

ISOLATION CHARACTERISTICS					
Parameter	Conditions	Min.	Typ.	Max.	Units
Insulation Safety Rating / Test Voltage	Input to Output - Reinforced	3000			Vrms
	Input to Chassis - Basic	1500			Vrms
Isolation	Output to Chassis				
	Output to Output				
Material Flammability	UL 94V-0				
Grounding	Main Output Return and Standby Output Return are connected internally. 100kΩ resistor parallel with 100nF capacitor is connected between Return and power supply chassis. Main Output Return should be connected to the System Chassis.				

CONTROL SIGNALS		
Status	Conditions	Description
LED	Off	No AC input to all PS
	Flashing Yellow	Power Supply Failure
	Flashing Green	Main Output Absent
	Green	Power Supply Good
I ² C Registers	Status	PS-ON, PGOOD, ACOK, PS_BAD, FANFAIL, OT Warning & shutdown, AC Range
	Output Fault	48V OV, 48V UV, 48V OC, Vsb Fail, Fan1 Fail, Fan2 Fail
	48V Output	8 bit scaled output voltage
	48V	8 bit scaled output current
	Fan1 Monitor	8 bit scaled output current
	Fan2 Monitor	8 bit scaled output current

EMISSIONS AND IMMUNITY		
Characteristic	Description	Criteria
Harmonics	IEC/EN 61000-3-2	
Voltage Fluctuation and Flicker	IEC/EN 61000-3-3	
Emission Conducted	FCC 47 CFR Parts 15/CISPR 22/EN55022	Class A, 6dB margin
Emission Radiated	FCC 47 CFR Parts 15/CISPR 22/EN55022	Class A, 6dB margin
ESD	IEC/EN 61000-4-2	4kV contact discharge
		8kV operational air discharge
		15kV non-operational air discharge
Electromagnetic Field	IEC/EN 61000-4-3	
Electrical Fast Transients/Burst	IEC/EN 61000-4-4	
Surge	IEC/EN 61000-4-5	1kV/2kV, Performance Criteria B
RF Conducted Immunity	IEC/EN 61000-4-6	3 Vac, 80% AM, 1kHz, Performance Criteria A
Magnetic Immunity	IEC/EN 61000-4-8	3 A/m
Voltage dips, interruptions	IEC/EN 61000-4-11	

OUTPUT CONNECTOR AND SIGNAL SPECIFICATION

DC and Signal Connector: Tyco Part # 1-6450332-7, or FCI PowerBlade # 51732-028

P1	P2	P3	P4	P5	P6	x1	x2	x3	x4	x5	
V _{OUT}	V _{OUT}	V _{OUT}	V _{RTN}	V _{RTN}	V _{RTN}	AC_OK	P_GOOD	V _{SB} +OUT	V _{SB} RETURN	V _{SB} RETURN	D
						PS_ON	V _{SB} +OUT	V _{SB} +OUT	V _{SB} RETURN	V _{SB} RETURN	C
						I_SHARE	I ² C ADR0	I ² C ADR1	I ² C ADR2	PS_PRESENT	B
						PS_KILL	V _{OUT} SENSE+	V _{OUT} SENSE-	I ² C DATA	I ² C CLOCK	A

Pin Assignment	Signal Name	Description	High Level Low Level	I Max
P1, P2, P3	V _{OUT}	Main output voltage		
P4, P5, P6	V _{RTN}	Main output voltage, return		
A2	Sense +	V _{OUT} remote sense, positive node input, connected to the +ve load point		
A3	Sense -	V _{OUT} remote sense, negative node input, connected to the -ve load point		
C2, C3, D3	V _{SB}	Standby voltage output		
C4, C5, D4, D5	V _{SB} Return	Standby voltage, return, tied internally to Output Return		
B1	I_Share	Active load sharing bus	0 – 8V	-4 mA / +5 mA
D1	AC_OK	Input AC Voltage “OK” signal output (Internal pull up is 10kΩ to Vsb)	>2.4V (active, OK) <0.4V	+4 mA -2 mA
D2	P_Good	Power good signal output (Internal pull up is 10kΩ to Vsb)	>2.4V (active, Good) <0.4V	+4 mA -2 mA
A1	PS_Kill	Floating pin will turn off P/S (shorter pin, last-make and first-break contact for hot plugging). This signal overrides PS-On in disabling the Main Output	>2.1V (open, or Vsb) <0.7V (active, PS:On)	N/A
B5	PS_Present	Internally tied to Vsb return	0 V	
C1	PS_On	Internal 1K ohm pull-up to Vsb, (accepts open collector/drain drive), This signal to be pulled low to turn-on power supply	>2.1V (open, or Vsb) <0.7V (active, PS:On)	-4 mA -1 mA
A4	I ² C Data	I ² C serial data bus	Vsb	
A5	I ² C Clock	I ² C serial clock bus	Vsb	
B2	I ² C ADR0	Address input 0, internal pull-up to Vsb	>2.1V, <Vsb <0.8V	±1 mA
B3	I ² C ADR1	Address input 1, internal pull-up to Vsb	>2.1V, <Vsb <0.8V	±1 mA
B4	I ² C ADR2	Address input 2, internal pull-up to Vsb	>2.1V, <Vsb <0.8V	±1 mA

D1U MATING CONNECTORS

48V D1U mat- ing connector	Press Fit		Solder ²	
	Straight	Right Angle	Straight	Right Angle
MPS	N/A	Pending	N/A	36-0440026-0
FCI	51742-10602000CALF	51762-10602000CBLF	51742-10602000AALF	51762-10602000ABL
Tyco	TBD	TBD	TBD	TBD

² Solder connector recommended for board thickness of <0.090