
図面名 : 特性データ

得意先名 :

製品名 : RTW50WC-Series
RTW03-12RC/RTW15-3R5C/RTW28-1R8C

TDK-Lambda

TDK 株式会社

テクニカルセンター

〒 272-8558

千葉県市川市東大和田2-15-7

承認	確認	立案
2006年11月10日 清水	2006年11月10日 下蔵	2006年11月10日 外岡

DWG.No.

ADSC-0009-1

評価結果 EVALUATION RESULT	型名 MODEL	RTW50WC	日付 DATE	14-Jan-04
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項目 ITEM	起動電圧 START UP VOLTAGE	判定 JUDGE	O K
規格 SPEC.	評価標準(TDK STD.) AC 80.75 V max.		
結果 RESULT	負荷(LOAD): 100% - 20 / 71 3.3V 73.5 / 66.7 V 15V 74.4 / 67.3 V 28V 74.2 / 65.8 V		

項目 ITEM	最低レギュレーション BROWNOUT VOLTAGE	判定 JUDGE	O K
規格 SPEC.	評価標準(TDK STD.) AC 80.75 V max.		
結果 RESULT	負荷(LOAD): 100% - 20 / 71 3.3V 70.3 / 65.8 V 15V 70.4 / 65.9 V 28V 69.5 / 64.1 V		

項目 ITEM	過電流保護 OVER CURRENT PROTECTION	判定 JUDGE	O K
規格 SPEC.	製品仕様(SPEC.)、評価標準(TDK STD.) 過電流検出値 Over Current Setting 3.3V : 13.2 ~ 15.6 A 28V : 1.9 ~ 2.25 A 15V : 3.68 ~ 4.38 A		
結果 RESULT	周囲温度(Ta): -20 ~ 71 入力(Vin): AC 85V ~ AC265V 過電流検出値 Over Current Setting - 20 / 71 3.3V 14.9 A / 14.4 A 15V 4.00 A / 3.80 A 28V 1.95 A / 1.90 A		

評価結果 EVALUATION RESULT		型名 MODEL	RTW50WC	日付 DATE	14-Jan-04
項目 ITEM	力率 POWER FACTOR			判定 JUDGE	O K
規格 SPEC.	製品仕様(SPEC.)、評価標準(TDK STD.)				
	0.99 typ. AC100V				
	0.96 typ. AC240V				
結果 RESULT	負荷(LOAD): 100% () 50% 3.3V / 15V / 28V AC 85V 0.994(0.987) / 0.997(0.989) / 0.999(0.996) AC100V 0.991(0.982) / 0.995(0.988) / 0.998(0.991) AC132V 0.983(0.966) / 0.989(0.979) / 0.991(0.980) AC170V 0.966(0.946) / 0.979(0.958) / 0.977(0.956) AC240V 0.952(0.857) / 0.934(0.883) / 0.921(0.863) AC265V 0.882(0.730) / 0.901(0.766) / 0.888(0.747) 温度(Temp): 24 湿度(Humi): 56% RH				
項目 ITEM	定常入力電流 INPUT CURRENT			判定 JUDGE	-
規格 SPEC.	製品仕様(SPEC.)、評価標準(TDK STD.)				
	0.7 Arms max. AC100 - 120V				
	0.4 Arms max. AC200 - 240V				
結果 RESULT	負荷(LOAD): 100% () 0% 3.3V / 15V / 28V AC 85V 0.665(48m) / 0.766(44m) / 0.734(35m) A AC100V 0.559(41m) / 0.641(40m) / 0.614(32m) A AC132V 0.421(34m) / 0.481(34m) / 0.461(27m) A AC170V 0.330(31m) / 0.374(31m) / 0.360(26m) A AC200V 0.284(32m) / 0.322(32m) / 0.311(28m) A AC265V 0.232(31m) / 0.260(33m) / 0.254(27m) A 温度(Temp): 24 湿度(Humi): 56% RH				
項目 ITEM	入力電力 INPUT POWER			判定 JUDGE	O K
規格 SPEC.	規定なし NOT SPECIFIED				
結果 RESULT	負荷(LOAD): 100% () 0% 3.3V / 15V / 28V AC 85V 56.2(3.6) / 64.9(3.4) / 62.3(2.7) W AC100V 55.4(3.7) / 63.8(3.5) / 61.3(2.8) W AC132V 54.6(3.7) / 62.8(3.7) / 60.3(2.9) W AC170V 54.2(3.7) / 62.3(3.8) / 59.8(2.6) W AC200V 54.1(3.4) / 62.1(2.9) / 59.7(2.5) W AC265V 54.2(3.5) / 62.1(3.4) / 59.8(2.7) W 温度(Temp): 24 湿度(Humi): 56% RH				

評価結果 EVALUATION RESULT		型名 MODEL	RTW50WC	日付 DATE	14-Jan-04
項目 ITEM	負荷急変 TRANSIENT RESPONSE	判定 JUDGE	O K		
規格 SPEC.	製品仕様(SPEC.) 負荷急変 50%~100% OF RATED LOAD TRANSIENT TIME 50 μ S 電圧変動(TRANSIENT LEVEL) : \pm 4 % max. 回復時間(RECOVERY TIME) : 1 mS max.				
結果 RESULT	入力(Vin): AC100V 負荷(LOAD): 50%~100% 電圧変動(TRANSIENT LEVEL) / 回復時間(RECOVERY TIME) 71 3.3V 40mV(1.21%) / 0.04mS 15V 50mV(0.33%) / 0.04mS 28V 30mV(0.11%) / 0.04mS				
項目 ITEM	起動特性 TURN-ON CHARACTERISTIC	判定 JUDGE	O K		
規格 SPEC.	製品仕様(SPEC.)、評価標準(TDK STD.) 起動時間 START UP TIME 400 mS typ. 500 mS max. (AC100V) 200 mS typ. 300 mS max. (AC240V) 許容負荷容量(Acceptable Output Capacitor): 10,000 μ F				
結果 RESULT	立ち上がり波形に異常はない。(NO UNUSUAL WAVEFORM OF TURN-ON) ・起動時間 - 20 71 START-UP TIME AC 85V/AC100V/AC240V/AC265V AC 85V/AC100V/AC240V/AC265V 3.3V 524 / 470 / 263 / 247 mS 396 / 349 / 134 / 113 mS 15V 514 / 466 / 260 / 255 mS 397 / 349 / 137 / 119 mS 28V 511 / 462 / 261 / 256 mS 400 / 354 / 143 / 125 mS 容量性負荷起動特性異常なし。(Capcitiv Load: 12,000 μ F / 100,000 μ F)				
項目 ITEM	保持特性 TURN-OFF CHARACTERISTIC	判定 JUDGE	O K		
規格 SPEC.	製品仕様(SPEC.)、評価標準(TDK STD.) 保持時間 HOLD UP TIME 3.3V : 55 mS typ. 40 mS max. 28V : 35 mS typ. 25 mS max. 15V : 30 mS typ. 20 mS max.				
結果 RESULT	立ち下がり波形に異常はない。(NO UNUSUAL WAVEFORM OF TURN-OFF) ・保持時間 - 20 71 HOLD-UP TIME AC 85V/AC100V/AC240V/AC265V AC 85V/AC100V/AC240V/AC265V 3.3V 49 / 49 / 50 / 50 mS 56 / 56 / 57 / 57 mS 15V 26 / 26 / 27 / 27 mS 31 / 31 / 31 / 31 mS 28V 35 / 35 / 39 / 39 mS 35 / 35 / 40 / 40 mS				

評価結果 EVALUATION RESULT	型名 MODEL	RTW50WC	日付 DATE	14-Jan-04
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項目 ITEM	突入電流 INRUSH CURRENT	判定 JUDGE	O K
規格 SPEC.	製品仕様(SPEC.) 14 A typ. AC100V 100%LOAD 25 コールドスタート COLD START 28 A typ. AC200V 100%LOAD 25 コールドスタート COLD START		
結果 RESULT	負荷(LOAD):100% AC100V / AC120V / AC200V / AC240V 3.3V 10.2 / (12.2) / 21.7 / (26.0) A 15V 10.5 / (12.6) / 23.0 / (27.6) A 28V 10.2 / (12.2) / 22.6 / (27.1) A ()内は1.2倍で換算値 温度(Temp):25 湿度(Humi):64%RH		

項目 ITEM	漏洩電流 LEAKAGE CURRENT	判定 JUDGE	O K
規格 SPEC.	製品仕様(SPEC.)、評価標準(TDK STD.) 0.28 mA typ. 0.45 mA max. AC100V 60Hz 電取(片切り) In conformance to dentori 0.38 mA typ. 0.6 mA max. AC240V 60Hz IEC950,UL1950(動作時) In conformance to IEC950 and UL1950		
結果 RESULT	負荷(LOAD):100% 60Hz ()内片切り NON OPERATING ()OFF AC100V / AC120V / AC200V / AC240V 3.3V 0.15(0.29) / 0.18(0.34) / 0.32(0.60) / 0.38(0.72) mA 15V 0.15(0.29) / 0.18(0.36) / 0.33(0.62) / 0.41(0.72) mA 28V 0.16(0.30) / 0.18(0.36) / 0.33(0.62) / 0.41(0.76) mA 温度(Temp):25 湿度(Humi):60%RH		

項目 ITEM	絶縁抵抗 INSULATION RESISTANCE	判定 JUDGE	O K
規格 SPEC.	製品仕様(SPEC.) 入力 - 出力間 (INPUT to OUTPUT) 100 M DC500V 入力 - FG間 (INPUT to GROUND) 100 M DC500V 出力 - FG間 (OUTPUT to GROUND) 100 M DC500V 入力 - ±RC (INPUT to ±RC) 100 M DC500V		
結果 RESULT	DC500V 入力 - 出力間 / 入力 - FG間 / 出力 - FG間 / 入力 - ±RC INPUT-OUTPUT / INPUT-GROUND / OUTPUT-GROUND / INPUT-RC 3.3V 250,000 / 8,000 / 250,000 / 23,000 M 15V 160,000 / 4,000 / 310,000 / 250,000 M 28V 250,000 / 18,000 / 7,000 / 35,000 M 温度(Temp):25 湿度(Humi):65%RH		

評価結果 EVALUATION RESULT	型名 MODEL	RTW50WC	日付 DATE	14-Jan-04
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項目 ITEM	耐電圧 WITHSTAND VOLTAGE(HI-POT TEST)	判定 JUDGE	O K
規格 SPEC.	1分間印加 1 min. 製品仕様(SPEC.)、評価標準(TDK STD.) カット外電流(Cutout current)		
	入力 - 出力間 (INPUT to OUTPUT) AC 3.0KV 10mA		
	入力 - FG間 (INPUT to GROUND) AC 2.0KV 10mA		
	出力 - FG間 (OUTPUT to GROUND) AC 500V 20mA		
結果 RESULT	入力 - 出力間 / 入力 - FG間 / 出力 - FG間 INPUT-OUTPUT / INPUT-GROUND / OUTPUT-GROUND 3.3V 5.0(5.4) / 4.2(4.6) / 11.0(12.4) mA 15V 5.0(5.3) / 4.0(4.5) / 11.0(13.0) mA 28V 5.0(5.3) / 4.1(4.6) / 11.08(13.2) mA 試験時のリーク電流(LEAK CURRENT): ()内1.2倍電圧印加時 × 1.2VOLTAGE 温度(Temp): 25 湿度(Humi): 65%RH		

項目 ITEM	重量 WEIGHT	判定 JUDGE	O K
規格 SPEC.	290 g max.		
結果 RESULT	3.3V : 260 g 15V : 260 g 28V : 260 g		

項目 ITEM	瞬停 SHORT INTERRUPTIONS	判定 JUDGE	O K
規格 SPEC.	評価標準(TDK STD.) 10mS ~ 50Sの瞬停において、停電時及び復電時に出力電圧の立ち上がり、立ち下がり 波形に異常のないこと。 NO UNUSUAL WAVEFORM OF OUTPUT VOLTAGE FOR 10mS ~ 50SECONDS SHORT INTERRUPTIONS		
結果 RESULT	入力(Vin): AC 100V / AC 240V 負荷(Load): 100% 5mS ~ 50Sの瞬停において、瞬停及び復電時に異常はない。 UNUSUAL OUTPUT VOLTAGE WAVEFORM WHEN POWER SUPPLY IS TURNED ON AND TURNED OFF. 温度(Temp): 25 湿度(Humi): 65%RH		

評価結果 EVALUATION RESULT	型名 MODEL	RTW50WC	日付 DATE	14-Jan-04
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項目 ITEM	リモートコントロール REMOTE ON-OFF CONTROL	判定 JUDGE	O K																
規格 SPEC.	<p style="text-align: center;">製品仕様(SPEC.)、評価標準(TDK STD.)</p> リモートON-OFFスイッチをYにすることにより、電源外部より出力電圧のON/OFFができる。 THE OUTPUT CAN BE TURNED ON/OFF BY REMOTE CONTROL + RC - RC端子間---SW ON(Hレベル):外部電圧印加 4.5~12.5V---出力電圧ON ---SW OFF(Lレベル):ショート又は端子間電圧0~0.8V---出力電圧OFF BETWEEN +RC AND -RC TERMINALS---SW ON(H-LEVEL): VOLTAGE LEVEL 4.5~12.5V---OUTPUT VOLTAGE ON ---SW OFF(L-LEVEL):SHORT OR VOLTAGE LEVEL 0~0.8V---OUTPUT VOLTAGE OFF																		
結果 RESULT	立ち上がり、立ち下がり波形に異常はない。 NO UNUSUAL WAVE OF TURN-ON,TURN-OFF. <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td style="text-align: center;">ON</td> <td style="text-align: center;">/</td> <td style="text-align: center;">OFF</td> </tr> <tr> <td style="text-align: center;">3.3V</td> <td style="text-align: center;">1.72</td> <td style="text-align: center;">/</td> <td style="text-align: center;">1.43 V</td> </tr> <tr> <td style="text-align: center;">15V</td> <td style="text-align: center;">1.74</td> <td style="text-align: center;">/</td> <td style="text-align: center;">1.49 V</td> </tr> <tr> <td style="text-align: center;">28V</td> <td style="text-align: center;">1.86</td> <td style="text-align: center;">/</td> <td style="text-align: center;">1.46 V</td> </tr> </table> <p style="text-align: right;">温度(Temp): 24 湿度(Humi): 56%RH</p>				ON	/	OFF	3.3V	1.72	/	1.43 V	15V	1.74	/	1.49 V	28V	1.86	/	1.46 V
	ON	/	OFF																
3.3V	1.72	/	1.43 V																
15V	1.74	/	1.49 V																
28V	1.86	/	1.46 V																

項目 ITEM	リモートセンス REMOTE SENSING	判定 JUDGE	O K																																																																																											
規格 SPEC.	<p style="text-align: center;">製品仕様(SPEC.)、評価標準(TDK STD.)</p> 出力端子と負荷端子間のラインドロップが片側で下記値まで補償出来る。 THE LINE DROP CAN BE COMPENSATED BY THE REMOTE SENSING TO IMPROVE THE LOAD SUPPLY 3.3V:0.15V max. 12~48V:0.4V max.																																																																																													
結果 RESULT	入力(Vin):AC100V <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td style="text-align: center;">LOAD</td> <td style="text-align: center;">0%</td> <td style="text-align: center;">/</td> <td style="text-align: center;">10%</td> <td style="text-align: center;">/</td> <td style="text-align: center;">25%</td> <td style="text-align: center;">/</td> <td style="text-align: center;">50%</td> <td style="text-align: center;">/</td> <td style="text-align: center;">75%</td> <td style="text-align: center;">/</td> <td style="text-align: center;">100%</td> </tr> <tr> <td style="text-align: center;">3.3V</td> <td style="text-align: center;">OUTPUT</td> <td style="text-align: center;">3.311</td> <td style="text-align: center;">/</td> <td style="text-align: center;">3.337</td> <td style="text-align: center;">/</td> <td style="text-align: center;">3.381</td> <td style="text-align: center;">/</td> <td style="text-align: center;">3.454</td> <td style="text-align: center;">/</td> <td style="text-align: center;">3.529</td> <td style="text-align: center;">/</td> <td style="text-align: center;">3.608 V</td> </tr> <tr> <td></td> <td style="text-align: center;">LOAD</td> <td style="text-align: center;">3.311</td> <td style="text-align: center;">/</td> <td style="text-align: center;">3.307</td> <td style="text-align: center;">/</td> <td style="text-align: center;">3.306</td> <td style="text-align: center;">/</td> <td style="text-align: center;">3.305</td> <td style="text-align: center;">/</td> <td style="text-align: center;">3.304</td> <td style="text-align: center;">/</td> <td style="text-align: center;">3.300 V</td> </tr> <tr> <td style="text-align: center;">15V</td> <td style="text-align: center;">OUTPUT</td> <td style="text-align: center;">15.04</td> <td style="text-align: center;">/</td> <td style="text-align: center;">15.11</td> <td style="text-align: center;">/</td> <td style="text-align: center;">15.23</td> <td style="text-align: center;">/</td> <td style="text-align: center;">15.43</td> <td style="text-align: center;">/</td> <td style="text-align: center;">15.63</td> <td style="text-align: center;">/</td> <td style="text-align: center;">15.83 V</td> </tr> <tr> <td></td> <td style="text-align: center;">LOAD</td> <td style="text-align: center;">15.04</td> <td style="text-align: center;">/</td> <td style="text-align: center;">15.03</td> <td style="text-align: center;">/</td> <td style="text-align: center;">15.03</td> <td style="text-align: center;">/</td> <td style="text-align: center;">15.02</td> <td style="text-align: center;">/</td> <td style="text-align: center;">15.02</td> <td style="text-align: center;">/</td> <td style="text-align: center;">15.02 V</td> </tr> <tr> <td style="text-align: center;">28V</td> <td style="text-align: center;">OUTPUT</td> <td style="text-align: center;">28.07</td> <td style="text-align: center;">/</td> <td style="text-align: center;">28.14</td> <td style="text-align: center;">/</td> <td style="text-align: center;">28.25</td> <td style="text-align: center;">/</td> <td style="text-align: center;">28.44</td> <td style="text-align: center;">/</td> <td style="text-align: center;">28.64</td> <td style="text-align: center;">/</td> <td style="text-align: center;">28.84 V</td> </tr> <tr> <td></td> <td style="text-align: center;">LOAD</td> <td style="text-align: center;">28.07</td> <td style="text-align: center;">/</td> <td style="text-align: center;">28.05</td> <td style="text-align: center;">/</td> <td style="text-align: center;">28.05</td> <td style="text-align: center;">/</td> <td style="text-align: center;">28.05</td> <td style="text-align: center;">/</td> <td style="text-align: center;">28.04</td> <td style="text-align: center;">/</td> <td style="text-align: center;">28.04 V</td> </tr> </table> <p style="text-align: right;">温度(Temp): 25 湿度(Humi): 64%RH</p>				LOAD	0%	/	10%	/	25%	/	50%	/	75%	/	100%	3.3V	OUTPUT	3.311	/	3.337	/	3.381	/	3.454	/	3.529	/	3.608 V		LOAD	3.311	/	3.307	/	3.306	/	3.305	/	3.304	/	3.300 V	15V	OUTPUT	15.04	/	15.11	/	15.23	/	15.43	/	15.63	/	15.83 V		LOAD	15.04	/	15.03	/	15.03	/	15.02	/	15.02	/	15.02 V	28V	OUTPUT	28.07	/	28.14	/	28.25	/	28.44	/	28.64	/	28.84 V		LOAD	28.07	/	28.05	/	28.05	/	28.05	/	28.04	/	28.04 V
	LOAD	0%	/	10%	/	25%	/	50%	/	75%	/	100%																																																																																		
3.3V	OUTPUT	3.311	/	3.337	/	3.381	/	3.454	/	3.529	/	3.608 V																																																																																		
	LOAD	3.311	/	3.307	/	3.306	/	3.305	/	3.304	/	3.300 V																																																																																		
15V	OUTPUT	15.04	/	15.11	/	15.23	/	15.43	/	15.63	/	15.83 V																																																																																		
	LOAD	15.04	/	15.03	/	15.03	/	15.02	/	15.02	/	15.02 V																																																																																		
28V	OUTPUT	28.07	/	28.14	/	28.25	/	28.44	/	28.64	/	28.84 V																																																																																		
	LOAD	28.07	/	28.05	/	28.05	/	28.05	/	28.04	/	28.04 V																																																																																		

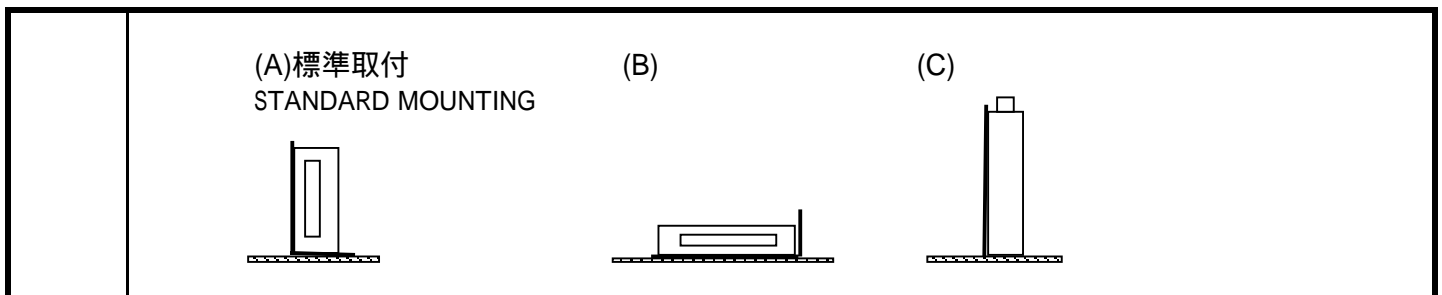
項目 ITEM	バーストイミュニティ FAST TRANSIENT/BURST IMMUNITY	判定 JUDGE	O K
規格 SPEC.	<p style="text-align: center;">製品仕様(SPEC.)</p> EN61000-4-4 Level 3 動作異常のないこと。 NORMAL OPERATION		
結果 RESULT	EN61000-4-4 Level 3 入力電圧(Vin):AC100V/AC200V 負荷(LOAD):100% (RESISTOR LOAD) 入力 - FG間に±2KV印加し、誤動作、部品破損等の異常はない。 APPLIED TERMINAL : INPUT TO FG NOISE LEVEL : ±2KV OPERATION IS NORMA, NO DAMAGE. <p style="text-align: right;">温度(Temp): 24 湿度(Humi): 52%RH</p>		

評価結果 EVALUATION RESULT		型名 MODEL	RTW50WC	日付 DATE	14-Jan-04
項目 ITEM	静電気 ELECTROSTATIC DISCHARGE	判定 JUDGE	O K		
規格 SPEC.	製品仕様(SPEC.) EN61000 - 4 - 2 Level 4 動作異常のないこと。 NORMAL OPERATING				
結果 RESULT	EN61000 - 4 - 2 Level 4 入力電圧(Vin):AC100V/AC200V 負荷(LOAD):100% (RESISTOR LOAD) <接触放電> ±8KV 各10回 誤動作、部品破損等の異常はない。 CONTACT DISCHARGE : APPLIED TERMINAL FRAME TO FG INPUT TERMINAL <気中放電> ±15KV 各10回 誤動作、部品破損等の異常はない。 AIR DISCHARGE : APPLIED TERMINAL FRAME TO FG INPUT TERMINAL 誤動作、部品破損等の異常はない。 OPERATION IS NORMALLY AND NO DAMAGE. 温度(Temp): 24 湿度(Humi): 52% RH				
項目 ITEM	雷サージ LIGHTENING SURGE	判定 JUDGE	O K		
規格 SPEC.	製品仕様(SPEC.)、評価標準(TDK STD.) EN61000 - 4 - 5 Level 4 部品破損のないこと。 NO DAMAGE				
結果 RESULT	EN61000 - 4 - 5 Level 4 入力(Vin):AC200V 負荷(LOAD):100%(RESISTOR LOAD) 入力 - 入力間(LINE TO LINE) : ±2KV 各5回印加(5 TIMES APPLIED FOR EACH) 入力 - FG間(LINE TO EARTH) : ±4KV 各5回印加(5 TIMES APPLIED FOR EACH) 誤動作や部品破損等の異常はない。 OPERATION IS NORMALLY AND NO DAMAGE. 温度(Temp): 25 湿度(Humi): 42% RH				
項目 ITEM	振動 VIBRATION	判定 JUDGE	O K		
規格 SPEC.	製品仕様(SPEC.) 5 ~ 10Hz:全振幅 AMPLITUDE 10mm 10 ~ 200Hz:加速度 ACCELERATION 19.6m / S ² (2G) スイープタイム10分 3方向各1時間(非動作時) SWEEP TIME 10 MINUTES. 1HOUR TO EACH AXIS (WHEN NOT OPERATING)				
結果 RESULT	5 ~ 10Hz:全振幅 AMPLITUDE 10mm 10 ~ 200Hz:加速度 ACCELERATION 21.56m / S ² (2.2G) スイープタイム10分 3方向各1時間(非動作時) SWEEP TIME 10 MINUTES. 1HOUR TO EACH AXIS (WHEN NOT OPERATING) 異常なし。NO DAMAGE.				

評価結果 EVALUATION RESULT	型名 MODEL	RTW50WC	日付 DATE	14-Jan-04
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項目 ITEM	衝撃 SHOCK	判定 JUDGE	
規格 SPEC.	製品仕様(SPEC.)、評価標準(TDK STD.)		
	加速度 ACCELERATION : A設置	392 m / S ² (40 G)	正弦半波 1/2 SINE PULSE
	: B,C設置	588 m / S ² (60 G)	正弦半波 1/2 SINE PULSE
	衝撃時間 PULSE DURATION 11 ± 5 mS		
	3方向各3回(非動作時) 3 SHOCKS EACH AXIS (WHEN NOT OPERATING)		
結果 RESULT	加速度 ACCELERATION : A設置 392 m / S ² (40 G) 正弦半波 1/2 SINE PULSE		
	: B,C設置 588 m / S ² (60 G) 正弦半波 1/2 SINE PULSE		
	衝撃時間 PULSE DURATION 11 ± 5 mS		
	3方向各3回(非動作時) 3 SHOCKS EACH AXIS (WHEN NOT OPERATING)		
	異常なし。NO DAMAGE.		

項目 ITEM	電解コンデンサ算出寿命 EXPECTED LIFE OF ELECTROLYTIC CAPACITOR	判定 JUDGE	
規格 SPEC.	製品仕様(SPEC.)、評価標準(TDK STD.)		
	周囲温度(Ta): 40	標準取付時 STANDARD MOUNTING	
	61,320 時間以上 (Hrs min.)		
結果 RESULT	周囲温度(Ta): 40 入力(Vin): AC100V/AC240V 負荷(LOAD): 100%		
	最小値 MIN. VALUE 実力値 ACTUAL LIFE		
	MOUNTING A		MOUNTING B
	3.3 V 43,560/ 57,870 Hrs	34,890/ 50,030 Hrs	
	(93,469/ 93,231 Hrs	メーカー見解による電解コンデンサ算出寿命値)	
	15 V 45,720/ 77,970 Hrs	40,640/ 74,280 Hrs	
	(73,623 Hrs	メーカー見解による電解コンデンサ算出寿命値)	
	28 V 47,010/ 80,160 Hrs	42,070/ 79,060 Hrs	
	(75,684 Hrs	メーカー見解による電解コンデンサ算出寿命値)	



DATE: 03/11/4

TESTED BY:

(V)

3

2

1

10

20

(A)

AC85V
AC100V
AC120V
AC132V

AC170V
AC200V
AC240V
AC265V

NOTE:

Ta=-20°C

(V)

3

2

1

10

20

(A)

AC85V
AC100V
AC120V
AC132V

AC170V
AC200V
AC240V
AC265V

NOTE:

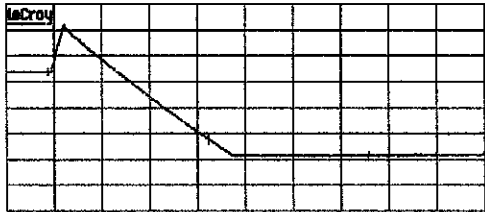
Ta=71°C

MODEL
RTW03-12RC

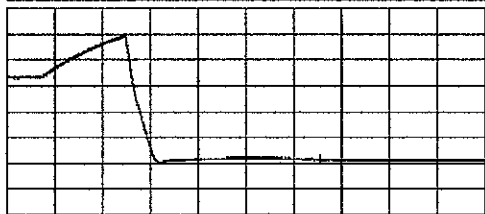
過電圧保護 OVERVOLTAGE PROTECTION	SOURCE	LOAD	TEMP.	
	AC100V	10% / 100%	25°C	

31-Oct-83
 16:34:42

B:M1
 2 ms
 1.00 V



B:M2
 1 ms
 1.00 V



1 ms B/L
 1 .1 V DC
 2 20 mV AC
 3 10 mV DC
 4 50 mV DC

1 DC 3.66 V

25 MS/s

STOPPED

+SENSE OPEN

UPPER WAVE FORM

LOAD=10% : 5.20V

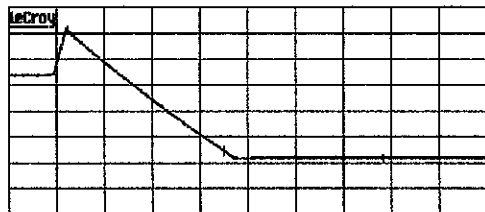
LOWER WAVE FORM

LOAD=100% : 4.97V

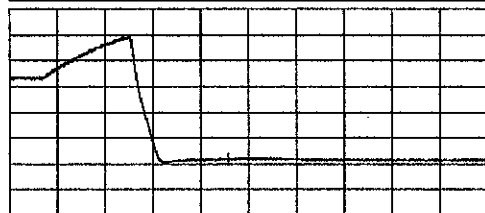
	SOURCE	LOAD	TEMP.	
	AC100V	10% / 100%	25°C	

31-Oct-83
 16:39:32

B:M1
 2 ms
 1.00 V



B:M2
 1 ms
 1.00 V



1 ms B/L
 1 .1 V DC
 2 20 mV AC
 3 10 mV DC
 4 50 mV DC

1 DC 3.66 V

25 MS/s

STOPPED

-SENSE OPEN

UPPER WAVE FORM

LOAD=10% : 5.20V

LOWER WAVE FORM

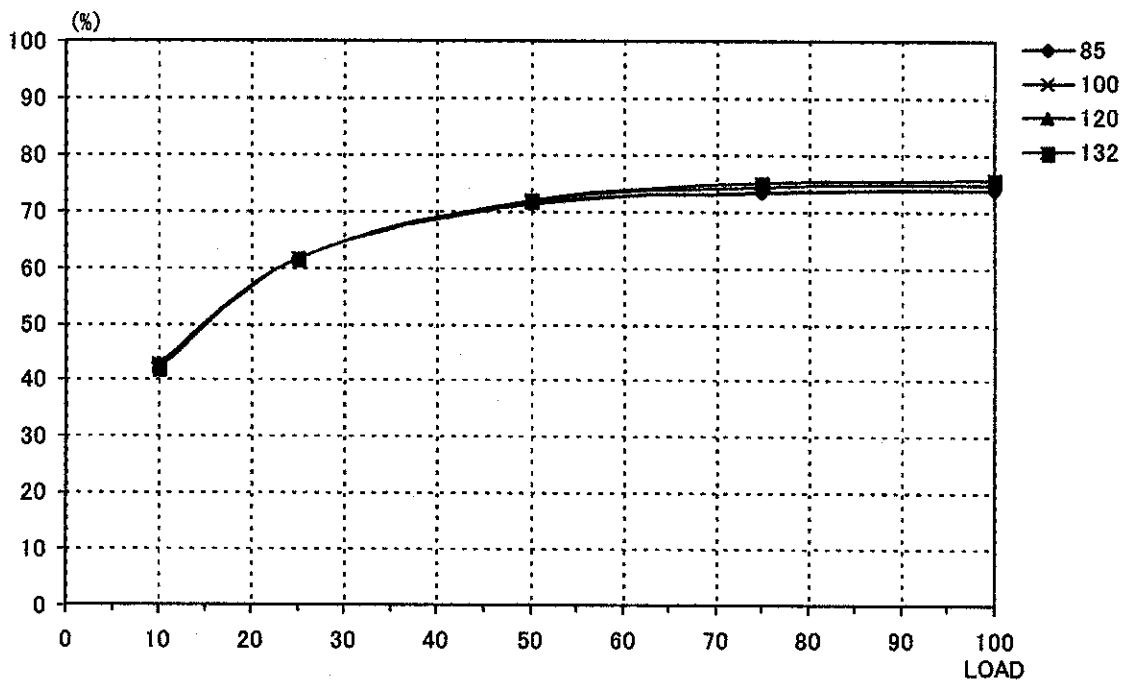
LOAD=100% : 4.97V

SER. NO	OUT PUT	DATE	TESTED BY	
		03/10/31	T.OKANO	

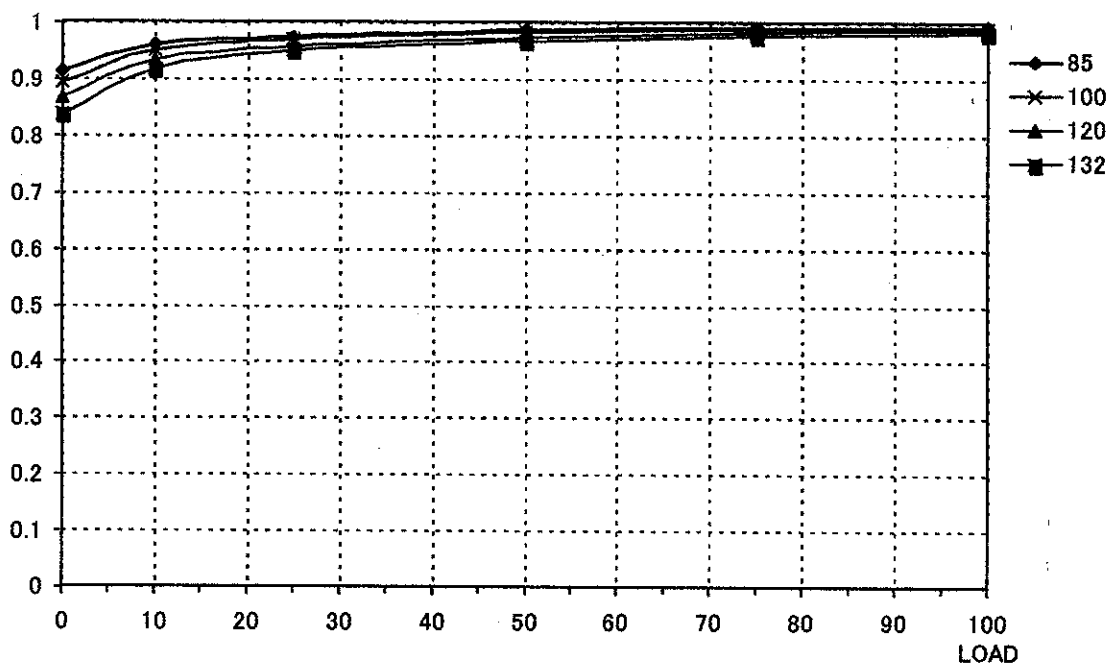
MODEL
RTW03-12RC

No: 030601

効 率 EFFICIENCY	SOURCE	LOAD	TEMP.	
	AC85V~AC132V	10~100%	25°C	



力 率 POWER FACTOR	SOURCE	LOAD	TEMP.	
	AC85V~AC132V	0~100%	25°C	



SER. NO.	OUT PUT			DATE	TESTED BY	
34800S02	3.3 V	12.5 A	41.25 W	03/12/10	T. OKANO	

MODEL
RTW03-12RC

No 030601

効 率
EFFICIENCY

SOURCE
AC170V~AC265V

LOAD
10~100%

TEMP.
25°C

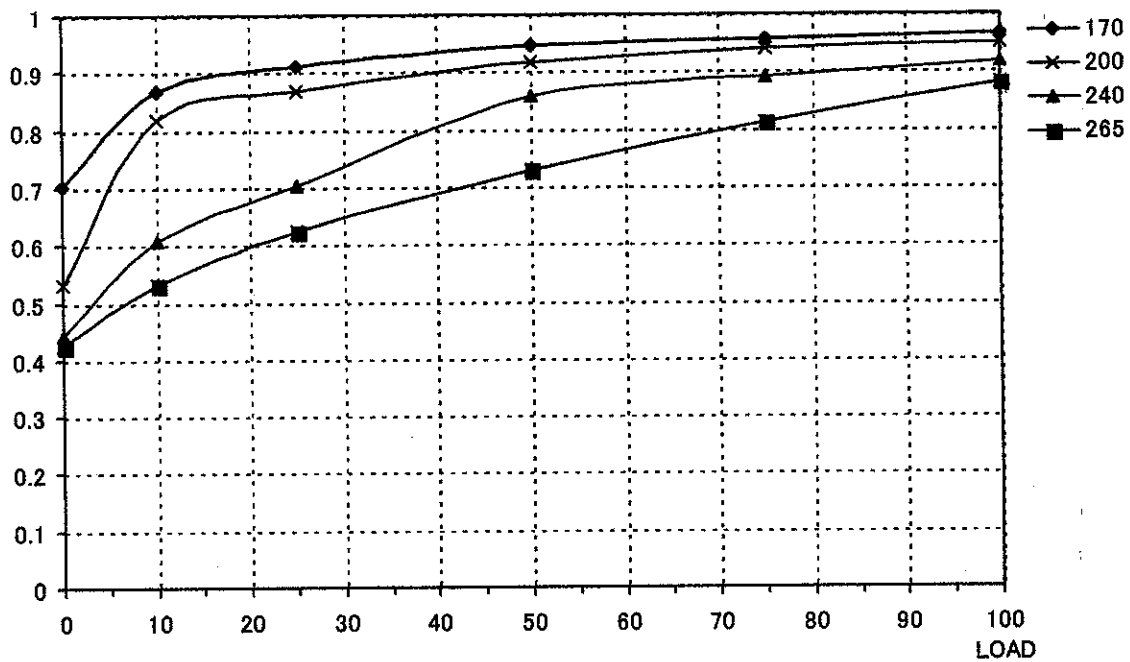


力 率
POWER FACTOR

SOURCE
AC170V~AC265V

LOAD
0~100%

TEMP.
25°C



SER. NO.	OUT PUT			DATE	TESTED BY
34800S02	3.3 V	12.5 A	41.25 W	03/12/10	T. OKANO

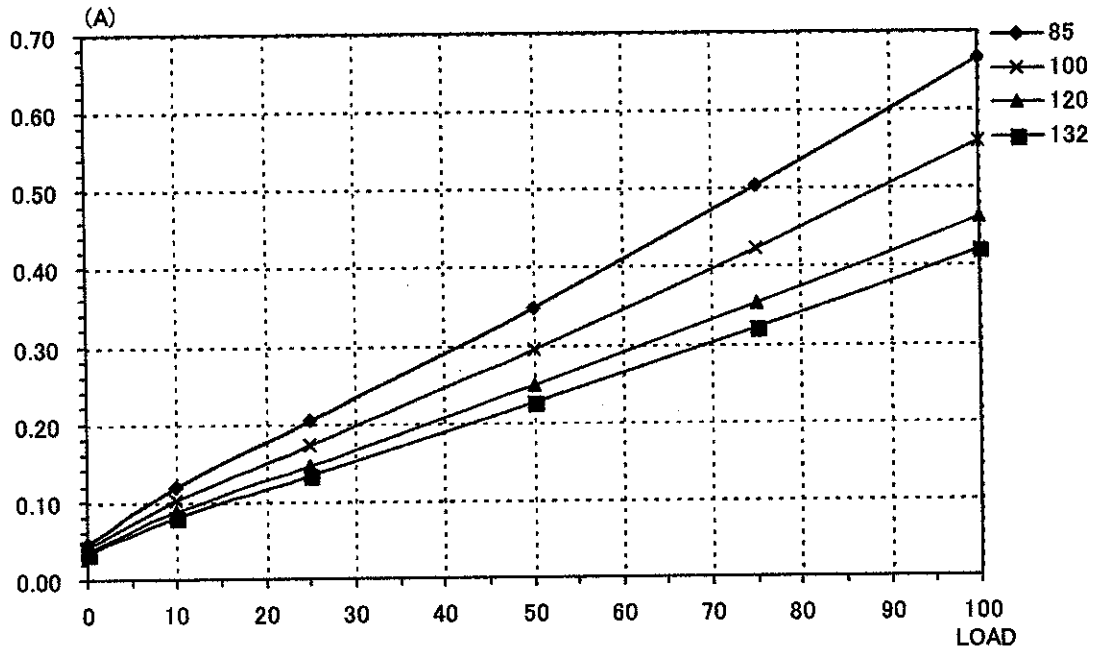
MODEL

RTW03-12RC

No: 030601

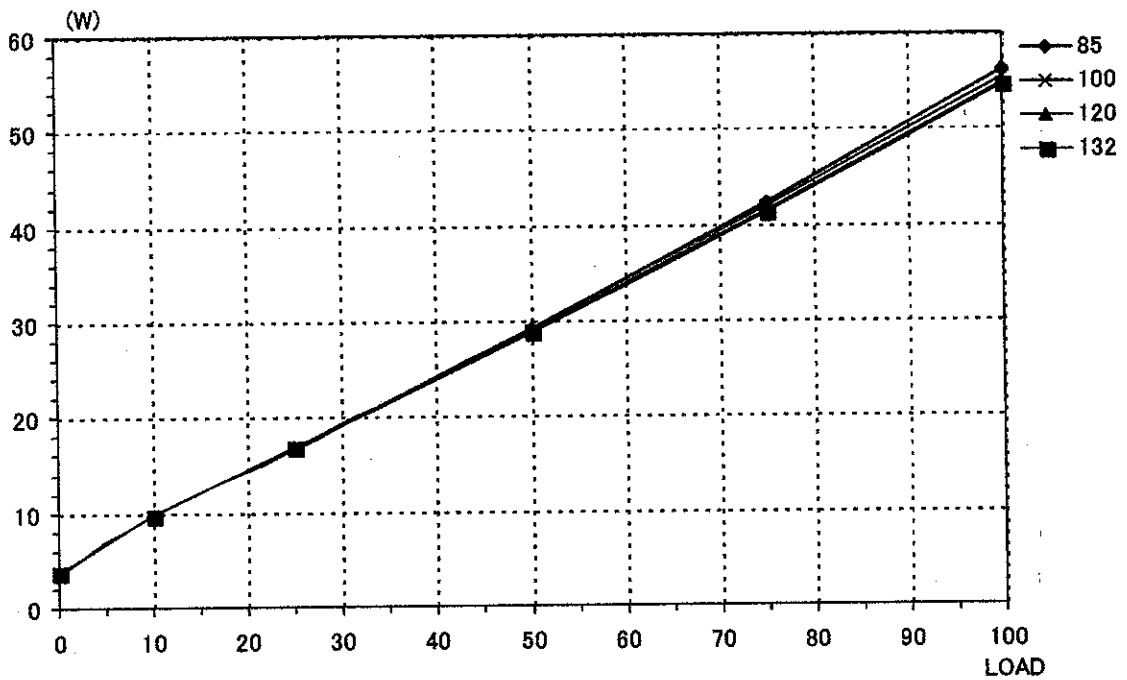
定常入力電流
INPUT CURRENT

SOURCE	LOAD	TEMP.
AC85V~AC132V	0~100%	25°C



入力電力
INPUT POWER

SOURCE	LOAD	TEMP.
AC85V~AC132V	0~100%	25°C



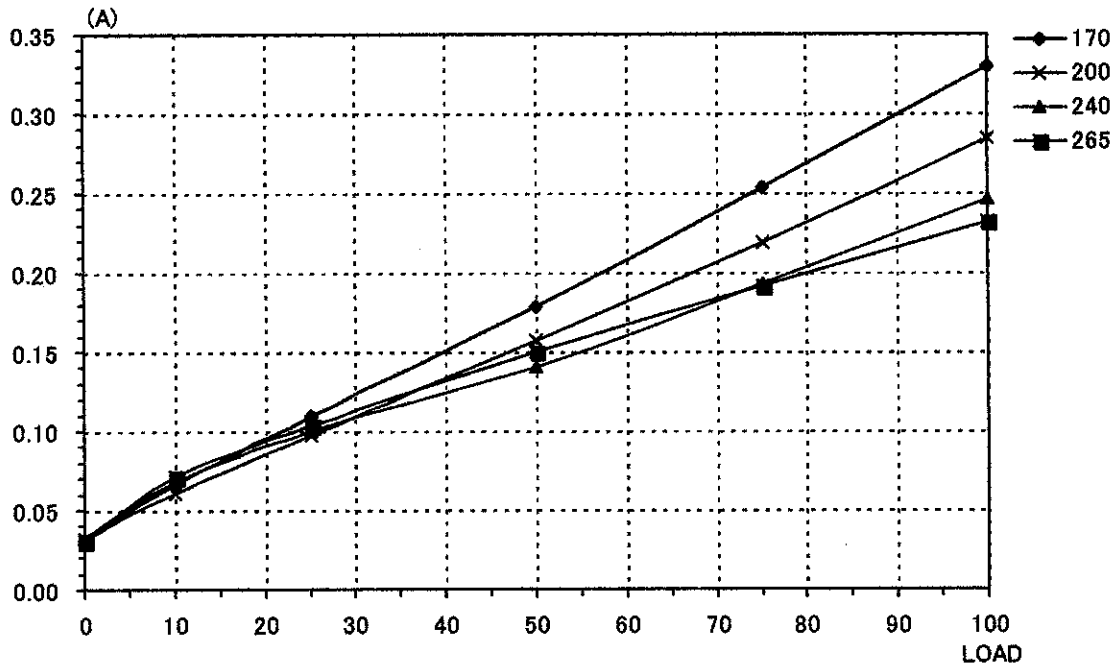
SER. NO.	OUT PUT			DATE	TESTED BY
34800S02	3.3 V	12.5 A	41.25 W	03/12/10	T. OKANO

MODEL
RTW03-12RC

No 030601

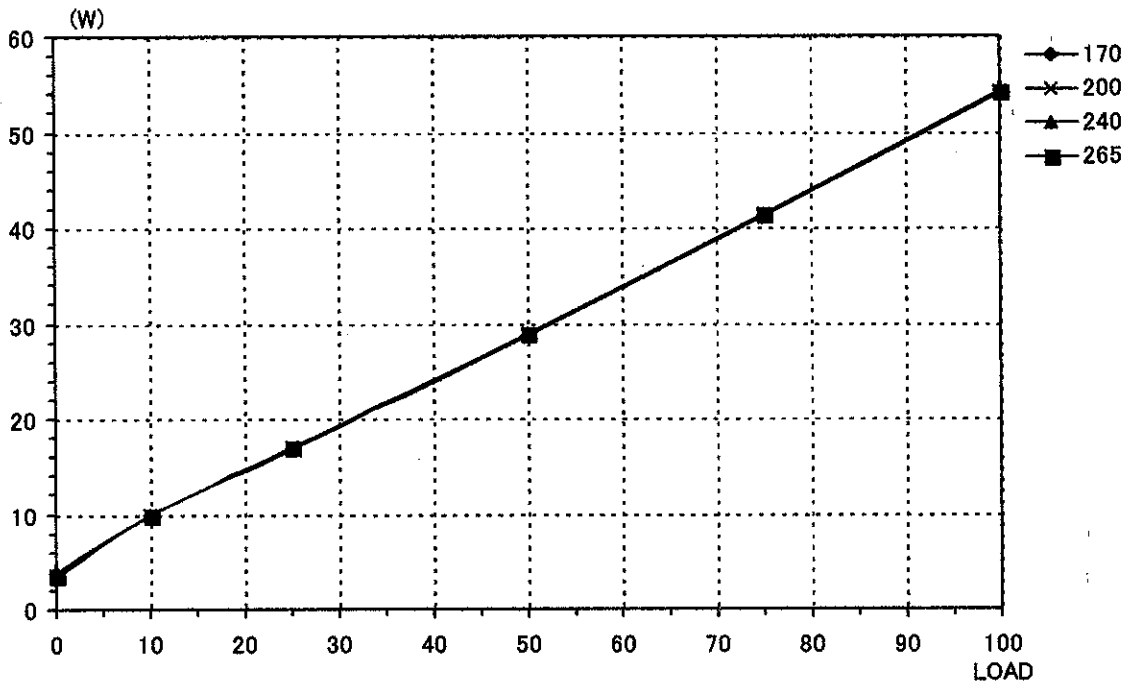
定常入力電流
INPUT CURRENT

SOURCE	LOAD	TEMP.
AC170V~AC265V	10~100%	25°C



入力電力
INPUT POWER

SOURCE	LOAD	TEMP.
AC170V~AC265V	0~100%	25°C



SER. NO.	OUT PUT			DATE	TESTED BY
34800S02	3.3 V	12.5 A	41.25 W	03/12/10	T. OKANO

MODEL

RTW03-12RC

負荷急変

TRANSIENT RESPONSE

SOURCE

LOAD

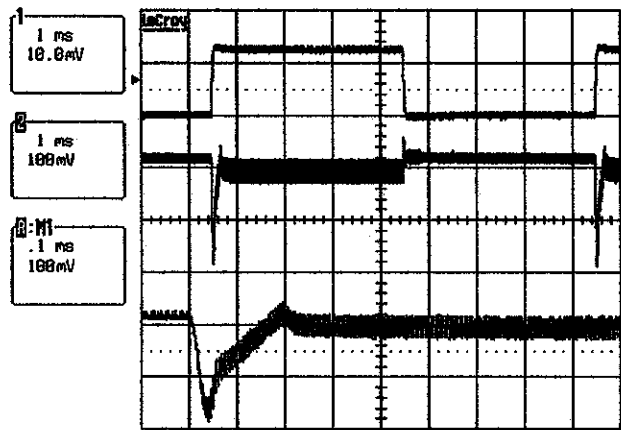
TEMP.

AC100V

0%to100%

25°C

18-Nov-83
13:25:08



1 ms BWL
1 10 mV DC
2 .1 V AC
3 10 mV DC
4 50 mV DC

1 DC 6.8mV

25 MS/s

□ STOPPED

UPPER WAVE FORM

Output load current : 10A/DIV

LOWER WAVE FORM

Ripple voltage : 100mV/DIV

TIME

1mS/DIV

SOURCE

LOAD

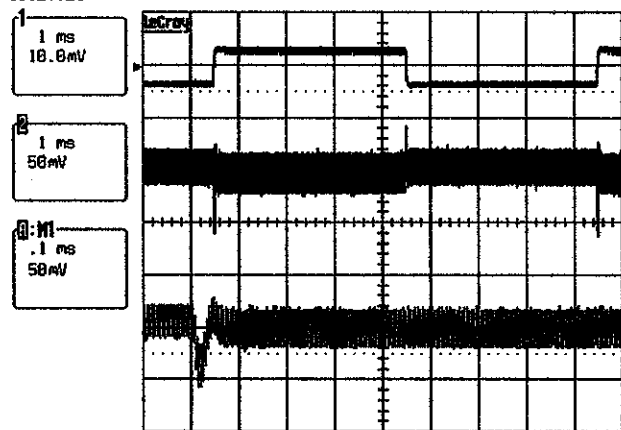
TEMP.

AC100V

50%TO100%

25°C

18-Nov-83
13:27:21



1 ms BWL
1 10 mV DC
2 50 mV AC
3 10 mV DC
4 50 mV DC

1 DC 9.6mV

25 MS/s

□ STOPPED

UPPER WAVE FORM

Output load current : 10A/DIV

LOWER WAVE FORM

Ripple voltage : 50mV/DIV

TIME

1mS/DIV

SER. NO

OUT PUT

DATE

TESTED BY

03/11/18

T.OKANO

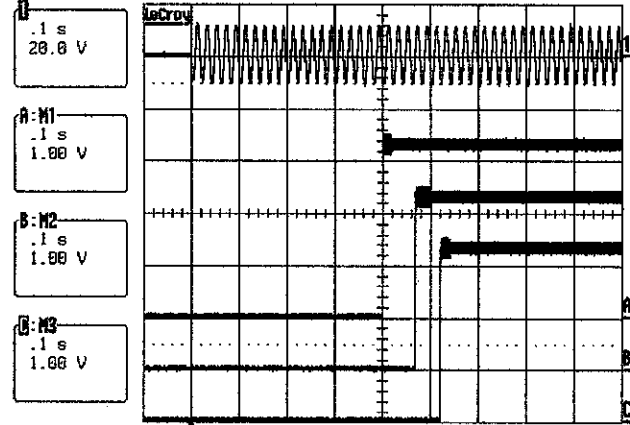
MODEL

RTW03-12RC

起動特性 TURN-ON CHARACTERISTIC	SOURCE	LOAD	TEMP.
	AC85V~AC132V	12.5A	-20°C

4-Nov-03
13:07:27

2 stored to M3



.1 s BML
 1 2 V AC 20
 2 1 V DC 10
 3 10 mV DC 10
 4 50 mV DC 10
 Ext DC 15mV 1MΩ
 250 kS/s
 STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC132V

LOWER MIDDLE WAVE FORM

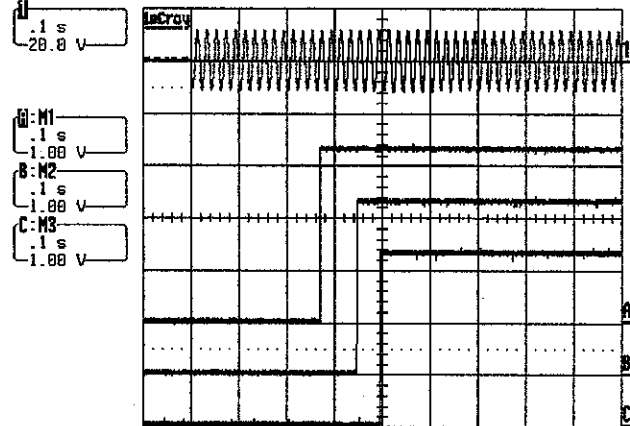
Vin=AC 100V

LOWER WAVE FORM

Vin=AC 85V

	SOURCE	LOAD	TEMP.
	AC85V~AC132V	12.5A	71°C

4-Nov-03
18:08:34



.1 s BML
 1 2 V DC 20
 2 1 V DC 10
 3 10 mV DC 10
 4 50 mV DC 10
 Ext DC 15mV 1MΩ
 250 kS/s
 STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC132V

LOWER MIDDLE WAVE FORM

Vin=AC 100V

LOWER WAVE FORM

Vin=AC 85V

SER. NO	OUT PUT	DATE	TESTED BY
		03/11/4	T.OKANO

MODEL

RTW03-12RC

起動特性

TURN-ON CHARACTERISTIC

SOURCE

LOAD

TEMP.

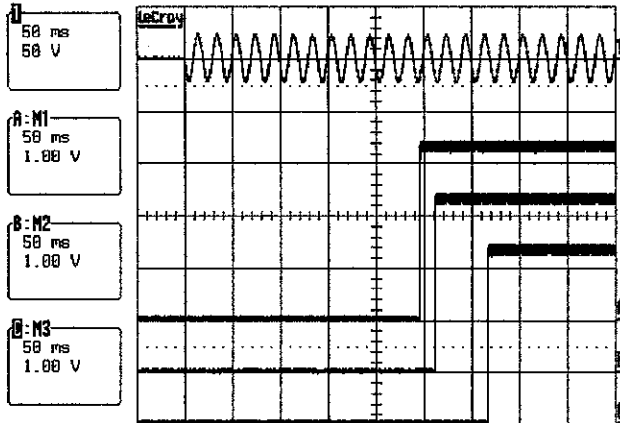
AC170V~AC265V

12.5A

-20°C

4-Nov-03
13:12:44

2 stored to M3



50 ms 50 V
A: M1
50 ms 1.00 V
B: M2
50 ms 1.00 V
C: M3
50 ms 1.00 V

Ext DC 15mV 1MΩ

500 kS/s

STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

V_{in}=AC265V

LOWER MIDDLE WAVE FORM

V_{in}=AC 240V

LOWER WAVE FORM

V_{in}=AC 170V

SOURCE

LOAD

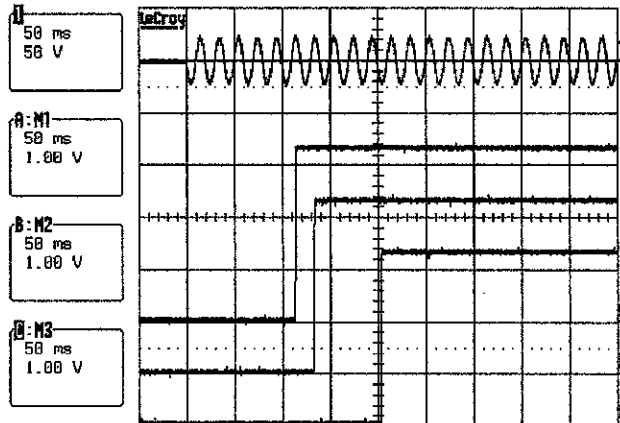
TEMP.

AC170V~AC265V

12.5A

71°C

4-Nov-03
10:14:13



50 ms 50 V
A: M1
50 ms 1.00 V
B: M2
50 ms 1.00 V
C: M3
50 ms 1.00 V

Ext DC 15mV 1MΩ

500 kS/s

STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

V_{in}=AC265V

LOWER MIDDLE WAVE FORM

V_{in}=AC 240V

LOWER WAVE FORM

V_{in}=AC 170V

SER. NO

OUT PUT

DATE

TESTED BY

03/11/4

T.OKANO

MODEL

RTW03-12RC

容量性負荷起動特性

TURN-ON CAPACITIVE LOAD

SOURCE

LOAD

TEMP.

CAPACTOR LOAD

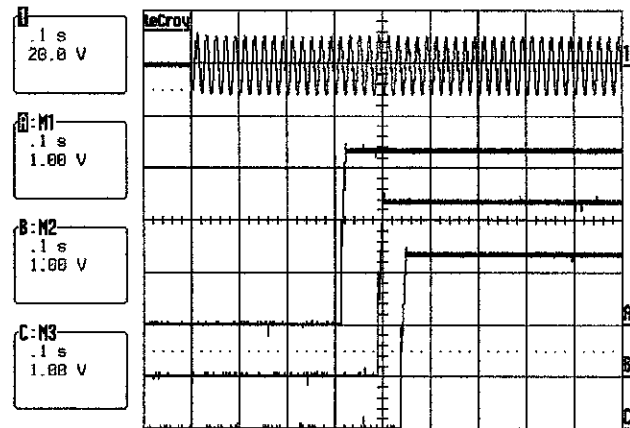
AC85TO132V

12.5A

25°C

12,000 μ F

30-Oct-03
19:10:39



.1 s BWL
1 .2 V AC 20%
2 .1 V DC 5%
3 10 mV DC
4 50 mV DC

Ext DC 5mV 1MΩ

50 ks/s

STOPPED

UPPER WAVE FORM

AC MONITOR

UPPER MIDDLE WAVE FORM

V_{IN}=AC132V

LOWER MIDDLE WAVE FORM

V_{IN}=AC 100V

LOWER WAVE FORM

V_{IN}=AC85V

SOURCE

LOAD

TEMP.

CAPACTOR LOAD

AC85TO132V

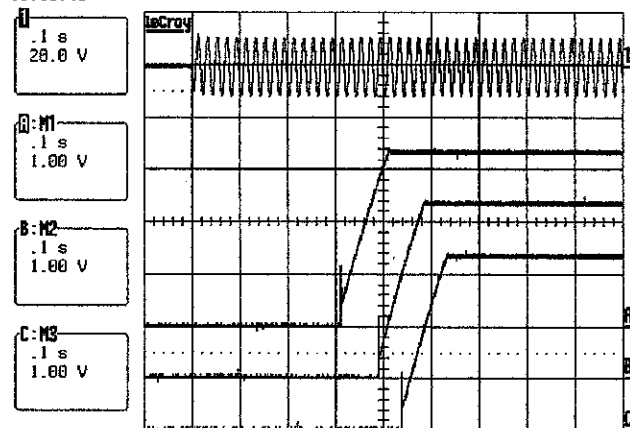
12.5A

25°C

100,000 μ F

30-Oct-03
19:13:49

2 stored to M3



.1 s BWL
1 .2 V AC 20%
2 .1 V DC 5%
3 10 mV DC
4 50 mV DC

Ext DC 5mV 1MΩ

50 ks/s

STOPPED

UPPER WAVE FORM

AC MONITOR

UPPER MIDDLE WAVE FORM

V_{IN}=AC132V

LOWER MIDDLE WAVE FORM

V_{IN}=AC 100V

LOWER WAVE FORM

V_{IN}=AC85V

SER. NO

OUT PUT

DATE

TESTED BY

03/10/30

T.OKANO

MODEL

RTW03-12RC

容量性負荷起動特性

TURN-ON CAPACITIVE LOAD

SOURCE

LOAD

TEMP.

CAPACTOR LOAD

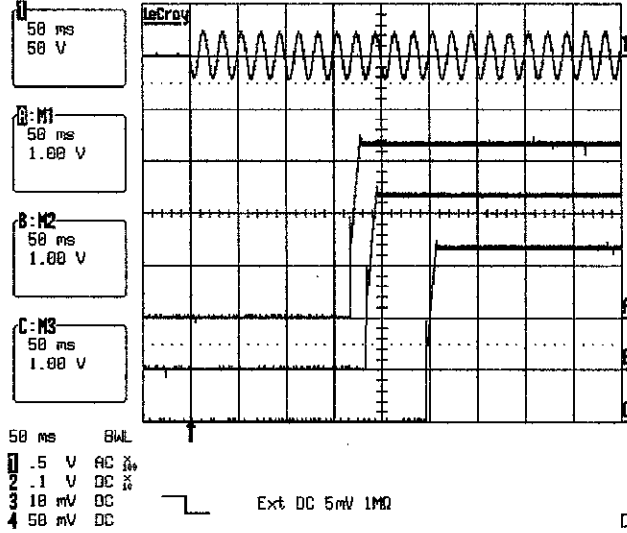
AC170TO265V

12.5A

25°C

12,000 μ F

30-Oct-03 19:18:33
Reading Floppy Disk Drive



UPPER WAVE FORM

AC MONITOR

UPPER MIDDLE WAVE FORM

$V_{IN}=AC265V$

LOWER MIDDLE WAVE FORM

$V_{IN}=AC240V$

LOWER WAVE FORM

$V_{IN}=AC170V$

SOURCE

LOAD

TEMP.

CAPACTOR LOAD

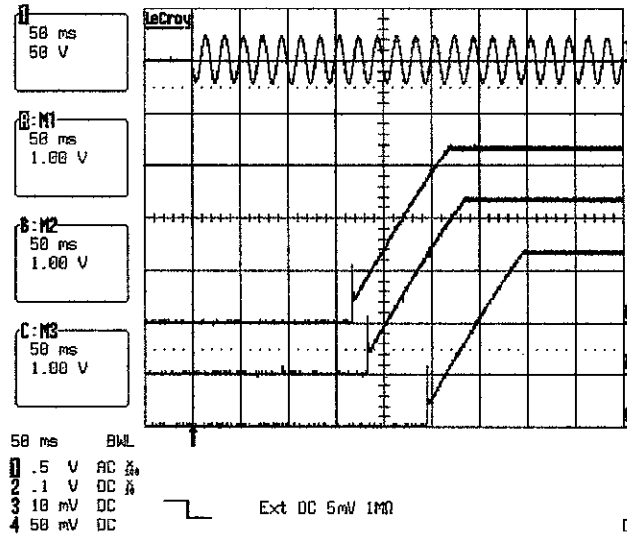
AC170TO265V

12.5A

25°C

100,000 μ F

30-Oct-03 19:21:08
2 stored to M3



UPPER WAVE FORM

AC MONITOR

UPPER MIDDLE WAVE FORM

$V_{IN}=AC265V$

LOWER MIDDLE WAVE FORM

$V_{IN}=AC240V$

LOWER WAVE FORM

$V_{IN}=AC170V$

SER. NO

OUT PUT

DATE

TESTED BY

03/10/30

T.OKANO

MODEL

RTW03-12RC

保持特性

TURN-OFF CHARACTERISTIC

SOURCE

AC85V~AC132V

LOAD

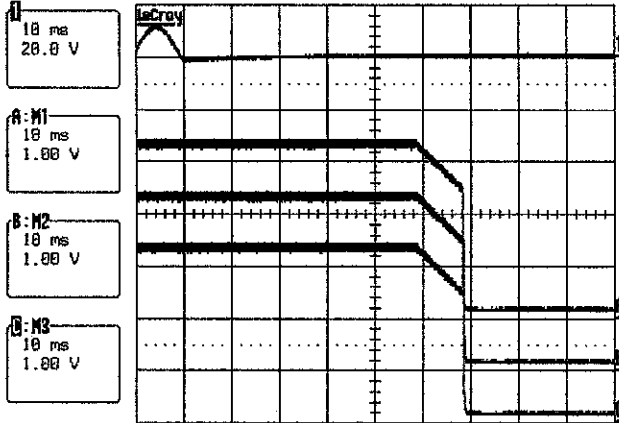
12.5A

TEMP.

-20°C

4-Nov-83
13:59:05

2 stored to M3



10 ms BML
1 .2 V AC \bar{h}
2 .1 V DC \bar{h}
3 10 mV DC \bar{h}
4 50 mV DC \bar{h}

Ext DC 15mV 1M Ω

2.5 MS/s

□ STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

V_{in} =AC132V

LOWER MIDDLE WAVE FORM

V_{in} =AC 100V

LOWER WAVE FORM

V_{in} =AC 85V

SOURCE

AC85V~AC132V

LOAD

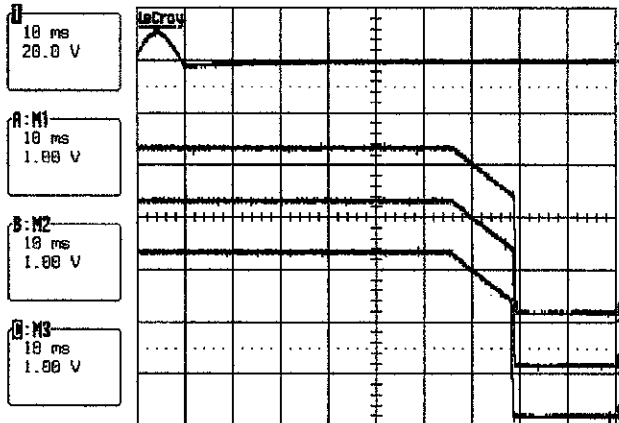
12.5A

TEMP.

71°C

4-Nov-83
11:24:00

2 stored to M3



10 ms BML
1 .2 V AC \bar{h}
2 .1 V DC \bar{h}
3 10 mV DC \bar{h}
4 50 mV DC \bar{h}

Ext DC 15mV 1M Ω

2.5 MS/s

□ STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

V_{in} =AC132V

LOWER MIDDLE WAVE FORM

V_{in} =AC 100V

LOWER WAVE FORM

V_{in} =AC 85V

SER. NO

OUT PUT

DATE

TESTED BY

03/11/4

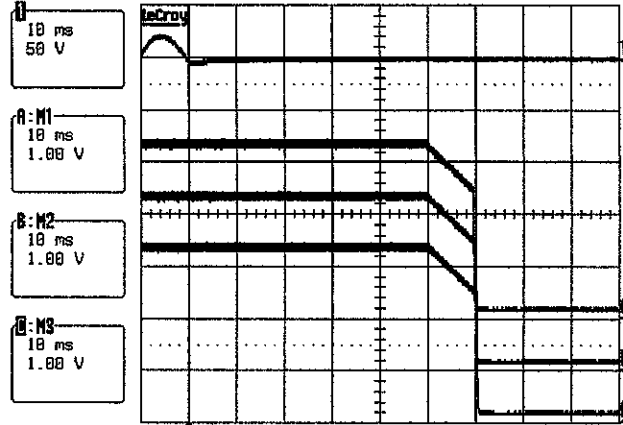
T.OKANO

MODEL
RTW03-12RC

保持特性 TURN-OFF CHARACTERISTIC	SOURCE	LOAD	TEMP.
	AC170V~AC265V	12.5A	-20°C

4-Nov-03
 14:02:29

2 stored to M3



10 ms BWL
 1 .5 V AC $\frac{1}{2}$
 2 .1 V DC $\frac{1}{10}$
 3 10 mV DC
 4 50 mV DC

Ext DC 15mV 1M Ω

2.5 MS/s

STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC265V

LOWER MIDDLE WAVE FORM

Vin=AC 240V

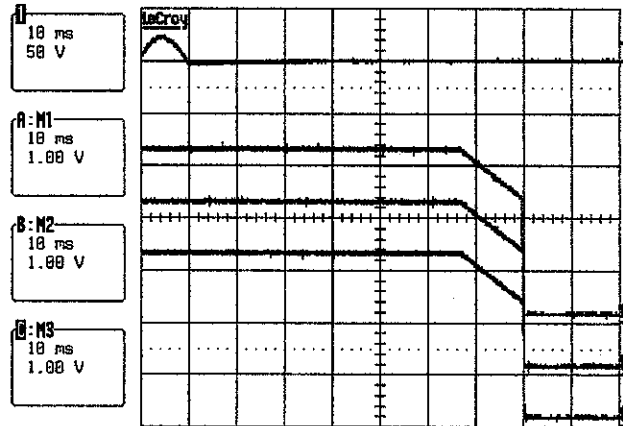
LOWER WAVE FORM

Vin=AC 170V

	SOURCE	LOAD	TEMP.
	AC170V~AC265V	12.5A	71°C

4-Nov-03
 11:28:39

2 stored to M3



10 ms BWL
 1 .5 V AC $\frac{1}{2}$
 2 .1 V DC $\frac{1}{10}$
 3 10 mV DC
 4 50 mV DC

Ext DC 15mV 1M Ω

2.5 MS/s

STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC265V

LOWER MIDDLE WAVE FORM

Vin=AC 240V

LOWER WAVE FORM

Vin=AC 170V

SER. NO	OUT PUT	DATE	TESTED BY	
		03/11/4	T.OKANO	

MODEL

RTW03-12RC

突入電流
INRUSH CURRENT

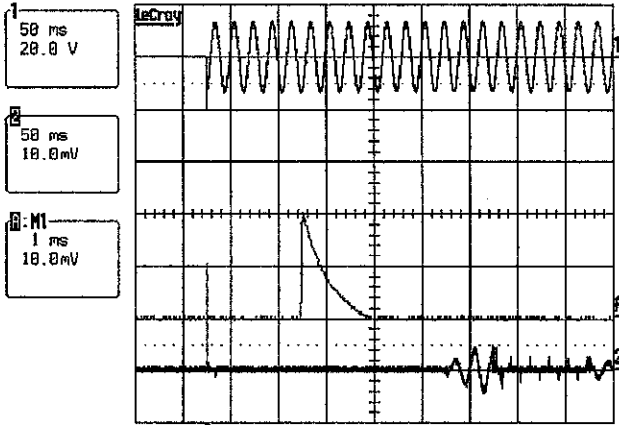
SOURCE
AC100V
(line direct connection)

LOAD
12.5A

TEMP.
25°C

PHASE
90°

31-Oct-03
11:34:12



50 ms BWL
1 .2 V AC %
2 18 mV DC
3 18 mV DC
4 50 mV DC
Ext DC 15mV 1MΩ
500 kS/s
□ STOPPED

UPPER WAVE FORM

AC MONITOR

LOWER WAVE FORM

$I_p=10.2A$

CURRENT / DIVISION

5A/DIV

TIME

50mS/DIV

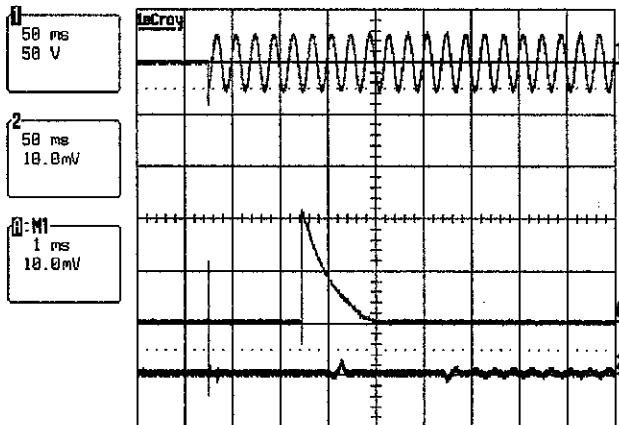
SOURCE
AC200V
(line direct connection)

LOAD
12.5A

TEMP.
25°C

PHASE
90°

31-Oct-03
11:51:06



50 ms BWL
1 .5 V AC %
2 18 mV DC
3 18 mV DC
4 50 mV DC
Ext DC 15mV 1MΩ
500 kS/s
□ STOPPED

UPPER WAVE FORM

AC MONITOR

LOWER WAVE FORM

$I_p=21.7A$

CURRENT / DIVISION

10A/DIV

TIME

50mS/DIV

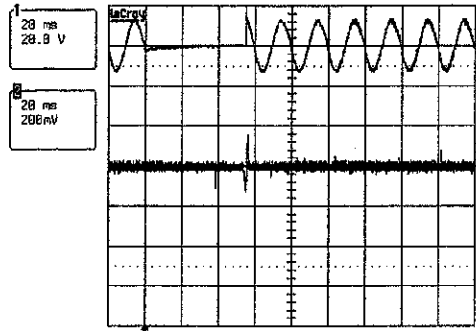
SER. NO	OUT PUT	DATE	TESTED BY
		03/10/31	T.OKANO

瞬 停 SHORT INTERRUPTIONS

MODEL RTW03-12RC SER.NO.

TESTRD BY : T.OKANO

38-Oct-83
14:44:21

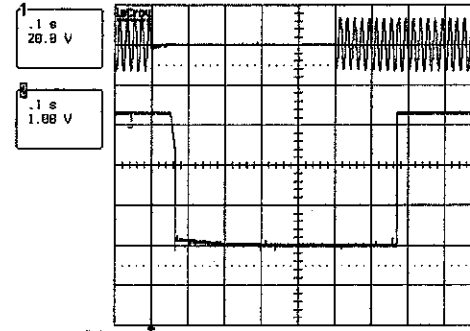


20 ms BWL
1 .2 V AC $\frac{1}{2}$
2 20 mV AC $\frac{1}{2}$
3 10 mV DC $\frac{1}{2}$
4 50 mV DC $\frac{1}{2}$
Ext DC 5mV 1M $\frac{1}{2}$ STOPPED 250 kS/s

Ta=25°C
VIN=AC100V
LOAD=12.5A
55mS

38-Oct-83
14:48:32

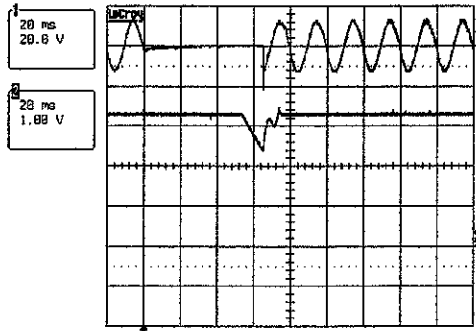
Reading Floppy Disk Drive



.1 s BWL
1 .2 V AC $\frac{1}{2}$
2 .1 V DC $\frac{1}{2}$
3 10 mV DC $\frac{1}{2}$
4 50 mV DC $\frac{1}{2}$
Ext DC 5mV 1M $\frac{1}{2}$ STOPPED 50 kS/s

Ta=25°C
VIN=AC100V
LOAD=12.5A
500mS

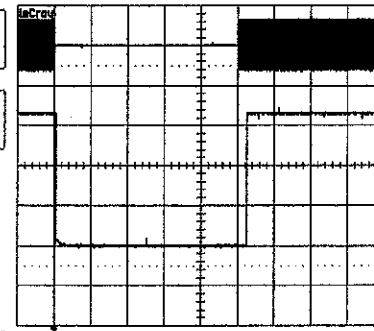
38-Oct-83
14:46:24



20 ms BWL
1 .2 V AC $\frac{1}{2}$
2 .1 V DC $\frac{1}{2}$
3 10 mV DC $\frac{1}{2}$
4 50 mV DC $\frac{1}{2}$
Ext DC 5mV 1M $\frac{1}{2}$ STOPPED 250 kS/s

Ta=25°C
VIN=AC100V
LOAD=12.5A
65mS

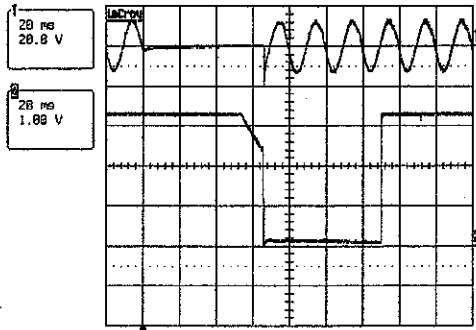
38-Oct-83
14:49:19



1 s BWL
1 .2 V AC $\frac{1}{2}$
2 .1 V DC $\frac{1}{2}$
3 10 mV DC $\frac{1}{2}$
4 50 mV DC $\frac{1}{2}$
Ext DC 5mV 1M $\frac{1}{2}$ STOPPED 5 kS/s

Ta=25°C
VIN=AC100V
LOAD=12.5A
5S

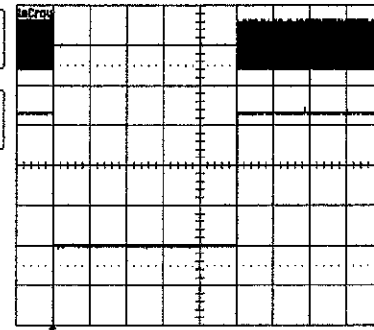
38-Oct-83
14:48:42



20 ms BWL
1 .2 V AC $\frac{1}{2}$
2 .1 V DC $\frac{1}{2}$
3 10 mV DC $\frac{1}{2}$
4 50 mV DC $\frac{1}{2}$
Ext DC 5mV 1M $\frac{1}{2}$ STOPPED 250 kS/s

Ta=25°C
VIN=AC100V
LOAD=12.5A
66mS

38-Oct-83
14:52:50



10 s BWL
1 .2 V AC $\frac{1}{2}$
2 .1 V DC $\frac{1}{2}$
3 10 mV DC $\frac{1}{2}$
4 50 mV DC $\frac{1}{2}$
Ext DC 5mV 1M $\frac{1}{2}$ STOPPED 500 S/s

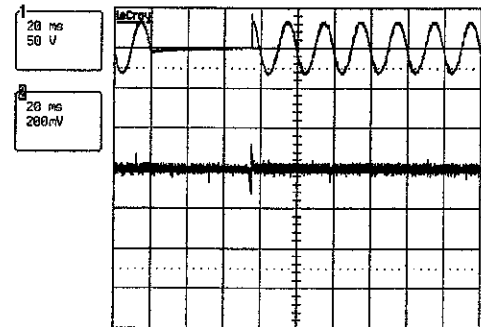
Ta=25°C
VIN=AC100V
LOAD=12.5A
50S

瞬 停 SHORT INTERRUPTIONS

MODEL RTW03-12RC SER.NO.

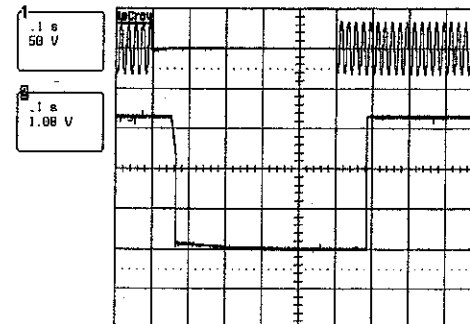
TESTRD BY : T.OKANO

30-Oct-03
14:55:18



Ta=25°C
VIN=AC240V
LOAD=12.5A
55mS

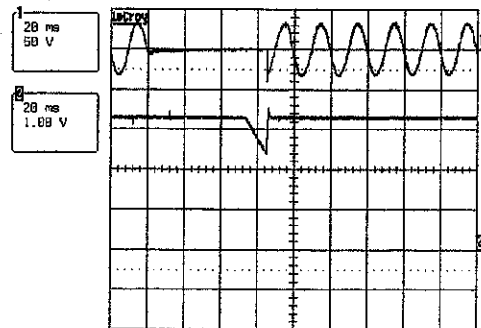
30-Oct-03
14:57:12



Ta=25°C
VIN=AC240V
LOAD=12.5A
500mS

20 ms BML
1.5 V AC
20 mV AC
10 mV DC
50 mV DC

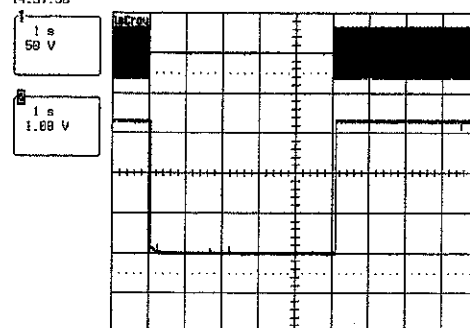
30-Oct-03
14:56:24



Ta=25°C
VIN=AC240V
LOAD=12.5A
65mS

1 s BML
1.5 V AC
1 V DC
10 mV DC
50 mV DC

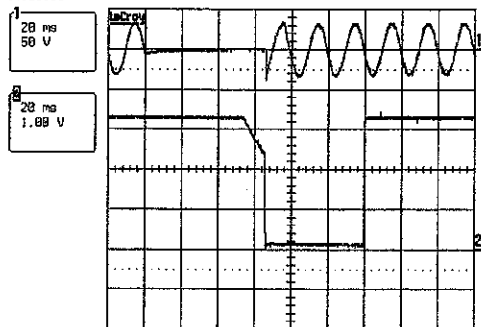
30-Oct-03
14:57:58



Ta=25°C
VIN=AC240V
LOAD=12.5A
5S

20 ms BML
1.5 V AC
1 V DC
10 mV DC
50 mV DC

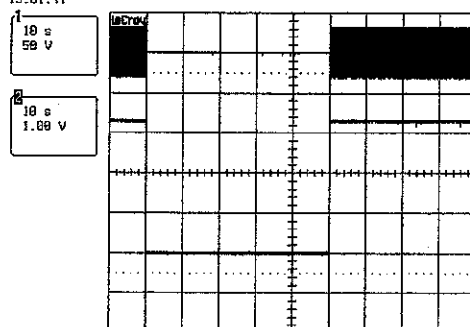
30-Oct-03
14:56:38



Ta=25°C
VIN=AC240V
LOAD=12.5A
66mS

1 s BML
1.5 V AC
1 V DC
10 mV DC
50 mV DC

30-Oct-03
15:01:41



Ta=25°C
VIN=AC240V
LOAD=12.5A
50S

20 ms BML
1.5 V AC
1 V DC
10 mV DC
50 mV DC

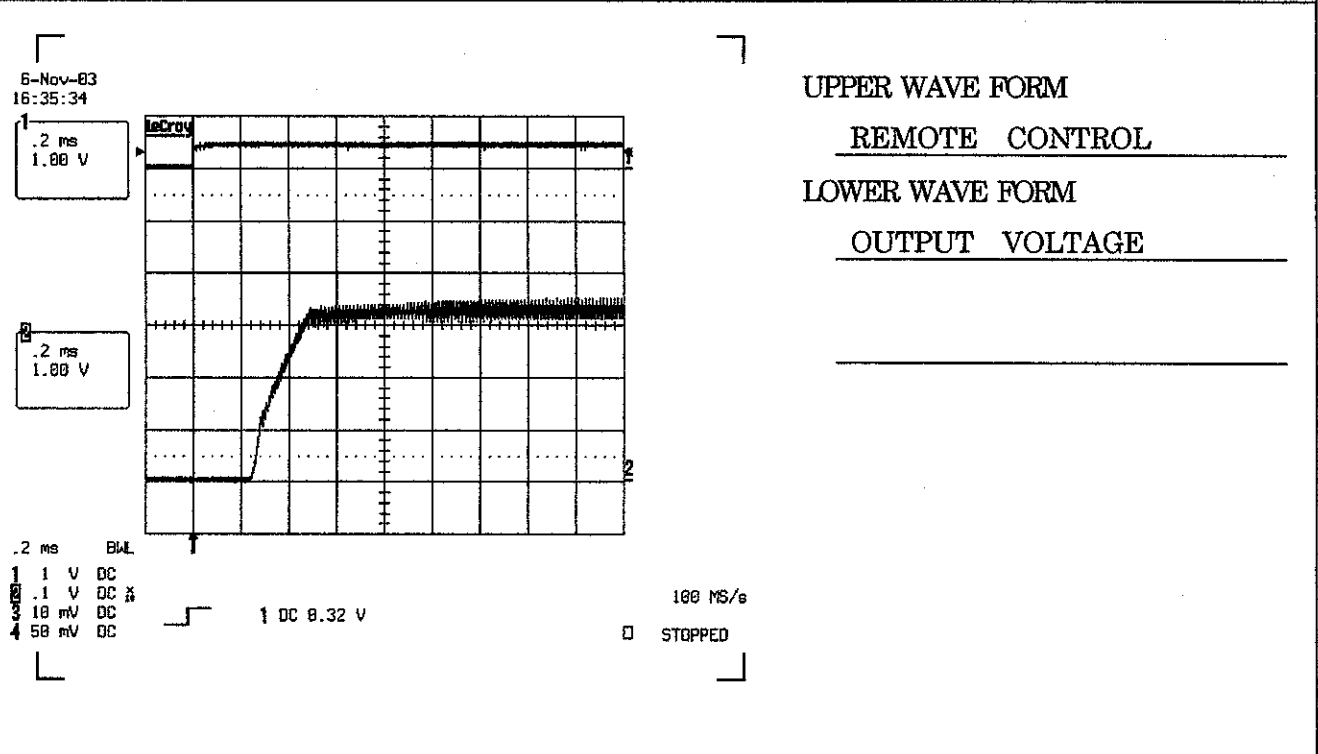
257 00

10 s BML
1.5 V AC
1 V DC
10 mV DC
50 mV DC

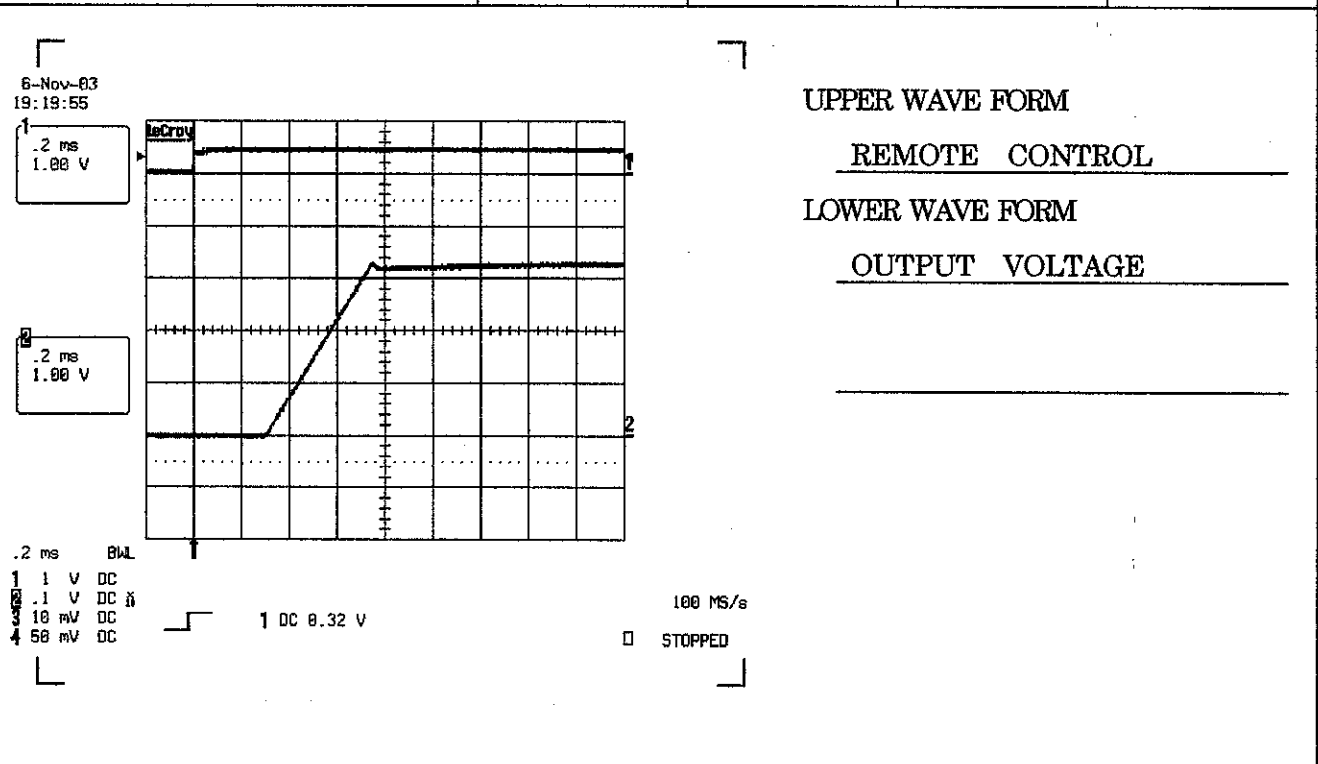
STOPPED

MODEL
RTW03-12RC

リモート コントロール REMOTE CONTROL	SOURCE	LOAD	TEMP.	
	AC100V	12.5A	-20°C	



	SOURCE	LOAD	TEMP.	
	AC100V	12.5A	71°C	



SER. NO	OUT PUT	DATE	TESTED BY
		03/11/ 6	T.OKANO

MODEL

RTW03-12RC

リモートコントロール

SOURCE

LOAD

TEMP.

REMOTE CONTROL

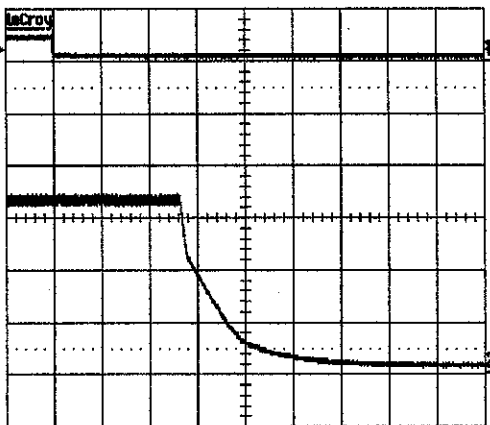
AC100V

12.5A

-20°C

6-Nov-03
15:36:56

.2 ms
1.00 V



.2 ms
1.00 V

.2 ms B/L
 1 1 V DC
 2 .1 V DC
 3 10 mV DC
 4 50 mV DC

1 DC 0.22 V

100 MS/s

STOPPED

UPPER WAVE FORM

REMOTE CONTROL

LOWER WAVE FORM

OUTPUT VOLTAGE

SOURCE

LOAD

TEMP.

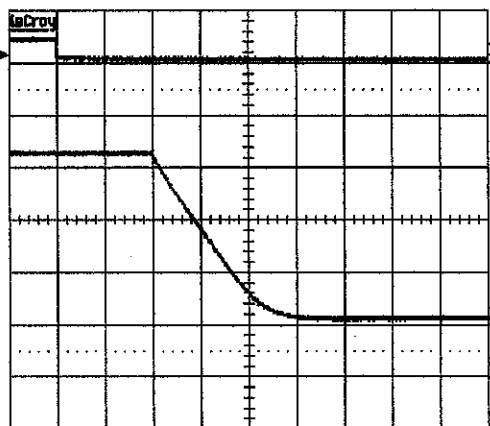
AC100V

12.5A

71°C

6-Nov-03
19:20:16

.2 ms
1.00 V



.2 ms
1.00 V

.2 ms B/L
 1 1 V DC
 2 .1 V DC
 3 10 mV DC
 4 50 mV DC

1 DC 0.16 V

100 MS/s

STOPPED

UPPER WAVE FORM

REMOTE CONTROL

LOWER WAVE FORM

OUTPUT VOLTAGE

SER. NO

OUT PUT

DATE

TESTED BY

03/11/ 6

T.OKANO

型名： RTW03-12RC

2003/12/25

電解コンデンサ算出寿命

部品No:C12

設置方向： A方向

Vo=3.3V

Vin=AC100V

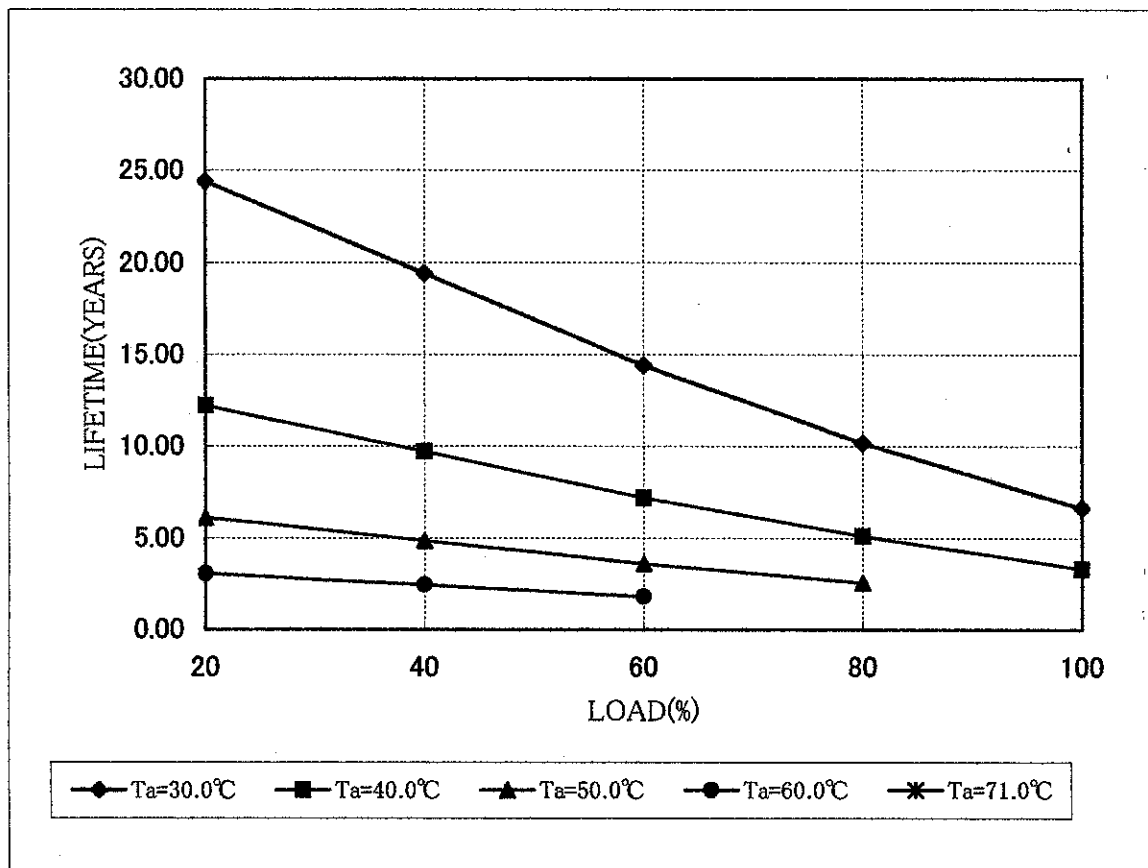
Io=(100%)=12.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	24.40	12.20	6.10	3.05	
40	19.41	9.71	4.85	2.43	
60	14.41	7.20	3.60	1.80	
80	10.19	5.09	2.55		
100	6.63	3.32			

*連続稼働 (最小保証値)

出力デューティ率(使用可能範囲)

Ta=40°C Io=100% Ta=71°C Io=10%
Ta=50°C Io=80%
Ta=60°C Io=60%



型名 : RTW03-12RC

2003/12/25

電解コンデンサ算出寿命

部品No:C12

設置方向 : A方向

Vo=3.3V

Vin=AC240V

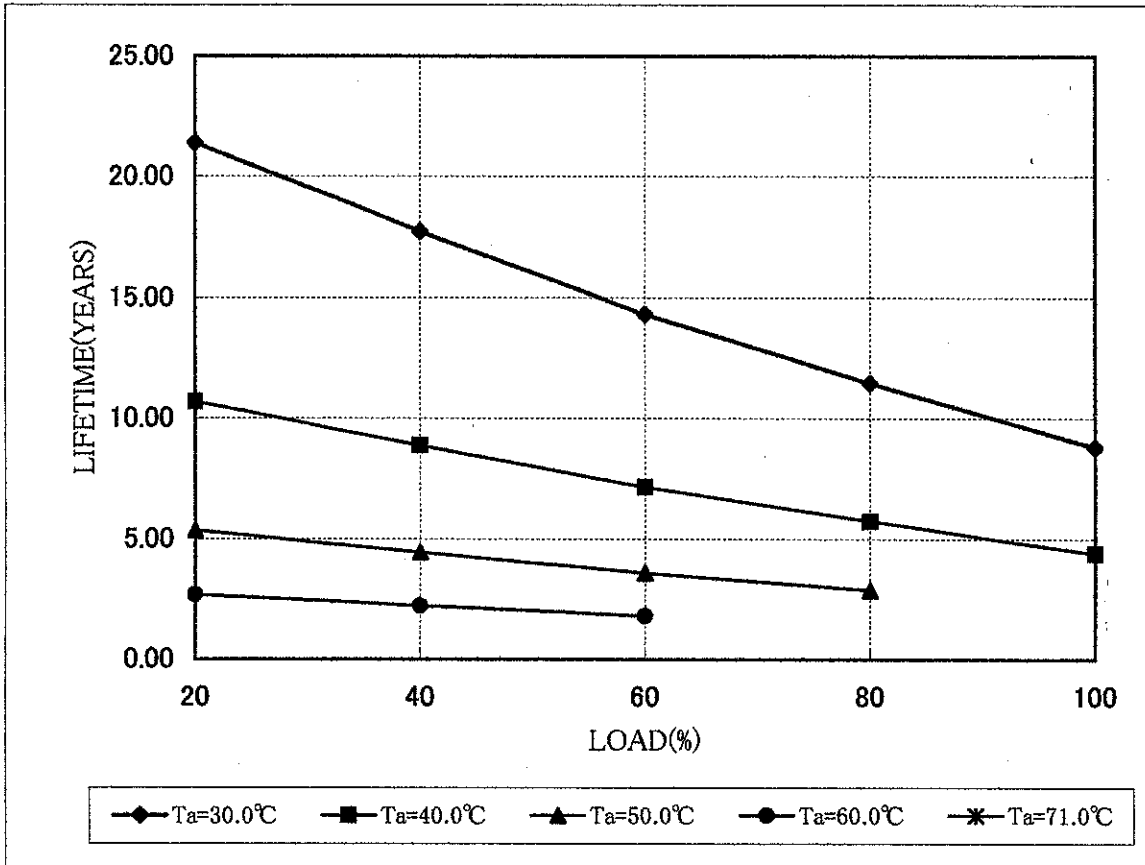
Io=(100%)=12.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	21.39	10.70	5.35	2.67	
40	17.74	8.87	4.43	2.22	
60	14.31	7.16	3.58	1.79	
80	11.46	5.73	2.87		
100	8.81	4.40			

*連続稼働 (最小保証値)

出力デューティ率(使用可能範囲)

Ta=40°C Io=100% Ta=71°C Io=10%
Ta=50°C Io=80%
Ta=60°C Io=60%



型名： RTW03-12RC

2003/12/25

電解コンデンサ算出寿命

部品No:C12

設置方向： A方向

Vo=3.3V

Vin=AC100V

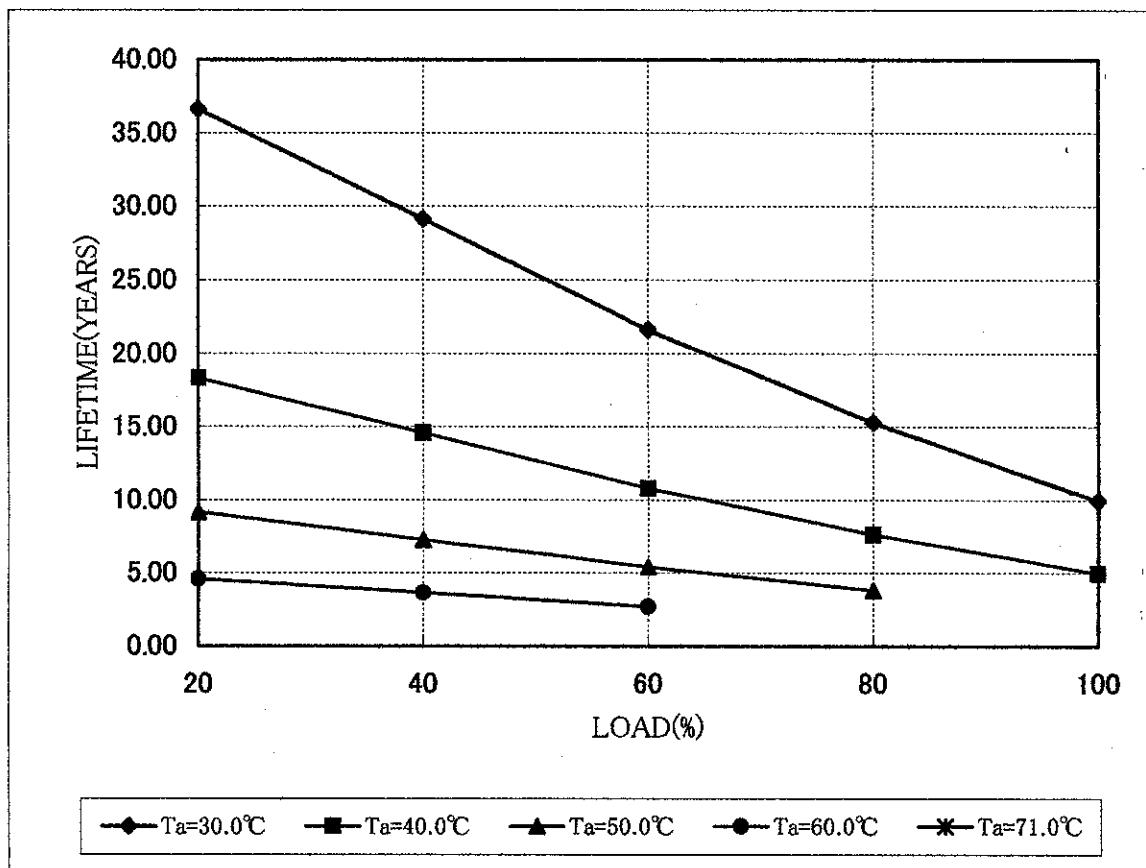
Io=(100%)=12.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	36.61	18.30	9.15	4.58	
40	29.12	14.56	7.28	3.64	
60	21.61	10.81	5.40	2.70	
80	15.28	7.64	3.82		
100	9.95	4.97			

*連続稼働 (最小実力値)

出力レギュレーション率(使用可能範囲)

Ta=40°C Io=100% Ta=71°C Io=10%
 Ta=50°C Io=80%
 Ta=60°C Io=60%



型名 : RTW03-12RC

2003/12/25

電解コンデンサ算出寿命

部品No:C12

設置方向 : A方向

$V_o=3.3V$

$V_{in}=AC240V$

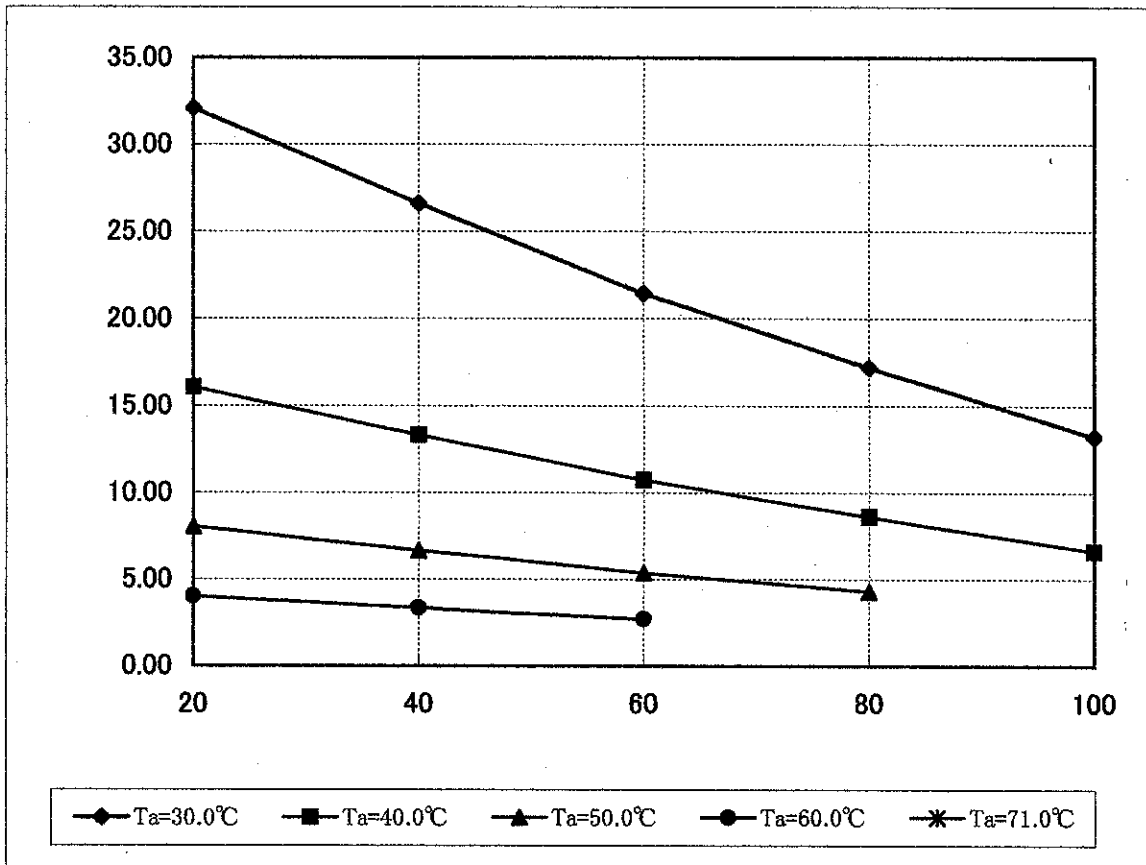
$I_o=(100\%)=12.5A$

LOAD (%)	LIFETIME (YEARS)				
	$T_a=30.0^\circ C$	$T_a=40.0^\circ C$	$T_a=50.0^\circ C$	$T_a=60.0^\circ C$	$T_a=71.0^\circ C$
20	32.09	16.04	8.02	4.01	
40	26.61	13.31	6.65	3.33	
60	21.47	10.73	5.37	2.68	
80	17.20	8.60	4.30		
100	13.21	6.61			

*連続稼働 (最小実力値)

出力レギュレーション率(使用可能範囲)

$T_a=40^\circ C$ $I_o=100\%$ $T_a=71^\circ C$ $I_o=10\%$
 $T_a=50^\circ C$ $I_o=80\%$
 $T_a=60^\circ C$ $I_o=60\%$



型名 : RTW03-12RC

2003/12/25

電解コンデンサ算出寿命

部品No:C12

設置方向 : B方向

Vo=3.3V

Vin=AC100V

Io=(100%)=12.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	15.23	7.62	3.81	1.90	
40	11.31	5.65	2.83		
60	7.62	3.81	1.90		
80	4.79	2.39			
100	2.66				

*連続稼働 (最小保証値)

出力レギュレーション率(使用可能範囲)

Ta=30°C

Io=100%

Ta=60°C

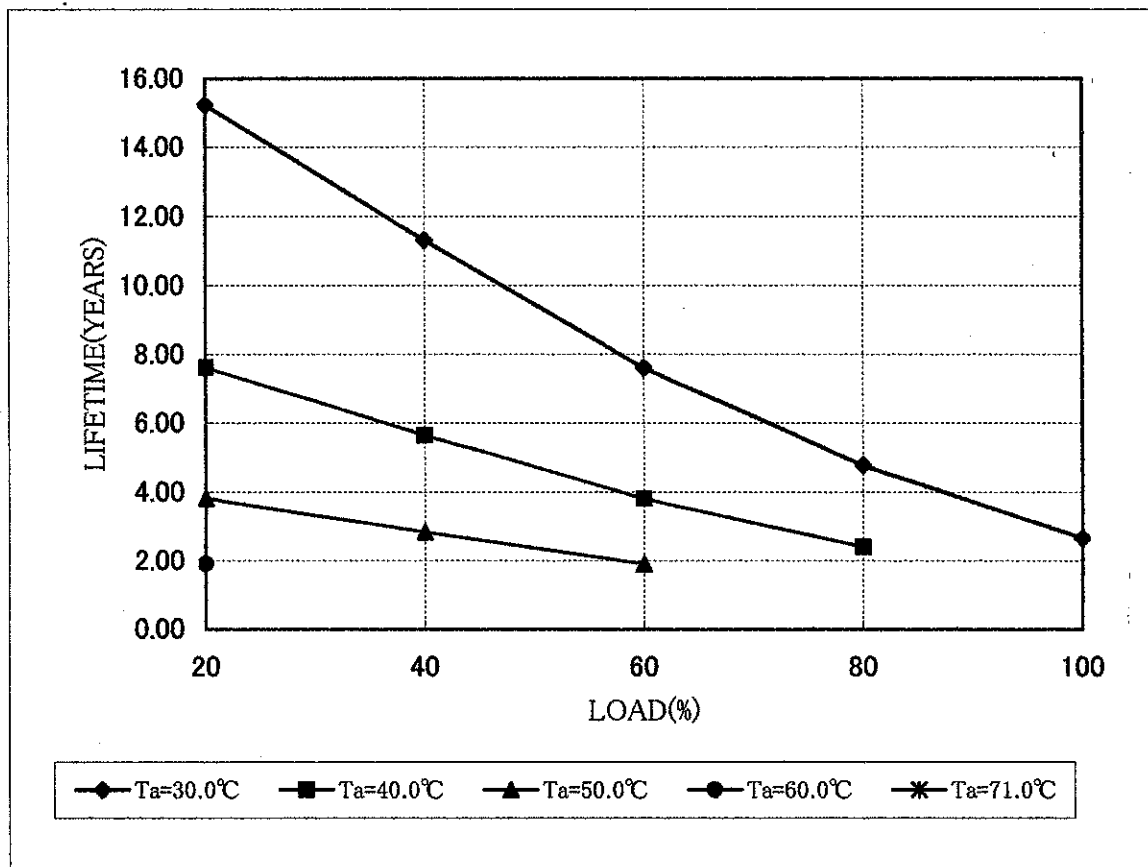
Io=20%

Ta=40°C

Io=80%

Ta=50°C

Io=60%



型名 : RTW03-12RC

2003/12/25

電解コンデンサ算出寿命

部品No:C12

設置方向 : B方向

Vo=3.3V

Vin=AC240V

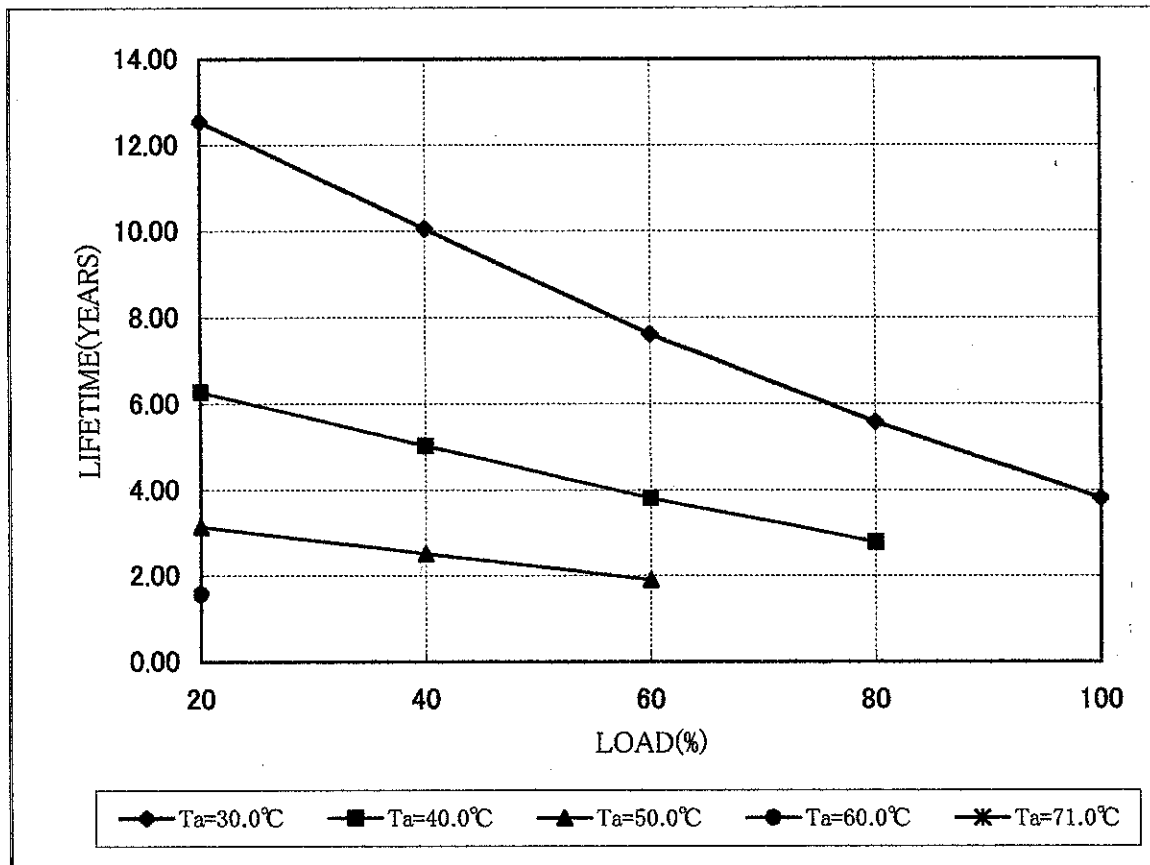
Io=(100%)=12.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	12.54	6.27	3.14	1.57	
40	10.05	5.02	2.51		
60	7.62	3.81	1.90		
80	5.58	2.79			
100	3.81				

*連続稼動 (最小保証値)

出力レギュレーション率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
Ta=40°C Io=80%
Ta=50°C Io=60%



型名 : RTW03-12RC

2003/12/25

電解コンデンサ算出寿命

部品No:C12

設置方向 : B方向

$V_o=3.3V$

$V_{in}=AC100V$

$I_o=(100\%)=12.5A$

LOAD (%)	LIFETIME (YEARS)				
	$T_a=30.0^\circ C$	$T_a=40.0^\circ C$	$T_a=50.0^\circ C$	$T_a=60.0^\circ C$	$T_a=71.0^\circ C$
20	22.85	11.42	5.71	2.86	
40	16.96	8.48	4.24		
60	11.42	5.71	2.86		
80	7.18	3.59			
100	3.98				

*連続稼働 (最小実力値)

出力デレージング率(使用可能範囲)

$T_a=30^\circ C$

$I_o=100\%$

$T_a=60^\circ C$

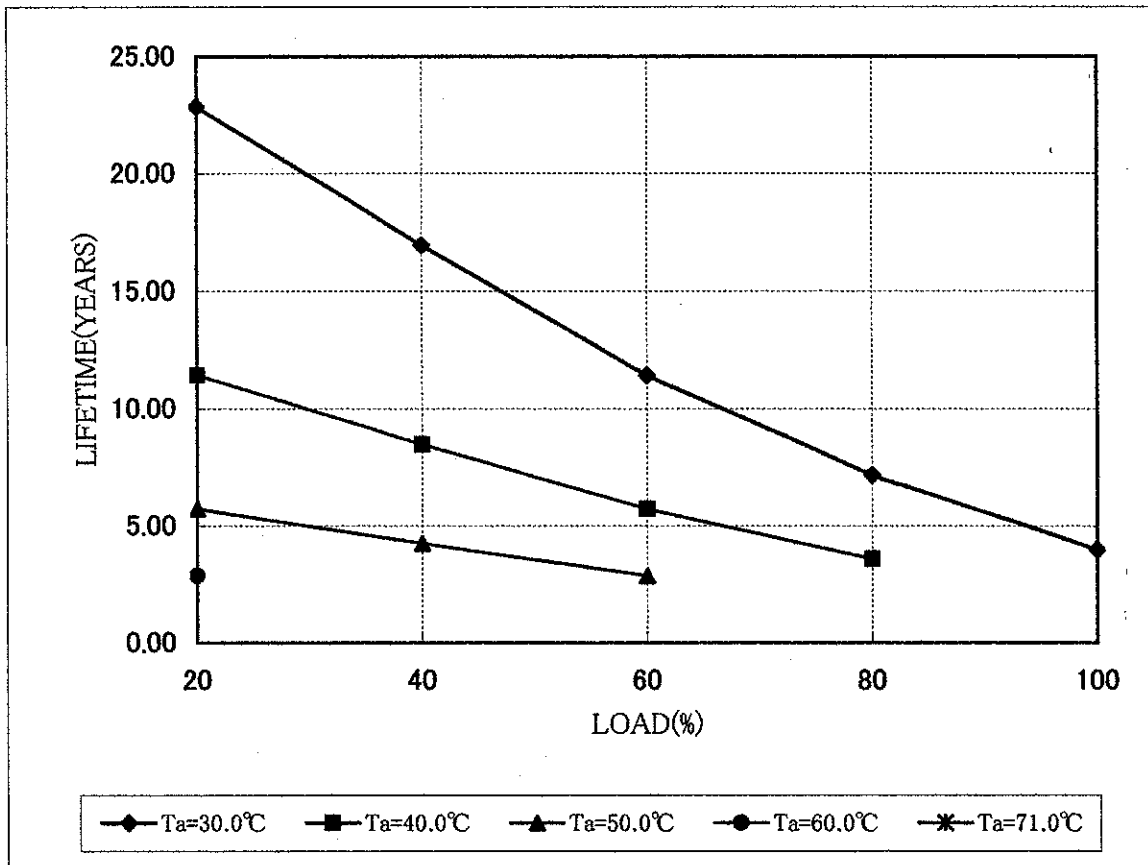
$I_o=20\%$

$T_a=40^\circ C$

$I_o=80\%$

$T_a=50^\circ C$

$I_o=60\%$



型名： RTW03-12RC

2003/12/25

電解コンデンサ算出寿命

部品No:C12

設置方向： B方向

$V_o=3.3V$

$V_{in}=AC240V$

$I_o=(100\%)=12.5A$

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	18.82	9.41	4.70	2.35	
40	15.07	7.54	3.77		
60	11.42	5.71	2.86		
80	8.36	4.18			
100	5.71				

*連続稼働 (最小実力値)

出力デレージング率(使用可能範囲)

Ta=30°C

$I_o=100\%$

Ta=60°C

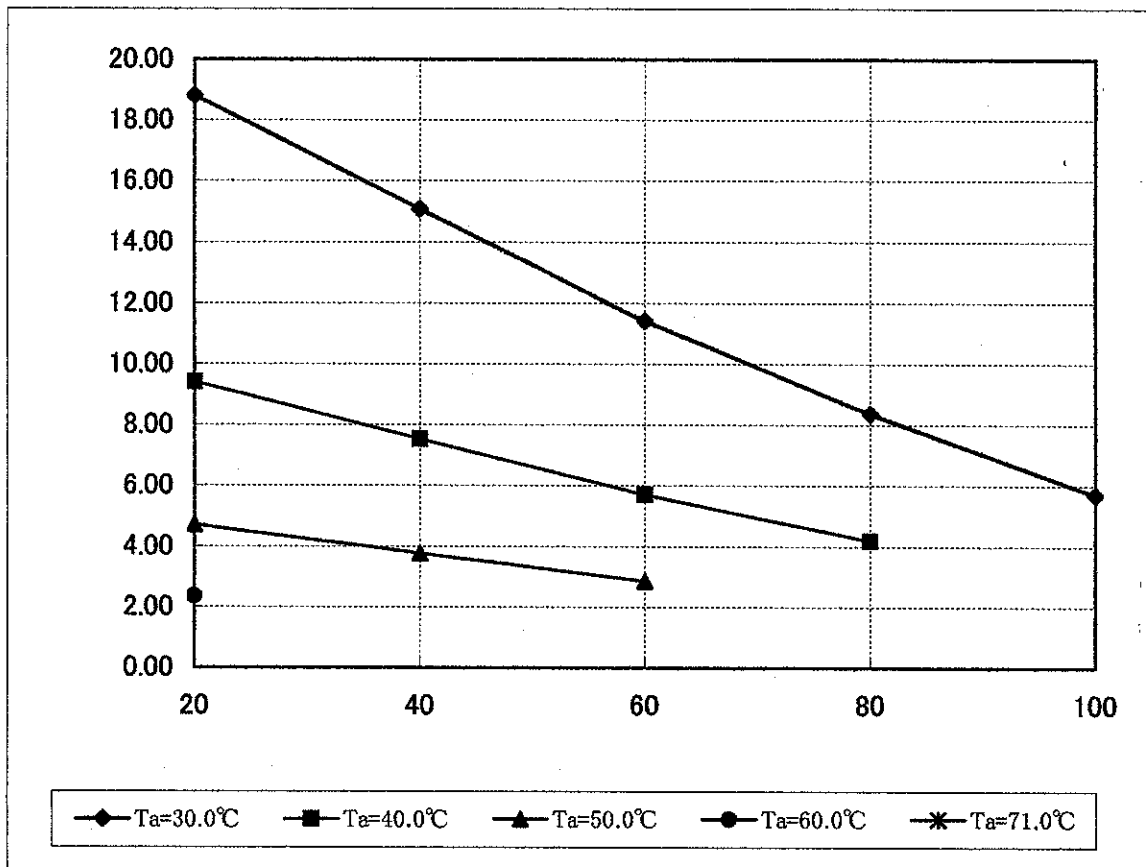
$I_o=20\%$

Ta=40°C

$I_o=80\%$

Ta=50°C

$I_o=60\%$



型名 : RTW03-12RC

2003/12/25

電解コンデンサ算出寿命

部品No:C12

設置方向 : C方向

Vo=3.3V

Vin=AC100V

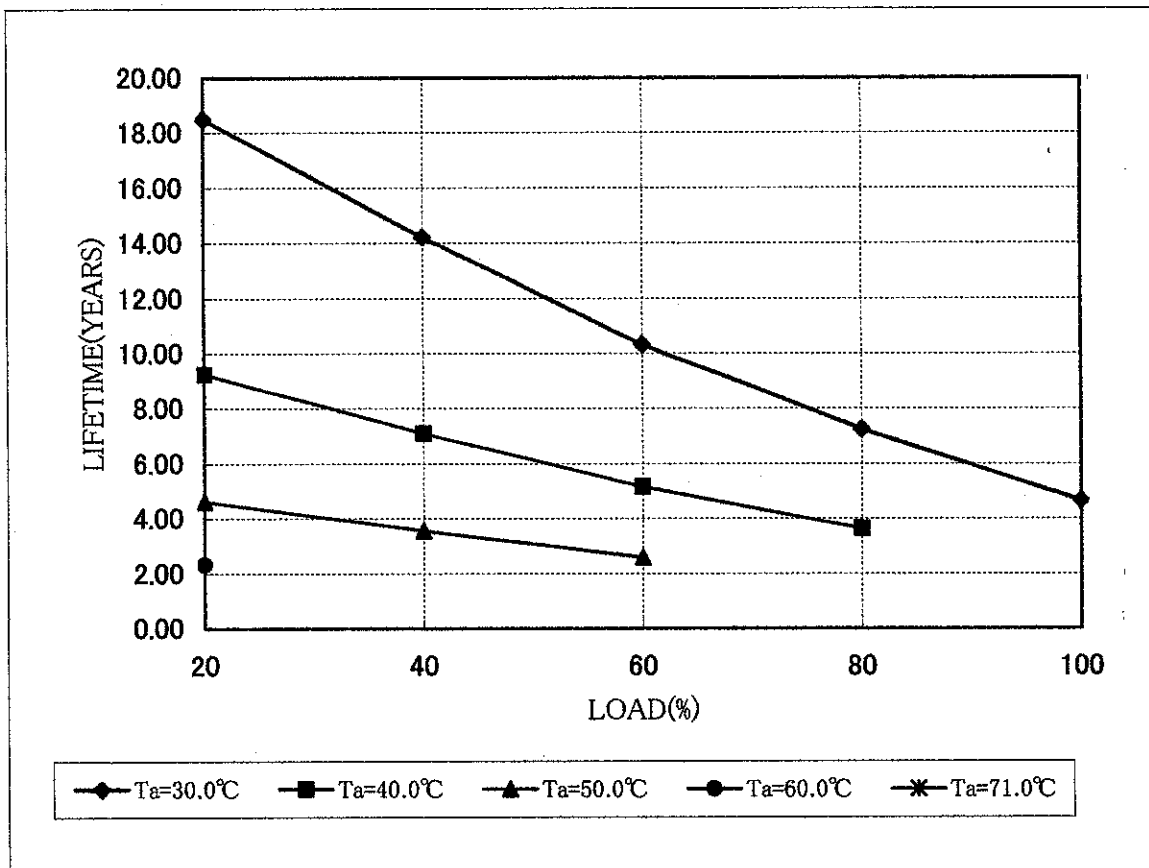
Io=(100%)=12.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	18.49	9.25	4.62	2.31	
40	14.21	7.11	3.55		
60	10.33	5.17	2.58		
80	7.25	3.63			
100	4.66				

*連続稼働 (最小保証値)

出力レギュレーション率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
Ta=40°C Io=80%
Ta=50°C Io=60%



型名 : RTW03-12RC

2003/12/25

電解コンデンサ算出寿命

部品No:C12

設置方向 : C方向

$V_o=3.3V$

$V_{in}=AC240V$

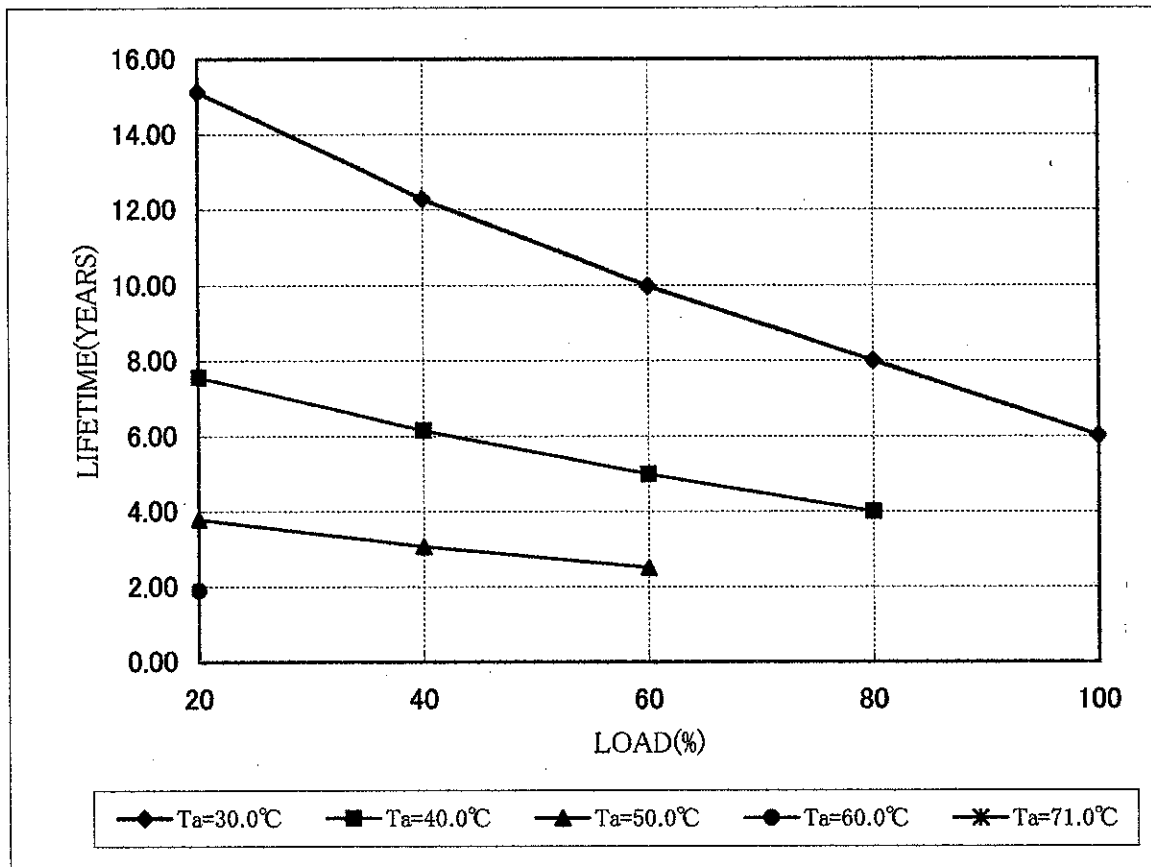
$I_o=(100\%)=12.5A$

LOAD (%)	LIFETIME (YEARS)				
	$T_a=30.0^\circ C$	$T_a=40.0^\circ C$	$T_a=50.0^\circ C$	$T_a=60.0^\circ C$	$T_a=71.0^\circ C$
20	15.13	7.56	3.78	1.89	
40	12.29	6.14	3.07		
60	9.98	4.99	2.49		
80	7.99	4.00			
100	6.02				

*連続稼働 (最小保証値)

出力レギュレーション率(使用可能範囲)

$T_a=30^\circ C$ $I_o=100\%$ $T_a=60^\circ C$ $I_o=20\%$
 $T_a=40^\circ C$ $I_o=80\%$
 $T_a=50^\circ C$ $I_o=60\%$



型名 : RTW03-12RC

2003/12/25

電解コンデンサ算出寿命

部品No:C12

設置方向 : C方向

Vo=3.3V

Vin=AC100V

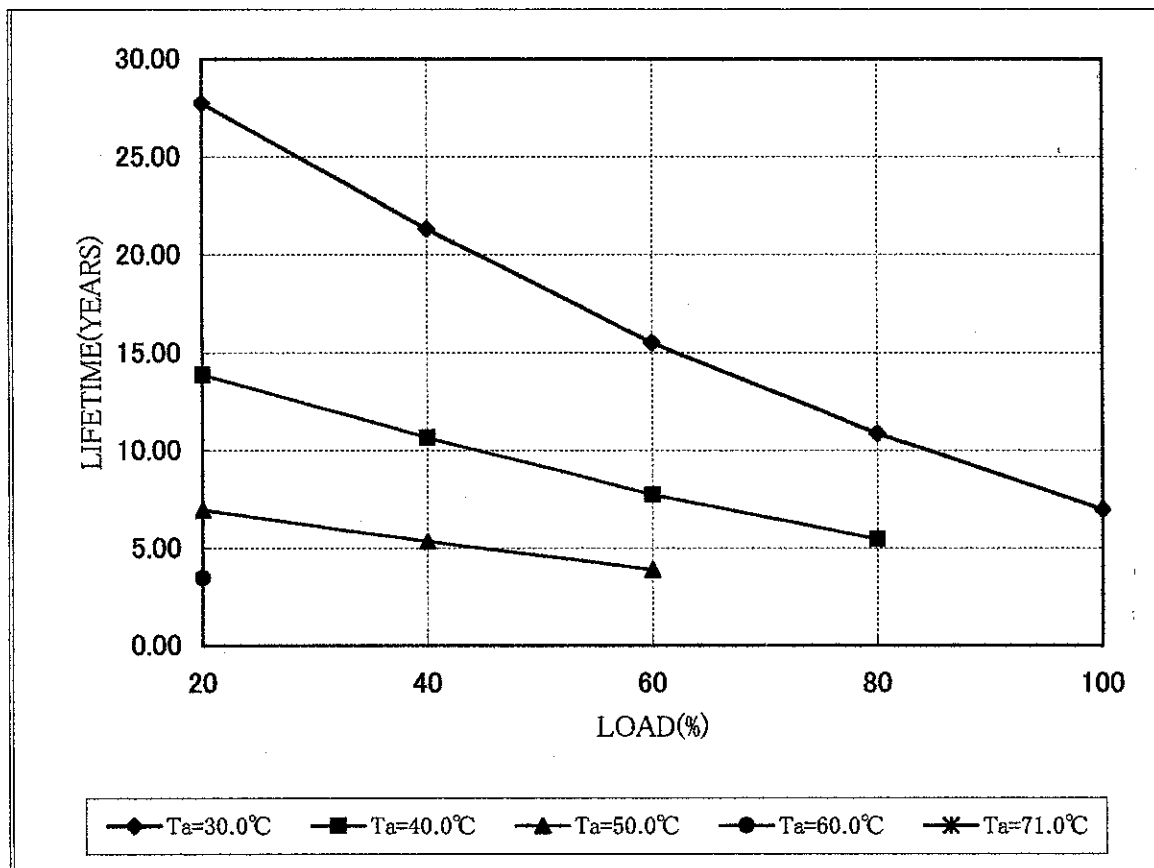
Io=(100%)=12.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	27.74	13.87	6.94	3.47	
40	21.32	10.66	5.33		
60	15.50	7.75	3.87		
80	10.88	5.44			
100	6.98				

*連続稼動 (最小実力値)

出力レギュレーション率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
 Ta=40°C Io=80%
 Ta=50°C Io=60%



型名 : RTW03-12RC

2003/12/25

電解コンデンサ算出寿命

部品No:C12

設置方向 : C方向

Vo=3.3V

Vin=AC240V

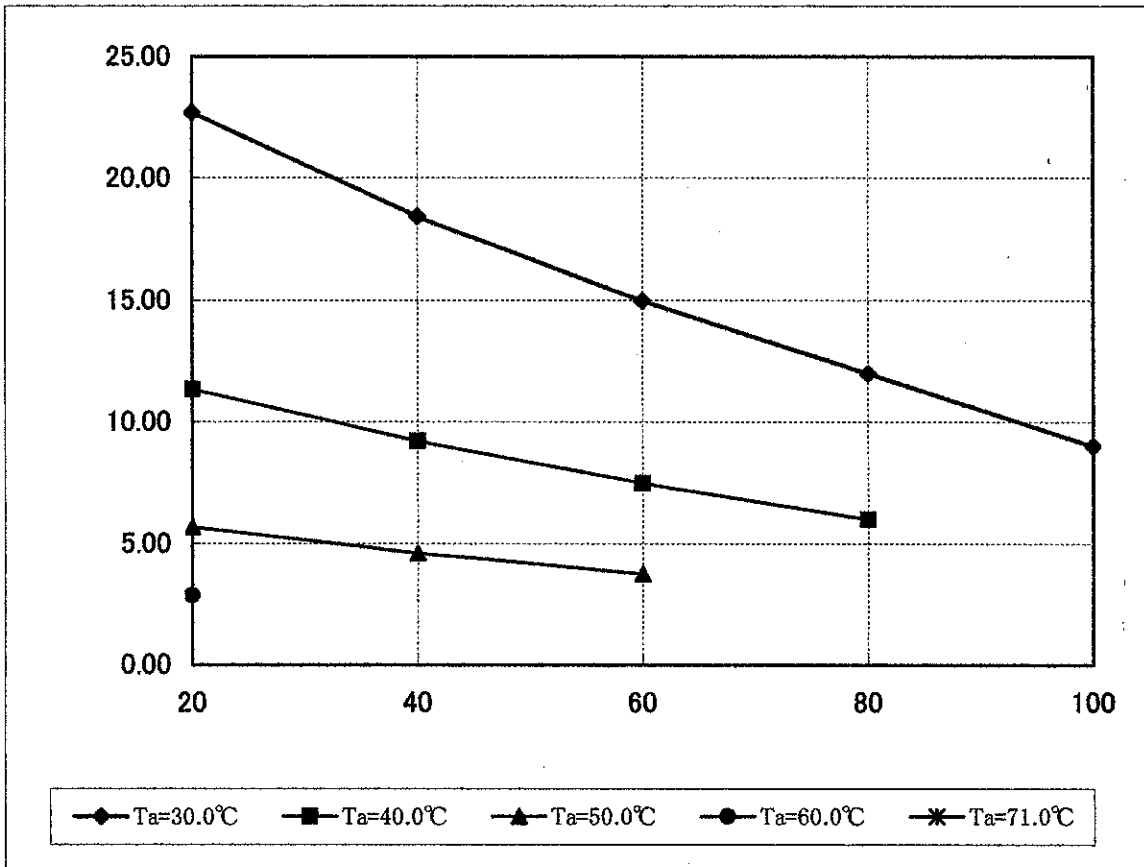
Io=(100%)=12.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	22.69	11.35	5.67	2.84	
40	18.43	9.22	4.61		
60	14.97	7.48	3.74		
80	11.99	6.00			
100	9.03				

*連続稼働 (最小実力値)

出力レギュレーション率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
 Ta=40°C Io=80%
 Ta=50°C Io=60%

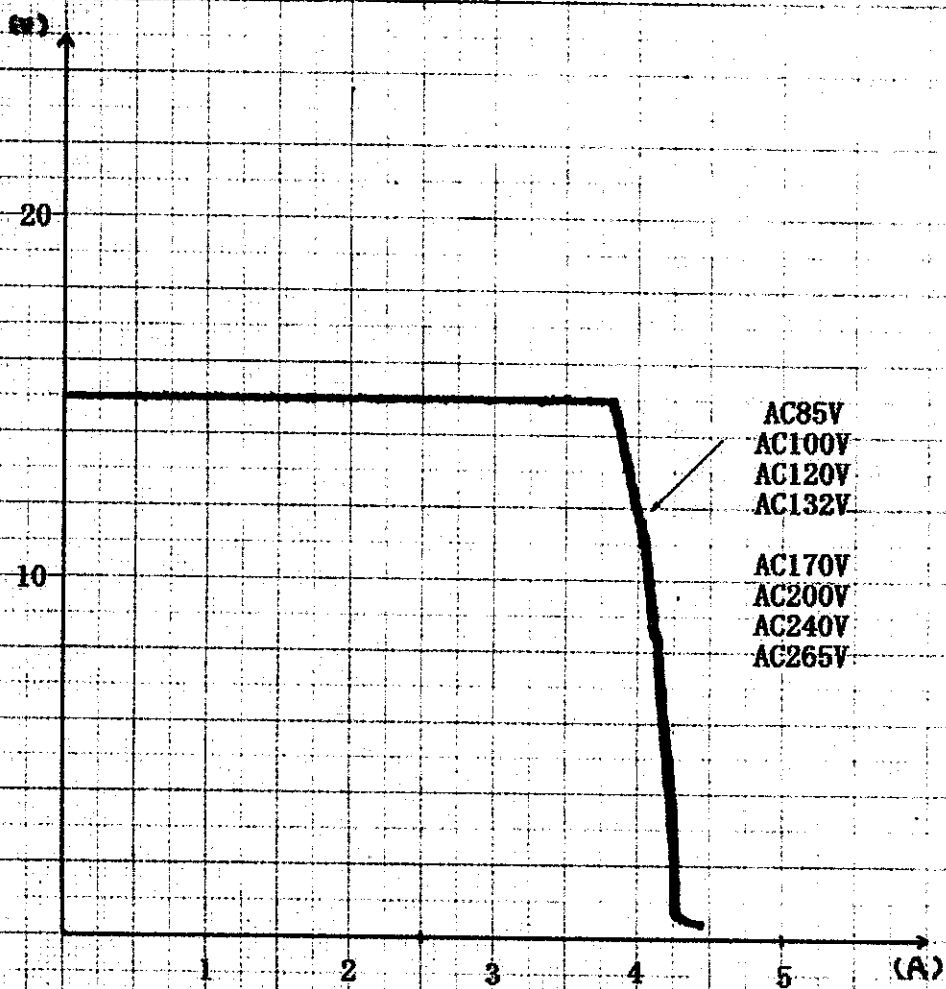
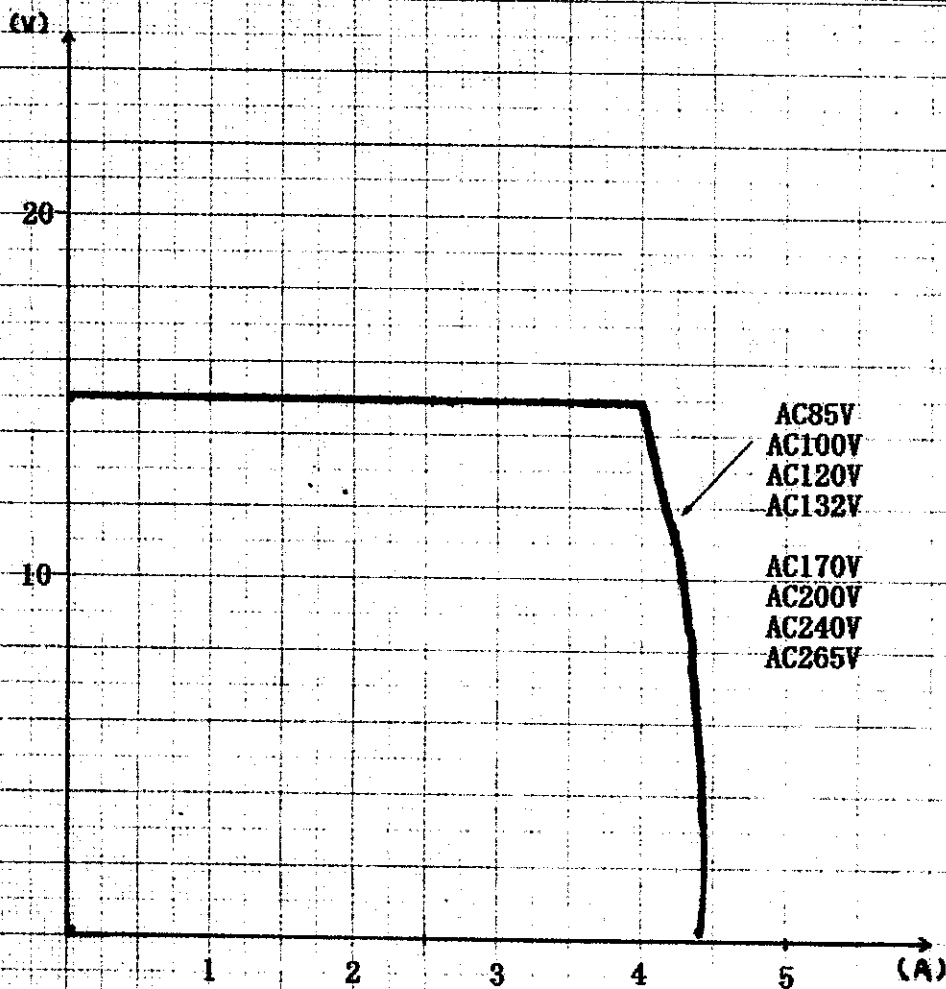


DATE: 03/11/4

TESTED BY:

NOTE:

Ta = -20°C



NOTE:

Ta = 71°C

MODEL

RTW15-3R5C

過電圧保護

OVERVOLTAGE PROTECTION

SOURCE

LOAD

TEMP.

AC100V

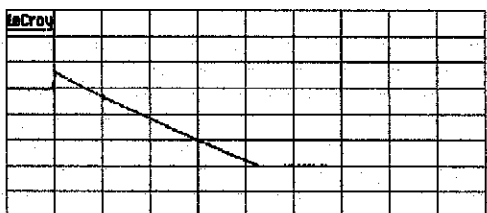
10% / 100%

25°C

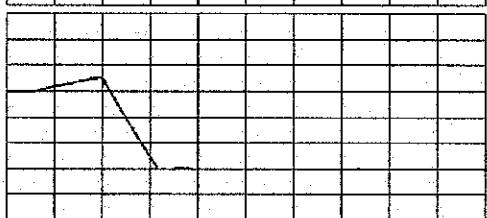
31-Oct-03

16:20:36

①: M1
5 ms
5.0 V



②: M2
2 ms
5.0 V



2 ms B/L
 ① .5 V DC
 ② 20 mV AC
 ③ 10 mV DC
 ④ 50 mV DC



1 DC 16.1 V

10 MS/s

☐ STOPPED

+SENSE OPEN

UPPER WAVE FORM

LOAD=10% : 18.2V

LOWER WAVE FORM

LOAD=100% : 17.9V

SOURCE

LOAD

TEMP.

AC100V

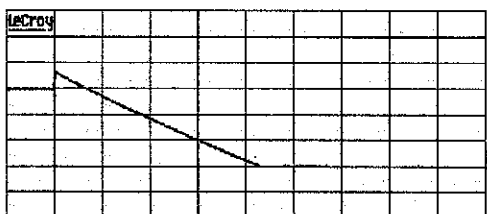
10% / 100%

25°C

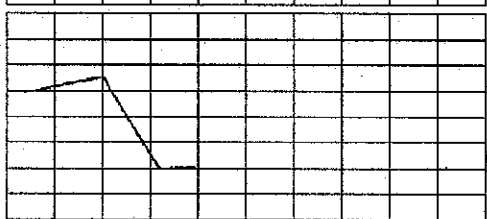
31-Oct-03

16:26:03

①: M1
5 ms
5.0 V



②: M2
2 ms
5.0 V



2 ms B/L
 ① .5 V DC
 ② 20 mV AC
 ③ 10 mV DC
 ④ 50 mV DC



1 DC 16.1 V

10 MS/s

☐ STOPPED

-SENSE OPEN

UPPER WAVE FORM

LOAD=10% : 18.2V

LOWER WAVE FORM

LOAD=100% : 17.9V

SER. NO

OUT PUT

DATE

TESTED BY

03/10/31

T.OKANO

MODEL

RTW15-3R5C

No: 030601

効 率
EFFICIENCY

SOURCE

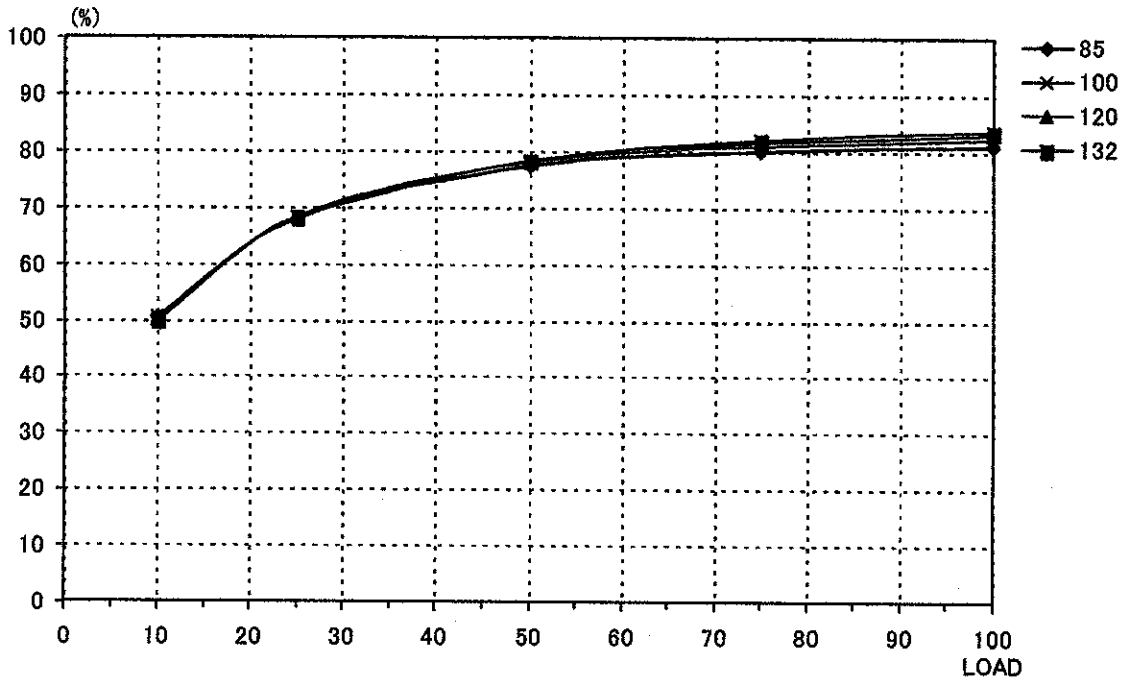
LOAD

TEMP.

AC85V~AC132V

10~100%

25°C



力 率
POWER FACTOR

SOURCE

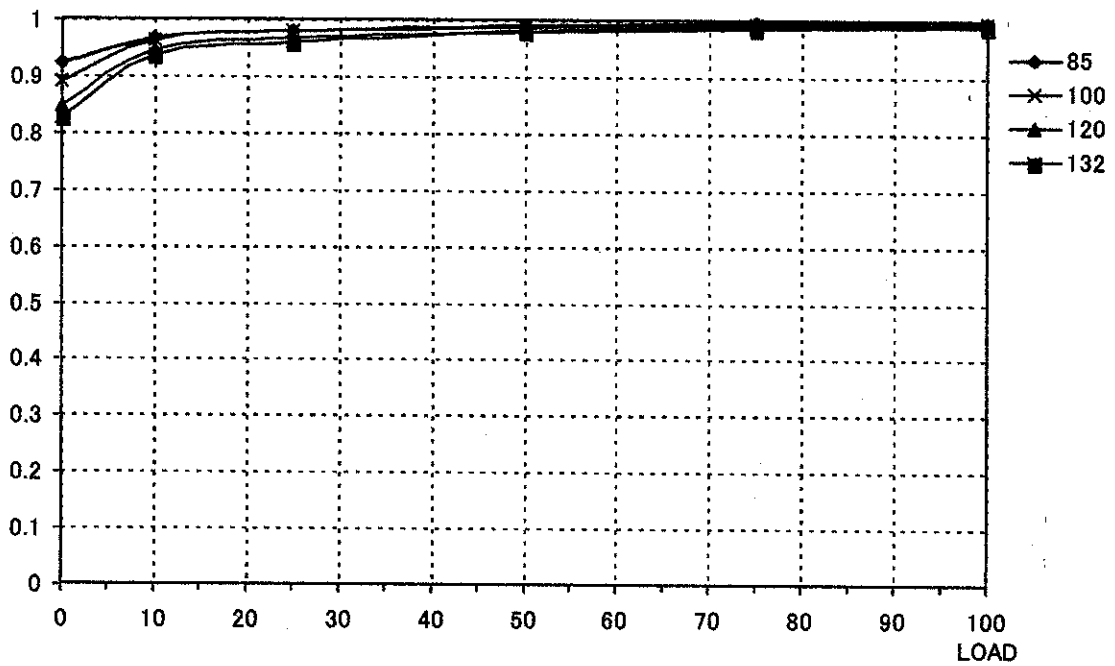
LOAD

TEMP.

AC85V~AC132V

0~100%

25°C



SER. NO.

OUT PUT

DATE

TESTED BY

36400505F

15 V

3.5 A

52.5 W

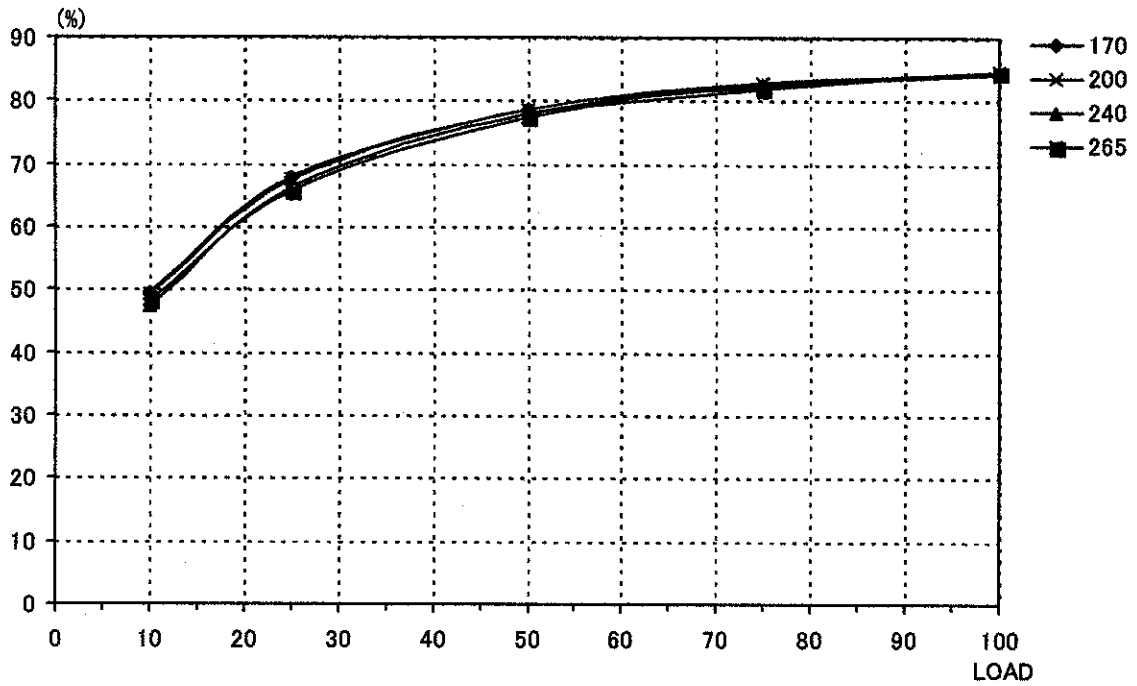
03/12/10

T. OKANO

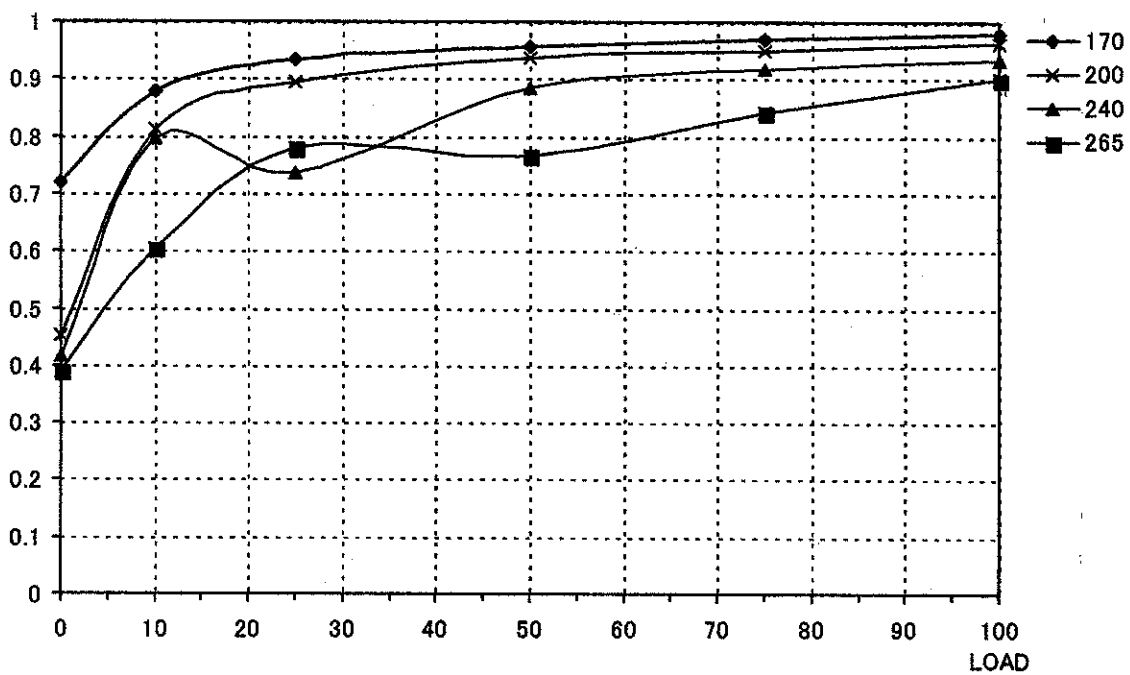
MODEL
RTW15-3R5C

No 030601

効 率 EFFICIENCY	SOURCE	LOAD	TEMP.	
	AC170V~AC265V	10~100%	25°C	



力 率 POWER FACTOR	SOURCE	LOAD	TEMP.	
	AC170V~AC265V	0~100%	25°C	



SER. NO.	OUT PUT			DATE	TESTED BY	
36400505F	15 V	3.5 A	52.5 W	03/12/10	T. OKANO	

MODEL
RTW15-3R5C

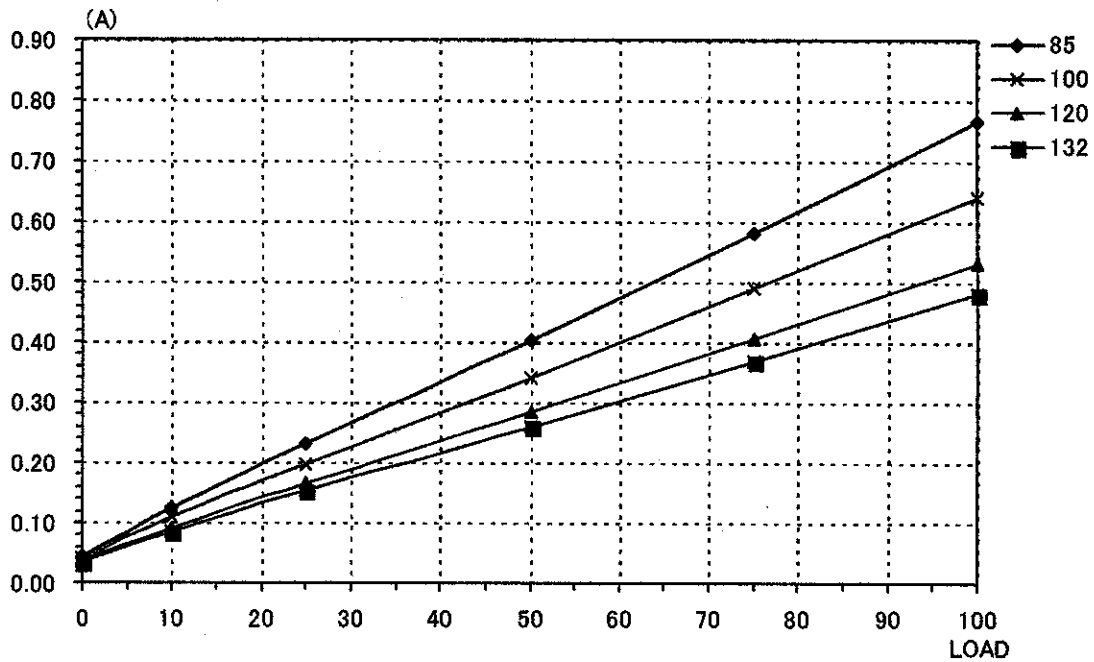
No: 030601

定常入力電流
INPUT CURRENT

SOURCE
AC85V~AC132V

LOAD
0~100%

TEMP.
25°C

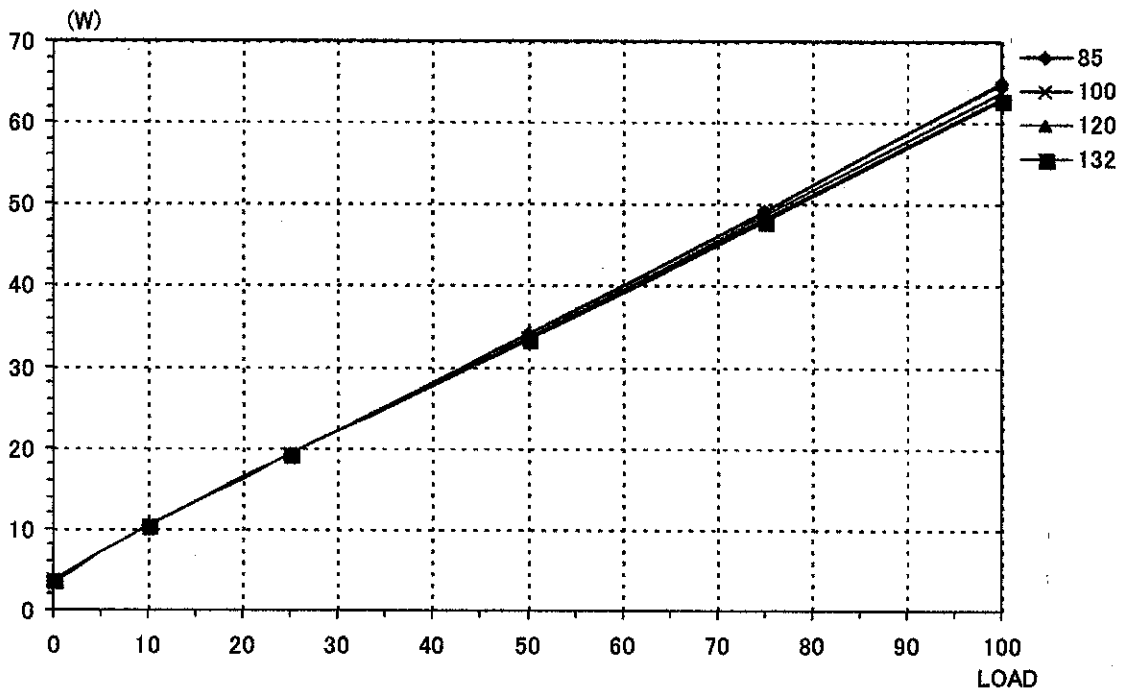


入力電力
INPUT POWER

SOURCE
AC85V~AC132V

LOAD
0~100%

TEMP.
25°C



SER. NO.

OUT PUT

DATE

TESTED BY

36400505F

15 V

3.5 A

52.5 W

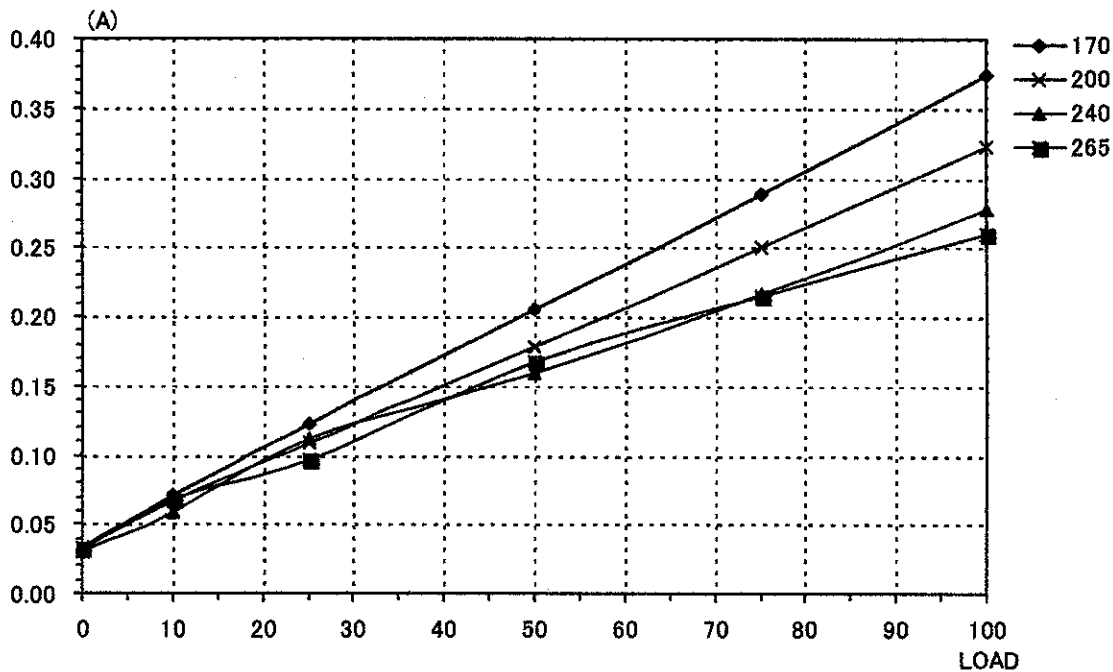
03/12/10

T. OKANO

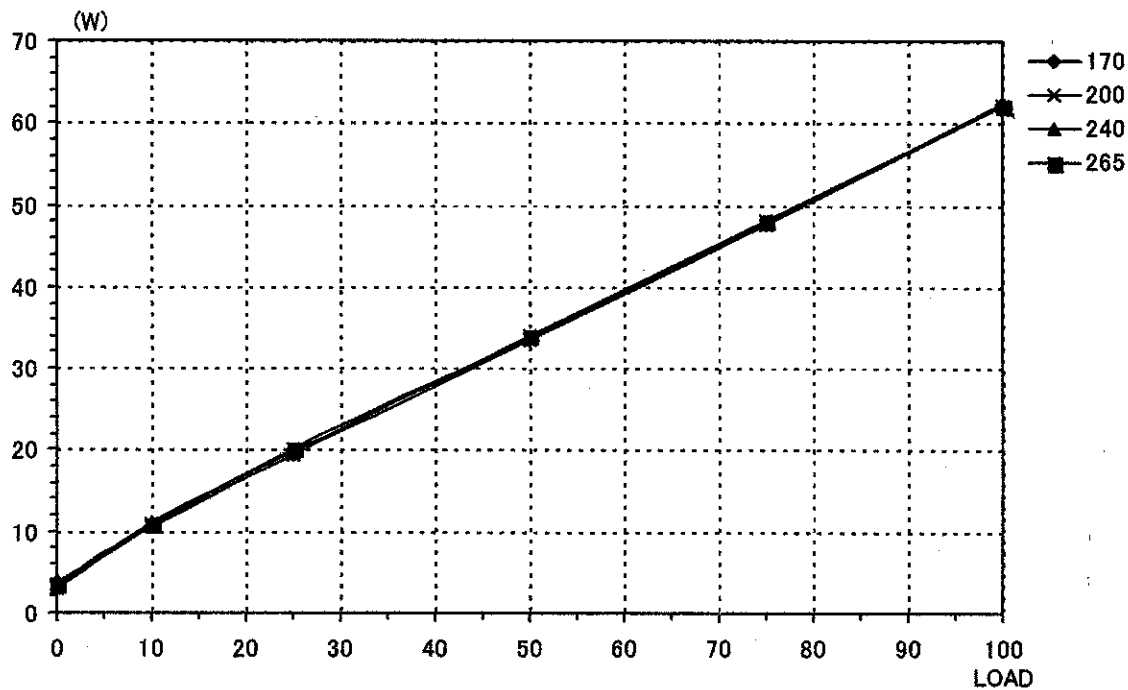
MODEL
RTW15-3R5C

No 030601

定常入力電流 INPUT CURRENT	SOURCE	LOAD	TEMP.	
	AC170V~AC265V	10~100%	25°C	



入力電力 INPUT POWER	SOURCE	LOAD	TEMP.	
	AC170V~AC265V	0~100%	25°C	



SER. NO.	OUT PUT			DATE	TESTED BY	
36400505F	15 V	3.5 A	52.5 W	03/12/10	T. OKANO	

MODEL

RTW15-3R5C

負荷急変
TRANSIENT RESPONSE

SOURCE

LOAD

TEMP.

AC100V

0%TO100%

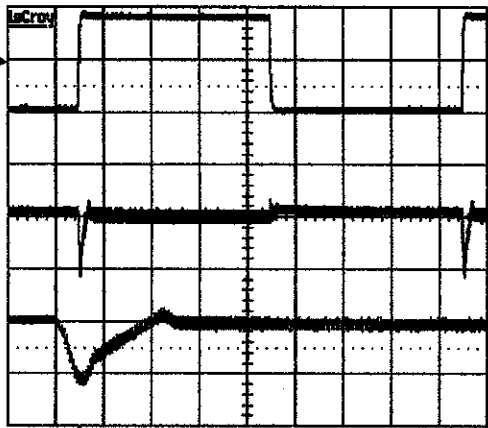
25°C

18-Nov-03
13:29:59

1 1 ms
10.8mV

2 1 ms
200mV

3:MI
.1 ms
200mV



1 ms BWL
 1 10 mV DC
 2 2 V AC
 3 10 mV DC
 4 50 mV DC

1 DC 9.6mV

25 MS/s

STOPPED

UPPER WAVE FORM

Output load current : 2A/DIV

LOWER WAVE FORM

Ripple voltage : 200mV/DIV

TIME

1mS/DIV

SOURCE

LOAD

TEMP.

AC100V

50%TO100%

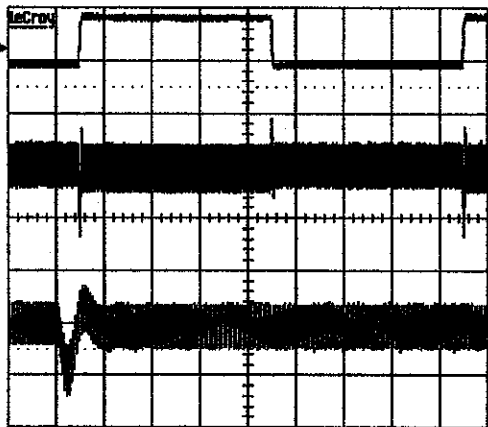
25°C

18-Nov-03
13:31:53

1 1 ms
10.8mV

2 1 ms
50mV

3:MI
.1 ms
50mV



1 ms BWL
 1 10 mV DC
 2 50 mV AC
 3 10 mV DC
 4 50 mV DC

1 DC 12.2mV

25 MS/s

STOPPED

UPPER WAVE FORM

Output load current : 2A/DIV

LOWER WAVE FORM

Ripple voltage : 50mV/DIV

TIME

1mS/DIV

SER. NO

OUT PUT

DATE

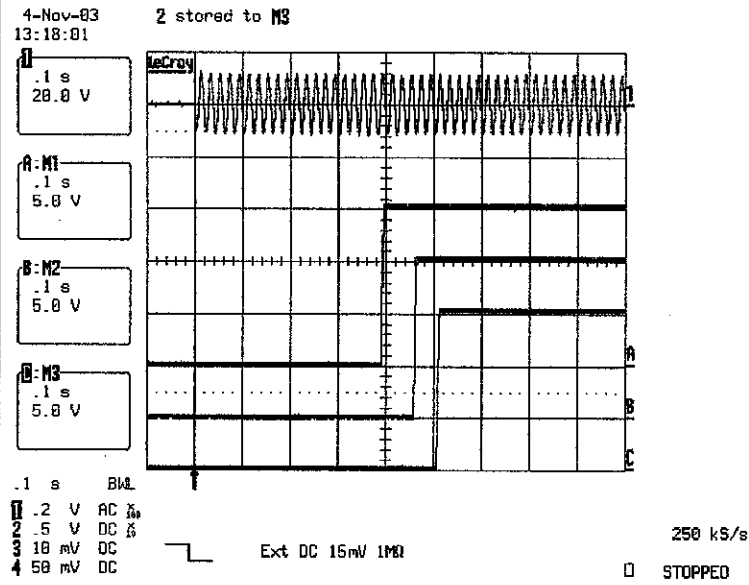
TESTED BY

03/11/18

T.OKANO

MODEL
RTW15-3R5C

起動特性 TURN-ON CHARACTERISTIC	SOURCE	LOAD	TEMP.
	AC85V~AC132V	3.5A	-20°C



UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC132V

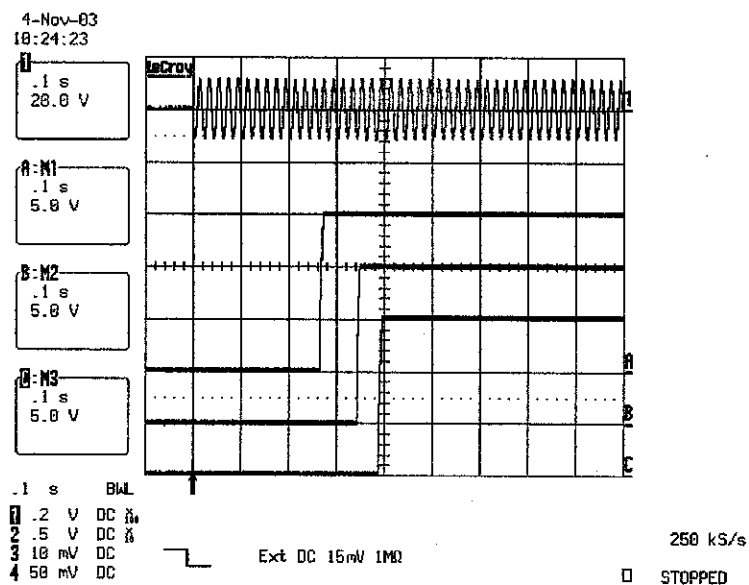
LOWER MIDDLE WAVE FORM

Vin=AC 100V

LOWER WAVE FORM

Vin=AC 85V

	SOURCE	LOAD	TEMP.
	AC85V~AC132V	3.5A	71°C



UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC132V

LOWER MIDDLE WAVE FORM

Vin=AC 100V

LOWER WAVE FORM

Vin=AC 85V

SER. NO	OUT PUT	DATE	TESTED BY	
		03/11/4	T.OKANO	

MODEL

RTW15-3R5C

起動特性
TURN-ON CHARACTERISTIC

SOURCE

LOAD

TEMP.

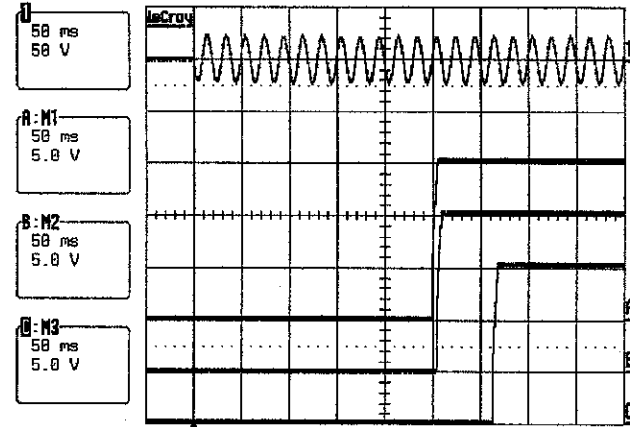
AC170V~AC265V

3.5A

-20°C

4-Nov-03
13:22:10

2 stored to M3



50 ms BIL

- 1 .5 V AC \bar{A}
- 2 .5 V DC \bar{A}
- 3 10 mV DC \bar{A}
- 4 50 mV DC \bar{A}

Ext DC 15mV 1M Ω

500 kS/s

STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

V_{in}=AC265V

LOWER MIDDLE WAVE FORM

V_{in}=AC 240V

LOWER WAVE FORM

V_{in}=AC 170V

SOURCE

LOAD

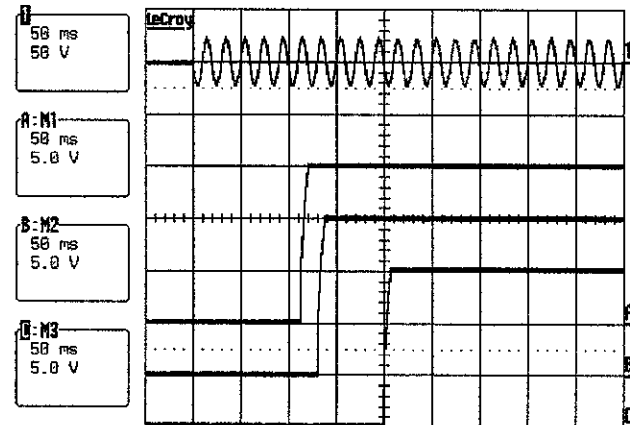
TEMP.

AC170V~AC265V

3.5A

71°C

4-Nov-03
10:27:55



50 ms BIL

- 1 .5 V DC \bar{A}
- 2 .5 V DC \bar{A}
- 3 10 mV DC \bar{A}
- 4 50 mV DC \bar{A}

Ext DC 15mV 1M Ω

500 kS/s

STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

V_{in}=AC265V

LOWER MIDDLE WAVE FORM

V_{in}=AC 240V

LOWER WAVE FORM

V_{in}=AC 170V

SER. NO

OUT PUT

DATE

TESTED BY

03/11/4

T.OKANO

MODEL

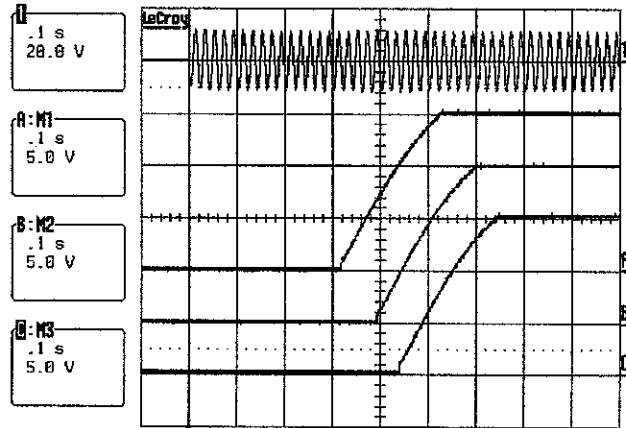
RTW15-3R5C

容量性負荷起動特性

TURN-ON CAPACITIVE LOAD

SOURCE	LOAD	TEMP.	CAPACTOR LOAD
AC85TO132V	3.5A	25°C	12,000 μF

30-Oct-03
19:27:32



.1 s BML
 1 .2 V AC $\frac{1}{\sqrt{2}}$
 2 .5 V DC $\frac{1}{\sqrt{2}}$
 3 10 mV DC
 4 50 mV DC
 Ext DC 5mV 1MΩ
 50 kS/s
 STOPPED

UPPER WAVE FORM

AC MONITOR

UPPER MIDDLE WAVE FORM

V_{IN}=AC132V

LOWER MIDDLE WAVE FORM

V_{IN}=AC100V

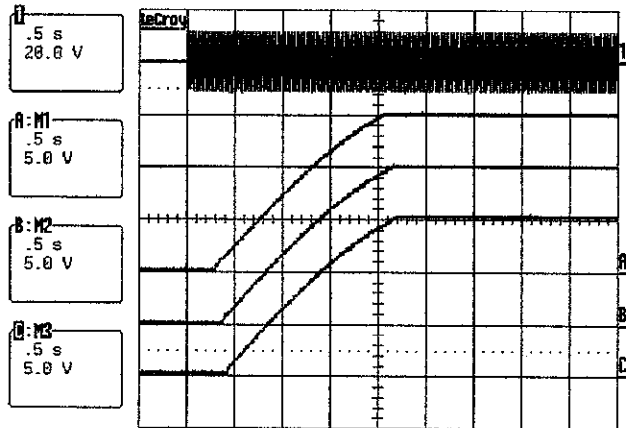
LOWER WAVE FORM

V_{IN}=AC85V

SOURCE	LOAD	TEMP.	CAPACTOR LOAD
AC85TO132V	3.5A	25°C	100,000 μF

30-Oct-03
19:32:30

2 stored to M3



.5 s BML
 1 .2 V AC $\frac{1}{\sqrt{2}}$
 2 .5 V DC $\frac{1}{\sqrt{2}}$
 3 10 mV DC
 4 50 mV DC
 Ext DC 5mV 1MΩ
 10 kS/s
 STOPPED

UPPER WAVE FORM

AC MONITOR

UPPER MIDDLE WAVE FORM

V_{IN}=AC132V

LOWER MIDDLE WAVE FORM

V_{IN}=AC100V

LOWER WAVE FORM

V_{IN}=AC85V

SER. NO	OUT PUT	DATE	TESTED BY
		03/10/30	T.OKANO

MODEL

RTW15-3R5C

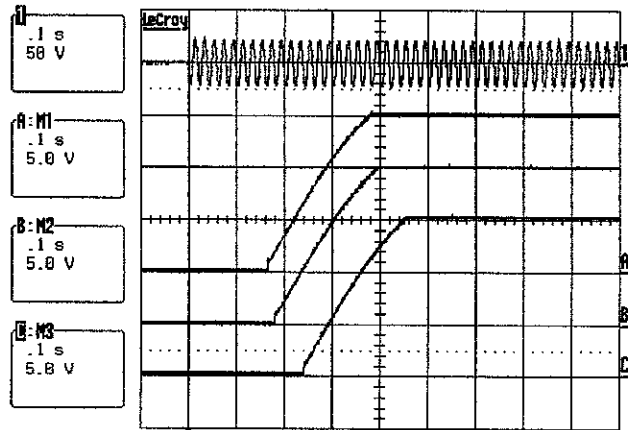
容量性負荷起動特性

TURN-ON CAPACITIVE LOAD

SOURCE	LOAD	TEMP.	CAPACTOR LOAD
AC170TO265V	3.5A	25°C	12,000 μF

30-Oct-03
19:35:44

2 stored to M3



.1 s BWL
 1 5.0 V AC $\tilde{\sim}$
 2 5.0 V DC \square
 3 10 mV DC \square
 4 50 mV DC \square
 Ext DC 5mV 1MΩ
 50 kS/s
 STOPPED

UPPER WAVE FORM

AC MONITOR

UPPER MIDDLE WAVE FORM

V_{IN}=AC265V

LOWER MIDDLE WAVE FORM

V_{IN}=AC240V

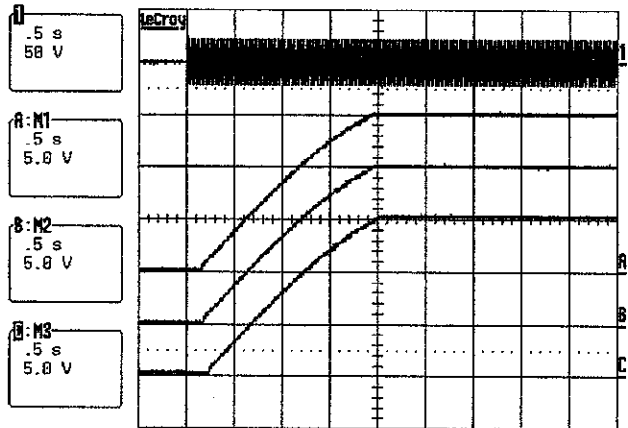
LOWER WAVE FORM

V_{IN}=AC170V

SOURCE	LOAD	TEMP.	CAPACTOR LOAD
AC170TO265V	3.5A	25°C	100,000 μF

30-Oct-03
19:38:34

2 stored to M3



.5 s BWL
 1 5.0 V AC $\tilde{\sim}$
 2 5.0 V DC \square
 3 10 mV DC \square
 4 50 mV DC \square
 Ext DC 5mV 1MΩ
 10 kS/s
 STOPPED

UPPER WAVE FORM

AC MONITOR

UPPER MIDDLE WAVE FORM

V_{IN}=AC265V

LOWER MIDDLE WAVE FORM

V_{IN}=AC240V

LOWER WAVE FORM

V_{IN}=AC170V

SER. NO	OUT PUT	DATE	TESTED BY
		03/10/30	T.OKANO

MODEL

RTW15-3R5C

保持特性

TURN-OFF CHARACTERISTIC

SOURCE

AC85V~AC132V

LOAD

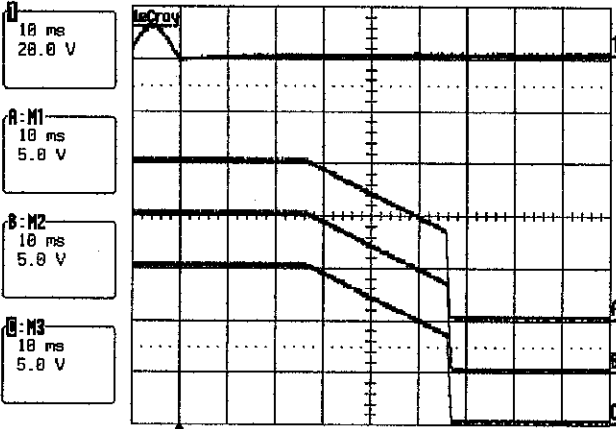
3.5A

TEMP.

-20°C

4-Nov-83
13:48:11

2 stored to M3



10 ms BkL
1 .2 V AC \hat{u}
2 .5 V DC \hat{u}
3 18 mV DC \hat{u}
4 58 mV DC \hat{u}

Ext DC 15mV 1M Ω

2.5 MS/s

STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC132V

LOWER MIDDLE WAVE FORM

Vin=AC 100V

LOWER WAVE FORM

Vin=AC 85V

SOURCE

AC85V~AC132V

LOAD

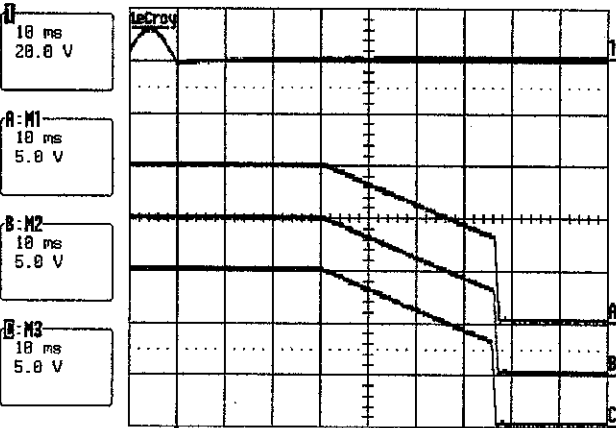
3.5A

TEMP.

71°C

4-Nov-83
11:12:05

2 stored to M3



10 ms BkL
1 .2 V AC \hat{u}
2 .5 V DC \hat{u}
3 18 mV DC \hat{u}
4 58 mV DC \hat{u}

Ext DC 15mV 1M Ω

2.5 MS/s

STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC132V

LOWER MIDDLE WAVE FORM

Vin=AC 100V

LOWER WAVE FORM

Vin=AC 85V

SER. NO

OUT PUT

DATE

TESTED BY

03/11/4

T.OKANO

MODEL

RTW15-3R5C

保持特性

TURN-OFF CHARACTERISTIC

SOURCE

AC170V~AC265V

LOAD

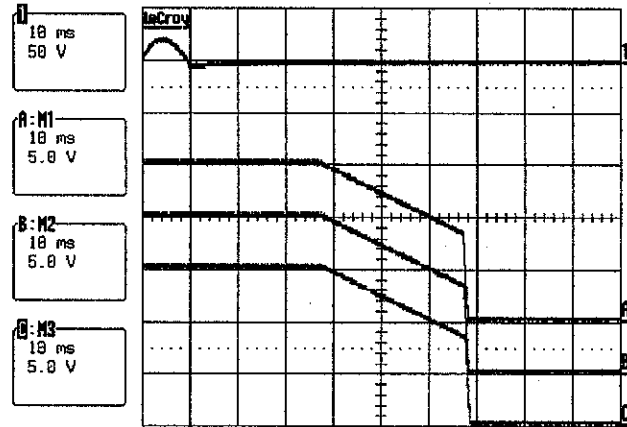
3.5A

TEMP.

-20°C

4-Nov-83
13:53:00

2 stored to M3



10 ms BWL
1 .5 V AC $\frac{1}{2}$
2 .5 V DC $\frac{1}{2}$
3 10 mV DC $\frac{1}{2}$
4 50 mV DC

Ext DC 15mV 1M Ω

2.5 MS/s

STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC265V

LOWER MIDDLE WAVE FORM

Vin=AC240V

LOWER WAVE FORM

Vin=AC170V

SOURCE

AC170V~AC265V

LOAD

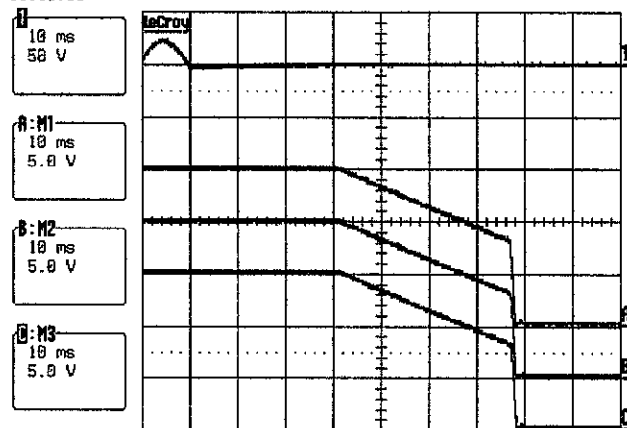
3.5A

TEMP.

71°C

4-Nov-83
11:16:08

2 stored to M3



10 ms BWL
1 .5 V AC $\frac{1}{2}$
2 .5 V DC $\frac{1}{2}$
3 10 mV DC $\frac{1}{2}$
4 50 mV DC

Ext DC 15mV 1M Ω

2.5 MS/s

STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC265V

LOWER MIDDLE WAVE FORM

Vin=AC240V

LOWER WAVE FORM

Vin=AC170V

SER. NO

OUT PUT

DATE

TESTED BY

03/11/4

T.OKANO

MODEL

RTW15-3R5C

突入電流
INRUSH CURRENT

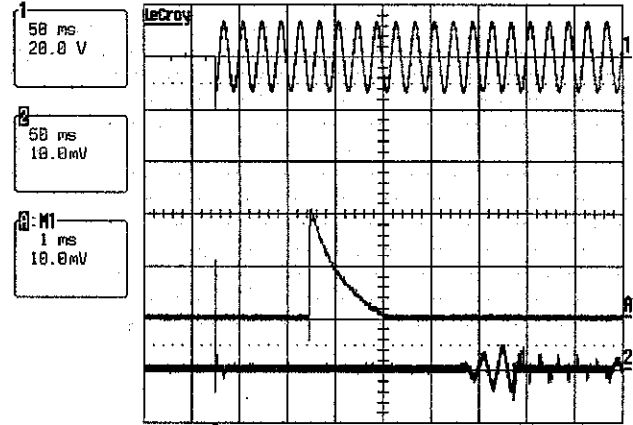
SOURCE
AC100V
(line direct connection)

LOAD
3.5A

TEMP.
25°C

PHASE
90°

31-Oct-03
11:37:48



50 ms BML
 1 .2 V AC $\tilde{\sim}$
 2 10 mV DC \square
 3 10 mV DC \square
 4 50 mV DC \square

Ext DC 15mV 1M \square 500 kS/s \square STOPPED

UPPER WAVE FORM

AC MONITOR

LOWER WAVE FORM

$I_p=10.5A$

CURRENT / DIVISION

5A/DIV

TIME

50mS/DIV

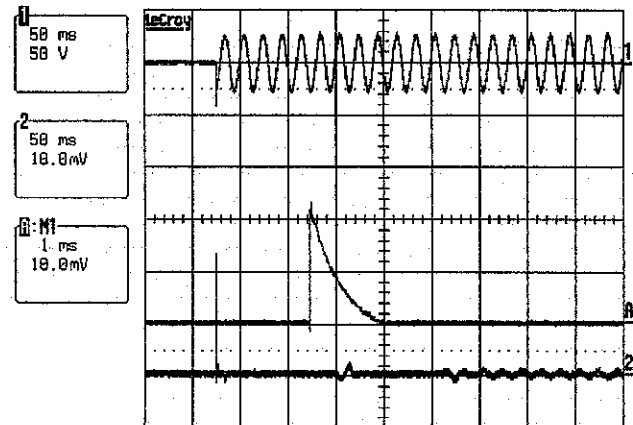
SOURCE
AC200V
(line direct connection)

LOAD
3.5A

TEMP.
25°C

PHASE
90°

31-Oct-03
11:47:54



50 ms BML
 1 .5 V AC $\tilde{\sim}$
 2 10 mV DC \square
 3 10 mV DC \square
 4 50 mV DC \square

Ext DC 15mV 1M \square 500 kS/s \square STOPPED

UPPER WAVE FORM

AC MONITOR

LOWER WAVE FORM

$I_p=23.0A$

CURRENT / DIVISION

10A/DIV

TIME

50mS/DIV

SER. NO

OUT PUT

DATE

TESTED BY

03/10/31

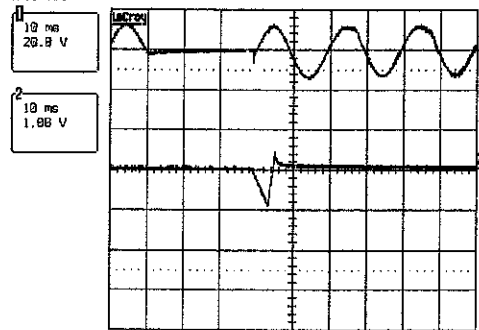
T.OKANO

瞬 停 SHORT INTERRUPTIONS

MODEL RTW15-3R5C SER.NO.

TESTRD BY : T.OKANO

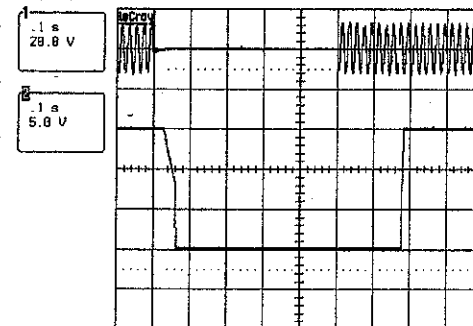
38-Oct-03
15:18:59



10 ms BW
1 20.8 V AC 1
2 1.98 V AC 1
3 10 mV DC 1
4 50 mV DC 1
Ext DC 5mV 1mV
500 kS/s
STOPPED

Ta=25°C
VIN=AC100V
LOAD=3.5A
29mS

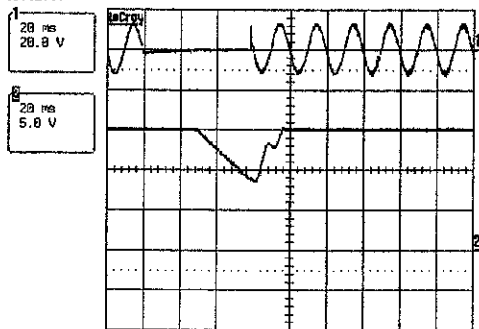
38-Oct-03
15:13:01



0.1 s BW
1 29.8 V AC 1
2 5.8 V AC 1
3 10 mV DC 1
4 50 mV DC 1
Ext DC 5mV 1mV
50 kS/s
STOPPED

Ta=25°C
VIN=AC100V
LOAD=3.5A
500mS

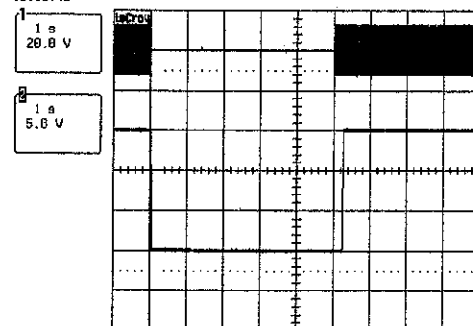
38-Oct-03
15:12:17



20 ms BW
1 29.8 V AC 1
2 5.8 V AC 1
3 10 mV DC 1
4 50 mV DC 1
Ext DC 5mV 1mV
250 kS/s
STOPPED

Ta=25°C
VIN=AC100V
LOAD=3.5A
58mS

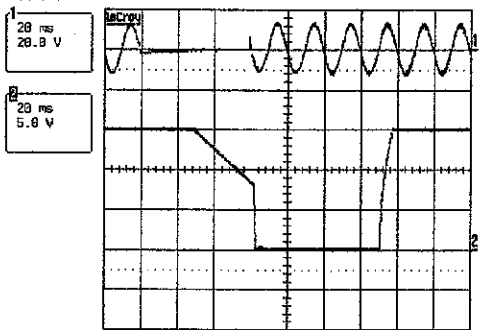
38-Oct-03
15:13:48



1 s BW
1 29.8 V AC 1
2 5.8 V AC 1
3 10 mV DC 1
4 50 mV DC 1
Ext DC 5mV 1mV
5 kS/s
STOPPED

Ta=25°C
VIN=AC100V
LOAD=3.5A
5S

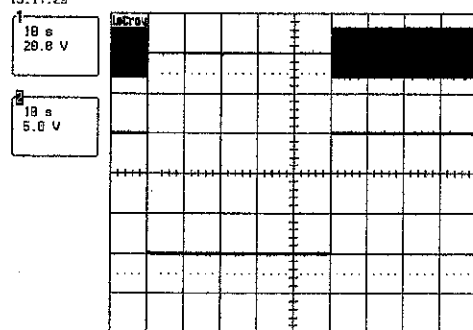
38-Oct-03
15:12:33



20 ms BW
1 29.8 V AC 1
2 5.8 V AC 1
3 10 mV DC 1
4 50 mV DC 1
Ext DC 5mV 1mV
250 kS/s
STOPPED

Ta=25°C
VIN=AC100V
LOAD=3.5A
59mS

38-Oct-03
15:17:29



10 s BW
1 29.8 V AC 1
2 5.8 V AC 1
3 10 mV DC 1
4 50 mV DC 1
Ext DC 5mV 1mV
500 S/s
STOPPED

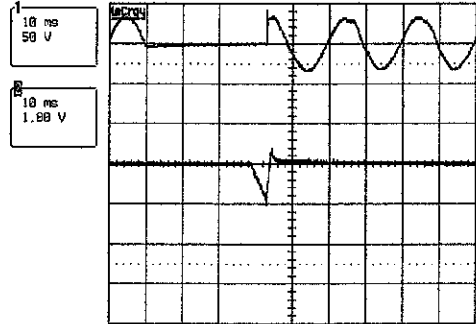
Ta=25°C
VIN=AC100V
LOAD=3.5A
50S

瞬 停 SHORT INTERRUPTIONS

MODEL RTW15-3R5C SER.NO.

TESTRD BY : T.OKANO

38-Oct-83
16:51:53



10 ms BW
1 1.5 V AC 5
2 1.5 V AC 5
3 10 mV DC 5
4 50 mV DC

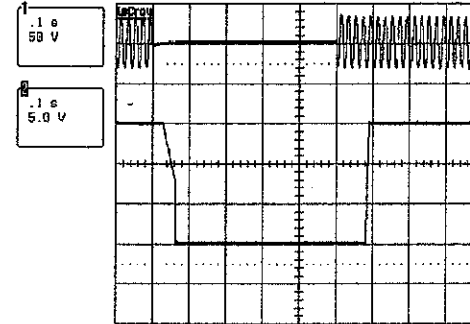
Ext DC 5mV 1MΩ

500 kS/s

STOPPED

Ta=25°C
VIN=AC240V
LOAD=3.5A
34mS

38-Oct-83
15:24:11



1 s BW
1 1.5 V AC 5
2 1.5 V AC 5
3 10 mV DC 5
4 50 mV DC

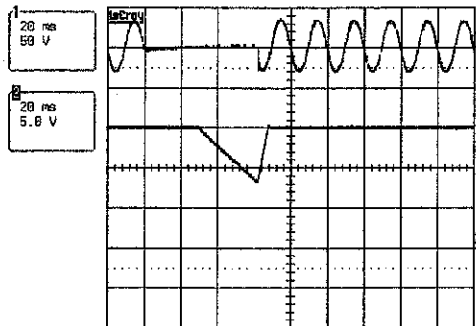
Ext DC 5mV 1MΩ

50 kS/s

STOPPED

Ta=25°C
VIN=AC240V
LOAD=3.5A
500mS

38-Oct-83
16:22:52



20 ms BW
1 1.5 V AC 5
2 1.5 V AC 5
3 10 mV DC 5
4 50 mV DC

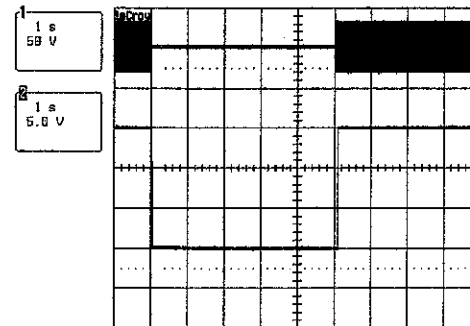
Ext DC 5mV 1MΩ

250 kS/s

STOPPED

Ta=25°C
VIN=AC240V
LOAD=3.5A
62mS

38-Oct-83
15:25:07



1 s BW
1 1.5 V AC 5
2 1.5 V AC 5
3 10 mV DC 5
4 50 mV DC

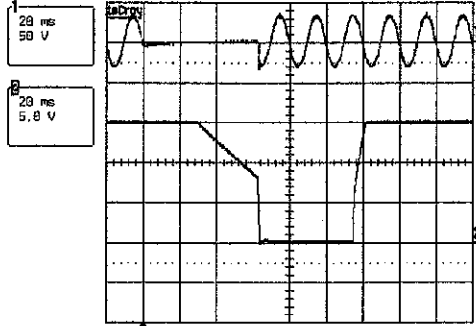
Ext DC 5mV 1MΩ

5 kS/s

STOPPED

Ta=25°C
VIN=AC240V
LOAD=3.5A
5S

38-Oct-83
15:23:15



20 ms BW
1 1.5 V AC 5
2 1.5 V AC 5
3 10 mV DC 5
4 50 mV DC

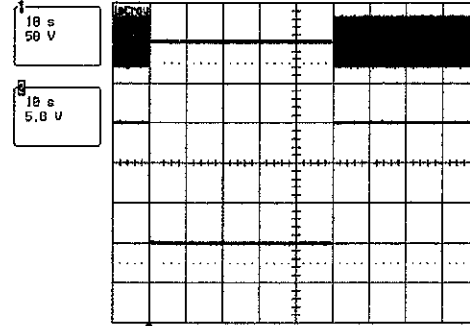
Ext DC 5mV 1MΩ

250 kS/s

STOPPED

Ta=25°C
VIN=AC240V
LOAD=3.5A
63mS

38-Oct-83
15:29:01



10 s BW
1 1.5 V AC 5
2 1.5 V AC 5
3 10 mV DC 5
4 50 mV DC

Ext DC 5mV 1MΩ

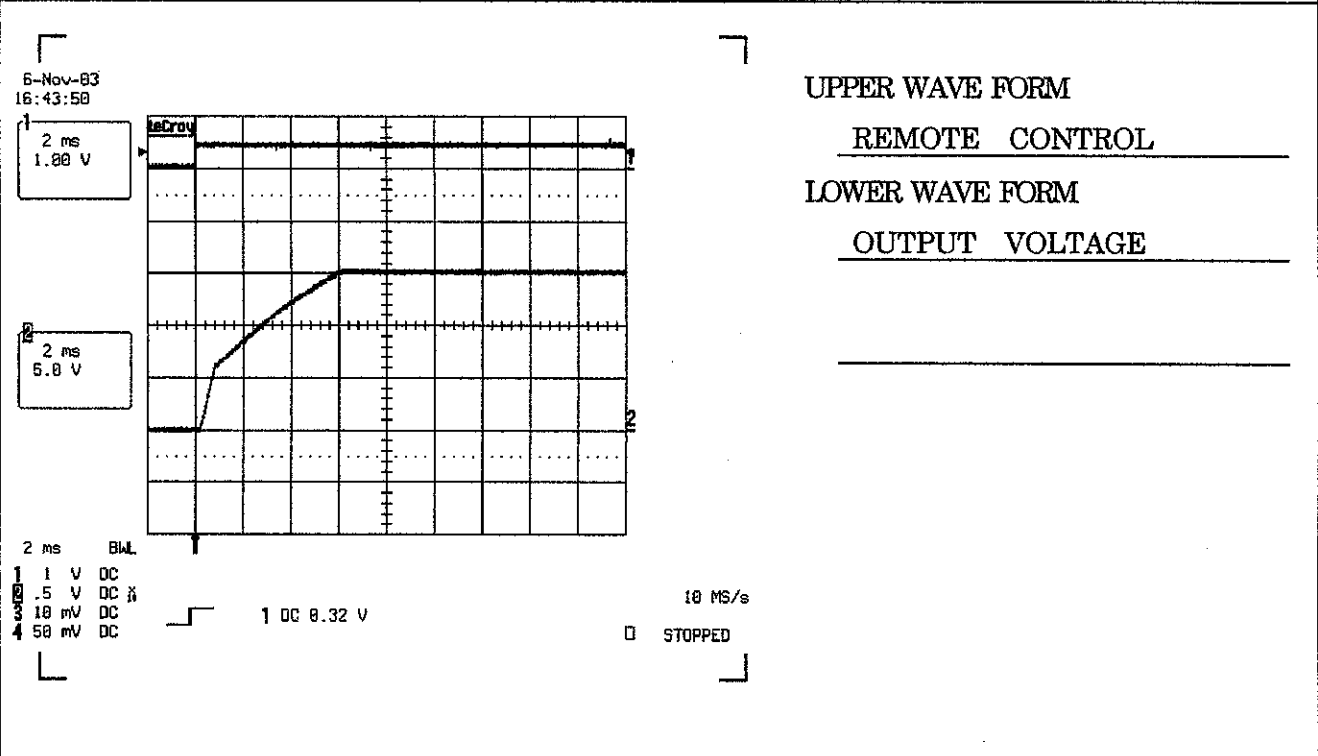
500 S/s

STOPPED

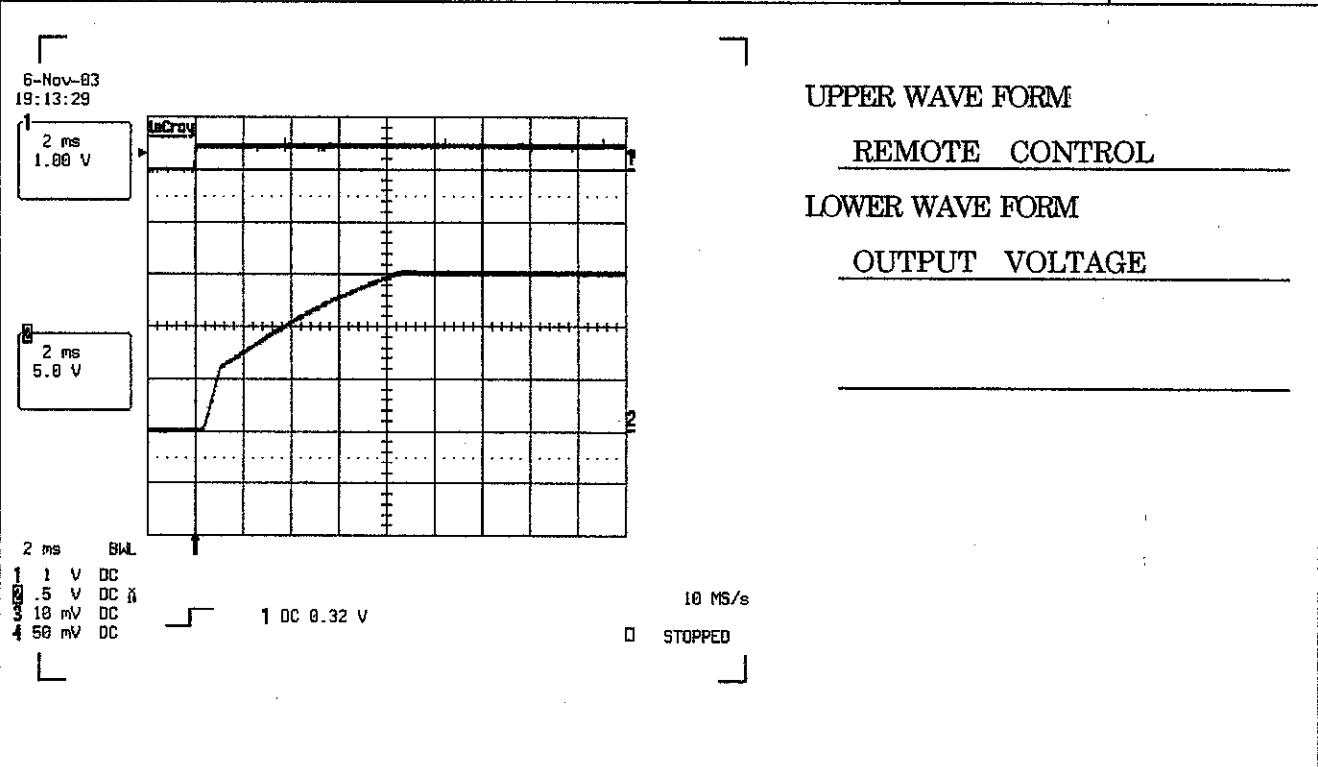
Ta=25°C
VIN=AC240V
LOAD=3.5A
50S

MODEL
RTW15-3R5C

リモート コントロール REMOTE CONTROL	SOURCE	LOAD	TEMP.	
	AC100V	3.5A	-20°C	



	SOURCE	LOAD	TEMP.	
	AC100V	3.5A	71°C	



SER. NO	OUT PUT	DATE	TESTED BY
		03/11/ 6	T.OKANO

MODEL

RTW15-3R5C

リモート コントロール

SOURCE

LOAD

TEMP.

REMOTE CONTROL

AC100V

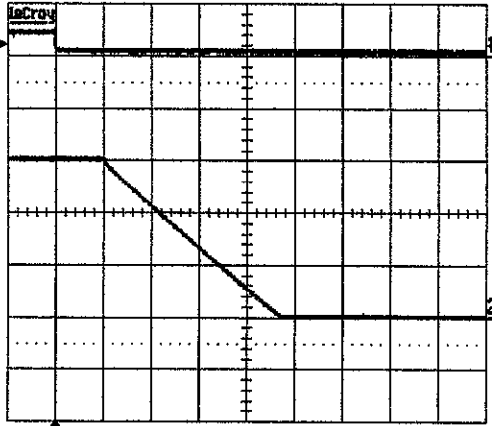
3.5A

-20°C

6-Nov-03
16:44:44

1 .5 ms
1.00 V

2 .5 ms
5.0 V



.5 ms BWL

1 1 V DC

2 .5 V DC $\bar{\Delta}$

3 10 mV DC

4 50 mV DC

1 DC 0.22 V

50 MS/s

□ STOPPED

UPPER WAVE FORM

REMOTE CONTROL

LOWER WAVE FORM

OUTPUT VOLTAGE

SOURCE

LOAD

TEMP.

AC100V

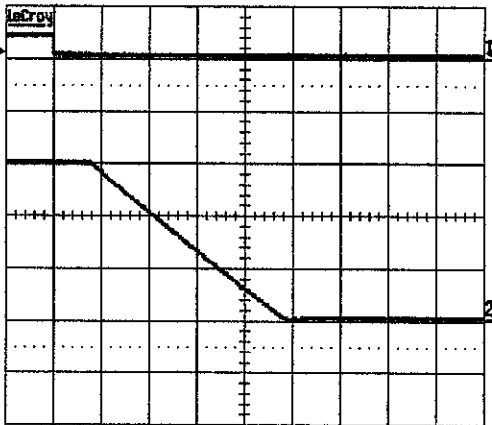
3.5A

71°C

6-Nov-03
19:13:50

1 .5 ms
1.00 V

2 .5 ms
5.0 V



.5 ms BWL

1 1 V DC

2 .5 V DC $\bar{\Delta}$

3 10 mV DC

4 50 mV DC

1 DC 0.14 V

50 MS/s

□ STOPPED

UPPER WAVE FORM

REMOTE CONTROL

LOWER WAVE FORM

OUTPUT VOLTAGE

SER. NO

OUT PUT

DATE

TESTED BY

03/11/ 6

T.OKANO

型名 : RTW15-3R5C

2003/11/21

電解コンデンサ算出寿命

部品No:C12, C120

設置方向 : A方向

Vo=15V

Vin=AC100V

Io=(100%)=3.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	19.34	9.67	4.84	2.42	
40	16.84	8.42	4.21	2.11	
60	14.11	7.06	3.53	1.76	
80	10.12	5.06	2.53		
100	6.96	3.48			

*連続稼働 (最小保証値)

出力レギュレーション率(使用可能範囲)

Ta=40°C

Io=100%

Ta=71°C

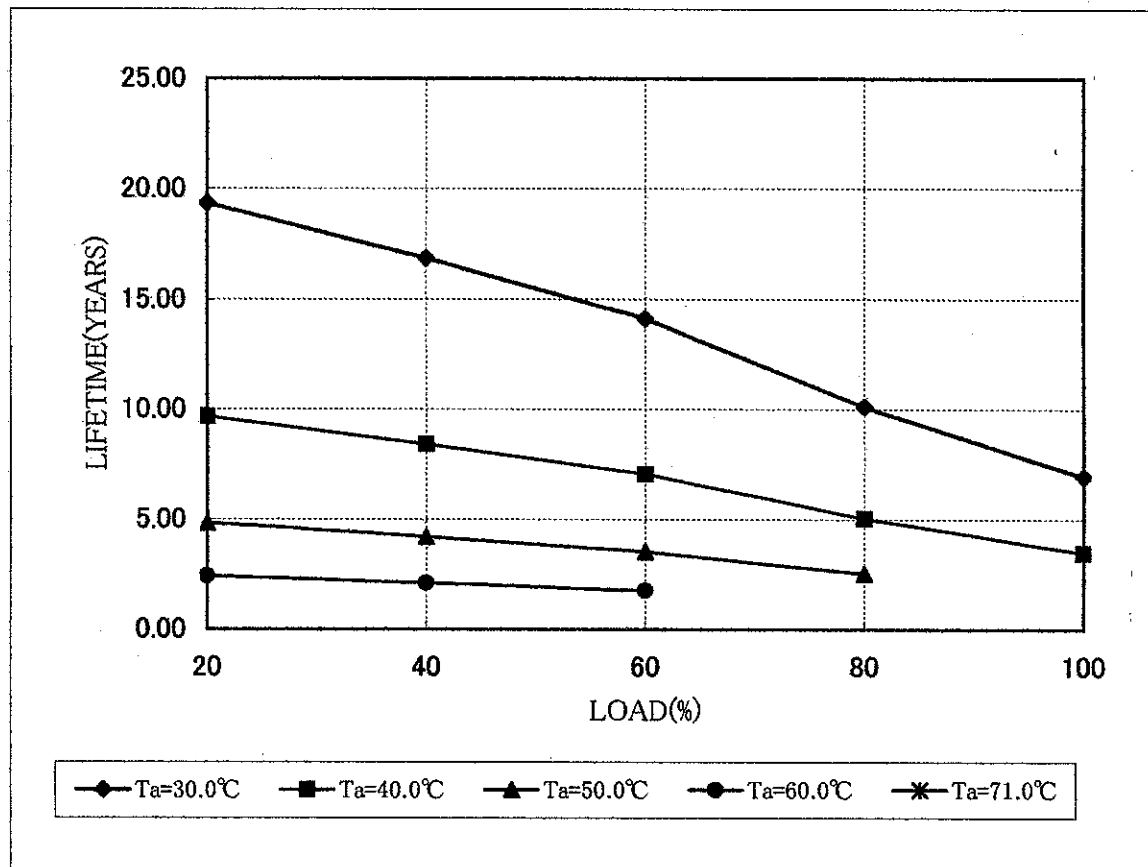
Io=10%

Ta=50°C

Io=80%

Ta=60°C

Io=60%



型名 : RTW15-3R5C

2003/11/21

電解コンデンサ算出寿命

部品No:C12, C120

設置方向 : A方向

Vo=15V

Vin=AC240V

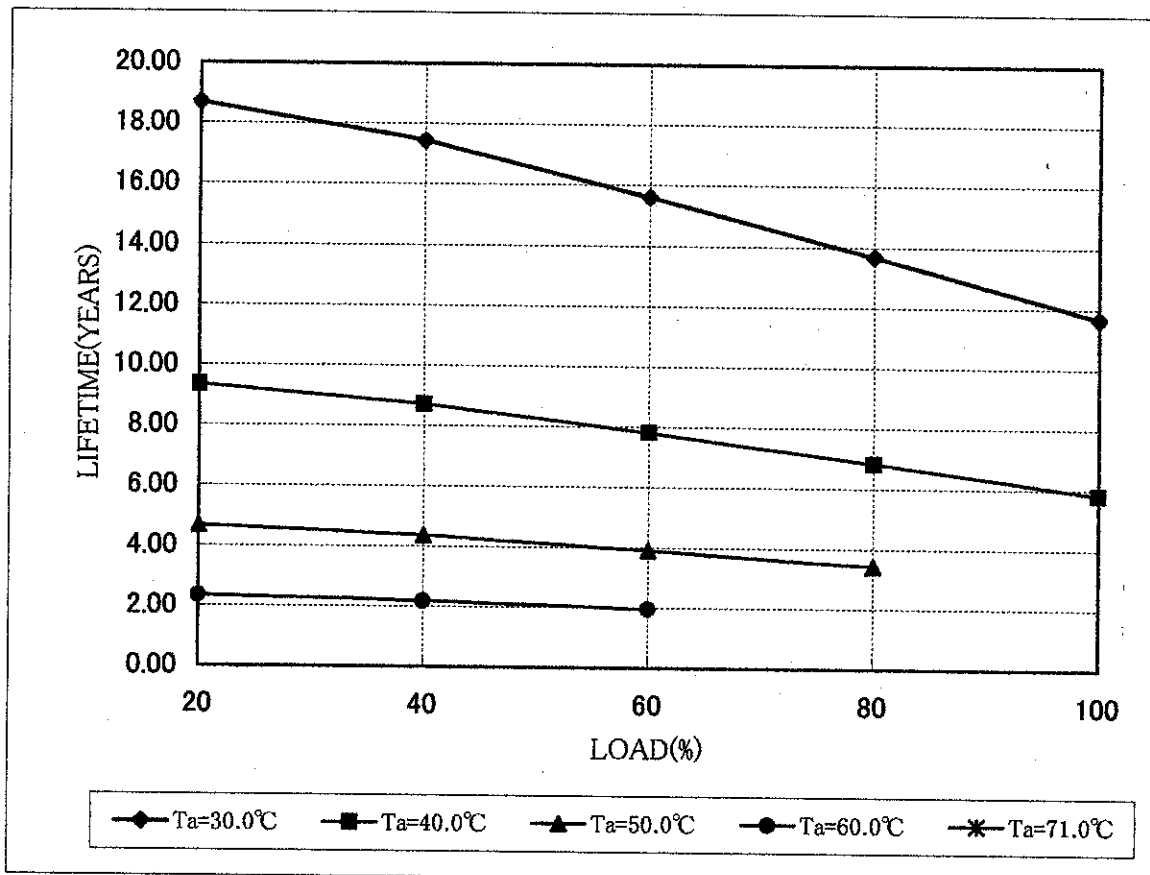
Io=(100%)=3.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	18.69	9.34	4.67	2.34	
40	17.44	8.72	4.36	2.18	
60	15.61	7.80	3.90	1.95	
80	13.68	6.84	3.42		
100	11.66	5.83			

*連続稼働 (最小保証値)

出力デューティ率(使用可能範囲)

Ta=40°C Io=100% Ta=71°C Io=10%
 Ta=50°C Io=80%
 Ta=60°C Io=60%



型名 : RTW15-3R5C

2003/11/21

電解コンデンサ算出寿命

部品No:C12, C120

設置方向 : A方向

Vo=15V

Vin=AC100V

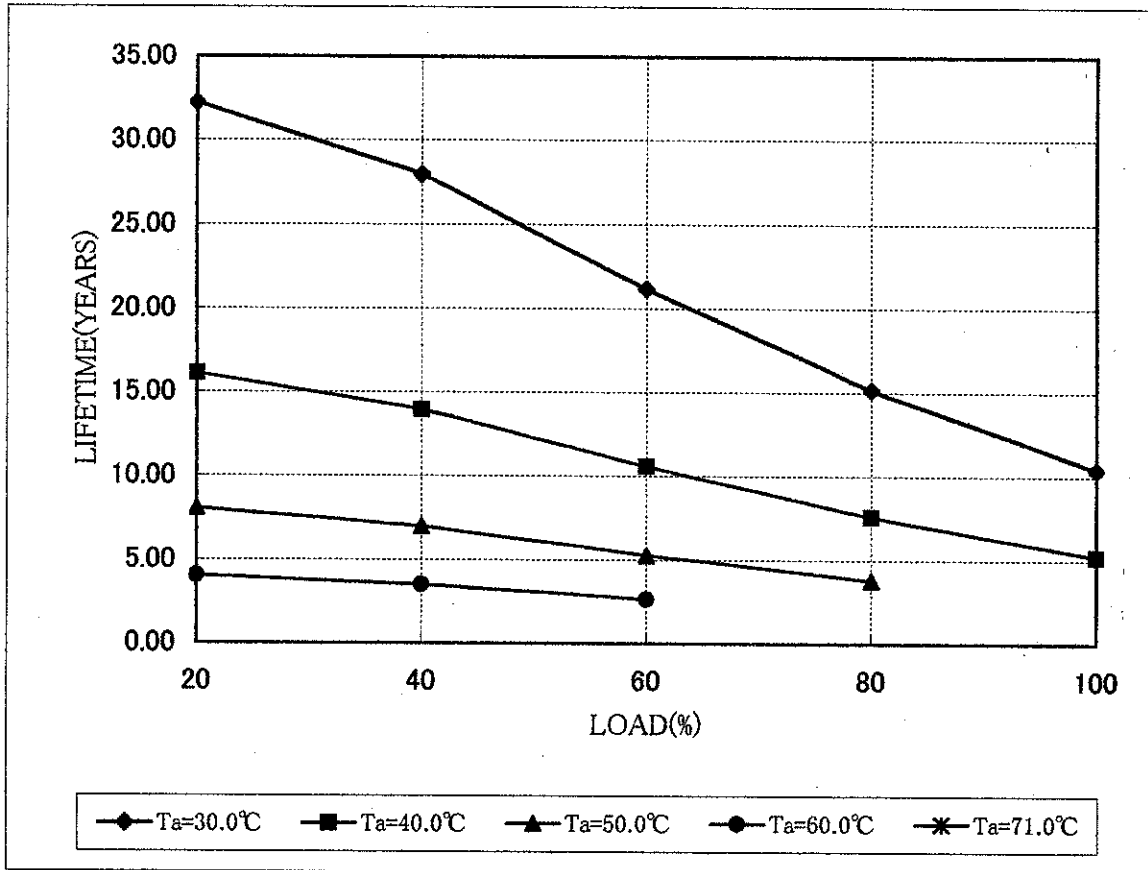
Io=(100%)=3.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	32.24	16.12	8.06	4.03	
40	27.93	13.97	6.98	3.49	
60	21.17	10.58	5.29	2.65	
80	15.18	7.59	3.79		
100	10.44	5.22			

*連続稼働 (最小実力値)

出力デューティ率(使用可能範囲)

Ta=40°C Io=100% Ta=71°C Io=10%
Ta=50°C Io=80%
Ta=60°C Io=60%



型名：RTW15-3R5C

2003/11/21

電解コンデンサ算出寿命

部品No: C12, C120

設置方向：A方向

Vo=15V

Vin=AC240V

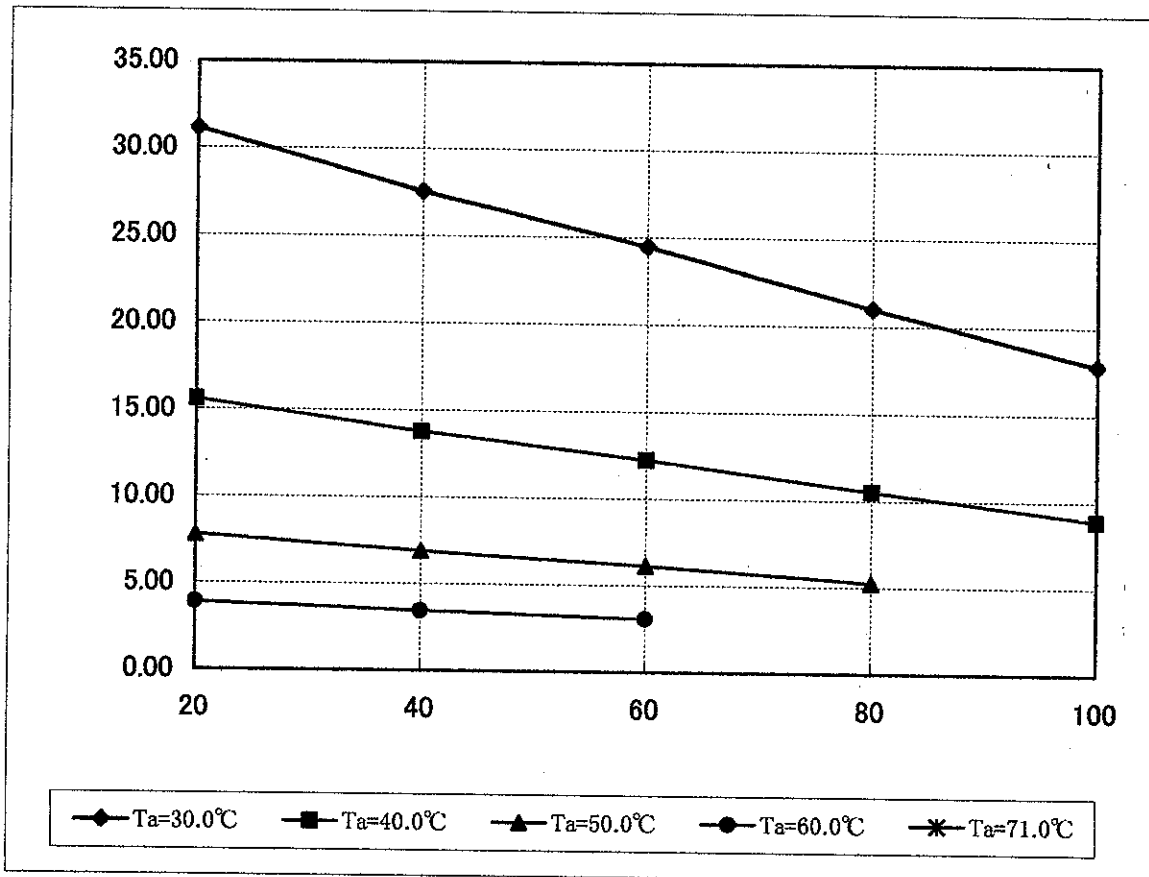
Io=(100%)=3.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	31.15	15.57	7.79	3.89	
40	27.55	13.78	6.89	3.44	
60	24.49	12.24	6.12	3.06	
80	21.02	10.51	5.26		
100	17.80	8.90			

*連続稼働 (最小実力値)

出力デューティ率(使用可能範囲)

Ta=40°C Io=100% Ta=71°C Io=10%
Ta=50°C Io=80%
Ta=60°C Io=60%



型名 : RTW15-3R5C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向 : B方向

Vo=15V

Vin=AC100V

Io=(100%)=3.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	13.63	6.82	3.41	1.70	
40	10.48	5.24	2.62		
60	7.51	3.76	1.88		
80	4.96	2.48			
100	3.09				

*連続稼働 (最小保証値)

出力デューティ率(使用可能範囲)

Ta=30°C

Io=100%

Ta=60°C

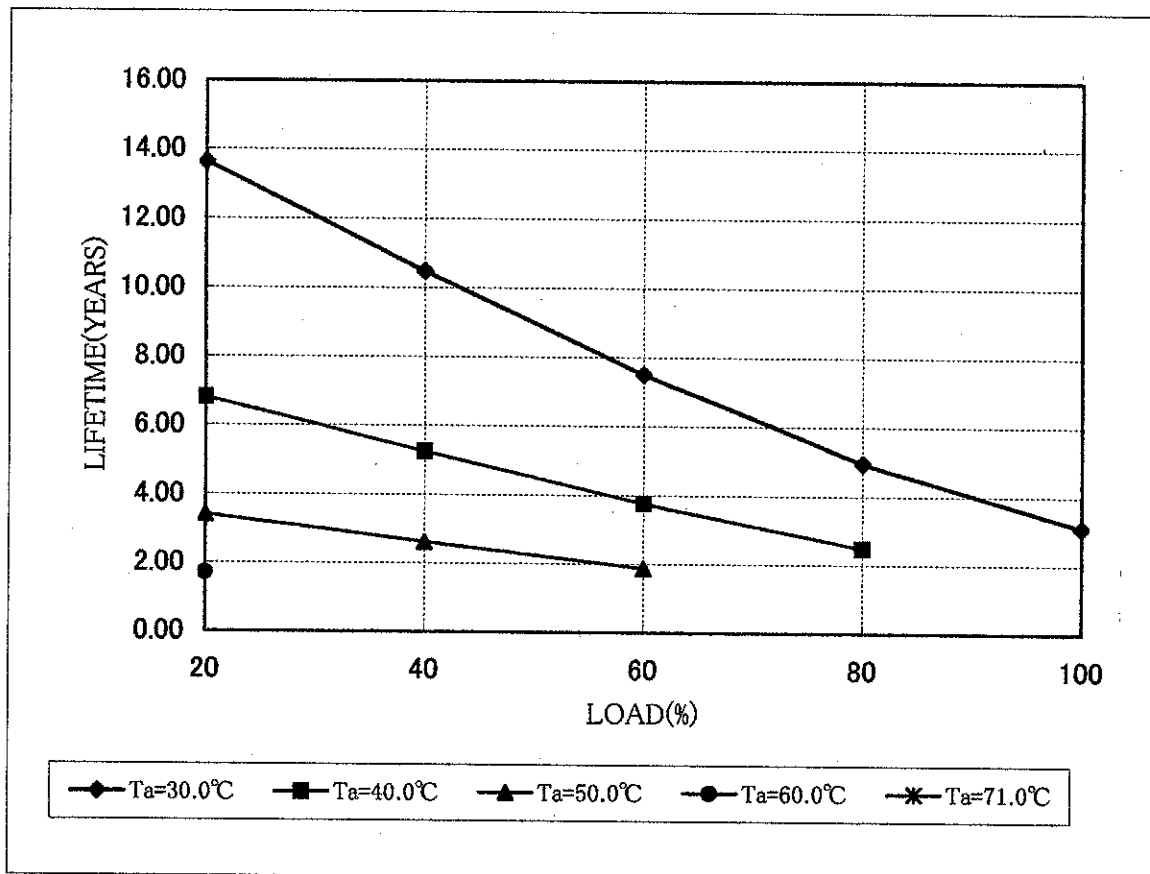
Io=20%

Ta=40°C

Io=80%

Ta=50°C

Io=60%



型名 : RTW15-3R5C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向 : B方向

Vo=15V

Vin=AC240V

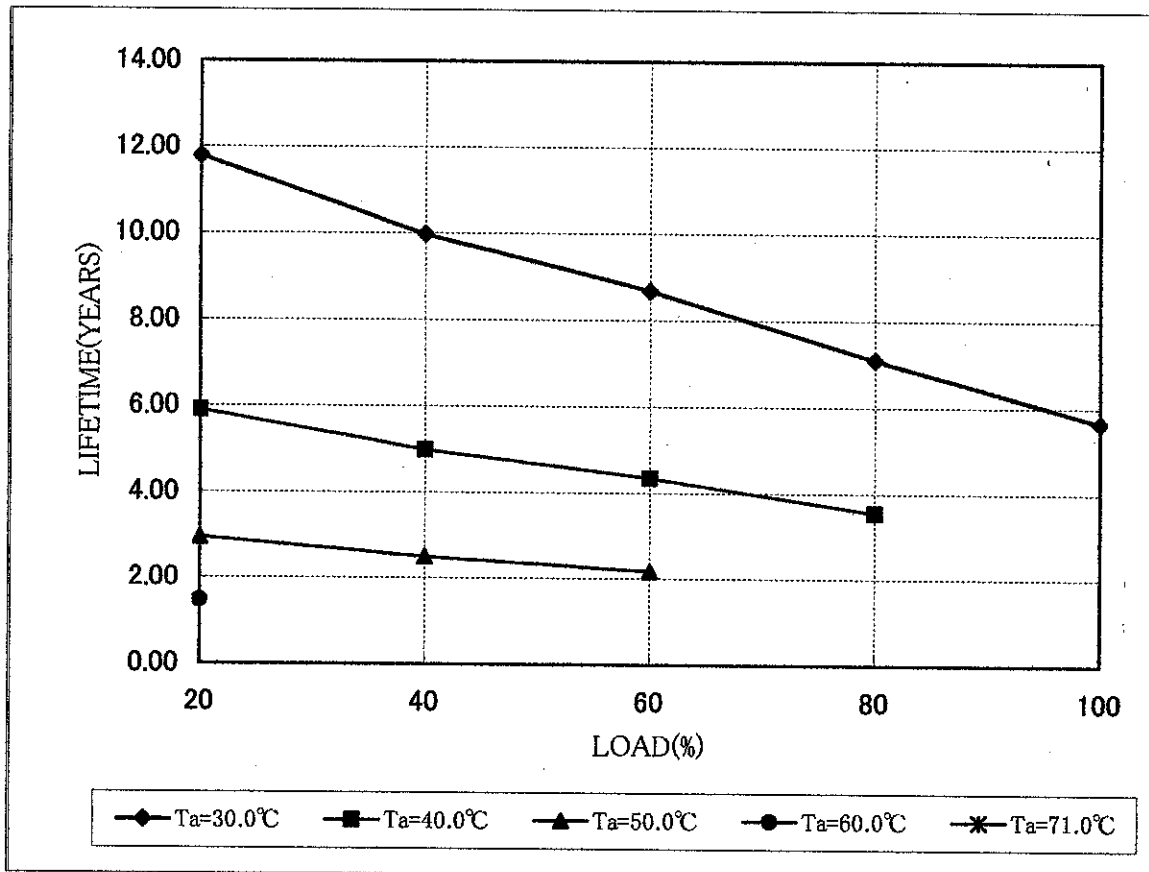
Io=(100%)=3.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	11.79	5.89	2.95	1.47	
40	9.98	4.99	2.49		
60	8.69	4.34	2.17		
80	7.11	3.55			
100	5.65				

*連続稼働 (最小保証値)

出力レベルイング率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
 Ta=40°C Io=80%
 Ta=50°C Io=60%



型名 : RTW15-3R5C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向 : B方向

Vo=15V

Vin=AC100V

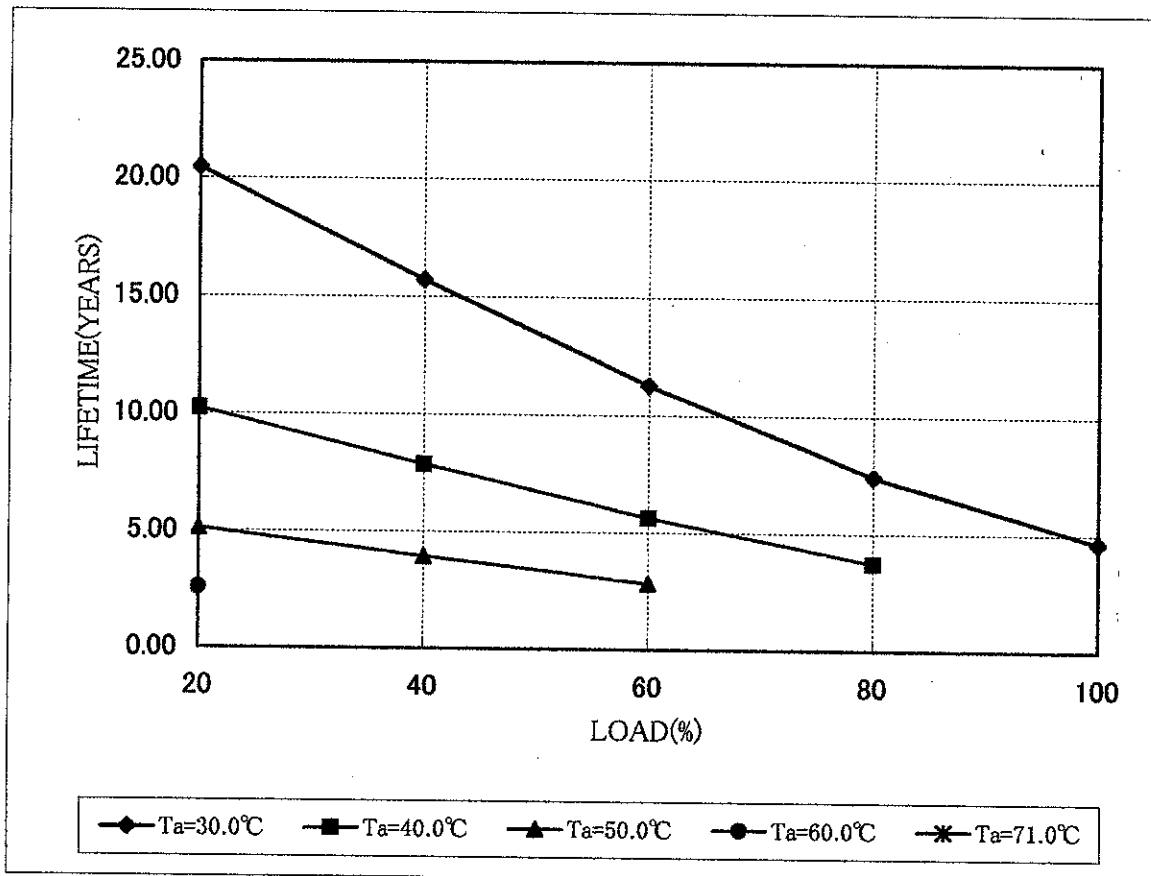
Io=(100%)=3.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	20.45	10.22	5.11	2.56	
40	15.71	7.86	3.93		
60	11.27	5.63	2.82		
80	7.43	3.72			
100	4.64				

*連続稼働 (最小実力値)

出力デレーティング率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
Ta=40°C Io=80%
Ta=50°C Io=60%



型名 : RTW15-3R5C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向 : B 方向

Vo=15V

Vin=AC240V

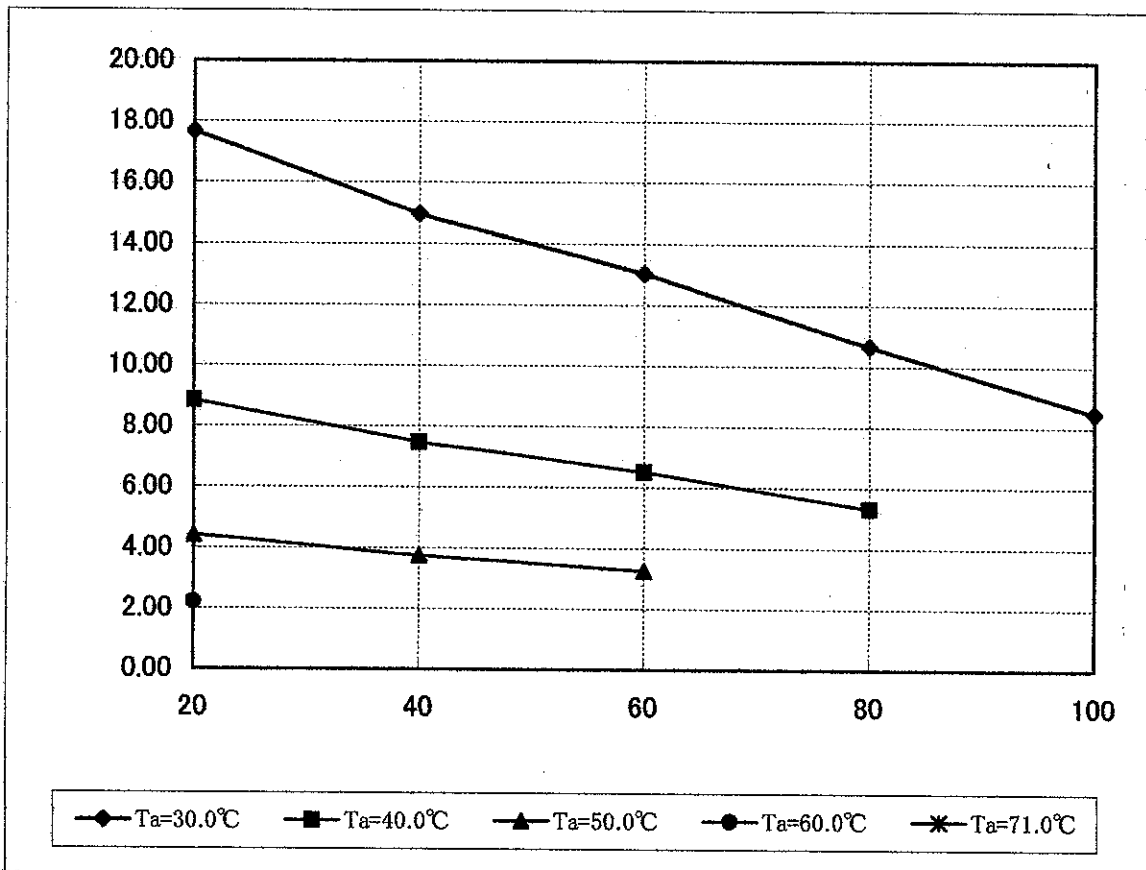
Io=(100%)=3.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	17.68	8.84	4.42	2.21	
40	14.97	7.48	3.74		
60	13.03	6.52	3.26		
80	10.66	5.33			
100	8.48				

*連続稼働 (最小実力値)

出力デューティ率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
Ta=40°C Io=80%
Ta=50°C Io=60%



型名 : RTW15-3R5C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向 : C方向

Vo=15V

Vin=AC100V

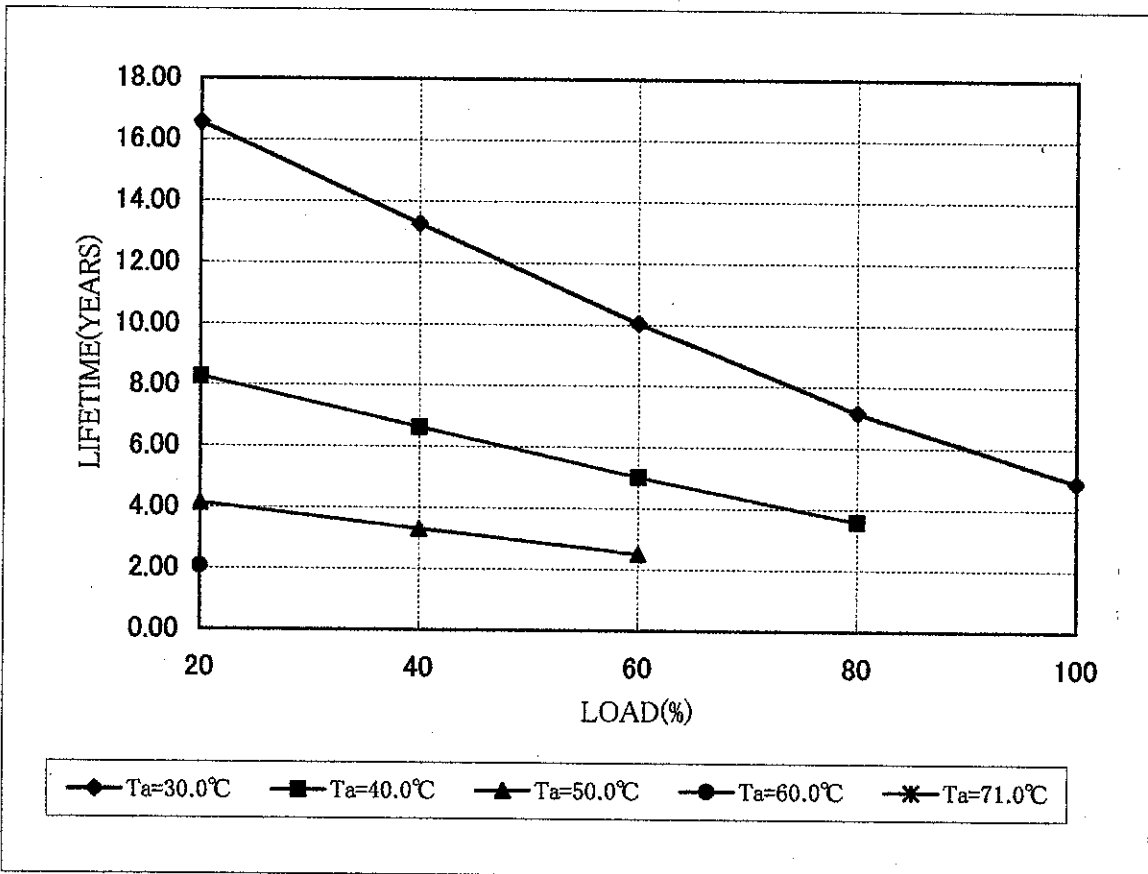
Io=(100%)=3.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	16.55	8.28	4.14	2.07	
40	13.26	6.63	3.32		
60	10.05	5.02	2.51		
80	7.16	3.58			
100	4.89				

*連続稼働 (最小保証値)

出力レギュレーション率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
 Ta=40°C Io=80%
 Ta=50°C Io=60%



型名 : RTW15-3R5C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向 : C方向

Vo=15V

Vin=AC240V

Io=(100%)=3.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	14.41	7.20	3.60	1.80	
40	12.46	6.23	3.11		
60	11.00	5.50	2.75		
80	9.31	4.66			
100	7.51				

*連続稼働 (最小保証値)

出力レギュレーション率(使用可能範囲)

Ta=30°C

Io=100%

Ta=60°C

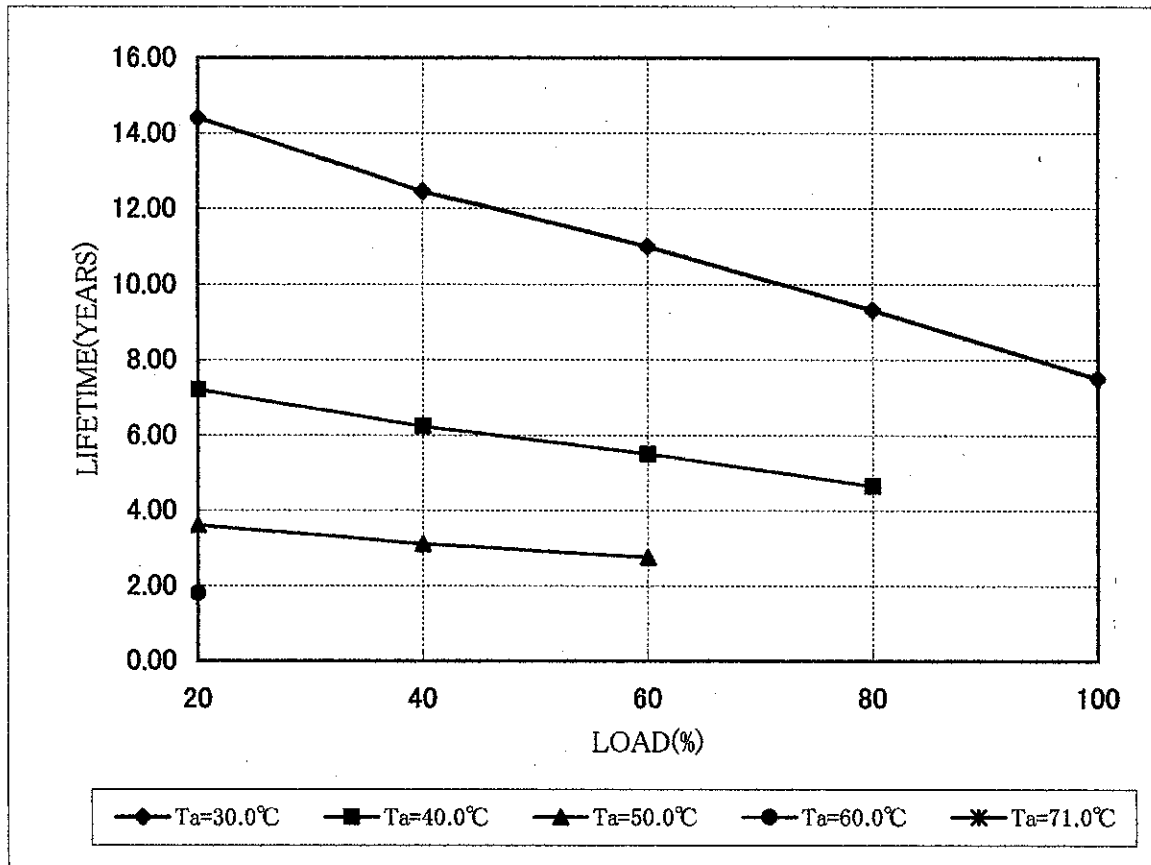
Io=20%

Ta=40°C

Io=80%

Ta=50°C

Io=60%



型名 : RTW15-3R5C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向 : C方向

Vo=15V

Vin=AC100V

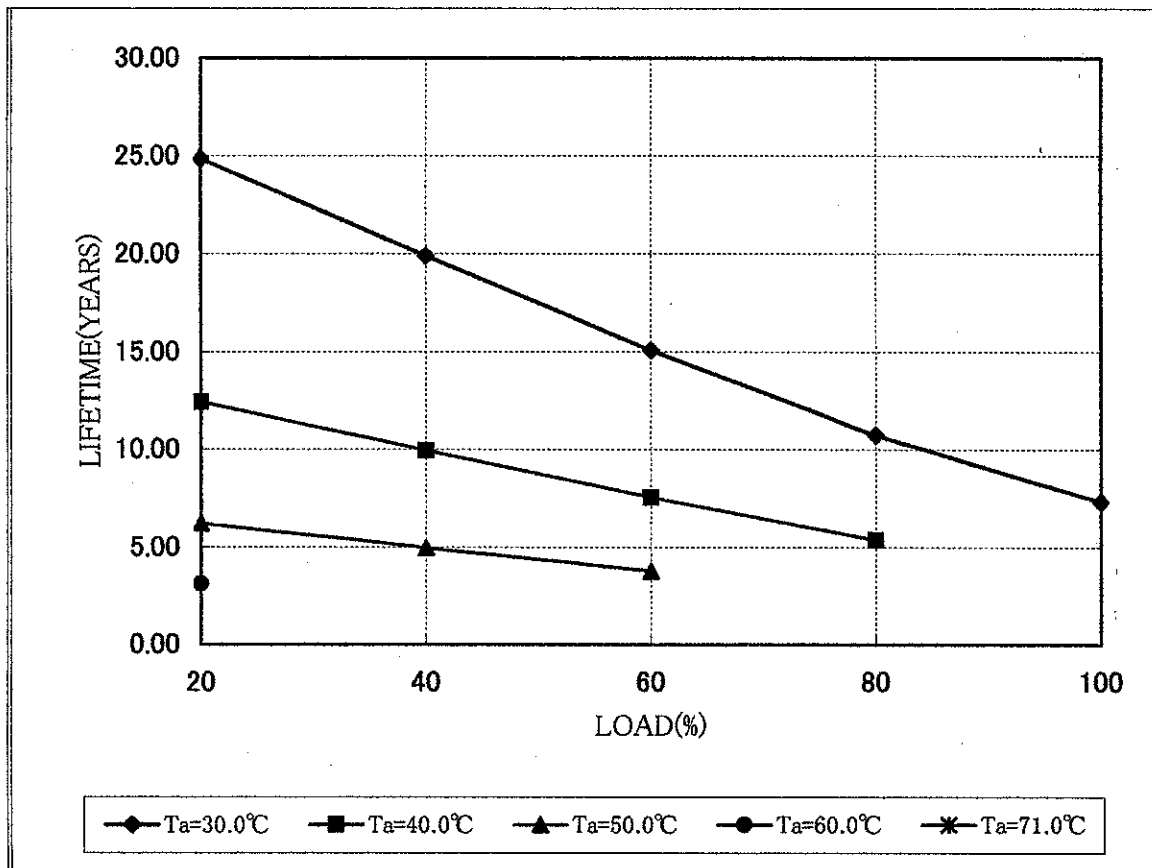
Io=(100%)=3.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	24.83	12.41	6.21	3.10	
40	19.89	9.95	4.97		
60	15.07	7.54	3.77		
80	10.73	5.37			
100	7.33				

*連続稼働 (最小実力値)

出力デューティ率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
 Ta=40°C Io=80%
 Ta=50°C Io=60%



型名 : RTW15-3R5C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向 : C方向

Vo=15V

Vin=AC240V

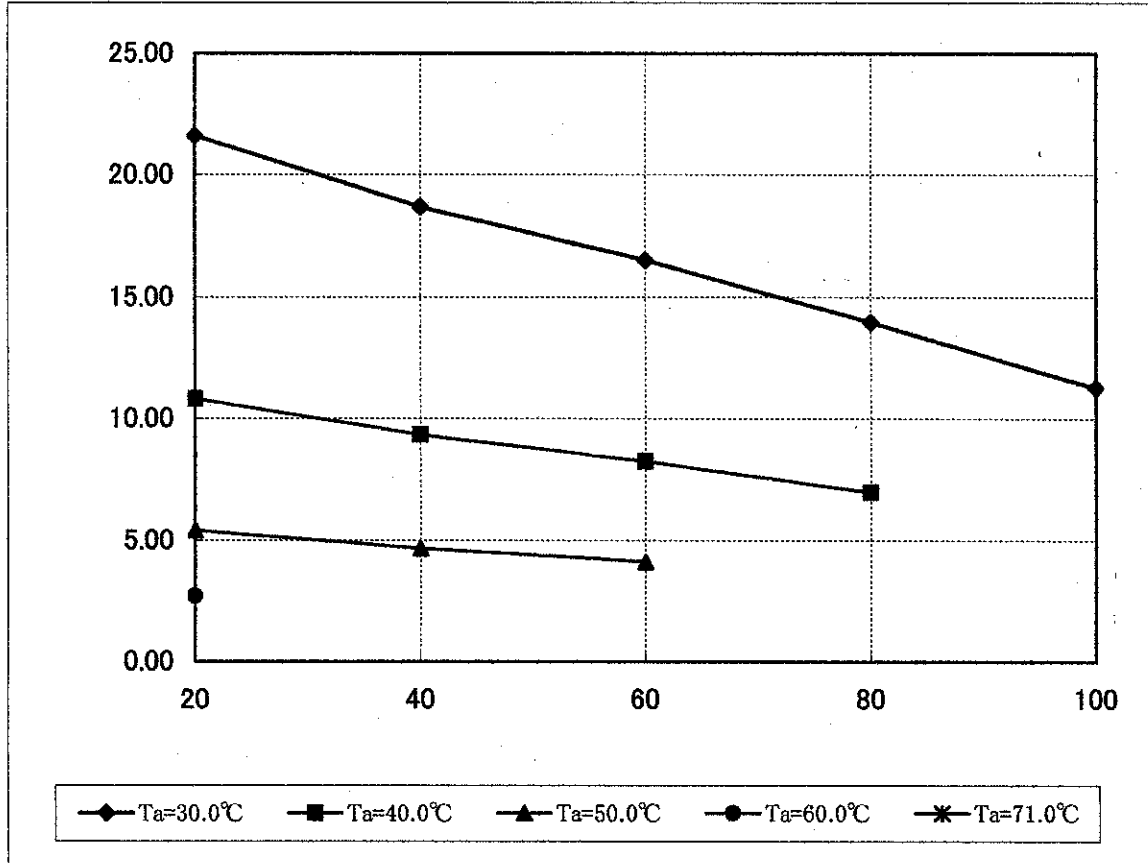
Io=(100%)=3.5A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	21.62	10.81	5.40	2.70	
40	18.69	9.34	4.67		
60	16.50	8.25	4.12		
80	13.97	6.98			
100	11.27				

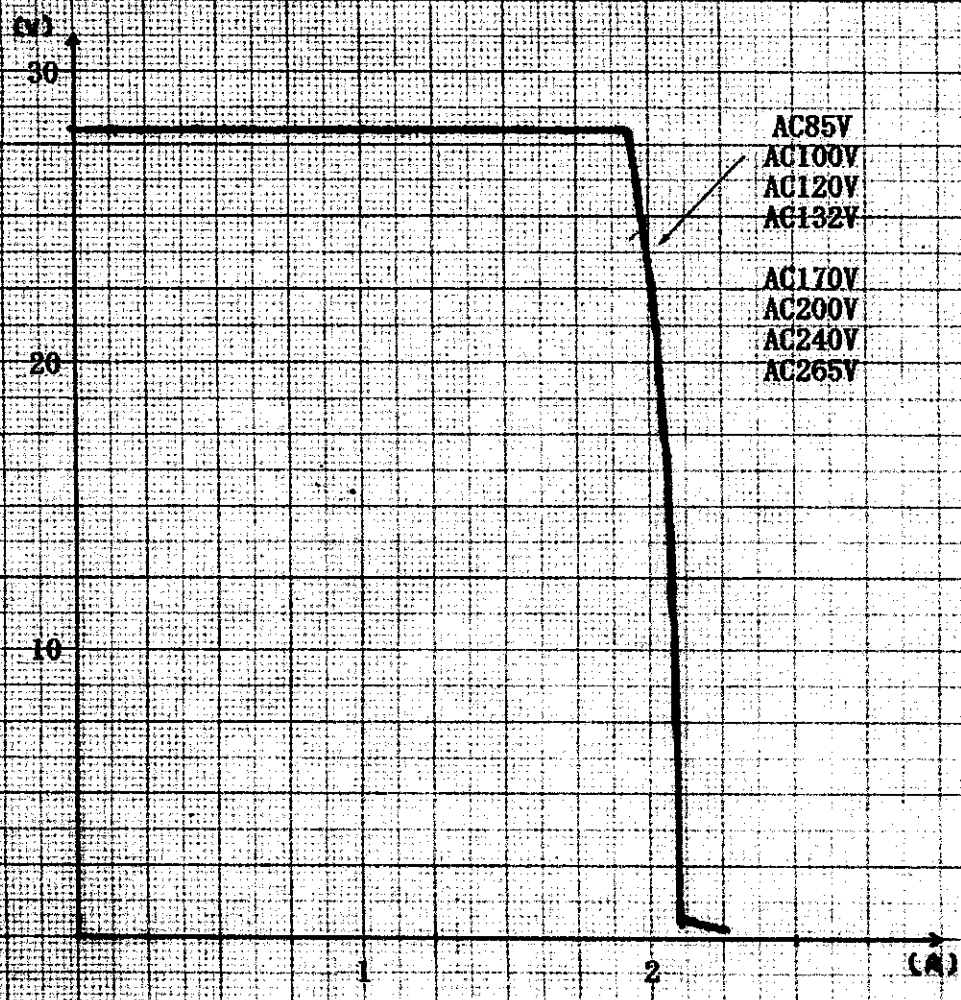
*連続稼働 (最小実力値)

出力デューティ率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
 Ta=40°C Io=80%
 Ta=50°C Io=60%

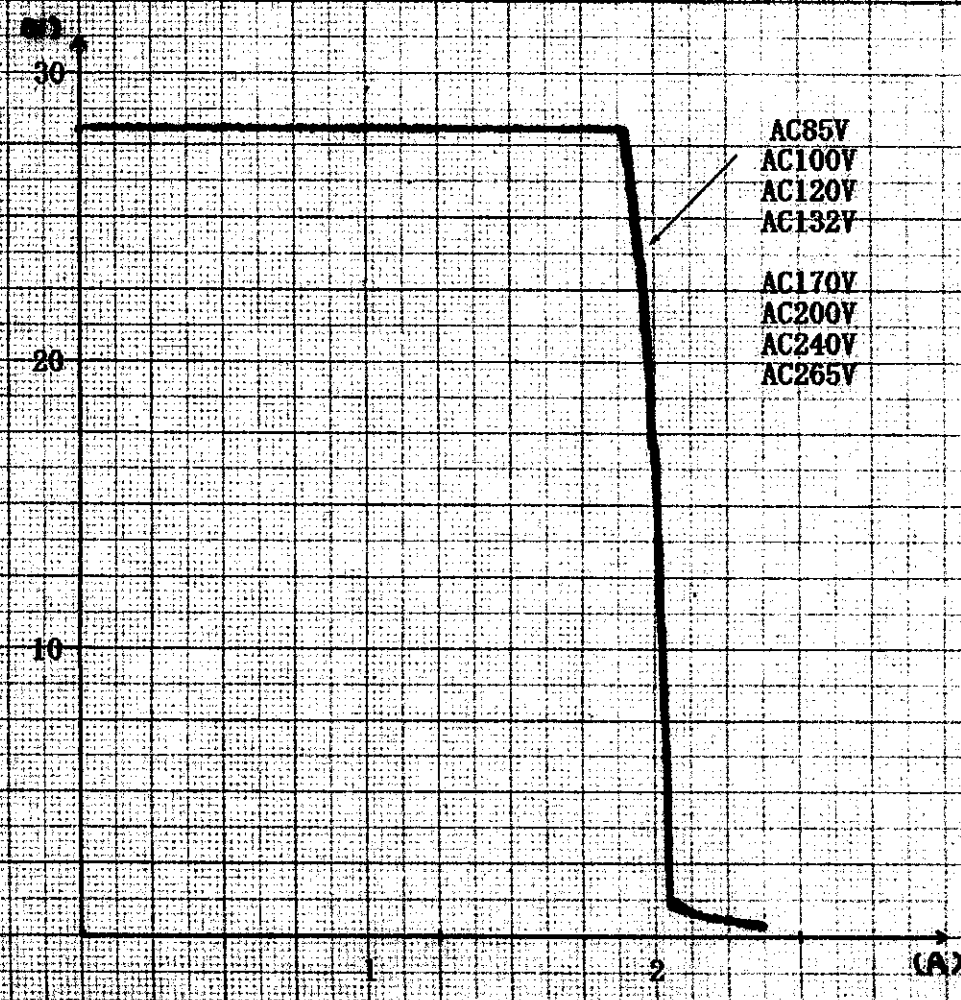


DATE: 03/11/4
TESTED BY:



NOTE:

Ta = -20°C



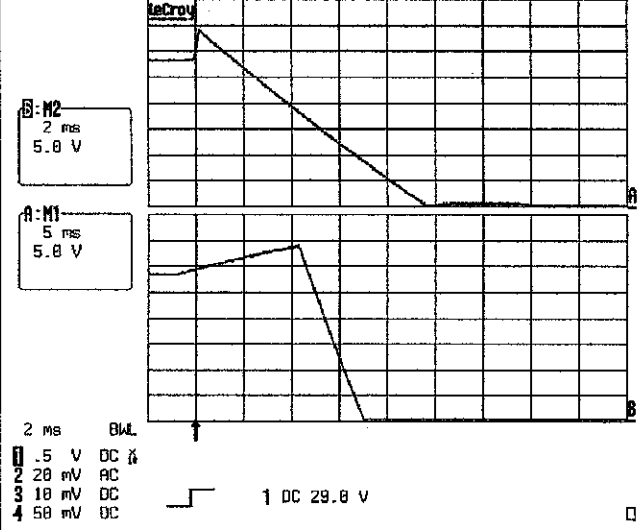
NOTE:

Ta = 71°C

MODEL
RTW28-1R8C

過電圧保護 OVERVOLTAGE PROTECTION	SOURCE	LOAD	TEMP.	
	AC100V	10% / 100%	25°C	

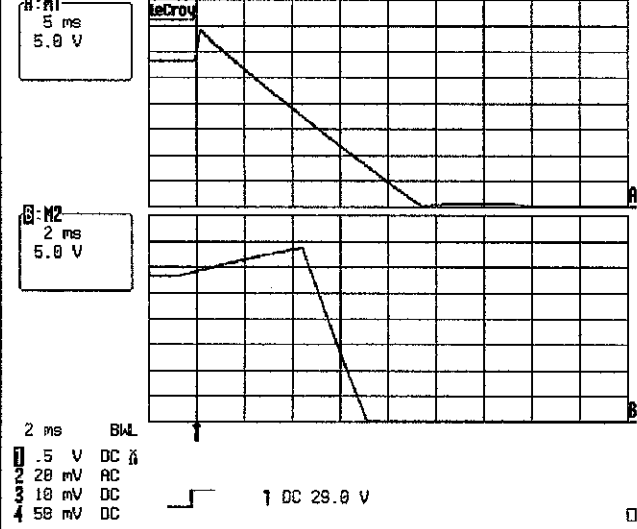
31-Oct-03
 16:04:40



+SENSE OPEN
 UPPER WAVE FORM
LOAD=10% : 33.8V
 LOWER WAVE FORM
LOAD=100% : 33.8V

	SOURCE	LOAD	TEMP.	
	AC100V	10% / 100%	25°C	

31-Oct-03
 16:12:21



-SENSE OPEN
 UPPER WAVE FORM
LOAD=10% : 33.8V
 LOWER WAVE FORM
LOAD=100% : 33.6V

SER. NO	OUT PUT	DATE	TESTED BY	
		03/10/31	T.OKANO	

MODEL

RTW28-1R8C

No: 030601

効 率
EFFICIENCY

SOURCE

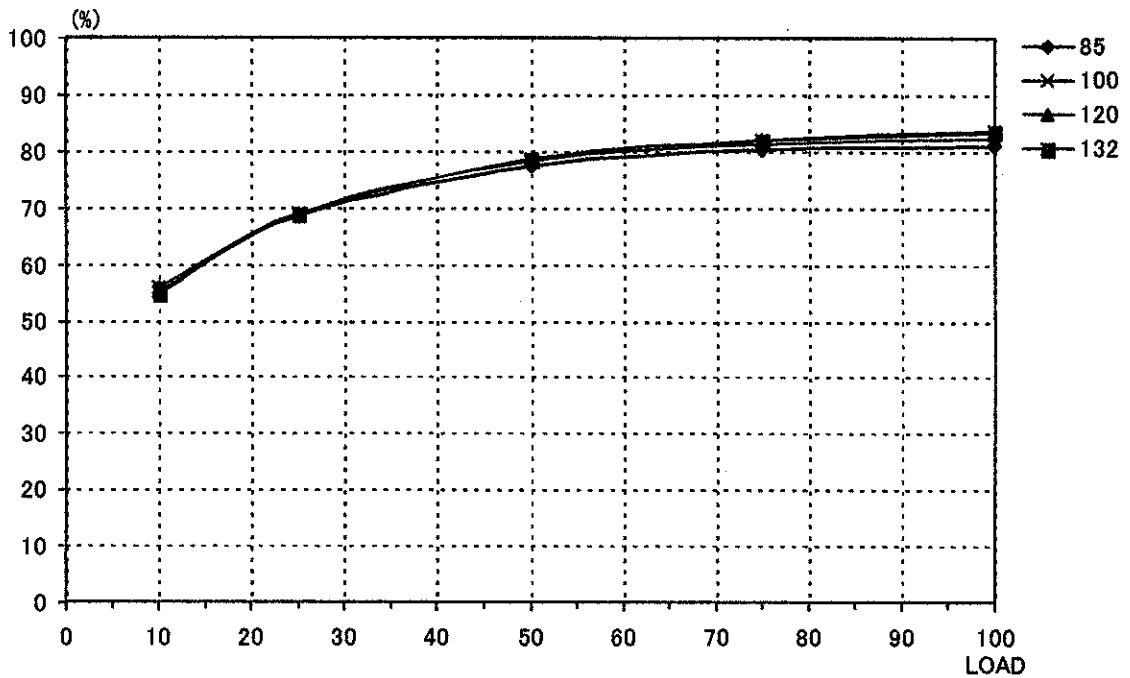
LOAD

TEMP.

AC85V~AC132V

10~100%

25°C



力 率
POWER FACTOR

SOURCE

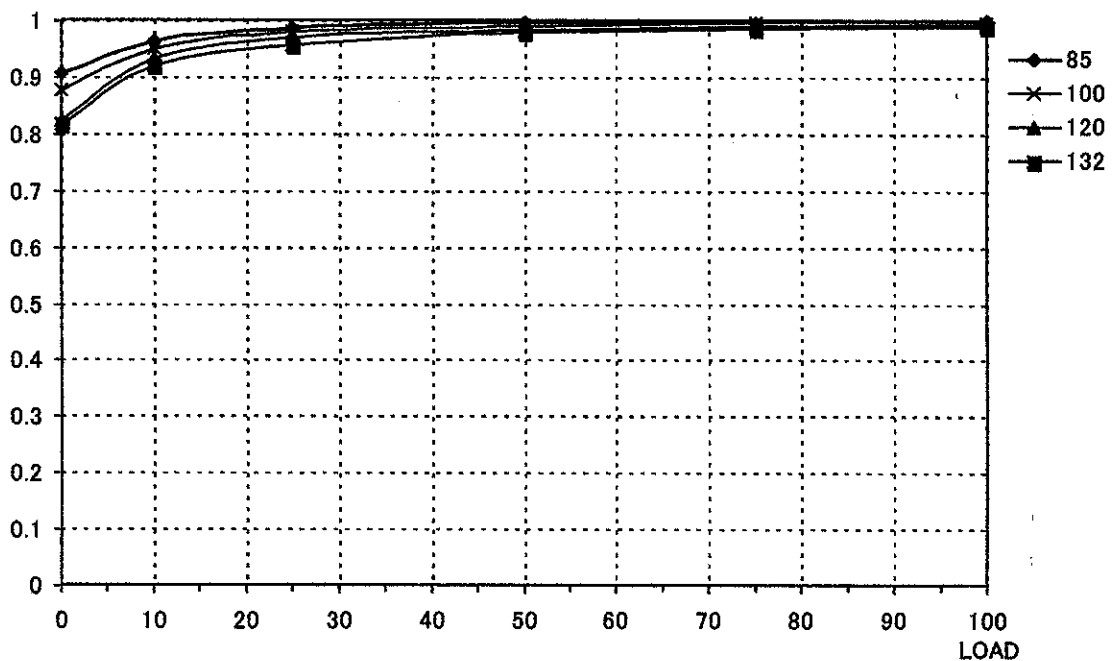
LOAD

TEMP.

AC85V~AC132V

0~100%

25°C



SER. NO.

OUT PUT

DATE

TESTED BY

36400502F

28 V

1.8 A

50.4 W

03/12/11

T. OKANO

MODEL

RTW28-1R8C

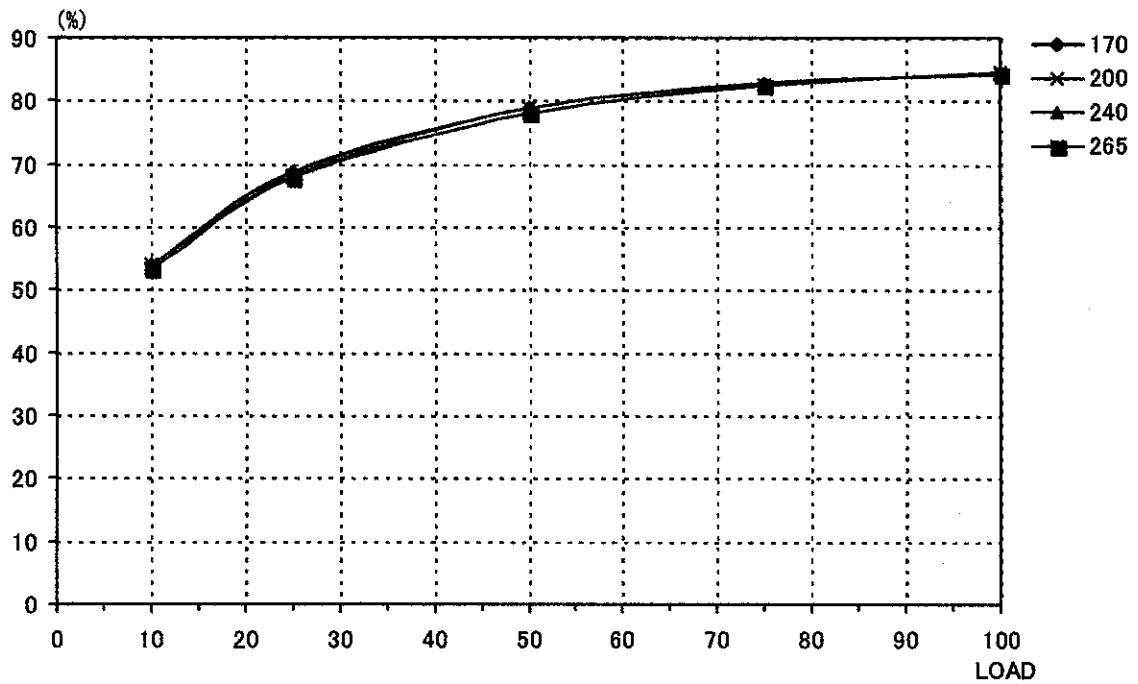
No 030601

効 率
EFFICIENCY

SOURCE
AC170V~AC265V

LOAD
10~100%

TEMP.
25°C

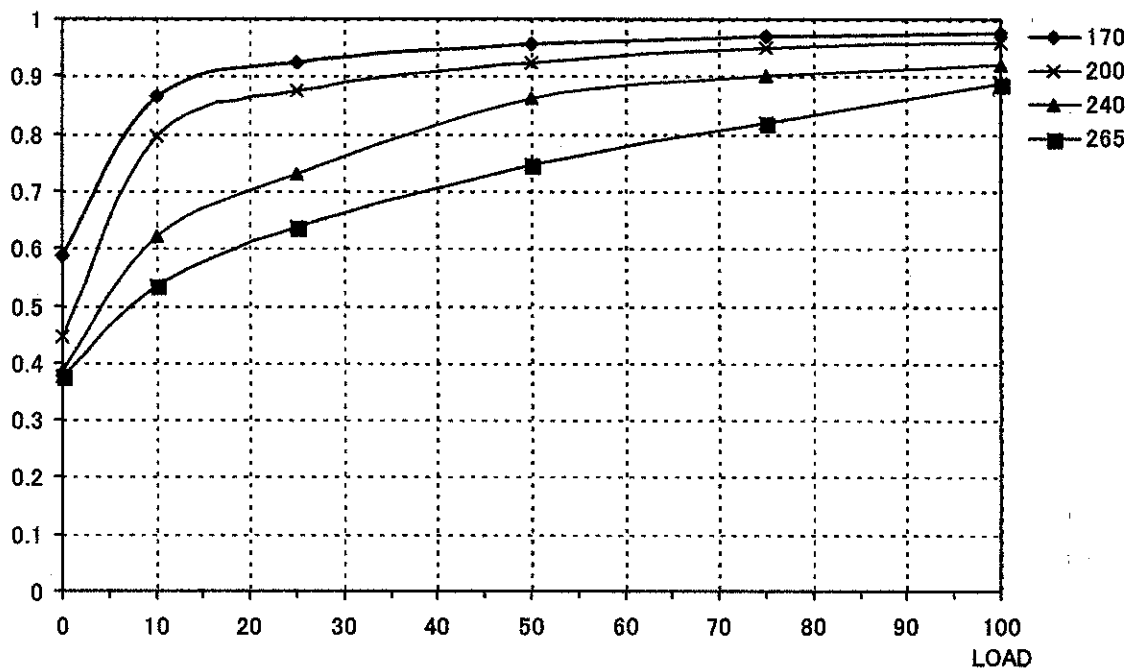


力 率
POWER FACTOR

SOURCE
AC170V~AC265V

LOAD
0~100%

TEMP.
25°C



SER. NO.

OUT PUT

DATE

TESTED BY

36400502F

28 V

1.8 A

50.4 W

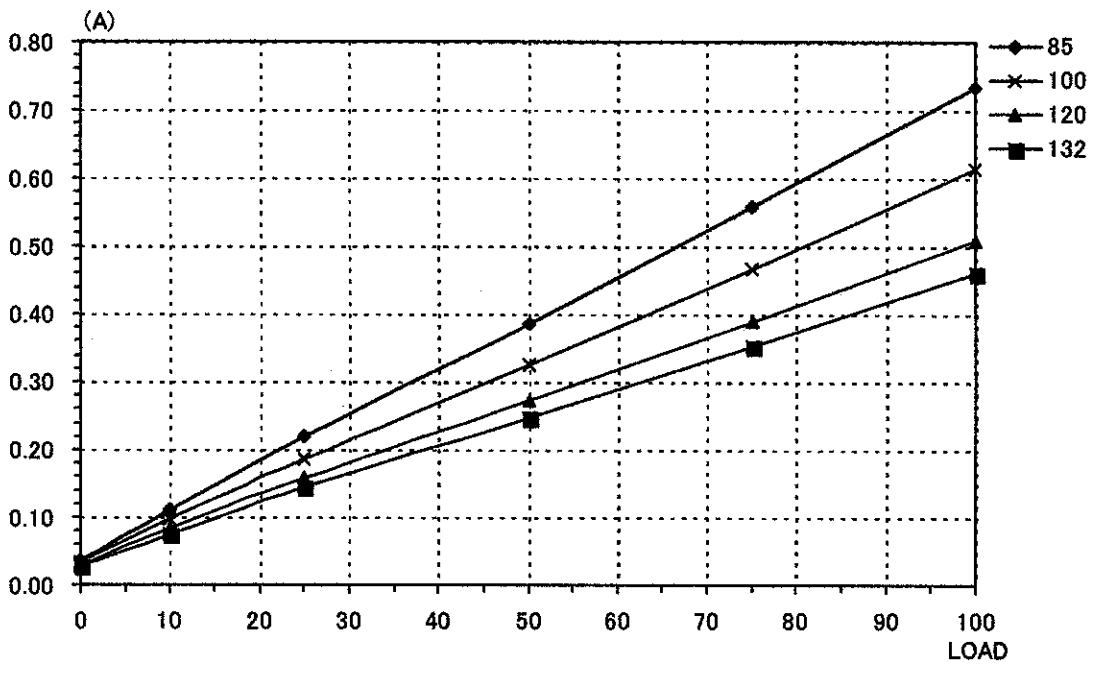
03/12/11

T. OKANO

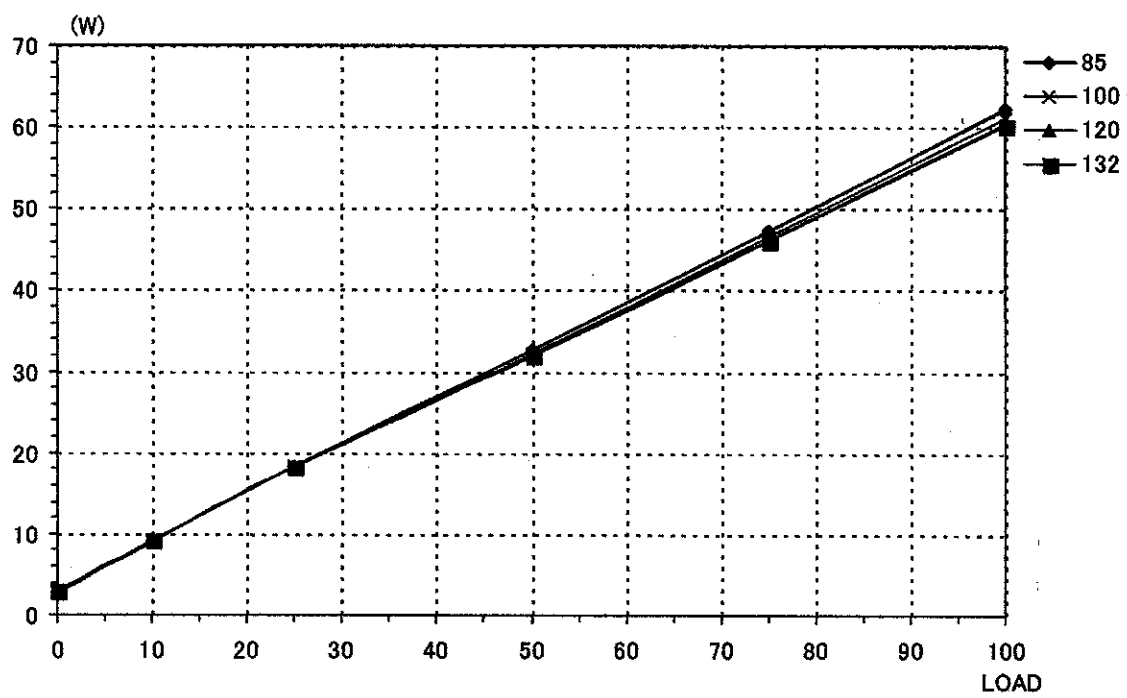
MODEL
RTW28-1R8C

No: 030601

定常入力電流 INPUT CURRENT	SOURCE	LOAD	TEMP.	
	AC85V~AC132V	0~100%	25°C	



入力電力 INPUT POWER	SOURCE	LOAD	TEMP.	
	AC85V~AC132V	0~100%	25°C	



SER. NO.	OUT PUT			DATE	TESTED BY	
36400502F	28 V	1.8 A	50.4 W	03/12/11	T. OKANO	

MODEL

RTW28-1R8C

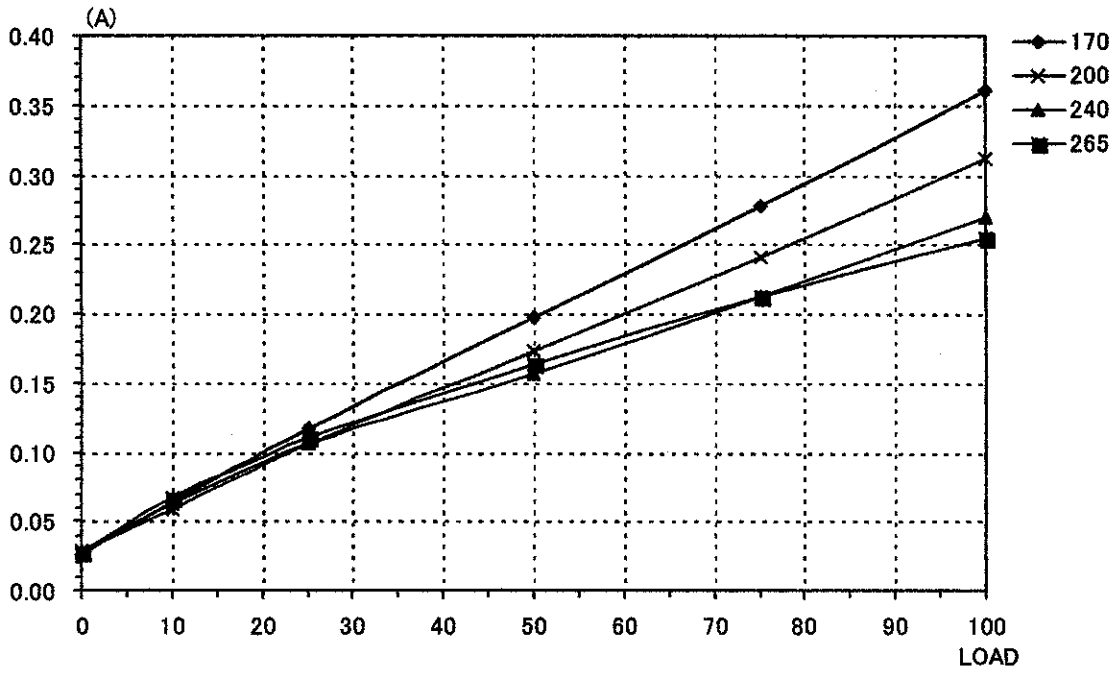
No 030601

定常入力電流
INPUT CURRENT

SOURCE
AC170V~AC265V

LOAD
10~100%

TEMP.
25°C

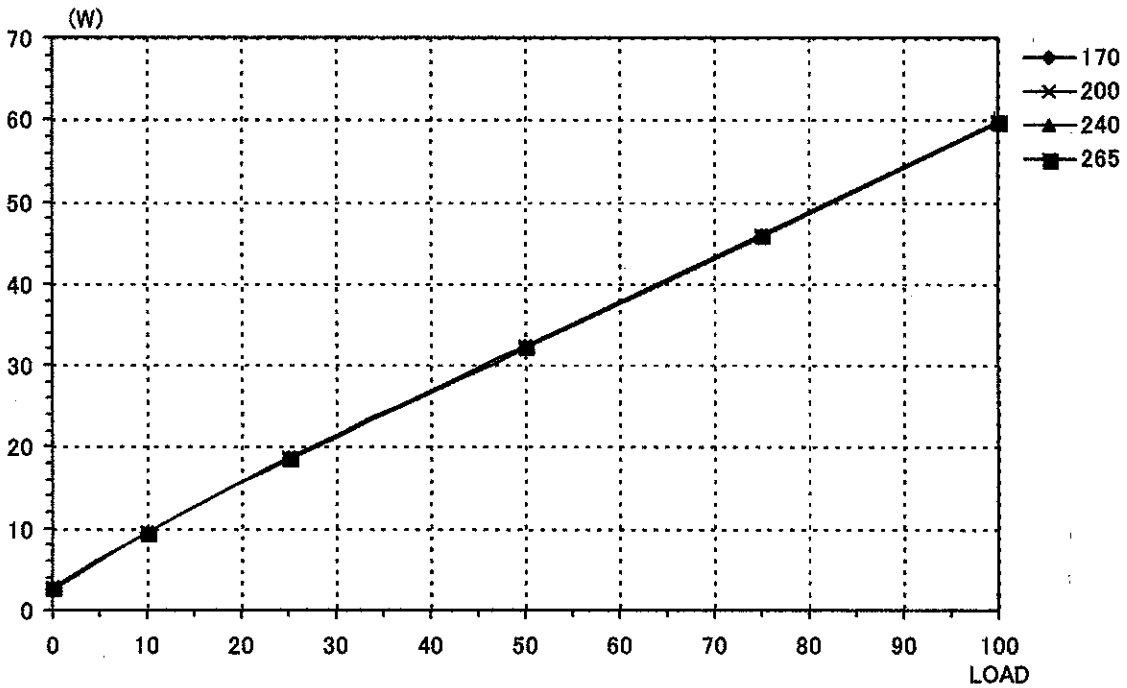


入力電力
INPUT POWER

SOURCE
AC170V~AC265V

LOAD
0~100%

TEMP.
25°C



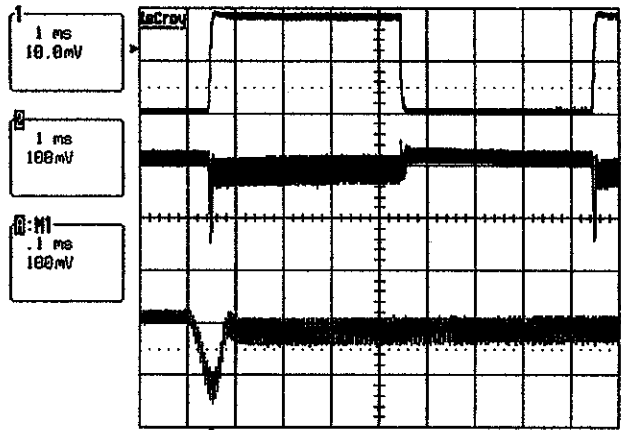
SER. NO.	OUT PUT			DATE	TESTED BY
36400502F	28 V	1.8 A	50.4 W	03/12/11	T. OKANO

MODEL

RTW28-1R8C

負荷急変 TRANSIENT RESPONSE	SOURCE	LOAD	TEMP.	
	AC100V	0%TO100%	25°C	

18-Nov-03
13:34:42



1 ms 84L
 1 10 mV DC
 2 1 V AC
 3 10 mV DC
 4 50 mV DC

1 DC 12.2mV

25 MS/s

STOPPED

UPPER WAVE FORM

Output load current : 1A/DIV

LOWER WAVE FORM

Ripple voltage : 100mV/DIV

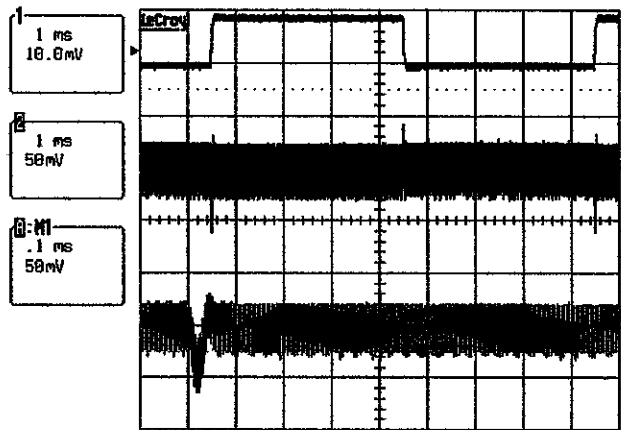
TIME

1mS/DIV

	SOURCE	LOAD	TEMP.	
	AC100V	50%TO100%	25°C	

18-Nov-03
13:35:37

2 stored to M1



1 ms 84L
 1 10 mV DC
 2 50 mV AC
 3 10 mV DC
 4 50 mV DC

1 DC 12.2mV

25 MS/s

STOPPED

UPPER WAVE FORM

Output load current : 1A/DIV

LOWER WAVE FORM

Ripple voltage : 50mV/DIV

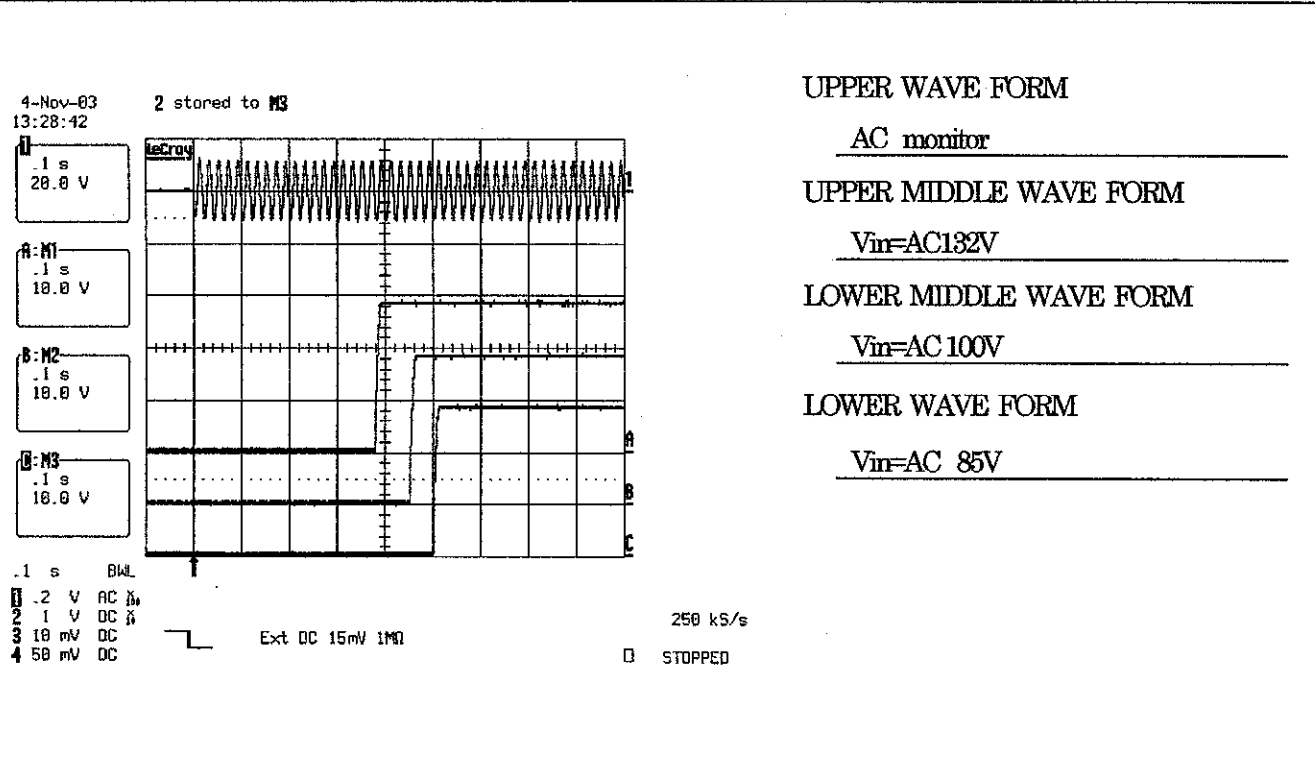
TIME

1mS/DIV

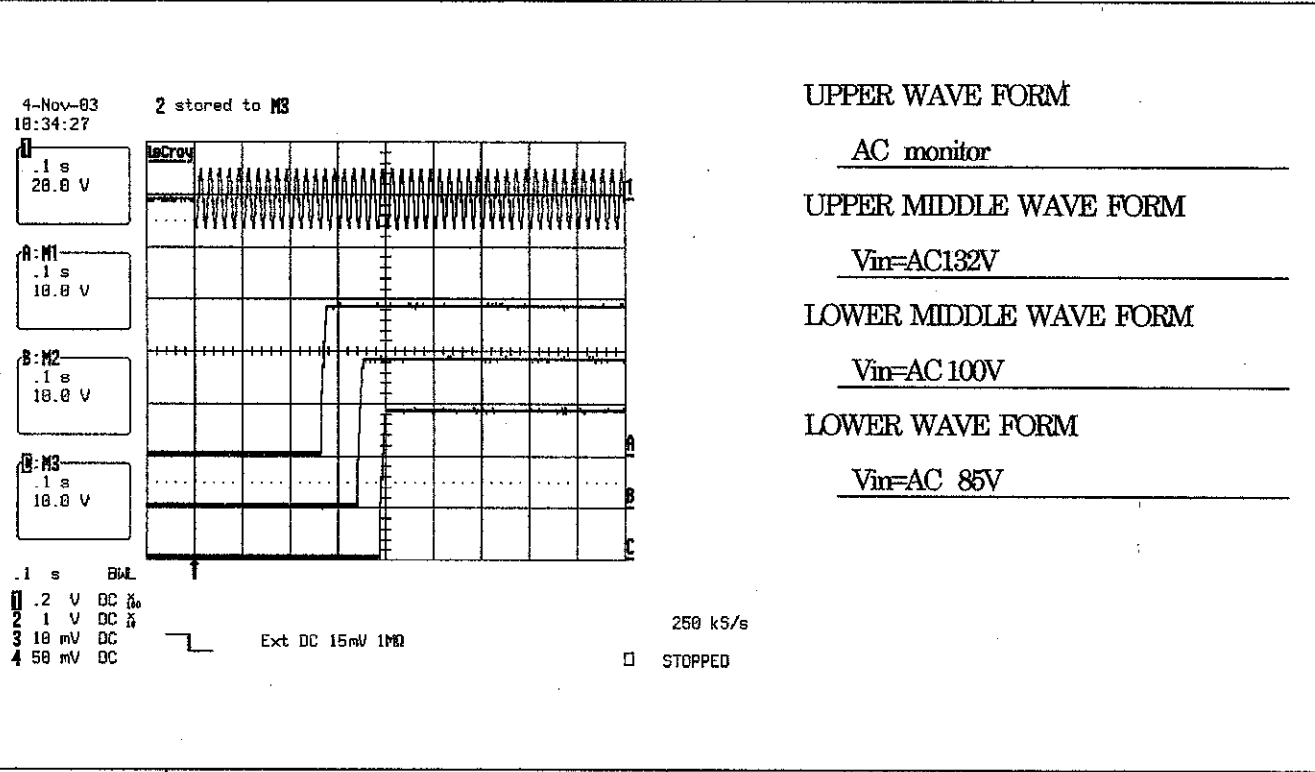
SER. NO	OUT PUT	DATE	TESTED BY	
		03/11/18	T.OKANO	

MODEL
RTW28-1R8C

起動特性 TURN-ON CHARACTERISTIC	SOURCE	LOAD	TEMP.
	AC85V~AC132V	1.8A	-20°C



	SOURCE	LOAD	TEMP.
	AC85V~AC132V	1.8A	71°C



SER. NO	OUT PUT	DATE	TESTED BY	
		03/11/4	T.OKANO	

MODEL

RTW28-1R8C

起動特性

TURN-ON CHARACTERISTIC

SOURCE

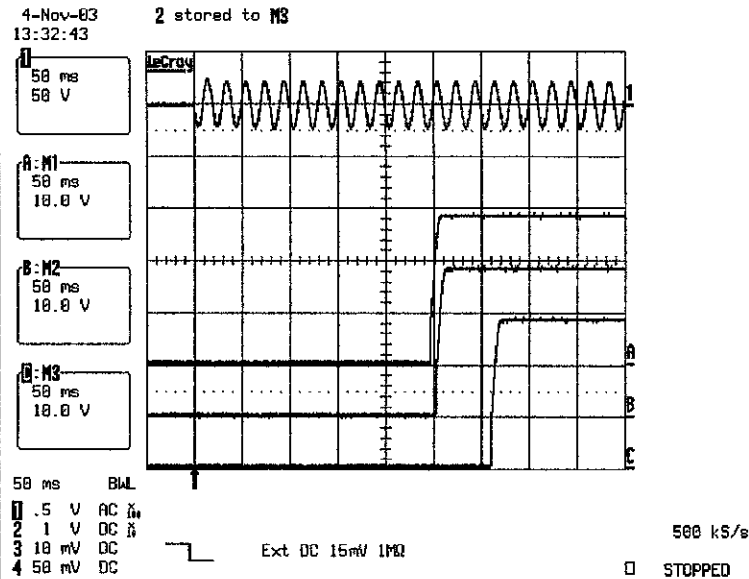
AC170V~AC265V

LOAD

1.8A

TEMP.

-20°C



UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

V_{in} =AC265V

LOWER MIDDLE WAVE FORM

V_{in} =AC 240V

LOWER WAVE FORM

V_{in} =AC 170V

SOURCE

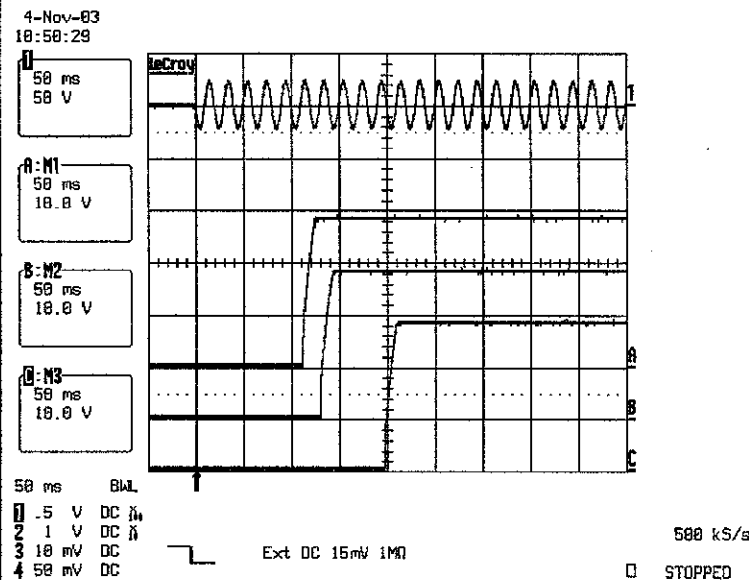
AC170V~AC265V

LOAD

1.8A

TEMP.

71°C



UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

V_{in} =AC265V

LOWER MIDDLE WAVE FORM

V_{in} =AC 240V

LOWER WAVE FORM

V_{in} =AC 170V

SER. NO

OUT PUT

DATE

TESTED BY

03/11/4

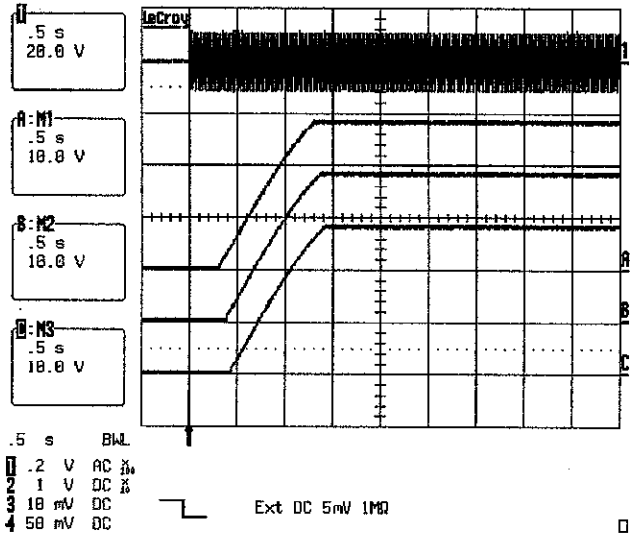
T.OKANO

MODEL
RTW28-1R8C

容量性負荷起動特性
 TURN-ON CAPACITIVE LOAD

SOURCE	LOAD	TEMP.	CAPACTOR LOAD
AC85TO132V	1.8A	25°C	12,000 μF

30-Oct-03
 19:45:25



UPPER WAVE FORM
 AC MONITOR

UPPER MIDDLE WAVE FORM
 $V_{IN} = AC132V$

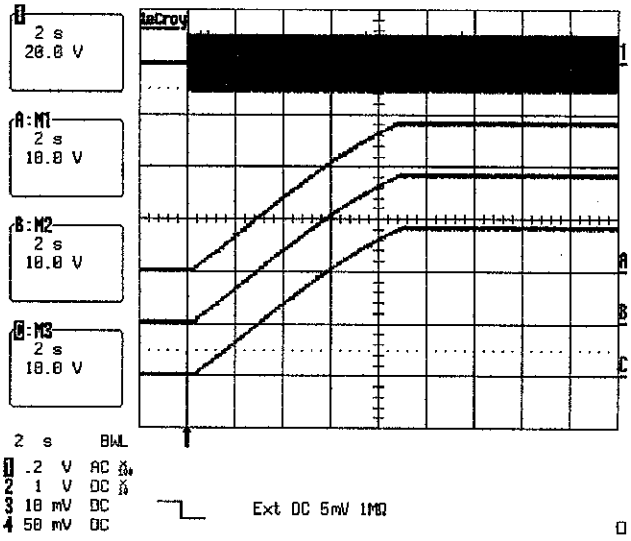
LOWER MIDDLE WAVE FORM
 $V_{IN} = AC100V$

LOWER WAVE FORM
 $V_{IN} = AC85V$

SOURCE	LOAD	TEMP.	CAPACTOR LOAD
AC85TO132V	1.8A	25°C	100,000 μF

30-Oct-03
 19:51:00

2 stored to M3



UPPER WAVE FORM
 AC MONITOR

UPPER MIDDLE WAVE FORM
 $V_{IN} = AC132V$

LOWER MIDDLE WAVE FORM
 $V_{IN} = AC100V$

LOWER WAVE FORM
 $V_{IN} = AC85V$

SER. NO	OUT PUT	DATE	TESTED BY
		03/10/30	T.OKANO

MODEL
RTW28-1R8C

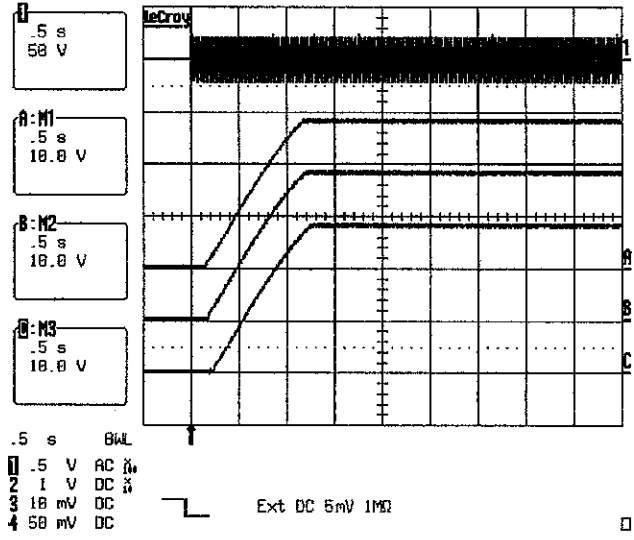
容量性負荷起動特性

TURN-ON CAPACITIVE LOAD

SOURCE	LOAD	TEMP.	CAPACTOR LOAD
AC170TO265V	1.8A	25°C	12,000 μ F

30-Oct-03
19:54:56

2 stored to M3



UPPER WAVE FORM

AC MONITOR

UPPER MIDDLE WAVE FORM

V_{IN}=AC265V

LOWER MIDDLE WAVE FORM

V_{IN}=AC240V

LOWER WAVE FORM

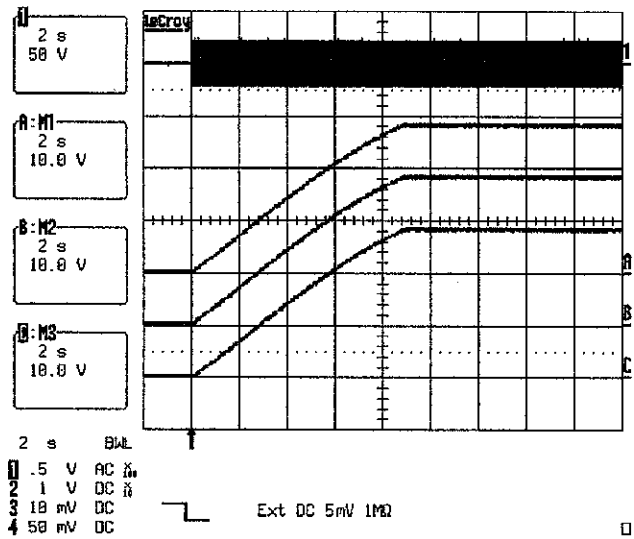
V_{IN}=AC170V

.5 s BWL
 1 .5 V AC $\bar{}$
 2 1 V DC $\bar{}$
 3 10 mV DC $\bar{}$
 4 50 mV DC $\bar{}$
 Ext DC 5mV 1MΩ
 10 kS/s
 STOPPED

SOURCE	LOAD	TEMP.	CAPACTOR LOAD
AC170TO265V	1.8A	25°C	100,000 μ F

30-Oct-03
19:59:18

2 stored to M3



UPPER WAVE FORM

AC MONITOR

UPPER MIDDLE WAVE FORM

V_{IN}=AC265V

LOWER MIDDLE WAVE FORM

V_{IN}=AC240V

LOWER WAVE FORM

V_{IN}=AC170V

2 s BWL
 1 .5 V AC $\bar{}$
 2 1 V DC $\bar{}$
 3 10 mV DC $\bar{}$
 4 50 mV DC $\bar{}$
 Ext DC 5mV 1MΩ
 2.5 kS/s
 STOPPED

SER. NO	OUT PUT	DATE	TESTED BY
		03/10/30	T.OKANO

MODEL

RTW28-1R8C

保持特性

TURN-OFF CHARACTERISTIC

SOURCE

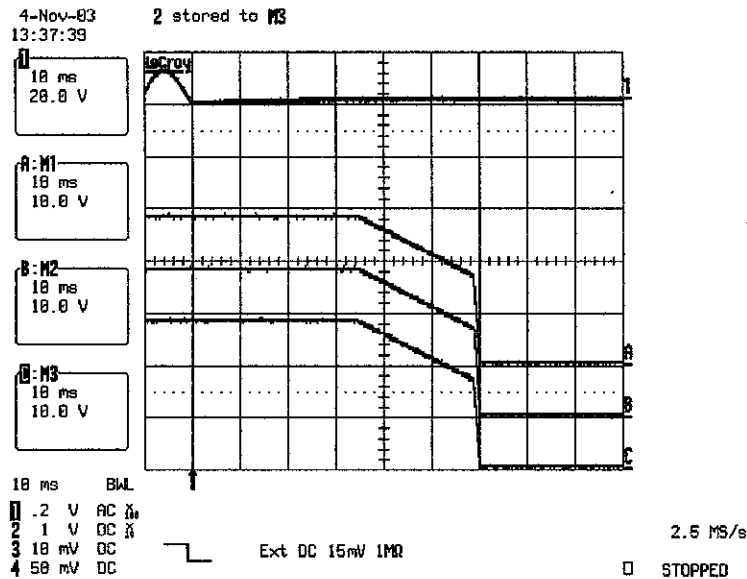
AC85V~AC132V

LOAD

1.8A

TEMP.

-20°C



UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC132V

LOWER MIDDLE WAVE FORM

Vin=AC 100V

LOWER WAVE FORM

Vin=AC 85V

SOURCE

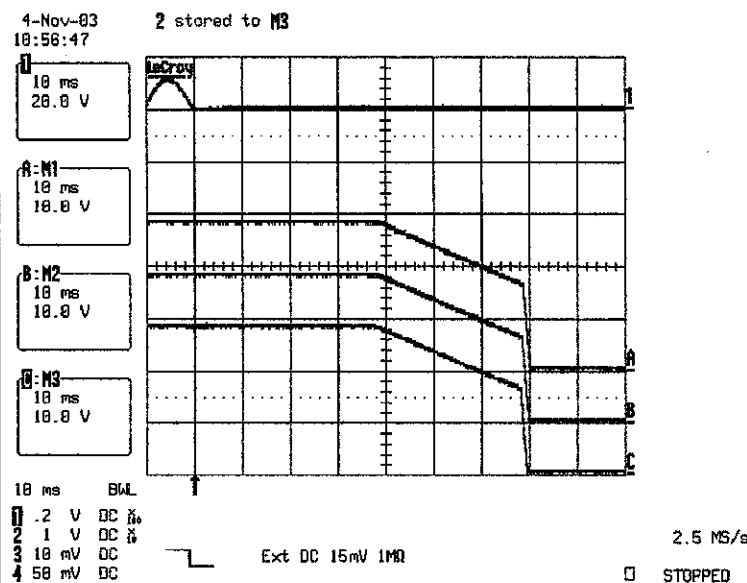
AC85V~AC132V

LOAD

1.8A

TEMP.

71°C



UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC132V

LOWER MIDDLE WAVE FORM

Vin=AC 100V

LOWER WAVE FORM

Vin=AC 85V

SER. NO

OUT PUT

DATE

TESTED BY

03/11/4

T.OKANO

MODEL

RTW28-1R8C

保持特性

TURN-OFF CHARACTERISTIC

SOURCE

AC170V~AC265V

LOAD

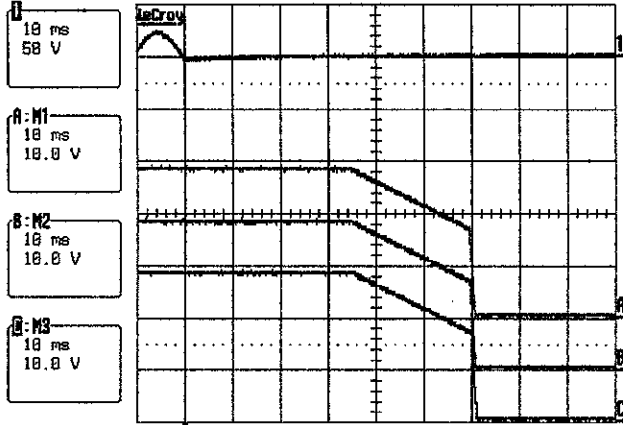
1.8A

TEMP.

-20°C

4-Nov-83
13:41:39

2 stored to M8



10 ms 50V
1 0.5 V AC 50%
2 1 V DC 50%
3 10 mV DC
4 50 mV DC
Ext DC 15mV 1MΩ
2.5 MS/s
STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC265V

LOWER MIDDLE WAVE FORM

Vin=AC 240V

LOWER WAVE FORM

Vin=AC 170V

SOURCE

AC170V~AC265V

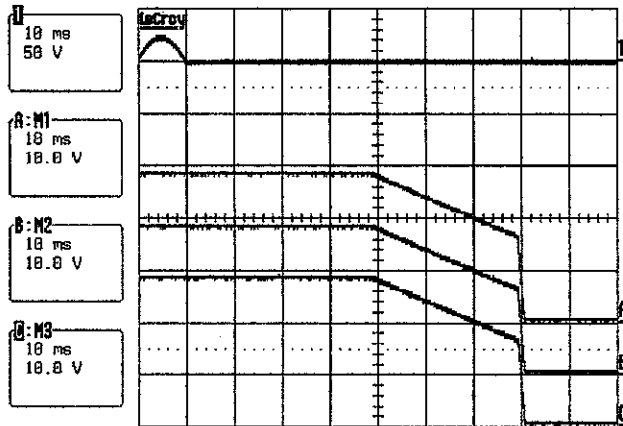
LOAD

1.8A

TEMP.

71°C

4-Nov-83
11:04:24



10 ms 50V
1 0.5 V AC 50%
2 1 V DC 50%
3 10 mV DC
4 50 mV DC
Ext DC 15mV 1MΩ
2.5 MS/s
STOPPED

UPPER WAVE FORM

AC monitor

UPPER MIDDLE WAVE FORM

Vin=AC265V

LOWER MIDDLE WAVE FORM

Vin=AC 240V

LOWER WAVE FORM

Vin=AC 170V

SER. NO

OUT PUT

DATE

TESTED BY

03/11/4

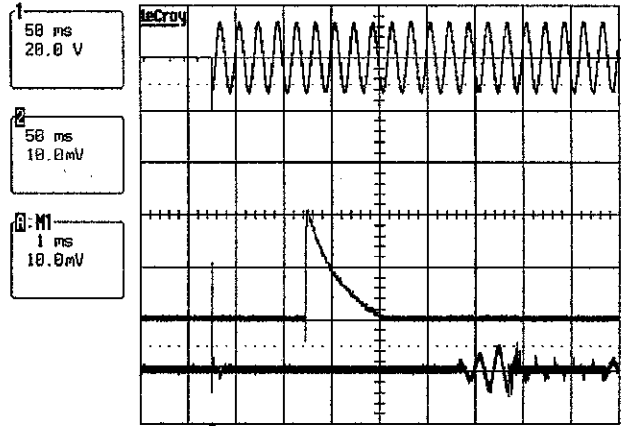
T.OKANO

MODEL

RTW28-1R8C

突入電流 INRUSH CURRENT	SOURCE	LOAD	TEMP.	PHASE
	AC100V (line direct connection)	1.8A	25°C	90°

31-Oct-83
11:40:43



50 ms BWL
 1 .2 V AC $\hat{}$
 2 10 mV DC $\hat{}$
 3 10 mV DC $\hat{}$
 4 50 mV DC $\hat{}$

500 kS/s
 STOPPED

Ext DC 15mV 1M Ω

UPPER WAVE FORM

AC MONITOR

LOWER WAVE FORM

$I_p=10.2A$

CURRENT / DIVISION

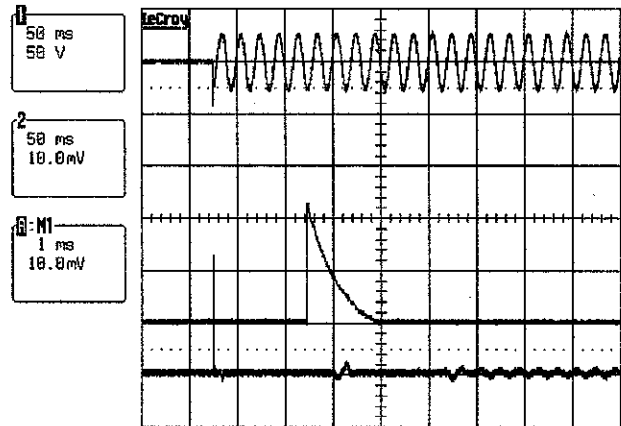
5A/DIV

TIME

50mS/DIV

	SOURCE	LOAD	TEMP.	PHASE
	AC200V (line direct connection)	1.8A	25°C	90°

31-Oct-83
11:43:41



50 ms BWL
 1 .5 V AC $\hat{}$
 2 10 mV DC $\hat{}$
 3 10 mV DC $\hat{}$
 4 50 mV DC $\hat{}$

500 kS/s
 STOPPED

Ext DC 15mV 1M Ω

UPPER WAVE FORM

AC MONITOR

LOWER WAVE FORM

$I_p=22.6A$

CURRENT / DIVISION

10A/DIV

TIME

50mS/DIV

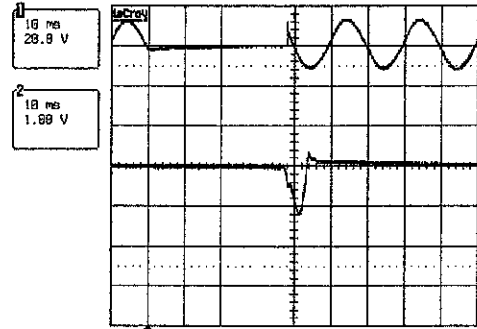
SER. NO	OUT PUT	DATE	TESTED BY
		03/10/31	T.OKANO

瞬停 SHORT INTERRUPTIONS

MODEL RTW28-1R8C SER.NO.

TESTRD BY : T.OKANO

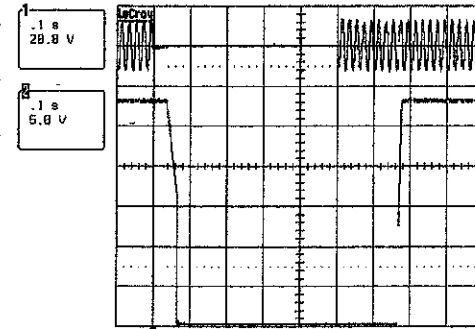
30-Oct-03
15:53:43



10 ms BW
1 20.8 V AC 5
2 1.88 V DC 5
3 10 mV DC
4 50 mV DC
Ext DC 5mV 1MΩ
500 kS/s
STOPPED

Ta=25°C
VIN=AC100V
LOAD=1.8A
38mS

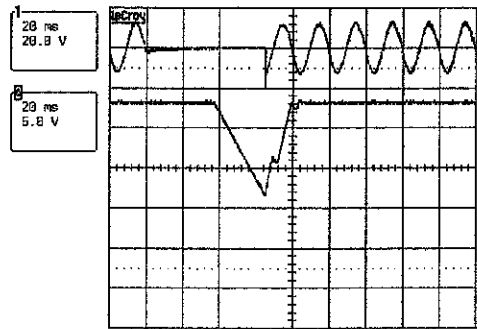
30-Oct-03
15:57:06



1 s BW
1 20.8 V AC 5
2 5.0 V DC 5
3 10 mV DC
4 50 mV DC
Ext DC 5mV 1MΩ
50 kS/s
STOPPED

Ta=25°C
VIN=AC100V
LOAD=1.8A
500mS

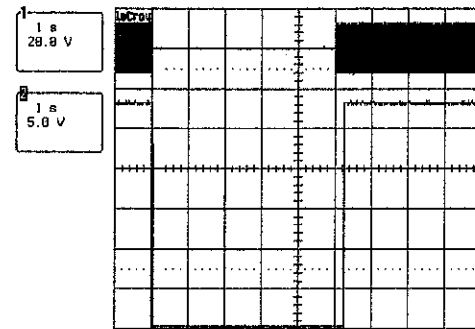
30-Oct-03
15:58:04



20 ms BW
1 20.8 V AC 5
2 5.0 V DC 5
3 10 mV DC
4 50 mV DC
Ext DC 5mV 1MΩ
250 kS/s
STOPPED

Ta=25°C
VIN=AC100V
LOAD=1.8A
65mS

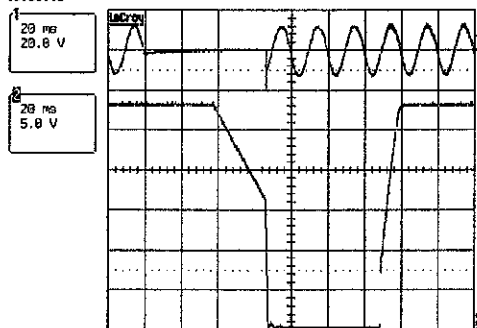
30-Oct-03
15:58:05



1 s BW
1 20.8 V AC 5
2 5.0 V DC 5
3 10 mV DC
4 50 mV DC
Ext DC 5mV 1MΩ
5 kS/s
STOPPED

Ta=25°C
VIN=AC100V
LOAD=1.8A
5S

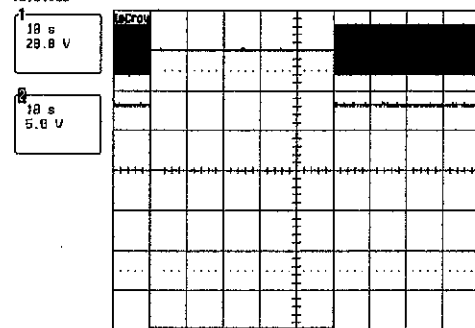
30-Oct-03
15:58:19



20 ms BW
1 20.8 V AC 5
2 5.0 V DC 5
3 10 mV DC
4 50 mV DC
Ext DC 5mV 1MΩ
250 kS/s
STOPPED

Ta=25°C
VIN=AC100V
LOAD=1.8A
66mS

30-Oct-03
16:01:00



10 s BW
1 20.8 V AC 5
2 5.0 V DC 5
3 10 mV DC
4 50 mV DC
Ext DC 5mV 1MΩ
500 S/s
STOPPED

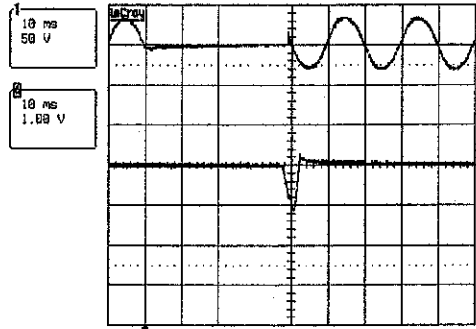
Ta=25°C
VIN=AC100V
LOAD=1.8A
50S

瞬停 SHORT INTERRUPTIONS

MODEL RTW28-1R8C SER.NO.

TESTRD BY : T.OKANO

38-Oct-83
16:03:17



Ta=25°C
VIN=AC240V
LOAD=1.8A
39mS

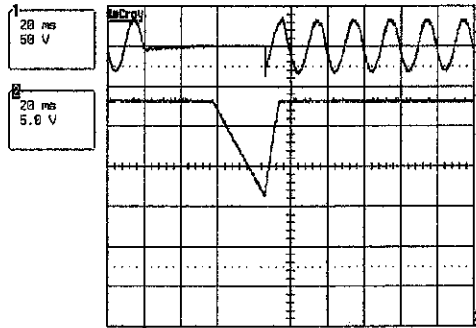
10 ms BW
1.5 V AC 3
0.1 V AC 3
10 mV DC 3
4 50 mV DC

Ext DC 5mV 1MΩ

500 kS/s

STOPPED

38-Oct-83
16:04:46



Ta=25°C
VIN=AC240V
LOAD=1.8A
66mS

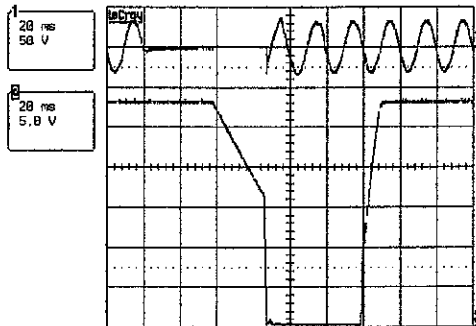
20 ms BW
1.5 V AC 3
0.5 V AC 3
10 mV DC 3
4 50 mV DC

Ext DC 5mV 1MΩ

250 kS/s

STOPPED

38-Oct-83
16:04:58



Ta=25°C
VIN=AC240V
LOAD=1.8A
67mS

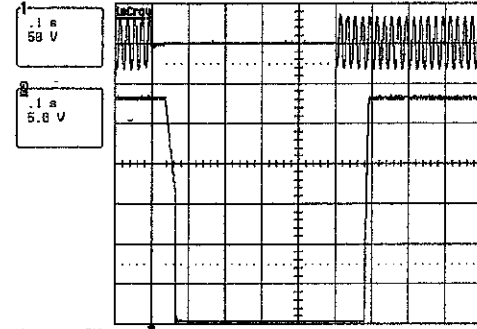
20 ms BW
1.5 V AC 3
0.5 V AC 3
10 mV DC 3
4 50 mV DC

Ext DC 5mV 1MΩ

250 kS/s

STOPPED

38-Oct-83
16:05:49



Ta=25°C
VIN=AC240V
LOAD=1.8A
500mS

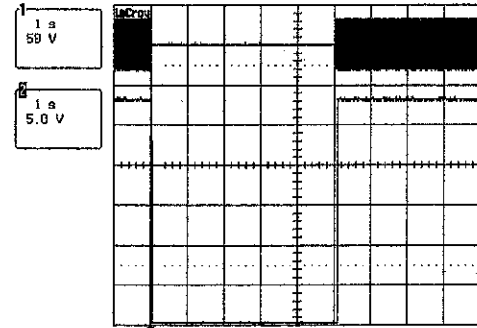
1 s BW
1.5 V AC 3
0.5 V AC 3
10 mV DC 3
4 50 mV DC

Ext DC 5mV 1MΩ

50 kS/s

STOPPED

38-Oct-83
16:07:01



Ta=25°C
VIN=AC240V
LOAD=1.8A
5S

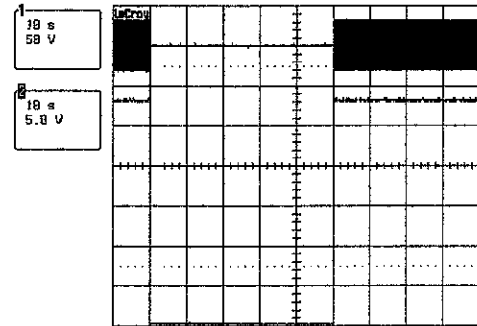
1 s BW
1.5 V AC 3
0.5 V AC 3
10 mV DC 3
4 50 mV DC

Ext DC 5mV 1MΩ

5 kS/s

STOPPED

38-Oct-83
16:16:42



Ta=25°C
VIN=AC240V
LOAD=1.8A
50S

10 s BW
1.5 V AC 3
0.5 V AC 3
10 mV DC 3
4 50 mV DC

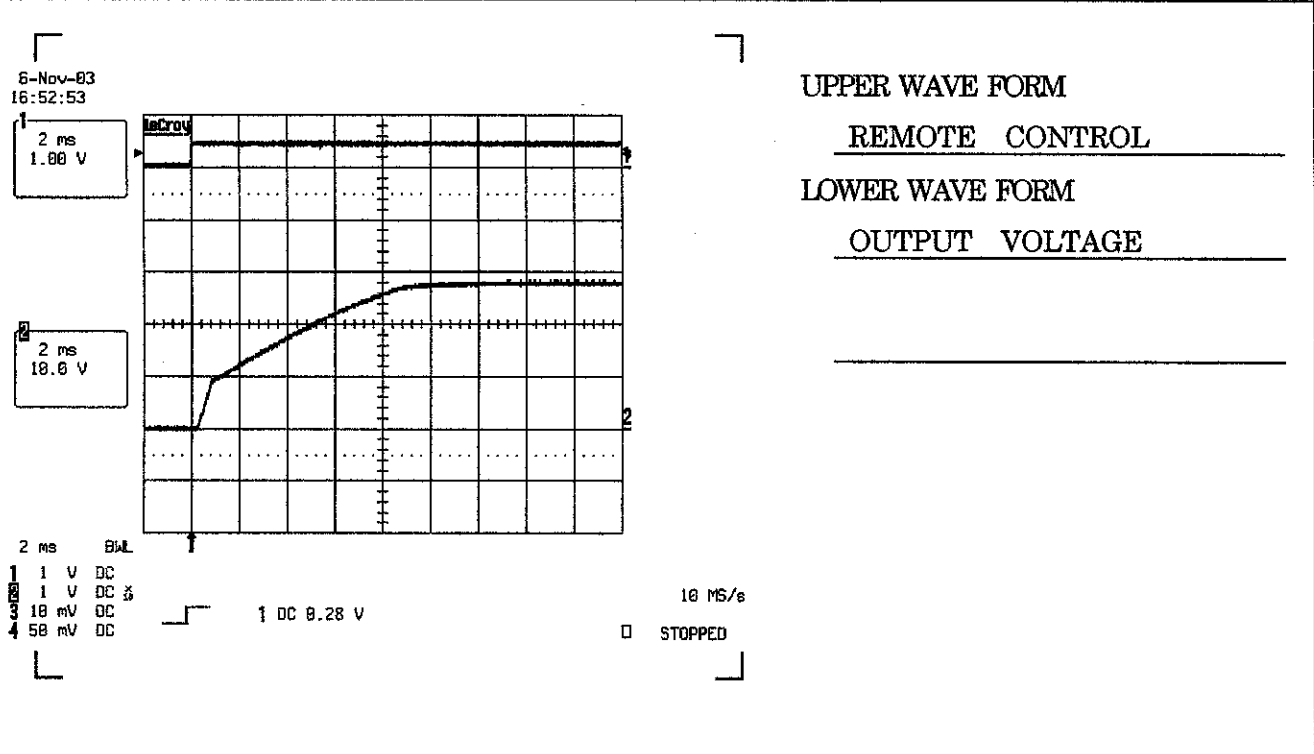
Ext DC 5mV 1MΩ

500 S/s

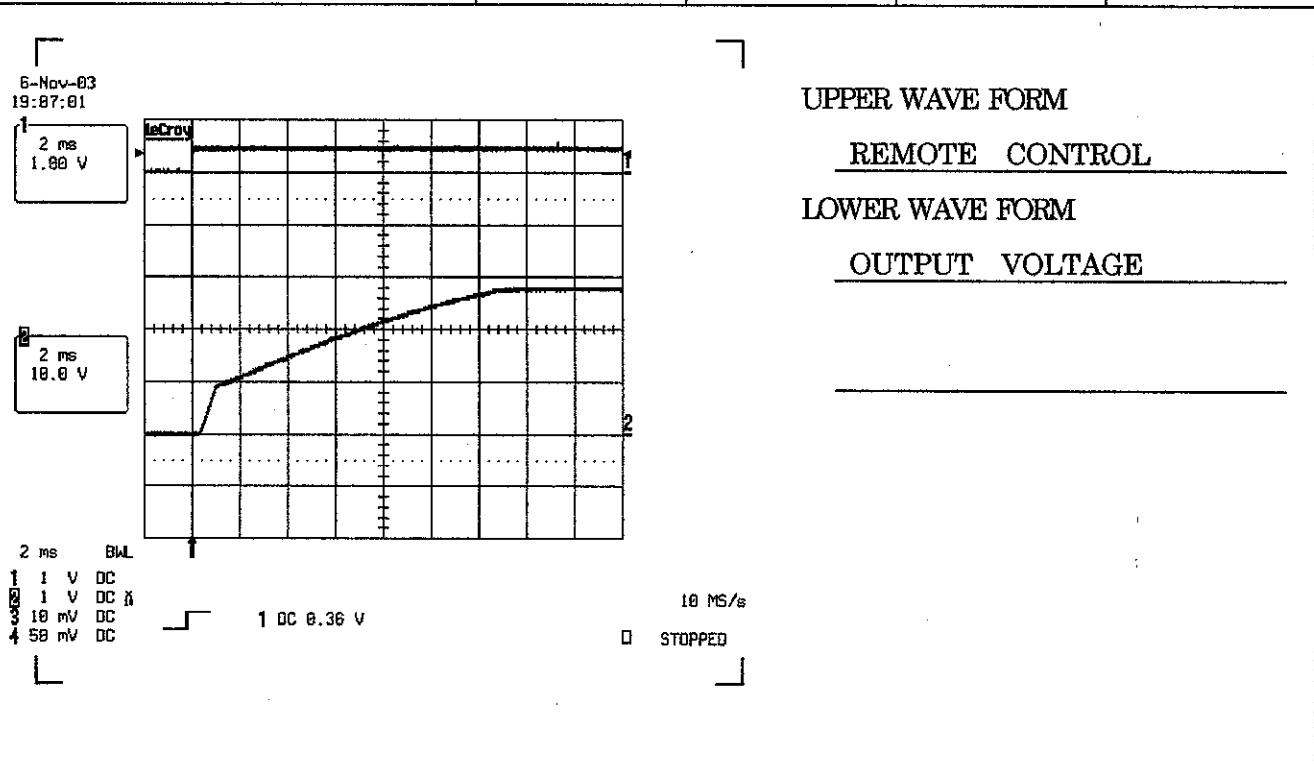
STOPPED

MODEL
RTW28-1R8C

リモート コントロール REMOTE CONTROL	SOURCE	LOAD	TEMP.	
	AC100V	1.8A	-20°C	



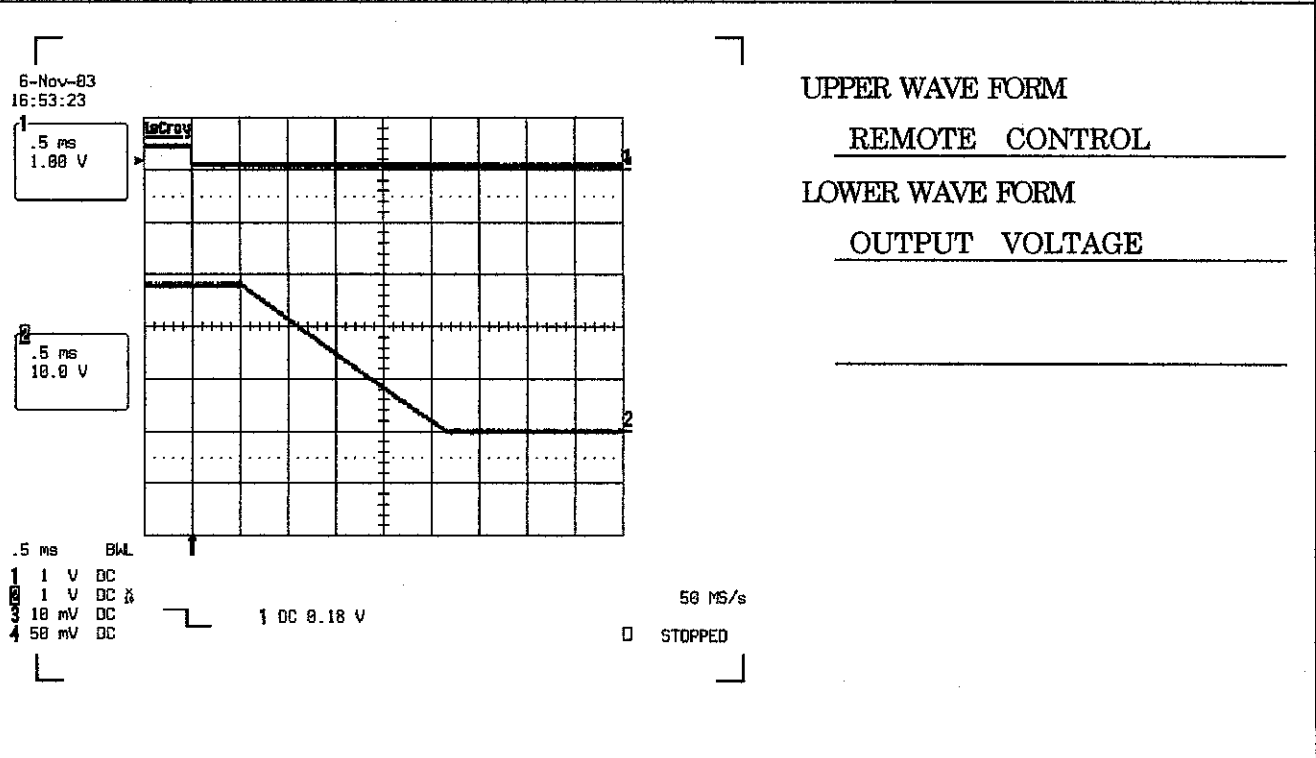
	SOURCE	LOAD	TEMP.	
	AC100V	1.8A	71°C	



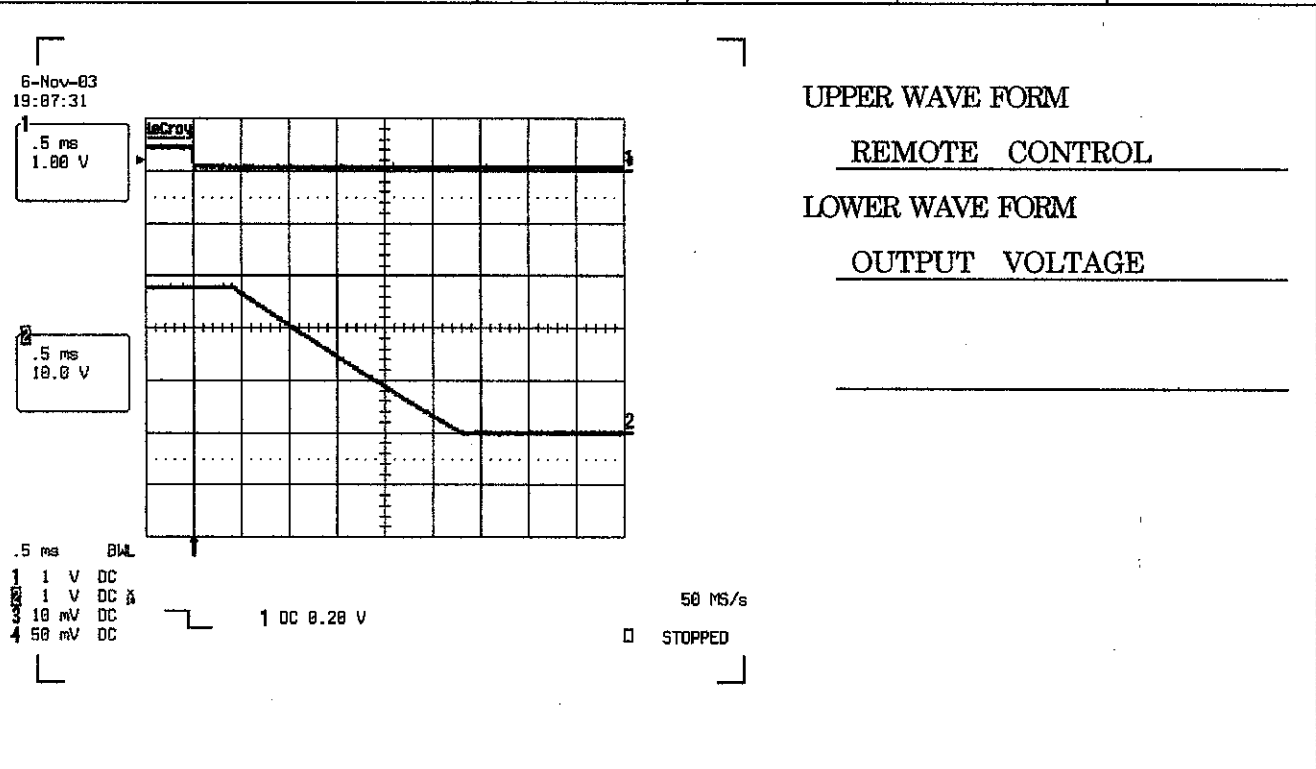
SER. NO	OUT PUT		DATE	TESTED BY	
			03/11/ 6	T.OKANO	

MODEL
RTW28-1R8C

リモート コントロール	SOURCE	LOAD	TEMP.	
REMOTE CONTROL	AC100V	1.8A	-20°C	



	SOURCE	LOAD	TEMP.	
	AC100V	1.8A	71°C	



SER. NO	OUT PUT	DATE	TESTED BY
		03/11/ 6	T.OKANO

型名 : RTW28-1R8C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向 : A方向

Vo=28V

Vin=AC100V

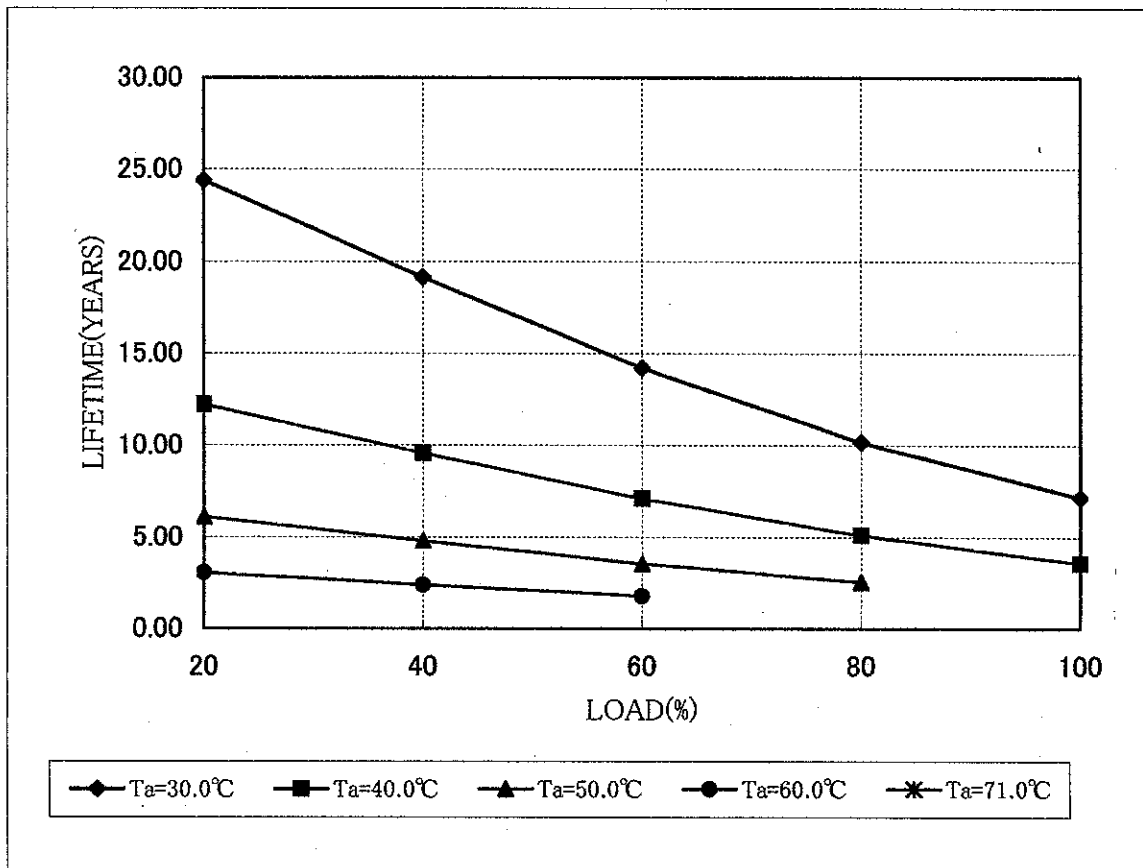
Io=(100%)=1.8A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	24.40	12.20	6.10	3.05	
40	19.15	9.57	4.79	2.39	
60	14.21	7.11	3.55	1.78	
80	10.19	5.09	2.55		
100	7.16	3.58			

*連続稼働 (最小保証値)

出力デューティ率(使用可能範囲)

Ta=40°C Io=100% Ta=71°C Io=10%
 Ta=50°C Io=80%
 Ta=60°C Io=60%



型名 : RTW28-1R8C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向 : A方向

Vo=28V

Vin=AC240V

Io=(100%)=1.8A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	21.54	10.77	5.39	2.69	
40	19.15	9.57	4.79	2.39	
60	17.02	8.51	4.25	2.13	
80	14.21	7.11	3.55		
100	12.20	6.10			

*連続稼動 (最小保証値)

出力レギュレーション率(使用可能範囲)

Ta=40°C

Io=100%

Ta=71°C

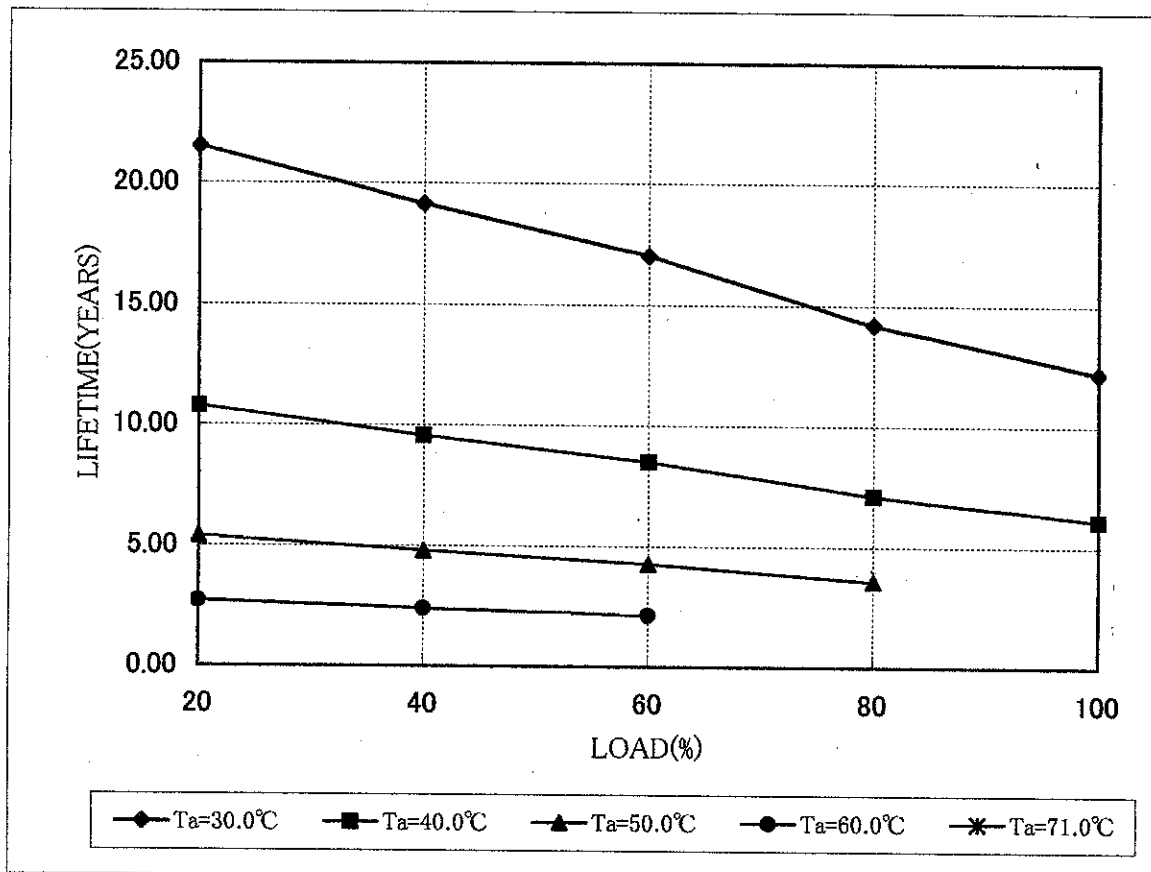
Io=10%

Ta=50°C

Io=80%

Ta=60°C

Io=60%



型名：RTW28-1R8C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向：A方向

Vo=28V

Vin=AC100V

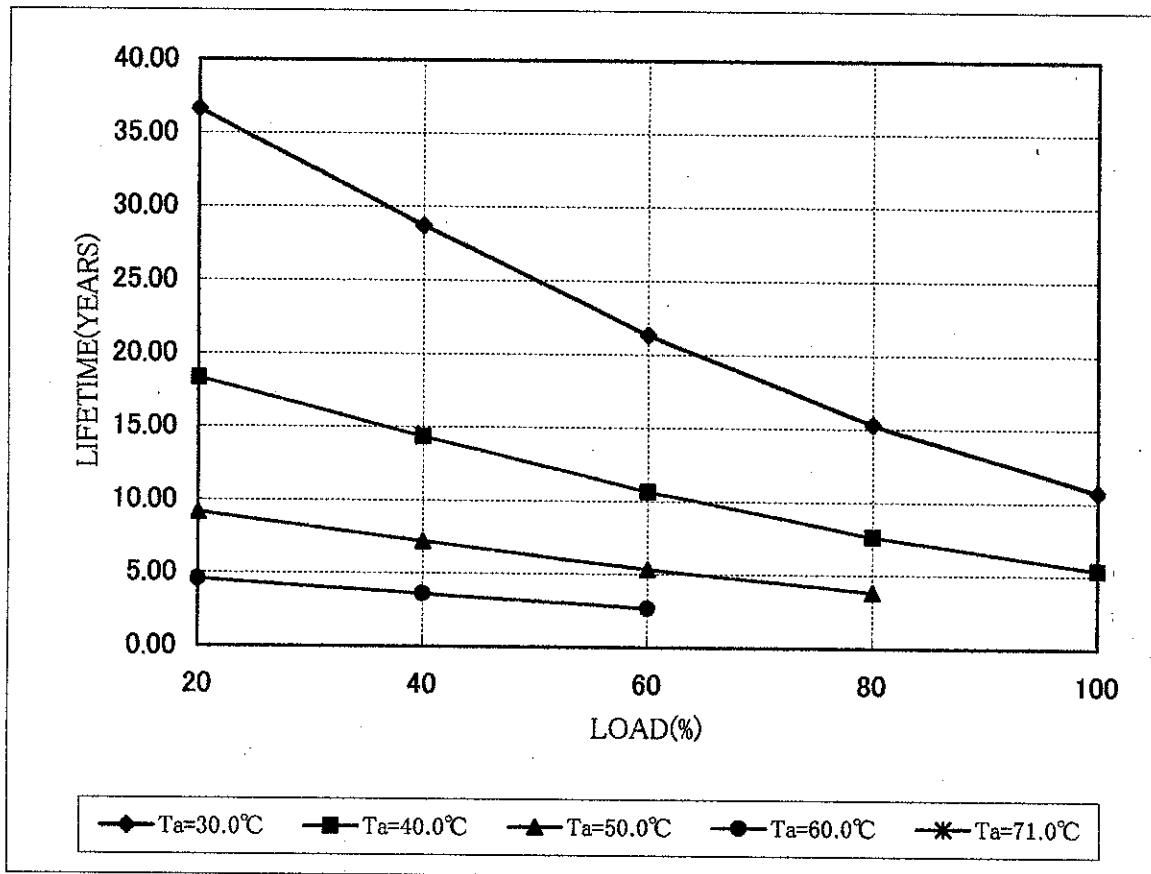
Io=(100%)=1.8A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	36.61	18.30	9.15	4.58	
40	28.72	14.36	7.18	3.59	
60	21.32	10.66	5.33	2.66	
80	15.28	7.64	3.82		
100	10.73	5.37			

*連続稼働 (最小実力値)

出力デューティ率(使用可能範囲)

Ta=40°C Io=100% Ta=71°C Io=10%
 Ta=50°C Io=80%
 Ta=60°C Io=60%



型名 : RTW28-1R8C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向 : A方向

Vo=28V

Vin=AC240V

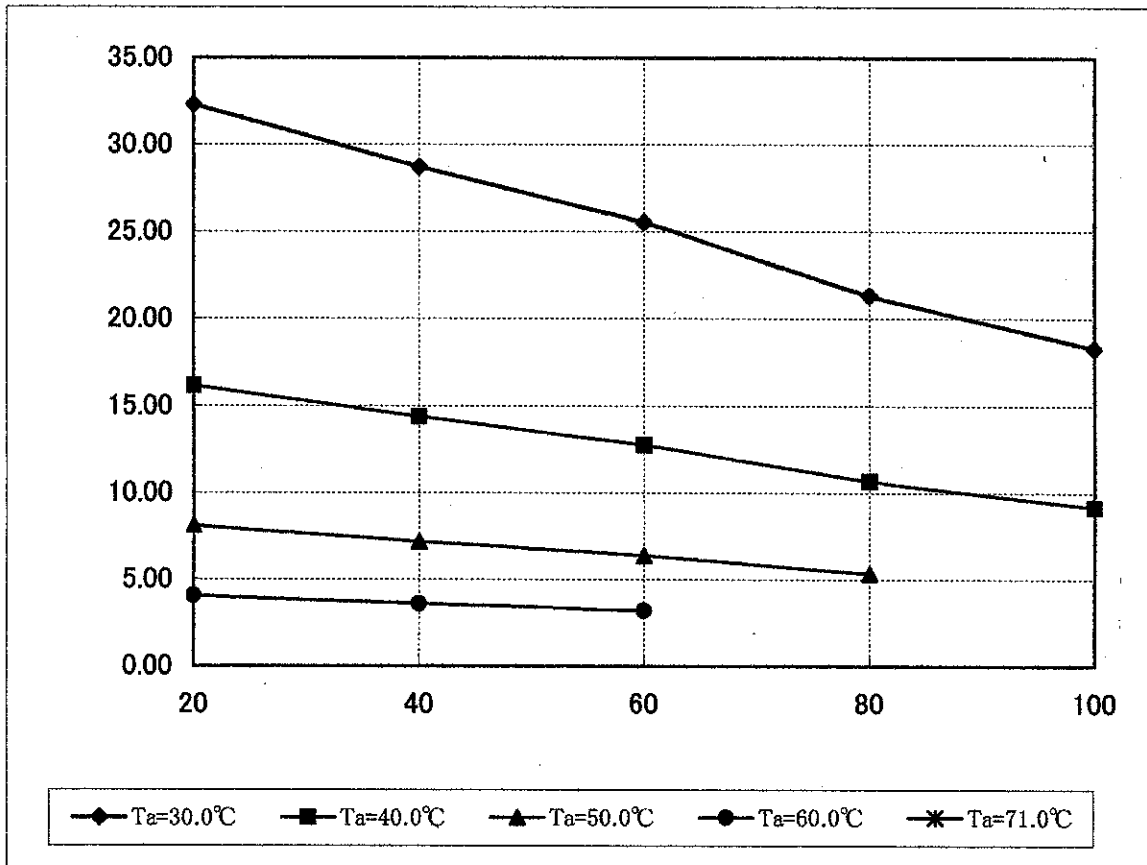
Io=(100%)=1.8A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	32.31	16.16	8.08	4.04	
40	28.72	14.36	7.18	3.59	
60	25.53	12.76	6.38	3.19	
80	21.32	10.66	5.33		
100	18.30	9.15			

*連続稼働 (最小実力値)

出力レギュレーション率(使用可能範囲)

Ta=40°C Io=100% Ta=71°C Io=10%
Ta=50°C Io=80%
Ta=60°C Io=60%



型名 : RTW28-1R8C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向 : B方向

Vo=28V

Vin=AC100V

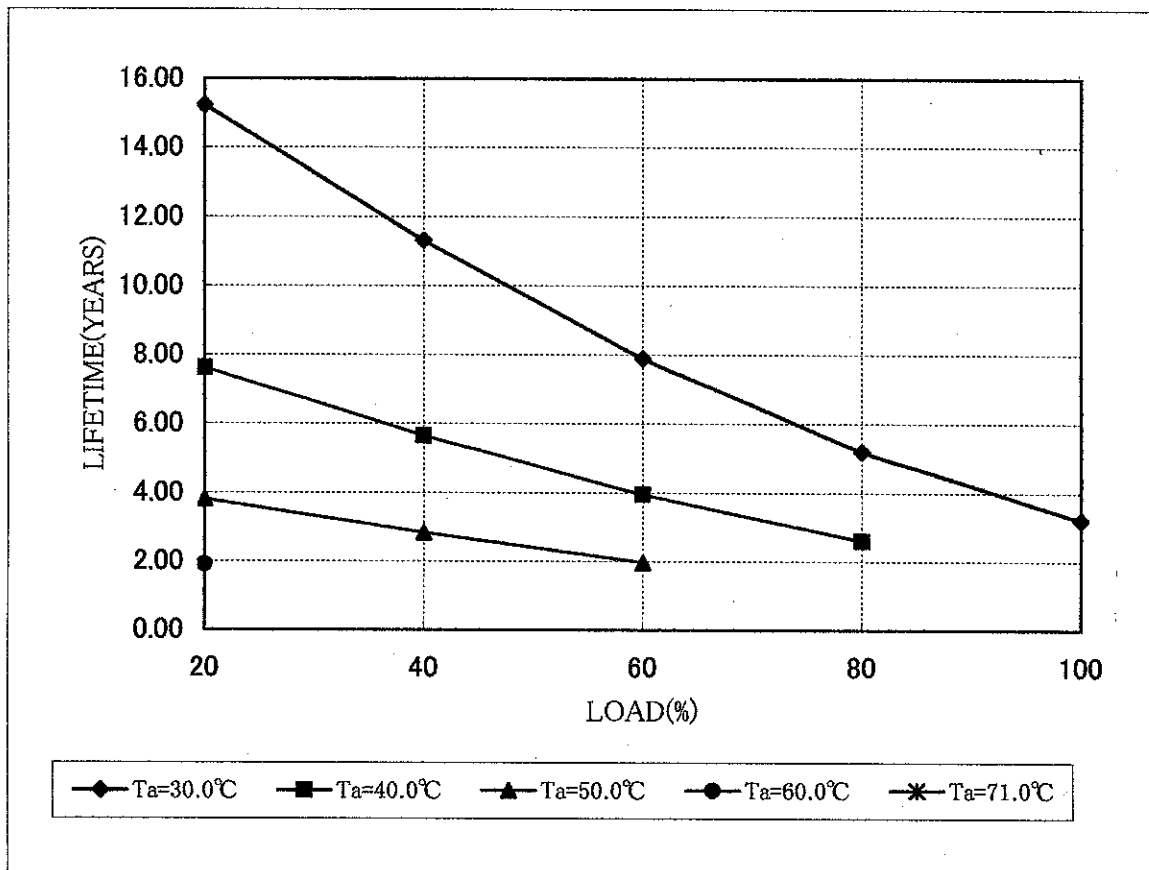
Io=(100%)=1.8A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	15.23	7.62	3.81	1.90	
40	11.31	5.65	2.83		
60	7.88	3.94	1.97		
80	5.20	2.60			
100	3.20				

*連続稼働 (最小保証値)

出力デューティ率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
Ta=40°C Io=80%
Ta=50°C Io=60%



型名： RTW28-1R8C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向： B方向

Vo=28V

Vin=AC240V

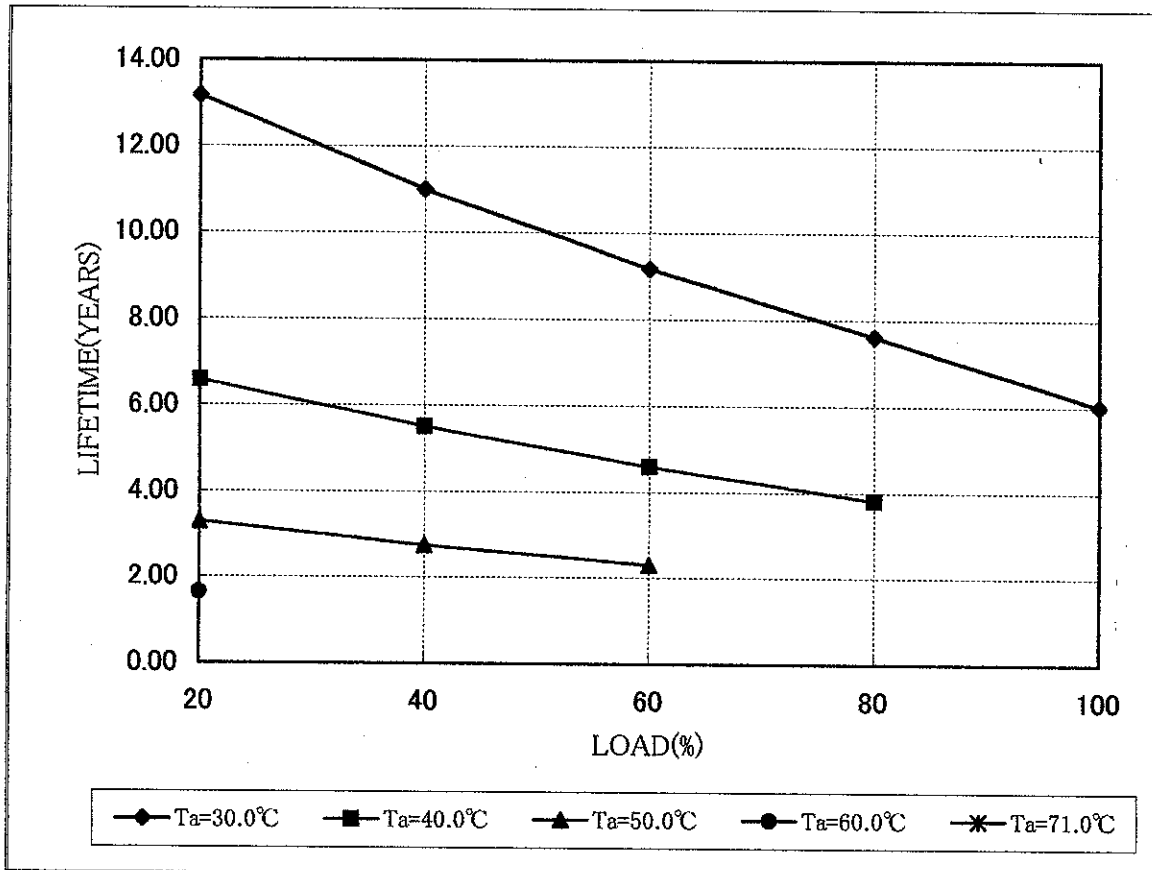
Io=(100%)=1.8A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	13.17	6.58	3.29	1.65	
40	11.00	5.50	2.75		
60	9.18	4.59	2.30		
80	7.62	3.81			
100	6.02				

*連続稼動 (最小保証値)

出力デレージング率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
 Ta=40°C Io=80%
 Ta=50°C Io=60%



型名： RTW28-1R8C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向： B方向

Vo=28V

Vin=AC100V

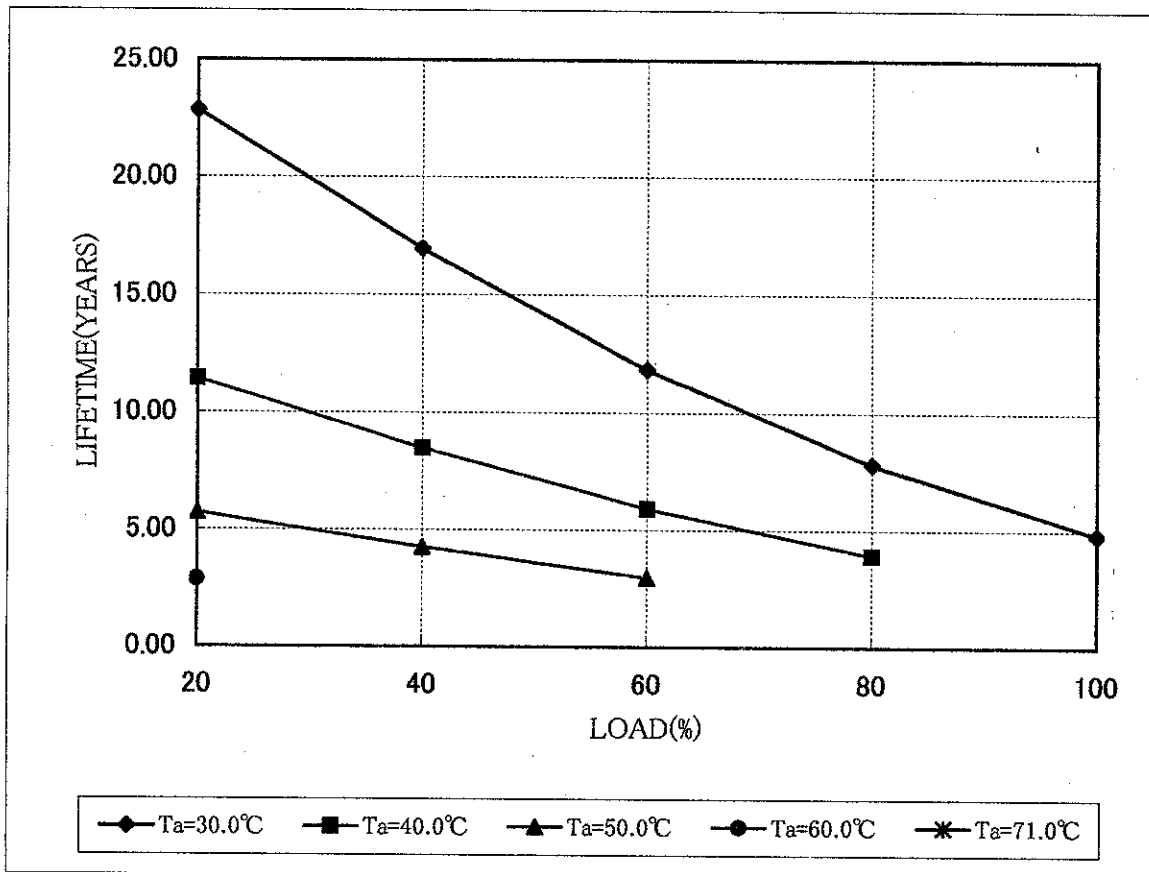
Io=(100%)=1.8A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	22.85	11.42	5.71	2.86	
40	16.96	8.48	4.24		
60	11.83	5.91	2.96		
80	7.80	3.90			
100	4.80				

*連続稼働 (最小実力値)

出力デューティ率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
Ta=40°C Io=80%
Ta=50°C Io=60%



型名 : RTW28-1R8C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向 : B方向

Vo=28V

Vin=AC240V

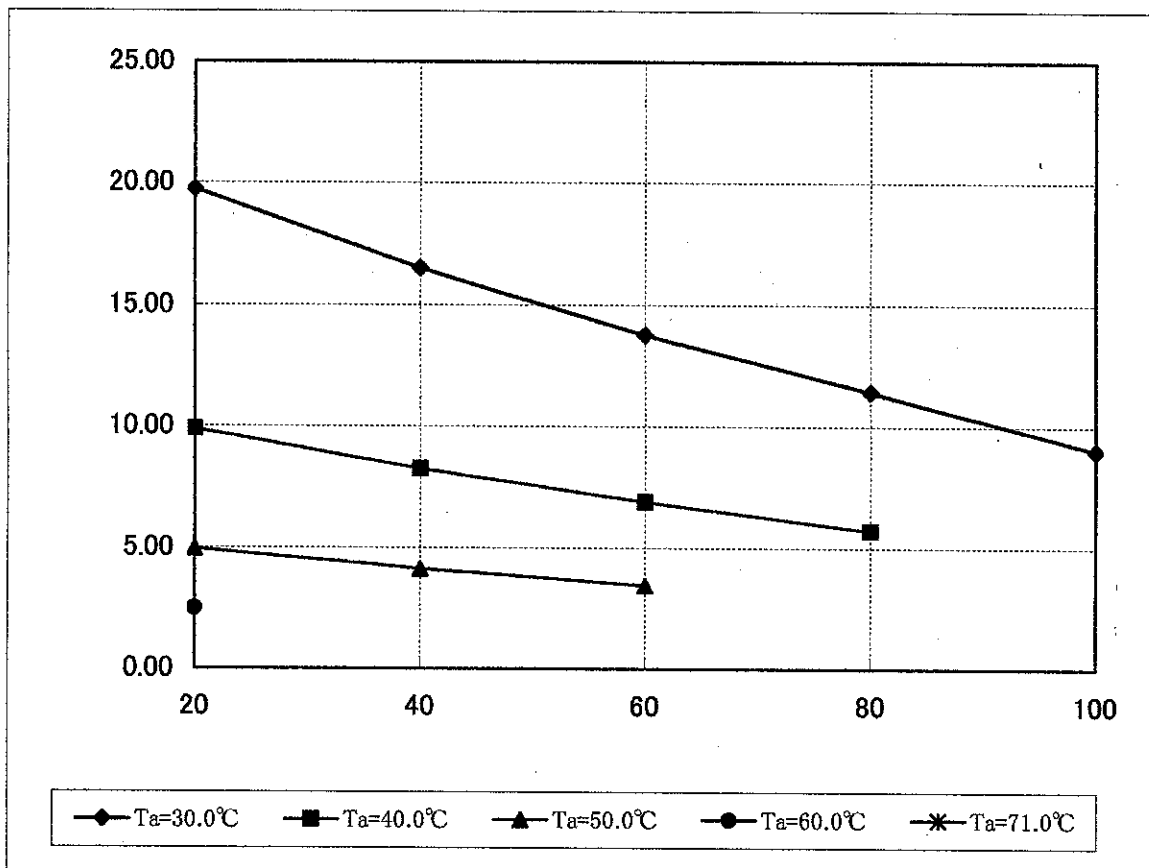
Io=(100%)=1.8A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	19.75	9.88	4.94	2.47	
40	16.50	8.25	4.12		
60	13.78	6.89	3.44		
80	11.42	5.71			
100	9.03				

*連続稼働 (最小実力値)

出力デレージング率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
Ta=40°C Io=80%
Ta=50°C Io=60%



型名： RTW28-1R8C

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電解コンデンサ算出寿命

部品No:C12

設置方向： C方向

Vo=28V

Vin=AC100V

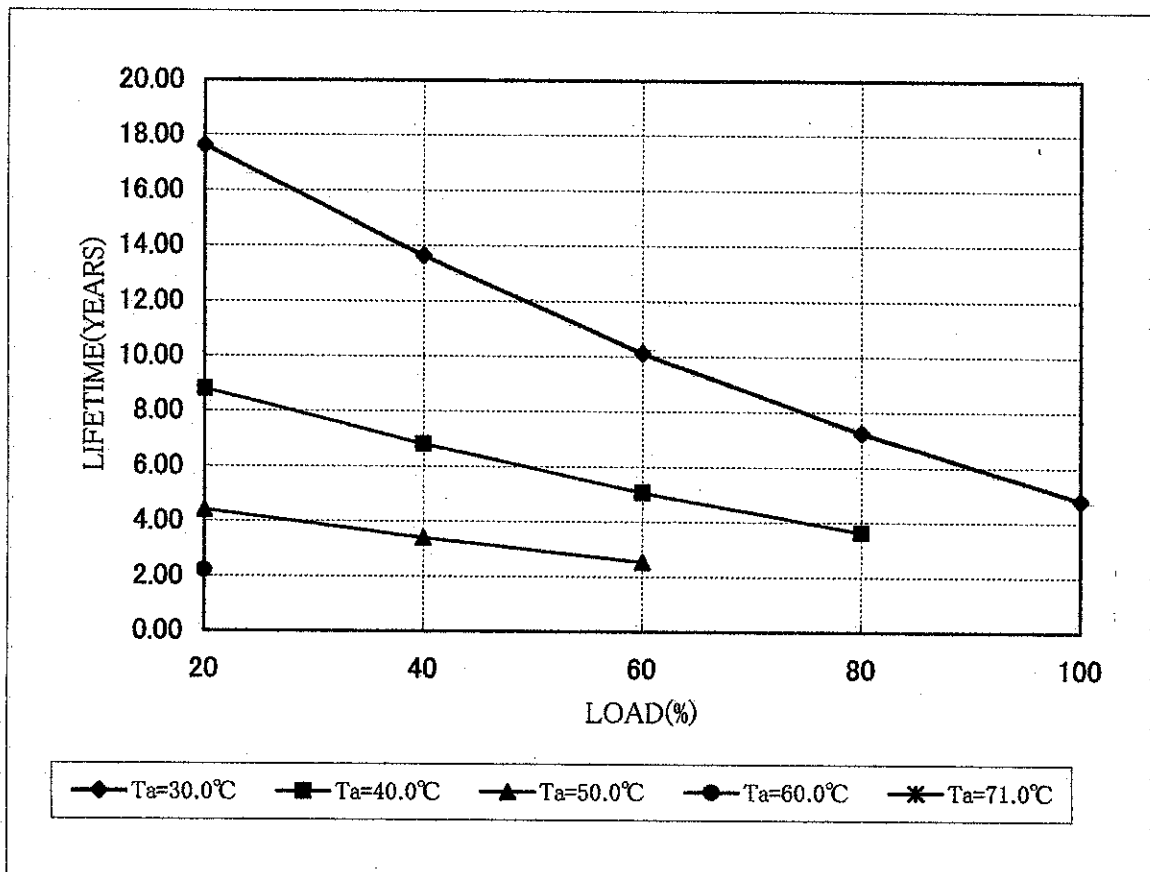
Io=(100%)=1.8A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	17.62	8.81	4.40	2.20	
40	13.63	6.82	3.41		
60	10.12	5.06	2.53		
80	7.25	3.63			
100	4.82				

*連続稼働 (最小保証値)

出力デューティ率(使用可能範囲)

Ta=30°C Io=100% Ta=60°C Io=20%
 Ta=40°C Io=80%
 Ta=50°C Io=60%



型名： RTW28-1R8C

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電解コンデンサ算出寿命

部品No:C12

設置方向： C方向

Vo=28V

Vin=AC240V

Io=(100%)=1.8A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	15.13	7.56	3.78	1.89	
40	12.99	6.49	3.25		
60	11.31	5.65	2.83		
80	9.77	4.89			
100	8.11				

*連続稼働 (最小保証値)

出力デレーティング率(使用可能範囲)

Ta=30°C

Io=100%

Ta=60°C

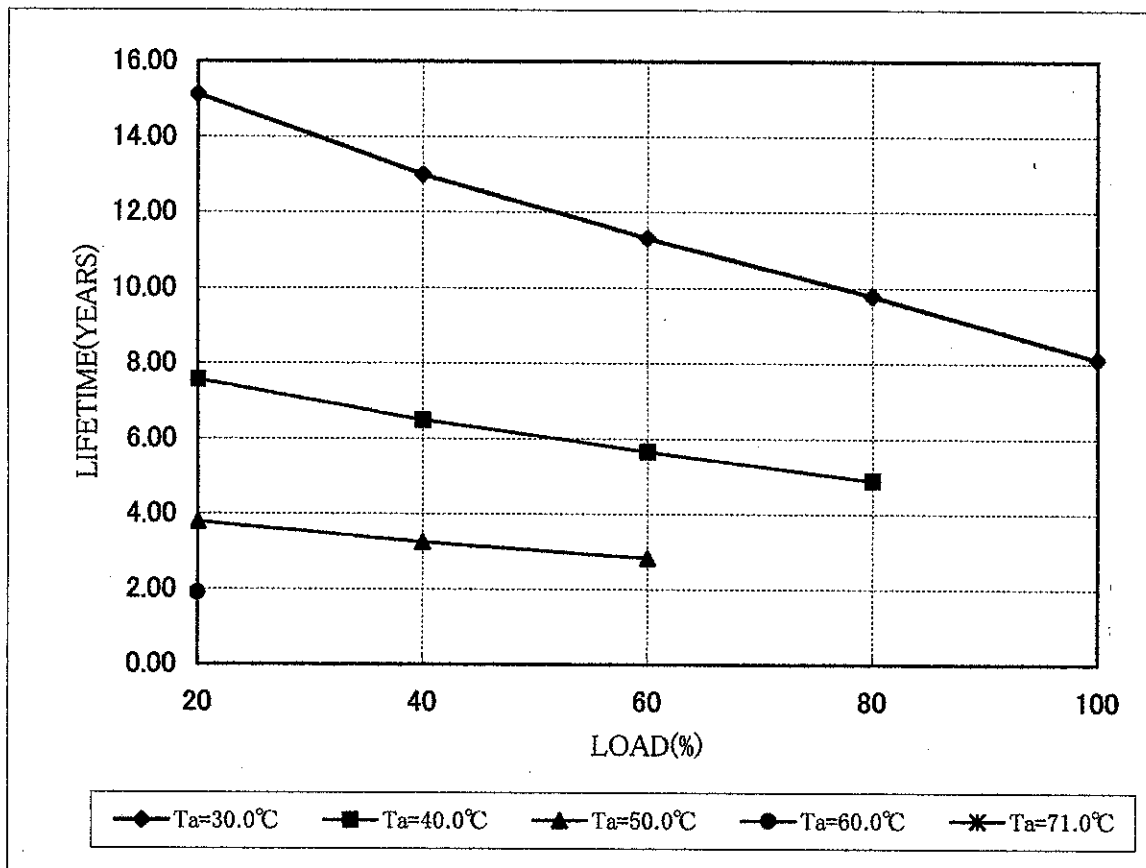
Io=20%

Ta=40°C

Io=80%

Ta=50°C

Io=60%



型名： RTW28-1R8C

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電解コンデンサ算出寿命

部品No:C12

設置方向： C方向

$V_o=28V$

$V_{in}=AC100V$

$I_o=(100\%)=1.8A$

LOAD (%)	LIFETIME (YEARS)				
	$T_a=30.0^\circ C$	$T_a=40.0^\circ C$	$T_a=50.0^\circ C$	$T_a=60.0^\circ C$	$T_a=71.0^\circ C$
20	26.43	13.21	6.61	3.30	
40	20.45	10.22	5.11		
60	15.18	7.59	3.79		
80	10.88	5.44			
100	7.23				

*連続稼働 (最小実力値)

出力デューティ率(使用可能範囲)

$T_a=30^\circ C$

$I_o=100\%$

$T_a=60^\circ C$

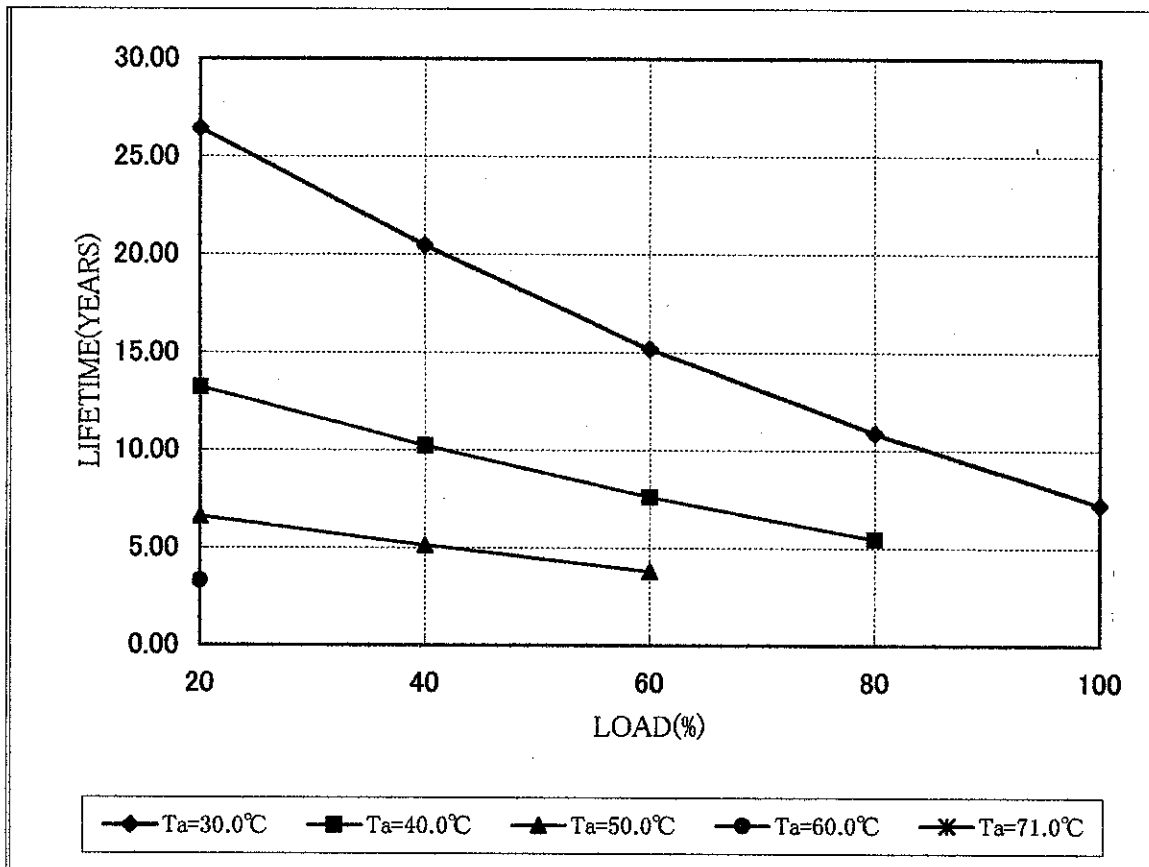
$I_o=20\%$

$T_a=40^\circ C$

$I_o=80\%$

$T_a=50^\circ C$

$I_o=60\%$



型名： RTW28-1R8C

2003/11/21

電解コンデンサ算出寿命

部品No:C12

設置方向： C方向

Vo=28V

Vin=AC240V

Io=(100%)=1.8A

LOAD (%)	LIFETIME (YEARS)				
	Ta=30.0°C	Ta=40.0°C	Ta=50.0°C	Ta=60.0°C	Ta=71.0°C
20	22.69	11.35	5.67	2.84	
40	19.48	9.74	4.87		
60	16.96	8.48	4.24		
80	14.66	7.33			
100	12.16				

*連続稼働 (最小実力値)

出力デューティ率(使用可能範囲)

Ta=30°C

Io=100%

Ta=60°C

Io=20%

Ta=40°C

Io=80%

Ta=50°C

Io=60%

