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Project 4788157407

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REPORT

on

COMPONENT - SWITCHES, APPLIANCE AND SPECIAL USE

CROUZET AUTOMATISMES SAS  
VALENCE CEDEX, FRANCE

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## DESCRIPTION

## PRODUCT COVERED:

USR, CNR Component, Appliance Switches: micro switch series 8318x (X = 0, 1, 3 or 6). (Mechanical)

Model	Load	Amp	Volt	Hz	Temp C <sup>(+)</sup>	Pol/ Thr/ (Cir)	Endurance		IP	DIS	SPCA
							30C	55C			
83180,	GP	10	125-250	50- 60	55	1/2 (2.2)	N/A	10k	67	μ	14N03 20N01 A B C D E
83181, 83186	GP	6	125-250	50- 60	120 or 105	1/2 (2.2)	6k	10k			
83183	GP	6	125-250	50- 60	120 or 105	1/2 (2.2)	6k	10k			
83181, 83186	RM	6(2)	125-250	50- 60	120 or 100	1/2 (2.2)	N/A	10k			
83183	RM	3(1)	125-250	50- 60	120 or 100	1/2 (2.2)	N/A	10k			

(+) - higher temperature is for Terminal version, lower temperature is for wire version.

## and Report

## EXPLANATION OF COLUMN HEADINGS

Mode - 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.

30C cycle - the number of Endurance cycles completed with a temperature rise less than 30C (on terminals).

55C cycle - 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.

ed - The switch evaluation was completed to the indicated UL standard revision date (such as 2009).

Products designated USR have been investigated using requirements contained in UL Standard for Switches for Appliance, UL 61058-1 edition 4.

Products designated CNR have been investigated using requirements contained in Canadian Standard CAN/CSA-C22.2 No. 61058-1-09.

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

Model	8318X		
Ambient Temp. C	see table on page 1	Type Reference	CT
Total Cycles	1E4	Glow Wire Temp. C	850
IP rating	67	PTI	250-399
Electric shock Class	I	Over Voltage Category	II
Pollution degree Macro	3	Impulse withstand Volt	2500
Pollution degree Micro	1	Disconnect	Micro
Actuation	Push button (lever)	Test Circuit	2.2

Terminal	Type	Wire range	Flexible/ Rigid	Wire type	Prepared or Unprepared	Specific test amps
1, 2, 4	Quick connector terminal, solder terminal	0.5-1.5 mm <sup>2</sup>	both	stranded	prepared	N/A
1, 2, 4	Fixed wires or cables	0.5-1.5 mm <sup>2</sup>	both	stranded	prepared	N/A

## NOMENCLATURE:

8318X, details see table on page 1

## FIGURE &amp; ILLUSTRATIONS:

The following Figures & Illustrations are included in this Report.

Figure and Illustration Index		
Fig. 1		Overall View
Fig. 2		Internal view
Fig. 3		Alternate construction with leads, coming out from side.
Fig. 4		Alternate construction with leads, coming out from bottom.
Ill. 1		Explosive drawing
Ill. 2		Technical drawing of overall dimension (NO version as representative)
Ill. 3		Technical drawing of overall dimension (alternate construction with leads)
Ill. 4		Technical drawing of single parts.

## 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 an alphabetical letter.

- A. The switch shall be installed in a Class I end-use product that provides an enclosure having adequate earthing and/or insulating barrier over the front and rear switch enclosure surfaces, which meets the requirements for Basic Insulation.
- B. The switch provides only Basic insulation to live parts. The acceptability of user access of Basic insulation shall be considered in the end-use product.
- C. IP67 testing was completed on the complete switch without mounting in an end product. To insure IP67 the switch terminals to the end product enclosure shall be evaluated in the end-use product testing.
- D. The tests were conducted with wire size 0.75 mm<sup>2</sup> for rated current lower than 10 A and 1.0 mm<sup>2</sup> for 10 A.
- E. The wired version of the switches were only checked for construction and not submitted to test. The wires used shall have adequate temperature and voltage ratings for the end use application and other ratings if necessary. This shall be ensured in that application.