

# ELECTRICAL INSTALLATION CERTIFICATE

## BS 7671:2008 – single signature

Certificate number:

Registration number:  (optional)

<b>DETAILS OF CLIENT:</b> Apex Traders Ltd..... 91-93 Baker St, ..... London..... W1H 6QQ..... .....	<b>INSTALLATION ADDRESS:</b> 2C Wilmot Place, London, NW1 9JS ..... ..... .....	JOB NUMBER (optional) N/A <hr/> Sheet <input type="text" value="1"/> of <input type="text" value="4"/>
---	--	--

**DESCRIPTION AND EXTENT OF INSTALLATION COVERED BY THIS CERTIFICATE**      Electrical install for SOLAR PV SYSTEM

.....

New installation     Addition     Alteration

**FOR DESIGN, CONSTRUCTION, INSPECTION AND TEST**

I/We being the person responsible for design, construction, inspection and testing of the electrical installation (as indicated by my signature below), particulars of which are described above, having exercised reasonable skill and care when carrying out the design, construction, inspection and testing, hereby CERTIFY that the said work for which I/we have been responsible is, to the best of my knowledge and belief, in accordance with BS 7671:2008 as amended to . 2011 ... except for the departures, if any, detailed as follows:

Departures and comments on existing installations (120.3; 133.5) . NONE .....

<b>Name</b> . Y. Khreptovich .....	<b>Name</b> . Y. Khreptovich .....
<b>For</b> . Eco Fortis Ltd .....	<b>For</b> . Eco Fortis Ltd .....
<b>Position</b> . Electrician .....	<b>Position</b> . Electrician .....
<b>Signature</b> .	<b>Signature</b> .
<b>Date</b> . 04/06/2015.....	<b>Date</b> . 04/06/2015.....
<b>Next Inspection</b> . 04/06/2016.....	<b>Next Inspection</b> . 04/06/2016.....

I/We recommend that the installation be further inspected and tested after an interval of not more than . 10 .... years.

SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS		Number and type of live conductors	Supply protective device characteristics	Earthing arrangements	Distributor's facility
Nominal voltage U/U <sub>o</sub> .	400 ..... V	Prospective fault current, I <sub>pf</sub> . 1.67 ..... kA	Type/BS (EN) .1361/II .....	<input checked="" type="checkbox"/> TN-S	Installation earth electrode <input type="text" value="N/a"/>
Frequency F	50 Hz	External loop impedance, Z <sub>e</sub> . 0.10.. Ohms	Rated Current . 100 ..... A	<input type="text" value="N/a"/> TN-C-S	Type . N/a..... (Rod, plate, tape, etc.)
Alternative source of supply	<input type="text" value="N/a"/> a.c. <input checked="" type="checkbox"/> d.c. <input type="text" value="N/a"/>	<input type="text" value="N/a"/> ..... 1-phase, 2-wire	<input checked="" type="checkbox"/> ..... 3-phase, 3-wire	<input type="text" value="N/a"/> TT	Location . N/a.....
		<input type="text" value="N/a"/> ..... 3-phase, 4-wire		Other . N/a.....	Resistance . N/a..... Ohms

**PARTICULARS OF INSTALLATION REFERRED TO IN THIS CERTIFICATE**

<b>Maximum demand</b> kVA / Amps  100 .....	<b>Main switch or circuit breaker</b> BS . 60947      Current rating .100... A Type . 3      No. of poles .....2. Location . Cupboard in the porch..... Voltage 230      Fuse rating N/a Rating . N/a      V or setting .....N/a... A RCD trip time N/a. ms      RCD 1 <sub>Δn</sub> . N/a mA (Applicable only where RCD is suitable and is used as a main circuit breaker)	<b>Location of main protective bonding connections</b> Gas- garage  Water- basement  Gas- basement ..... ..... .....	<b>Earthing conductor</b> <input checked="" type="checkbox"/> Copper <input type="text" value="N/A"/> Steel <input type="text" value="N/A"/> Aluminium  <b>Main protective bonding conductor</b> <input checked="" type="checkbox"/> Copper <input type="text" value="N/A"/> Steel <input type="text" value="N/A"/> Aluminium	<b>Main protective conductors</b> CSA . 16 ..... mm <sup>2</sup> Connections verified <input checked="" type="checkbox"/>  CSA . 10 ..... mm <sup>2</sup> Connections verified <input checked="" type="checkbox"/> Main bonding: Water <input checked="" type="checkbox"/> Gas <input checked="" type="checkbox"/> Other <input type="text" value="N/a"/>
--	--	---	---	--

# SCHEDULE OF INSPECTIONS

## NOTES:

✓ to indicate an inspection has been carried out and the result is satisfactory

N/A to indicate that the inspection is not applicable to a particular item

NOTE – items on the right are seldom relevant in a domestic setting

Sheet **2** of **4**

## METHODS OF PROTECTION AGAINST ELECTRIC SHOCK

### Basic protection:

- (i) Insulation of live parts
- (ii) Barriers or enclosures

### Fault protection:

#### (i) Automatic disconnection of supply:

- Presence of earthing conductor
- Presence of circuit protective conductors
- Presence of protective bonding conductors
- N/A Presence of supplementary bonding conductors
- Choice of setting of protective and monitoring devices (for fault and/or overcurrent protection)

#### Additional protection:

- Presence of residual current device(s)
- N/A Presence of supplementary bonding conductors

## PREVENTION OF MUTUAL DETRIMENTAL INFLUENCE

- (a) Proximity to non-electrical services and other influences
- N/A (b) Segregation of Band I and Band II circuits or use of Band II insulation

## IDENTIFICATION

- (a) Presence of diagrams, instructions, circuit charts and similar information
- (b) Presence of danger notices and other warning notices
- (c) Labelling of protective devices, switches and terminals
- (d) Identification of conductors

## CABLES AND CONDUCTORS

- Selection of conductors for current-carrying capacity and voltage drop
- Erection methods
- Routing of cables in prescribed zones
- N/A Cables incorporating earthed armour or sheath, or run within an earthed wiring system, or otherwise adequately protected against nails, screws and the like

## CABLES AND CONDUCTORS (continued)

- Additional protection provided by 30 mA RCD for cables concealed in walls (where required in premises not under the supervision of a skilled or instructed person)
- Connection of conductors
- Presence of fire barriers, suitable seals and protection against thermal effects

## GENERAL

- Presence of correct location of appropriate devices for isolation and switching
- Adequacy of access to switchgear and other equipment
- Particular protective measures for special installations and locations
- Connection of single-pole devices for protection or switching in line conductors only
- N/A Correct connection of accessories and equipment
- N/A Selection of equipment and protective measures appropriate to external influences
- N/A Selection of appropriate functional switching devices

## ADDITIONAL SCHEDULE OF ITEMS INSPECTED (where applicable)

- N/A SELV
- N/A PELV
- Double insulation
- Reinforced insulation
- N/A Obstacles
- N/A Placing out of reach
- N/A Presence of earthing arrangements for combined protective and functional purposes
- Presence of adequate arrangements for alternative source(s), where applicable
- N/A FELV
- N/A Absence of protective conductors
- N/A Presence of earth-free local equipotential bonding
- Electrical separation provided for **one item** of current-using equipment
- N/A Electrical separation provided for **more than one item** of current-using equipment
- Segregation of safety circuits
- N/A Presence of undervoltage protective devices

# SCHEDULE OF TEST RESULTS

DB Reference no. . . . . DB2	Details of circuits and/or installed equipment vulnerable to damage when testing	Details of test instruments used (state serial and/or asset numbers) Continuity . . . . . 101306959
Location . . . . . cupboard on the staircase (top floor)	NONE	Insulation resistance . . . . . -----//-----
Zs at DB ( $\Omega$ ) . . . . . 0.12		Earth fault loop impedance . . . . . -----//-----
$I_{pf}$ at DB (kA) . . . . . 1.69		RCD . . . . . -----//-----
Correct polarity of supply confirmed YES / NO		Earth electrode resistance . . . . . N/a
Phase sequence confirmed (where appropriate) N/a		

**Tested by:**  
**Name (CAPITALS).** Y.Khreptovich  
**Signature.** *[Signature]* **Date** ..04/06/2015.

**Circuit details**

Circuit number	Circuit description	Overcurrent device				Conductor details		
		BS (EN)	Type	Rating (A)	Breaking capacity (kA)	Reference method	Live (mm <sup>2</sup> )	cpc (mm <sup>2</sup> )
A	B	C	D	E	F	G	H	I
1	Solar PV	60898	B	16	6	B	2.5	1.5

**Test results**

Ring final circuit continuity ( $\Omega$ )			Continuity ( $\Omega$ ) ( $R_1 + R_2$ ) or $R_2$		Insulation resistance (M $\Omega$ )		Polarity	$Z_s$ ( $\Omega$ )	RCD (ms)		Remarks (continue on a separate sheet if necessary)	
$r_1$ (line)	$r_n$ (neutral)	$r_2$ (cpc)	$(R_1 + R_2)^*$	$R_2$	Live – Live	Live – E	✓	$\Omega$	@ $I_{\Delta n}$	@5I $\Delta n$	Test button operation	
J	K	L	M	N	O	P	Q	R	S	T	U	V
n/a	n/a	n/a	n/a	0.10	>999	>999	✓	0.121	n/a	n/a	n/a	

\* Where there are no spurs connected to a ring final circuit this value is also the  $(R_1 + R_2)$  of the circuit.

# ELECTRICAL INSTALLATION CERTIFICATE

## NOTES:

- 1 The Electrical Installation Certificate is to be used only for the initial certification of a new installation or for an addition or alteration to an existing installation where new circuits have been introduced.  
  
It is not to be used for a Periodic Inspection, for which an Electrical Installation Condition Report form should be used. For an addition or alteration which does not extend to the introduction of new circuits, a Minor Electrical Installation Works Certificate may be used.  
  
The 'original' Certificate is to be given to the person ordering the work (Regulation 632.1). A duplicate should be retained by the contractor.
- 2 This Certificate is only valid if accompanied by the Schedule of Inspections and the Schedule(s) of Test Results.
- 3 The signatures appended are those of the persons authorised by the companies executing the work of design, construction and inspection and testing respectively. A signatory authorised to certify more than one category of work should sign in each of the appropriate places.
- 4 The time interval recommended before the first periodic inspection must be inserted (see IET Guidance Note 3 for guidance).
- 5 The page numbers for each of the Schedules of Test Results should be indicated, together with the total number of sheets involved.
- 6 The maximum prospective value of fault current ( $I_{pf}$ ) recorded should be the greater of either the prospective value of short-circuit current or the prospective value of earth fault current.
- 7 The proposed date for the next inspection should take into consideration the frequency and quality of maintenance that the installation can reasonably be expected to receive during its intended life and the period should be agreed between the designer, installer and other relevant parties.

# ELECTRICAL INSTALLATION CERTIFICATE

## GUIDANCE FOR RECIPIENTS

### (to be appended to the Certificate)

This safety Certificate has been issued to confirm that the electrical installation work to which it relates has been designed, constructed, inspected and tested in accordance with British Standard 7671 (the IET Wiring Regulations).

You should have received an 'original' Certificate and the contractor should have retained a duplicate. If you were the person ordering the work, but not the owner of the installation, you should pass this Certificate, or a full copy of it including the schedules, immediately to the owner.

The 'original' Certificate should be retained in a safe place and be shown to any person inspecting or undertaking further work on the electrical installation in the future. If you later vacate the property, this Certificate will demonstrate to the new owner that the electrical installation complied with the requirements of British Standard 7671 at the time the Certificate was issued. The Construction (Design and Management) Regulations require that, for a project covered by those Regulations, a copy of this Certificate, together with its schedules, is included in the project health and safety documentation.

For safety reasons the electrical installation will need to be inspected at appropriate intervals by a competent person. The maximum time interval recommended before the next inspection is stated on Page 1 under 'Next Inspection'.

This Certificate is intended to be issued only for a new electrical installation or for new work associated with an addition or alteration to an existing installation. It should not have been issued for the inspection of an existing electrical installation. An 'Electrical Installation Condition Report' should be issued for such an inspection.