



Product Service

Choose certainty.
Add value.

TUV Product Service Ltd, Octagon House,
Concorde Way, Segensworth North, Fareham,
Hampshire, United Kingdom, PO15 5RL
Tel: +44 (0) 1489 558100
Website: www.tuvps.co.uk

COMMERCIAL-IN-CONFIDENCE

TEST HOUSE CERTIFICATE

CLIENT	Brigade Electronics Plc Brigade House, The Mills Station Road South Darenth United Kingdom DA4 9BO	DOCUMENT	75906164 THC 02 Issue 4
		CLIENT'S ORDER NUMBER	118551
INCOMING RELEASE NOTE	N/A		
DATE OF RECEIPT	16 th March 2009		
TEST ITEM(S)	Reversing Cameras		
NUMBER OF ITEMS TESTED	4		
MODEL/PART NUMBER(S)	i) BE-800C	ii) BE-810C	
	iii) BE-820C	iv) BE-840C	
SERIAL NUMBER(S)	i) 0809001110	ii) 0811000831	
	iii) 08031453	iv) 070700031	
TEST PLAN/ISSUE/DATE	N/A		
TEST SPECIFICATION/ISSUE/DATE	IEC 60529		
DEVIATIONS FROM THE STANDARD	None		
DATE OF TEST	20 th March 2009		
TEST DESCRIPTION	IPX8 Protected against the effects of Continuous Immersion in water		

The following test was required by the specification:

Continuous Immersion

1. The stable temperature of the EUT and the test water was established. The EUT was pre-conditioned to the test water temperature.
2. The EUT was tested in its normal in-service orientation.
3. The EUT was completely immersed in fresh water, for a period of 60 minutes, with the lowest point of the enclosure 1000 mm below the surface of the water.
4. Following the test a performance check and internal examination were performed.

RESULT(S) OF TEST

This certificate relates only to the actual item tested.

BE-800C

The test requirements were satisfied. The camera was powered ON and was subject to satisfactory performance check. Approximately 2 ml of water ingress was observed during an interior visual inspection. Brigade No other damage or detrimental effects were observed.

Approved by


 D H Grace
 Authorised Signatory



Date 21 August 2009



Product Service

DOCUMENT 7596164 THC 02 Issue 4 CONTINUATION PAGE

BE-810C

The test requirements were satisfied. The camera was powered ON and was subject to satisfactory performance check. Approximately 1 ml of water ingress was observed during an interior visual inspection. No other damage or detrimental effects were observed.

BE-840C

The test requirements were satisfied. The camera was powered ON and was subject to satisfactory performance check. Approximately 2 ml of water ingress was observed during an interior visual. The No other damage or detrimental effects were observed.

BE-820C

The EUT met the requirements of the applied test. No ingress was observed. The camera was subject to a satisfactory performance check.

Where water ingress was observed Brigade Electronics reported that:

- The water ingress was not sufficient to impair safety of the EUT.
- The water ingress had not deposited on insulation parts where it could lead to tracking along creepage distances.
- The water ingress could not reach live parts or windings not designed to operate when wet.