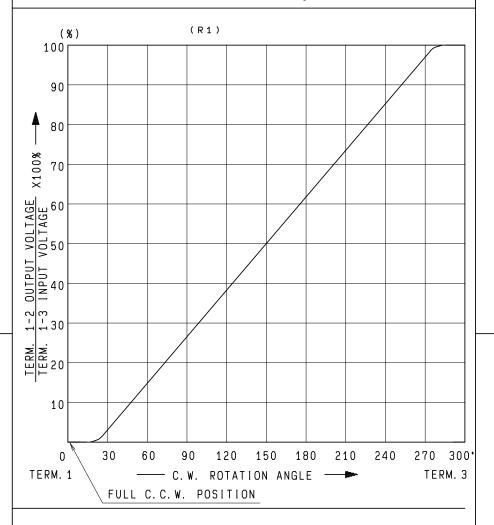
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2. Reted power: 3. Reted voitage: 4. Resistance toper: 5. Tap oposition: 6. Tap resistance between terminals: 7. Resioual resistance between terminals: 8. Silding noise: (Wessired by JIS C 644) 9. Insulation resistance: 10. Withstand voitage: 11. Gane error: 12. Switch rating:(Resistor load) 13. Switch contact resistance: 14. Circuit: 14. Circuit: 15. Rotational torque: (Resistor load) 13. Switch contact resistance: 14. Please refer to the attached. 15. Rotational torque: (Resistor load) 16. Subject for the load of t	1. Total resistance:	
3. Rated voltage: Please refer to the attached. 5. Tao position: Please refer to the attached. 6. Tao resistance between terminals: 142, 243 : 1000 max. 9. Insulation resistance: More than 100 Mb at 2500 D.C. 10. Withstand voltage: 300V A.C. for 1 minute. 11. Gang error : 300V A.C. for 1 minute. 12. Switch reting: (Resistor load) 3. Switch contact resistance: 300V A.C. for 1 minute. 14. Circuit: Please refer to the attached. 15. Total rotational angle: 300° ts. 16. Total rotational angle: 300° ts. 17. Total rotational angle: 300° ts. 18. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached. 19. Resistance to solidering heat: Please refer to the attached.	2. Rated power:	
4. Resistance between terminals: 5. Tap resistance between terminals: 18. Stiding noise: (Measured by JIS C 843) 9. Insulation resistance: 10. Withstand voltage: 300V A.C. for 1 minute.  11. Gang error: 12. Switch reting:(Resistor load) 13. Switch contact resistance: 14. Circuit: 15. Rotational largie: 2. Rotational torque: (Retings seed 86 /sec.) 2. Rotational torque: (Retings seed 86 /sec.) 3. Stooper strength: 3. Stooper strength: 3. Stooper strength: 4. Resistance to soldering heat: 5. Bushing nut tightening strength: 5. Bushing nut tightening strength: 5. Bushing nut tightening strength: 6. Push 7. Pull strength: 7. Shaft washed value shall be calculated prepartionally.) 14. Rotation force of shaft: 9. Cuertain force of shaft: 9. Cuertain force of shaft: 19. Cuertain force of shaft: 11. Rotational life: 11. Rotational life: 12. Switch coeration torque: 13. Switch coeration torque: 14. Switch coeration torque: 15. Rotational life: 16. More than 15.000 cycles.  NOTES 1. The items except above mentioned items shall meet or exceed JIS C 6443. 2. This type is protected daylant sulfides. 2. This type is protected daylant sulfides. 3. Title 3. Spicing angle: 3. Spicing angle: 4. Storage temperature renge: -40°C to +85°C  ALPSALPINE CO.,LID.  Specifications 3. Symp ant particulated spices of the company of t		
6. Tae resistance between terminals: 7. Residual resistance between terminals: 1. S. Silding noise: Items are the standard of		
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T. Residual resistance between terminals: 132,283 : 1000 max.  8. Silding noise : (Resayerd by JIS C 6443)  10. Withstand voltage: 300V A. C. For 1 minute.  11. Gang error : 300V A. C. For 1 minute.  12. switch rating: (Resistor Load)  13. switch contact resistance: 300V A. C. For 1 minute.  14. Circuit: 4. Circuit: 4. Circuit: 4. Circuit: 5. Circuit:		
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9. Insulation resistance: More than 100 Mg at 250V D.C. 10. Withstand voltage: 300V A.C. for 1 minute.  12. switch rating:(Resistor load) 13. switch contact resistance:  14. Circuit:   MCCHANICAL 1. Total rotational angle: 300° 15° 2. Rotational torque: (Retained) speed 50° /sec.) 3. Stopper strength: 4. Resistance to soldering heat: Please refer to the attachment of 5. Shuhm min. 4. Resistance to soldering heat: Please refer to the attachment of 5. Shuhm min. 5. Shushing nut inplication of 300 minute be neverable than 4m sept attention attention than 100 minutes of 5 mi		
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13. Switch contact resistance:  14. Circuit:  MECHANICAL  1. Total rotational angle: 2. Rotational torque: (Rotational speed 60°/sec.) 2. Potational torque: (Rotational speed 60°/sec.) 2. Solational torque: (Rotational speed 60°/sec.) 2. Potational torque: 3. Stopper strength: No damage with an application of 0.5N·m min. 4. Resistance to soldering heat: Please refer to the attached. Flease refer to the attached. S. Bushing nut tightening strength: No damage with an application of Push or puil i force 1001 for 10 sec. No damages with an application of Push or puil force 1001 for 10 sec.  1. Rotation for 30mm from nonting surface) 8. Operation force of shaft: 9. Click position: 10. Click borque: 11. Rotation play at the click position: 12. Contact arrangement: 13. Switch operation torque: 14. Switch operation torque: 15. Rotational life:  More than 15. 000 cycles.  NOTES 1. The items except above mentioned items shall meet or exceed JIS C 6443. 3. Operating temperature renge: -20 c to +70° c 4. Storage temperature renge: -40° c to +85° c  ALPSALPINE CO., LTD.  TITLE  Syne Date Margo, 5. 94 Margo, 5. 94 Margo, 6. 99 No.  RATOSYNA ME. Endo  ITITLE  APPD. MAR FOR S. 94 No. (RAG, 65, 99 No. (RAG, 65,	11. daily off of	
13. Switch contact resistance:  14. Circuit:  MECHANICAL  1. Total rotational angle: 2. Rotational torque: (Rotational seed 60°/sec.) 2. Potational torque: (Rotational seed 60°/sec.) 2. Potational torque: 3. Stopper strength: No damage with an application of 0.5N·m min. 4. Resistance to soldering heat: Please refer to the attached 5. Bushing nut tightening strength: No damage with an application of push or puil rote 100x for 10 sec. 7. Shart wooble: (Ropor) the moment of SomN·m at the point of 30mm from monting surface) 8. Operation force of shaft: 9. Click position: 10. Click borque: 11. Rotation play at the click position: 12. Contact arrangement: 13. Switch operation torque: 14. Switch operation torque: 15. Rotational life: More than 15.000 cycles.  NOTES 1. The items except above mentioned items shall meet or exceed JIS C 6443. 3. Operating temperature renge: -40°C to +85°C  ALPSALPINE CO., LTD.  TITLE ARPD. SYMB DATE IMPROLESSED MERSON: ARY, 05. 594 Map. 05. 59		
13. Switch contact resistance:  14. Circuit:  MECHANICAL  1. Total rotational angle: 2. Rotational torque: (Rotational seed 60°/sec.) 2. Potational torque: (Rotational seed 60°/sec.) 3. Stopper strength: No damage with an application of 0.5 Nm min. Rotational rotation for some of 19 peters		
13. Switch contact resistance:  14. Circuit:  MECHANICAL  1. Total rotational angle: 2. Rotational torque: (Rotational seed 60°/88c.) 2. Potational torque: 3. Substance to soldering heat: Please refer to the attached. Please refer to the attached. Tightening torque to be no greater than th-m. *Pay attention otherwise the strength may not be assured. Roberation force of shaft: 9. Click position of 30mm from monting surface) 10. Click position: 10. Click torque: 11. Rotation play at the click position: 12. Contact arrangement: 13. Switch operation torque: 14. Switch operation torque: 15. Rotational life: 16. More than 15.000 cycles.  NOTES 17. The items except above mentioned items shall meet or exceed JIS C 6443. 2. Operating temperature renge: -40° C to +70° C c. 4. Storage temperature reng		
13. Switch contact resistance:  14. Circuit:  MECHANICAL  1. Total rotational angle: 2. Rotational torque: (Rotational seed 60°/88c.) 2. Potational torque: 3. Subsper strength: No damage with an application of 0.5N·m min. No damage with an application of push or pull force 1004 for 10 sec. 1. Rotation plus of 30mm from monting surface) 1. Rotation for of 30mm from monting surface) 1. Rotation play at the click position: 12. Contact arrangement: 13. Switch operation torque: 14. Switch operation torque: 15. Rotational life: 16. More than 15.000 cycles.  NOTES 1. The items except above mentioned items shall meet or exceed JIS C 6443. 2. Operating temperature renge: -40° C to +70° C 4. Storage temperature renge: -40° C to +70° C 4. Storage temperature renge: -40° C to +70° C 5. Symbol Date (RKD)  ALPSALPINE CO., LTD.  MICHAELS (MICHAEL)  1. Title (RAPPD, 5, 94 M67807 M, MERGO) 1. Rotational (RKD) 1. Title (RAPPD, 5, 94 M67807 M, MERGO) 1. Rotational (RKD) 1. Title (RAPPD, 5, 94 M67807 M, MERGO) 1. Rotational (RKD) 1. Title (RAPPD, 5, 94 M67807 M, MERGO) 1. Rotational (RKD) 1. R	12 switch rating:(Resistor Load)	
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MECHANICAL  1. Total rotational angle: 300°±5°  2. Rotational torque: [Votational speed 80°/560, 2 ~25mn·m.  3. Stopper strength: No damage with an application of 0.5n·m min.  4. Resistance to soldering heat: Please refer to the attached.  5. Bushing nut tightening strength: Indiana application of Push or pull force 100N for 10 sec.  7. Shaft wobble: (Apply the moment of 50mn·m at the point of 30mm from monting surface) (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  8. Operation force of shaft: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  9. Click position: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  10. Click torque: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  11. Rotation play at the click position: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  12. Contact arrangement: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  13. Switching angle: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  14. Switch operation torque: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  15. The items except above mentioned items shall meet or exceed JIS C 6443.  2. This type is protected against sulfides. (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  ALPSALPINE CO., LTD.  TITLE STATE APPRICATIONS SYMB DATE APPRICATIONS DATE. (APPRICATIONS DATE.)  APPRICATIONS DATE.	15. Switten contact restolation.	
MECHANICAL  1. Total rotational angle: 300°±5°  2. Rotational torque: [Votational speed 80°/560, 2 ~25mn·m.  3. Stopper strength: No damage with an application of 0.5n·m min.  4. Resistance to soldering heat: Please refer to the attached.  5. Bushing nut tightening strength: Indiana application of Push or pull force 100N for 10 sec.  7. Shaft wobble: (Apply the moment of 50mn·m at the point of 30mm from monting surface) (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  8. Operation force of shaft: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  9. Click position: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  10. Click torque: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  11. Rotation play at the click position: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  12. Contact arrangement: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  13. Switching angle: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  14. Switch operation torque: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  15. The items except above mentioned items shall meet or exceed JIS C 6443.  2. This type is protected against sulfides. (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  ALPSALPINE CO., LTD.  TITLE STATE APPRICATIONS SYMB DATE APPRICATIONS DATE. (APPRICATIONS DATE.)  APPRICATIONS DATE.	14 Circuit:	
1. Total rotational angle:  2. Rotational torque: (Rotational speed 80 /sec.)  2. Rotational torque: (Rotational speed 80 /sec.)  3. Stopper strength:  3. Stopper strength:  4. Resistance to soldering heat:  5. Bushing nut tightening strength:  6. Push / pull strength:  8. Operation force of shaft:  9. Click borgue:  10. Click torque:  11. Rotation play at the click position:  12. Contact arrangement:  13. Switching angle:  14. Switch operation torque:  15. Rotational life:  16. More than 15. 000 cycles.  NOTES  1. The items except above mentioned items shall meet or exceed JIS C 6443.  2. This type is protected against sulfides.  3. Operating temperature renge: -20 C to +70 C d. Storage temperature renge: -40 C to +85 C   ALPSALPINE CO., LTD.  17. The items except above mentioned items shall meet or exceed JIS C 6443.  2. This type is protected against sulfides.  3. Operating temperature renge: -40 C to +85 C   ALPSALPINE CO., LTD.  17. The items except against sulfides.  5. Symb Date APPDICHED Sobol R. Afa5848 M. Endo 7, Yamayuti V R 0 0 0 0 0 1 1	14. 011 001 0	
1. Total rotational angle:  2. Rotational torque: (Rotational speed 80 /sec.)  2. Rotational torque: (Rotational speed 80 /sec.)  3. Stopper strength:  3. Stopper strength:  4. Resistance to soldering heat:  5. Bushing nut tightening strength:  6. Push / pull strength:  8. Operation force of shaft:  9. Click borgue:  10. Click torque:  11. Rotation play at the click position:  12. Contact arrangement:  13. Switching angle:  14. Switch operation torque:  15. Rotational life:  16. More than 15. 000 cycles.  NOTES  1. The items except above mentioned items shall meet or exceed JIS C 6443.  2. This type is protected against sulfides.  3. Operating temperature renge: -20 C to +70 C d. Storage temperature renge: -40 C to +85 C   ALPSALPINE CO., LTD.  17. The items except above mentioned items shall meet or exceed JIS C 6443.  2. This type is protected against sulfides.  3. Operating temperature renge: -40 C to +85 C   ALPSALPINE CO., LTD.  17. The items except against sulfides.  5. Symb Date APPDICHED Sobol R. Afa5848 M. Endo 7, Yamayuti V R 0 0 0 0 0 1 1	MECHANICAL	
2. Rotational torque: (Rotational speed 60 /sec.)  3. Stopper strength:  4. Resistance to soldering heat:  5. Bushing nut tightening strength:  7. Shaft wobble: (Apply the moment of 50mN·m at the point of 30mm from monting surface)  8. Operation force of shaft:  9. Click position:  10. Click torque:  11. Rotation play at the click position:  12. Contact arrangement:  13. Switching angle:  14. Switch operation torque:  15. Rotation play at the click position:  16. Push / pull strength:  17. Shaft wobble: (Apply the moment of 50mN·m at the point of 30mm from monting surface)  18. Operation from onting surface)  19. Click position:  10. Click torque:  11. Rotation play at the click position:  12. Contact arrangement:  13. Switching angle:  14. Switch operation torque:  15. The items except above mentioned items shall meet or exceed JIS C 6443.  2. This type is protected against sulfind surface.  3. Operating temperature renge: -20 C to +70 C C C C Storage temperature renge: -20 C to +85 C C C C C +85 C C C C C C C C C C C C C C C C C C C		300°+5°
3. Stopper strength:  4. Resistance to soldering heat:  5. Bushing nut tightening strength:  6. Push / pull strength:  7. Shaft wobble: (Apply the moment of 50mN·m at the point of 30mm from monting surface)  8. Operation force of shaft:  9. Click position:  10. Click torque:  11. Rotation play at the click position:  12. Contact arrangement:  13. Switching angle:  14. Switch operation torque:  15. Rotational life:  16. More than 15.000 cycles.  NOTES  17. The items except above mentioned items shall meet or exceed JIS C 6443.  2. This type is protected against sulfides.  3. Operating temperature renge: -20°C to +70°C c  4. Storage temperature renge: -40°C to +85°C  ALPSALPINE CO., LTD.  No damage with an application of 0.5N·m min.  Please refer to the attached.  10. Click torque than item space than item of grater than item. spay attention otherwise the strength may not be assured.  No damage with an application of 0.5N·m min.  **Pay attention otherwise the strength may not be assured.  **Out attention of 30mm. The strength may not be assured.  **Out attention of 10 sec.  **Out attention of		
4. Resistance to soldering heat: Please refer to the attached.  5. Bushing nut tightening strength: Inditening to be no great than New Pay attention otherwise the strength may not be assured (6. Push / pull strength: No damages with an application of Push or pull force 100N for 10 sec.  7. Shaft wobble: (Apply the moment of 50mN·m at the point of 30mm from monting surface) (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  8. Operation force of shaft: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  9. Click position: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  10. Click torque: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  11. Rotation play at the click position: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  12. Contact arrangement: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  13. Switching angle: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  14. Switching angle: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  15. Contact arrangement: (If the shaft length is less than 30mm. the value shall be calculated proportionally.)  16. The shaft length is less than 30mm. the value shall be calculated proportionally.)  17. The shaft length is less than 30mm. the value shall be calculated proportionally.)  18. Chasting the shaft length is less than 30mm. the value shall be calculated proportionally.)  19. Chasting the shaft length is less than 30mm. the value shall be calculated proportionally.)  19. Chasting the shaft length is less than 30mm. the value shall be calculated proportionally.)  19. Chasting the shaft length is less than 30mm. the value shall be calculated proportionally.)  19. Chasting the shaft length is less than 30mm. the value shall be calculated proportionally.)  19. Chasting the s		No damage with an application of 0.5N·m min
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6. Push / pull strength:  7. Shaft wobble :(Apply the moment of 50M\cdot m) at the point of 30mm from monting surface)  8. Operation force of shaft:  9. Click position:  10. Click torque:  11. Rotation play at the click position:  12. Contact arrangement:  13. Switching angle:  14. Switch operation torque:  17. Rotational life:  More than 15.000 cycles.  NOTES  1. The items except above mentioned items shall meet or exceed JIS C 6443.  2. This type is protected against sulfides.  3. Operating temperature renge: -20°C to +70°C descriptions.  TITLE  SPECIFICATIONS  SYMB DATE APPDICHEDISCO N. A.		
7. Shaft wobble :(Apply the moment of 50mN·m at the point of 30mm from monting surface)  8. Operation force of shaft:  9. Click position:  10. Click torque:  11. Rotation play at the click position:  12. Contact arrangement:  13. Switching angle:  14. Switch operation torque:  1 Rotational life:  More than 15.000 cycles.  NOTES  1. The items except above mentioned items shall meet or exceed JIS C 6443.  2. This type is protected against sulfides.  3. Operating temperature renge: -40°C to +70°C  4. Storage temperature renge: -40°C to +85°C  ALPSALPINE CO., LTD.  O. 4 XL/30mm p-p max. (L:Shaft length)  (If the shaft length is less than 30mm, the value shall be calculated proportionally.)  If the shaft length is less than 30mm, the value shall be calculated proportionally.)  A King a sum of the value shall be calculated proportionally.)  A CHABOL SHAPPLON SH		"
at the point of 30mm from monting surface)  8. Operation force of shaft: 9. Click position: 10. Click torque: 11. Rotation play at the click position: 12. Contact arrangement: 13. Switching angle: 14. Switch operation torque: 18. Rotational life: 19. More than 15,000 cycles.  NOTES 19. The items except above mentioned items shall meet or exceed JIS C 6443. 20. This type is protected against sulfides. 30. Operating temperature renge: -20 C to +70 C C 4. Storage temperature renge: -40 C to +85 C C  ALPSALPINE CO., LTD.  TITLE SPECIFICATIONS SYMB DATE APPDICHKD DSGD R. Alf888V8 M. Endo  T. Yamaguti V R 0 0 0 0 0 0 1 1		0.4 XI/30mm D-D max (I:Shaft length)
8. Operation force of shaft: 9. Click position: 10. Click torque: 11. Rotation play at the click position: 12. Contact arrangement: 13. Switching angle: 14. Switch operation torque: ENDURANCE 1. Rotational life:  More than 15.000 cycles.  NOTES 1. The items except above mentioned items shall meet or exceed JIS C 6443. 2. This type is protected against sujfides. 3. Operating temperature renge: -20° C to +70° C 4. Storage temperature renge: -40° C to +85° C  ALPSALPINE CO., LTD.  TITLE SPECIFICATIONS SYMB DATE APPD CHKD DSSOD R. AISSON R. M. F. ROO 0 0 0 0 0 1 1	at the point of 30mm from monting surface)	(If the shaft length is less than 30mm, the value shall be calculated proportionally )
9. Click position: 10. Click torque: 11. Rotation play at the click position: 12. Contact arrangement: 13. Switching angle: 14. Switch operation torque: ENDURANCE 1. Rotational life: More than 15.000 cycles.  NOTES 1. The items except above mentioned items shall meet or exceed JIS C 6443. 2. This type is protected against sulfides. 3. Operating temperature renge: -20°C to +70°C 4. Storage temperature renge: -40°C to +85°C  ALPSALPINE CO., LTD.  TITLE SPECIFICATIONS SYMB DATE APPD CHKD DSGD R. AIRSSWA M. Endo I, Yamaguti V R O O O O O O 1 1		
10. Click torque:  11. Rotation play at the click position:  12. Contact arrangement:  13. Switching angle:  14. Switch operation torque:  ENDURANCE  1. Rotational life:  More than 15.000 cycles.  NOTES  1. The items except above mentioned items shall meet or exceed JIS C 6443. 2. This type is protected against sulfides. 3. Operating temperature renge: -20°C to +70°C 4. Storage temperature renge: -40°C to +85°C  ALPSALPINE CO., LTD.  TITLE SPECIFICATIONS SYMB DATE APPDICHKD DSGD R. AT 858V8 M. Endo  V R 0 0 0 0 0 0 1 1		
11. Rotation play at the click position:  12. Contact arrangement:  13. Switching angle:  14. Switch operation torque:  ENDURANCE  1. Rotational life:  More than 15.000 cycles.  NOTES  1. The items except above mentioned items shall meet or exceed JIS C 6443.  2. This type is protected against sulfides. 3. Operating temperature renge: -20°C to +70°C 4. Storage temperature renge: -40°C to +85°C  ALPSALPINE CO., LTD.  TITLE SPECIFICATIONS SYMB DATE APPDICHKD DSSOD R. AIGS 848 M. Endo T. Yamaguti V R 0 0 0 0 0 0 1 1		
12. Contact arrangement:  13. Switching angle:  14. Switch operation torque:  ENDURANCE  1. Rotational life:  More than 15.000 cycles.  NOTES  1. The items except above mentioned items shall meet or exceed JIS C 6443.  2. This type is protected against sulfides. 3. Operating temperature renge: -20°C to +70°C 4. Storage temperature renge: -40°C to +85°C   ALPSALPINE CO., LTD.  TITLE SPECIFICATIONS  SYMB DATE APPD CHKD DSGD R, ATGSAVA MAY. 05. '94 May. 05. '		
13. Switching angle:  14. Switch operation torque:  ENDURANCE  1. Rotational life:  More than 15.000 cycles.  NOTES  1. The items except above mentioned items shall meet or exceed JIS C 6443.  2. This type is protected against sulfides.  3. Operating temperature renge: -20°C to +70°C  4. Storage temperature renge: -40°C to +85°C  ALPSALPINE CO., LTD.  TITLE  SPECIFICATIONS  SYMB DATE APPDICHED DSGD  R. AI ASSAVA M. Endo  V R O O O O O O 1 1		
1. Rotational life:  More than 15.000 cycles.  NOTES 1. The items except above mentioned items shall meet or exceed JIS C 6443. 2. This type is protected against sulfides. 3. Operating temperature renge: -20°C to +70°C 4. Storage temperature renge: -40°C to +85°C  ALPSALPINE CO., LTD.  TITLE SPECIFICATIONS SYMB DATE APPD CHKD DSGD R. AIGS & WAY. 05. '94 I, Yamaguti V R 0 0 0 0 0 0 1 1		
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1. The items except above mentioned items shall meet or exceed JIS C 6443. 2. This type is protected against sulfides. 3. Operating temperature renge : -20°C to +70°C 4. Storage temperature renge : -40°C to +85°C  ALPSALPINE CO., LTD.  TITLE SPECIFICATIONS  SYMB  DATE SYMB  DATE SYMB  DATE SYMB  DATE DATE DATE DATE DATE DATE DATE DAT	NOTES	
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ALPSALPINE CO., LTD. TITLE SPECIFICATIONS SYMB DATE APPD CHKD DSGD R, Alasawa M, Endo T, Yamaguti V R O O O O O O 1 1	3. Operating temperature renge : -20°C to	+70°C
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5 TMB   DATE   APPD CHKD   DSGD   N. M. data   M., Elido   I., Iumuyuti	ALPSALPINE CO., LI D.	
<u>Confidential</u>		SIMB DATE APPOLITED DESCRIPTION TO THE TRANSPORT OF THE PROPERTY OF THE PROPER
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Rated voltage: The rated voltage shall be the voltage of D.C. or A.C. (commercial frequency, effective value) corresponding to the rated power ( dissipation), and be obtained from the following formula. When the obtained rated voltage exceeds the maximum working voltage given in the following , however, the maximum working voltage of the following shall be the rated voltage.  $E = \sqrt{P \cdot R} (V)$ Where E: Rated voltage (V) P: Rated power (dissipation) (W) R: Nominal total resistance ( $\alpha$ ) Maximum working voltage: 50 V A.C., 10 V D.C. Resistance to soldering heat There shall be no evidence of poor contact between resistance element and terminals, or any physical damages as a result of soldering. ● Dip soldering Condition of soldering: Soldering shall be certified with following condition. Substrate to be soldered : Copper clad laminated phenol board in one surface of 1.6 mm thickness. Solder flux : Flux of 0.82 specific weight in bubbling type solder fluxcoating apparatus shall be used and bubbling surface height shall be defined substantially as halt thickness of substrate. Flux shall not flow up on substrate surface. Preheating: Surface temperature of substrate shall be settled within 100°C in 2 minutes. Dip soldering : To be performed in 260±5°C, 5±1 sec. Please use the above process only 1 or 2 times. Manual soldering To be performed in 3 seconds within 350°C.

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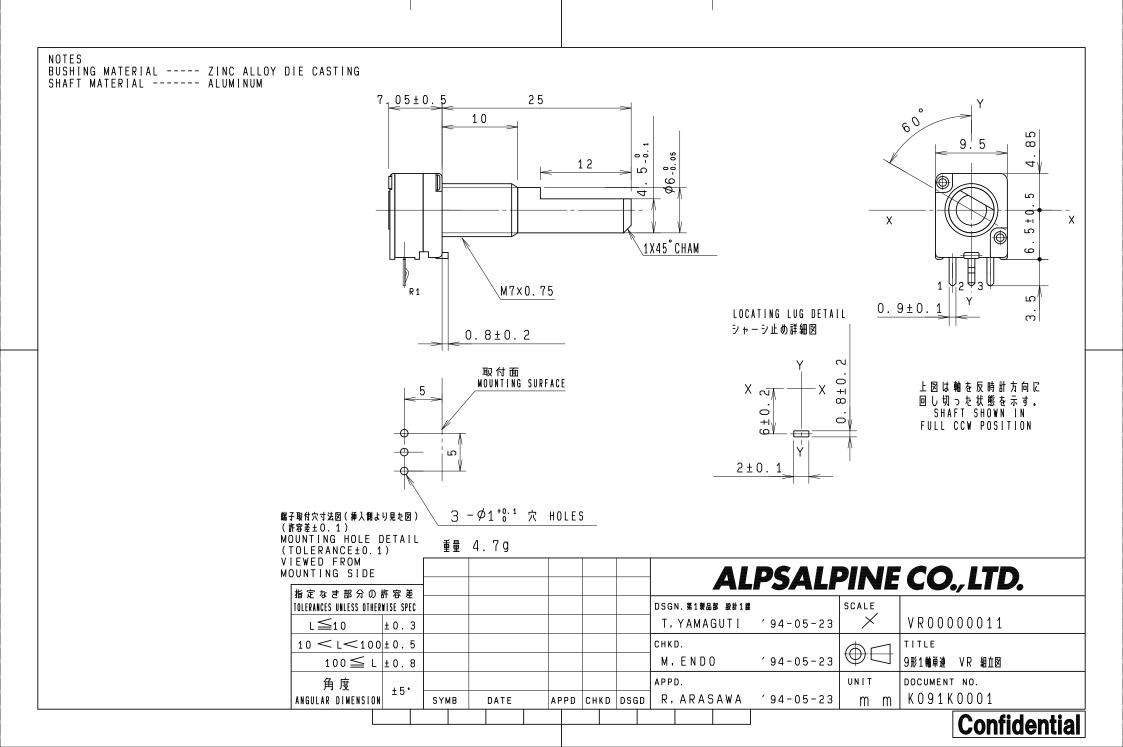
## ALPSALPINE CO.,LTD.



AT150° C.W. SHAFT ROTATION FROM FULL C.C.W. POSITION VOLTAGE PERCENT SHALL FALL WITHIN THE LIMITS OF 40-60 PERCENT.

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