



VZCA.E330181 - Surge-protective Devices

Surge-protective Devices

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstrasse 8
Blomberg, 32825 Germany

E330181

Cat. No.	SPD Type	Volts (V)	AC/DC/ DC PV	PH	AMPS (A)	AMB Min (°C)	AMB Max (°C)	MODE	VPR (Vpk)	MCOV (V)	In (kA)	SCCR (kA)
Open-Type SPD												
GDT-US-NG/40-1+0	1	0	AC	1	n/a	-40	80	N-G	1200	305	20	n/a
GDT-US-NG/40-1+0-FM	1	0	AC	1	n/a	-40	80	N-G	1200	305	20	n/a
GDT-US-NG/80-1+0	1	0	AC	1	n/a	-40	80	N-G	1200	264	20	n/a
GDT-US-NG/80-1+0-FM	1	0	AC	1	n/a	-40	80	N-G	1200	264	20	n/a
PLT-SEC-T3-120-FM-UT	2	120	AC	1	20	-40	80	L-N L-G N-G	700 900 900	150 150 150	5	10
PLT-SEC-T3-120-FM-UT (DC)	2	150	DC	-	20	-40	80	DC+-DC- DC+-G DC--G	700 900 900	150 150 150	5	5
VAL-SEC-T2-2+0-120DC-FM	1	300	DC	-	n/a	-40	80	DC+-DC-	1500	300	20	50
VAL-SEC-T2-2+0-120DC-FM	1	150	DC	-	n/a	-40	80	DC+-G DC--G	700 700	150 150	20	50
VAL-SEC-T2-2+0-48DC-FM	1	150	DC	-	n/a	-40	80	DC+-DC-	800	150	20	50
VAL-SEC-T2-2+0-48DC-FM	1	75	DC	-	n/a	-40	80	DC+-G DC--G	400 400	75 75	20	50
VAL-US-120/40/1+0	1	120	AC	1	n/a	-40	80	L-G	700	175	20	200
VAL-US-120/40/1+0-FM	1	120	AC	1	n/a	-40	80	L-G	700	175	20	200
VAL-US-120/40/1+1	1	120	AC	1	n/a	-40	80	L-N L-G N-G	700 1800 1200	175 175 305	20	200
VAL-US-120/40/1+1-FM	1	120	AC	1	n/a	-40	80	L-N L-G N-G	700 1800 1200	175 175 305	20	200
VAL-US-120/40/1+1V	1	120	AC	1	n/a	-40	80	L-N L-G N-G	700 1200 700	175 350 175	20	200
VAL-US-120/40/1+1V-FM	1	120	AC	1	n/a	-40	80	L-N L-G N-G	700 1200 700	175 350 175	20	200
VAL-US-120/40/2+0	1	240/120	AC	1S	n/a	-40	80	L-L L-G	1200 700	350 175	20	200
VAL-US-120/40/2+0-FM	1	240/120	AC	1S	n/a	-40	80	L-L L-G	1200 700	350 175	20	200
VAL-US-120/40/2+1	1	240/120	AC	1S	n/a	-40	80	L-L L-N L-G N-G	1200 700 1800 1200	350 175 175 305	20	200
VAL-US-120/40/2+1-FM	1	240/120	AC	1S	n/a	-40	80	L-L L-N L-G N-G	1200 700 1800 1200	350 175 175 305	20	200
VAL-US-120/40/2+1V	1	240/120	AC	1S	n/a	-40	80	L-L L-N L-G N-G	1200 700 1200 700	350 175 350 175	20	200
VAL-US-120/40/2+1V	1	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	1200 700 1200 700	350 175 350 175	20	200

VAL-US-120/40/2+1V-FM	1	240/120	AC	1S	n/a	-40	80	L-L L-N L-G N-G	1200 700 1200 700	350 175 350 175	20	200
VAL-US-120/40/2+1V-FM	1	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	1200 700 1200 700	350 175 350 175	20	200
VAL-US-120/40/3+0	1	240/120	AC	1S	n/a	-40	80	L-L L-N L-G N-G	1200 1200 700 700	350 350 175 175	20	200
VAL-US-120/40/3+0	1	208/120	AC	3Y	n/a	-40	80	L-L L-G	1200 700	350 175	20	200
VAL-US-120/40/3+0-FM	1	240/120	AC	1S	n/a	-40	80	L-L L-N L-G N-G	1200 1200 700 700	350 350 175 175	20	200
VAL-US-120/40/3+0-FM	1	208/120	AC	3Y	n/a	-40	80	L-L L-G	1200 700	350 175	20	200
VAL-US-120/40/3+1	1	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	1200 700 1800 1200	350 175 175 305	20	200
VAL-US-120/40/3+1-FM	1	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	1200 700 1800 1200	350 175 175 305	20	200
VAL-US-120/40/3+1V	1	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	1200 700 1200 700	350 175 350 175	20	200
VAL-US-120/40/3+1V-FM	1	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	1200 700 1200 700	350 175 350 175	20	200
VAL-US-120/65/1+0	1	120	AC	1	n/a	-40	80	L-G	700	175	20	200
VAL-US-120/65/1+0-FM	1	120	AC	1	n/a	-40	80	L-G	700	175	20	200
VAL-US-120/65/1+1	1	120	AC	1	n/a	-40	80	L-N L-G N-G	700 1500 1200	175 175 264	20	200
VAL-US-120/65/1+1-FM	1	120	AC	1	n/a	-40	80	L-N L-G N-G	700 1500 1200	175 175 264	20	200
VAL-US-120/65/1+1V	1	120	AC	1	n/a	-40	80	L-N L-G N-G	700 1200 700	175 350 175	20	200
VAL-US-120/65/1+1V-FM	1	120	AC	1	n/a	-40	80	L-N L-G N-G	700 1200 700	175 350 175	20	200
VAL-US-120/65/2+0	1	240/120	AC	1S	n/a	-40	80	L-L L-G	1200 700	350 175	20	200
VAL-US-120/65/2+0-FM	1	240/120	AC	1S	n/a	-40	80	L-L L-G	1200 700	350 175	20	200
VAL-US-120/65/2+1	1	240/120	AC	1S	n/a	-40	80	L-L L-N L-G N-G	1200 700 1500 1200	350 175 175 264	20	200
VAL-US-120/65/2+1-FM	1	240/120	AC	1S	n/a	-40	80	L-L L-N L-G N-G	1200 700 1500 1200	350 175 175 264	20	200
VAL-US-120/65/2+1V	1	240/120	AC	1S	n/a	-40	80	L-L L-N L-G N-G	1200 700 1200 700	350 175 350 175	20	200

VAL-US-120/65/2+1V	1	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	1200 700 1200 700	350 175 350 175	20	200
VAL-US-120/65/2+1V-FM	1	240/120	AC	1S	n/a	-40	80	L-L L-N L-G N-G	1200 700 1200 700	350 175 350 305	20	200
VAL-US-120/65/2+1V-FM	1	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	1200 700 1200 700	350 175 350 305	20	200
VAL-US-120/65/3+0	1	240/120	AC	1S	n/a	-40	80	L-L L-N L-G N-G	1200 1200 700 700	350 350 175 175	20	200
VAL-US-120/65/3+0	1	208/120	AC	3Y	n/a	-40	80	L-L L-G	1200 700	350 175	20	200
VAL-US-120/65/3+0-FM	1	240/120	AC	1S	n/a	-40	80	L-L L-N L-G N-G	1200 1200 700 700	350 350 175 175	20	200
VAL-US-120/65/3+0-FM	1	208/120	AC	3Y	n/a	-40	80	L-L L-G	1200 700	350 175	20	200
VAL-US-120/65/3+1	1	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	1200 700 1500 1200	350 175 175 264	20	200
VAL-US-120/65/3+1-FM	1	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	1200 700 1500 1200	350 175 175 264	20	200
VAL-US-120/65/3+1V	1	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	1200 700 1200 700	350 175 350 175	20	200
VAL-US-120/65/3+1V-FM	1	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	1200 700 1200 700	350 175 350 175	20	200
VAL-US-1U-48/65/1+1V-FM	1	60	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	400 400 600	100 100 100	20	5
VAL-US-1U-48/65/2+0-FM	1	60	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	600 400 400	100 100 100	20	5
VAL-US-240/40/1+0	1	240	AC	1	n/a	-40	80	L-G	1500	385	20	200
VAL-US-240/40/1+0-FM	1	240	AC	1	n/a	-40	80	L-G	1500	385	20	200
VAL-US-240/40/1+1	1	240	AC	1	n/a	-40	80	L-N L-G N-G	1500 2000 1200	385 385 305	20	200
VAL-US-240/40/1+1-FM	1	240	AC	1	n/a	-40	80	L-N L-G N-G	1500 2000 1200	385 385 305	20	200
VAL-US-240/40/1+1V	1	240	AC	1	n/a	-40	80	L-N L-G N-G	1500 3000 1500	385 750 385	20	200
VAL-US-240/40/1+1V-FM	1	240	AC	1	n/a	-40	80	L-N L-G N-G	1500 3000 1500	385 750 385	20	200
VAL-US-240/40/2+0	1	480/240	AC	1S	n/a	-40	80	L-L L-G	2500 1500	750 385	20	200
VAL-US-240/40/2+0-FM	1	480/240	AC	1S	n/a	-40	80	L-L L-G	2500 1500	750 385	20	200

VAL-US-240/40/2+1	1	480/240	AC	1S	n/a	-40	80	L-L L-N L-G N-G	2500 1500 2000 1200	750 385 385 305	20	200
VAL-US-240/40/2+1-FM	1	480/240	AC	1S	n/a	-40	80	L-L L-N L-G N-G	2500 1500 2000 1200	750 385 385 305	20	200
VAL-US-240/40/2+1V	1	480/240	AC	1S	n/a	-40	80	L-L L-N L-G N-G	2500 1500 3000 1500	750 385 750 385	20	200
VAL-US-240/40/2+1V-FM	1	480/240	AC	1S	n/a	-40	80	L-L L-N L-G N-G	2500 1500 3000 1500	750 385 750 385	20	200
VAL-US-240/40/3+0	1	480/240	AC	1S	n/a	-40	80	L-L L-N L-G N-G	2500 3000 1500 1500	750 750 385 385	20	200
VAL-US-240/40/3+0	1	415/240	AC	3Y	n/a	-40	80	L-L L-G	2500 1500	750 385	20	200
VAL-US-240/40/3+0-FM	1	480/240	AC	1S	n/a	-40	80	L-L L-N L-G N-G	2500 3000 1500 1500	750 750 385 385	20	200
VAL-US-240/40/3+0-FM	1	415/240	AC	3Y	n/a	-40	80	L-L L-G	2500 1500	750 385	20	200
VAL-US-240/40/3+1	1	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 1500 2000 1200	750 385 385 305	20	200
VAL-US-240/40/3+1-FM	1	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 1500 2000 1200	750 385 385 305	20	200
VAL-US-240/40/3+1V	1	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 1500 3000 1500	750 385 750 385	20	200
VAL-US-240/40/3+1V-FM	1	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 1500 3000 1500	750 385 750 385	20	200
VAL-US-240D/40/1+0	1	240	AC	1	n/a	-40	80	L-G	1000	275	20	200
VAL-US-240D/40/1+0-FM	1	240	AC	1	n/a	-40	80	L-G	1000	275	20	200
VAL-US-240D/40/2+0	1	240	AC	3D	n/a	-40	80	L-L L-G	1800 1000	550 275	20	200
VAL-US-240D/40/2+0-FM	1	240	AC	3D	n/a	-40	80	L-L L-G	1800 1000	550 275	20	200
VAL-US-240D/40/3+0	1	240	AC	3D	n/a	-40	80	L-L L-G	1800 1000	550 275	20	200
VAL-US-240D/40/3+0-FM	1	240	AC	3D	n/a	-40	80	L-L L-G	1800 1000	550 275	20	200
VAL-US-240HLD/40/3+1	1	240	AC	3H	n/a	-40	80	L-L L-N L-G N-G H-L H-N H-G	1200 700 1200 1200 1500 1000 1200	350 175 175 305 450 275 275	20	200
VAL-US-240HLD/40/3+1-FM	1	240	AC	3H	n/a	-40	80	L-L L-N L-G N-G H-L H-N H-G	1200 700 1200 1200 1500 1000 1200	350 175 175 305 450 275 275	20	200
VAL-US-277/40/1+0	1	277	AC	1	n/a	-40	80	L-G	1500	385	20	200

VAL-US-277/40/1+0-FM	1	277	AC	1	n/a	-40	80	L-G	1500	385	20	200
VAL-US-277/40/1+1	1	277	AC	1	n/a	-40	80	L-N L-G N-G	1500 2000 1200	385 385 305	20	200
VAL-US-277/40/1+1-FM	1	277	AC	1	n/a	-40	80	L-N L-G N-G	1500 2000 1200	385 385 305	20	200
VAL-US-277/40/1+1V	1	277	AC	1	n/a	-40	80	L-N L-G N-G	1500 2000 1500	385 750 385	20	200
VAL-US-277/40/1+1V-FM	1	277	AC	1	n/a	-40	80	L-N L-G N-G	1500 2000 1500	385 750 385	20	200
VAL-US-277/40/3+0	1	480/277	AC	3Y	n/a	-40	80	L-L L-G	2500 1500	750 385	20	200
VAL-US-277/40/3+0-FM	1	480/277	AC	3Y	n/a	-40	80	L-L L-G	2500 1500	750 385	20	200
VAL-US-277/40/3+1	1	480/277	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 1500 2000 1200	750 385 385 305	20	200
VAL-US-277/40/3+1-FM	1	480/277	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 1500 2000 1200	750 385 385 305	20	200
VAL-US-277/40/3+1V	1	480/277	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 1500 3000 1500	750 385 750 385	20	200
VAL-US-277/40/3+1V-FM	1	480/277	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 1500 3000 1500	750 385 750 385	20	200
VAL-US-277/40/4+0	1	480/277	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 3000 1500 1500	750 750 385 385	20	200
VAL-US-277/40/4+0-FM	1	480/277	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 1200 1500 1500	750 750 385 385	20	200
VAL-US-277/80/1+0	1	277	AC	1	n/a	-40	80	L-N	1500	385	20	200
VAL-US-277/80/1+0-FM	1	277	AC	1	n/a	-40	80	L-N	1500	385	20	200
VAL-US-277/80/1+1V	1	277	AC	1	n/a	-40	80	L-N L-G N-G	1500 2500 1200	385 750 385	20	200
VAL-US-277/80/1+1V-FM	1	277	AC	1	n/a	-40	80	L-N L-G N-G	1500 2500 1200	385 750 385	20	200
VAL-US-277/80/3+0	1	480/277	AC	3Y	n/a	-40	80	L-L L-G	2500 1500	750 385	20	200
VAL-US-277/80/3+0-FM	1	480/277	AC	3Y	n/a	-40	80	L-L L-G	2500 1500	750 385	20	200
VAL-US-277/80/3+1V	1	480/277	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 1500 2500 1200	750 385 750 385	20	200
VAL-US-277/80/3+1V-FM	1	480/277	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 1500 2500 1200	750 385 750 385	20	200
VAL-US-277/80/4+0	1	480/277	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 2500 1500 1200	750 750 385 385	20	200
VAL-US-277/80/4+0-FM	1	480/277	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	2500 2500 1500 1200	750 750 385 385	20	200

VAL-US-2U-48/65/1+0	1	60	DC	-	n/a	-40	80	DC+-DC-	400	100	20	5
VAL-US-2U-48/65/1+0-FM	1	60	DC	-	n/a	-40	80	DC+-DC-	400	100	20	5
VAL-US-347/30/1+0	1	347	AC	1	n/a	-40	80	L-G	2000	580	20	200
VAL-US-347/30/1+0	1	400	AC	1	n/a	-40	80	L-G	2000	580	20	200
VAL-US-347/30/1+0-FM	1	347	AC	1	n/a	-40	80	L-G	2000	580	20	200
VAL-US-347/30/1+0-FM	1	400	AC	1	n/a	-40	80	L-G	2000	580	20	200
VAL-US-347/30/1+1V	1	347	AC	1	n/a	-40	80	L-N L-G N-G	2000 4000 2000	580 750 580	20	200
VAL-US-347/30/1+1V	1	400	AC	1	n/a	-40	80	L-N L-G N-G	2000 4000 2000	580 750 580	20	200
VAL-US-347/30/1+1V-FM	1	347	AC	1	n/a	-40	80	L-N L-G N-G	2000 4000 2000	580 750 580	20	200
VAL-US-347/30/1+1V-FM	1	400	AC	1	n/a	-40	80	L-N L-G N-G	2000 4000 2000	580 750 580	20	200
VAL-US-347/30/3+0	1	600/347	AC	3Y	n/a	-40	80	L-L L-G	4000 2000	750 580	20	200
VAL-US-347/30/3+0	1	690/400	AC	3Y	n/a	-40	80	L-L L-G	4000 2000	750 580	20	200
VAL-US-347/30/3+0-FM	1	600/347	AC	3Y	n/a	-40	80	L-L L-G	4000 2000	750 580	20	200
VAL-US-347/30/3+0-FM	1	690/400	AC	3Y	n/a	-40	80	L-L L-G	4000 2000	750 580	20	200
VAL-US-347/30/3+1V	1	600/347	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	4000 2000 4000 2000	750 580 750 580	20	200
VAL-US-347/30/3+1V	1	690/400	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	4000 2000 4000 2000	750 580 750 580	20	200
VAL-US-347/30/3+1V-FM	1	600/347	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	4000 2000 4000 2000	750 580 750 580	20	200
VAL-US-347/30/3+1V-FM	1	690/400	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	4000 2000 4000 2000	750 580 750 580	20	200
VAL-US-48/65/1+0	1	60	DC	-	n/a	-40	80	DC+-DC-	400	100	20	5
VAL-US-48/65/1+0-FM	1	60	DC	-	n/a	-40	80	DC+-DC-	400	100	20	5
VAL-US-48/65/1+1V	1	60	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	400 400 600	100 100 100	20	5
VAL-US-48/65/1+1V-FM	1	60	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	400 400 600	100 100 100	20	5
VAL-US-48/65/DELTA	1	60	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	400 400 400	100 100 100	20	5
VAL-US-48/65/DELTA-FM	1	60	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	400 400 400	100 100 100	20	5
VAL-US-480D/30/1+0	1	480	AC	3D	n/a	-40	80	L-G	2000	580	20	200
VAL-US-480D/30/1+0-FM	1	480	AC	3D	n/a	-40	80	L-G	2000	580	20	200

VAL-US-480D/30/2+0	1	480	AC	3D	n/a	-40	80	L-L L-G	4000 2000	750 580	20	200
VAL-US-480D/30/2+0-FM	1	480	AC	3D	n/a	-40	80	L-L L-G	4000 2000	750 580	20	200
VAL-US-480D/30/3+0	1	480	AC	3D	n/a	-40	80	L-L L-G	4000 2000	750 580	20	200
VAL-US-480D/30/3+0-FM	1	480	AC	3D	n/a	-40	80	L-L L-G	4000 2000	750 580	20	200
VAL-US-480HLD/30/3+1V	1	480/240	AC	3H	n/a	-40	80	L-L L-N L-G N-G H-L H-N H-G	2500 1500 3000 1500 3000 2000 4000	750 385 750 385 750 580 750	20	200
VAL-US-480HLD/30/3+1V-FM	1	480/240	AC	3H	n/a	-40	80	L-L L-N L-G N-G H-L H-N H-G	2500 1500 3000 1500 3000 2000 4000	750 385 750 385 750 580 750	20	200
VAL-US-600D/30/1+0	1	600	AC	3D	n/a	-40	80	L-N	2500	750	20	200
VAL-US-600D/30/1+0-FM	1	600	AC	3D	n/a	-40	80	L-N	2500	750	20	200
VAL-US-600D/30/2+0	1	600	AC	3D	n/a	-40	80	L-L L-G	4000 2500	750 750	20	200
VAL-US-600D/30/2+0-FM	1	600	AC	3D	n/a	-40	80	L-L L-G	4000 2500	750 750	20	200
VAL-US-600D/30/3+0	1	600	AC	3D	n/a	-40	80	L-L L-G	4000 2500	750 750	20	200
VAL-US-600D/30/3+0-FM	1	600	AC	3D	n/a	-40	80	L-L L-G	4000 2500	750 750	20	200
Permanently Connected												
BXT-4XP-SEC-T3-120	2	120	AC	1	20	-40	80	L-N L-G N-G	700 1000 900	150 150 150	5	10
BXT-4XP-SEC-T3-120 (dc)	2	125	DC	-	20	-40	80	DC+-DC- DC+-G DC--G	700 1000 900	150 150 150	5	10
BXT-4XS-SEC-T3-120	2	120	AC	1	20	-40	80	L-N L-G N-G	700 1000 900	150 150 150	5	10
BXT-4XS-SEC-T3-120 (dc)	2	125	DC	-	20	-40	80	DC+-DC- DC+-G DC--G	700 1000 900	150 150 150	5	10
VAL-MS 600DC-PV/2+V	1	800	DC PV	-	n/a	-40	85	DC+-DC- DC+-G DC--G	2000 2000 2000	800 800 800	20	50
VAL-MS 600DC-PV/2+V-FM	1	800	DC PV	-	n/a	-40	85	DC+-DC- DC+-G DC--G	2000 2000 2000	800 800 800	20	50
VAL-MS-T1/T2 600DC-PV/2+V	1	800	DC PV	-	n/a	-40	85	DC+-DC- DC+-G DC--G	2000 2000 2000	800 800 800	20	50
VAL-MS-T1/T2 600DC-PV/2+V-FM	1	800	DC PV	-	n/a	-40	85	DC+-DC- DC+-G DC--G	2000 2000 2000	800 800 800	20	50

These products are intended for installation on the line side (Type 1 SPD) or load side (Type 1, 2 or 3 SPDs) of the main service disconnect in circuits not exceeding 1000 V rms, and have been tested to verify that the transient-voltage surges are limited to the maximum amplitudes specified in the Voltage Protection Rating (VPR).

SPDs investigated for Type 1 applications are automatically suitable for Type 2 applications and may be marked for SPD Type 1 and/or Type 2 applications. SPDs only marked "SPD Type 2" are not suitable for Type 1 applications.

The effect of the surge-protective device on connected loads, the effect of the protector on harmonic distortion of the supply voltage, and the adequacy of the Voltage Protection Rating to protect connected equipment from damage from transient-voltage surges has not been determined.

SPDs investigated for Type 1 applications are automatically suitable for Type 2 applications and may be marked for SPD Type 1 and/or Type 2 applications. SPDs only marked "SPD Type 2" are not suitable for Type 1 applications.

Where a minimum ambient temperature is not specified, assume 0°C unless the product is marked otherwise or with an Outdoor use Environmental Rating. See Electrical Equipment for Use in Ordinary Locations (AALZ) for details regarding Environmental Ratings.

Der Umstand, dass der Name oder das Produkt eines Unternehmens in dieser Datenbank aufgeführt ist, garantiert nicht, dass die Herstellung der jeweiligen Produkte dem Follow-Up-Service von UL unterliegt. Nur Produkte mit UL-Zeichen gelten als zertifiziert und sind vom Follow-Up-Service von UL abgedeckt. Prüfen Sie daher stets, ob ein Produkt das UL-Zeichen trägt.

UL gestattet die Weiterverwendung der im Online-Zertifizierungsverzeichnis enthaltenen Materialien unter den folgenden Bedingungen: 1. Alle Anleitungen, Baugruppen, Konstruktionen, Designs, Systeme und/oder Zertifizierungen (Dateien) müssen vollständig und auf nicht irreführende Weise ohne Manipulation der Daten (oder Zeichnungen) dargestellt werden. 2. Bei Weiterverwendung von Materialien muss der Vermerk „Aus dem Online-Zertifizierungsverzeichnis mit Genehmigung von UL nachgedruckt“ stets mit angegeben werden. Darüber hinaus muss das nachgedruckte Material einen Urheberrechtsvermerk in folgendem Format enthalten: "© 2022 UL LLC"

VZCA2.E330181 - Surge-protective Devices - Component

Surge-protective Devices - Component

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstrasse 8
Blomberg, 32825 Germany

E330181

Cat. No.	SPD Type	Volts (V)	AC/DC/ DC PV	PH	AMPS (A)	AMB Min (°C)	AMB Max (°C)	MODE	VPR (Vpk)	MLV (Vpk)	MCOV (V)	Vn (Vdc)	In (kA)	SCCR (kA)	Notes
F-MS 12 HD ST	4CA	0	AC	1	n/a	-40	80	N-G	-	1490	260	n/a	20	n/a	2
F-MS 12 ST	4CA	0	AC	1	n/a	-40	80	N-G	-	1490	260	n/a	20	n/a	2
F-MS 12 UD ST	4CA	0	AC	1	n/a	-40	80	N-G	-	1490	260	n/a	20	n/a	2
F-MS 12, F-MS 12/FM, F-MS 12/FM-UD, F-MS 12-O, F-MS 12-O/FM															
	4CA	0	AC	1	n/a	-40	80	N-G	-	1490	260	n/a	20	n/a	2
F-MS 80 ST	4CA	0	AC	1	n/a	-40	80	N-G	-	2600	264	n/a	20	n/a	2
F-MS-T1/T2 50 ST	4CA	0	AC	1	n/a	-40	80	N-G	-	2600	264	n/a	20	n/a	2
FLT-BK 350/1+0(f)	2CA	240	AC	1	50	-40	70	L-G	1500	-	350	-	20	50	2,4
FLT-BK 350/1+1(f)	2CA	240	AC	1	50	-40	70	L-N	1500	-	350	-	20	50	2,4
								L-G	1500	-	350	-			
								N-G	1200	-	350	-			
FLT-BK 350/1+1(f) BE(v)	ACC	690	AC	1	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-BK 350/3+1(f)	2CA	415/240	AC	3Y	50	-40	70	L-L	2000	-	700	-	20	50	2,4
								L-N	1500	-	350	-			
								L-G	1500	-	350	-			
								N-G	1200	-	350	-			
FLT-BK 350/3+1(f) BE(v)	ACC	690/400	AC	3Y	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-CP-350-ST, FLT-SEC-T1-350/25-P															
	1CA	240	AC	1	n/a	-40	85	L-N	1200	-	264	-	20	50	2,4
	1CA	240	AC	1	n/a	-40	85	L-G	1200	-	264	-	20	50	2, 4
FLT-CP-N/PE-350-ST, FLT-SEC-P-T1-N/PE-350/100-P, FLT-BK 350 N/PE-P															
	1CA	0	AC	1	n/a	-40	85	N-G	1200	-	350	-	20	n/a	2
FLT-CP-PLUS-1C-350 BE (v)	ACC	690	AC	1	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-CP-PLUS-350-ST, FLT-SEC-P-T1-350/25-P, FLT-BK 350-P															
	1CA	240	AC	1	n/a	-40	85	L-N	1500	-	350	-	20	50	2,4
	1CA	240	AC	1	n/a	-40	85	L-G	1500	-	350	-	20	50	2, 4
FLT-SEC-1C-350 BE (v)	ACC	690	AC	1	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-1S-350 BE (v)	ACC	690	AC	1	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-2C-350 BE (v)	ACC	690	AC	3D	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-2S-350 BE (v)	ACC	690/400	AC	3Y	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-3C-350 BE (v)	ACC	690/400	AC	3Y	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-3S-350 BE (v)(o)	ACC	690/400	AC	3Y	50	-40	70	-	-	-	-	-	n/a	n/a	2
FLT-SEC-P-1C-264 BE (v)	ACC	690	AC	1	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-1C-350 BE (v)	ACC	690	AC	1	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-1C-440 BE (v)	ACC	690	AC	1	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-1C-480 BE (v)	ACC	690	AC	1	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-1S-264 BE (v)	ACC	690	AC	1	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-1S-350 BE (v)(o)	ACC	690	AC	1	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-2C-350 BE (v)	ACC	690	AC	3D	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-2S-350 BE (v)	ACC	690/400	AC	3Y	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-3C-264 BE (v)	ACC	690	AC	3D	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-3C-350 BE (v)	ACC	690	AC	3D	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-3C-440 BE (v)	ACC	690	AC	3D	50	-40	70	-	-	-	-	-	n/a	n/a	2,4

FLT-SEC-P-3S-264 BE (v)	ACC	690/400	AC	3Y	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-3S-350 BE (v)(o)	ACC	690/400	AC	3Y	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-3S-440 BE (v)	ACC	690/400	AC	3Y	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-T1-1C-264/50-FM	2CA	240	AC	1	50	-40	70	L-G	1500	-	264	-	20	50	2,4
FLT-SEC-P-T1-1C-350/25-FM	2CA	240	AC	1	50	-40	70	L-G	1500	-	350	-	20	50	2,4
FLT-SEC-P-T1-1C-440/35-FM	2CA	400	AC	1	50	-40	70	L-G	1800	-	440	-	20	25	2,4
FLT-SEC-P-T1-1S-264/50-FM	2CA	240	AC	1	50	-40	70	L-N L-G N-G	1500 1800 1200	- - -	264 264 350	- - -	20	50	2,4
FLT-SEC-P-T1-1S-350/25-FM	2CA	240	AC	1	50	-40	70	L-N L-G N-G	1500 1500 1200	- - -	350 350 350	- - -	20	50	2,4
FLT-SEC-P-T1-264/50-P	1CA	240	AC	1	n/a	-40	85	L-N	1500	-	264	-	20	50	2,4
	1CA	240	AC	1	n/a	-40	85	L-G	1500	-	264	-	20	50	2, 4
FLT-SEC-P-T1-2C-350/25-FM	2CA	240	AC	3D	50	-40	70	L-L L-G	2000 1500	- -	700 350	- -	20	50	2,4
	2CA	240/120	AC	1S	50	-40	70	L-L L-G	2000 1500	- -	700 350	- -	20	50	2,4
	2CA	415/240	AC	3Y	50	-40	70	L-L L-G	2000 1500	- -	700 350	- -	20	50	2,4
FLT-SEC-P-T1-2S-350/25-FM	2CA	240/120	AC	1S	50	-40	70	L-L L-N L-G N-G	2000 1500 1500 1200	- - - -	700 350 350 350	- - - -	20	50	2,4
	2CA	415/240	AC	3Y	50	-40	70	L-L L-N L-G N-G	2000 1500 1500 1200	- - - -	700 350 350 350	- - - -	20	50	2,4
FLT-SEC-P-T1-3C-264/50-FM	2CA	240	AC	3D	50	-40	70	L-L L-G	2500 1500	- -	528 264	- -	20	50	2,4
	2CA	415/240	AC	3Y	50	-40	70	L-L L-G	1800 1200	- -	528 264	- -	20	50	2,4
FLT-SEC-P-T1-3C-350/25-FM	2CA	240	AC	3D	50	-40	70	L-L L-G	2000 1500	- -	700 350	- -	20	50	2,4
	2CA	415/240	AC	3Y	50	-40	70	L-L L-G	1500 1200	- -	700 350	- -	20	50	2,4
FLT-SEC-P-T1-3C-440/35-FM	2CA	400	AC	3D	50	-40	70	L-L L-G	3000 1800	- -	880 440	- -	20	25	2,4
	2CA	690/400	AC	3Y	50	-40	70	L-L L-G	3000 1800	- -	880 440	- -	20	25	2,4
FLT-SEC-P-T1-3S-264/50-FM	2CA	415/240	AC	3Y	50	-40	70	L-L L-N L-G N-G	2500 1500 1800 1200	- - - -	528 264 264 350	- - - -	20	50	2,4
FLT-SEC-P-T1-3S-350/25-FM	2CA	415/240	AC	3Y	50	-40	70	L-L L-N L-G N-G	2000 1500 1500 1200	- - - -	700 350 350 350	- - - -	20	50	2,4
FLT-SEC-P-T1-3S-440/35-FM	2CA	690/400	AC	3Y	50	-40	70	L-L L-N L-G N-G	3000 1800 1800 1500	- - - -	880 440 440 440	- - - -	20	25	2,4
FLT-SEC-P-T1-440/35-P	1CA	400	AC	1	n/a	-40	85	L-N	1800	-	440	-	20	25	2, 4
	1CA	400	AC	1	n/a	-40	85	L-G	1800	-	440	-	20	25	2, 4
FLT-SEC-P-T1-N/PE-350 BE (v)	ACC	690	AC	1	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-T1-N/PE-350/100-FM	2CA	240	AC	1	n/a	-40	70	N-G	1200	-	350	-	20	n/a	2
FLT-SEC-P-T1-N/PE-440 BE (v)	ACC	690	AC	1	50	-40	70	-	-	-	-	-	n/a	n/a	2,4
FLT-SEC-P-T1-N/PE-440/100-FM	2CA	400	AC	1	n/a	-40	70	N-G	1500	-	440	-	20	n/a	2
FLT-SEC-P-T1-N/PE-440/100-P	1CA	0	AC	1	n/a	-40	85	N-G	1500	-	440	-	20	n/a	2
FLT-SEC-T1+T2-1C-350/25-FM	2CA	240	AC	1	50	-40	70	L-G	1200	-	264	-	20	50	2,4

FLT-SEC-T1+T2-1S-350/25-FM	2CA	240	AC	1	50	-40	70	L-N L-G N-G	1200 1500 1200	- - -	264 264 350	- - -	20	50	2,4
FLT-SEC-T1+T2-2C-350/25-FM	2CA	240	AC	3D	50	-40	70	L-L L-G	2000 1200	- -	528 264	- -	20	50	2,4
	2CA	240/120	AC	1S	50	-40	70	L-L L-G	2000 1200	- -	528 264	- -	20	50	2,4
	2CA	415/240	AC	3Y	50	-40	70	L-L L-G	2000 1200	- -	528 264	- -	20	50	2,4
FLT-SEC-T1+T2-2S-350/25-FM	2CA	240/120	AC	1S	50	-40	70	L-L L-N L-G N-G	2000 1200 1500 1200	- - - -	528 264 264 350	- - - -	20	50	2,4
	2CA	415/240	AC	3Y	50	-40	70	L-L L-N L-G N-G	2000 1200 1500 1200	- - - -	528 264 264 350	- - - -	20	50	2,4
FLT-SEC-T1+T2-3C-350/25-FM	2CA	240	AC	3D	50	-40	70	L-L L-G	2000 1200	- -	528 264	- -	20	50	2,4
	2CA	415/240	AC	3Y	50	-40	70	L-L L-G	2000 1200	- -	528 264	- -	20	50	2,4
FLT-SEC-T1+T2-3S-350/25-FM	2CA	415/240	AC	3Y	50	-40	70	L-L L-N L-G N-G	2000 1200 1500 1200	- - - -	528 264 264 350	- - - -	20	50	2,4
GDT-US-NG/40-P	1CA	277	AC	1	n/a	-40	80	N-G	1200	-	305	-	20	n/a	2
GDT-US-NG/80-P	1CA	240	AC	1	n/a	-40	80	N-G	1200	-	264	-	20	n/a	2
PLT-SEC-T3-120-FM	4CA	120	AC	1	20	-40	80	L-N L-G N-G	- - -	810 860 860	150 150 150	n/a n/a n/a	3	n/a	2,4
	4CA	120	AC	1	25	-40	80	L-N L-G N-G	- - -	810 860 860	150 150 150	n/a n/a n/a	3	n/a	2,4
	4CA	120	DC	-	20	-40	80	DC+-DC- DC+-G DC--G	- - -	810 860 860	150 150 150	n/a n/a n/a	3	n/a	2,4
	4CA	120	DC	-	25	-40	80	DC+-DC- DC+-G DC--G	- - -	810 860 860	150 150 150	n/a n/a n/a	3	n/a	2,4
PLT-SEC-T3-120-P	4CA	120	AC	1	n/a	-40	80	L-N L-G N-G	- - -	810 860 860	150 150 150	n/a n/a n/a	3	n/a	2,4
	4CA	120	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	- - -	810 860 860	150 150 150	n/a n/a n/a	3	n/a	2,4
PLT-SEC-T3-120-P-UT/PT	2CA	120	AC	1	20	-40	80	L-N L-G N-G	700 900 900	- - -	150 150 150	- - -	5	10	2
PLT-SEC-T3-120-P-UT/PT (dc)	2CA	150	DC	-	20	-40	80	DC+-DC- DC+-G DC--G	700 900 900	- - -	150 150 150	- - -	5	5	2
PLT-SEC-T3-230-FM	4CA	230	AC	1	20	-40	80	L-N L-G N-G	- - -	1290 1310 1310	255 255 255	n/a n/a n/a	3	n/a	2,4
	4CA	230	AC	1	25	-40	80	L-N L-G N-G	- - -	1290 1310 1310	255 255 255	n/a n/a n/a	3	n/a	2,4
	4CA	230	DC	-	20	-40	80	DC+-DC- DC+-G DC--G	- - -	1290 1310 1310	255 255 255	n/a n/a n/a	3	n/a	2,4
	4CA	230	DC	-	25	-40	80	DC+-DC- DC+-G DC--G	- - -	1290 1310 1310	255 255 255	n/a n/a n/a	3	n/a	2,4
PLT-SEC-T3-230-FM-UT	4CA	240	AC	1	20	-40	80	L-N L-G N-G	- - -	1150 1180 1180	264 264 264	- - -	5	n/a	2,4

	4CA	240	DC	-	20	-40	80	DC+-DC- DC+-G DC--G	- - -	1150 1180 1180	240 240 240	n/a n/a n/a	5	n/a	2,4
PLT-SEC-T3-230-P	4CA	230	AC	1	20	-40	80	L-N L-G N-G	- - -	1290 1310 1310	255 255 255	n/a n/a n/a	3	n/a	2,4
	4CA	230	DC	-	20	-40	80	DC+-DC- DC+-G DC--G	- - -	1290 1310 1310	255 255 255	n/a n/a n/a	3	n/a	2,4
PLT-SEC-T3-230-P-UT/PT	4CA	240	AC	1	-	-40	80	L-N L-G N-G	- - -	1150 1180 1180	264 264 264	- - -	5	n/a	2
	4CA	240	DC	-	-	-40	80	DC+-DC- DC+-G DC--G	- - -	1150 1180 1180	240 240 240	- - -	5	n/a	2
PLT-SEC-T3-24-FM	4CA	24	AC	1	20	-40	80	L-N L-G N-G	- - -	290 560 560	34 34 34	n/a n/a n/a	1	n/a	2,4
	4CA	24	AC	1	25	-40	80	L-N L-G N-G	- - -	290 560 560	34 34 34	n/a n/a n/a	1	n/a	2,4
	4CA	24	DC	-	20	-40	80	DC+-DC- DC+-G DC--G	- - -	290 560 560	34 34 34	n/a n/a n/a	1	n/a	2,4
	4CA	24	DC	-	25	-40	80	DC+-DC- DC+-G DC--G	- - -	290 560 560	34 34 34	n/a n/a n/a	1	n/a	2,4
PLT-SEC-T3-24-FM-UT	4CA	24	AC	1	20	-40	80	L-N L-G N-G	- - -	200 510 510	34 34 34	- - -	1	n/a	2,4
	4CA	34	DC	-	20	-40	80	DC+-DC- DC+-G DC--G	- - -	200 510 510	34 34 34	- - -	1	n/a	2,4
PLT-SEC-T3-24-P	4CA	24	AC	1	n/a	-40	80	L-N L-G N-G	- - -	290 560 560	34 34 34	n/a n/a n/a	1	n/a	2,4
	4CA	24	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	- - -	290 560 560	34 34 34	n/a n/a n/a	1	n/a	2,4
PLT-SEC-T3-24-P-UT/PT	4CA	24	AC	1	-	-40	80	L-N L-G N-G	- - -	200 510 510	34 34 34	- - -	1	n/a	2
	4CA	34	DC	-	-	-40	80	DC+-DC- DC+-G DC--G	- - -	200 510 510	34 34 34	- - -	1	n/a	2
PLT-SEC-T3-60-FM	4CA	60	AC	1	20	-40	80	L-N L-G N-G	- - -	540 830 830	100 100 100	n/a n/a n/a	3	n/a	2,4
	4CA	60	AC	1	25	-40	80	L-N L-G N-G	- - -	540 830 830	100 100 100	n/a n/a n/a	3	n/a	2,4
	4CA	60	DC	-	20	-40	80	DC+-DC- DC+-G DC--G	- - -	540 830 830	80 80 80	n/a n/a n/a	3	n/a	2,4
	4CA	60	DC	-	25	-40	80	DC+-DC- DC+-G DC--G	- - -	540 830 830	80 80 80	n/a n/a n/a	3	n/a	2,4
PLT-SEC-T3-60-FM-UT	4CA	60	AC	1	20	-40	80	L-N L-G N-G	- - -	490 680 680	100 100 100	- - -	3	n/a	2,4
	4CA	80	DC	-	20	-40	80	DC+-DC- DC+-G DC--G	- - -	490 680 680	80 80 80	- - -	3	n/a	2,4
PLT-SEC-T3-60-P	4CA	60	AC	1	n/a	-40	80	L-N L-G N-G	- - -	540 830 830	100 100 100	n/a n/a n/a	3	n/a	2,4
	4CA	60	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	- - -	540 830 830	80 80 80	n/a n/a n/a	3	n/a	2,4

PLT-SEC-T3-60-P-UT/PT	4CA	60	AC	1	-	-40	80	L-N L-G N-G	- - -	490 680 680	100 100 100	- - -	3	n/a	2
	4CA	80	DC	-	-	-40	80	DC+-DC- DC+-G DC--G	- - -	490 680 680	80 80 80	- - -	3	n/a	2
PLT-SEC-T3-BE	ACC	230	AC	1	20	-40	80	-	-	-	-	-	n/a	n/a	2,4
	ACC	230	AC	1	25	-40	80	-	-	-	-	-	n/a	n/a	2,4
	ACC	230	DC	-	20	-40	80	-	-	-	-	-	n/a	n/a	2,4
	ACC	230	DC	-	25	-40	80	-	-	-	-	-	n/a	n/a	2,4
PLT-SEC-T3-BE-FM-UT	ACC	240	AC	1	20	-40	80	-	-	-	-	-	n/a	n/a	2,4
PLT-SEC-T3-BE-FM-UT (dc)	ACC	240	DC	-	20	-40	80	-	-	-	-	-	n/a	n/a	2,4
PLT-T3-120-FM	4CA	120	AC	1	20	0	55	L-N L-G N-G	- - -	800 800 700	150 150 150	NA NA NA	3	NA	2, 4
PLT-T3-120-P	4CA	120	AC	1	20	0	55	L-N L-G N-G	- - -	800 800 700	150 150 150	NA NA NA	3	NA	2, 4
PLT-T3-230-FM	4CA	230	AC	1	20	0	55	L-N L-G N-G	- - -	1500 1200 1200	255 255 255	NA NA NA	3	NA	2, 4
PLT-T3-230-P	4CA	230	AC	1	20	0	55	L-N L-G N-G	- - -	1500 1200 1200	255 255 255	NA NA NA	3	NA	2, 4
PLT-T3-24-FM	4CA	24	AC	1	20	0	55	L-N L-G N-G	- - -	330 600 600	34 34 34	NA NA NA	1	NA	2, 4
	4CA	24	DC	-	20	0	55	DC+-DC- DC+-G DC--G	- - -	330 600 600	34 34 34	n/a n/a n/a	1	NA	2,4
PLT-T3-24-P	4CA	24	DC	-	20	0	55	DC+-DC- DC+-G DC--G	- - -	330 600 600	34 34 34	n/a n/a NA	1	NA	2,4
	4CA	24	AC	1	20	0	55	L-N L-G N-G	- - -	330 600 600	34 34 34	n/a n/a NA	1	NA	2,4
PLT-T3-60-FM	4CA	60	AC	1	20	0	55	L-N L-G N-G	- - -	500 900 900	100 100 100	NA NA NA	2	NA	2, 4
PLT-T3-60-P	4CA	60	AC	1	20	0	55	L-N L-G N-G	- - -	500 900 900	100 100 100	NA NA NA	2	NA	2, 4
PRT 220/40/1S#	4CA	220	AC	1	n/a	-40	95	L-N L-G N-G	- - -	2580 1870 1870	320 320 320	n/a n/a n/a	20	n/a	1
PRT-1S-350/20/R	4CA	230	AC	1	n/a	-40	85	L-N L-G N-G	- - -	2200 1210 1210	350 350 350	n/a n/a n/a	20	n/a	1
PRT-1S-350/5S	4CA	230	AC	1	n/a	-40	85	L-N L-G N-G	- - -	1370 2240 2240	350 350 350	n/a n/a n/a	5	n/a	1
PRT-PV-1000(@) (#)	4CA	585	DC	-	n/a	-40	85	Ld-Ld	-	1900	585	n/a	20	n/a	1
PRT-PV-750AC(@) (#)	4CA	690	AC	1	n/a	-40	85	Ld-Ld	-	2710	750	n/a	20	n/a	1
PRT-T2-1S-320/20#	4CA	220	AC	1	n/a	-40	95	L-N L-G N-G	- - -	2580 1870 1870	320 320 320	n/a n/a n/a	20	n/a	1
PRT-T2-1S-350-5	4CA	230	AC	1	n/a	-40	85	L-N L-G N-G	- - -	1420 1350 1350	350 350 350	n/a n/a n/a	5	n/a	1
PRT-T2-48/20	4CA	100	DC	-	n/a	-40	85	DC+-DC- DC+-G DC--G	- - -	610 820 990	100 100 100	n/a n/a n/a	20	n/a	1
PT-BE/FM	ACC	240	AC	1S	20	0	55	-	-	-	-	-	NA	NA	2, 4
	ACC	240	DC	-	20	0	55	-	-	-	-	-	n/a	NA	2,4

PWT 100-800AC-FM	4CA	690/400	AC	3Y	150	-40	80	L-L L-G	- -	8750 4370	800 800	n/a n/a	20	n/a	2,4
	4CA	690	AC	3D	150	-40	80	L-L L-G	- -	8750 4370	800 800	n/a n/a	20	n/a	2,4
PWT 35-800AC-FM	4CA	690	AC	1	150	-40	80	L-G	-	4370	800	n/a	20	n/a	2,4
	4CA	690	AC	1	150	-40	80	L-G	-	4370	800	n/a	20	n/a	2,4
SFP 1-10/120AC (c)	2CA	120	AC	1	10	0	40	L-N L-G N-G	500 500 500	- - -	150 150 150	- - -	3	5	2, 4
SFP 1-15/120AC (c)	2CA	120	AC	1	15	0	40	L-N L-G N-G	500 500 500	- - -	150 150 150	- - -	3	5	2, 4
SFP 1-20/120AC (c)	2CA	120	AC	1	20	0	40	L-N L-G	500 500	- -	150 150	- -	3	5	2, 4
SFP 1-5/120AC (c)	2CA	120	AC	1	5	0	40	L-N L-G N-G	500 500 500	- - -	150 150 150	- - -	3	5	2, 4
SFP2-1S-1-10A-120AC-UT(c), SFP2-1S-1-10A-120AC-PT(c)															
	2CA	120	AC	1	5	-40	70	L-N L-G N-G	500 500 500	- - -	150 150 150	- - -	5	10	2,4
	2CA	120	AC	1	10	-40	65	L-N L-G N-G	500 500 500	- - -	150 150 150	- - -	5	10	2,4
SFP2-1S-1-15A-120AC-UT(c), SFP2-1S-1-15A-120AC-PT(c)															
	2CA	120	AC	1	15	-40	60	L-N L-G N-G	500 500 500	- - -	150 150 150	- - -	5	10	2,4
SFP2-1S-1-20A-120AC-UT(c), SFP2-1S-1-20A-120AC-PT(c)															
	2CA	120	AC	1	15	-40	60	L-N L-G N-G	500 500 500	- - -	150 150 150	- - -	5	10	2,4
	2CA	120	AC	1	20	-40	55	L-N L-G N-G	500 500 500	- - -	150 150 150	- - -	5	10	2,4
SFP2-1S-1-5A-120AC-UT(c), SFP2-1S-1-5A-120AC-PT(c)															
	2CA	120	AC	1	5	-40	70	L-N L-G N-G	500 500 500	- - -	150 150 150	- - -	5	10	2,4
SYS-SET/ 1	2CA	415/240	AC	3Y	50	-40	70	L-L L-N L-G N-G	2000 1200 1500 1200	- - - -	528 264 264 350	- - - -	20	50	2,4
SYS-SET/ 2	2CA	415/240	AC	3Y	50	-40	70	L-L L-N L-G N-G	2000 1200 1500 1200	- - - -	528 264 264 350	- - - -	20	50	2,4
SYS-SET/ 3	2CA	415/240	AC	3Y	50	-40	70	L-L L-N L-G N-G	2000 1500 1500 1200	- - - -	700 350 350 350	- - - -	20	50	2,4
SYS-SET/ 4	2CA	415/240	AC	3Y	50	-40	70	L-L L-N L-G N-G	2000 1500 1500 1200	- - - -	700 350 350 350	- - - -	20	50	2,4
SYS-SET/ 5	2CA	240	AC	1	50	-40	70	L-N L-G N-G	1500 1500 1200	- - -	350 350 350	- - -	20	50	2,4
SYS-SET/ 6	2CA	240	AC	1	50	-40	70	L-N L-G N-G	1200 1500 1200	- - -	264 264 350	- - -	20	50	2,4
VAL-CP-175-ST(c), VAL-SEC-T2-175-P															
	4CA	125	AC	1	n/a	-40	80	L-N	-	1510	175	n/a	20	n/a	2
VAL-CP-1S-BE(c), VAL-CP-1S-175-BE(c), VAL-CP-2C-BE(c), VAL-CP-2C-BE-175(c), VAL-CP-2S-BE(c), VAL-CP-2S-175-BE(c), VAL-CP-3C-BE(c), VAL-CP-3C-BE-175(c), VAL-CP-1S-350 BE/O.FM(c), VAL-CP-2C-350 BE/O.FM(c), VAL-CP-2S-350 BE/O.FM(c), VAL-CP-3C-350 BE/O.FM(c), VAL-CP-3S-350 BE/O.FM(c), VAL-CP-3S-BE(c), VAL-CP-3S-175-BE(c).															

	ACC	600	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-CP-350-ST (c)	1CA	277	AC	1	n/a	-40	80	L-N	1200	-	350	-	20	50	2
VAL-CP-N/PE-175-ST, VAL-SEC-T2-N/PE-175-P															
	4CA	0	AC	1	n/a	-40	80	N-G	-	560	150	n/a	20	n/a	2
VAL-CP-N/PE-350-ST (c), VAL-SEC-T2-N/PE-350-P (c)															
	4CA	0	AC	1	n/a	-40	80	N-G	-	950	264	n/a	20	n/a	2
VAL-MS 1000DC-PV-ST	1CA	1170	DC PV	-	n/a	-40	85	DC+-DC-	3000	-	1170	-	10	50	2
	1CA	1170	DC PV	-	n/a	-40	85	DC+-G	3000	-	1170	-	10	50	2
	1CA	1170	DC PV	-	n/a	-40	85	DC--G	3000	-	1170	-	10	50	2
VAL-MS 1000DC-PV/2+V	1CA	1170	DC PV	-	n/a	-40	85	DC+-DC- DC+-G DC--G	3000 3000 3000	- - -	1170 1170 1170	- - -	10	50	2
VAL-MS 1000DC-PV/2+V-FM	1CA	1170	DC PV	-	n/a	-40	85	DC+-DC- DC+-G DC--G	3000 3000 3000	- - -	1170 1170 1170	- - -	10	50	2
VAL-MS 120 ST, VAL-MS 120-UD ST															
	4CA	120	AC	1	n/a	-40	80	L-N	-	1490	150	n/a	20	n/a	2
VAL-MS 120, VAL-MS 120/FM, VAL-MS 120-O, VAL-MS 120-O/FM															
	4CA	120	AC	1	n/a	-40	80	L-N	-	1540	150	n/a	20	n/a	2
VAL-MS 120/3+1-FM, VAL-MS 120/3+1-FM-UD															
	4CA	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	2160 1540 2280 1400	300 150 150 260	n/a n/a n/a n/a	20	n/a	2
VAL-MS 1500DC-PV-ST	1CA	1500	DC PV	-	n/a	-40	85	DC+-DC- DC+-G DC--G	4000 4000 4000	- - -	1500 1500 1500	- - -	10	50	2
VAL-MS 1500DC-PV/2+V	1CA	1500	DC PV	-	n/a	-40	85	DC+-DC- DC+-G DC--G	4000 4000 4000	- - -	1500 1500 1500	- - -	10	50	2
VAL-MS 1500DC-PV/2+V-FM	1CA	1500	DC PV	-	n/a	-40	85	DC+-DC- DC+-G DC--G	4000 4000 4000	- - -	1500 1500 1500	- - -	10	50	2
VAL-MS 1500DC-PV/2+V-TX	1CA	1500	DC PV	-	n/a	-40	85	DC+-DC- DC+-G DC--G	4000 4000 4000	- - -	1500 1500 1500	- - -	10	50	2
VAL-MS 1500DC-PV/2+V-TX/FM	1CA	1500	DC PV	-	n/a	-40	85	DC+-DC- DC+-G DC--G	4000 4000 4000	- - -	1500 1500 1500	- - -	10	50	2
VAL-MS 230 IT ST	4CA	230	AC	1	n/a	-40	80	L-N	-	2200	385	n/a	20	n/a	2
VAL-MS 230 IT, VAL-MS230 IT/FM, VAL-MS 230 IT-O, VAL-MS 230IT-O/FM															
	4CA	230	AC	1	n/a	-40	80	L-N	-	2200	385	n/a	20	n/a	2
VAL-MS 230 ST	4CA	230	AC	1	n/a	-40	80	L-N	-	1910	275	n/a	20	n/a	2
VAL-MS 230, VAL-MS 230/FM, VAL-MS 230-O, VAL-MS 230-O/FM															
	4CA	230	AC	1	n/a	-40	80	L-N	-	1900	275	n/a	20	n/a	2
VAL-MS 230-UD ST	4CA	230	AC	1	n/a	-40	80	L-N	-	1910	275	n/a	20	n/a	2
VAL-MS 230/1+1, VAL-MS 230/1+1/FM, VAL-MS 230/1+1/FM-UD															
	4CA	230	AC	1	n/a	-40	80	L-N L-G N-G	- - -	1910 2630 1370	275 275 260	n/a n/a n/a	20	n/a	2
VAL-MS 230/2+0, VAL-MS 230/2+0-FM															
	4CA	230	AC	1	n/a	-40	80	L-L L-N	- -	2720 1910	550 275	n/a n/a	20	n/a	2
VAL-MS 230/3+1, VAL-MS 230/3+1/FM															
	4CA	400/230	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	2720 1910 2630 1370	550 275 275 260	n/a n/a n/a n/a	20	n/a	2
VAL-MS 320 HD ST	4CA	320	AC	1	n/a	-40	80	L-N	-	2030	320	n/a	20	n/a	2

VAL-MS 320 ST	4CA	320	AC	1	n/a	-40	80	L-N	-	2030	320	n/a	20	n/a	2
VAL-MS 320 UD ST	4CA	320	AC	1	n/a	-40	80	L-N	-	2030	320	n/a	20	n/a	2
VAL-MS 320, VAL-MS 320/FM, VAL-MS 320-O, VAL-MS 320-O/FM															
	4CA	320	AC	1	n/a	-40	80	L-N	-	2030	320	n/a	20	n/a	2
VAL-MS 320/1+1, VAL-MS 320/1+1/FM, VAL-MS 320/1+1/FM-UD															
	4CA	240	AC	1	n/a	-40	80	L-L L-G L-N N-G	- - - -	2900 2720 2030 1370	640 260 320 260	n/a n/a n/a n/a	20	n/a	2
VAL-MS 320/3+0, VAL-MS 320/3+0-FM															
	4CA	240	AC	3D	n/a	-40	80	L-L L-G	- -	2900 2720	640 320	n/a n/a	20	n/a	2
VAL-MS 320/3+1, VAL-MS 320/3+1-FM, VAL-MS 320/3+1-FM-UD															
	4CA	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	2900 2030 2720 1370	640 320 320 260	n/a n/a n/a n/a	20	n/a	2
VAL-MS 320/4+0, VAL-MS 320/4+0-FM															
	4CA	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	2900 2030 2720 2030	670 670 335 335	n/a n/a n/a n/a	20	n/a	2
VAL-MS 350VF ST	4CA	350	AC	1	n/a	-40	80	L-N	-	1610	350	n/a	10	n/a	2
VAL-MS 350VF, VAL-MS 350VF/FM, VAL-MS 350VF-O, VAL-MS 350VF-O/FM															
	4CA	350	AC	1	n/a	-40	80	L-N	-	2420	350	n/a	10	n/a	2
VAL-MS 350VF/3+1/FM	4CA	380/220	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	2420 1610 2030 870	700 350 350 260	n/a n/a n/a n/a	10	n/a	2
VAL-MS 385/80 ST	4CA	240	AC	1	n/a	-40	80	L-N	-	2710	385	n/a	20	n/a	2
VAL-MS 385/80/1+1	4CA	240	AC	1	n/a	-40	80	L-N L-G N-G	- - -	2710 3730 2590	385 385 264	n/a n/a n/a	20	n/a	2
VAL-MS 385/80/1+1-FM	4CA	240	AC	1	n/a	-40	80	L-N L-G N-G	- - -	2710 3730 2590	385 385 264	n/a n/a n/a	20	n/a	2
VAL-MS 385/80/3+0	4CA	240	AC	3D	n/a	-40	80	L-L L-G	- -	3860 2710	385 385	n/a n/a	20	n/a	2
VAL-MS 385/80/3+0-FM	4CA	240	AC	3D	n/a	-40	80	L-L L-G	- -	3860 2710	385 385	n/a n/a	20	n/a	2
VAL-MS 385/80/3+1	4CA	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	3860 2710 3730 2590	770 385 385 264	n/a n/a n/a n/a	20	n/a	2
VAL-MS 385/80/3+1-FM	4CA	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	3860 2710 3730 2590	770 385 385 264	n/a n/a n/a n/a	20	n/a	2
VAL-MS 400 ST	4CA	400	AC	1	n/a	-40	80	L-N	-	2280	440	n/a	20	n/a	2
VAL-MS 400, VAL-MS 400/FM, VAL-MS 400-O, VAL-MS 400-O/FM															
	4CA	400	AC	1	n/a	-40	80	L-N	-	2280	440	n/a	20	n/a	2
VAL-MS 500 ST	4CA	500	AC	1	n/a	-40	80	L-N	-	2370	600	n/a	10	n/a	2
VAL-MS 500, VAL-MS 500/FM, VAL-MS 500-O, VAL-MS 500-O/FM															
	4CA	500	AC	1	n/a	-40	80	L-N	-	2370	600	n/a	10	n/a	2
VAL-MS 580/3+0, VAL-MS 580/3+0-FM															
	4CA	690/400	AC	3Y	n/a	-	80	L-L L-N	- -	4270 2310	750 580	n/a n/a	10	n/a	2
VAL-MS 60 ST, VAL-US 60 ST	4CA	60	AC	1	n/a	-40	80	L-N	-	630	75	n/a	10	n/a	2
	4CA	60	DC	-	n/a	-40	80	DC+-DC-	-	810	100	n/a	10	n/a	2
VAL-MS 60, VAL-MS 60/FM, VAL-MS 60-O, VAL-MS 60-O/FM															

	4CA	60	AC	1	n/a	-40	80	L-N	-	630	75	n/a	10	n/a	2
	4CA	60	DC	-	n/a	-40	80	DC+-DC-	-	810	100	n/a	10	n/a	2
VAL-MS 600DC-PV-ST	1CA	800	DC PV	-	n/a	-40	85	DC+-DC-	2000	-	800	-	20	50	2
	1CA	800	DC PV	-	n/a	-40	85	DC+-G	2000	-	800	-	20	50	2
	1CA	800	DC PV	-	n/a	-40	85	DC--G	2000	-	800	-	20	50	2
VAL-MS 690 ST	4CA	690	AC	3D	n/a	-40	85	L-G	-	3040	750	n/a	20	n/a	2
VAL-MS 690/3+0, VAL-MS 690/3+0-TX, VAL-MS 690/3+0-FM, VAL-MS 690/3+0-TX-FM															
	4CA	690	AC	3D	n/a	-40	80	L-L L-G	- -	5490 3040	750 750	n/a n/a	20	n/a	2
VAL-MS 750/30-ST, VAL-MS 750/30-UD-ST															
	4CA	690	AC	1	n/a	-40	80	L-N	-	2700	750	n/a	10	n/a	2
VAL-MS 750/30/3+0, VAL-MS 750/30/3+0/FM, VAL-MS 750/30/3+0/FM-UD															
	4CA	690	AC	3D	n/a	-40	80	L-L L-G	- -	4810 2560	750 750	n/a n/a	10	n/a	2
VAL-MS BE	ACC	690	AC	1	n/a	-40	80	n/a	-	-	-	n/a	n/a	n/a	2
VAL-MS BE/3+0-TX, VAL-MS BE/3+0-TX-FM															
	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS BE/FM	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS-75 VF ST	4CA	48	AC	1	n/a	-40	80	L-N	-	1760	75	n/a	10	n/a	2
	4CA	60	DC	-	n/a	-40	80	DC+-DC-	-	1760	100	n/a	10	n/a	2
VAL-MS-T1/T2 1000DC-PV-ST	1CA	1170	DC PV	-	n/a	-40	85	DC+-DC-	3000	-	1170	-	10	50	2
	1CA	1170	DC PV	-	n/a	-40	85	DC+-G	3000	-	1170	-	10	50	2
	1CA	1170	DC PV	-	n/a	-40	85	DC--G	3000	-	1170	-	10	50	2
VAL-MS-T1/T2 1000DC-PV/2+V	1CA	1170	DC PV	-	n/a	-40	85	DC+-DC- DC+-G DC--G	3000 3000 3000	- - -	1170 1170 1170	- - -	10	50	2
VAL-MS-T1/T2 1000DC-PV/2+V-FM	1CA	1170	DC PV	-	n/a	-40	85	DC+-DC- DC+-G DC--G	3000 3000 3000	- - -	1170 1170 1170	- - -	10	50	2
VAL-MS-T1/T2 175/12.5 ST	4CA	120	AC	1	n/a	-40	80	L-N	-	2200	175	n/a	20	n/a	2
VAL-MS-T1/T2 175/12.5/1+1	4CA	120	AC	1	n/a	-40	80	L-N L-G N-G	- - -	2200 3160 2600	175 175 264	n/a n/a n/a	20	n/a	2
VAL-MS-T1/T2 175/12.5/1+1-FM	4CA	120	AC	1	n/a	-40	80	L-N L-G N-G	- - -	2200 3160 2600	175 175 264	n/a n/a n/a	20	n/a	2
VAL-MS-T1/T2 175/12.5/3+0	4CA	208/120	AC	3Y	n/a	-40	80	L-L L-G	- -	2800 2200	350 175	n/a n/a	20	n/a	2
VAL-MS-T1/T2 175/12.5/3+0-FM	4CA	208/120	AC	3Y	n/a	-40	80	L-L L-G	- -	2800 2200	350 175	n/a n/a	20	n/a	2
VAL-MS-T1/T2 175/12.5/3+1	4CA	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	2800 2200 3160 2600	350 175 175 264	n/a n/a n/a n/a	20	n/a	2
VAL-MS-T1/T2 175/12.5/3+1-FM	4CA	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	2800 2200 3160 2600	350 175 175 264	n/a n/a n/a n/a	20	n/a	2
VAL-MS-T1/T2 335/12.5 ST	4CA	240	AC	1	n/a	-40	80	L-N	-	2630	335	n/a	20	n/a	2
VAL-MS-T1/T2 335/12.5/1+1	4CA	240	AC	1	n/a	-40	80	L-N L-G N-G	- - -	2630 3600 2600	335 335 264	n/a n/a n/a	20	n/a	2
VAL-MS-T1/T2 335/12.5/1+1-FM	4CA	240	AC	1	n/a	-40	80	L-N L-G N-G	- - -	2630 3600 2600	335 335 264	n/a n/a n/a	20	n/a	2
VAL-MS-T1/T2 335/12.5/3+0	4CA	240	AC	3D	n/a	-40	80	L-L L-G	- -	3570 2630	335 335	n/a n/a	20	n/a	2
VAL-MS-T1/T2 335/12.5/3+0-FM	4CA	240	AC	3D	n/a	-40	80	L-L L-G	- -	3570 2630	335 335	n/a n/a	20	n/a	2

VAL-MS-T1/T2 335/12.5/3+1	4CA	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	3570 2630 3600 2600	670 335 335 264	n/a n/a n/a n/a	20	n/a	2
VAL-MS-T1/T2 335/12.5/3+1-FM	4CA	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	3570 2630 3600 2600	670 335 335 264	n/a n/a n/a n/a	20	n/a	2
VAL-MS-T1/T2 335/12.5/4+0	4CA	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	3650 3650 2630 2630	670 670 335 335	n/a n/a n/a n/a	20	n/a	2
VAL-MS-T1/T2 335/12.5/4+0-FM	4CA	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	3650 3650 2630 2630	670 670 335 335	n/a n/a n/a n/a	20	n/a	2
VAL-MS-T1/T2 48/12.5 ST	1CA	60	DC	-	n/a	-40	80	DC+-DC-	400	-	100	-	20	5	2
VAL-MS-T1/T2 48/12.5/1+0	1CA	60	DC	-	n/a	-40	80	DC+-DC-	400	-	100	-	20	5	2
VAL-MS-T1/T2 48/12.5/1+0-FM	1CA	60	DC	-	n/a	-40	80	DC+-DC-	400	-	100	-	20	5	2
VAL-MS-T1/T2 48/12.5/1+1V	1CA	60	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	400 400 600	- - -	100 100 100	- - -	20	5	2
VAL-MS-T1/T2 48/12.5/1+1V-FM	1CA	60	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	400 400 600	- - -	100 100 100	- - -	20	5	2
VAL-MS-T1/T2 48/12.5/2+0/1U/FM	1CA	60	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	400 400 400	- - -	100 100 100	- - -	20	5	2
VAL-MS-T1/T2 48/12.5/O	1CA	60	DC	-	n/a	-40	80	DC+-DC-	400	-	100	-	20	5	2
VAL-MS-T1/T2 48/12.5/O-FM	1CA	60	DC	-	n/a	-40	80	DC+-DC-	400	-	100	-	20	5	2
VAL-MS-T1/T2 600DC-PV-ST	1CA	800	DC PV	-	n/a	-40	85	DC+-DC-	2000	-	800	-	20	50	2
	1CA	800	DC PV	-	n/a	-40	85	DC+-G	2000	-	800	-	20	50	2
	1CA	800	DC PV	-	n/a	-40	85	DC--G	2000	-	800	-	20	50	2
VAL-MS-T1/T2 75/12.5 ST	4CA	60	DC	-	n/a	-40	80	DC+-DC-	-	2080	75	n/a	0.01	n/a	2
VAL-MS-T1/T2 BE	ACC	30	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS-T1/T2 BE/FM	ACC	300	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS/1+1-BE, VAL-MS/1+1-BE RN															
	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS/1+1-BE/FM, VAL-MS/1+1-BE/FM RN															
	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS/2+0-BE	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS/2+0-BE/FM	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS/2+V-BE-L/FM(b)	ACC	1500	DC PV	-	n/a	-40	85	-	-	-	-	-	n/a	-	2
VAL-MS/2+V-BE/1(b)	ACC	1500	DC PV	-	n/a	-40	85	-	-	-	-	-	n/a	-	2
VAL-MS/2+V/L-BE(b)	ACC	1500	DC PV	-	n/a	-40	85	-	-	-	-	-	n/a	-	2
VAL-MS/2+V/L-BE-FM(b)	ACC	1500	DC PV	-	n/a	-40	85	-	-	-	-	-	n/a	-	2
VAL-MS/2+V/L-BE-TX(b)	ACC	1500	DC PV	-	n/a	-40	85	-	-	-	-	-	-	-	2
VAL-MS/2+V/L-BE-TX/FM(b)	ACC	1500	DC PV	-	n/a	-40	85	-	-	-	-	-	n/a	-	2
VAL-MS/3+0-BE, VAL-MS/3+0-BE RN															
	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS/3+0-BE/FM, VAL-MS/3+0-BE/FM RN															
	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS/3+0/HD-BE	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS/3+0/HD-BE/FM	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS/3+1-BE	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS/3+1-BE/FM, VAL-MS/3+1-BE/FM RN															

	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS/4+0-BE RN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-MS/4+0-BE/FM RN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-SEC-1S-350 BE, VAL-SEC-1S-175 BE, VAL-SEC-2C-350 BE, VAL-SEC-2C-175 BE, VAL-SEC-2S-350 BE, VAL-SEC-2S-175 BE, VAL-SEC-3C-350 BE, VAL-SEC-3C-175 BE, VAL-SEC-1S-350 BE/O.FM, VAL-SEC-2C-350 BE/O.FM, VAL-SEC-2S-350 BE/O.FM, VAL-SEC-3C-350 BE/O.FM, VAL-SEC-3S-350 BE/O.FM, VAL-SEC-3S-BE, VAL-SEC-3S-175-BE.															
	ACC	600	AC	1	n/a	-40	80	-	-	-	-	-	-	n/a	2
VAL-SEC-T2-120DC-P	1CA	150	DC	-	n/a	-40	80	DC+-G	700	-	150	-	20	50	2
VAL-SEC-T2-1S-175-FM	4CA	120	AC	1	n/a	-40	80	L-N L-G N-G	- - -	1510 1630 560	175 175 150	n/a n/a n/a	20	n/a	2
VAL-SEC-T2-1S-350	4CA	240	AC	1	n/a	-40	80	L-N L-G N-G	- - -	2000 2080 950	350 350 264	n/a n/a n/a	20	n/a	2
VAL-SEC-T2-1S-350-FM	4CA	240	AC	1	n/a	-40	80	L-N L-G N-G	- - -	2000 2080 950	350 350 264	n/a n/a n/a	20	n/a	2
VAL-SEC-T2-2+0-120-BE-FM	ACC	600	DC	-	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-SEC-T2-2+0-220-BE-FM	ACC	600	DC	-	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-SEC-T2-2+0-220DC-FM	4CA	500	DC	-	n/a	-40	80	DC+-DC-	-	3280	500	n/a	20	n/a	2
	4CA	250	DC	-	n/a	-40	80	DC+-G DC--G	- -	1640 1640	250 250	n/a n/a	20	n/a	2
VAL-SEC-T2-2+0-380-BE-FM	ACC	600	DC	-	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-SEC-T2-2+0-380DC-FM	4CA	600	DC	-	n/a	-40	80	DC+-DC-	-	3280	600	n/a	20	n/a	2
	4CA	450	DC	-	n/a	-40	80	DC+-G DC--G	- -	1640 1640	450 450	n/a n/a	20	n/a	2
VAL-SEC-T2-2+0-48-BE-FM	ACC	600	DC	-	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-SEC-T2-220DC-P	4CA	250	DC	-	n/a	-40	80	DC+-G	-	1640	250	n/a	20	n/a	2
VAL-SEC-T2-2C-175-FM	4CA	240/120	AC	1S	n/a	-40	80	L-L L-N	- -	2010 1510	350 175	n/a n/a	20	n/a	2
VAL-SEC-T2-2C-350	4CA	480/277	AC	3Y	n/a	-40	80	L-L L-N	- -	3280 2000	700 350	n/a n/a	20	n/a	2
VAL-SEC-T2-2C-350-FM	4CA	480/277	AC	3Y	n/a	-40	80	L-L L-N	- -	3280 2000	700 350	n/a n/a	20	n/a	2
VAL-SEC-T2-2S-175-FM	4CA	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	2010 1510 1630 560	350 175 175 150	n/a n/a n/a n/a	20	n/a	2
VAL-SEC-T2-2S-350-FM, VAL-SEC-T2-2S-350															
	4CA	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	3280 2000 2080 950	700 350 350 264	n/a n/a n/a n/a	20	n/a	2
VAL-SEC-T2-350-P	1CA	277	AC	1	n/a	-40	80	L-N	1200	-	350	-	20	50	2
VAL-SEC-T2-380DC-P	4CA	450	DC	-	n/a	-40	80	DC+-G	-	1640	450	n/a	20	n/a	2
VAL-SEC-T2-3C-175-FM	4CA	208/120	AC	3Y	n/a	-40	80	L-L L-N	- -	2010 1510	350 175	n/a n/a	20	n/a	2
VAL-SEC-T2-3C-350	4CA	480/277	AC	3Y	n/a	-40	80	L-L L-N	- -	3280 2000	700 350	n/a n/a	20	n/a	2
VAL-SEC-T2-3C-350-FM	4CA	480/277	AC	3Y	n/a	-40	80	L-L L-N	- -	3280 2000	700 350	n/a n/a	20	n/a	2
VAL-SEC-T2-3S-175-FM	4CA	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	2010 1510 1630 560	350 175 175 150	n/a n/a n/a n/a	20	n/a	2
VAL-SEC-T2-3S-350	4CA	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	3280 2000 2080 950	700 350 350 264	n/a n/a n/a n/a	20	n/a	2

VAL-SEC-T2-3S-350-FM	4CA	415/240	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	3280 2000 2080 950	700 350 350 264	n/a n/a n/a n/a	20	n/a	2
VAL-SEC-T2-48DC-P	1CA	75	DC	-	n/a	-40	80	DC+-G	400	-	75	-	20	50	2
VAL-US 120 ST	4CA	120	AC	1	n/a	-40	80	L-N	-	160	175	n/a	10	n/a	2
VAL-US 120, VAL-US 120/FM, VAL-US 120-O, VAL-US 120-O/FM															
	4CA	120	AC	1	n/a	-40	80	L-N	-	1600	75	n/a	10	n/a	2
VAL-US 120/3+1-FM, VAL-US 120/3+1-FM-UD															
	4CA	208/120	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	2030 1600 2300 1490	350 175 175 260	n/a n/a n/a n/a	20	n/a	2
VAL-US 240 ST	4CA	240	AC	1	n/a	-40	80	L-N	-	1910	275	n/a	20	n/a	2
VAL-US 240, VAL-US 240/FM, VAL-US 240-O, VAL-US 240-O/FM															
	4CA	240	AC	1	n/a	-40	80	L-N	-	1900	275	n/a	20	n/a	2
VAL-US 240/1+1, VAL-US 240/1+1-FM															
	4CA	240	AC	1	n/a	-40	80	L-N L-G N-G	- - -	1910 2630 1370	275 275 260	n/a n/a n/a	20	n/a	2
VAL-US 240/2+0, VAL-UL 240/2+0-FM															
	4CA	240	AC	1	n/a	-40	80	L-L L-N	- -	2720 1910	550 275	n/a n/a	20	n/a	2
VAL-US 240/3+1, VAL-US 240/3+1/FM															
	4CA	400/230	AC	3Y	n/a	-40	80	L-L L-N L-G N-G	- - - -	2720 1910 2630 1370	550 275 275 260	n/a n/a n/a n/a	20	n/a	2
VAL-US 277 ST	4CA	277	AC	1	n/a	-40	80	L-N	-	2200	385	n/a	20	n/a	2
VAL-US 277, VAL-US 277/FM, VAL-US 277-O, VAL-US 277-O/FM															
	4CA	277	AC	1	n/a	-40	80	L-N	-	2200	385	n/a	20	n/a	2
VAL-US 347 ST	4CA	347	AC	1	n/a	-40	80	L-N	-	2280	440	n/a	20	n/a	2
VAL-US 347, VAL-US 347/FM, VAL-US 347-O, VAL-US 347-O/FM															
	4CA	347	AC	1	n/a	-40	80	L-N	-	2280	440	n/a	20	n/a	2
VAL-US 480 ST	4CA	480	AC	1	n/a	-40	80	L-N	-	2310	580	n/a	10	n/a	2
VAL-US 480/3+0, VAL-US 480/3+0-FM															
	4CA	690/400	AC	3Y	n/a	-40	80	L-L L-G	- -	4270 2310	1600 580	n/a n/a	10	n/a	2
VAL-US 580 ST	4CA	400	AC	1	n/a	-40	80	L-N	-	2310	580	n/a	10	n/a	2
VAL-US 60	4CA	60	AC	1	n/a	-40	80	L-N	-	630	75	n/a	10	n/a	2
	4CA	60	DC	-	n/a	-40	80	DC+-DC-	-	810	100	n/a	10	n/a	2
VAL-US 690 ST	4CA	690	AC	1	n/a	-40	80	L-N	-	2700	750	n/a	10	n/a	2
VAL-US 690/3+0, VAL-US 690/3+0/FM															
	4CA	690	AC	3D	n/a	-40	80	L-L L-G	- -	4810 2560	1500 750	n/a n/a	10	n/a	2
VAL-US-120/40-P	1CA	120	AC	1	n/a	-40	80	L-N	700	-	175	-	20	200	2
VAL-US-120/65-P	1CA	120	AC	1	n/a	-40	80	L-N	700	-	175	-	20	200	2
VAL-US-1U-48/40/1+1V-FM	4CA	60	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	- - -	810 810 1620	100 100 100	n/a n/a n/a	10	n/a	2
	4CA	60	AC	1	n/a	-40	80	L-N L-G N-G	- - -	630 1260 630	75 75 75	n/a n/a n/a	10	n/a	2
VAL-US-1U-48/40/2+0-FM	4CA	60	DC	-	n/a	-40	80	DC+-DC- DC+-G DC--G	- - -	1620 810 810	100 100 100	n/a n/a n/a	10	n/a	2

	4CA	60	AC	1	n/a	-40	80	L-N L-G N-G	- - -	1260 630 630	75 75 75	n/a n/a n/a	10	n/a	2
VAL-US-1U/1+1-BE-FM	ACC	480	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US-1U/2+0-BE-FM	ACC	480	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US-240/40-P	1CA	240	AC	1	n/a	-40	80	L-N	1200	-	385	-	20	200	2
VAL-US-240D/40-P	1CA	240	AC	1	n/a	-40	80	L-N	1000	-	275	-	20	200	2
VAL-US-277/40-P	1CA	277	AC	1	n/a	-40	80	L-N	1200	-	385	-	20	200	2
VAL-US-277/80-P	1CA	277	AC	1	n/a	-40	80	L-N	1500	-	385	-	20	200	2
VAL-US-2U-48/40/1+0, VAL-US1-2U-48/40/1+0-FM															
	4CA	60	AC	1	n/a	-40	80	L-N	-	630	75	n/a	10	n/a	2
	4CA	60	DC	-	n/a	-40	80	DC+-DC-	-	810	100	n/a	10	n/a	2
VAL-US-2U/1+0-BE	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US-2U/1+0-BE-FM	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US-347/30-P	1CA	347	AC	1	n/a	-40	80	L-N	2000	-	580	-	20	200	2
	1CA	400	AC	1	n/a	-40	80	L-N	2000	-	580	-	20	200	2
VAL-US-48/40-P	4CA	100	DC	-	n/a	-40	80	DC+-DC-	-	720	100	n/a	20	n/a	2
VAL-US-48/40/1+0	4CA	100	DC	-	n/a	-40	80	DC+-DC-	-	720	100	n/a	20	n/a	2
VAL-US-48/40/1+0-FM	4CA	100	DC	-	n/a	-40	80	DC+-DC-	-	720	100	n/a	20	n/a	2
VAL-US-48/40/1+1V	4CA	100	DC	-	n/a	-40	80	DC+-DC- DC--G	- -	720 720	100 100	n/a n/a	20	n/a	2
	4CA	200	DC	-	n/a	-40	80	DC+-G	-	1440	200	n/a	20	n/a	2
VAL-US-48/40/1+1V-FM	4CA	100	DC	-	n/a	-40	80	DC+-DC- DC--G	- -	720 720	100 100	n/a n/a	20	n/a	2
	4CA	200	DC	-	n/a	-40	80	DC+-G	-	1440	200	n/a	20	n/a	2
VAL-US-48/65-P	1CA	60	DC	-	n/a	-40	80	DC+-DC-	400	-	100	-	20	5	2
VAL-US-480D/30-P	1CA	480	AC	3D	n/a	-40	80	L-G	2000	-	580	-	20	200	2
VAL-US-600D/30-P	1CA	600	AC	3D	n/a	-40	80	L-G	2500	-	750	-	20	200	2
VAL-US/1+0-BE, VAL-US/1+0-BE RN															
	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/1+0-BE, VAL-US/1+0-BE RN (dc)															
	ACC	690	DC	-	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/1+0-BE/FM, VAL-US/1+0-BE/FM RN															
	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/1+0-BE/FM, VAL-US/1+0-BE/FM RN (dc)															
	ACC	690	DC	-	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/1+1-BE	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/1+1-BE (dc)	ACC	690	DC	-	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/1+1-BE RN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/1+1-BE/FM	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/1+1-BE/FM (dc)	ACC	690	DC	-	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/1+1-BE/FM RN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/2+0-BE RN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/2+0-BE/FM RN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/2+1-BE PN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/2+1-BE/FM RN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/3+0-BE	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/3+0-BE RN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/3+0-BE/FM	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/3+0-BE/FM RN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2

VAL-US/3+1-BE	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/3+1-BE RN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/3+1-BE/FM	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/3+1-BE/FM RN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/4+0-BE	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/4+0-BE RN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/4+0-BE/FM	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/4+0-BE/FM RN	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/DELTA-BE	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2
VAL-US/DELTA-BE-FM	ACC	690	AC	1	n/a	-40	80	-	-	-	-	-	n/a	n/a	2

Notes:

1. Suitable for Factory wiring only.
2. Suitable for Field and Factory wiring.
3. Series External Impedance required, see Electrical Ratings in the Recognition report.
4. Series External Overcurrent Protection required, see Electrical Ratings in the Recognition report.
5. Body of discrete component metal-oxide varistors (MOVs) flammability:

a) Min. V-0 or VTM-0.

b) Min. V-1 or VTM-1.

c) Complies with IEC 60950-1, Edition 2.2, Annex Q/IEC62368-1 Annex G.8.2 needle flame testing requirements.

d) Complies with IEC 60065, Edition 7.2, Annex G.1.1 needle flame testing requirements.
- # - Rated for used in altitude up to 5000m

(a) - May be prefixed with WTX- for commercial purpose.

(b) - May be followed by /xxx, where xxx represents a 1 to 3 digit number.

(c) - Complementary Recognized as FOKY2 under File E330181.

(dc) - Model has dual AC and DC ratings, AC ratings detailed in the table 'Investigated to CSA C22.2 No. 269' and DC ratings investigated to CSA Legacy requirements.
- @ - maybe followed by S1.
- Note - All Cat. Nos. may be followed by additional suffixes.

[Click here to view the Colombia Market Access Certification](#)

Marking: Company name and model designation and the Recognized Component Mark, .

Last Updated on 2022-06-10

Der Umstand, dass der Name oder das Produkt eines Unternehmens in dieser Datenbank aufgeführt ist, garantiert nicht, dass die Herstellung der jeweiligen Produkte dem Follow-Up-Service von UL unterliegt. Nur Produkte mit UL-Zeichen gelten als zertifiziert und sind vom Follow-Up-Service von UL abgedeckt. Prüfen Sie daher stets, ob ein Produkt das UL-Zeichen trägt.

UL gestattet die Weiterverwendung der im Online-Zertifizierungsverzeichnis enthaltenen Materialien unter den folgenden Bedingungen: 1. Alle Anleitungen, Baugruppen, Konstruktionen, Designs, Systeme und/oder Zertifizierungen (Dateien) müssen vollständig und auf nicht irreführende Weise ohne Manipulation der Daten (oder Zeichnungen) dargestellt werden. 2. Bei Weiterverwendung von Materialien muss der Vermerk „Aus dem Online-Zertifizierungsverzeichnis mit Genehmigung von UL nachgedruckt“ stets mit angegeben werden. Darüber hinaus muss das nachgedruckte Material einen Urheberrechtsvermerk in folgendem Format enthalten: "© 2022 UL LLC"

FOKY2.E330181 - Electromagnetic Interference Filters - Component

Hinweis: Wir verbessern unsere Systeme und möglicherweise bemerken Sie fehlende/veraltete Daten. Während dieser Übergangszeit, rufen Sie bitte unser Konformitätszertifikat auf oder wenden Sie sich an unseren Kundendienst unter <https://www.ul.com/about/locations>.

Electromagnetic Interference Filters - Component

PHOENIX CONTACT GmbH & Co. KG

E330181

Flachmarktstrasse 8
Blomberg, 32825 Germany

Marking: Company name and model designation.
Note: For additional marking information, refer to the [Guide Information Page](#).

Appliance filters, Model(s): FIL-3C-1E-xxA-480AC-yy Where xx = 10, 20, 30 or 50. yy = blank or MED.

Appliance filters, Model(s): FIL-WM-1S-xx-yyA-230AC-zz Where xx = 1N, 2N or 2E. yy = 1, 3, 6, 10, 12, 16, 20, 30, 36 or 60. zz = blank or MED.

Appliance filters, Model(s): FIL-WM-3C-1E-xxA-480AC-yy Where xx = 10, 20, 30 or 50. yy = blank or MED.

Appliance single stage filters, Model(s): FIL-WM-1S-1E-xxA-230AC-yy Where xx = 1, 3, 4, 6, 8, 10, 12, 16, 20 or 30. yy = blank or MED.

Appliance two stage filters, Model(s): FIL-WM-1S-2H-xxA-230AC-yy Where xx = 1, 3, 4, 6, 8, 10, 12, 16, 20 or 30. yy = blank or MED.

Base units, Model(s): VAL-CP-1S-175-BE, VAL-CP-1S-350 BE/O.FM, VAL-CP-1S-BE, VAL-CP-2C-350 BE/O.FM, VAL-CP-2C-BE, VAL-CP-2C-BE-175, VAL-CP-2S-175-BE, VAL-CP-2S-350 BE/O.FM, VAL-CP-2S-BE, VAL-CP-3C-350 BE/O.FM, VAL-CP-3C-BE, VAL-CP-3C-BE-175, VAL-CP-3S-175-BE, VAL-CP-3S-350 BE/O.FM, VAL-CP-3S-BE

SPD/EMI Filters, "SPF2", Model(s): SFP2-1S-1-10A-120AC-PT(c), SFP2-1S-1-10A-120AC-UT(c), SFP2-1S-1-15A-120AC-PT(c), SFP2-1S-1-15A-120AC-UT(c), SFP2-1S-1-20A-120AC-PT(c), SFP2-1S-1-20A-120AC-UT(c), SFP2-1S-1-5A-120AC-PT(c), SFP2-1S-1-5A-120AC-UT(c)

Surge protective devices, Type 2 SPD, Model(s): SFP 1-10/120AC, SFP 1-15/120AC, SFP 1-20/120AC, SFP 1-5/120AC

Surge protective devices, Type 4 SPD, SPD modules, Model(s): VAL-CP-N/PE-175-ST, VAL-CP-N/PE-350-ST

(c) - Complementary Recognized as Surge Protective Devices under E330181.
Note - Complementary evaluated as Surge Protective Devices - Component under File E330181, VZCA2/8.

Last Updated on 2022-06-09

Der Umstand, dass der Name oder das Produkt eines Unternehmens in dieser Datenbank aufgeführt ist, garantiert nicht, dass die Herstellung der jeweiligen Produkte dem Follow-Up-Service von UL unterliegt. Nur Produkte mit UL-Zeichen gelten als zertifiziert und sind vom Follow-Up-Service von UL abgedeckt. Prüfen Sie daher stets, ob ein Produkt das UL-Zeichen trägt.

UL gestattet die Weiterverwendung der im Online-Zertifizierungsverzeichnis enthaltenen Materialien unter den folgenden Bedingungen: 1. Alle Anleitungen, Baugruppen, Konstruktionen, Designs, Systeme und/oder Zertifizierungen (Dateien) müssen vollständig und auf nicht irreführende Weise ohne Manipulation der Daten (oder Zeichnungen) dargestellt werden. 2. Bei Weiterverwendung von Materialien muss der Vermerk „Aus dem Online-Zertifizierungsverzeichnis mit Genehmigung von UL nachgedruckt“ stets mit angegeben werden. Darüber hinaus muss das nachgedruckte Material einen Urheberrechtsvermerk in folgendem Format enthalten: "© 2022 UL LLC"