File E42016
Project 4789521348

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REPORT

on

COMPONENT - Switches, Appliance and Special Use

Crouzet
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DESCRIPTION
PRODUCT COVERED:
USR, CNR Component, Appliance Switches: (mechanical micro switch)

Model	Load	Amp	Volt	Hz	Temp C	Pol/ Thr/ (Cir)	Endurance	IP	DIS
831600	GP	8	250	50/60	110	1/1 or 2 (1.2 or 2.2)	10k	40	µ
	RM	16(4) A	250	50/60	125	1/1 or 2 (1.2 or 2.2)	50k	40	µ
831600 SP9654	RM	10(4) A	400	50/60	125	1/1 or 2 (1.2 or 2.2)	50k	40	µ
	RM	16(4) A	250	50/60	125	1/1 or 2 (1.2 or 2.2)	50k	40	µ
831603	GP	8	250	50/60	110	1/1 or 2 (1.2 or 2.2)	10k	40	µ
	RM	10(4) A	250	50/60	90	1/1 or 2 (1.2 or 2.2)	10k	40	µ
831604	GP	6	250	50/60	110	1/1 or 2 (1.2 or 2.2)	10k	40	µ
	RM	6(2) A	250	50/60	90	1/1 or 2 (1.2 or 2.2)	50k	40	µ

PRODUCT COVERED CONT'D:

Model	Load	Amp	Volt	Hz	Temp C	Pol/ Thr/ (Cir)	Endurance	IP	DIS
831606	GP	10	250	50/60	110	1/1 or 2 (1.2 or 2.2)	10k	40	full
	RM	16(4) A	250	50/60	125	1/1 or 2 (1.2 or 2.2)	50k	40	full
	R	12 A	24	DC	110	1/1 or 2 (1.2 or 2.2)	10k	40	full
835560	GP	6	250	50/60	110	1/1 or 2 (1.2 or 2.2)	10k	40	μ or full
835563	GP	6	250	50/60	110	2/1 or 2 (1.5 or 2.8)	10k	40	μ or full

Note: Product marking: part numbers may be prefixed by "U".
All models can be followed by 00 through 99, with or without Suffix SP or SF 0000 through 9999. The suffix indicates variations which would not affect the electrical or mechanical function of the switch.
Except 831600 SP9654: for 400V ratings, safe mounting conditions are defined in drawing SP965400

EXPLANATION OF COLUMN HEADINGS

Model - Cat. No. – Identifier used by the manufacturer for a specific switch Model or Catalog number.

f/b – followed by, ww/o - With or without,

Load - identify the load according the Testing. R= resistive, RM= resistive and motor, RC= resistive and capacitive, L=tungsten lamp load, Spc= specific load, mA =load below 20mA, SpcL, SpcT = specific lamp load such as US L or T, I= inductive, SpcM= specific motor rating, TV= television, GP= general purpose, GPM= general purpose and motor, GPhp= general purpose and horse power.

Amps – the steady state amp value of the switch. Per pole value may be marked "PP" and is verified by the circuit connection.

Volt – the Voltage (RMS) value.

Hz – the Frequency or range such as (50-60).

Temp – The declared operating temperature of the switch.

Pol/Thr/Cir – The number of Poles (Pol) and Throws (Thr) represented by the switch construction (where "M" indicates multiple poles (more than 2). The circuit (Cir) is identified by a code explained in the standard and appendix pages (Table 2 of 61058-1).

IP – Degree of protection against ingress of solid objects and dust, and harmful ingress of water.

DIS – Disconnect air gap across open contact, electronic is indicated by "e", micro indicated "micro", FULL indicated with a measurement in mm.

Endurance – the number of Endurance cycles completed with a temperature rise less than 55C (on terminals).

SPCA – Identifies Special Conditions of Acceptability that must be considered in the end product. A list of typical SPCOAs (represented with a number) are found in the WOYR2 guide card. Conditions other than the typical are represented with a letter and described in the specific volume and section follow-up procedure description.

Products designated USR have been investigated using requirements contained in UL Standard for Switches for Appliance, UL 61058-1 edition 5 and UL 61058-1-1 edition 1.

Products designated CNR have been investigated using requirements contained in Canadian Standard CAN/CSA-C22.2 No. 61058-1:17 and CAN/CSA-C22.2 No. 61058-1-1:17.

Switch Declaration: Use table for general and indicate differences below.

Model	Series 83160X, 83556X			
Ambient Temp. C	See table page 1		Type Reference	C.T.
Total Cycles	See table page 1		Glow Wire Temp. C	850
IP rating	See table page 1		PTI	250
Electric shock Class	I		Over Voltage Category	II
Pollution degree Macro	3		Impulse withstand Volt	2500
Pollution degree Micro	2		Disconnect	See table page 1
Actuation	Linear (push-button)		Test Circuit	See table page 1

Terminal	Type	Wire range	Flexible/ Rigid	Wire type	Prepared or Unprepared	Specific test amps
1, 2, 4	Quick Connect Terminal (6.3 x 0.8 or 4.8 x 0.5 mm)	Table 4	Both	Solid/stranded	prepared	N/A
1, 2, 4	Solder Terminal	Table 4	Both	Solid/stranded	unprepared	N/A
1, 2, 4	Screw Terminal	Table 4	Both	Solid/stranded	unprepared	N/A

FIGURE & ILLUSTRATIONS:

The following Figures & Illustrations are included in this Report.

Figure		
Fig. 1		Overall view of series 86130
Fig. 2		Internal view of series 86130
Fig. 3		Overall view of model 83556
Ill. 1		Specification sheet of series 86130
Ill. 2		Measurements of clearance and creepage distances.
Ill. 3		Technical drawing of 831600 SP9654

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use – The switches covered by this Report are for use only in complete equipment where the suitability of the combination is determined by UL.

STANDARD CONDITIONS OF ACCEPTABILITY: (See Section General or LIS guide Page)

SPECIAL CONDITIONS OF ACCEPTABILITY: (See section General or LIS guide Page)

Specific Conditions of Acceptability should be identified in page 1 column SPCA. Below are the conditions that apply to this description, items 1 to 8 or unique conditions are identified by a alphabetical letter.

A. The switch 83160X provides only basic insulation which shall be assured in the end use product.

B. IP40 testing was completed on the complete switch without an end product enclosure (without considering terminals).

C. Only Flexible stranded conductor was used for testing. Suitability of Rigid and solid conductors shall be evaluated in end use product, if applicable.