPD80: 5 year/\$75,000 connected equipment warranty

Table 6.12: HEPD Whole House Surge Protective Devices

Description	Surge Current Rating	Cat. No.
50kA Home Electronic Protective Device	50 kA	HEPD50
80kA Home Electronic Protective Device	80 kA	HEPD80
Flush Mount Kit for HEPD50/HEPD80		HEPD58MKF

Plug-on Neutral QO™ and Homeline™ Load Center Surge Protective Devices

The industry's first exclusive Plug on Neutral (PoN) Surge Protective Device (SPD). Square D™ load center PoN SPDs are a simple and quick installation. It's as easy as snap, click, done! PoN SPDs are easier to install than a standard circuit breaker. No wires are needed for installation. The PoN SPD simply plugs on to the bus and neutral bar. The surge suppressors use two-pole spaces in a QO™ or Homeline™ load center.

US and Canadian UL® Listed as Type 2 SPD to the UL 1449 standard. Complies with requirements of NEC® Article 285, CSA 233.1-87, and CSA C22.2 No. 8-M1986 as appropriate.



QO250PSPD



HOM250PSPD

- Industry First: No wires or tools required for installation
- Installation Flexibility: Works on Plug-on Neutral design QO or HOM loadcenters using two-pole spaces
- Whole House Protection: 50 kA surge current capacity per phase
- LED indicates operational status
- Peace of mind: 5 year/ \$50,000 connected equipment warranty

Table 6.13: QO™, NQ, and Homeline™ Load Center Surge Protective Device

Description	Cat. No.
Plug on Neutral QO™ Surgebreaker	QO250PSPD
Plug on Neutral Homeline™ Surgebreaker	HOM250PSPD

QO™, NQ, and Homeline™ Load Center Surge Protective Devices

Square D™ load center surge protective devices are easy to install plug-in units that install as quickly as a standard circuit breaker. The surge suppressors use two pole spaces in a QO™ or Homeline™ load center, or NQ panelboard.

US and Canadian UL® Listed as Type 2 SPD to the UL 1449 standard. Complies with requirements of NEC® Article 285, CSA 233.1-87, and CSA C22.2 No. 8-M1986 as appropriate.



QO217SB



HOM217SB

- QO2175SB for QO™ load centers, combination devices, and NQ panelboards
- HOM2175SB for Homeline™ load centers and combination devices
- Requires two pole spaces
- LED indicates operational status
- 22.5 kA per phase

Table 6.14: QO™, NQ, and Homeline™ Load Center Surge Protective Devices

Description	Cat. No.
QO™ Surgebreaker for QO and NQ	QO2175SB
Homeline™ Surgebreaker	HOM2175SB

Square D™ Easy UPS 3S (UL 208 V)

The Square D Easy UPS 3S is an easy-to-install, easy-to-use and easy-to-service 10-40 kVA 3-phase 208 V UPS ideal for non-IT applications. Easy UPS 3S combines power stability with robust electrical specifications and long-lasting performance to ensure your business continuity.



UPS



Battery String



Modular Battery Cabinet

- US listed to the UL 1778 standard
- Complies with the requirements of CSA C22.2 No. 107.3-14 + G11
- IP20 rated
- Optimize efficiency
 - Double Conversion Mode (up to 94%)
 - ECO Mode (98% efficiency)
- 1.0 power factor kVA = kW
- Parallel up to 4 units for 10-30 kVA. Parallel 3 units for 40 kVA.
- Robustness against harsh environment
 - Conformal coating on PCBA
 - Replaceable dust filter
 - 60s @ 150% overload, 10 min. @ 125% overload.
 - Operating temperature: 32 - 104°F
- Flexibility for wider application
 - Modular battery cabinet for longer runtime
 - SNMP / Modbus TCP/IP / dry contact for connectivity
 - 5 years lifespan battery module
- Connectivity
 - Startup service included with every UPS
 - EcoStructure™ ready
 - Network management card to remotely monitor and control

Please Note: Batteries are not included with the UPS. Use the selection tables below to determine number of batteries.

Using the selection table, choose what percentage of the total kVA will be backed up. Then, choose the runtime.

Example: A 20 kVA UPS backing up 75% of its kVA for a runtime of 1 hour will require (1) E3SUPS20KFBS, (1) E3SXR7, and (12) E3SFBTH2. Then, choose accessories if needed.

The maximum number of battery strings that can be installed in a modular battery cabinet (E3SXR7) is 12.



Square D Easy UPS 3S is configurable in SE Advantage. Access via MySE homepage. <https://www.myseus.schneider-electric.com/mySchneider#!/login>

Table 6.15: Selection Table for 10 kVA UPS

Part Number	Measurement	% Load			Battery Strings E3SFBTH2
		50%	75%	100%	
E3SUPS10KFBS + (#) of battery strings needed E3SFBTH2	KW	5	7.5	10	—
	kVA	5	7.5	10	—
	Runtime (Minutes)	10.5	5.8	—	1
		26.5	15.5	10.5	2
E3SUPS10KFBS + 1 modular battery cabinet E3SXR7 + (#) of battery strings needed E3SFBTH2	kVA	44.5	26.5	18	3
		5	7.5	10	—
	Runtime (Minutes)	5	7.5	10	—
		63.5	38.5	26.5	4
		83.5	51	35	5
		100	63.5	44	6
		125	77	53.5	7
		145	90.5	63	8
		170	100	73	9
		190	115	83	10
		215	130	93	11
		240	145	100	12
		265	160	110	13
		285	175	120	14
		300	190	135	15

Table 6.16: Selection Table for 15 kVA UPS

Part Number	Measurement	% Load			Battery Strings E3SFBTH2
		50%	75%	100%	
E3SUPS15KFBS + (#) of battery strings needed E3SFBTH2	KW	7.5	11.25	15	—
	kVA	7.5	11.25	15	—
	Runtime (Minutes)	5.8	—	—	1
		15.5	8.9	5.7	2
		26.5	15.5	10.5	3
E3SUPS15KFBS + 1 modular battery cabinet E3SXR7 + (#) of battery strings needed E3SFBTH2	KW	7.5	11.25	15	—
	kVA	7.5	11.25	15	—
	Runtime (Minutes)	38.5	23	15.5	4
		51	30.5	21	5
		63.5	38.5	26.5	6
		77	46.5	32.5	7
		90.5	55	38	8
		100	63.5	44.5	9
		115	72	50.5	10
		130	81	57	11
		145	90	63.5	12
		160	99.5	70	13
		175	105	76.5	14
		190	115	83	15
		E3SUPS15KFBS + 2 of E3SXR7 + (#) of battery strings needed E3SFBTH2	KW	7.5	11.25
kVA	7.5		11.25	15	—
Runtime (Minutes)	205		125	90	16
	225		135	97	17
	240		145	100	18
	255		155	110	19
	270		165	115	20
	285		175	125	21
	300		185	130	22
	300		195	135	23
	300		205	145	24
	300		215	150	25
	300		225	160	26
	300		235	165	27

Table 6.17: Selection Table for 20 kVA UPS

Part Number	Measurement	% Load			Battery Strings E3SFBTH2
		50%	75%	100%	
E3SUPS20KFBS + (#) of battery strings needed E3SFBTH2	KW	10	15	20	—
	kVA	10	15	20	—
	Runtime (Minutes)	10.5	5.8	—	1
		18.5	10.5	6.9	3
E3SUPS20KFBS + 1 of E3SXR7 + (#) of battery strings needed E3SFBTH2	KW	10	15	20	—
	kVA	10	15	20	—
	Runtime (Minutes)	27	15.5	10.5	4
		36	21	14	5
		45	26.5	18	6
		54.5	32.5	22.5	7
		64.5	38.5	26.5	8
		74.5	44.5	31	9
		84.5	51	35.5	10
		95	57.5	40	11
		105	63.5	44.5	12
		115	70.5	49	13
		125	77	53.5	14
		135	83.5	58.5	15
		E3SUPS20KFBS + 2 of E3SXR7 + (#) of battery strings needed E3SFBTH2	KW	10	15
kVA	10		15	20	—
Runtime (Minutes)	145		90.5	63.5	16
	160		97.5	68.5	17
	170		100	73	18
	180		110	78	19
	195		115	83.5	20
	205		125	88.5	21
	215		130	93.5	22
	230		140	98.5	23
	240		145	100	24
	255		155	105	25
	265		160	110	26
280	170	120	27		

Table 6.18: Selection Table for 30 kVA UPS

Part Number	Measurement	% Load			Battery Strings E3SFBTH2	
		50%	75%	100%		
E3SUPS30KFBS + (#) of battery strings needed E3SFBTH2	KW	15	22.5	30	—	
	kVA	15	22.5	30	—	
	Runtime (Minutes)	—	—	—	—	1
		5.9	—	—	—	2
		10.5	5.9	—	—	3
		16	9.1	5.8	—	4
21.5		12.5	8.2	—	5	
27.5	16	10.5	—	6		
E3SUPS30KFBS + 1 of E3SXR7 + (#) of E3SFBTH2 below	KW	15	22.5	30	—	
	kVA	15	22.5	30	—	
	Runtime (Minutes)	33.5	19.5	13	—	7
		39.5	23.5	16	—	8
		45.5	27	18.5	—	9
		52	31	21	—	10
		58.5	35	24	—	11
		65	39	27	—	12
		72	43	30	—	13
		79	47.5	33	—	14
		85.5	51.5	36	—	15
		92.5	56	39	—	16
		100	60.5	42	—	17
		105	64.5	45	—	18
E3SUPS30KFBS + 2 of E3SXR7 + (#) of E3SFBTH2 below	KW	15	22.5	30	—	
	kVA	15	22.5	30	—	
	Runtime (Minutes)	110	69	48	—	19
		120	73.5	51.5	—	20
		125	78	54.5	—	21
		135	82.5	57.5	—	22
		140	87.5	61	—	23
		150	92	64	—	24
		155	96.5	67.5	—	25
		165	100	71	—	26
		170	105	74	—	27
		180	110	77.5	—	28
		190	115	81	—	29
		195	120	84.5	—	30
E3SUPS30KFBS + 3 of E3SXR7 + (#) of E3SFBTH2 below	KW	15	22.5	30	—	
	kVA	15	22.5	30	—	
	Runtime (Minutes)	205	125	88	—	31
		210	130	91.5	—	32
		220	135	95	—	33
		230	140	98.5	—	34
		235	145	100	—	35
		245	150	105	—	36
		250	155	105	—	37
		260	160	110	—	38
		270	165	115	—	39
		275	170	115	—	40
		285	175	120	—	41
		295	180	125	—	42

Table 6.19: Selection Table for 40 kVA UPS

Part Number	Measurement	% Load			Battery Strings E3SFBTH2	
		50%	75%	100%		
E3SUPS40KFBS + (#) of battery strings needed E3SFBTH2	KW	20	30	40	—	
	kVA	20	30	40	—	
	Runtime (Minutes)	—	—	—	—	1
		7.2	—	—	—	2
		11	5.9	—	—	3
		15	8.4	5.3	—	4
19		10.5	7.1	—	5	
E3SUPS40KFBS + 1 of E3SXR7 + (#) of battery strings needed E3SFBTH2	KW	20	30	40	—	
	kVA	20	30	40	—	
	Runtime (Minutes)	23	13.5	8.9	—	6
		27.5	16	10.5	—	7
		32	19	12.5	—	8
		36.5	21.5	14.5	—	9
		41	24.5	16.5	—	10
		46	27.5	18.5	—	11
		51	30.5	20.5	—	12
		55.5	33.5	23	—	13
		60.5	36.5	25	—	14
		65.5	39.5	27	—	15
		70.5	42.5	29.5	—	16
		76	45.5	31.5	—	17
E3SUPS40KFBS + 2 of E3SXR7 + (#) of battery strings needed E3SFBTH2	KW	20	30	40	—	
	kVA	20	30	40	—	
	Runtime (Minutes)	81	49	34	—	18
		86	52	36	—	19
		91.5	55.5	38.5	—	20
		97	58.5	40.5	—	21
		100	62	43	—	22
		105	65	45.5	—	23
		110	68.5	48	—	24
		115	72	50	—	25
		120	75.5	52.5	—	26
		125	79	55	—	27
		135	82	57.5	—	28
		140	85.5	60	—	29

Table 6.19 Selection Table for 40 kVA UPS (cont'd.)

Part Number	Measurement	% Load			Battery Strings E3SFBTH2
		50%	75%	100%	
E3SUPS40KFBS + 3 of E3SXR7 + (#) of battery strings needed E3SFBTH2	KW	20	30	40	—
	kVA	20	30	40	—
	Runtime (Minutes)	145	89	62.5	31
		150	92.5	65	32
		155	96	67.5	33
		160	100	70	34
		165	100	72.5	35
		175	105	75	36
		180	110	77.5	37
		185	110	80	38
		190	115	82.5	39
		195	120	85	40
		205	125	88	41
		210	125	90.5	42
E3SUPS40KFBS + 4 of E3SXR7 + (#) of battery strings needed E3SFBTH2	KW	20	30	40	—
	kVA	20	30	40	—
	Runtime (Minutes)	215	130	93	43
		220	135	95.5	44
		225	140	98.5	45
		235	140	100	46
		240	145	100	47
		245	150	105	48
		250	155	105	49
		260	155	110	50
		265	160	110	51
		270	165	115	52
		275	170	120	53
		285	170	120	54

Table 6.20: Accessories

Part Number	Description
E3SBPSU10K20F	Easy UPS 3S Maint Bypass Panel, 10-20 kVA 208 V
E3SBPSU30K40F	Easy UPS 3S Maint Bypass Panel, 30-40 kVA 208 V
E3SBPAR10K40F	Easy UPS Parallel MBP for 3 UPS, 10-40 kVA 208 V
E3SXR7	Easy UPS 3S Modular Battery Cabinet 208 V
E3SFBTH2	Easy UPS 3S High Capacity Battery String 208 V
E3SOPT010	Easy UPS 3S Dry Contact Card
E3SOPT014	Easy UPS 3S Cold Start Kit 15-40 kVA 208 V
E3SOPT015	Easy UPS 3S Kirk Key Kit
E3SOPT001	Easy UPS 3S Series Network Card
E3SOPT002	Easy UPS 3S Parallel Kit



Maint Bypass Panel



Modular Battery Cabinet



Battery String



Dry Contact Card



Cold Start Kit



Kirk Key Kit



Series Network Card



Parallel Kit