



PCR317

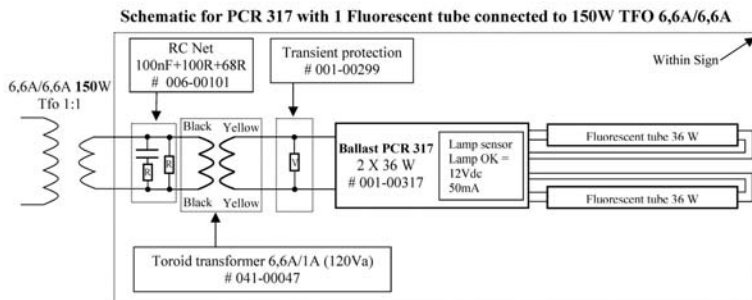
High Power factor State of the art dual Current Regulator for up to 6,6Amp in Series circuits in Airfield lighting systems

Patent Pending

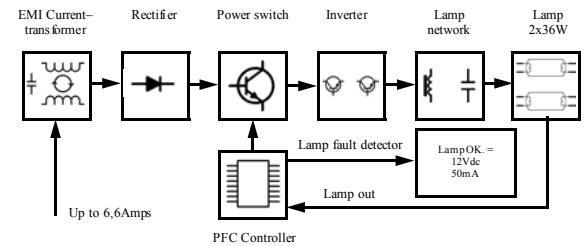


The PCR 317 Dual Current Regulator is designed for use in airfield lighting systems that use constant current up to 6,6Amp for power distribution to Information and Direction signs. The unit contains a complete lamp ballast for 2x36W fluorescent TL tubes. The PCR 317 presents a very high power factor seen by the Constant Current Regulator (CCR). This contributes to a good power-factor for the entire system and lower operating costs as result. The output 1 & 2 supply a 12Vdc, 50mA when the two TL tubes is Lighting.

Schematic



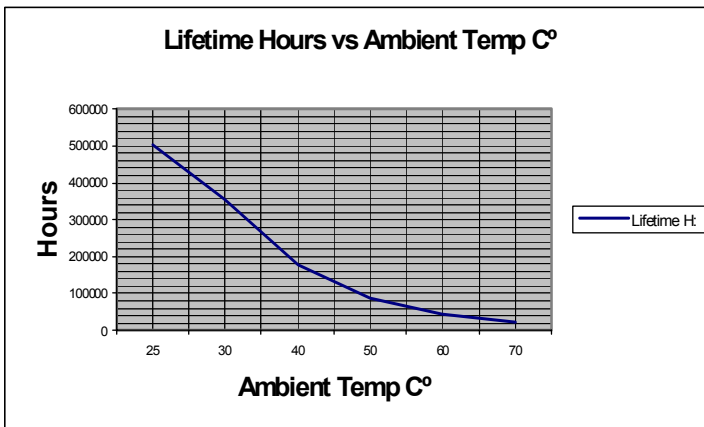
Block diagram PCR317 Current Regulator



Technical information

Temperature working range	- 20 to + 65 Celsius Centigrade
Relative humidity	98% RH
Mechanical dimension (mm)	Length 150 (175 overall) Width 83 Height 47
Life time	According to graph beside
Weight	900 grams
Casing	100 % plastic with compound
Fluorescent tubes	2x36W
Storage temperature range	- 20 to + 65 Celsius Centigrade

Lifetime Hours vs Ambient Temp C°



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High Power factor State of the art dual Current Regulator for up to 6,6Amp in Series circuits in Airfield lighting systems

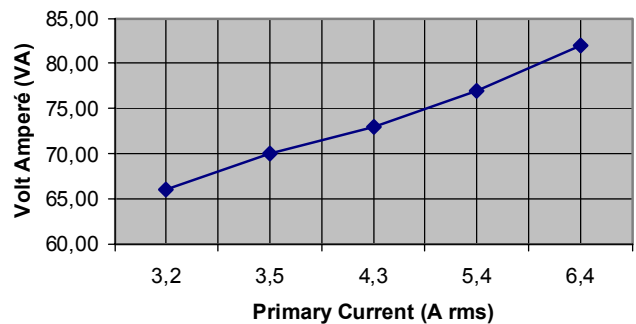
Patent Pending



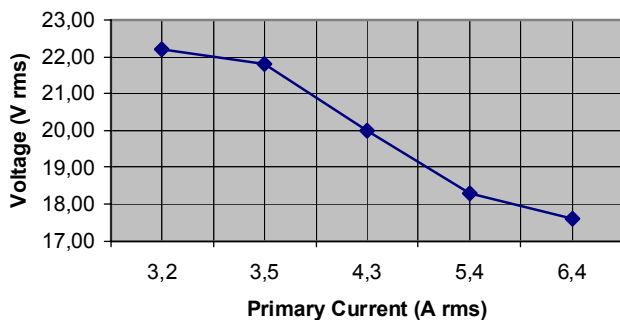
Note: The lowest input current to get 100 % light output is 3,2Amps @ 2,4mS on time out from the CCR.

If the CCR on time is longer can the input current be lower.

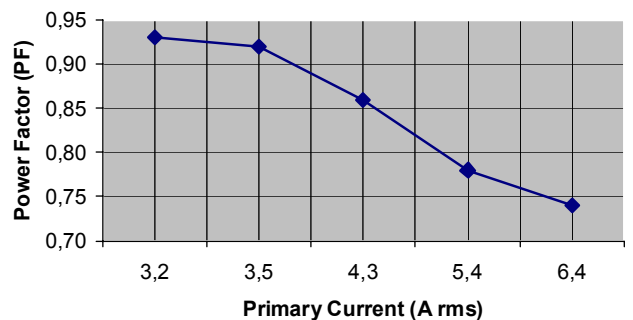
VA Consumption over Current



Primary Voltage Drop



Power Factor over Current



Advantages

- | | | |
|------------------------------|---|---|
| ✓ High efficiency | ✓ Low temperature rise | ✓ Long life time |
| ✓ High power factor | ✓ Over voltage and over current protected (100 Amps @ 30 sec) | ✓ Simple installation |
| ✓ Constant tube light output | ✓ Strikes a long life tube at least 20.000 times | ✓ Output light comparable to a magnetic ballast |
| ✓ Moisture-proof | ✓ Conforms to EMC standards | ✓ Fire resistance class ULV0 |

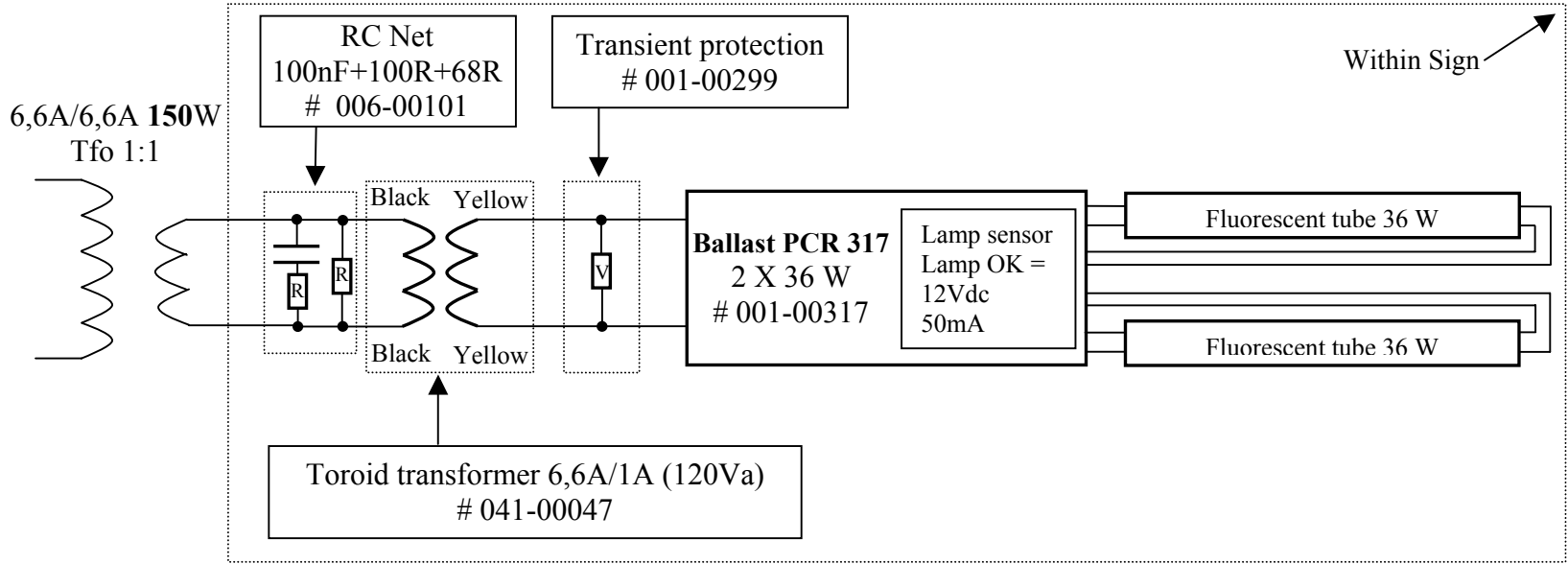
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Schematic for PCR 317 with 1 Fluorescent tube connected to 150W TFO 6,6A/6,6A



KEMET EMC-Lab
RFI Field Report No: 04031-01

05 feb 2004 10:22

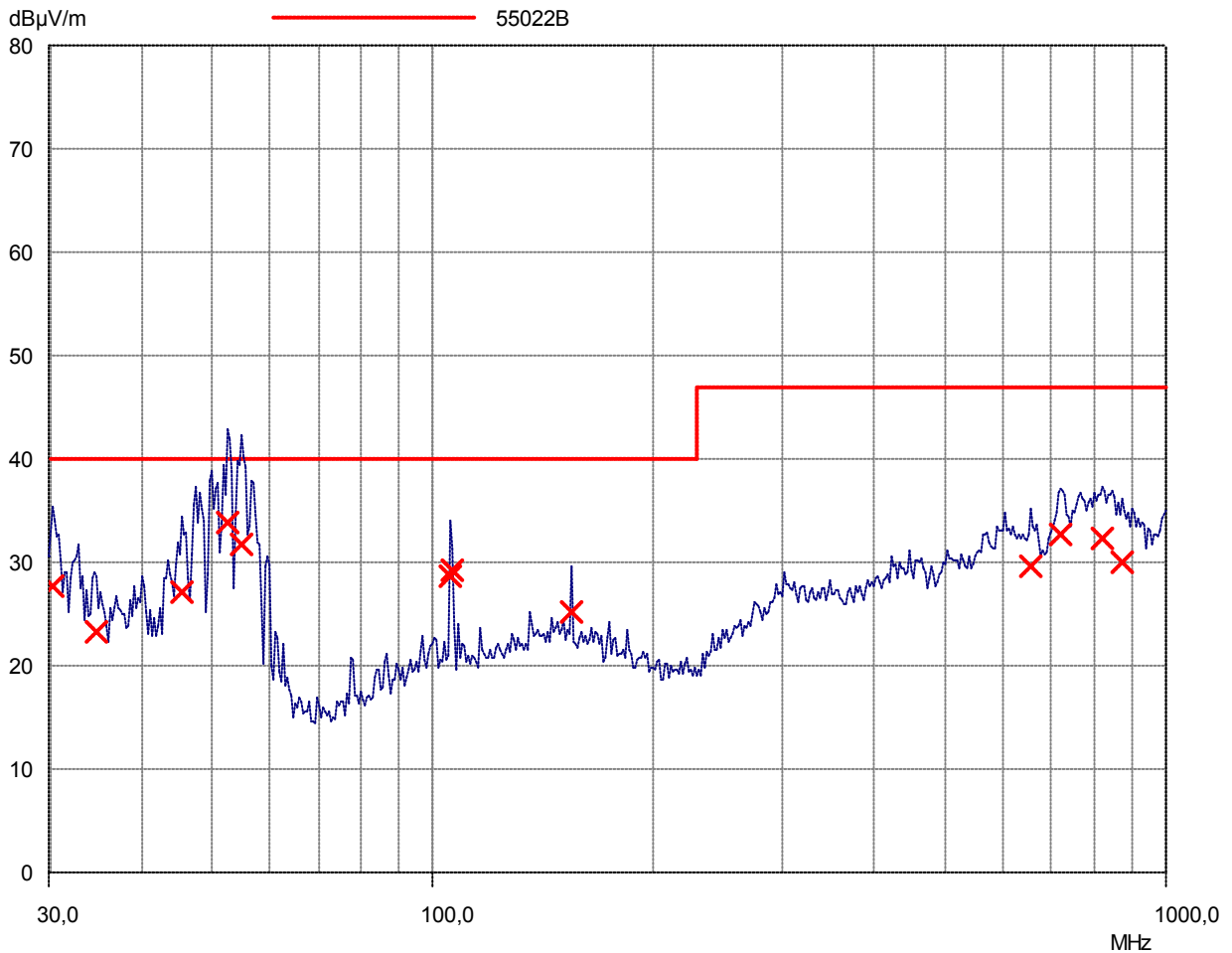
EUT: PCR2X36W
 Manuf: KEMET
 Op Cond: 230 Vac 50 Hz, input Ca100W, ut 2x 36 W
 Operator: Liebert Gustavsson
 Test Spec: EN 55022 B
 Comment: Filter according schematic V1.0
 Field measuring in screened room damped with ferrites. Dist. 3 m. Horizontal and vertical polarization.
 Result File: 04031-01.dat : Dectron, PCR 2X36W, Rad.

Scan Settings (1 Range)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
30MHz	1000MHz	0,1%	120kHz	PK	1msec	Auto	ON	60dB

Transducer	No.	Start	Stop	Name
1	1	30MHz	1000MHz	Cables_8
	21	30MHz	1000MHz	CBL6112A
	22	30MHz	1000MHz	Ant_Corr

Final Measurement: Detector: X QP
 Meas Time: 1sec
 Subranges: 25
 Acc Margin: 12 dB



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Final Measurement Results

Frequency MHz	QP Level dBµV/m	QP Limit dBµV/m	QP Delta dB
30,1503	27,66	40,00	12,34
34,6094	23,41	40,00	16,59
45,331	27,08	40,00	12,92
52,2437	33,84	40,00	6,16
54,7018	31,74	40,00	8,26
105,3796	28,71	40,00	11,29
106,2256	29,35	40,00	10,65
154,5284	25,28	40,00	14,72
656,3242	29,66	47,00	17,34
721,6985	32,70	47,00	14,30
822,6592	32,32	47,00	14,68
875,2513	30,13	47,00	16,87

* limit exceeded