



December 13, 2001

Mr. Ofer Har'el
Baccara Automation Control Ltd.

Subject: IP Testing of Solenoid Valve
Models: 24V, 50Hz, 5.5W with base A 0.8-P and
24V, 50Hz, 5.5W with base A 2.4-N/O P

SII P.O. No.: 8112319600

Dear Mr. Har'el,

Please be advised that your equipment Solenoid Valves (Models 24V, 50Hz, 5.5W with base A 0.8-P and 24V, 50Hz, 5.5W with base A 2.4-N/O P C14) have successfully passed testing at the Standards Institution of Israel for compliance with clauses 5 and 6 of IEC 60529 (2001-02) and has been classified as IP68.

Test results are detailed in SII test report No. 8112319600.

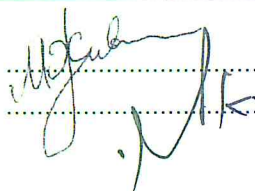

Should you have any questions, please do not hesitate to contact us.

Sincerely Yours,

Eli Vaknin
Head of Electrical Safety Branch
The Standards Institution of Israel

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TEST REPORT	
IEC 60529	
Degrees of protection provided by enclosure (IP Code)	
Report Reference No.....	: 8112319600
Compiled by (+ signature).....	: MICHAEL ZHIVIN 
Approved by (+ signature).....	: ELI VAKNIN 
Date of issue	: 10/12/2001
Contents.....	: 11 pages
Testing laboratory.....	: The Standards Institution of Israel
Address.....	: 42 Chaim Levanon St., Tel Aviv 69977, Israel
Testing location	: As above
Client	
Name	: Baccara Automation Control
Address.....	: Kvutzat Geva, 18915 Israel
Test specification	
Standard.....	: IEC 60529:2001 (Clauses 5, 6 – compliance with IP68 only)
Test item	
Description	: Solenoid Valve
Trademark.....	: Baccara
Models and/or type reference	: 24V, 50Hz, 5.5W with base A 0.8-P 24V, 50Hz, 5.5W with base A 2.4-N/O P
Manufacturer	: Baccara Automation Control
Rating(s).....	: 24V, 50Hz, 5.5W



General remarks:

Only the tests in accordance with IP68 were performed on the Solenoid Valve:

- ◆ Degrees of protection against access to hazardous parts and against foreign solid objects indicated by the first characteristic numeral (clause 5)
- ◆ Degrees of protection against ingress of water indicated by the second characteristic numeral (clause 6)

Attachments:

1. Appendix 1: Photographs

IPX8 Test Results

Tested by Michael Zhivin

Witnessed by Eli Vaknin

TABLE: IPX8 Tests*				P
Equipment under Test	Duration	Depth	Instrument	Deposit of water is observable
Solenoid Valve	72hours	2m*	Water chamber	No
No water has penetrated inside the unit. Equipment is normally functioning after the test.				
* - in accordance with agreement with the manufacturer				



IP6X Test Results

Tested by Michael Zhivin  Witnessed by Eli Vaknin 

Test instruments used: 1067

TABLE: IP6X Tests			P
Equipment under Test	Duration	Instrument	Deposit of dust is observable
Solenoid Valve	8 hours	Dust chamber	No
No dust has penetrated inside the unit. Equipment is normally functioning after the test.			

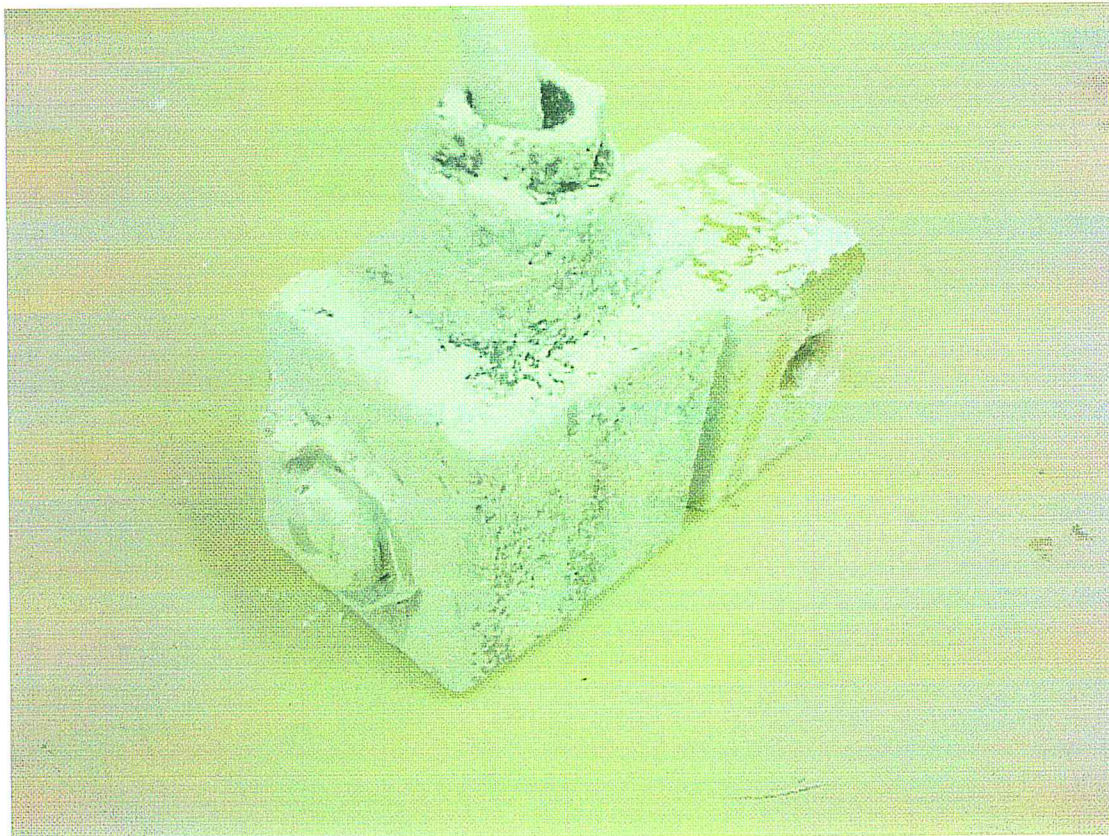


Test instruments					
SII Ref.No.	Instrument Type	Manufacturer	Model	Expire Calibration date	SII Location
1067	Dust chamber	PTL	P1414	--	Electr. Lab

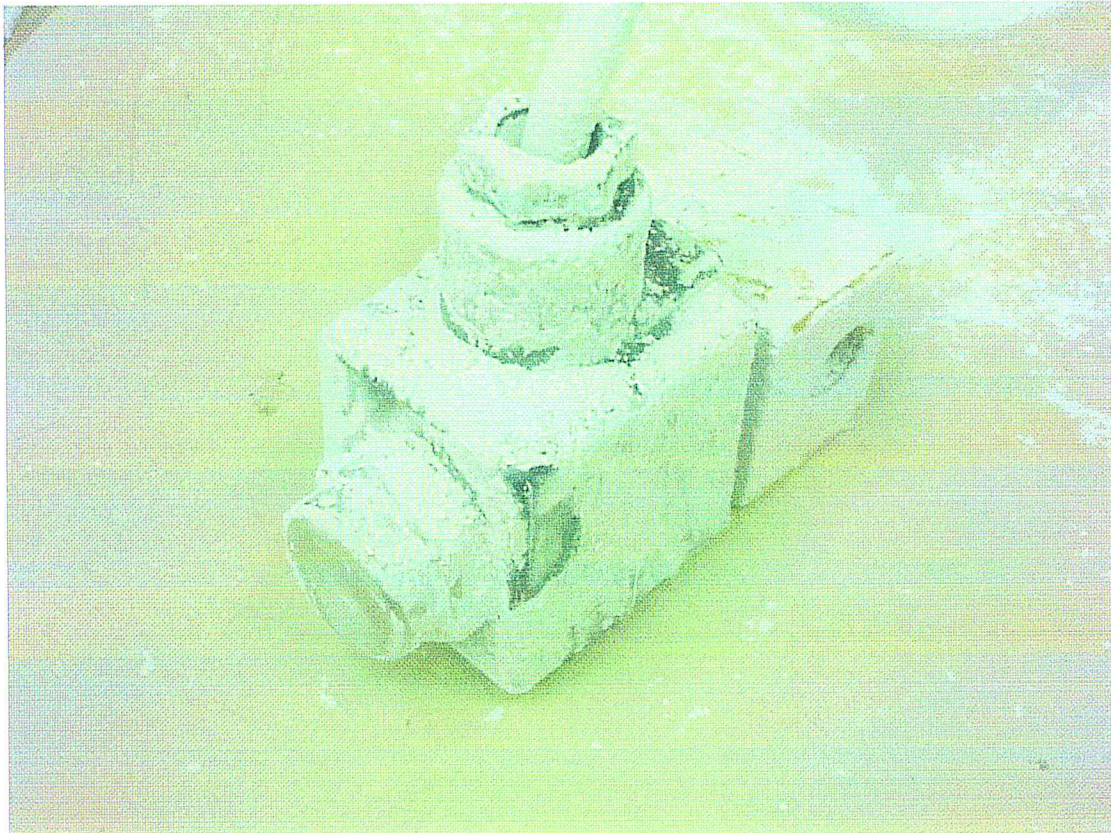


Appendix 1 Photos

Overall view of the solenoid valve with coil 24V, 50Hz, 5.5W and base A 0.8-P
after test in dust chamber



Overall view of the solenoid valve with coil 24V, 50Hz, 5.5W and base A 2.4-N/O P
after test in dust chamber



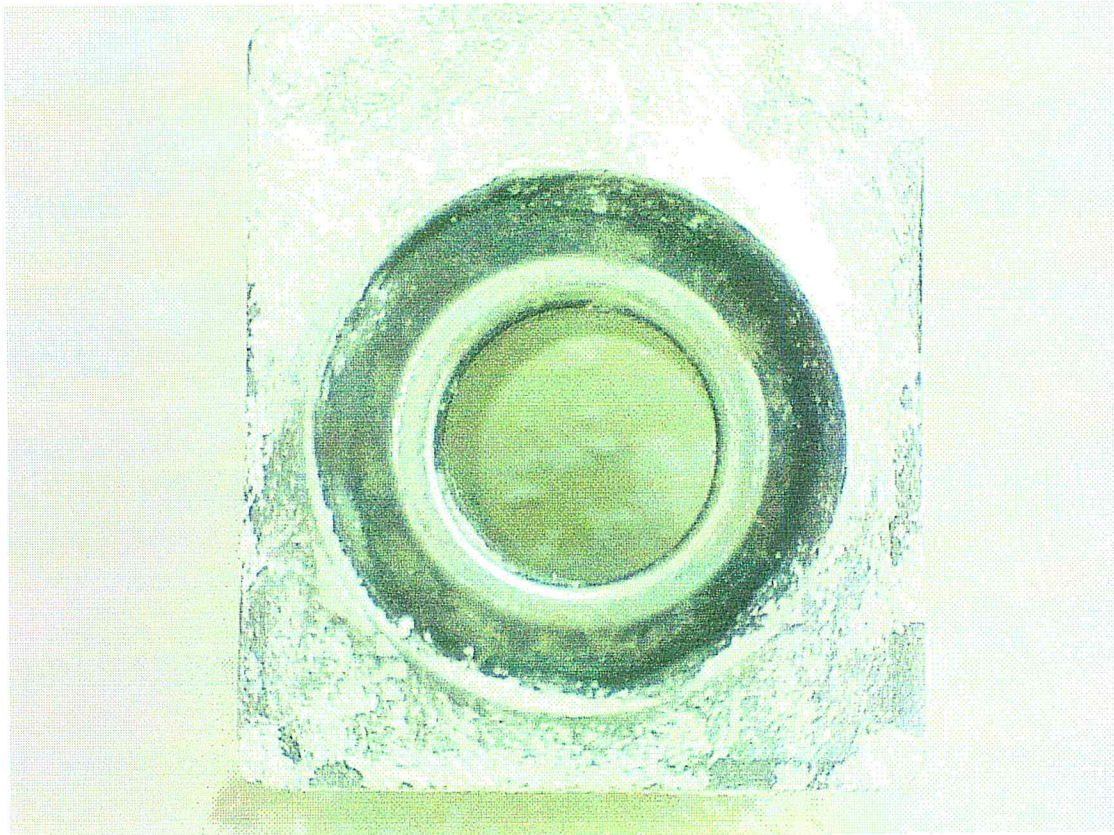
Overall view of the base A 2.4-N/O P
after test in dust chamber



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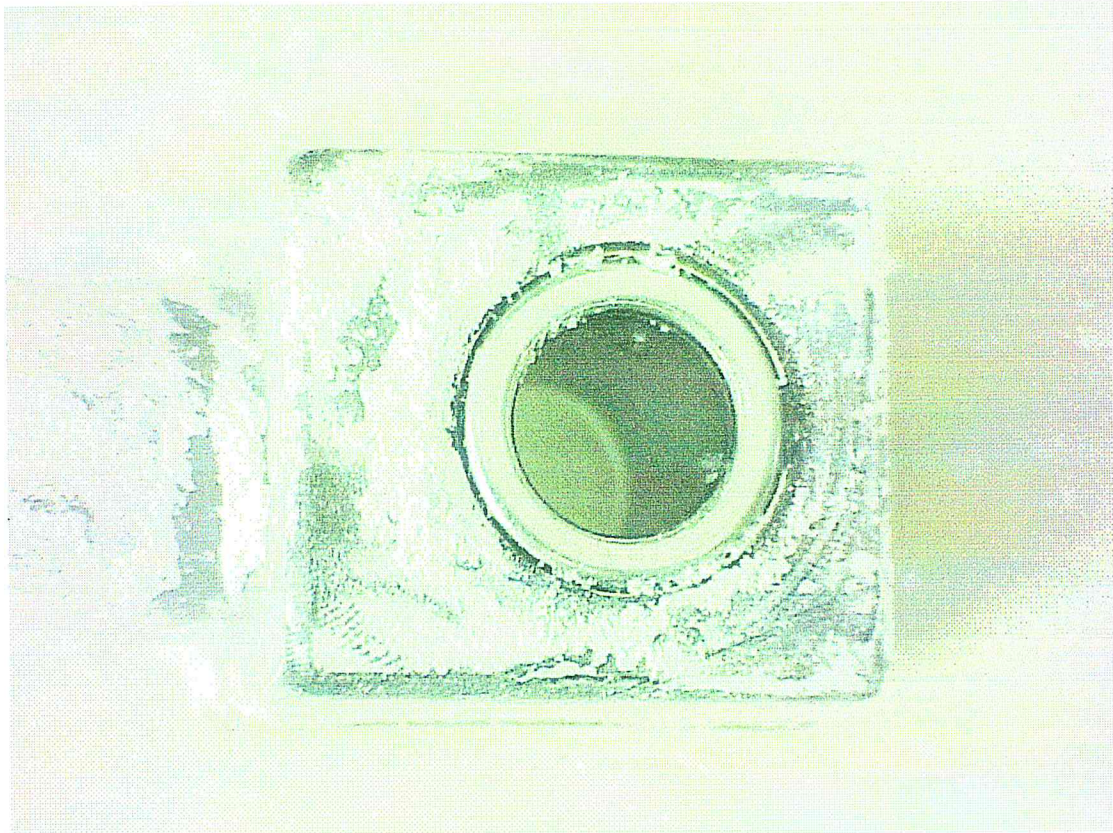
Overall front view of the coil
after test in dust chamber



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Overall rear view of the coil
after test in dust chamber



Overall view of the solenoid valve with coil 24V, 50Hz, 5.5W and base A 2.4-N/O P
after immersion into water



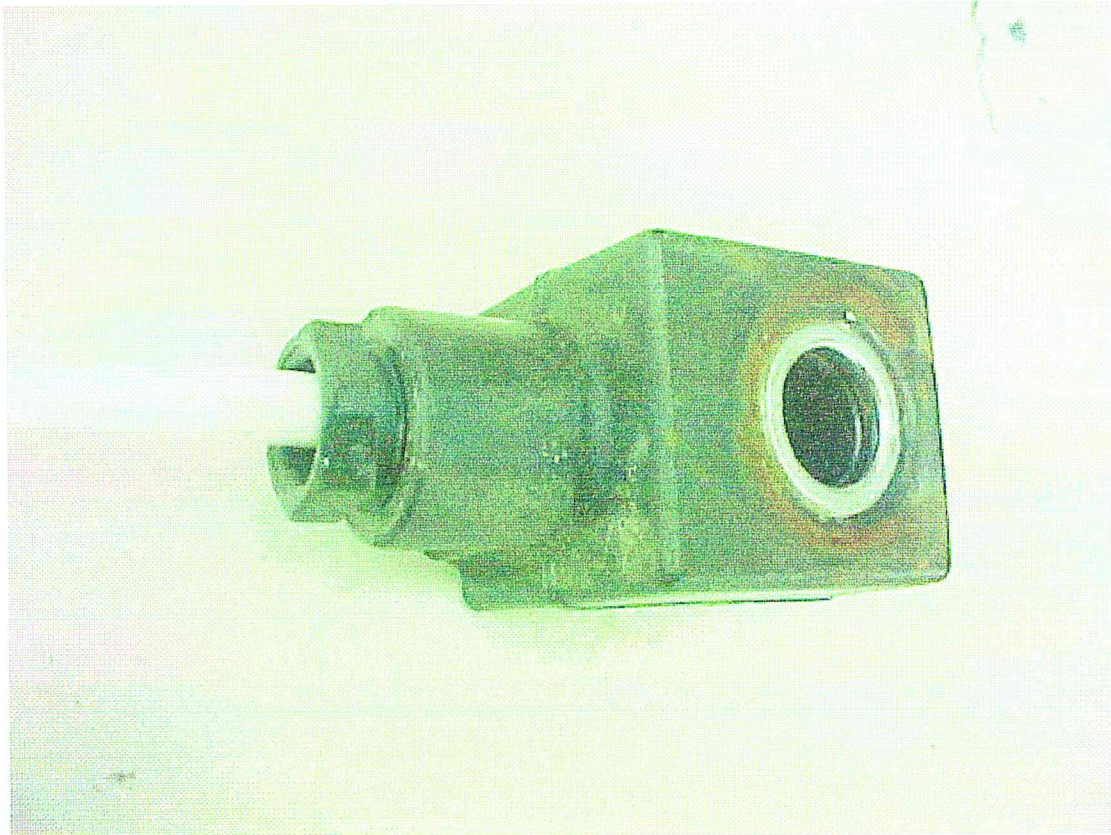
Overall view of the solenoid valve with coil 24V, 50Hz, 5.5W and base A 0.8-P
after immersion into water



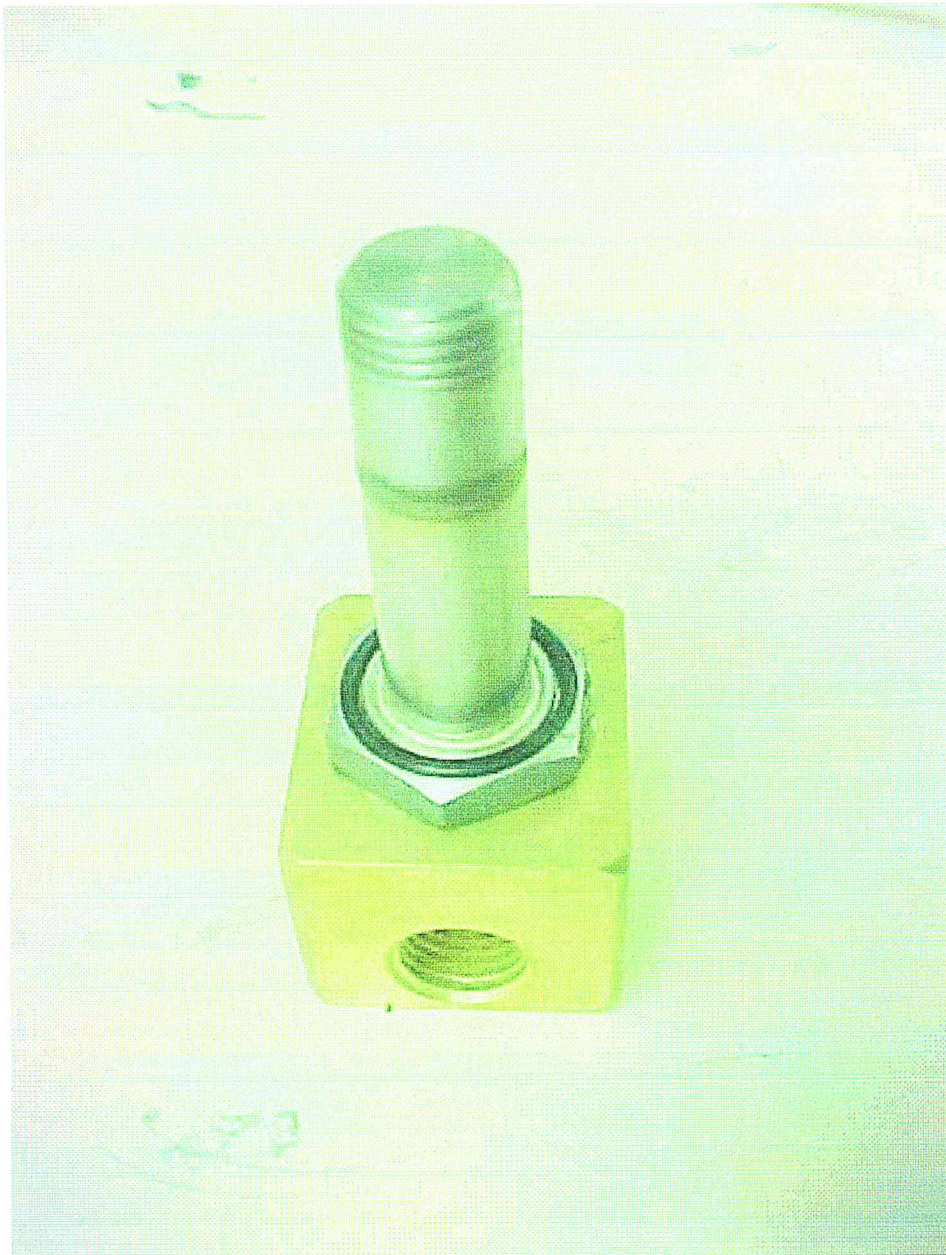
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Overall view of the coil
after immersion into water



Overall view of the base A 2.4-N/O P
after immersion into water



Power cable input connector view
after immersion into water

