

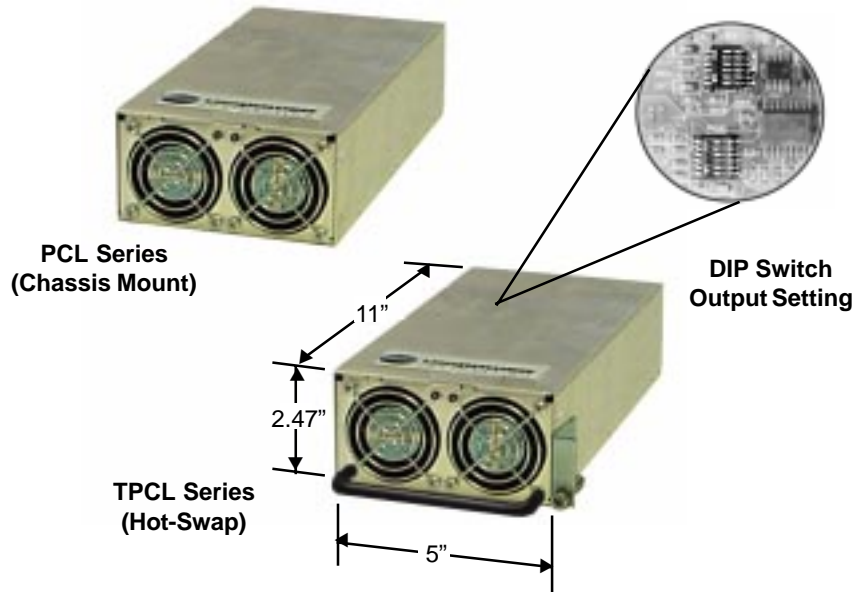
QUICK-SET *PowerCassette*[®]: MULTI-OUTPUT SWITCHER

1½U High, Up to 6 Outputs at 800 Watts
 Outputs Instantly Set at Factory

FEATURES

- Outputs Set by DIP Switches
- Advanced "CellularPower"[™] Architecture
- Up to 5 Outputs Plus 5V, ¼ A Standby
- 254 Different Models
- Hot-Swap or Chassis Mount Versions
- 1.8 to 12VDC Outputs
- I²C Serial Data Bus Option
- Integral LED Status Indicators
- 5.9 Watts/Cubic Inch Power Density
- Power Factor Corrected
- Low Profile: 2.47 Inches High
- Hot-Swappable Connector
- Staged Pin Lengths
- ORing Diodes on All Outputs
- Two- or Three-Unit 19" Racks*
- Active Current Sharing on V1, V2 & V3
- Universal 85 to 264VAC Input
- Class B EMI Input Filter
- Optimized Thermal Management
- No Minimum Load, Any Output
- Control & Monitoring Features

*For TPCL Models



TWO-YEAR WARRANTY

SAFETY CERTIFICATIONS

AGENCY	STANDARD
UL	UL1950
CUL	CSA22.2, No. 950
DEMKO	EN60950

Patents Issued & Pending

ORDERING GUIDE

SERIES	V1 OUTPUT	I ² C OUTPUT	V1 to V5 OUTPUTS
PCL = Chassis Mount TPCL = Hot Swap	2 = 1.8-5V Out 3 = 12V Out	Z = I ² C B* = No I ² C	Use 5 Letters From Tables: -XXXXX (Pages 3 & 4)

* NOTE: B means "leave blank" (no letter)

Examples: Model **TPCL2-DBFGE** is a Hot-Swap version with no I²C, V1 = 5V/75A, V2 = 2.5V/75A, V3 = 12V/15A, V4 = -12V/3A and V5 = -5V/3A

Model **PCL3-Z-FCOGE** is a Chassis Mount version with I²C output, V1 = 12V/35A, V2 = 3.3V/75A, V3 = No Output, V4 = -12V/3A and V5 = -5V/3A

Two-and Three-Unit Racks: For information on these 19-inch racks, contact factory.

QUICK-SET PowerCassette® MODEL PCL/TPCL SUFFIX SELECTOR

V1	V2	V3	V4	V5	MODEL SUFFIX	V1	V2	V3	V4	V5	MODEL SUFFIX
12V/35A	2.5V/75A		-12V/3A	-5V/3A	FBOGE	12V/35A	3.3V/75A			-5V/3A	FCOOE
12V/35A	2.5V/75A		-12V/3A	5V/3A	FBOGD	12V/35A	3.3V/75A		-12V/3A	-5.2V/3A	FCOGK
12V/35A	2.5V/75A			-5V/3A	FBOOE	12V/35A	3.3V/75A	5V/15A		1.8V/3A	FCJOA
12V/35A	2.5V/75A		-12V/3A	-5.2V/3A	FBOGK	12V/35A	3.3V/75A	5V/15A			FCJOO
12V/35A	2.5V/75A	5V/15A		1.8/3A	FBJOA	12V/35A	5V/75A		-12V/3A	-5V/3A	FDOGE
12V/35A	2.5V/75A	5V/15A			FBJOO	12V/35A	5V/75A		-12V/3A	3.3V/3A	FDOGC
12V/35A	3.3V/75A		-12V/3A	-5V/3A	FCOGE	12V/35A	5V/75A		-12V/3A	2.5V/3A	FDOGB
12V/35A	3.3V/75A		-12V/3A	5V/3A	FCOGD	12V/35A	5V/75A		-12V/3A	-5.2V/3A	FDOGK
						12V/35A	5V/75A		-12V/3A		FDOGO
						12V/35A	5V/75A				FDOOO
5V/75A	3.3V/75A	12V/15A	-12V/3A	-5V/3A	DCFGE	5V/75A	2.5V/75A	12V/15A	-12V/3A	-5V/3A	DBFGE
5V/75A	3.3V/75A	12V/15A	-12V/3A		DCFGO	5V/75A	2.5V/75A		-12V/3A	3.3V/3A	DBOGC
5V/75A	3.3V/75A	12V/15A		2.5V/3A	DCFOB	5V/75A	2.5V/75A	12V/15A		2.5V/3A	DBOFB
5V/75A	3.3V/75A		-12V/3A	1.8V/3A	DCOGA	5V/75A	2.5V/75A	12V/15A		-5V/3A	DBFOE
5V/75A	3.3V/75A		-12V/3A	-5V/3A	DCOGE	5V/75A	2.5V/75A		-12V/3A		DBOGO
5V/75A	3.3V/75A	12V/15A	-12V/3A	2.5V/3A	DCFGB	5V/75A	2.5V/75A		-12V/3A	-5V/3A	DBOOE
5V/75A	3.3V/75A				DCOOO	5V/75A	2.5V/75A				DBOFC
5V/75A	3.3V/75A	12V/15A		-5V/3A	DCFOE	5V/75A	2.5V/75A		12V/3A	3.3V/3A	DBFGB
5V/75A	3.3V/75A		12V/3A	-5V/3A	DCOFE	5V/75A	2.5V/75A	12V/15A	-12V/3A	2.5V/3A	DBOGE
5V/75A	3.3V/75A		12V/3A	2.5V/3A	DCOFB	5V/75A	2.5V/75A		-12V/3A	1.8V/3A	DBOFA
5V/75A	3.3V/75A			2.5V/3A	DCOOB	5V/75A	2.5V/75A		12V/3A	1.8V/3A	DOOGE
5V/75A	3.3V/75A	12V/15A	-5.2V/3A		DCFOK	5V/75A	2.5V/75A		-12V/3A	-5V/3A	DOOOC
											DOOOB
5V/75A		12V/15A	-12V/3A	-5V/3A	DOFGE	5V/75A			-12V/3A	3.3V/3A	DOOOA
5V/75A		12V/15A	-12V/3A	3.3V/3A	DOFGC	5V/75A				1.8V/3A	DOOFA
5V/75A		12V/15A		2.5V/3A	DOFOB	5V/75A			12V/3A	1.8V/3A	DOOFB
5V/75A		12V/15A		3.3V/3A	DOFOC	5V/75A			12V/3A	2.5V/3A	DOOFC
5V/75A		12V/15A			DOFOO	5V/75A			12V/3A	3.3V/3A	DOOFO
5V/75A			-12V/3A	2.5V/3A	DOOGB	5V/75A				-5.2V/3A	DOOOK
5V/75A		12V/15A	-12V/3A		DOFGO	5V/75A				-5V/3A	DOOOE
5V/75A		12V/15A		-5V/3A	DOFOE						
5V/75A			-12V/3A	1.8V/3A	DOOGA						
5V/75A			-12V/3A	3.3V/3A	DOOGC						
5V/150A		12V/15A	-12V/3A	-5V/3A	LDFGE	3.3V/75A	5V/75A	12V/15A	-12V/3A	-5V/3A	COFGE
5V/150A		12V/15A	-12V/3A	3.3V/3A	LDFGC	3.3V/75A		12V/15A	-12V/3A	5V/3A	COFGD
5V/150A		12V/15A		2.5V/3A	LDFOB	3.3V/75A	5V/75A	12V/15A	-12V/3A		COFGO
5V/150A			12V/3A	-5V/3A	LDOFE	3.3V/75A	5V/75A		-12V/3A	-5V/3A	CDOOE
5V/150A			-12V/3A	2.5V/3A	LDOGB	3.3V/75A	5V/75A		-12V/3A	1.8V/3A	CDOGA
5V/150A		12V/15A	-12V/3A		LDFGO	3.3V/75A			-12V/3A	2.5V/3A	COFOB
5V/150A		12V/15A		-5V/3A	LDFOE	3.3V/75A		12V/15A		2.5V/3A	COFGB
5V/150A			-12V/3A	3.3V/3A	LDOGC	3.3V/75A	5V/75A	12V/15A	-12V/3A	2.5V/3A	CDOOB
5V/150A			-12V/3A	-5V/3A	LDOGE	3.3V/75A	5V/75A			2.5V/3A	CDOFB
5V/150A		12V/15A		3.3V/3A	LDFOC	3.3V/75A	5V/75A		12V/3A	2.5V/3A	COOGB
5V/150A		12V/15A		-5.2V/3A	LDFOK	3.3V/75A			-12V/3A	2.5V/3A	
3.3V/75A	2.5V/75A	12V/15A	-12V/3A	-5V/3A	CBFGE	3.3V/75A		12V/15A	-12V/3A	-5V/3A	COFGE
3.3V/75A	2.5V/75A	12V/15A	-12V/3A		CBFGO	3.3V/75A		12V/15A	-12V/3A		COFGO
3.3V/75A	2.5V/75A	12V/15A		-5V/3A	CBFOE	3.3V/75A		12V/15A		-5V/3A	COFOE
3.3V/75A	2.5V/75A			-5V/3A	CBOOE	3.3V/75A		12V/15A		5V/3A	COFOD
3.3V/75A	2.5V/75A		12V/3A	-5V/3A	CBOFE	3.3V/75A		12V/15A		1.8V/3A	COFOA
3.3V/75A	2.5V/75A		12V/3A	5V/3A	CBOFD	3.3V/75A				2.5V/3A	COOGB
3.3V/75A	2.5V/75A	12V/15A		5V/3A	CBFOD	3.3V/75A		12V/15A	-12V/3A	-5.2V/3A	COFGK
3.3V/75A	2.5V/75A	5V/15A		-5.2V/3A	CBJOO	3.3V/75A		12V/15A	-12V/3A	2.5V/3A	COFGB
3.3V/75A	2.5V/75A	12V/15A	-12V/3A		CBFGK	3.3V/75A		12V/15A			COFOO
3.3V/75A	2.5V/75A	5V/15A		1.8V/3A	CBJOA	3.3V/75A		5V/15A			COJOO
3.3V/75A	2.5V/75A		12V/3A	1.8V/3A	CBOFA	3.3V/75A		5V/15A		1.8V/3A	COJOA
3.3V/75A	2.5V/75A	12V/15A	-12V/3A	1.8V/3A	CBFGA	3.3V/75A		12V/15A		-5.2V/3A	COFOK
2.5V/75A	5V/75A	12V/15A	-12V/3A	-5V/3A	BDFGE	2.5V/75A	3.3V/75A	12V/15A	-12V/3A	5V/3A	BCFGD
2.5V/75A	5V/75A	12V/15A	-12V/3A	3.3V/3A	BDFGC	2.5V/75A	3.3V/75A	12V/15A	-12V/3A	3.3V/3A	BCFGO
2.5V/75A	5V/75A	12V/15A		2.5V/3A	BDFOB	2.5V/75A	3.3V/75A	12V/15A		2.5V/3A	BCFOB
2.5V/75A	5V/75A		12V/3A	-5V/3A	BDOFE	2.5V/75A	3.3V/75A		12V/3A	-5V/3A	BCOFE
2.5V/75A	5V/75A		-12V/3A	3.3V/3A	BDOGC	2.5V/75A	3.3V/75A		12V/3A	5V/3A	BCOFD
2.5V/75A	5V/75A		12V/3A	1.8V/3A	BDOFA	2.5V/75A	3.3V/75A	12V/15A	-12V/3A	-5.2V/3A	BCFGK
2.5V/75A	5V/75A		-12V/3A	1.8V/3A	BDOGA	2.5V/75A	3.3V/75A	5V/15A		1.8V/3A	BCJOA
2.5V/75A	5V/75A		-12V/3A		BDOGO	2.5V/75A	3.3V/75A			-5V/3A	BCOOE
2.5V/75A	5V/75A	12V/15A			BDFOO	2.5V/75A	3.3V/75A		-12V/3A	1.8V/3A	BCOGA
2.5V/75A	5V/75A	12V/15A		-5V/3A	BDFOE	2.5V/75A	3.3V/75A		-12V/3A	-5V/3A	BCOGE
2.5V/75A	5V/75A	12V/15A		3.3V/3A	BDFOC	2.5V/75A	3.3V/75A	12V/15A	-12V/3A	-5V/3A	BCFGE
2.5V/75A	5V/75A			3.3V/3A	BDOOC	2.5V/75A	3.3V/75A	12V/15A	-12V/3A		BCFGO

QUICK-SET PowerCassette® MODEL PCL/TPCL SUFFIX SELECTOR (CONTINUED)

V1	V2	V3	V4	V5	MODEL SUFFIX	V1	V2	V3	V4	V5	MODEL SUFFIX
2.5V/75A			-12V/3A	-5V/3A	BOOGE	1.8V/75A	5V/75A	12V/15A	-12V/3A	-5V/3A	ADFGE
2.5V/75A			12V/3A	3.3V/3A	BOOFC	1.8V/75A	5V/75A	12V/15A	-12V/3A		ADFGO
2.5V/75A			-12V/3A	5V/3A	BOOGD	1.8V/75A	5V/75A	12V/15A		-5V/3A	ADFOE
2.5V/75A			12V/3A		BOOFO	1.8V/75A	5V/75A	12V/15A			ADFOO
2.5V/75A			-12V/3A	3.3V/3A	BOOGC	1.8V/75A	5V/75A	12V/15A		2.5V/3A	ADFOB
2.5V/75A			12V/3A	5V/3A	BOOFD	1.8V/75A	5V/75A	12V/15A	-12V/3A	3.3V/3A	ADFGC
2.5V/75A			12V/3A	1.8V/3A	BOOFA	1.8V/75A	5V/75A		-12V/3A	2.5V/3A	ADOGB
2.5V/75A			-12V/3A	1.8V/3A	BOOGA	1.8V/75A	5V/75A	12V/15A	-12V/3A	2.5V/3A	ADFGB
2.5V/75A				1.8V/3A	BOOOA	1.8V/75A	5V/75A		12V/3A	3.3V/3A	AD OFC
2.5V/75A			-12V/3A		BOOGO	1.8V/75A	5V/75A				ADOOO
2.5V/75A			12V/3A	-5V/3A	BOOFFE	1.8V/75A	5V/75A			3.3V/3A	ADOO C
2.5V/75A				-5V/3A	BOOOE	1.8V/75A	5V/75A			2.5V/3A	ADOOB
2.5V/75A				5V/3A	BOOOD	1.8V/75A	5V/75A			-5V/3A	ADOOE
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1.8V/75A	3.3V/75A	12V/15A	-12V/3A	-5V/3A	ACFGE	1.8V/75A	2.5V/75A	12V/15A	-12V/3A	-5V/3A	ABFGE
1.8V/75A	3.3V/75A	12V/15A	-12V/3A	3.3V/3A	ACFGC	1.8V/75A	2.5V/75A	12V/15A	-12V/3A		ABFGO
1.8V/75A	3.3V/75A	12V/15A		2.5V/3A	ACFOB	1.8V/75A	2.5V/75A	12V/15A			ABFOO
1.8V/75A	3.3V/75A		12V/3A	-5V/3A	ACOF E	1.8V/75A	2.5V/75A	12V/15A		5V/3A	ABFOD
1.8V/75A	3.3V/75A		12V/3A	3.3V/3A	ACOF C	1.8V/75A	2.5V/75A	12V/15A		-5V/3A	ABFOE
1.8V/75A	3.3V/75A			5V/3A	ACOOD	1.8V/75A	2.5V/75A		-12V/3A	-5V/3A	ABOGE
1.8V/75A	3.3V/75A		-12V/3A		ACOGO	1.8V/75A	2.5V/75A	12V/15A		3.3V/3A	ABFOC
1.8V/75A	3.3V/75A		12V/3A	2.5V/3A	ACOF B	1.8V/75A	2.5V/75A	12V/15A	-12V/3A	3.3V/3A	ABFGC
1.8V/75A	3.3V/75A		12V/3A	5V/3A	ACOF D	1.8V/75A	2.5V/75A		12V/3A	3.3V/3A	ABOF C
1.8V/75A	3.3V/75A	12V/15A	-12V/3A	-5.2V/3A	ACFGK	1.8V/75A	2.5V/75A	5V/15A			ABJOO
1.8V/75A	3.3V/75A		12V/3A		ACOF O	1.8V/75A	2.5V/75A		12V/3A	5V/3A	ABOF D
1.8V/75A	3.3V/75A	5V/15A			ACJOO	1.8V/75A	2.5V/75A			3.3V/3A	ABOO C
1.8V/75A	3.3V/75A			2.5V/3A	ACOOB	1.8V/75A	2.5V/75A	12V/15A	-12V/3A	-5.2V/3A	ABFGK
1.8V/75A	3.3V/75A		-12V/3A	2.5V/3A	ACOG B	1.8V/75A	2.5V/75A			5V/3A	ABOOD
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3.3V/75A			12V/3A	5V/3A	COOF D	3.3V/150A		12V/15A	-12V/3A	-5V/3A	MCFGE
3.3V/75A			-12V/3A	-5V/3A	COOGE	3.3V/150A		12V/15A	-12V/3A		MCFGO
3.3V/75A			-12V/3A	5V/3A	COOG D	3.3V/150A		12V/15A		-5V/3A	MCFOE
3.3V/75A			12V/3A	-5V/3A	COOF E	3.3V/150A		12V/15A			MCFOO
3.3V/75A				5V/3A	COOOD	3.3V/150A		12V/15A	-12V/3A	-5.2V/3A	MCFGK
3.3V/75A			12V/3A		COFOO	3.3V/150A		12V/15A	-12V/3A	2.5V/3A	MCFG B
3.3V/75A				-5.2V/3A	COOOK	3.3V/150A			-12V/3A	1.8V/3A	MCOGA
3.3V/75A			12V/3A	2.5V/3A	COOF B	3.3V/150A			12V/3A	1.8V/3A	MCOFA
3.3V/75A			-12V/3A	-5.2V/3A	COOG K	3.3V/150A			-12V/3A	-5V/3A	MCOGE
3.3V/75A			12V/3A	1.8V/3A	COOF A	3.3V/150A			-12V/3A	2.5V/3A	MCOGB
3.3V/75A			-12V/3A	1.8V/3A	COOG A	3.3V/150A			12V/3A	2.5V/3A	MCOFB
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2.5V/150A		12V/15A	-12V/3A	5V/3A	NBFGD	2.5V/75A		12V/15A	-12V/3A	-5V/3A	BOFGE
2.5V/150A		12V/15A			NBFOO	2.5V/75A		12V/15A	-12V/3A		BOFGO
2.5V/150A		12V/15A		-5V/3A	NBFOE	2.5V/75A		12V/15A		-5V/3A	BOFOE
2.5V/150A		12V/15A	-12V/3A	3.3V/3A	NBFGC	2.5V/75A		12V/15A	-12V/3A	5V/3A	BOFGD
2.5V/150A		12V/15A	-12V/3A	3.3V/3A	NBOGC	2.5V/75A		12V/15A	-12V/3A	3.3V/3A	BOFGC
2.5V/150A		12V/15A	-12V/3A		NBFGO	2.5V/75A		12V/15A			BOFOO
2.5V/150A			-12V/3A	1.8V/3A	NBOGA	2.5V/75A		12V/15A		1.8V/3A	BOFOA
2.5V/150A			12V/3A	1.8V/3A	NBOFA	2.5V/75A			12V/3A	-5.2V/3A	BOOFK
2.5V/150A			12V/3A	3.3V/3A	NBOFC	2.5V/75A			-12V/3A	-5.2V/3A	BOOGK
2.5V/150A		5V/15A			NBJOO	2.5V/75A		12V/15A		3.3V/3A	BOFOC
2.5V/150A		5V/15A		1.8V/3A	NBJOA	2.5V/75A		5V/15A			BOJOO
2.5V/150A			12V/3A		NBOFO	2.5V/75A		12V/15A	-12V/3A	-5.2V/3A	BOFGK
2.5V/150A		12V/15A	-12V/3A	-5.2V/3A	NBFGK	2.5V/75A		5V/15A		1.8V/3A	BOJOA
2.5V/150A		12V/15A		5V/3A	NBFOD	2.5V/75A				-5.2V/3A	BOOOK
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1.8V/75A			-12V/3A	-5V/3A	AOOG E	1.8V/75A		12V/15A	-12V/3A	-5V/3A	AOFGE
1.8V/75A			-12V/3A	2.5V/3A	AOOG B	1.8V/75A		12V/15A	-12V/3A		AOFGO
1.8V/75A			12V/3A	2.5V/3A	AOOF B	1.8V/75A		12V/15A		-5V/3A	AOFOE
1.8V/75A			-12V/3A	3.3V/3A	AOOG C	1.8V/75A		12V/15A			AOFOO
1.8V/75A			12V/3A	-5V/3A	AOOF E	1.8V/75A		12V/15A		3.3V/3A	AOFOC
1.8V/75A			-12V/3A	5V/3A	AOOG D	1.8V/75A				5V/3A	AOOOD
1.8V/75A		5V/15A			AOJOO	1.8V/75A		12V/15A		-5.2V/3A	AOFOK
1.8V/75A			12V/3A	3.3V/3A	AOOF C	1.8V/75A		12V/15A		2.5V/3A	AOFOB
1.8V/75A			12V/3A		AOOF O	1.8V/75A		12V/15A	-12V/3A	3.3V/3A	AOFGC
1.8V/75A			-12V/3A	-5.2V/3A	AOOG K	1.8V/75A				3.3V/3A	AOOOC

APPLICATION NOTES

- Output current must not exceed the values shown in the model tables for each output; maximum power for all outputs combined must not exceed 800 watts. Maximum power for V3, V4 and V5 combined must not exceed 200 watts.**
- For units with V1 over 75 amps, that output actually consists of the V1 and V2 outputs in parallel. In this mode the V1 and V2 output pins must be connected to one another and the V1 and V2 current share pins connected to each other. The V1 plus sense and minus sense pins must be connected to the V2 plus sense and minus sense pins, respectively. All connections are external to unit.
- For outputs of 2.5V or lower, the peak-to-peak ripple and noise is specified at 2% maximum.
- The DC Power Good signal monitors the V1, V2 and V3 outputs only.
- DESCRIPTION and INTERCONNECTION OF LOGIC SIGNALS.** ENABLE, DC POWER GOOD, AC POWER FAIL, OVERTEMP WARNING and INHIBIT pin connections come from the equivalent of an open collector circuit with an internal pull up 10K resistor to +5V.

ENABLE. This pin must be shorted to ground in order for outputs to function. The connection may also be achieved by means of an external open collector or open FET drain circuit; i.e., when the external transistor is turned on, the power supply is enabled. This is the inverse of the Inhibit function below.

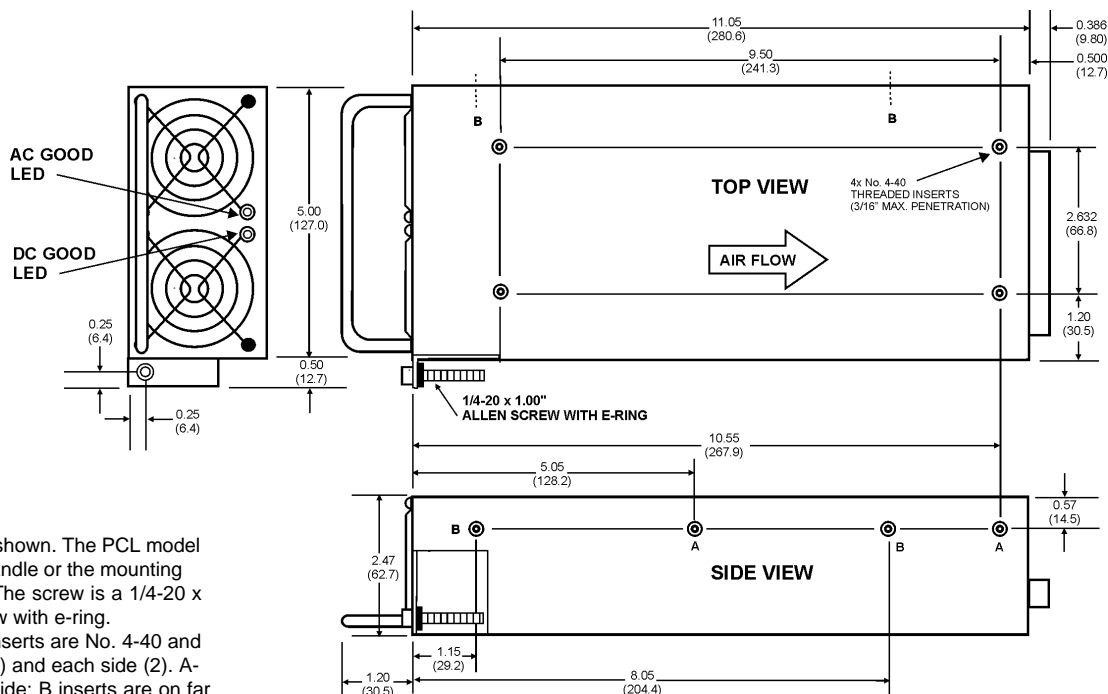
OUTPUT POWER GOOD. Provides Logic High signal when V1, V2 and V3 reach a prescribed level.

INPUT POWER FAIL. Provides a Logic High signal pulse when the AC line voltage ceases. Pulse occurs a minimum of 4 milliseconds before outputs go out of regulation. Pulse duration is 4 milliseconds up to tens of milliseconds, depending on load. Signal is Logic High rather than low (typical in non-redundant power supplies) so that there is no signal ambiguity when redundant power supplies are operated from different AC phases.

OVERTEMP. WARNING. Provides a Logic Low signal when exit air temperature approaches an unacceptable level.

GLOBAL INHIBIT. Shuts down the outputs but not the standby supply or the fans. As with the Enable pin above, it is achieved by shorting the pin to ground or turning on an external transistor. Should be connected through a 10K ohm resistor to +5V Standby Output. Acts as the inverse of the Enable pin.

- CONNECTING ALL OUTPUT SIGNALS TOGETHER FOR UNITS IN AN N+1 RACK:** Normally signals are used for identifying status of each module in paralleled unit configuration. If it is desired to connect all the signals together to treat the complete rack as a single power supply, the following (or equivalent) must be done. The Input Power Fail, Output Power Good and Overtemp. Warning signals of each module are each connected to the anode of a BAV99 diode, the other side of which goes to the base of a 2N2222A. The collectors of all the Input Power Fail transistors are connected to form a single Input Power Fail chassis signal. The same is done for the Output Power Good and Overtemp. Warning signals. The resultant system warning signals then give a Logic Low for Input Power Fail and a Logic High for Output Power Good and Overtemperature Warning.
- MTBF.** 200,000 hours at 35°C using Bellcore method.



NOTES:

- The TPCL model is shown. The PCL model does not have the handle or the mounting bracket with screw. The screw is a 1/4-20 x 1.00 inch Allen Screw with e-ring.
- Mounting threaded inserts are No. 4-40 and are located on top (4) and each side (2). A-inserts are on near side; B inserts are on far side. Maximum penetration is 3/16 inch (4.8mm).

ALL DIMENSIONS IN INCHES (mm).
 All specifications subject to change without notice.

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